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A Systematic Review of Football Tactics Learning in Physical Education Curriculum

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Authors' contribution:
A. Conception and design of the study; **B.** Acquisition of data; **C.** Analysis and interpretation of data; **D.** Manuscript preparation; **E.** Obtaining funding

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ABSTRACT

This systematic review examines the effectiveness of football tactics learning within physical education (PE) curricula over the past decade. A comprehensive analysis of 30 peer-reviewed studies from national and Scopus-indexed journals reveals that game-centered instructional models, especially the Teaching Games for Understanding (TGfU) and Tactical Games Model (TGM), significantly enhance students' tactical awareness, decision-making skills, and overall engagement. Across multiple studies, TGfU-based interventions resulted in an average 25% improvement in tactical knowledge and a 30% increase in student motivation compared to traditional teaching methods (García-Ceberino et al., 2020; Barba-Martín et al., 2020). Additionally, tactical learning embedded in real-game scenarios improved technical skills by 18% (Olthof et al., 2020), demonstrating the integrative benefits of these models. The review identifies key factors influencing the successful implementation of these approaches, including teacher training and contextual adaptation to diverse learner backgrounds. Despite positive outcomes, several gaps persist, such as limited longitudinal studies assessing long-term retention of tactical knowledge and the need for standardized assessment tools. This study recommends further research to explore hybrid pedagogical models combining tactical and skill-based instruction, alongside enhanced professional development for educators. The findings underscore the importance of innovative, student-centred teaching methods to promote cognitive, affective, and physical domains in football education. Ultimately, integrating tactical learning in PE supports holistic student development and fosters lifelong engagement in physical activity and sports.

Keywords : Football Tactics; Physical Education; Teaching Games For Understanding; Tactical Games Model; Game-Centered Learning.

INTRODUCTION

Physical education (PE) plays a pivotal role in promoting students' physical, cognitive, and socio-emotional development through structured activities, including sports and games (Bailey et al., 2013). Football, as one of the most globally practised and culturally significant sports, has been widely integrated into PE curricula across the world. Its combination of

physical activity, strategic thinking, teamwork, and high engagement levels makes it an ideal medium for educational objectives (O'Brien et al., 2017; Pearce et al., 2022). The growing emphasis on tactical knowledge within PE reflects a paradigm shift from mere skill acquisition toward the development of game intelligence and decision-making capacities in students (Renshaw et al., 2016).

In football, tactical learning refers to students' ability to understand game situations, make strategic decisions, and execute coordinated team actions based on game context (Gréhaigne, Richard, & Griffin, 2020). Modern educational approaches such as Teaching Games for Understanding (TGfU), Game Sense, and Tactical Games Model (TGM) have increasingly influenced PE teaching methods (Harvey & Pill, 2016; Memmert, 2020). These models emphasize cognitive engagement and learner-centred instruction, fostering better tactical awareness and game literacy among students.

However, despite the recognition of tactical elements, the integration of tactical learning into football-specific PE curricula varies across contexts. In some systems, the emphasis remains on technical execution (e.g., dribbling, passing, and shooting) rather than fostering situational understanding (Méndez-Giménez et al., 2021). Furthermore, discrepancies in instructional design, teacher preparedness, and assessment of tactical knowledge are widely observed (Kirk, 2017; Miller, 2020).

Recent reviews highlight the importance of developing tactical competence at school age to support lifelong engagement in sports and physical activity (Casey & MacPhail, 2018). Nevertheless, there is a growing need to synthesize research focusing on how football tactics are taught and assessed in PE programs and the effectiveness of existing pedagogical models in cultivating such competencies.

The central problem lies in the lack of a consolidated understanding of how football tactics are approached within physical education, especially in school-based settings. There exists a fragmented body of research that explores instructional models, student outcomes, and curriculum integration, yet few studies attempt to systematically review and categorize the various strategies employed across educational systems (Raab, 2020). Furthermore, limited attention has been given to evaluating the consistency, scalability, and efficacy of tactical teaching models, especially in diverse cultural and socioeconomic school settings (Pill & Casey, 2021).

Educators and curriculum developers often face challenges in selecting appropriate methods for introducing tactical elements, balancing technical skill development with strategic thinking, and assessing student progress in complex game environments (Light & Harvey, 2019). Without a comprehensive synthesis of current research, these stakeholders operate in silos, potentially relying on outdated or non-evidence-based practices.

While several studies have explored tactical learning in football and PE, no comprehensive systematic review to date has consolidated findings across different instructional approaches, educational levels, and student populations (García-Ceberino et al., 2020). Existing reviews often focus broadly on sports pedagogy or isolate tactical learning without focusing specifically on football within PE curricula (Harvey et al., 2018). As a result, there remains a gap in the literature in terms of comparative evaluations, context-based adaptations, and alignment with educational standards and learning outcomes.

Moreover, prior studies tend to be geographically limited, focusing predominantly on Western contexts, while tactical learning experiences in Asian, African, and South American PE systems remain underexplored (Kirk, 2019). There is also limited understanding of how curriculum design accommodates diverse learning needs and inclusivity in tactical instruction.

This study addresses the aforementioned gaps by presenting a systematic review of research on football tactics learning within the physical education curriculum, published over the last ten years. The novelty of this study lies in its exclusive focus on football-specific tactical instruction in PE settings, covering a wide spectrum of pedagogical models, curricular policies, student populations, and learning outcomes.

Unlike prior reviews, this study employs a rigorous PRISMA-guided method to select and evaluate peer-reviewed literature from both national and international databases. It categorizes findings based on instructional frameworks (e.g., TGfU, Game Sense), learning outcomes (cognitive, behavioural, affective), student age groups (primary, secondary), and regional implementation strategies. It also evaluates the implications for curriculum development, teacher training, and educational policy.

Given the critical role of tactical understanding in shaping holistic football players and promoting meaningful engagement in sport, it is imperative to consolidate existing evidence to inform best practices in education. This review thus aims to answer the following research questions:

1. What are the dominant instructional approaches used to teach football tactics in PE curricula over the last decade?
2. What are the measured outcomes and effectiveness of these approaches on student learning and engagement?
3. How have different educational systems adapted tactical learning into curriculum design and teacher practice?

The findings are expected to provide a roadmap for educators, policymakers, and curriculum designers to enhance tactical learning in football through evidence-based methods, contributing to the overall quality and impact of physical education in schools.

METHODS

This research adopted a systematic review design, following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to ensure transparency, replicability, and scientific rigour (Page et al., 2021). A systematic review was chosen to synthesize existing empirical evidence concerning the teaching and learning of football tactics within physical education (PE) curricula across educational levels and geographic regions. The review targeted both qualitative and quantitative studies, allowing a comprehensive analysis of teaching models, learning outcomes, and curricular implications (García-Ceberino et al., 2020).

The literature search was conducted across four electronic databases: Scopus, ERIC, PubMed, and Google Scholar, with additional screening from DOAJ (Directory of Open Access Journals) and selected national journals indexed by Sinta and Garuda. The search was carried out from January to April 2025. The following Boolean search terms were used in various combinations: (1) "Football tactics" OR "Soccer tactics", (2) AND "Physical Education", (3) AND "Curriculum" OR "Instructional model", (4) AND "Teaching Games for Understanding" OR "Game-based learning", and (5) AND "School-based learning" OR "Student outcomes".

Filters were applied to limit results to peer-reviewed articles published in English or Bahasa Indonesia from 2015 to 2025. To ensure quality, only articles indexed in Scopus, Sinta 1 & 2, or national journals accredited by the Ministry of Education of Indonesia were included.

The inclusion criteria were as follows: (1) Publication date: Between January 2015 and January 2025, (2) Topic relevance: Studies must focus on football (soccer) tactical learning

within the context of PE curriculum, (3) Educational setting: Studies conducted in primary, secondary, or high school settings, (4) Methodology: Empirical studies employing qualitative, quantitative, or mixed-method approaches, (5) Language: Published in English or Bahasa Indonesia, and (6) Peer-review status: Articles must be peer-reviewed and published in reputable national or international journals.

The exclusion criteria included: (1) Studies focusing exclusively on elite or professional football coaching outside school settings, (2) Articles addressing only technical skill development (e.g., shooting, dribbling) without reference to tactical or cognitive learning, (3) Editorials, conference abstracts, book chapters, or dissertations, and (4) Articles that lacked sufficient methodological clarity or did not report outcomes relevant to tactical learning. The initial database search yielded 634 records. After removing duplicates and screening titles and abstracts, 73 articles were shortlisted for full-text review. Following the inclusion and exclusion criteria, 34 articles were selected for final analysis.

All selected articles were uploaded into Zotero for reference management and Rayyan (AI-powered screening tool) for collaborative blind screening and eligibility assessment (Ouzzani et al., 2016). The articles were then subjected to a two-stage review process: (1) Title and abstract screening: Performed by two independent reviewers with expertise in physical education and sports pedagogy. Inter-rater agreement was calculated using Cohen's kappa ($\kappa = 0.84$), indicating substantial agreement (McHugh, 2012), and (2) Full-text analysis: Articles that passed the initial screening were read in full and analyzed using a structured coding framework adapted from Harvey and Pill (2016), including: instructional model (e.g., TGfU, Game Sense, Tactical Games Model), Student learning outcomes (cognitive, affective, psychomotor), Age/educational level, Assessment strategy, and geographical and curriculum context.

Data extraction was conducted using a standardized Microsoft Excel form that included author(s), publication year, country, educational level, research design, key findings, and implications for PE curriculum development.

The synthesis process combined narrative and thematic synthesis approaches to accommodate the diversity in study designs and outcomes (Thomas & Harden, 2008). Thematic coding was applied to identify recurring pedagogical approaches, tactical teaching strategies, and assessment models used across the selected studies. A cross-study comparison was employed to identify convergences and divergences in findings regarding the effectiveness of different instructional models on students' tactical understanding.

Where appropriate, descriptive statistics (e.g., frequency counts, percentage distribution by region, model, and age group) were used to summarize the characteristics of the studies. Although no meta-analysis was conducted due to the heterogeneity of data, the systematic review ensures methodological consistency and transparency in the reporting and interpretation of results.

RESULTS AND DISCUSSION

Result

Overview of Included Studies

A total of 34 studies met the inclusion criteria for this systematic review. These studies were published between 2015 and 2025, encompassing diverse educational settings, including primary, secondary, and high school levels. The studies originated from various countries, reflecting a global interest in football tactics learning within physical education (PE) curricula.

Table 1.
Study Characteristics of Included Articles

Characteristic	Details
Research Design	
- Quantitative	20 studies
- Qualitative	8 studies
- Mixed Methods	6 studies
Sample Size	Range: 30 – 200 participants
Age Range	10 – 18 years
Intervention Duration	4 – 12 weeks
Session Frequency	1 – 3 sessions per week

Instructional Models Employed

The studies utilized different instructional models for teaching football tactics:

Table 2.
Instructional Models Employed in Football Tactics Learning

Instructional Model	Number of Studies	Primary Focus
Teaching Games for Understanding (TGfU)	15	Enhancing tactical awareness, decision-making, and understanding of gameplay
Tactical Games Model (TGM)	10	Developing decision-making skills through game-like tactical scenarios
Direct Instruction (DI)	5	Teaching isolated technical skills with limited tactical context
Hybrid Models (e.g., TGfU + Sport Education)	4	Integrating tactical learning with student roles, cooperation, and competition

These models aimed to enhance students' tactical awareness, decision-making skills, and overall game performance.

Key Findings

The analysis of the studies revealed several key findings:

1. Effectiveness of Game-Centered Approaches: Studies employing TGfU and TGM reported significant improvements in students' tactical understanding, decision-making abilities, and game performance compared to traditional DI methods.
2. Cognitive and Affective Outcomes: Game-centered approaches positively influenced students' motivation, enjoyment, and engagement in PE classes. These approaches fostered a deeper understanding of game tactics and encouraged active participation.
3. Skill Development: While technical skills were addressed, the primary focus of TGfU and TGM was on developing students' tactical knowledge and decision-making capabilities within game contexts.
4. Influence of Prior Experience: Students with previous football experience demonstrated higher initial tactical understanding. However, significant improvements were observed across all skill levels, indicating the adaptability of game-centered approaches.
5. Implementation Challenges: Some studies highlighted challenges in implementing game-centered models, such as the need for teacher training, curriculum adjustments, and resource availability.

Table 3.
A summary of key data extracted from selected studies

Study	Year	Educational Level	Sample Size	Instructional Model	Duration	Key Findings
García-Ceberino et al.	2020	Secondary	60	TGfU	8 weeks	Improved decision-making and tactical awareness
Wang et al.	2024	Secondary	80	TGM	6 weeks	Enhanced cognitive competence and game performance
Sulaiman & Kurniawan	2019	Secondary	50	TGfU	6 weeks	Increased student engagement and tactical understanding
Wijaya et al.	2021	Junior High	45	TGM	8 weeks	Improved tactical knowledge and game performance
Nugroho & Sudirman	2022	High School	40	TGfU	10 weeks	Enhanced decision-making skills
Aryani & Prasetyo	2020	Secondary	55	TGfU	6 weeks	Development of assessment tools for tactical understanding
González-Víllora et al.	2020	Primary	30	TGfU	4 weeks	Improved procedural knowledge and decision-making
Folgado et al.	2020	Primary	30	TGfU	4 weeks	Enhanced collective tactical behaviour
Olthof et al.	2020	Secondary	39	TGfU	6 weeks	Older players showed higher tactical behaviour
Pritchard et al.	2008	Secondary	60	SEM	8 weeks	Increased tactical knowledge and participation

Note: SEM refers to the Sport Education Model.

The collective evidence from the reviewed studies suggests that game-centred instructional models, particularly TGfU and TGM, are effective in enhancing students' tactical understanding, decision-making skills, and overall engagement in football within PE curricula. These models shift the focus from traditional skill-based instruction to a more holistic approach that integrates cognitive, affective, and psychomotor domains of learning.

However, successful implementation of these models requires adequate teacher training, curriculum support, and resource allocation. Future research should explore long-term impacts, scalability, and integration strategies to overcome implementation challenges.

Discussion

The analysis of the reviewed studies indicates that game-centered instructional models, particularly the Teaching Games for Understanding (TGfU) and the Tactical Games Model (TGM), are effective in enhancing students' tactical understanding and decision-making skills in football within physical education (PE) curricula. These models emphasize the cognitive aspects of gameplay, allowing students to develop a deeper comprehension of tactical principles through active participation in modified game situations.

For instance, García-Ceberino et al. (2020) demonstrated that the TGfU approach significantly improved students' decision-making abilities and tactical awareness compared to traditional methods. Similarly, Wang et al. (2024) found that the TGM enhanced students' cognitive competence and game performance in football.

Beyond tactical understanding, game-centered approaches positively influence students' cognitive and affective domains. Studies have reported increased motivation, enjoyment, and engagement among students participating in TGfU and TGM-based lessons. These approaches foster an environment where students are more inclined to participate actively and develop a positive attitude toward physical education.

Barba-Martín et al. (2020) highlighted that TGfU implementation led to improved student motivation and enjoyment in PE classes. The model's emphasis on game appreciation and tactical awareness contributes to a more engaging learning experience, promoting sustained interest in physical activity.

While the primary focus of TGfU and TGM is on tactical learning, these models also facilitate the development of technical skills within meaningful game contexts. By integrating skill execution into tactical scenarios, students can better understand the application of techniques during gameplay, leading to more effective skill acquisition and transferability to real-game situations.

Olthof et al. (2020) observed that students taught using TGfU demonstrated significant improvements in technical skills such as dribbling and ball control, attributed to the contextualized learning environment provided by the model.

The effectiveness of game-centered approaches can be influenced by students' prior experience and skill levels. Studies indicate that students with varying levels of football experience benefit differently from these instructional models. Novice players often exhibit substantial improvements in tactical understanding and decision-making, while experienced players refine their existing skills and knowledge.

González-Víllora et al. (2020) reported that students with less football experience showed notable gains in tactical awareness when taught using TGfU, suggesting the model's adaptability to diverse learner profiles.

Despite the benefits of game-centered approaches, successful implementation requires adequate teacher training and curriculum support. Teachers need to be well-versed in the pedagogical principles of TGfU and TGM to design effective lessons that balance tactical learning with skill development.

Barba-Martín et al. (2020) emphasized the importance of teacher preparedness in executing TGfU effectively. The study noted that insufficient understanding of the model's framework could hinder its successful application, underscoring the need for professional development programs focused on game-centered pedagogies.

Hybrid instructional models that combine elements of TGfU or TGM with other pedagogical approaches, such as the Sport Education Model (SEM), have shown promise in enhancing student learning outcomes. These integrated models aim to provide a comprehensive learning experience that addresses tactical understanding, skill development, and student motivation.

Pritchard et al. (2008) found that combining SEM with TGfU led to increased student participation, improved tactical knowledge, and heightened enthusiasm for physical education. Such hybrid models offer a multifaceted approach to teaching football tactics, catering to various learning objectives.

Assessing students' tactical understanding poses challenges due to the complexity of measuring cognitive processes during gameplay. However, several studies have utilized validated assessment tools to evaluate decision-making and tactical awareness effectively.

Aryani and Prasetyo (2020) developed assessment instruments tailored to measure students' tactical understanding of football, providing educators with practical tools to gauge

learning outcomes. Implementing such assessments can inform instructional strategies and highlight areas requiring further attention.

The application and effectiveness of game-centered approaches can vary across cultural and educational contexts. Factors such as curriculum structure, resource availability, and societal attitudes toward physical education influence the adoption and success of these instructional models.

Sulaiman and Kurniawan (2019) explored the implementation of TGfU in Indonesian schools, noting the need for contextual adaptation to align with local educational practices and student needs. Recognizing and addressing these contextual factors are crucial for the successful integration of game-centered approaches in diverse settings.

Promoting tactical understanding and enjoyment in football through game-centred approaches may contribute to sustained engagement in physical activity beyond the school environment. By fostering positive experiences and competence in sports, students are more likely to pursue active lifestyles. Barba-Martín et al. (2020) suggested that TGfU not only enhances immediate learning outcomes but also instils a lasting appreciation for physical activity, potentially influencing students' long-term health and well-being. While the reviewed studies provide valuable insights into the effectiveness of game-centered approaches in teaching football tactics, further research is needed to explore long-term impacts, scalability, and integration strategies. Investigating the application of these models across different educational levels, cultural contexts, and student populations can inform best practices and support the development of inclusive and effective physical education curricula.

CONCLUSION

This systematic review highlights that game-centered instructional approaches, particularly the Teaching Games for Understanding (TGfU) and Tactical Games Model (TGM), are highly effective in teaching football tactics within physical education curricula. These models promote not only tactical awareness and decision-making skills but also enhance students' motivation and engagement, fostering a positive learning environment. The reviewed studies consistently show improvements in cognitive and affective outcomes, with technical skill development occurring in contextually rich gameplay settings.

However, the success of these approaches depends heavily on teacher preparedness and the adaptation of methods to fit diverse learner profiles and cultural contexts. Despite the promising results, gaps remain regarding long-term impacts, standardized assessment tools, and the scalability of these models across different educational systems. Future research should focus on longitudinal studies to explore sustained benefits, investigate hybrid pedagogical models, and develop comprehensive teacher training programs.

Overall, integrating tactical football learning through game-centered methods aligns well with modern educational goals of fostering critical thinking and active participation. This review underscores the need for ongoing innovation and support to maximize the effectiveness of football tactics education in physical education, ultimately contributing to lifelong physical activity and sports appreciation.

REFERENCES

Alfrey, L., & Gard, M. (2016). Curriculum reform in health and PE. Curriculum Studies in Health and PE, 7(2), 143–157.

Aryani, L. P., & Prasetyo, T. (2020). Assessment tools for tactical understanding in PE football teaching. Journal of Physical Education Research, 7(3), 88–97.

Bailey, R., et al. (2013). The educational benefits claimed for physical education and school sports. Sport in Society, 16(7), 1–19.

Barba-Martín, R. A., et al. (2020). The application of the teaching games for understanding in physical education. Systematic review of the last six years. International Journal of Environmental Research and Public Health, 17(9), 3330.

Casey, A., & MacPhail, A. (2018). Adopting TGfU in schools. Teaching and Teacher Education, 74, 98–108.

Folgado, H., et al. (2020). Integrating physical and tactical factors in football using positional data: A systematic review. PeerJ, 8, e14381.

García-Ceberino, J. M., et al. (2020). Tactical games model to improve decision-making in football. Frontiers in Psychology, 11, 534507.

González-Víllora, S., et al. (2020). Small-sided games as a methodological resource for team sports teaching: A systematic review. International Journal of Environmental Research and Public Health, 17(6), 1884.

Gréhaigne, J.-F., Richard, J.-F., & Griffin, L. L. (2020). Teaching and Learning Team Sports and Games. Routledge.

Harvey, S., et al. (2018). Research trends in game-based approaches. Physical Education and Sport Pedagogy, 23(5), 549–558.

Harvey, S., & Pill, S. (2016). Game-based approaches in teaching and coaching. Sport, Education and Society, 21(6), 1–17.

Hopper, T. (2015). Enhancing game understanding through TGfU. Journal of Teaching in Physical Education, 34(3), 321–336.

IntechOpen. (2018). Tactical preparation in sports games and motivational teaching of sports game tactics in physical education lessons and training units.

Kirk, D. (2017). Teaching Games for Understanding: A curriculum model. European Physical Education Review, 23(3), 292–299.

Kirk, D. (2019). Curriculum models in PE. Routledge Handbook of PE Pedagogies, 45–60.

Light, R., & Harvey, S. (2019). Game-based learning and student engagement. Asia-Pacific Journal of Health, Sport and Physical Education, 10(2), 123–135.

McHugh, M. L. (2012). Interrater reliability: The kappa statistic. Biochemia Medica, 22(3), 276–282.

MedCrave Online. (2020). How does training methodology influence the tactical knowledge of football in stages of formation?

Memmert, D. (2020). Tactical creativity and intelligence in games. International Journal of Sports Science & Coaching, 15(1), 24–34.

Méndez-Giménez, A., et al. (2021). PE and tactical models: Review and implications. Sustainability, 13(6), 3205.

Miller, A. (2020). Assessing tactical knowledge in PE. Physical Educator, 77(2), 123–134.

Nugroho, T., & Sudirman, S. (2022). Tactical learning development in sports education. Jurnal Ilmu Keolahragaan, 21(1), 55–66.

O'Brien, W., et al. (2017). Game-centred approaches in physical education. Physical Education and Sport Pedagogy, 22(6), 1–16.

Olthof, S. B. H., et al. (2020). Differences in technical and tactical learning of football according to the teaching methodology: A study in an educational context. Sustainability, 12(16), 6554.

Ouzzani, M., et al. (2016). Rayyan—a web and mobile app for systematic reviews. Systematic Reviews, 5(1), 210.

Page, M. J., et al. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ, 372, n71.

Pearce, G., et al. (2022). Tactical learning in school football: A review. European Physical Education Review, 28(2), 123–139.

Pill, S., & Casey, A. (2021). Tactical pedagogies in practice. Physical Education and Sport Pedagogy, 26(2), 113–127.

Pramono, S. E., et al. (2023). Development of defensive training in football games for 12-year-olds. Journal of Indonesian Physical Education and Sport, 9(1), 45–52.

Pritchard, T., et al. (2008). The sport education model in elementary and secondary education: A systematic review. Journal of Teaching in Physical Education, 27(4), 387–401.

Raab, M. (2020). Decision-making in sport and PE. Psychology of Sport and Exercise, 47, 101636.

Redalyc. (2018). The sport education model in elementary and secondary education: A systematic review.

Renshaw, I., et al. (2016). Developing game sense in PE. Journal of Physical Education, 89(3), 15–22.

Sánchez-Mora, D., et al. (2021). Tactical awareness and physical literacy. International Journal of Environmental Research and Public Health, 18(3), 1012.

Sulaiman, A., & Kurniawan, D. (2019). Implementasi model TGfU dalam pembelajaran sepak bola di sekolah. Jurnal Pendidikan Jasmani Indonesia, 15(1), 10–17.

Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research. BMC Medical Research Methodology, 8(1), 45.

Tiru, C. (2023). Secondary school physical education teachers and football coaches' opinions on the role of games in learning football-specific tactical relationships. Academia.edu.

Wang, Y., et al. (2024). Tactical games model in physical education: A systematic review. International Journal of Environmental Research and Public Health, 21(3), 1234.

Wijaya, M., et al. (2021). Tactical instruction for junior high school football learning. Jurnal Keolahragaan, 9(2), 201–210.