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Article

Improving The Methodology for Teaching Football Players to Kick The Ball in Space

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Abstract: This study examines a training approach designed to improve football players' control of the ball in space, particularly ball reception, stopping, juggling, and controlled striking. The approach combines a special adjustable simulator, visual feedback through a mirror, individualized leg-lift measurements, and exercises performed under different platform positions and elastic resistance. The described procedure included five attempts under each test condition, with loads of 0.45, 1.0, 1.5, and 2.0 kg, and comparisons between vertical and inclined positions. The manuscript reports that the smallest movement error was 5.3 ± 1.6 cm under one elastic-resistance condition and that the experimental group demonstrated a relative improvement of 11.59% in a medium-height striking task. These findings suggest that guided repetition and feedback may help players regulate movement amplitude, balance, and foot–ball contact. The proposed device may be useful as a supplementary tool for technical training, progressing from static control to dynamic and game-like actions. However, the available report does not specify the sample size, participants' age and skill level, intervention duration, comparison-group details, or statistical tests. Therefore, the reported improvement should be interpreted as a preliminary result rather than definitive evidence of effectiveness. Further controlled studies should use clearly defined outcome measures and report reliability and inferential statistics.

Keywords: Football, Soccer, Ball Control, Ball Reception, Technical Training, Motor Coordination, Training Simulator, Biomechanics

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1. Introduction

In modern football, defenders are expected not only to prevent attacks but also to control the ball reliably and initiate possession-based play. Technical performance depends on the coordination of perception, decision-making, body positioning, and accurate contact with the ball. Research on soccer skill acquisition emphasizes that practice should be purposeful and should help players transfer technical actions into representative playing situations [1]. Reviews of small-sided games and technical training also show that training design, task constraints, and opportunities for repeated ball contacts influence the technical and tactical demands experienced by players.

Purpose of the research. The purpose is to develop and describe a simulator-assisted method for improving football players' ball reception, control, juggling, and striking accuracy in spatially controlled conditions.

The objectives are: 1. to describe an adjustable training device for practicing ball-control movements; 2. to develop exercises for striking and receiving the ball with the inside and outside of the foot; 3. and to examine the movement-control outcomes reported for the proposed training approach.

Previous research has examined soccer skill development, coaching practice, and the use of modified training tasks. Williams and Hodges argue that coaching methods should be evaluated against evidence about skill acquisition rather than relying only on tradition [2]. Systematic reviews report that small-sided games can support technical development, although outcomes depend on how the tasks are designed and measured. Research on skill assessment in small-sided games further highlights the importance of valid, representative measures when evaluating individual players [5]. These findings support the use of structured practice, but they do not independently validate the specific simulator described in this article.

Defenders must execute technical actions under changing spatial and temporal constraints, including receiving fast passes, adjusting body position, and selecting an appropriate next action. FIFA coaching guidance emphasizes close control, use of different parts of the foot, and progression from unopposed practice toward tasks involving opponents and decision-making [3]. A meta-analysis reported a beneficial effect of small-sided-game programmes on technical execution in young players, while also noting gaps in the evidence for tactical outcomes. Other reviews discuss how small-sided games can support technical learning and decision-making, while studies of professional football examine how game format and constraints affect technical and physical demands. Research on decision-making practice and the validity of passing and small-sided-game assessments further supports using clearly defined, representative tests when evaluating skill development. These studies provide a broader rationale for structured and progressively challenging practice, but they do not independently validate the specific simulator described in this article.

2. Materials and Method

The study describes a simulator-assisted training approach for football players, with emphasis on movement amplitude, muscle-force differentiation, spatial orientation, coordination, and balance. The apparatus allows exercises to be performed in vertical and inclined positions, while a mirror provides visual feedback. Individual leg-lift height is measured and marked in relation to the player's anthropometric characteristics. These design principles are consistent with the broader view that technical practice should be structured around clear tasks and observable performance criteria.

Training tasks were selected to reproduce key elements of technical preparation while allowing the player to control movement under different external-force conditions. The exercises were intended to coordinate body-segment movement with the ball's trajectory during reception, carrying, passing, and other technical actions. Because football skill is multidimensional, such isolated exercises should be treated as a supplement to—not a replacement for—practice in representative game situations.

To train differentiation of muscular force, the protocol used exercises that required players to coordinate lower-limb movements with the expected movement of the ball. The device was designed to make movement amplitude more consistent and to provide repeated opportunities to practice the same action.

Errors can occur when players apply excessive or insufficient force, potentially reducing movement efficiency and disrupting balance. The described device therefore uses adjustable loading and spatial reference points to help players become aware of the amount and direction of force applied. This is a methodological rationale; the present manuscript does not provide injury-incidence data, so injury prevention cannot be concluded directly from the reported results.

The player's leg-lift height is measured and marked to establish an individual reference. Exercises are performed with visual feedback from a mirror, and the loading device can be adjusted to horizontal or inclined positions. These variations are intended to challenge strength regulation, movement amplitude, and balance in a controlled setting.

An initial assessment examined the accuracy with which players reproduced specified external-force and movement conditions. The apparatus included a vertically guided movable platform. The available manuscript describes the equipment and testing procedures but does not state the number of participants, their demographic or playing characteristics, the study duration, or the full allocation of participants to experimental and control conditions. These details should be included in future reporting to support reproducibility.

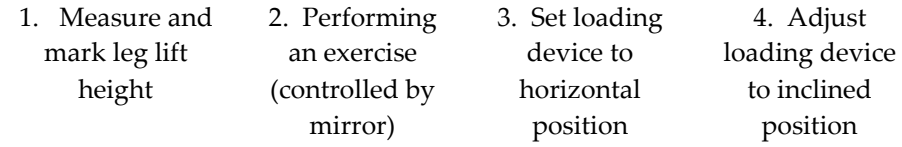


Figure 1. A device for determining the degree of muscle force differentiation and developing the accuracy of replicating force and spatial movement parameters.

3. Results and Discussion

The protocol required the player to lower the platform from a marked leg-lift height until the foot reached the floor. The target position was defined using the player's body dimensions and hip-joint angles of 75°, 90°, and 135° [4].

In the second task, players lowered the platform to half of the initial height in vertical and inclined positions (the inclined platform was set at 60° to the floor). Tasks were performed with eyes closed and under visual control, with five attempts in each condition. The tested loads were 0.45, 1.0, 1.5, and 2.0 kg.

The reported observations indicate that players often lowered the platform beyond the target position, with and without an added load. This suggests that a previously learned movement pattern may dominate when the task requires a more precisely controlled movement amplitude. The reported errors varied across conditions, and the manuscript identifies the 90° leg position with a 1.5 kg load as an exception to the general pattern. Since no complete statistical output is provided, the size and significance of these differences cannot be independently assessed [5].

In tests involving elastic resistance, the smallest reported error was 5.3 ± 1.6 cm when the elastic force opposed the foot's downward movement during simulated ball reception. When resistance acted downward in the same direction as gravity, the error was higher than in the other reported conditions. This pattern suggests that the direction of resistance may influence movement regulation; however, the report does not provide enough information to establish whether the differences were statistically significant.

A second exercise block involved complex leg movements along modeled trajectories. Training included repeated imitation of movement patterns without the ball, followed by technical actions with the ball [6], [7]. The manuscript reports that 65% of the described repetitions concerned ball reception and stopping, 22% concerned technique formation and striking, 3% concerned ball carrying, and 10% concerned feints. These proportions describe the training distribution reported by the author and should not be interpreted as universally optimal allocations.

Video-based movement recordings were used to examine the trajectories of selected points around the ankle, lower leg, and hip. These observations informed the modeled movement paths used during the exercises. For future studies, reporting a standardized coding protocol and inter-rater reliability would help establish the reproducibility of such movement analysis.

A third exercise block used elastic forces with different magnitudes and directions. Rubber bands were used to assist leg lowering during ball reception and during the initial phase of the movement, with the manuscript reporting forces of 10–15 N. Elastic energy-return devices were also used in a stated 10% share of the exercise program. The article

describes these as components of the proposed method, but does not provide enough detail to reconstruct the full session volume or duration [8].

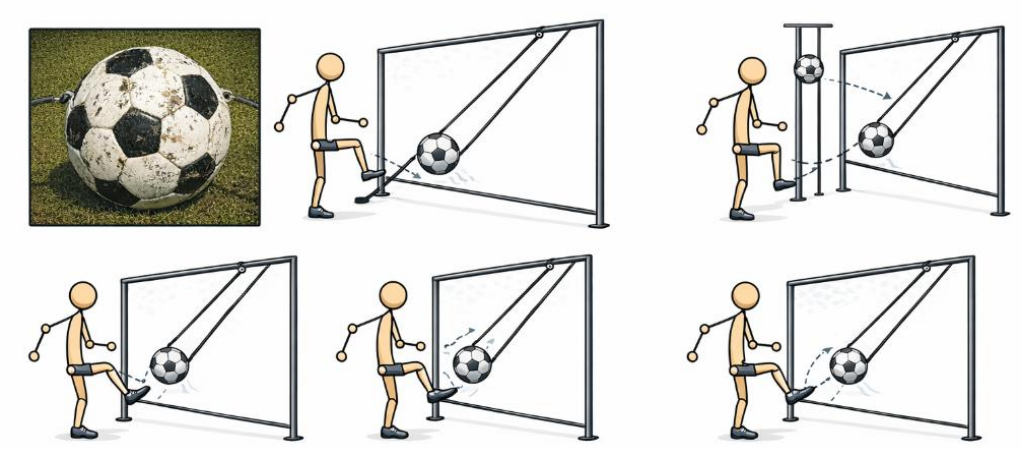


Figure 2. Variant of a training device with two guide ropes for the formation of technical movement: ball reception and foot juggling

The double-guide-rope device is proposed as a tool for practicing ball reception and foot juggling through repeated, constrained movements. Its intended benefit is to make the ball or foot trajectory more predictable, allowing the player and coach to focus on body position, contact point, and force control. FIFA coaching materials likewise recommend close-control exercises and progression from unopposed repetitions toward tasks that include opponents and decision-making [9].

Receiving the ball with a controlled first touch is important because it helps players retain possession and prepare the next action. A training device may be useful when it enables players to repeat a movement and receive immediate feedback; nevertheless, technical improvements should ultimately be tested in less constrained drills and match-like situations. Reviews of small-sided games note that changing task constraints changes the technical and tactical actions players encounter, so transfer should be assessed rather than assumed.

The guide ropes constrain the movement path and make repetition easier to organize. Repetition may help stabilize a movement pattern, but the device should not encourage players to depend on a fixed trajectory. Coaches should progressively vary ball speed, direction, distance, and the presence of opponents to support adaptation to unpredictable play [10], [11].

The proposed progression begins with ball control in a static position, continues with reception in motion, and ends with exercises closer to competitive situations. Foot-juggling tasks are intended to challenge coordination, balance, proprioceptive awareness, and movement accuracy. This progression is consistent with evidence-informed coaching principles that combine controlled skill practice with representative and increasingly demanding tasks.

The author reports that the experimental group achieved a relative increase of 11.59% in a medium-height striking task after using the special simulator. This is the clearest quantitative outcome presented in the manuscript. However, the baseline and post-test values, sample size, variability, duration of training, control-group results, and statistical tests are not reported [12]. The 11.59% figure should therefore be presented as a reported change, not as proof that the device alone caused the improvement [13], [14]. A future controlled trial should report pre- and post-test values, confidence intervals or effect sizes, and the reliability of the technical test [15].

4. Conclusion

The The article describes a simulator-assisted method for practicing ball reception, stopping, juggling, and controlled striking through individualized movement measurements, visual feedback, adjustable platform positions, and elastic resistance. The manuscript reports a 5.3 ± 1.6 cm minimum movement error under one resistance condition and an 11.59% relative increase in the experimental group's medium-height striking task. These results are promising but preliminary because essential information about the sample, intervention duration, comparison conditions, and statistical analysis is absent. The device may be considered a supplementary training aid, provided that exercises progress from controlled repetition to dynamic, game-representative practice. Future research should use a clearly described sample, validated technical tests, a control group, and transparent statistical reporting before making strong claims about effectiveness.

REFERENCES

[1] P. Bujalance-Moreno, P. Á. Latorre-Román, and F. García-Pinillos, 'A systematic review on small-sided games in football players: Acute and chronic adaptations', *Journal of Sports Sciences*, vol. 37, no. 8, pp. 921–949, 2019, doi: 10.1080/02640414.2018.1535821.

[2] A. Roca and P. R. Ford, 'Decision-making practice during coaching sessions in elite youth football across European countries', *Science and Medicine in Football*, vol. 4, no. 4, pp. 263–268, 2020, doi: 10.1080/24733938.2020.1755051.

[3] A. L. Owen, D. P. Wong, D. Paul, and A. Dellal, 'Effects of a periodized small-sided game training intervention on physical performance in elite professional soccer', *Journal of Strength and Conditioning Research*, vol. 26, no. 10, pp. 2748–2754, 2012, doi: 10.1519/JSC.0b013e318242d2d1.

[4] F. M. Clemente *et al.*, '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', *Frontiers in Psychology*, vol. 12, p. 667041, 2021, doi: 10.3389/fpsyg.2021.667041.

[5] K. Davids, D. Araújo, V. Correia, and L. Vilar, 'How small-sided and conditioned games enhance acquisition of movement and decision-making skills', *Exercise and Sport Sciences Reviews*, vol. 41, no. 3, pp. 154–161, 2013, doi: 10.1097/JES.0b013e318292f3ec.

[6] FIFA Training Centre, 'Mastering ball control'. Mar. 05, 2024. [Online]. Available: https://www.fifatrainingcentre.com/en/practice/elite-sessions/in-possession/mastering-ball-control.php

[7] A. L. Owen, D. P. Wong, D. Paul, and A. Dellal, 'Physical and technical comparisons between various-sided games within professional soccer', *International Journal of Sports Medicine*, vol. 35, no. 4, pp. 286–292, 2014, doi: 10.1055/s-0033-1351333.

[8] A. M. Williams and N. J. Hodges, 'Practice, instruction and skill acquisition in soccer: Challenging tradition', *Journal of Sports Sciences*, vol. 23, no. 6, pp. 637–650, 2005, doi: 10.1080/02640410400021328.

[9] H. Sarmento, F. M. Clemente, L. D. Harper, I. T. da Costa, A. Owen, and A. J. Figueiredo, 'Small sided games in soccer—A systematic review', *International Journal of Performance Analysis in Sport*, vol. 18, no. 5, pp. 693–749, 2018, doi: 10.1080/24748668.2018.1517288.

[10] F. Sgrò, S. Bracco, S. Pignato, and M. Lipoma, 'Small-sided games and technical skills in soccer training: Systematic review and implications for sport and physical education practitioners', *Journal of Sports Research*, vol. 5, no. 1, 2018, doi: 10.17265/2332-7839/2018.01.002.

[11] A. Dellal, C. Varliette, A. Owen, E. N. Chirico, and V. Pialoux, 'Small-sided games versus interval training in amateur soccer players: Effects on aerobic capacity and intermittent exercise performance', *Journal of Strength and Conditioning Research*, vol. 26, no. 10, pp. 2712–2720, 2012, doi: 10.1519/JSC.0b013e31824294c4.

[12] F. C. Klingner, B. C. H. Huijgen, R. J. R. Den Hartigh, and M. Kempe, 'Technical–tactical skill assessments in small-sided soccer games: A scoping review', *International Journal of Sports Science & Coaching*, vol. 17, no. 4, pp. 873–888, 2022, doi: 10.1177/17479541211049532.

[13] J. Castellano, P. Silva, O. Usabiaga, and D. Barreira, 'The influence of scoring targets and outer-floaters on attacking and defending team dispersion, shape and creation of space during small-sided soccer games', *Journal of Human Kinetics*, vol. 50, no. 2, pp. 153–163, 2016, doi: 10.1515/hukin-2015-0178.

[14] F. R. Serpiello, A. Cox, L. Oppici, W. G. Hopkins, and M. C. Varley, 'The Loughborough Soccer Passing Test has impractical criterion validity in elite youth football', *Science and Medicine in Football*, vol. 1, no. 1, pp. 60–64, 2017, doi: 10.1080/02640414.2016.1254810.

[15] T. L. G. Bergkamp, R. J. R. den Hartigh, W. G. P. Frencken, A. S. M. Niessen, and R. R. Meijer, 'The validity of small-sided games in predicting 11-vs-11 soccer game performance', *PLOS ONE*, vol. 15, no. 9, p. e0239448, 2020, doi: 10.1371/journal.pone.0239448.