

THE EFFECTIVENESS OF USING VISUAL EXERCISES ON LEARNING SOME FOOTBALL SKILLS FOR DEAF AND DUMB PLAYERS (12-14 YEARS)

Maytham Mohsin Habeeb

Directorate of Misan Education, Ministry of Education of Iraq
maythamalbtaat78@gmail.com

Munadhil Adil Kiasm

Imam Kadhim Faculty of Islamic Sciences University
munadil.adil@iku.edu.iq

ABSTRACT	KEYWORDS
skills for deaf and dumb players aged 12 to 14 years. The inadequate performance in this category arises from insufficient mastery and consistency in skill execution, negatively impacting skill competency, a shortcoming that may endure into later stages of life. The researchers utilised an experimental methodology on a sample of 20 players, comprising an experimental group of 10 players and a control group of 8 players. The execution of a training program focused on visual exercises and diverse skill assessments in football revealed that such exercises improved the football skills of deaf and dumb participants in the study. Statistically significant differences are present in the football skill test findings within the research sample, with the experimental group exhibiting superiority over the control group in the evaluated football skills.	Curriculum, visual exercise, skills, football, deaf and dumb.

Introduction

Physical activities and sports, in all their forms, are vital for all societies. An indicator is the extent to which industrialised nations participate in and compete for progress, development, and enhancement (Kohl, Murray & Salvo, 2020). It also demonstrates the extent of civilisational and cultural advancement of these societies, functioning as an effective tool to leverage the strengths and potential of individuals through holistic education including mental, physical, and health dimensions (Wang et al., 2024). The concept of inclusive sports seeks to provide all societal segments with the opportunity to participate in various athletic activities, as sports are not limited to a specific group, offering advantageous effects to all participants, including those with disabilities (Sandford et al., 2021). The sport for those with impairments, especially the deaf and dumb, has become a notable phenomena in sophisticated countries, illustrating the scientific advancements of our time across multiple fields, including athletics (Leigh et al., 2022). Thorough preparation of deaf individuals is crucial for attaining excellence in sporting activities (Gaweł et al., 2024). Kinetic learning and sports training for the deaf

are highly advantageous, allowing individuals to articulate themselves through their selected sports, thereby enhancing self-confidence in themselves, their instructors, and others, promoting positive interactions and personal development (Ward, 2024). Peers (2018) say that the aims of sports for those who are deaf and dumb are comparable to those of the general population, and they can participate in all sports activities without requiring alterations to venues, equipment, or regulations. Football is the most extensively engaged sport across diverse age demographics in society, including schools, universities, clubs, national teams, both sexes, and individuals with disabilities (Bergmann & Schreyer, 2019). Football has attracted increasing global attention in numerous countries, solidifying its status as one of the most popular sports, appealing to a wide array of age groups and both sexes (Pifer et al., 2018). Football markedly improves the physical and motor fitness of individuals with impairments (Afacan & Kılıç, 2021) and promotes the advancement of neuromuscular coordination and sensory-motor perception, hence enhancing their motor efficiency (Noad, 2022). It also improves their concentration, attention, and ability to perceive, visualise, recall, and distinguish motor and visual inputs, hence promoting cognitive development (Campillo et al., 2018). Experts assert that sports coaches, athletes, and sports scientists are always pursuing innovative training methodologies to improve athletic performance and gain a competitive advantage (Appelbaum & Erickson, 2018). Visual learning is a method employed in sports, consisting of a repetitive series of visual exercises aimed at improving essential visual functions vital for athletes in all competitive disciplines. This technique entails repetitive visual workouts that enhance the linkage between the eyes and the brain, consequently improving visual skills and capacities through systematically structured activities (Erickson, 2020). Under stressful conditions, it augments the compatibility and adaptability of the ocular muscles, facilitating control over these muscles to boost essential visual processes and, therefore, athletic performance. Kotb (2024) contends that visual workouts are crucial for both athletes and non-athletes, as they should be generally implemented, especially eye exercises, to alleviate visual stress that negatively affects visual functions over time. McDavid, Huse, and Hawthorn (2018). The visual exercise is a component of vision measurement, a discipline focused on sight and perception, evaluating and improving visual performance, and determining the most appropriate visual assistance for particular physical and athletic endeavours. He contends that visual training exercises are essential in sports, which may include physical conditioning, skill enhancement, and strategic planning; however, regrettably, sensory training has not been sufficiently emphasised in training programs, despite its critical importance in improving performance. Some study indicates that effective performance is associated with the ability for visual idealisation, but shortcomings in this domain impede performance; inaccurate visual information interferes with timing and leads to reduced performance levels (Erickson, 2020). A visual workout is an activity available to everyone. Exercise is revitalising; one simply needs to participate in practice and execute the exercises (Stanojevic & Saragiotto, 2021). Intelligence is a vital component in learning and excelling in sports, characterised as the ability to acquire knowledge and the individual's readiness to expand their experiences and activities (Doh, Kim & Nite, 2025). Multiple experiments and studies have shown a positive correlation between intelligence and skill acquisition and performance, relevant to individual sports like arena and field games, dual sports such as racket games, and team sports including football, basketball, and volleyball (Knapp, 2024). Alcaraz-Rodríguez et al. (2021) observed, according to expert opinion, that the prevalence of auditory and visual impairments does not impede the cognitive development of individuals with disabilities, asserting that their intellectual capacities are equally complex as those of

others. The hearers exhibit cognitive abilities within the standard intelligence spectrum and show comparable variability to the listeners (Lee & Chelladurai, 2018). Do not underestimate mental perception, a vital factor affecting performance, as it enables the internalisation of abilities through mental repetition, which includes rectifying faults by visualising flawless technical execution. The utilisation of mental imagery in sports training assists athletes or learners in doing activities precisely by detecting and rectifying deficiencies while enhancing strengths (Cossich et al., 2023). Enhancing gameplay techniques and developing motor skills while minimising focus on them through an awareness of optimal performance. Concentrating on successful experiences enhances the association between stimulus and reaction, so augmenting both the quality and velocity of performance to correspond with the pace of cognitive perception (Corrado et al., 2024). Prior study has investigated the correlation between visual training and performance, particularly the studies of Appelbaum and McGuckian, along with Cole and Pepping (2018), which determined that visual skills and visual coherence are essential for performance in various sports. The aforementioned demonstrates that visual exercises are important topics that have been largely neglected by researchers in the field of sports, especially with physical activities for those with disabilities. The dependence on visual perception, resulting from hearing and speech impairments, enhances the acquisition and mastery of various motor and athletic skills through the application of these activities. During exploratory visits to specialised schools for children with hearing impairments in Misan Governorate, we noted that the players participate in football erratically, lacking essential skills for the sport, demonstrating insufficient physical performance, and experiencing a shortfall in educational and training programs for their coaches. Despite the lack of local study on this aspect, and although football is the most popular sport worldwide, this category has not been given the chance to participate in the sport effectively and suitably. The study was designed to evaluate the effectiveness of visual exercises in improving particular football skills in deaf and dumb adolescents aged 12 to 14 years.

Research Objectives

1. Implement a visual workout regimen tailored to the attributes of individuals with disabilities (deaf and dumb).
2. Investigating the impact of visual exercises on enhancing football skills performance in individuals with disabilities (deaf and dumb) aged 12 to 14 years.
3. Identifying the disparities in dimensional measurements between the control and experimental samples for the execution of football skills in individuals with disabilities (deaf and dumb , ages 12-14).

Research hypotheses

1. The use of visual exercises is effective in improving the football skills under research for players with deaf and dumb disabilities (12-14 years).
2. There are statistically significant differences between the control and experimental group in the dimensional measurement in the performance of football skills under research for players with deaf and dumb disabilities (12-14 years).
3. There are statistically significant differences between the control and experimental group in the dimensional measurement in the performance of football skills under research for players with deaf and dumb disabilities (12-14 years) and in favor of the experimental group.

Research Areas

1. **The human Areas :** The research sample included 20 deaf-dumb players (12-14 years old).
2. **Spatial Areas :** Field research was conducted at the level of the Specialized School in Misan Governorate.
3. **Time Areas :** The proposed training program was planned, built and implemented, starting from 1-12-2023 to 13-3- 2023.

Methodology

Research methodology: The researchers employed an experimental approach including two groups: one experimental and the other control, to assess the appropriateness of the research's nature.

Study population and sample: The research population consists of 40 players from specialised schools for the hearing-impaired in Misan Governorate for the academic year 2023/2024 .

The foundational research sample comprised 20 deaf players aged 12 to 14 years, selected purposely and subsequently randomised into two equal groups: one experimental group consisting of 10 players and a control group of the same size.

Means of collecting information and tools used

The researchers conducted the following actions to establish procedural control:

1. Absence of disability associated with deaf and dumb disability.
2. Conducting tests in the same conditions Tools and means Research tools.
3. Sources and references as well as previous studies.
4. Football skills tests under research.

Football skills tests under consideration

First: Ball control and control test

Test name: Ball Sense of Time Test (Pepping, 2018).

Purpose of the test: to measure the player's sensitivity to the ball and his ability to control it.

Tools: Football, clock died stadium radius (3) meters.

How to perform the test: The player stands in the center of the circle with the ball, and when he is given the signal to start lifting the ball from the ground and bounces it within the boundaries of the circle with feet or one foot for one minute and if the ball falls to the ground or exits the boundaries of the circle before the end of the time, he repeats again.

Scoring: The best score is measured by the number of times the ball is touched from the moment of the start signal until the ball falls to the ground or exits out of the circle during the performance time.

Second: Ball Running Test

Test name: Ball slalom running test between signs (Majic, Hraste & Jelaska, 2020).

Purpose of the test: Measure the player's ability to control the ball while running with it. Instruments (9) Football signs, stopwatch.

How to perform the test: the stinging signs are placed in a straight line and the distance between each sign and the other (2) m, and the distance between the starting line and the first signs (2) m.

The player stands with the ball on the starting line, and when the start signal is given, the player runs between the lists a zigzag scab until he reaches the last sign that rotates around him and returns to the starting line in the same way.

Scoring: Scores the player the best time to the nearest second from the moment he gives the start signal until he returns to the starting line again.

Third: Handling Test

Test name: ground short scroll accuracy test (Saher, 2015).

Test objective: to measure the accuracy of passing the ball.

Pitch and tools: a square with a side length of (6) m, a flag is placed in the center of the square, the ball is placed at a distance of 1.5 meters from the corner of the square from both sides, the goal of its width is placed (1) m at a distance of (10) m from the middle of each side of the square.

How to perform the test: The player stands next to the post in the center of the square, when the signal is given, the player runs to the ball to the left side of the square and aims it towards the goal and then runs to the ball similar to the three sides of the square, and after kicking the last left ball runs to the side of the first square to kick the right ball and continues to perform kicking the rest of the balls.

Scoring: The player counts the number of goals he scored.

Fourth: Scoring Test

Test Name: Scoring accuracy test on divided goal.

Test objective: to measure the accuracy and to score the ball to the goal.

Tools used: thick colored adhesive tape to designate scoring areas, football goal legal (5) footballs, the pitch is divided into zones.

How to perform: (5) balls are placed on the penalty line, which is 18 meters away from the goal line and the distance between one ball and another is 1 meter, where the player scores in the areas indicated by the test and according to their importance and difficulty and sequentially ball after the other, provided that the test is done from the running position.

How to score: Calculates the number of injuries that enter the goals set from both sides so that the scores of each of the five balls are calculated as follows:

Each ball is calculated with the points specified for the calculated area, taking into account that if the ball touches the bar, it is calculated for the highest area according to the numbered areas, and zero when it exits outside the goal limits.

- ❖ 5 degrees for zone No (5).
- ❖ 4 degrees for zone No (4)
- ❖ 3 degrees for zone No (3).
- ❖ 2 degrees for zone No (2).
- ❖ 1 degree for zone No (1).
- ❖ Zero outside the goal.

Scientific foundations of the test

The stability and truthfulness of the tests

After consulting with experts about the evaluations of the research variables and subsequent arbitration, the researchers established the reliability coefficient of the tests by administering and re-administering

the assessment to an exploratory sample separate from the primary research sample, which comprised 8 players with disabilities (deaf and dumb). The preliminary test was performed on 10/12/2023, succeeded by a dimensional measurement one week later on 17/12/2023, employing Pearson's correlation coefficient.

Table 1: Coefficient of stability for the tests under consideration.

Tests	Unit of measurement	Sample size	Constant coefficient	R
Ball zigzag running	Number	10	0.92	0.66
Ball Control	Second		0.78	
Ball Handling	Degree		0.82	
Scoring towards goal	Degree		0.74	

Table (1) reveals that all obtained results were elevated, with the minimum value at 0.74 and the maximum at 0.92, both exceeding the tabulated R value of 0.66 at a significance level of 0.05 and 9 degrees of freedom, indicating the substantial stability inherent in these tests.

Objectivity

A series of skill assessments was administered to a cohort of evaluators comprising experts and specialists in adapted sports and sports training from Iraqi universities' colleges of physical education and sports sciences. Their objective was to provide feedback on the assessments, suggest modifications where applicable, and determine if they fulfil their intended purpose. The majority of evaluators reached a consensus regarding the validity of the tests under investigation, noting their ease of application and lack of ambiguity, as well as their substantial relevance to the research topic at hand.

Foundations of program development

- ❖ The researchers established the scientific basis for developing the program by curating its content. Physical activities Ball workouts emphasising visual training aimed at enhancing visual acuity and acquiring football skills for the research sample.
- ❖ Sixteen training units have been created, encompassing physical exercises and motor tasks with an emphasis on visual exercises throughout an 8-week period, with each training unit conducted twice weekly, lasting between 50 to 60 minutes.

Curriculum content

- ❖ Running exercises and games.
- ❖ Compatibility exercises and games.
- ❖ Action Games (Imitation Games).
- ❖ Ball Games.

Visual exercises

Visual perception was represented in the visual-motor synergy of the hands (visual-motor synergy of the legs) and included:

- ❖ Running with the ball has specific distances and different directions.

- ❖ Control the ball in place and with navigation.
- ❖ Receive the ball in multiple ways.
- ❖ Aim at certain targets.
- ❖ Kick the ball in the appropriate ways.
- ❖ Recognize and distinguish near and far distances.
- ❖ Distinguish the place and specific goals.
- ❖ Focus on the right performance (the right model).

Carrying out research procedures

Pre-test: The level of football skills under consideration was tested for the two experimental research samples and the officer on 17/12/2023, in the same circumstances and place.

Program Application

The proposed program was implemented with the experimental group from 19-12-2023, to 13-2-2023, spanning 8 weeks, with two sessions per week. Each training session lasted 50 to 60 minutes, comprising 10 to 15 minutes for the preparatory phase, 35 to 45 minutes for the main phase, and 5 minutes for the concluding phase, with each session repeated biweekly. The control sample engaged in football practice under the coach's supervision during the sports activity class.

Post-test: The post-measurement was carried out on 16/02/2024 with the same steps and method adopted in the pre-measurement and in the same conditions and place.

Statistical methods

The researcher used statistical methods through (SPSS-23) and were:

- ❖ The arithmetic mean of the standard deviation correlation coefficient (Pearson).
- ❖ Test the significance of differences T Sunbudnet difference two mean correlated.
- ❖ Test the significance of differences T Sunbudnet difference two unrelated mean difference for two equal samples.

Results

Presentation, interpretation and discussion of results

Presentation and discussion of the results of the pre- and post-tests of the two research samples

Table 2: Significance of the differences between the pre- and post-tests of the experimental sample in the skills under research.

Tests	Pre test		Post test		T
	M	SD	M	SD	
Ball zigzag running	16.68	1.56	14.00	2.01	8.47
Ball Control	5.6	0,93	10.2	3.28	7.22
Ball Handling	2.8	0.95	5.30	1.65	6.70
Scoring towards goal	9.4	2.37	15.4	3.37	7.27

Table (2) indicates statistically significant differences favouring the post-tests of the experimental sample, with calculated T values ranging from 6.70 to 8.47, all exceeding the tabular T value of 1.83

at a significance level of 0.05 and degrees of freedom (N1-10). This results from the incorporation of physical exercise both with and without the ball, as well as the utilisation of the ball to enhance visual exercises within the program designed to teach football skills in the experimental research sample, alongside the application of scientific principles in the development of educational units supported by visual exercises.

Table 3: Significance of the differences between the pre- and post-tests of the control sample in the skills under research.

Tests	Pre test		Post test		T
	M	SD	M	SD	
Ball zigzag running	16.6	1.78	15.08	2.25	0.61
Ball Control	5.8	2.00	6.40	2.37	2.25
Ball Handling	2.7	1.12	3.00	1.55	0.89
Scoring towards goal	10.00	3.88	11.10	3.32	1.84

Table (3) demonstrates statistically significant differences within the control sample across the administered tests, with calculated T values ranging from 1.84 to 2.25, all exceeding the tabular T value of 1.83 at a significance level of 0.5 and 9 degrees of freedom, with the exception of the running with the ball and passing the ball tests. The researchers attribute these findings to the frequency and repetitions of the exercises employed, which pertain to skills relevant to the game of football. Due to insufficient emphasis on the proper execution of acquired abilities.

Table 4: Significance of the differences in the dimensional measurement of the two research samples in the tests under research.

Tests	Experimental		Control		T
	M	SD	M	SD	
Ball zigzag running	14.00	2.01	15.08	2.25	2.61
Ball Control	10.2	3.28	6.40	2.37	3.68
Ball Handling	5.30	1.65	3.00	1.55	3.28
Scoring towards goal	15.4	3.37	11.10	3.32	3.73

Table (4) clearly indicates statistically significant differences between the control and experimental research samples, favouring the experimental sample in the tests conducted. The calculated values ranged from 2.61 to 3.73, all exceeding the tabulated T-value of 2.10 at a significance level of 0.05 with 18 degrees of freedom.

Discuss research Results

Table (2) indicates that the significance test of the two averages reveals statistically significant differences favouring the post-test in the football skills assessments under investigation (slalom running with the ball, ball control, passing, and shooting towards the goal) for the experimental sample following the implementation of an educational program emphasising visual exercises over a duration of 8 weeks, with two sessions per week. The researchers ascribe this to the beneficial impact of the proposed program centred on visual exercises, which was implemented with the experimental sample

by significantly emphasising the sense of sight during the execution of motor tasks related to learning football skills. The program's development considered the number of repetitions and exercise simplicity, emphasising an expanded selection of exercises, directional changes, and coordination activities between the eye and the body. The exercises are structured to progress from easy to difficult, enhancing the synergy between visual perception and muscular function. The selected exercises are targeted and capable of delivering motor stimuli more effectively than non-directed exercises. Ahmed (2020) discovered that the implementation of ball exercises and games enhanced certain motor skills in players with disabilities (deaf and dumb), notably improving the coordination between the eye and the leg, as evidenced by the results of the ball-kicking test aimed at the goal. This finding aligns with Myer et al. (2011), who concluded that incorporating specialised exercises into the training regimen resulted in improved proficiency in ball control among youth under 16 years of age. Naser and Rashid (2022) confirm that a player attains skill performance automatically through consistent repetition. Additionally, Putri and Anam (2023) assert that a player's proficiency in fundamental football skills correlates with the effort invested in skill acquisition over a brief period, leading to a high achievement rate. The correction of performance errors through feedback and the repeated execution of correct techniques under varying conditions and increasing difficulty significantly contribute to skill enhancement. Hussein, Habeeb, and Ibrahim (2022) emphasise the significance of training through mental visualisation activities that enhance the performance of football abilities in juniors. Erickson (2021) affirms that data supports the efficacy of visual exercises in sports presentations. Table (3) indicates that, following the significance test of the two averages of the differences, statistically significant differences were seen among the control sample in several tests, with the exception of the slalom running tests with the ball and the ball passing tests. This results from the teacher's dependence on basic motor activities and exercises related to football skills, which prioritise skill development over precise and proper execution of the applied skills. The superiority of the experimental sample over the control sample is highlighted, as demonstrated in Table (5). Utilising the significance test for the difference between two unrelated means of equal variance, the results indicate statistically significant differences favouring the experimental sample across all dimensional measurements. The researchers concentrated on visual exercises to enhance football skills, utilising both total and partial learning methods, and incorporating individual and group feedback for error correction. This contrasts with the control group, which employed a total method of gameplay, neglecting proper skill performance oversight by the coach and failing to select suitable exercises for skill enhancement. Consequently, the results obtained align with the findings of Dhouibi et al. (2021), Tomporowski and Pesce (2019), and Nobre, Nobre, and Valentini (2024) on the efficacy of visual exercises in enhancing cognitive motor abilities and proficiency in sports activities. Bashtovenko et al. (2021) asserted that Lustyna is a significant visual educational program for players in responsive sports. Du Toit et al. (2011) and Cereatti et al. (2009) emphasise the significance of incorporating visual exercises and maintaining focus on them in educational and training programs. Its significant role in the acquisition of motor and athletic skills. Pourkhosravani, Kavyani, and Aghdaei (2018) assert that football players must be capable of recognising opponents and teammates in their peripheral vision while managing the ball, given its evident significance. The sports visual system has witnessed the rise of numerous visual training regimens designed to improve athletes' visual skills. The researchers contend that this curiosity pertains equally to both the novice demographic of the general populace and individuals with exceptional abilities, including those with hearing and speech impairments. This is achieved by

focussing on visual perceptions and enhancing them, as they play a crucial role in improving motor coordination, thereby facilitating the acquisition of fundamental movements, game skills, and athletic activities, given that visual skills are essential for performance in diverse sports endeavours. Moreover, the processes of repetition and correction contribute to enhancing the performance of the abilities being studied by utilising both immediate and delayed feedback to rectify prior achievements and experiences. Laby and Appelbaum (2021) advocate for the incorporation of visual training exercises targeting eye movements, concentration, visual perceptual environments, and visual perceptual skills to enhance athletic performance, irrespective of the intensity of training. Conversely, other researchers, such as Lochhead et al. (2024), propose the integration of visual exercises into standard athletic training regimens. Allaba and Abbas (2022) advocate for the use of workouts that enhance neuromuscular compatibility for deaf and dumb athletes within sports curricula and programs tailored for this demographic. Dyck (2011) emphasises the need of implementing balance and motor coordination exercises to enhance the precision of low-foot shooting in the sport of football. The nature of the deaf category, stemming from hearing loss, indicates that the sense of sight enables the learner to comprehend the execution of new movements, hence facilitating the observation of initial outward appearances. The essential aspects of the movement are highlighted when demonstrating the kinetic model, and its repetition enhances the precision of the action. Presenting the models to the learner stimulates passion and fosters a sense of kinaesthetic awareness. This indicates that the learner or trainee actively engages with both external and internal incentives, in addition to those perceived through tactile sensations and the equilibrium of temperature and motion; the sense of sight aids in discerning the body's position and form during movement. Ultimately, it may be asserted that diverse educational programs are crucial for enhancing proficiency levels. Motor and skill competencies of athletes and non-athletes across many physical and sporting activities. These exercises should be complemented with visual activities, as they stimulate sensory engagement for enhanced performance. Visual exercises are intriguing, requiring no surgical intervention or extensive visual supplies; rather, they are tasks that individuals can execute effectively. They hold equal importance alongside other forms of exercise, such as physical, skill-based, and tactical training.

Conclusions

1. The visual education program used has a positive impact on improving the performance of football skills for players with disabilities (deaf and dumb).
2. The existence of statistically significant differences between the pre-measurement and the post-measurement among the experimental sample valid post-measurement in the football skills tests under research.
3. The existence of statistically significant differences between the control sample and the experimental sample in the valid dimensional measurement of the experimental sample in the football skills tests under research.
4. The experimental sample outperformed the control sample in the results of the football skills tests under research.
5. Visual exercise programs are of great importance for players with hearing disabilities in learning and improving football skills

Proposals

1. The use of visual exercises because of their importance in learning football skills for players with disabilities (deaf and dumb).
2. Attention to the development of visual cognitive abilities for their great contribution to learning sports skills.
3. Diversification in educational programs between visual exercises skill and planning.
4. Conducting research on visual exercise in various sports activities in the community of players with disabilities (deaf and dumb).
5. Paying attention to research related to players with disabilities and conducting them on various aspects of movement, skill and planning.

References

1. Aksum, K. M., Brotangen, L., Bjørndal, C. T., Magnaguagno, L., & Jordet, G. (2021). Scanning activity of elite football players in 11 vs. 11 match play: An eye-tracking analysis on the duration and visual information of scanning. *Plos one*, 16(8), e0244118.
2. Al Behadili, H. J. H., & Kasim, M. A. (2022). Developing Ball Dribbling And Passing Skills Using The Integrative And Reciprocal Methods Of Emerging Footballers. *International Journal of Revolution in Science and Humanity*, 10(2), 13-20.
3. Al Behadili, H. J. H., & Kasim, M. A. (2022). Effects Of A Training Program For The Plyometric On The Harmonic Abilities And Muscular Ability Of Football Players. *European Journal of Interdisciplinary Research and Development*, 6, 60-69.
4. Al Behadili, H. J. H., & Kasim, M. A. (2022). The Implications For Learning Of Transferring On Passing Skills In Junior Football Players. *Open Access Repository*, 8(9), 39-49.
5. Appelbaum, L. G., & Erickson, G. (2018). Sports vision training: A review of the state-of-the-art in digital training techniques. *International Review of Sport and Exercise Psychology*, 11(1), 160-189.
6. Appelbaum, L. G., & Erickson, G. (2018). Sports vision training: A review of the state-of-the-art in digital training techniques. *International Review of Sport and Exercise Psychology*, 11(1), 160-189.
7. Armila, P., Rannikko, A., & Torvinen, P. (2018). Young players with intellectual disabilities and sport as a leisure activity: notions from the Finnish welfare society. *Leisure Studies*, 37(3), 295-306.
8. Bayraktar, G. (2011). The effect of cooperative learning on students' approach to general gymnastics course and academic achievements. *Educational research and reviews*, 6(1), 62.
9. Bores-García, D., Hortigüela-Alcalá, D., Fernandez-Rio, F. J., González-Calvo, G., & Barba-Martín, R. (2021). Research on cooperative learning in physical education: Systematic review of the last five years. *Research quarterly for exercise and sport*, 92(1), 146-155.
10. Coutinho, D., Kelly, A. L., Santos, S., Figueiredo, P., Pizarro, D., & Travassos, B. (2023). Exploring the effects of tasks with different decision-making levels on ball control, passing performance, and external load in youth football. *Children*, 10(2), 220.
11. Dyson, B., Shen, Y., Xiong, W., & Dang, L. (2022). How cooperative learning is conceptualized and implemented in Chinese physical education: A systematic review of literature. *ECNU review of education*, 5(1), 185-206.
12. Erickson, G. B. (2020). *Sports vision: vision care for the enhancement of sports performance*. Elsevier Health Sciences.

13. Fernández-Espínola, C., Abad Robles, M. T., Collado-Mateo, D., Almagro, B. J., Castillo Viera, E., & Gimenez Fuentes-Guerra, F. J. (2020). Effects of cooperative-learning interventions on physical education students' intrinsic motivation: A systematic review and meta-analysis. *International Journal of Environmental Research and Public Health*, 17(12), 4451.
14. Fernandez-Rio, J., & Casey, A. (2021). Sport education as a cooperative learning endeavour. *Physical Education and Sport Pedagogy*, 26(4), 375-387.
15. Iglesias, D., & Fernandez-Rio, J. (2024). A model fidelity check in cooperative learning research in physical education. *Physical Education and Sport Pedagogy*, 1-16.
16. Jaradat, N. A., & Dhia'a, Y. (2023). The Effectiveness of a Sports Program in Developing the Social Skills of Deaf Individuals in a Jordanian Sample.
17. Maher, A. J. (2021). Disrupting phonocentrism for teaching Deaf pupils: prospective physical education teachers' learning about visual pedagogies and non-verbal communication. *Physical Education and Sport Pedagogy*, 26(4), 317-329.
18. Manouvrier, C., Cassirame, J., & Ahmaidi, S. (2016). Proposal for a specific aerobic test for football players: The "Footeval". *Journal of sports science & medicine*, 15(4), 670.
19. Mežan, L. Ž., & Škof, B. (2023). Cooperative learning vs. direct instruction in youth sport: effects on children's motor learning. *Kinesiologia Slovenica: scientific journal on sport*, 29(2), 136-156.
20. Newman, T. J. (2020). Life skill development and transfer: "They're not just meant for playing sports". *Research on Social Work Practice*, 30(6), 643-657.
21. Nshimiyimana, J., Uwihoreye, P., Muhigirwa, J. C., & Niyonsega, T. (2023). Neurofunctional intervention approaches. In *Neurorehabilitation and physical therapy*. IntechOpen.
22. Perdana, R. P., Supriatna, E., Yanti, N., & Suryadi, D. (2023). Team Game Tournament (TGT)-type cooperative learning model: How does it affect the learning outcomes of football shooting?. *Edu Sportivo: Indonesian Journal of Physical Education*, 4(1), 86-96.
23. Pifer, N. D., Wang, Y., Scremin, G., Pitts, B. G., & Zhang, J. J. (2018). Contemporary global football industry: An introduction. *The global football industry*, 3-35.
24. Post, E. G., Trigsted, S. M., Schaefer, D. A., Cadmus-Bertram, L. A., Watson, A. M., McGuine, T. A., ... & Bell, D. R. (2020). Knowledge, attitudes, and beliefs of youth sports coaches regarding sport volume recommendations and sport specialization. *The Journal of Strength & Conditioning Research*, 34(10), 2911-2919.
25. Poucher, Z. A., Tamminen, K. A., & Kerr, G. (2023). Olympic and Paralympic athletes' perceptions of the Canadian sport environment and mental health. *Qualitative Research in Sport, Exercise and Health*, 15(5), 636-653.
26. Prasetyo, K., Soegiyanto, S., & Irawan, F. A. (2019). The Effect of Exercise Methods and Eye-Foot Coordination on Football Passing Accuracy. *Journal of Physical Education and Sports*, 8(4), 82-87.
27. Ric, A., Torrents, C., Gonçalves, B., Torres-Ronda, L., Sampaio, J., & Hristovski, R. (2017). Dynamics of tactical behaviour in association football when manipulating players' space of interaction. *PloS one*, 12(7), e0180773.
28. Rivera-Pérez, S., Fernandez-Rio, J., & Iglesias Gallego, D. (2021). Effects of an 8-week cooperative learning intervention on physical education students' task and self-approach goals, and emotional intelligence. *International Journal of Environmental Research and Public Health*, 18(1), 61.

29. Rivera-Pérez, S., Fernandez-Rio, J., & Iglesias Gallego, D. (2021). Effects of an 8-week cooperative learning intervention on physical education students' task and self-approach goals, and emotional intelligence. *International Journal of Environmental Research and Public Health*, 18(1), 61.
30. Salih, M. M. M., Hashim, R. S., & Kasim, M. A. (2021). Forecasting Achievement Sports through Cooperative Learning in Handball Training in Physical Education. *Annals of Applied Sport Science*, 9(3), 0-0.
31. Smith, B., & Bundon, A. (2018). Disability models: Explaining and understanding disability sport in different ways. *The Palgrave handbook of Paralympic studies*, 15-34.
32. Tang, N., & Li, P. (2012). Study on cooperative learning teaching mode in university tennis teaching. In *Informatics and management science I* (pp. 545-552). London: Springer London.
33. Wibisono, R., Kartiko, D. C., & Hartoto, S. (2018). Improve the motivation of learning and learning outcomes passing down volleyball through cooperative learning model. *Journal of Physical Education Health and Sport*, 5(2), 39-45.