

DOI: <https://doi.org/10.54702/4cyf2165>**The effect of a cognitive training strategy supported by complex exercises on learning some football skills for second-year intermediate students**Ameena Kareem Hussein<sup>1</sup>✉, Ismail Abid Zaid<sup>2</sup>✉, Saadullah Saeed Majeed<sup>3</sup>✉

1&amp;3 Physical Education and Sport Sciences College / Kirkuk University

2 Physical Education and Sport Sciences College / Mustansirya University

Received: 22/01/2024, Accepted: 14/02/2024, Published: 30/04/2024

This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/), © Modern Sport**Abstract**

The purpose of this paper is to prepare educational units for the cognitive training strategy, prepare complex exercises specific to soccer, and identify the effect of using the cognitive training strategy according to complex exercises in learning some soccer skills. The researchers used the experimental method with a rotating design for the two experimental groups and the control group to suit the nature of the research problem. The research aims to identify the research population represented by middle-aged second grade students for the academic year 2023/2024 in the Baghdad Education Directorate Al-Karkh III, who number (132) students divided into four sections (A\_B\_C\_D\_). The research sample was chosen randomly by lottery and was Choosing two sections (A - C) to represent the two experimental groups, and section (B) to represent the control group. (10) Students were chosen from section (D) to represent the sample of the exploratory experiment for the research, so that the number of section (A) became (29) students (cognitive training with complex exercises) the number of students in Section (C) (Cognitive Training) was (28) students and the control group was (32) students. The number of students in the exploratory experiment was (10) students, as the percentage of the sample as a whole from the community of origin was (72%). The researchers proceeded to research procedures, including testing. The pre-test and conducting the research experiment as well as the post-test, and the statistical package was used to extract the results until they reached the most important conclusions, including that the cognitive training strategy supported by combined exercises has a positive impact on learning some football skills. The researchers recommend using the cognitive training strategy supported by combined exercises by physical education teachers. To teach other football skills.

**Keywords****strategy, cognitive training, compound exercises, football.****Introduction:**

There are many modern learning strategies that have become an urgent educational necessity to master the learning process and one of the important factors that contribute to the development of the educational process that helps researchers contribute to thinking and discovering new strategies to reach success. One of these strategies is the cognitive training strategy as a scientific method that serves the development process. Mental, cognitive, and skills, and improving them as they are specific cognitive means that urge learners to employ appropriate

mental processes during their learning and leave them the freedom to employ whatever processes they want according to different natures and concepts that lead to understanding and comprehension and then to better learning, as the use of the cognitive training strategy and its types and forms. In the educational process, it would stimulate the learner, as it provides an educational environment and various concepts and styles, including audio, visual, and symbolic, in addition to directing questions and concepts in different ways and forms in order to direct the learner's attention to what he wants to learn, even if the

learner focuses his attention. Therefore, the cognitive strategy is of great educational importance that can be implemented at different ages and specializations and in many educational, social and sports fields to master the learning process, which contributes to developing the learner's experiences stored and preserved in his memory, which will be prepared for the process of transferring and retrieving information when needed. The game of football is one of the most important sports that is widely practiced and occupies a good position in societies as it is an exciting game in the interconnection of exercises and skills with each other and the interaction of learners with the skills and sports movements that students and athletes must learn and master to a high degree during the physical education lesson, matches and exercises. The vehicle is for students at this age stage and is no different from any other game through the preparation of strategies and modern scientific methods to develop the sports skills that should be developed and achieve the best sports results. The improvement and development processes continue in the methods and methods of learning and exercises and their organization in a way that is consistent with the effectiveness and skill required for learning and in harmony with the capabilities. The abilities of the learners and their age and study groups that develop their skill and physical abilities in the process of learning basic football skills. From the above, the importance of research lies in the use of the cognitive training strategy, which is one of the modern concepts that contribute to the development of the educational process so that it is accessible to those who work in this field in general, and football in particular, so that they can apply it on the field and in an appropriate scientific and educational manner that can contribute to raising The level of learning football skills for the better, providing appropriate and objective ways to improve them, and creating learning methods that contribute to improving the learning process to reach the best level with the least time and effort, as well as the importance of compound exercises, which are also important through their implementation in learning football skills. Its physical type is skillful and skillful is skillful. The researchers noticed, through their review of scientific research, sources and

references, and through their personal experience in teaching the field of teaching methods, that there is a lack of use of modern cognitive strategies, a lack of focus on the cognitive aspect, and a lack of use of a cognitive training strategy that urges the learner to employ the mental process while learning football skills. The learning practiced in most schools is to rely on repetition and repeating without giving the student a role in understanding, analysis and evaluation, or what raises the students' motivation towards learning to perform the skills in the correct and required way. There are also a number of students who learn and store what they learn, but they lose the ability to recover what they have experienced. From the experience and performance of skills in the correct and required way, because the student does not work to employ his appropriate mental processes and does not use modern technology, such as displaying videos and posters, which work to help him easily retrieve information instead of carrying out the process of storing information.

#### **Research objective:**

- Preparing special compound exercises for the skills of (passing - rolling - and putting down) in football.
- Preparing educational units for the cognitive training strategy.
- Identifying the effect of using a cognitive training strategy according to complex exercises in learning some football skills.

#### **Research hypotheses:**

- There are statistically significant differences in the results of the pre- and post-tests for the three research groups (experimental and control) in learning some football skills.
- There are statistically significant differences in the results of the post-tests between the three research groups (experimental and control).

#### **Research fields:**

- Human field: A sample of students in the second grade / Al-Futwa Intermediate School for Boys / for Baghdad Al-Karkh Education III / for the academic year (2023/2024).
- Time field: (25/9/2023) to (28/12/2023)
- Spatial field: Intermediate yard (Al-Fatwa for boys), Baghdad Education Al-Karkh III.

**Method and Procedures:****Research Methodology:**

The researchers used the experimental method with a design that rotated the groups, the two experimental groups and the control group, to suit the nature of the research problem and the research objectives.

**Community and sample research:**

The researchers intended to identify the research population represented by middle-aged second grade students for the academic year 2023/2024 in the third Baghdad Al-Karkh Education Directorate, who numbered (132) students, divided into four sections and according to the letters of the alphabet (A\_B\_C\_D\_). The number of students in each section was (A.) (31), Section (B) (37), Section (C) (31), and Section (D) (33). The research sample was chosen randomly by lottery, and Sections (A\_C) were chosen to represent the two experimental groups, and Section (B) It represents the control group. (10) students were chosen from Section (D) to represent the sample of the exploratory experiment for the research. The failing students were excluded, namely two students from Section (A) and one student from Section (C), so that the number of Section (A) became (29) students (training). The number of students in Section (C) (cognitive training) was (28) students and the control group was (32) students. The number of students in the exploratory experiment was (10) students, as the percentage of the sample as a whole from the community of origin was (72%), which is a representative and real percentage of the community. search.

**Methods used in the research:**

- Arab and foreign references and sources.
- Personal interview.
- A questionnaire of the names of experts to nominate the tests, as shown in an appendix
- Skill tests questionnaire.
- Internet

**Devices and tools used in research:**

The researchers used the following devices and tools to fulfill the requirements of his research

- One Chinese-made Lenova310 laptop.
- Kinon camera, Chinese origin (1)
- Footballs (15)

- Signs.

**Field research procedures:****Identify the skills being researched:**

The researchers relied on (Kazim et al.) "The methodological skills prepared by the Ministry of Education, General Curriculum Directorate, Physical Education Teacher's Guide (Rolling, Passing, Putting down). (1)

**Determine the tests for the skills nominated for research:**

The researchers presented a set of tests for skills in the game of football, which have a high degree of validity, consistency and objectivity. These tests were presented to the 7 experts and specialists to seek their opinions on nominating what they saw as appropriate special tests to measure skill variables, as each skill included three tests and were chosen. The tests that obtained the highest percentages of agreement among experts and those that obtained an agreement rate of (67%) or higher.

**Skill tests identified by experts:**

First: Rolling with a football / (rolling between 5 cons back and forth) (Al-Hiti) (2)

Second: Controlling stopping the ball (put down) (Al-Hiti) (2).

Third: Testing the bouncing passing on the wall for (30) seconds (Faleh) (3)

**First exploratory experience (for skill tests):**

The exploratory experiment is a preliminary study that researchers conduct on a small sample before they carry out their research with the aim of choosing research methods and tools. In addition, researchers can identify the obstacles that they may encounter during the applied research procedures. The test was conducted on 2/10/2023.

**Second exploratory experiment on educational units and complex exercises**

When starting to apply the educational units for the two cognitive training strategies, the researchers intended to give two educational units to the two research groups, so that the learners would become familiar with the types and forms of cognitive training. This unit is considered one

of the educational units prepared by the researchers, which is one of the necessary basics at the beginning of learning, in addition to applying complex exercises. In football, the researchers used combined physical, skill, and skill exercises, and the exploratory experiment was conducted on 8/10/2023.

#### Scientific foundations of football skills tests:

The researchers relied on standardized scientific tests applied to the Iraqi environment and at the same age level and for recent years and applied to the Iraqi environment and enjoyed acceptable scientific levels of honesty, reliability and

objectivity, with degrees of truthfulness (0.90, 0.89, 0.87) and degrees of reliability (0.88, 0.89, 0.88). As for objectivity, it was the researchers relied on fixed units of measurement that deal with the testers' scores.

#### Pre-tests:

A pre-test was conducted on the research groups (experimental and control) before starting to implement the education curriculum, in order to determine the level of football skills of the research sample. The tests were conducted on 10/10/2023 in the Al-Futwa Intermediate Schoolyard for boys.

**Table .1** shows the equivalent of the sample members

Variable	Variance	Sum of squares	Degree of freedom	Mean squares	F calculated	Level sig	Type sig
Passing	Between groups	8.68	2	4.34	2.14	0.11	Non sig
	Inside groups	193.96	89	2.08			
Rolling	Between groups	63.35	2	31.67	0.74	0.47	Non sig
	Inside groups	3972.42	89	42.71			
Putting down	Between groups	4.75	2	2.37	0.53	0.58	Non sig
	Inside groups	412.87	89	4.44			

#### Implementation of educational units:

After the researchers reviewed a group of scientific sources, benefited from previous studies, and benefited from the experiences of the supervisors because they are specialists in the field of teaching methods and football, and after the researchers completed the exploratory experiments and pre-tests, the researchers prepared a curriculum according to the cognitive training strategy in order to achieve the research objectives. It included The curriculum consists of (10) educational units, two units per week, (20) educational units, with a time limit of (45) minutes per educational unit, according to the lesson time allocated according to the lesson schedule. The following is the time distribution of the proposed approach:

- Number of weeks (10).
- The number of educational units per week is (2) two units.
- The total number of units is (20) educational units
- The time of the educational unit is (45) minutes.
- As indicated in the educational unit.
- The researchers applied combined physical-skill and physical-skill exercises during the educational units.

#### Post-tests:

Posttests were conducted on members of the research sample after completing the implementation of the curriculum, which were conducted on 24/12/2023 in the Al-Futwa middle

school playground for boys, under direct supervision by the researchers.

### Presentation and analysis of the results of the three research groups on the football rolling skill

#### Results:

**Table .2** shows the values of the arithmetic means and standard deviations for the research groups, the two experimental groups and the control group, and the value of (t) in the skill of rolling in football in the results of the pre- and post-tests.

Groups	Measuring unit	Pre-test		Post-test		Arithmetic mean of difference	Sum arithmetic mean of difference	T value Calculated	Level sig	Type sig
		Mean	Standard deviation	Mean	Standard deviation					
Control group	Time	28.37	5.37	25.19	5.01	3.17	7.80	2.30	0.02	Sig
First experimental group, the second experimental group		28.01	7.04	17.87	4.20	10.14	4.68	12.23	0.00	Sig
Second experimental group, the first experimental group		29.89	7.02	20.62	5.41	9.27	6.39	8.20	0.00	Sig

Table 2 shows the values of the arithmetic means and standard deviations for the sums  
**Presentation and analyze the results of the pre- and post-test of the passing skill**

**Table .3** shows the results of the pre- and post-test for the three research groups in the skill (passing), the values of the arithmetic means and the standard deviations for the three research groups, the two experimental groups and the control group.

Groups	Measuring unit	Pre-test		Post-test		Arithmetic mean of difference	Sum arithmetic mean of difference	T value Calculated	Level sig	Type sig
		Mean	Standard deviation	Mean	Standard deviation					
Control group	Repetition	6.01	1.60	6.41	1.38	0.40	1.07	2.14	0.04	sig
First experimental group, the second experimental group		6.46	1.26	7.34	0.97	0.88	0.67	6.55	0.00	sig
Second experimental group		5.84	1.41	6.87	0.71	1.03	1.20	5.07	0.00	sig

**Presentation and analysis of the results of the pre- and post-test of football Putting down skill:**

**Table .4** shows the results of the pre- and post-test for the three research groups in the skill (Putting down)

Groups	Measuring unit	Pre-test		Post-test		Arithmetic mean of difference	Sum arithmetic mean of difference	T value Calculated	Level sig	Type sig
		Mean	Standard deviation	Mean	Standard deviation					
Control group	Degree	5.25	1.95	6.15	1.68	0.90	1.04	4.86	0.00	Sig
Second experimental group		5.68	1.90	8.41	1.53	2.73	1.93	7.69	0.00	Sig
First experimental group		5.75	2.42	7.68	1.76	1.93	3.02	3.62	0.00	Sig

#### Post-test of the investigated skills:

By observing Table (4), which shows us the results of the post-tests between the three research groups, the two experimental groups, and the control group, it shows us the variance within the

groups, as well as the mean squares between the groups and within the groups, the degree of freedom between the groups and within the groups, the calculated (f) value, and the percentage of error.

**Table .5** shows the arithmetic means and standard deviations between groups and within groups, and the calculated (f) value

Variable	Variance	Sum of squares	Degree of freedom	Mean squares	F calculated	Level sig	Type sig
Passing	Between groups	8.89	2	4.44	3.89	0.02	sig
	Inside groups	106.34	93	1.14			
Rolling	Between groups	875.23	2	437.61	18.19	0.00	sig
	Inside groups	2237.25	93	42.05			
Putting down	Between groups	79.26	2	39.63	14.30	0.00	sig
	Inside groups	257.67	93	2.77			

**Table .6** shows the value of (L.S.D), the least significant difference for the variables investigated

Variable	Groups	Difference between the mean	Results Mean	L.S.D	Type sig
Passing	Control - first experimental	7.34 – 6.41	0.93	0.45	Sig for second experiment
	Control - second experimental	6.87 – 6.41	0.46		Sig for first experiment
	Second experimental - first experimental	6.87 – 7.34	0.47		Sig for second experiment
Rolling	Control - second experimental	17.87 – 25.19	7.32	2.07	Sig for second experiment
	Control - the first experimental	20.62 – 25.19	4.57		Sig for first experiment

	Second experimental - the first experimental	20.62 – 17.87	2.75		Sig for second experiment
	Control - second experimental	8.41 – 6.15	2.16		Sig for second experiment
Putting down	Control - the first experimental	7.68 – 6.15	1.53	0.70	Sig for first experiment
	Second experimental - the first experimental	7.68 – 8.41	0.73		Sig for second experiment

### **Discussing:**

#### **Discussing the results of the pre- and post-test between the two experimental groups and the control group regarding the football skills under study.**

When observing the football skills tables above, which relate to the results of the control group and the two experimental groups in the pre- and post-tests, through the results of the special display, which pertains to the control group, there are statistically significant differences between the pre- and post-tests in all tests for the research groups in the arithmetic settings for the post-tests and the pre-tests between the tests. The pre and post-tests are statistically significant for all tests in learning the three soccer skills (passing, rolling, and putting down). This achieves the goal and the first hypothesis of the research, which is that there are statistically significant differences using cognitive training supported by combined exercises in the two experimental groups in learning some soccer skills. Between the pre- and post-tests, the researchers attribute these results to several reasons, including the effectiveness of learning using the cognitive training strategy (supported by complex exercises). Its correct use in learning some football skills had a positive impact in achieving significant results in favor of the two experimental groups, which was applied to the two experimental groups between The pre- and post-tests are in favor of the post-test for the three football skills. Accordingly, the researchers attribute the reasons for these differences to the effectiveness of the two cognitive training strategies, which contributed effectively, in addition to the educational curriculum prepared according to the cognitive training strategy, as the goal that the researchers seek through these educational programs It is developing the level of performance, improving it, and accelerating the

learning process, by following the correct scientific foundations, and in a way that is consistent with the capabilities and possibilities available to acquire learning and bring the learner to a good level of performing the skills to be learned. This is what was confirmed by the study (Nahir and Hassan): “Cognitive training is one of the It will work to simplify the learning process, make unfamiliar educational content familiar to the beginner, and develop different and diverse mental levels” (4). This is what has been proven by the results of previous research on the cognitive perspective in teaching, and that students, especially beginners, need to use a cognitive training strategy supported by complex exercises in order to make their understanding and learning style more exciting, interesting, and enjoyable, to eliminate routine and boredom in educational lessons, and to make the subject being studied more clear, meaningful, and useful. Because the cognitive training strategy would work to simplify the learning process and make unfamiliar educational content familiar to beginners and develop their different and diverse mental levels. Therefore, modern learning depends on the number of cognitive training that the learner uses during his learning. The more this cognitive training increases, the better it leads to improvement. The level of comprehension and learning. Therefore, the researchers explained the importance of the order of cognitive training that was chosen. The researchers also confirm that the educational units prepared by the researchers used many complex exercises in the cognitive training strategy, which work to increase students’ motivation in learning motor skills, their speed of learning, and their drive towards achieving more benefit, and this is what was confirmed by a study. (Hussein). “It is important for individuals to be motivated to learn motor tasks for the purpose of

obtaining maximum learning. If the learner views his tasks as not meaningful or not preferable, learning will be limited. If motivation is too low, learning may not occur at all, as he is not motivated enough. To learn” (5). This is what the researchers emphasized in applying the exercises included in the educational unit exclusively for the first two experimental groups, as the exercises that were used in the educational units had a clear impact, as the researchers worked on high coordination in choosing exercises that suit the learners’ ability and applied the principle of grading the exercises from easy to difficult. In the football skills under investigation, good explanation of the exercises contributed to achieving learning (Mahbas) (Explanation, clarification, and understanding of the movement and linking it with the demonstration leads to the progress of the motor skill after comparing the demonstration with the explanation) (6) between the teacher and the students and the extent to which the pedagogical educational atmosphere is appropriate for the students. Which made them give good results, and explaining the details of the skill accurately through visual, audio-visual, and symbolic form, and displaying the videos presented to the students in the educational units, increased control and control over performance and experience in the work. (Ibrahim) confirmed that the complex exercises were appropriate according to the ability of the learners, and the principle of gradation of exercises from easy to difficult was applied in the football skills under research, and a good explanation of the complete exercises for sports movements, exposure and tactical behavior to be learned, and in this way the student can understand the skill and apply it, taking into account that it is presented Movement as an integrated unit in addition to its division into its applied parts (7). Researchers also confirm that compound exercises play a crucial role in learning football skills. It helps develop strength, fitness, balance, and muscle coordination, all essential skills in soccer. In addition, compound exercises contribute to improving positional skills and dealing with pressure during matches, which enhances players’ performance on the field.

#### **Discussion of the results of the post-tests for the three research groups:**

Through the results presented in the tables above, it is clear to us that the two experimental research groups have achieved their goal in terms of the moral effect of the post-tests on learning the three research skills, despite the emergence of a discrepancy in the learning rates between the two experimental groups and the control group, meaning that there is a significant improvement between the two groups. Research: There is an effect of the educational approach followed by the two experimental groups, as the first group (cognitive training strategy supported by complex exercises) in learning some football skills according to different levels of students’ learning efficiency showed different differences in the levels of learning the skills under research (rolling, passing, and Putting down.) Therefore, the researchers believe that teaching football skills by providing the learner with cognitive training is a new strategy for the research sample, as it had a role in influencing their psychological factor, which is represented by suspense and excitement and increasing their motivation towards practicing the skill in a new way. A number of researchers have shown that cognitive training provides Students have links to store and retrieve the educational task because the student who employs his mental processes during learning will learn better than the one who does not do this process. It is also considered a flexible way of dealing with academic information. Because of the flexibility of this training and for the purpose of developing it and developing it for the better, cognitive methods are considered indicators good for collection. This is what the researchers agree on, according to what was stated in the study (Aklonza) “that complex skills are one of the types of developmental exercises that coaches do not neglect during their educational units and in all periods of preparation, as these exercises are represented in special forms for individual and group play and offensive operations. Likewise, the development that The first experimental group obtained it as a result of the desire and motivation of the learners, as generating desire and motivation in the learner makes him reach a level of good performance, especially when the researchers enhanced the educational curriculum with a large number of tools that were given to the learners” (8). He also agrees with (Ashour and



Hikmat) “Every learner had a ball while performing the exercises according to the allocated learning units, each according to the exercise and its type, which led to maintaining the number of repetitions and performing them at the time specified for them and according to what is required to perform the exercise or skill” (9). This is consistent with what (Mahjoub and Al-Badri) indicated that “exercise with a tool such as a ball moves the learner to better performance during practice” (10). This is also consistent with what (Ali) study indicated: “A good football player is one who puts the issue of developing mental and physical skills in the first place, and must devote time to this goal” (11). It can be formulated according to the freedom of its users. The use of cognitive training in this method comes by choosing (the teacher) that he deems appropriate, preparing it and presenting it to the student, then urging him to study it and employ it during his learning, as the role of an effective teacher has great benefit in delivering information through the hypermedia program. In addition, the use of shapes and types that are most suitable for students, which made the students of the first group learn more and differentiate more than the second group (cognitive training strategy). The teacher was organizing repetitions and attempts among the students in the second experimental cognitive stimulants strategy. Organizing the students’ work performance and linking the complex exercises from easy to difficult was his. The significant effect of increasing the significance of the first experimental group over the second experimental group. As for the second experimental group (cognitive training strategy), it is the educational system that provides the learner with instructions that encourage him to think and derive information on his own to achieve educational goals. Therefore, the cognitive training strategy is based on the principle that the learner is an individual who has a degree of maturity, knowledge, and responsibility and can teach himself. And controlling his learning process, and this is what was confirmed by the study (Hussein, & Hasan) (Majed) “It is noted from the educational system from which cognitive training begins that the learner’s thought and mental processes in the first experimental cognitive strategy are restricted. (12) and (13)

“And He confirms (Intidhar, Huda, Iqbal). The learner is given complete freedom to employ the mental process that he deems appropriate, thus making the learner positive and active in educational situations instead of being passive to information” (14). As for the control group, there are very few differences in the results of the research. The researchers attribute these few differences to the problems that we suffer from, the most important of which is the lack of use of modern technologies in the learning process, which leads to a delay and slowdown in the learning process on the one hand, and the modernity of cognitive training and their lack of use in the sports field on the other hand. Therefore, it was necessary to recognize its effective role in the educational process, which comes as a real response or treatment to experiences of failure or low levels of learning and memory that students face through loss of self-confidence and a feeling of weak ability to remember inside or outside the lesson, and to address these problems that they face. Educational process.

The results were reached the conclusions and the most important: 1 - that the exercises have a special impact in the development of concentration of attention Fastness of performance of chest handling and accuracy of free throw of stability in the experimental group (15).

Through the results, conclusions were reached, the most important of which is the preference for the experimental group in the applied exercises for metacognitive education used in the educational curriculum for performance, which had an effective role among the members of the experimental group. (16).

conclusions were reached, as it was found that there is a strong relationship between sports media and sports culture, and the researchers recommend conducting more research on the role of university media in other fields. (17). One of the most important results reached by the researcher is that: The results showed that there is a significant correlation between models of cognitive representation and problem-solving skill of third-year students in the College of Physical Education

and Sports Sciences for Woman, there is a significant correlation between the cognitive representation models and the blocking skill of the research sample, and there is a contribution rate of models of cognitive representation and problem solving skill in the performance of the blocking skill of the research sample. (18). The information that the learner may encounter when performing to build a knowledge base is the experience of the learners in their performance and the questions they ask in the applied part of the unit. allocated for this skill (30) minutes of section Chief of time (60 minutes), it has been allocated (4) educational units by its educational unit and one in the school week, and the results were processed results of the study statistical system bag social (SPSS). (19).

### **Conclusions:**

- The cognitive strategy supported by complex exercises has a positive impact on learning some football skills.
- Using cognitive training supported by complex exercises had an advantage over the cognitive training strategy and was also more effective than the (control) group.
- The complex exercises prepared by the researchers and used in the cognitive training strategy had an effective role in learning basic football skills.

### **Recommendations:**

- Researchers recommend using a cognitive training strategy supported by exercises developed by physical education teachers to teach other football skills.
- Researchers recommend increasing sports awareness among football players by using a cognitive training strategy because it is an advanced means of developing sports.
- Researchers recommend using cognitive training for different ages and stages of education in the process of learning basic skills and for various sports.

### **References:**

- 1- Kazim, Abdul Razzaq (and others). (2012). Middle School Physical Education Teacher Guide, Curriculum Directorate, Ministry of Education, Republic of Iraq.
- 2- Al-Hiti, Muwafaq Asaad. (2009). Football tests and tactics, 2nd edition, Degla Printing House.
- 3- Faleh, Muhammad Ali. (2019). Cognitive training strategy in learning to improve motor and skill abilities in futsal, unpublished master's thesis, College of Physical Education and Sports Sciences, Wasit University.
- 4- Nahir, Reda Ghadib and Hassan, Amin Atta. (2023). The effect of a cognitive training strategy on shooting from standing still for specialized school basketball players under the age of 14 years, published research, Wasit Journal of Sports Sciences, Volume 13.
- 5- Hussein, Kamel Malyoukh (2009). The effect of a training curriculum with different percentages of skill and physical preparation on some physical and skill abilities related to youth football, Master's thesis, Al-Qadisiyah University, College of Physical Education and Sports Sciences.
- 6- Mahbas Mortada (1997). International football training lectures, University of Baghdad, Journal of the College of Physical Education.
- 7- Ibrahim, Mufti (1985). Skills and tactical preparation for the football player, ed., Cairo, Dar Al-Fikr Al-Arabi.
- 8- Aklonza, Al-Farid (1987). Football, translated by Maher Al-Bayati, Suleiman Ali Hussein, Dar Al-Kutub for Printing and Publishing, University of Mosul.
- 9- Ashour, Ismail Abdel Zaid and Hikmat, Ali. (2021). Designing constructive educational units in physical education, Al-Wefaq Publishing and Distribution House, Amman, Jordan.
- 10- Mahjoub, Wajiya, and Al-Badri, Ahmed. (2002). Fundamentals of Motor Learning, Mosul, University Printing House.
- 11- Ali, Ahmed Adnan (2023). Foundations of cognitive training for developing teaching skills in viewing and application for students of art education, published research, Journal of the College of Basic Education, Al-Mustansiriya University, Volume 29.

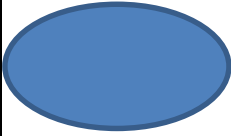
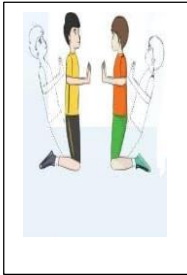

- 12- Hussein, A., Majed, S., & Hasan, U. (2023). Effect of employing the knowledge economy using the problem-solving strategy on the learning of basic tennis skills. *SPORT TK-Revista EuroAmericana de Ciencias del Deporte*, 12, 3. <https://doi.org/10.6018/sportk.545921>
- 13- Majed, S. S. (2022). The effectiveness of the six thinking hats strategy in testing the cognitive achievement of handball basic skills. *SPORT TK-Revista EuroAmericana de Ciencias del Deporte*, 20-20. <https://revistas.um.es/sportk/article/view/522031>
- 14- Intidhar Jumma Mubarak, Huda Badawi, Iqbal Abdul-Hussein. (2023). The effect of physical effort training according to the anaerobic threshold to avoid overtraining in the development of rapid force and shooting skill from jumping high in handball. *Wasit Journal of Sports Sciences* 10-23,1,13 <https://doi.org/10.31185/wjoss.180>
- 15- Mohammed, N. B., & Kzar, M. H. (2021). The effect of the use of exploratory exercises in improving concentration of attention and skills of chest handling and correction of basketball stability for people with special needs. *Revista iberoamericana de psicología del ejercicio y el deporte*, 16(4), 7. <https://www.scopus.com/record/display.uri?eid=2-s2.0-85124491603&origin=resultlist>
- 16- Mohammed, N., Kzar, M. H., & Al-Selmi, A. D. H. (2021). The effect of an educational curriculum based on metacognitive skills in teaching some offensive skills on the specialized school of basketball in Baghdad governorate. *Revista iberoamericana de psicología del ejercicio y el deporte*, 16(3), 4. <https://www.scopus.com/record/display.uri?eid=2-s2.0-85110978326&origin=resultlist>
- 17- Najlaa Abbas, A. Z., Ali, L. A., Talal, R., Samer, L., Alwan, N. M., Ameer, Z. A. A., & Nadem, M. (2023). University Sports Media and Its Relationship to the Spread of Sports Culture at the University of Baghdad. *Revista iberoamericana de psicología del ejercicio y el deporte*, 18(3), 286-287. <https://www.scopus.com/record/display.uri?eid=2-s2.0-85166303462&origin=resultlist>
- 18- Hassan, D. S., & Alwan, N. M. (2022). The Ratio Of The Contribution Of Models Of Cognitive Impersonation Of Information In The Skill Of Resolving Problems And Performance Of The Skill Of Blocking In Volleyball. *Revista iberoamericana de psicología del ejercicio y el deporte*, 17(5), 316-318. <https://www.scopus.com/record/display.uri?eid=2-s2.0-85146699088&origin=resultlist>
- 19- Kadhim, F. A. H., & Alwan, N. M. (2019). The Impact of the Strategy of the Three-Step Interview in the Rugby Thinking and the Accuracy of the Performance of the Skill of Students. *Indian Journal of Public Health Research & Development*, 10(10). <http://dx.doi.org/10.5958/0976-5506.2019.03302.3>

**Appendix (1)**

Shows the educational unit according to the cognitive training strategy

- Educational unit number: third
- today is Monday
- The goal of the unit: teaching the skill of rolling while improving time perception
- Date: 10/23/2023
- Number of students: 37
- Means, devices and tools: balls, sticks, cones and eye covers
- Educational goals
  - Spreading the spirit of cooperation and teamwork among students
  - Enhancing sportsmanship and self-discipline
  - Enhancing students' self-confidence and increasing their belief in their abilities
- Behavioral goals
  - To perform the rolling skill
  - To distinguish between types of rolling in football
  - To understand the technical and educational steps for the skill of rolling the ball.

Time	Lesson sections	Lesson activities	Stages of the cognitive training strategy	Formation	Notes
20 minutes	Introductory section	Educational effectiveness 10 minute	Planning session - explaining a new skill using educational methods - asking students about the extent of their previous understanding of the skill - directing questions about the skill - explaining the types of skills Lesson session (in person) Re-explaining and presenting the skill and addressing the problems they encountered by processing the skill (rolling)	Students sit in a hall with a projector and screen	Emphasize that students sit in pairs
		Administrative side 2minutes	Follow the students' uniforms and take attendance with the starting	+++++++ +	Use verbal instructions at the beginning of the


			shout		lesson
		Introduction 5minutes	Walk ---- run ---- run with arms raised --- run.....then trot with knees raised high.....trot		Emphasize performing the exercises while jogging while using the whistle
		Physical exercise 3minutes	forming students into pairs standing) jumping from standing forward in 3 jumps.  (standing - open) bend the knees completely and raise the arms to the side.  (brooke touli) raising the arms in front with the palms open in front.		The exercises are performed in pairs  Using numerical instructions while applying the exercise equipment rule
10 minutes	Main section	Practical activities	Meditation session: - the student explains the skill with his colleague - evaluation of his understanding of the material by the peer students - comparison between his understanding of the lesson and the explanation of the skill by the teacher - linking the skill of rolling with awareness of time prediction  Application session perform the exercise attached to the assignment sheet		Distribute the assignment sheet for review and knowledge of the mechanism of learning. Each student has a sheet of paper and a note on which his colleague evaluates


5 minutes	Concluding section	Concluding activity 5minutes	concluding activity	+++++++ +	Performing calm-down exercises with the end-of-lesson shout slogan
-----------	--------------------	---------------------------------	---------------------	--------------	--

Assignment paper according to the cognitive training strategy

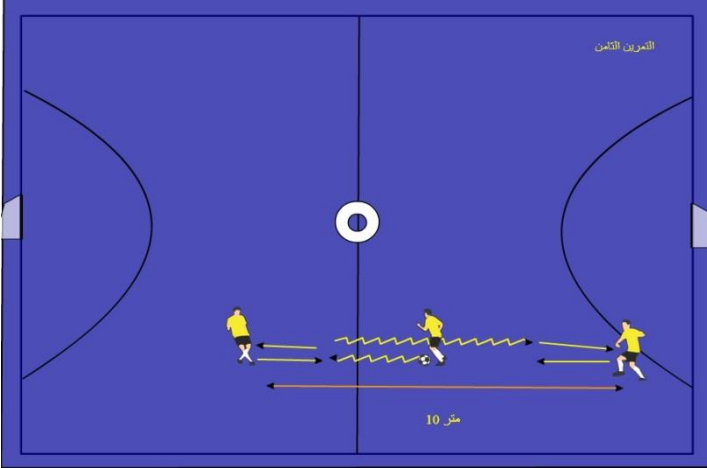
school year		2024-2023		time	45 minutes
stage		second-year intermediate		Number of students	16
Lesson sections	time	Tools	Football, cones, flags, striping tape		
Applied	10	Distributing worksheets to students (peers)	Compound exercises and soccer skills - Exercise No. 4 - Exercise No. 9 - Exercise No. 16		
Observer student notes on a worksheet for each student			Exercise time	repetitions	rest
			20 seconds	3	40
			20 seconds	3	40
			20	3	40

Exercise	Notes
----------	-------

<p style="text-align: center;">Exercise (4): Rolling with the ball</p> 	<ul style="list-style-type: none"> <li>- Good preparation.</li> <li>- Knowledge of the correct position when rolling the ball.</li> <li>- Linking motor and skill performance</li> </ul>
<p>Organization of exercise:                  Group: Experimental                  Area: 30 m.                  Devices and tools:                  Footballs: 15                  Training staff: 25                  Stopwatch: 2</p>	<p>Exercise description:                  The student rolls zigzag around (5) signs, the distance between one sign and another (2m), and the distance between the first sign and the starting point (2m), and then returns with a straight roll to the starting place.</p>
<p>Educational objectives of the exercise:                  Teaching zigzag and straight rolling with the ball.                  Teaching control of ball rolling</p>	

<p style="text-align: center;">Exercise (9): (Rolling + passing towards a small target)</p> 	<p>Notes</p> <ul style="list-style-type: none"> <li>- Good preparation.</li> <li>- Knowledge of the correct movement when rolling and controlling the ball.</li> <li>- It is required that the student does not stop during performance until the pass is performed.</li> </ul>
<p>Organization of exercise:                  Group: Experimental                  Area: 30 m.                  Devices and tools:                  Footballs: 15                  Training staff: 25</p>	<p>Exercise description:                  The student rolls the ball between (6) blocks with a distance of (1.5 m) back and forth, after which another player (or the teacher) raises the ball to him at an appropriate height to ensure good skill performance of the</p>

Stopwatch: 2	passing skill by moving forward and stepping back for two steps.
Educational objectives of the exercise: - Teaching ball rolling and passing. Teaching the accuracy of the correct performance of rolling and passing.	

Exercise	Notes
<p style="text-align: center;"><b>Exercise (16): (Rolling + Passing)</b></p> 	<ul style="list-style-type: none"> <li>- Good preparation.</li> <li>- Knowledge of the correct movement when rolling and controlling the ball.</li> <li>- The student is required not to stop until he finishes performing the pass.</li> </ul>
<p>Organization of exercise: Group: Experimental Area: 30 m. Devices and tools: Football: 10 Training sign: 20 Stopwatch: 2</p>	<p style="text-align: right;">Exercise description:</p> <p>The exercise is performed between three students, with a distance of 10 meters between them. The performance is only for the midfielder, as he rolls the ball to the first student, and before he arrives, the student passes the ball and receives it, then moves towards the second student and performs the same process, and so on.</p>
<p>Educational objectives of the exercise: -Teaching ball rolling and putting down. -Teaching the accuracy of the correct performance of rolling and damping.</p>	



## أثر استراتيجية التدريب المعرفي المدعم بتمرينات مركبة في تعلم بعض المهارات كرة القدم لطلاب الصف الثاني متوسط

امينة كريم حسين 1 ، اسماعيل عبد زيد عاشور 2 ، سعد الله سعيد مجيد 3  
3&1 جامعة كركوك / كلية التربية البدنية و علوم الرياضة  
2 الجامعة المستنصرية / كلية التربية البدنية و علوم الرياضة

البحث  
مستخلص

هدف البحث الى اعداد وحدات تعليمية لاستراتيجية التدريب المعرفي، اعداد تمرينات مركبة خاصة بكرة القدم والتعرف على اثر استخدام استراتيجية التدريب المعرفي وفق التمرينات المركبة في تعلم بعض المهارات بكرة القدم. استخدم الباحثون المنهج التجريبي ذو تصميم تدوير المجاميع المجموعتين التجريبيتين والمجموعة الضابطة لملاءمته طبيعة مشكلة البحث. يهدف البحث الى تحديد مجتمع البحث المتمثل بطلاب مرحلة الصف الثاني متوسط الفتوة للعام الدراسي 2023 \ 2024 في مديرية تربية بغداد الكرخ الثالثة والبالغ عددهم (132) طالباً مقسمين على اربع شعب (أ\_ب\_ج\_د) ، وقد تم اختيار عينة البحث عشوائياً عن طريق القرعة وتم اختيار شعبتي (أ\_ج) لتمثل المجموعتين التجريبيتين وشعبة(ب) تمثل المجموعة الضابطة وقد تم اختيار (10) طلاب من شعبة (د) ليمثلوا عينة التجربة الاستطلاعية للبحث ليصبح عدد شعبة (أ) (29) طالباً (التدريب المعرفي بالتمرينات المركبة) وعدد طلاب شعبة (ج) (28) (التدريب المعرفي) طالباً والمجموعة الضابطة (32) طالب وبلغ عدد طلاب التجربة الاستطلاعية (10) طلاب حيث بلغت نسبة العينة بمجموعها من مجتمع الاصل(72%) ، وقد عمد الباحثون الى اجراءات بحثية منها الاختبار القبلي واجراء التجربة البحثية فضلا عن الاختبار البعدي وتم اعتماد الحقيبة الاحصائية في استخراج النتائج الى توصلهم الى اهم الاستنتاجات ومنها ان الاستراتيجية المعرفي المدعم بالتمرينات المركبة اثراً ايجابياً في تعلم بعض مهارات كرة القدم، يوصي الباحثون باستخدام الاستراتيجية التدريب المعرفي المدعم بالتمرينات مركبة من قبل مدرسي التربية الرياضية لتعليم مهارات كرة القدم الاخرى.

استراتيجية ، التدريب المعرفي ، تمرينات مركبة ، كرة القدم.

الكلمات المفتاحية