THE IMPACT OF MENTAL TRAINING OVERLAP ON THE DEVELOPMENT OF SOME CLOSED AND OPEN SKILLS IN FIVE-A-SIDE FOOTBALL FOR MIDDLE SCHOOL STUDENTS

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Abstract

The goal of this study is to see how mental training overlap affects the development of closed and open skills in middle school five-a-side football. Identifying each group's advantage in developing closed and open skills in five-a-side football. The study community consisted of 72 of seventh grade students in the intermediate level, and the research sample consisted of twenty students divided into two groups: control and experimental which represents (27%) of the research community sample. The pre and post tests were carried out, and the results were analyzed using appropriate statistical methods. The exercises used had an effect on the development of the skills under study and for the two groups, and the overlap of mental training exercises contributes to the development of some closed skills. The authors recommend using these exercises in training curricula and using mental training as an aid to developing and teaching closed skills with a fixed middle in five-a-side football.

Keywords: Mental training. Closed. Open skills. Five-a-side football.

Introduction

Any sports project that lacks a pre-planned goal will waste time and energy, negatively affecting the course of the sports educational process, and this is what must be available in the physical education lesson, which is one of the lessons that has a significant impact on the student throughout his school study. The student will learn some basic skills for different games in a scientific way during the class, which will most likely be presented to him for the first time, especially at the beginning of middle school, so the middle school student is expected to perform the skills well and as error-free as possible. In fact, five-a-side football is one of students' favorite games and includes multiple basic skills, so the student is obligated to perform these skills in the correct form; however, in all schools, we find some students attempting to reach a good performance of skills in football pentathlon, but without feasibility, and thus they will face criticism from their colleagues in cases of incorrect performance. Thus leads to their reluctance to play the game and evasion from joining the school teams, and this responsibility lies with the student and the physical education teacher alike, as it is necessary to find appropriate ways to develop these skills effectively. From this perspective, the significance of the research lies in discovering new and simple ways to develop some skills in the five-a-side football, as represented by the overlap of mental training within the basic curriculum of the physical education class, and in understanding

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the effect of mental training on some closed skills on the one hand and open skills on the other with the five-a-side football and within the conditions and surroundings of the physical education class.

The research problem is that teachers of physical education face some problems at the start of the new school year for the middle schools. The most important of which is the evasion and isolation of some students, as well as their failure to participate in physical education classes and school teams, as a result of their poor performance and lack of mastery of skills, as well as criticism they may face from some of their colleagues, which results in limited participation on some occasions.

Through the authors' experience as physical education teachers in the Directorate of Education of the Third Baghdad Governorate, Karkh, and through their briefing on the course of lessons in their schools and with his fellow teachers in other schools, the authors noticed that some students struggle to perform some basic football skills. The cause of this problem is a lack of performance periods and a method of developing skills that, in most cases, lacks renewal and enthusiasm, as well as a failure to use various means and exercises to develop these skills, as well as a failure to adopt mental exercises as required. As a result, the authors determine that a scientific and objective study of this problem is required, so they consider including mental training within the curriculum used in an attempt to learn its impact on developing the aforementioned skills, as well as the fact that mental training is one of the exercises that can be applied on the ground in schools. Recognizing the effect of mental training overlap in developing some closed and open skills in middle school five-a-side football.

Research Methodology

Various methods have been used in scientific research depending on the nature and type of the study, so the authors use the experimental method with the design of the control and experimental groups (before and after) as it matches the nature and type of the study problem to be researched in order to achieve the objectives and hypotheses of this study. The experimental method is the one who "searches for the reason" And how it occurs, and it is

characterized as a procedure to exert control over the variables influencing the experiment. The research hypothesis is as follows:

H1: There are statistically significant differences between the pretest and remote tests in some of the closed and open skills in five-a-side football for middle school students.

"A model that depicts a part of the original community's units" is how the research sample is defined (Legi, 1999). The research community is selected as the first year students at the middle school, who numbered (72 students) and ranged in age from (12-13). They are divided into two groups, control and experimental, using a random method (lots), with ten players in each group. (27%) of the research community is represented in the sample. The sample is considered homogeneous because it is of the same gender, age and community.

The results

To ensure the equality of the two research groups, the results of the previously described tests were statistically analyzed using the T-test for independent samples after the research sample was randomly divided into two control and experimental groups by lottery. This is seen in Table 1 (Table 1).

The most important closed and open skills in the football quintet under consideration were determined based on the degree of environmental stability during implementation, which are represented by four basic skills, two of which are closed skills, such as scoring and handling accuracy, because scoring is from stability and the middle is fixed, and handling accuracy since it is the most commonly used. Because the center in free kicks, side throws, and corner kicks is totally defined for the executing player and the wall, they are extremely comparable to scoring. The open skills were represented by rolling and damping, and it was impossible to regulate its surroundings because the movement was continuous and numerous factors such as the opponent, the ball's speed and height, and other factors interfered.

The appropriate tests are selected for each of the skills chosen by the authors, based on scientific sources and references, and in line with the requirements

The significance of the differences	The value of calculated T	Experimental group		Control group		Measuring	Research variables
		Standard deviation	Arithmetic mean	Standard deviation	Arithmetic mean	units	
Not significant	0.346	1.429	3.6	1.337	3.7	degree	Handling accuracy test
Not significant	0.242	1.751	8.2	1.728	8.1	degree	Scoring test
Not significant	1.021	1.11	13.73	1.335	13.39	Time (second)	Rolling test
Not Significant	0.343	0.788	1.8	0.737	1.9	degree	Putting down test
Under the degree of freed	lom of 18, the leve	el of significance i	s 0.05				

Table 1: It shows the equivalence of the two research groups in the arithmetic means, standard deviations, and (T) values in the pretests.

of the research. The tests selected are closed skills tests (handling, scoring), of stability (fixed center), open skill tests (rolling, putting down), and of motion (moving center).

Closed skill tests (scoring, handling accuracy)

On both sides, scoring at a target is divided into numbered squares (average). The test's goal is to assess the accuracy of scoring toward the target. Tools used are 6 balls, tape to designate the scoring area for the test, Five-a-side soccer goal and a specific area to perform the test. The method of measuring performance consisted of placing 6 balls in different places, with a specified distance of 10 meters from the target. The tested player scores in the areas indicated in the test in descending order of importance and difficulty, and the distance between one ball and another is (50 cm) (Abd al-Hamza, 2011). The test begins with ball (1) and concludes with ball (6). If there are no scores, the attempt is null and void. The number of injuries that enter or touch the sides of the goals is computed as follows: 4 scores on scoring in the field (4), 3 scores on scoring in the field (1) and zero is out of the target. The tested player is given one attempt.

The ball pass is directed towards a small target of dimensions (50 x 75) cm from a distance of (7.5) meter. The purpose of the test is to measure handling accuracy. The tools used are 4 balls, measuring tape, a small goal with dimensions (50 x 75) cm. The method of performance is that the tested player stands with the ball at a distance of (7.5) meter from the target. When the signal is received, the tested player handles the ball while it is pointed at the target. The performance conditions begins when the test starts with ball (1) and ends with ball (4). The tested player is given four attempts; each successful attempt earns the tested player two points. If the ball strikes the crossbar or the posts, the tested player receives one (score); the tested player receives zero of the scores for the failed attempt (Thijeel et al., 2018).

Open skill tests (rolling, putting down)

Zigzag running with the ball (rolling) between (5) poles back and forth. The purpose of the test is to measure the ability to run with the ball (roll) by changing direction. The tools used are 1 ball, 5 bars, a stopwatch, a whistle, arena to perform the test in which the starting line is at a distance of (2) meter from the first bar, and five consecutive bars with distance of (1.5) meter from one bar to another and the total distance for the test is (8) meters.

The method of performance

Starts after hearing the signal (whistle), the player rolls the ball swiftly and crosses the five bars, as well as returning by crossing the signs and reaching the start and finish lines as quickly as possible. Performance conditions include: the tested player can begin by passing the first bar from the right or left; player does not stop during the test; and the attempt does not count if the ball escapes the player's control. The player is given two tries, with the best time recorded being calculated to the closest (1/100) in seconds.

Putting down test

The goal of the test is to see how accurate the players are at stopping and recovering control of the ball in the sole of their feet, thigh, or chest. The required tools are (5) balls, a whistle, and a specified area of the test (2 x 2) meters on the opposite side of the line (B) and at a distance of (6) meters from the line (A). Method of performance: the player stands behind the line of the specified test area, and the coach stands with the ball on line (A) on the opposite side. After giving the start signal, the coach throws the ball (a high ball) to the player, who advances from the starting line into the test area trying to stop the ball in any part of the body except for the arms, and then return to the starting line and start again, and thus the player repeats the five consecutive attempts.

Performance conditions: the ball must be stopped behind the line and within the designated test area. If the coach makes a mistake in throwing the ball from below, the attempt is repeated. The ball is thrown with the movement of the hands from the bottom up. The correct attempt is not counted in cases if the player fails to stop the ball, if he crosses any line in the area by more than one foot and finally, if he stops the ball illegally. One point is given for each correct attempt and (5) points are calculated for the sum of the five attempts.

The exploratory experiments

The exploratory experiment is a hands-on learning experience for the author, allowing him to discover for himself the disadvantages and positives that he finds while doing the tests in order to avoid them in the future" (Al-Mandalawi, 1989). The two authors have conducted exploratory experiments on a sample of the research community, which numbered (5) players, on Thursday, 1/11/2018, at football field in the middle school of the Martyr Muhammad Muhammad Sadiq Al-Sadr with the assistant work team.

Pretests

The two authors did the pretests for the research sample on Sunday, 4/11/2018 at 2:00 p.m., with the help of the assistant work team, in the middle school football yard of the martyr Muhammad Muhammad Sadiq al-Sadr. The conditions related to the tests, such as the place, time and method of implementation of the tests, as well as the assistant work team and the equipment used in the test, were established for the purpose of achieving the same conditions as possible during the post-tests. A form was prepared to record the results of the tests, for each of the control and experimental groups.

Training units

Following agreement with the middle school administration and the educational counselor, a portion of the educational guidance class was used to distribute the special training units of the research sample to the experimental group represented by first-year students (A) and the control group represented by first-year students (C) containing (16 training units) specialized to develop the skills to the experimental group represented by first-year students (A) and the control group represented by first-year students (C). The experimental group was given ten minutes for mental training and twenty minutes for skill training. That is, the experimental group exceeded the control group by overlapping mental training in the curriculum only, which occupied an additional (10 minutes).

Experimental variable mental training exercises

Pretests are administered to the player, and the findings are communicated to him so that he may determine whether his performance is good or bad in comparison to his peers. As a result, a starting line is established for each student, allowing researchers to determine how to approach each individual in the sample individually. On the students' laptop, an explanatory video of a professional player performing the skills in question perfectly is shown at slow speed to display the kinetic sequence of each part of the motor performance of the skill, followed by the performance of the skills in question by one of the students with a high level of performance in the same manner as the first.

Mental training modules: The experimental group receives a mental training dose that overlaps with skill training, beginning with skills training for half the time (10 minutes), then moving on to mental training, and then returning to skill training to complete the full training unit. To create mental workouts, the researchers took the following steps:

Muscular relaxation unit: Complete relaxation in a quiet place with a focus on the muscles working in the performance of one skill only, such as scoring, as they are informed of the working muscles by the coach, and the student, in turn, contracts and tightens these muscles and relaxes them for a full minute.

Mental relaxation: For one minute, complete relaxation, total isolation, closing his eyes and not thinking about anything but the functioning muscles that he used to contract and relax.

Mental visualization unit: In this unit, the full performance of the skill is visualized, and it is divided into two parts:

First, external mental visualization: (To conjure a comprehensive picture of a talented student's and player's correct performance), for one minute, while a film exhibiting optimal performance at slow and normal speeds is shown, and the student is requested to visualize at normal speed only.

Second, an internal mental vision: This is to elicit a comprehensive picture of the performance for himself, i.e. the student, while recalling the mistakes and attempting to remedy them for a full minute during the visualization.

Skill exercises for developing the skills under consideration: The experimental and control groups were instructed on the exercises employed in the specific curriculum for the physical education lesson for football, which entails the student receiving and delivering the ball with the assistance of a teacher of stability at a rate of ten attempts per student, and scoring towards squares drawn on a wall with the same goal measurements, with 10 attempts for each student, passing the ball by hand by the coach and putting it down by the student with the chest, 5 attempts for each student. Each student has five attempts at passing the ball by hand from the coach to the student in the thigh. The coach passing the ball by hand and the student placing it down with the head in 5 attempts for each student. Receiving the ball by the student from a colleague and rolling it for a distance of 20 meters between 10 poles, then handing it to the other colleague by handling and with 3 attempts for each student as quickly as possible.

Post-tests: Following the application of mental training exercises to the experimental group, the two researchers, with the assistance of the supplementary work team, conducted post-tests on both the control and experimental groups on Monday, 7/1/2019, on the Middle school yard of Martyr Muhammad Muhammad Sadiq al-Sadr, using the same circumstances and location as the pre-tests to avoid variables of circumstance on the research sample's post-tests(Al-Taie et al., 2017).

Presentation and analysis of the results of the tribal tests for the two research groups: The researchers presented the results of the pretest and remote measurements of the research sample, by displaying the arithmetic circles and standard deviations in illustrative tables after performing the necessary statistical operations for them by analyzing and interpreting the results of each test to know the reality of the differences and their statistical implications, according to the exact scientific perspective, in order to achieve the objectives and hypotheses of the research (Table 2).

Presentation and analysis of the results of the post-tests of the two research groups: It can show in table 3 (Table 3).

Presentation, analysis, and discussion of the differences in pretests and post-tests results for the control group:

The researchers attribute this improvement to the control group's dedication to the training units, as well as the effectiveness of the exercises used. The duration of the exercises' application also contributed to the development of the research variables, as (Abu El-Ela, 1996) indicates that training-related changes occur most frequently during the first period of the program within the next 6-8 weeks (Table 4).

Presentation, analysis, and discussion of the differences in pretests and posttests results for the experimental group:

We can see that there are significant differences between the pre and post tests for the rolling and putting down tests, with the post-test clearly winning. The control group's results are significant in the pretest and post-tests in favor of the post-test, so it is natural that some skills of the group evolve as they continue to train, but when we return to Table 5, we find that there are differences between the arithmetic means of the two groups and in favor of the experimental group, indicating the superiority of the experimental group over the control group despite the development of the latent variables (Table 5).

Presentation, analysis and discussion of the results of the post-test differences between the control and experimental groups:

The researchers attribute this to two factors: the effectiveness of the exercises used in the physical education curriculum and the commitment of the control group to perform them well, and the nature of the skill, which is one of the most commonly used skills, as evidenced by an increase in the frequency of performance of this skill in the exercises and in physical education lessons, as well as outside of the lesson. Thus leads to the mastery of this skill and the remarkable development in it for both groups, and this was confirmed by (Mufti Ibrahim, 1994) "The handling of all kinds is a means of transfer and is faster than the player's transfer and is most commonly used in the match (Alzabari et al., 2019). Returning to Chart 1, we see that the experimental group has a slight advantage over the control group in the handling accuracy test, and we conclude that mental training has contributed to the development of the skill of handling accuracy, but with a minor difference that does not cause significant differences between the two groups, despite the experimental group's superiority (Table 6).

The reason for this, according to the researchers, is that the mental training intertwined within the exercises contributed significantly to the development of the experimental group's scoring skill, as the mental training exercises included a novel method of training, such as relaxation and contraction exercises for working muscles and visualization (Figure 1). This boosted the nerve signal reaching the muscle, resulting in a high frequency in the muscle groups engaged in performance, which was corroborated by an increase in the degree of muscle contraction as a result of the enhanced motor neuron signal. This increase does not mean just the involvement of new motor units, but also an increase in the frequency of the nerve signals of the small motor units (Talab et al., 2017).

To clarify the matter further, in (Al-Arabi, 1996) stated that "when the mental visualization occurs, the muscles involved in the performance of the skill to be learned are excited, which leads to real nervous excitation that is sufficient for sensory feedback to occur. It is used to correct the error when trying to repetition." Furthermore, most of the mental training exercises were innovative

Research variables	The test	Measuring unit	Control group		Experimental group	Experimental group		
			Arithmetic mean	Standard deviation	Arithmetic mean	Standard deviation		
Closed skills	Handling Accuracy test	degree	3.7	1.337	3.60	1.429		
	Scoring test	degree	8.100	1.728	8.200	1.751		
Open skills	Rolling test	Time (second)	13.390	1.335	13.730	1.110		
	Putting down test	degree	1.900	0.737	1.800	0.788		

Table 2: Shows the arithmetic means and standard deviations of the pre-tests for the two research groups.

Table 3: Shows the arithmetic means and standard deviations of the post-tests of the two research groups.

Research variables	The test	Measuring unit	Control group		Experimental group		
			Arithmetic mean Standard deviation A		Arithmetic mean	Standard deviation	
Closed skills	Handling Accuracy test	degree	4.900	1.595	6.100	1.370	
	Scoring test	degree	8.600	1.646	11.200	1.988	
Open skills	Rolling test	Time (second)	11.950	1.454	11.980	1.255	
	Putting down test	degree	3.00	0.816	3.100	0.875	

Table 4: Shows the difference of the arithmetic means, standard deviations, the calculated (t) value, and the significance of the differences for the post-tests of the control group in the research variables.

The test	Measuring units	Control group		The value of	The significance	The significance of
		Arithmetic mean	Standard deviation	calculated T	level	the differences
Handling accuracy test	degree	1.200	0.918	-4.129	0.003	significant
Scoring test	degree	-5.000	0.527	-3.000	0.015	significant
Rolling test	Time (second)	1.440	0.176	-3.000	0.000	significant
Putting down test	degree	1.100	0.233	-4.174	0.001	Significant
	Handling accuracy test Scoring test Rolling test Putting down	Handling accuracy test degree Scoring test degree Rolling test Time (second) Putting down degree	Handling accuracy test degree degree 1.200 Scoring test degree -5.000 Rolling test Time (second) 1.440 Putting down degree 1.100	Handling accuracy testdegree-5.0000.918Scoring testdegree-5.0000.527Rolling testTime (second)1.4400.176Putting downdegree1.1000.233	Arithmetic meanStandard deviationcalculated THandling accuracy testdegree1.2000.918-4.129Scoring testdegree-5.0000.527-3.000Rolling testTime (second)1.4400.176-3.000Putting downdegree1.1000.233-4.174	Arithmetic meanStandard deviationcalculated TlevelHandling accuracy testdegree1.2000.918-4.1290.003Scoring testdegree-5.0000.527-3.0000.015Rolling testTime (second)1.4400.176-3.0000.000Putting downdegree1.1000.233-4.1740.001

Table 5: Shows the difference of the arithmetic means, standard deviations, the calculated (t) value and the significance of the differences for the post-tests of the experimental group in the research variables.

Research variables	The test	Measuring units	Experimental group		The value of	The	The significance of
			Arithmetic mean	Standard deviation	calculated T	significance level	the differences
Closed skills	Handling accuracy test	degree	2.500	0.166	-15.000	0.000	significant
	Scoring test	degree	3.000	0.210	-14.230	0.000	significant
Open skills	Rolling test	Time (second)	1.750	0.302	5.782	0.000	significant
	Putting down test	degree	1.300	0.213	-6.091	0.000	Significant

At a degree of freedom (9) and a level of significance (0.05).

Table 6: Shows the difference of the arithmetic means, standard deviations, the calculated (t) value, and the significance of the differences between the post-test results of the two research groups.

Research The test variables	The test	Control group		Experimental group		The value of	The significance	The significance
	Arithmetic mean	Standard deviation	Arithmetic mean	Standard deviation	calculated T	level	of the differences	
Handling accuracy test	Handling accuracy test	1.200	0.918	2.500	0.166	-1.805	0.088	random
Scoring test	Scoring test	-5000	0.527	3.000	0.210	-3.184	0.005	significant
Rolling test	Rolling test	1.440	0.176	1.750	0.302	-0.049	0.961	random
Putting down test	Putting down test	1.100	0.233	1.300	0.213	264	0.795	random
At a degree of	freedom (18) and	a level of signifi	cance (0.05).			1	1	1

and entertaining, which led group members to accept and take these exercises seriously, as confirmed by (Al-Bahadli, 2001) with the conditions that must be met in the exercises: "The exercises must be different for the purpose of the overall effect on the body, the thrill of the individual, and the avoidance of boredom." We also add that the overlap of mental training with relaxation exercises between the training unit's exercises helped the experimental sample members complete recovery and reach a state of complete rest, unlike the control group members, who did not stop during their exercise, and this may negatively affect the development of accuracy skills, as mentioned by most scientific sources (Al-Bishtawi & Al-Khuja, 2005). During times of fatigue and depletion, there is no training in precision. And, especially in the test for scoring talent, the nature of the scoring skill is based mostly on accuracy. Also, as previously noted, good thinking about the performance of the skill and attempts to modify perceptions resulted in an increase in the rate of development in the scoring skill (Schmidt & Wrisberg, 2008). The learner imagines the effective completion of the movement while thinking about doing the skills mentally and mentally repeating the stages of performing them in a sequential order. In the case of the open skills variable (rolling and suppression) represented by my skills, the post-test results show no significant changes between the two groups for the rolling variable. It is logical that this development occurs as a natural condition and a reaction to the control group's commitment to training, which resulted in the absence of moral differences in the open skills variable's post tests, as well as the nature of the open skills represented by rolling and suppression, which require a strong connection with external conditions to complete the skill's implementation. "The amount to which the surrounding factors interfere with perception varies on the nature of the skill," according to this theory (Khion, 2010). The rolling skill in which the individual is obligated to deal with the speed of the ball rolling and his personal ability to dribble and push the ball as well as the tension arising from the time specified for performing the skill, which increases the surrounding pressure on performance. This is likewise true of the suppressing ability. Because the suppression skill is affected by external environment factors such as the height of the ball and the ability of the same individual to put the ball down with his body parts, there are no significant differences between the two groups for the post-test in the suppression variable. As well as movement and concentration in the location required to perform the skill in the form Correct, and that any delay in timing will negatively affect performance. Because it is difficult to imagine skills in which the external environment interferes more than the person's abilities, we infer that mental training has no effect on the effect of mental training in making a significant difference between the two groups for the two skills of rolling and suppression. By intensifying the stimuli in order to arouse abilities, or by soothing the stimulus in order to eliminate and regulate worry. This made it difficult for the experimental group members to apply and control it during visualization, and another explanation is that the sample's lack of experience with skills, given the nature of the skill, prevented the ability to visualize good performance free of errors and at an appropriate speed. The greater the experience of the individual, the more he is able to determine the components of the perception accurately and independently.

Conclusions

In conclusion, mental training has an effective influence on perceptual skills that are based on sensory perception rather than strength, speed, or elongation, and this holds true for the scoring skill, which is heavily reliant on the individual's perception and senses. The researchers' specific exercises

in the training curriculum had a substantial impact on the development of the skills under study, as well as the control and experimental groups. The development of some closed talents dependent on perceptual skills is aided by the overlap of mental training tasks. Relaxation exercises aided in the quick recovery of the muscles involved in skill performance. For the research sample category, the difficulty of regulating mental imagery in skills with a variable medium. If the research sample group has limited experience, mental training does not contribute to the development of open abilities in a changeable setting and environment.

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