International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 04, 2020
ISSN: 1475-7192

Special Auxiliary Exercises And Their Effect On Learning The Accuracy Of The Straight Ground Tennis Service For Junior Players

Maher Mohammed Ismael[1], Suha Darweesh Abdulghafoor

Abstract---*Modern science has a goal to reach the best technical performance through the use of special auxiliary exercises and their effect on learning in the accuracy of the straight-ground tennis transmission. The game of tennis takes perfection for the first performance, starting with the physical exercises that prepare the body as a whole, as well as focusing on the working muscle groups that will perform during the game and which ultimately leads to the control of the technique and the correctness of performance, so the research adopted tennis exercises for the straight and ground service of the emerging players, thus the goal Research to know the impact of exercises to help learning the accuracy of the transmitter straight ground tennis. The researcher made the assumption (the presence of significant differences between the pre and post test and in favor of the post test) and after identifying the fields of research, the researcher dealt with the third chapter, which occupies the research methodology and its field procedures, so the research sample was composed of 10 players representing the Federation Center in Tennis - the International People's Stadium and was approved in the technical performance test (Technique) for the skill of the accuracy of the straight ground transmission on the apparent form of the skill through its three sections (preparatory, main, and final), as three consecutive attempts were given to each player to perform this skill and these attempts were evaluated by two specialized evaluators and the evaluation score of technical performance was (10 marks) and the best attempt was counted from the three attempts for each index. While the researcher adopted in assessing the accuracy level of the transmitter for the skill of the straight ground transmitter, which measures the level of accuracy of the straight transmitter in tennis, after that the researcher used a set of statistical means. Then the research hypotheses were answered through Chapter Four, and it was found that there are significant differences between the pre and post tests in the level of technical and skill performance in the accuracy of the straight transmission in tennis and in favor of the post test. The results also showed that the performance of the straight line accuracy level was more advanced than the pre-test of the same test.*

Keywords: *Special Auxiliary Exercises, Effect On Learning The Accuracy, Straight Ground Tennis Service*

Definition of research:

Introduction and the importance of research

In the game of tennis, the body preparation stage takes the first place, starting with the physical exercises that prepare the body as a whole, as well as the focus on the working muscle groups that will burden the most during the game and which ultimately leads to adjusting the technique and performing the skill perfectly for the stages of performing the accuracy of the straight transmission, which is one of the The game of tennis breaks to score points and win the game.

Modern training relies on science as a basis for obtaining good results. The time has gone when some coaches were able to deliver their athletes to the high level based on individual practical experiences, so the coach must take into account when developing his training curriculum that it differs among junior beginners in the early stages, as each stage has its own duties, important goals and own contents. This fact applies to all sports. There is a difference between every other event or game according to the special characteristics of the age stage from which the game begins. As well as the degree of understanding for mastering the skill and stages of learning it. The aids in tests and measurements are the objective aspect that is the basis for respecting the mind and the experiments of science.

[1] *College of Physical Education and Sports Sciences, Al-Mustansiriya University, Iraq*
Corresponding author: Email: mi374520@gmail.com

Also, through the tests, many talents that are suitable for playing and advancing in the game of tennis, as well as the formulas and types of exercises to master these skills, can be detected.
Likewise, the process of learning the skills and knowing the player's real level will motivate him to make more progress, and thus the goal that should be reached (1: 65) becomes clear, as well as the extent of knowing the effect of exercises in learning the accuracy of the straight-ground service in tennis for the sample members.

Research Problem

By following the researcher as a teacher of tennis at the College of Physical Education and Sports Sciences - Al-Mustansiriya University and following up on the Iraqi Tennis Federation championships and for training players, he noticed that there is a weakness in the process of learning the accuracy of the straight-ground transmission skill for the individuals of the sample as a result of not using exercises and effective aids for this skill and the fact that the transmission is The first door to score points and win victory. From that, the researcher used auxiliary exercises to solve the problem and its effect on developing the accuracy of the sending skill of the sample members. As well as reaching the junior athlete to the technical level according to the stages in learning this skill, and thus the research treated the use of exercises with means to assist in developing the accuracy of the straight-ground transmission skill of the junior sample members according to the level of these age groups in order to control the technique and reach the optimum performance in the accuracy of the transmission skill of the sample members. The researcher designed an educational curriculum using exercises with auxiliary means in the educational process and its effect on the accuracy of the skill of sending straight ground to the sample members.

Research Objectives

Knowing the effect of the exercises that help in learning the accuracy of the straight-ground transmission skill of the members of the sample with tennis.

Imposing Research

1. There are significant differences between the pre and post tests and in favor of the post test for the sample members.

Research Areas

1. Al-Bishri: Iraqi Tennis Federation Center players- Al-Shaab International Stadium.
2. Time Domain: for the period from 12/25/2019 to 25/2/2020
3. Spatial area: Tennis Federation Center - Al-Shaab International Stadium.

Terminology

Learning and kinesthetic learning: There are several definitions of the subject of learning that may be different in expression, but all are similar in meaning.

Learning was defined as learning as (the steady improvement in performance resulting from training or scientific practice) (1:43), and it was also known as (a set of processes that take place through the transmission of information from the teacher to the learner) (2: 189), as well as the definition The following is the concept of learning, as it is (a continuous, continuous process of human life aimed at promoting human growth and behavior) (3:11).

The subject of learning is a basic principle for the human being who is one of the living creatures most in need of learning and I appreciate it in achieving and satisfying desires, as learning is a link between the person and the society in which he lives so that he can play a positive role that enhances his existence and his ability to innovate, create and interact with others.

As for motor learning, it is (a permanent change in motor behavior as a result of repetition and correction, and that this change cannot be evaluated directly, but indirectly, through motor behavior (4:17).

Research Methodology And Methodological Procedures

Research Methodology

The researcher used the experimental method in solving the research problem and achieving the goal of the study, being more appropriate to the nature of the research to reach accurate and influential results to achieve the goal of the study (5:43)

Research Community And Sample

The research community included the players of the Iraqi Tennis Federation (10) players, where the researcher kept the research sample with (10) players (one group), and formed (100%) of the total research sample of the Iraqi Tennis Federation - Al Shaab International Stadium.

2-3 research methods, tools and devices used

Research Tools

The researcher used several modern means, including:

Arab and foreign scientific sources and references.

Technical performance evaluation form.

Data dump form.

Personal interviews.

2-3-2 used tools and devices

Legal ground tennis court.

(10) legal tennis rackets.

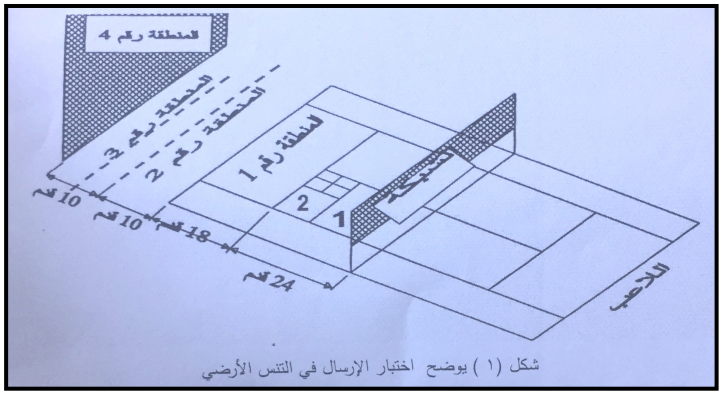
- 30 legal tennis balls.

2-4 Defining Tests

1. Research tests
2. Test the accuracy of the ground straight transmitter skill

The purpose of the test: to measure the accuracy of the straight line transmitter skill.

Tools used: legal tennis net, legal tennis court, TS rackets, legal tennis balls.



شكل (١) يوضح اختبار الإرسال في التنس الأرضي

Performance description: The tested player stands behind the base of the transmitter, then sends ten balls in succession to the targets set in the opposite half of the court on the condition that all the balls pass from the net and rope, so that he tries to get the highest score.

Register:

- Balls that touch the net or rope are not counted as attempted if they fall into any of the targets.
- Each correct ball has a score value in the area in which it falls, as shown in Figure (1).
- A player's score is the set of points he gets from the ten attempts.
- The highest score for the test is (60).

The exploratory experience

The exploratory experiment is a survey of the conditions surrounding the phenomenon that the researcher wishes to study, which is the detection of mysterious rings, which is a preliminary experimental mini-training study for the researcher to identify the pros and cons, work flow, find out the difficulties and obstacles, and identify the time period for implementing the experiment. And to ensure the efficiency of the work team, test the validity of the tools and devices, the suitability of the sample and its response to the experiment and the tests participating in achieving the scientific conditions for the tests (validity, stability, objectivity, and the close relevance to the subject of the objectives).

On this basis, the researcher conducted the exploratory experiment on December 27, 2019 on a sample of (2) from outside the research sample, and the aim of the exploratory experiment was:

- Identify the obstacles and difficulties that may face the researcher.
- The efficiency of the researcher's working group.

- The heuristic of the tests.

Time to take tests.

2-6 tutorial for assistive exercises

2-6-1 The exercises help in learning the accuracy of the skill of the straight ground transmitter and the purpose of this transmitter.

Exercise raising and holding the ball

Purpose: to practice placing the ball at the correct height.

The Exercise: Players use the serve position and throw the ball up into the air and fall into the same hand that stays elevated. Players use the paddles by placing the server and swinging the racket back at the same time.

Exercise to raise the ball and hit it with the hand

Purpose: to practice placing the ball at the correct height.

The Exercise: Players use the serve position and throw the ball up into the air and then hit it with the palm of the hitting arm.

The throwing exercise

Purpose: To improve throwing effectiveness

The exercise: without a racket, each teammate throws the ball across from the other side.

For diversification: the cross throw of the transmitter area.

Exercise the hour with the racket

Purpose: exercise the wrist to roll the opposite of movement.

Performing this service with the racket so that the player can see the striking hand with which he is wearing a wristwatch on his right wrist. The timing means that the wrist is rotating outwards.

Hour training (with a tennis racket)

Purpose: same as the previous exercise.

Perform this service, but this time with a tennis racket, so that the player can see the striking hand on which a wristwatch is worn on his right wrist, meaning that the speed is rotated outward.

- Exercise hitting the ball down with the racquet with a wrist movement

The purpose: to practice hitting the transmitter by moving the wrist.

Exercise: The player sends the ball using the wrist from the service line forward to the service area on the opposite side and the opposite player collects balls.

2-6-2 post test

The post-test was conducted on 2/30/2020 after completing the application of the experimental method to the research sample, and the researcher took into account the spatial and temporal conditions and the procedures used in the pre-test, and thus the data and results of this test were obtained correctly.

Tutorial (*)

An educational program consisting of (12) educational units was set up at three units per week, and the sample consisted of one group, and the time of the educational unit was (60) minutes divided into three sections:

- Preparatory section (12) minutes.
- The main section is (43) minutes.
- The final section is (5) minutes.
- The group's exercises were interspersed with auxiliary exercises for sending straight ground to the sample members.

Statistical Methods

The researcher used the statistical methods using the statistical method (SPSS) to process the statistical data, including:

- Mediator
- Spring deviation

Wilcoxen's test

Research results

1. Presentation, analysis and discussion of the research results
2. Presentation and analysis of the technical performance test results of the tennis straight transmitter accuracy skill

It shows the median, the spring deviation, and the calculated and tabular Lucoxen values between the pre and post test to test the technical performance of the tennis straight ground transmission precision skill.

Table (2). The median and spring deviation for the pre and post test and the table and calculated Lucoxen values for testing the technical performance of the precision of the straight ground transmission in tennis.

Indication type	Calculated Wilcoxen value	Post test		Pre-test		Statistical parameters For testing
		Vernal deviation	Mediator	Vernal deviation	Mediator	
Moral	4 +	1,25	5	0,5	2,5	Technical performance test of the accuracy of the straight line transmission

Tabular degree = (8) the number of the level of significance (0’5) under the degree of freedom (10)

Table (1) indicates that the mean in the pre-test was (2.5) with a spring deviation of (0.5), while the median of the same group was (5) in the post test with a spring deviation of (1.25). As for the calculated Wolcoxon value It was (+4), and its tabular value reached (8) at the level of significance (0.5) and under the degree of freedom (10), which means that the difference is categorized between the pre and post test for the technical performance test of the precision of the straight ground transmission in tennis. The researcher attributes this difference to the use of assistive exercises that will improve technical performance because the auxiliary exercises are an important educational method and have an effective effect in acquiring the process of learning basic skills, including the skill of the straight transmission accuracy in ground tennis, as sending is the key to offensive play and has a sure and great opportunity to win Match (6: p. 85).

Presentation and analysis of the accuracy test results of the tennis straight transmitter skill it shows the median, the spring deviation, and the calculated and tabular Lucox values between the pre and post test for accuracy testing of straight transmission skill and ground tennis.

Table (2). The median and spring deflection for the pre and post test and the table and calculated Lucoxen values for testing the accuracy of the straight serve skill in tennis

Indication type	Calculated Wilcoxen value	Post test		Pre-test		Statistical parameters For testing
		Vernal deviation	Mediator	Vernal deviation	Mediator	
Moral	+3,5	7,5	52,5	2,5	30	Technical performance test of the accuracy of the straight line transmission

Tabular degree = (8) the number of the level of significance (0’5) under the degree of freedom (10)

Table (3) indicates that there are significant differences between the pretest and the post test in the straight serve accuracy test in ground tennis, as the results indicate that the research group achieved a median of (30) with a spring deviation (2.5) in the pretest. In the test, the group achieved a median of (52.5) with a quartile deviation of (7.5). Thus, the calculated value of the Calcux was (3.5), and its tabular value reached (8) at the level of significance (0.5) and below Degree of freedom (10). The researcher attributes the reason for this difference to the research sample's use of assistive exercises that help the individual learner to form a base or background on which the learner relies to develop the learning process and thus develop his kinetic performance in the accuracy of the ground straight transmission.

Conclusions and recommendations

Conclusions

1. The results showed that there are significant differences between the pre and post tests in the level of technical and skill performance of straight serve tennis and in favor of the post test.
2. The performance of the research level in the accuracy of the skill performance of the straight transmission was more advanced than the pre-test of the same test.

Recommendations

Through the conclusions shown by the research results, the researcher recommends the following:

1. The necessity of using assistive exercises in the educational process, as it is useful in learning basic skills in tennis.
2. The coaches and those in charge of the educational process must adopt the scientific foundations for testing and measuring because they show the level of performance of the educated individuals.

References

1. Zafer Hashem: Technical and Planning for Tennis, University of Baghdad, College of Physical Education, 2000.
2. Abdul Nabi Jamal: The Arab Encyclopedia of Tennis, Physical and Technical Preparation for the Tennis Player, College of Physical Education, Part 1, 1st Edition, 1988.
3. Abdulaziz Abdul-Karim Al-Mustafa: Child Movement Development, 2nd Edition, Riyadh, Rawaea Al-Fikr House for Printing and Publishing, 1996.
4. Qasim Lazam: The Effect of Some Learning Methods on Acquiring and Developing Performance in Closed and Open Skills, PhD Thesis, University of Baghdad - College of Physical Education, 1997.
5. Mufti Ibrahim: Modern Sports Training, Planning - Training - and Leadership, 1st Edition, Cairo, Arab Thought House, 1998.
6. Yaaroub Khayoun: Learning between Principle and Practice, Baghdad, Al-Adel Office for Publishing and Distribution, 2001.
7. Jim Brown, Tennis Steps to Success, Third Edition, USA, 2004

Accessory (1)

Model for an educational unit = educational unit (6) today is Tuesday
Venue: Al Wahda Youth Center
Time: 60 minutes

Notes	Activities and skills	Date in Mints	Sections of the unit	
	Jogging - rotating arms forward - backward, back-to-back - alternating torso twisting	4 m	General warm-up	Preparatory department
	Jumps on the spot - Shina and ground the number (5) for each player, then a break - 10s (number of reps – 5) 1. The players do the exercises 2.The use of a tennis racket and each player has 20 repetitions	8 m	A special warm-up	
	Provided that the ball passes in the opponent's yard only, and 20 other repetitions for each player provided that the ball crosses the serve square.	43 m	The main section	
Leaving	3. Repeat the exercise to master the skill and for the duration of the performance of the main educational unit.	5 m	The closing section	