International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 01, 2020
ISSN: 1475-7192

The effect of using some help in learning the accuracy of performance and achievement of some basic tennis skills

[1] Asst. Prof. Ammar Jabbar Abbas

Abstract

The aim of the research is to detect the effect of using Some aids in acquiring the art of performance and accuracy of achievement For a tennis serve kick. And use the experimental method Due to its relevance to the nature of the problem, the research sample consisted of (30) students From the students of the College of Physical Education and Sports Sciences / University of Diyala, they were deliberately selected from the students of the third stage of the morning study for the academic year 4/3/2022 until 25/4/2022, divided into three experimental groups of (10) students for each group, and they were parity in Variables (age, height, weight) as well as a number of physical and kinetic components. And each of the three groups implemented its own program according to the following methods: The first educational program (the method of implementing practical exercises on the wall). The second educational program (method of implementing applied exercises in the regular playground). The third educational program, the integration (method of implementing practical exercises on the wall and in the regular playground), and took to implement Software educational ten weeks And in reality three units educational in the week the one, In a time of (90) minutes for every lonliness educational, and the researcher concluded that the use of the first educational program (using the method of implementing applied exercises on the wall) is effective in developing the art of performance and the accuracy of achievement of the transmitter skill when compared to their colleagues in the second and third programs.

Keywords*: assistive devices, accuracy of performance, accuracy of achievement, service, tennis.*

1- Introduction:

have developed greatly during the last two decades, as this development included all individual and team sports that achieved the highest levels of achievement as a result of benefiting from research and scientific studies. The evidence for this is the contributions of researchers, which represent luminous signs and new efforts in its progress and advancement, but this field will remain in need To the new and more scientific research in finding and innovating scientific methods and methods for the purpose of developing the fields of physical education, which made those working in the fields of physical education look forward to a bright future by solving our mathematical problems through scientific research methods, and benefiting from modern theories in physical education sciences and what is related to them From other sciences to develop everything related to the process of learning and training for skills and in all sports. Accordingly, the teaching and learning process depends on many and varied factors: some of them are related to the nature of the learner, his

[1]University of Dyala/ College of physical Education and Sport sciences

characteristics and advantages, some of which are related to the methods and means of learning, including what is related to the skill class and the type of effectiveness (individual or group), the use of educational aids and the use of modern technology in learning and through organizing And scheduling the methods of applied exercises and adopting the correct scientific classification of motor skills and how to learn them using appropriate educational methods to take the hand of the novice or the junior to reach the degree of mastery of skills in sports. This is achieved by following the correct method in the ways and means of learning and training. (Shawkat et al., 1997, 1991). Tennis is one of the sports that has witnessed rapid development in recent years and increased interest in it. To teach the skillful performance of learners and develop their level by creating educational programs based on scientific foundations that help the novice to acquire basic skills as quickly as possible. (Brown, 1989, 206), and thus learning the game of tennis has become like learning the rest of sports, as it must pass through all the external influences that surround the game, in addition to the availability of requirements for its development from scientific sources and an efficient educational and training staff, in addition to developing the skill capabilities of Through the use of educational methods and programs and the creation of the necessary capabilities on which the game is based. In light of the foregoing, the importance of the research lies in the observation of one of the researchers and through his supervision of the teaching of tennis to third-year students in the College of Physical Education and Sports Sciences, that there is a difference in the opinions of teachers who teach and learn these basic skills by using practical exercises implemented in the regular court without reference To the classification of motor skill (closed and open) during its learning, as well as the lack of studies in this field comes the importance of research in finding the most appropriate proposed educational programs in acquiring some basic skills in tennis.

2- Research methodology and field procedures:

2- 1Research Methodology:

I used the experimental method for its relevance to the nature of the research problem.

2- 2research community and appointed him

The research community consisted of (50) students From the students of the College of Physical Education and Sports Sciences / University of Diyala for the third stage of the morning study for the academic year 2021/2022, where they were randomly distributed into three groups and by lottery. For the purpose of sample homogeneity, the researcher excluded a number of members of the research community and for the following reasons (16) students for their participation in the pilot experiments of educational programs. and two students who practice badminton and board game, for the purpose of stopping the process of transferring the effect of learning from similar skills, And the Taliban for not being able to adhere to the timings of the programmes. Thus, the actual research sample consisted of (30) students representing three experimental groups, each group comprising (10) students, and then the proposed educational programs were distributed to the three groups at random.

2- 3Devices, tools and means of collecting information:

Arab and foreign sources, personal interview, legal tennis court, legal tennis rackets, legal tennis balls, measuring tape, medical scale, camera type (Nikone D5000).

2- 4Field Research Procedures :

2-4- 1Performance art evaluation tests for the serve skill in tennis:

The process of evaluating mathematical skills by calculating points plays an active role in the field of physical education, as it is one of the important methods based on observation in evaluating the technical performance of the skill. Therefore, the researcher used this method to assess the level of technical performance in acquiring the skills under study by dividing each of the tennis skills into three parts (the preparatory, main and final part), and after setting the special specifications and the illustration for each part of the skill, the total score

was determined B (10) degrees, and the most frequent score for each part was taken according to the agreement of the specialists' opinions and according to the importance of each part of the skill and the points awarded to it, and Table (1) j shows the distribution of scores according to the parts of each skill and based on the opinions of specialists.

Table (1)

It shows the distribution of scores for evaluating the art of performing the skill of the transmission under consideration

strikes	_ Preparatory part	The main part	final part the	final grade The
serve kick	4	4	2	10

For the purpose of ensuring the objectivity of evaluating the performance art among the assessors, the researcher chose the skill of the front ground strike randomly after it was photographed during the video stability coefficient tests and transferred to a disk (CD) for the purpose of displaying it by a computer to a group of assessors to assess the skill where the coefficient of stability was calculated The multiple correlation between the degrees of the three assessors was the result of the correlation (0.94), which is a high correlation coefficient in the evaluation of the technical performance of skills, and it became clear that the evaluation process was objective, which means "the degree of agreement between two different examinees who tested the same sample in the performance of a particular skill") The Student, and the Samurai, 1981, 139).

The third test:

White's modified serve test to measure the accuracy of a serve

The objective of the test: To measure the accuracy of executing the serve hit skill.

Measures:

1. The tennis court is planned from one side, as shown in the figure.
2. A rope shall be fixed from both ends of the two columns in the posts of the net and parallel to it and at a height of (4) feet above the net.
3. The boundaries of the service ball fall area are divided into (6) parts, and each part is given its own score, where the scores refer to:

1. to a rectangle whose dimensions are (15 x 13,5) feet.
2. to a rectangle whose dimensions are (6 x 10,5) feet.

(3) (3, 4, 5, 6) refers to the rectangles, each of which has dimensions (1,5 x 3) feet.

The numbers above indicate the scores assigned to each of the areas on which the ball falls, provided that it passes between the net and the rope.

To take the test and how to register

The player stands on the center mark located in the middle of the base line and takes the serve

1. Each individual is given (5) training attempts for the purpose of learning how to perform the test.
2. Each person is given (10) attempts in the same way above for the purpose of calculating the accuracy of the serve
3. Balls that touch the rope or the net are not counted as an attempt and are replayed.
4. A ball that passes over the top of the rope is considered an attempt and awarded a score of zero if it falls on any correct position.

Players' scores are the sum of points earned from the 10 attempts.

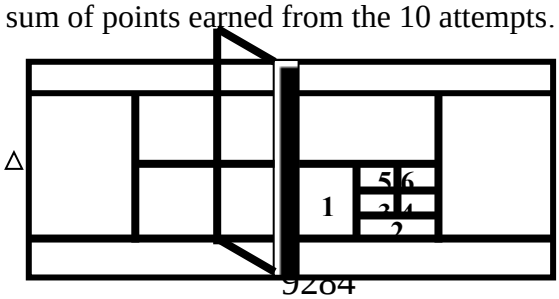

Figure (1) shows the serve stroke test

2-4-2 Equality of research groups:
The equivalence process was carried out between the three research groups to adjust for the following variables, using one-way analysis of variance, Anova one way And the two tables (3,2) show that 0

Table (2)
The equivalence of the three research groups in (age, height, weight)

Variables	Contrast source	sum of quaress	degree of freedom	mean squares	Calculated q value
the age to the nearest) (month	between groups	1.067	2	0.533	0.015
	within groups	964.300	27	35.715	
	the total	965,367	29		
height (centimeter)	between groups	0.067	2	0.0335	0.007
	within groups	1479,867	27	45,809	
	the total	1479,867	29		
weight (Kg)	between groups	0.067	2	0.0335	0.002
	within groups	571.400	27	21.136	
	the total	571.467	29		

Tabular value (q) at an error rate < (0.05) and in front of a degree of freedom (2-27) = 3.354
2-4-3 Educational Programs: After reviewing the scientific sources, previous studies and related research, Three proposed educational programs have been prepared to learn the skill of serving in tennis The application of the three programs was based on the concept of classifying motor skills and within the foundations of motor learning and its scientific concepts in learning, an attempt to mix the theoretical concept of learning with practical application, and it includes the parts of the educational unit (the preparatory, main and final part). The application of the programs took 6 weeks and by two educational units Weekly, with a time of (90) minutes for each educational unit, and the equivalent of (45) educational hours for each program, which is equivalent to (135) educational hours for the three programmes.
3-5 The main experience of the research
The three educational programs were applied by (8) educational units for each of the research groups. And all the educational units were similar in the preparatory section and the closing section. The difference was in the applied part of the educational unit and during the implementation of the applied exercises for the three programs, as follows:
The first tutorial: (Using the method of implementing practical exercises on the wall)
Where the members of this group applied the exercises on the wall and individually after the verbal explanation of the chosen skill and the presentation as a model by the researcher and the use of some teaching aids and the provision of immediate feedback through the course of the exercises depending on the time of performing each exercise where the start of work and the end with a clear signal by The trainer, according to the time allotted for each exercise, and

the participant applies the exercises individually, depending on his personal abilities in carrying out the motor duty.

educationl programs Second:

(Using the method of implementing practical exercises in the regular court)

Where the members of this group applied the exercises in pairs, each two participants meet together throughout the period of the educational unit inside the tennis court and in the presence of the network after the verbal explanation and presentation as a model by the coach, and also providing immediate feedback for the purpose of correcting errors where the start of the application of the work and the end with a signal from The researcher according to the time allotted to each individual.

Third tutorial:

(Using the method of implementing practical exercises on the wall and the regular court)

Where the members of this group applied the method of mixed exercises, as an exercise was carried out on the wall, followed by an exercise in the regular playground and in a sequential manner throughout the period of the educational unit. The exercises were performed after the verbal explanation and presentation by the trainer, as well as providing it for immediate feedback for the purpose of correcting errors.

2-6 Post-tests:

The researcher conducted the post-test on the individuals of the research sample on Sunday 18/4/2021 and on the tennis court in the College of Physical Education and Sports Sciences, University of Diyala, under the same conditions as the pre-test.

2-7 Statistical methods used

The researcher used the computer in the statistical treatments and using the statistical program (SPSS).

3- Presentation, analysis and discussion of the results:

3-1 Presentation of the results of the comparison of the effect of using some aids in acquiring the performance art of the front and back ground strokes and the serve in tennis.

3-1-1 Presentation of the comparison results for the effect of using Some aids in acquiring the art of performing the forehand kick in tennis ground up.

Table (3)

Shows the value of (q) calculated among the three educational programs in the performance art of the forehand ground stroke

educationl programs	**Arithmetic mean**	**standard deviation**	**Average of squares between groups**	**Average of squares within groups**	**Calculated q) value)**
the first	**380 .6**	**_ 0.862**	**324 .5**	**_ 0.372**	*** 983 .10**
Second	**973 .5**	**_ 0.467**			
Third	**132 .6**	**_ 0.531**			

*Significant at error rate < (0.05) and in front of two degrees of freedom (2-27) tabular value (F) = (3.354)

2-1-4Presentation of the results of the comparison of the effect of using Some aids in acquiring the art of performing a serve in ground tennis.

Table (4)
It shows the value of (q) calculated among the three educational programs in the performance art of the serve.

educationl programs	Arithmetic mean	d standar deviation	Average of squares between groups	Average of squares within groups	Calculated q) value)
the first	836 .6	_ 0.352	642 .6	438 .0	* 860 .19
Second	276 .5	624 .0			
Third	435 .6	620 .0			

*Significant at error rate < (0.05) and in front of two degrees of freedom (2-27) tabular value (F) = (3.354)

3-2-1-4Presentation of the comparison results for the effect of using Some of the aids in the accuracy of the completion of the serve kick in ground tennis.

Table (5)
Shows the value (q) calculated between the three educational programs in the accuracy of the completion of the serve

educationl programs	Arithmetic mean	standard deviation	Average of squares between groups	Average of squares within groups	Calculated q) value)
the first	975 .19	463 .4	276 .63	837 .13	* 678 .4
Second	765 .14	304 .3			
Third	637 .16	575 .3			

*Significant at error rate < (0.05) and in front of two degrees of freedom (2-27) tabular value (F) = (3.354).

3-2 Discussing the results:

3-2-1 Discussing the results of the comparison of the effect of the use of Some aids in learning the art of performance and the skill of serving in tennis.

In light of the results he reached, it was found that there are significant “differences” for the effect of using three proposed educational programs in acquiring the art of performance for the front and back ground strikes and the tennis serve, and in favor of the first experimental group whose members applied the method of applying skill exercises on the wall. The researcher attributes this to the effectiveness of the first educational program, which included the use of practical exercises on the wall and within a fixed environment, which made the learner rely on himself in organizing the introductory, main and closing parts of the movement for each of the skills under study, as the increased opportunity to practice exercises (ie, increase Repeating it) and the learner’s dependence on himself in implementing the speed of the ball and the direction he chooses led to an increase in his chance of paying attention to the swinging of the striking arm before executing the main part of the movement, and this is one of the basic conditions for the success of the strike, as well as his careful observation of the collision of the ball with the racket and his failure to implement it. And its focus on the movement of the feet, while we find in the second educational program that most of the learners are the same Skill exercises with the colleague in an unstable environment, which led the learner to become preoccupied with the ball sent to him without confirming the swinging of the arm, organizing the steps of the feet, touching the ball in the middle of the racket, the direction of the ball and the movement of the body, and he does not find in himself the ability to return the balls with the colleague.

3-2-2 Discussing the results of the comparison of the effect of using Some of the aids in learning the accuracy of the achievement and the skill of serving in tennis:
In light of the results that were reached, it was found that there are significant differences in the effect of using three proposed educational programs in the accuracy of achieving the front and back ground strikes and the serve strike in favor of the first educational program whose members applied the method of implementing practical exercises on the wall. The researcher attributes this to the effectiveness of the educational program that included the implementation of skill exercises within a fixed environment and surroundings (closed skills), and that the participants in the program had learned the skills based on the classification of the closed skill that led to the formation of internal motor control for the learner through the expected prediction of performance away from Critical cases such as not estimating the speed of the ball and the direction of the ball coming from the outer periphery, which are performed by the same method and repetition. (Singer, 1980) asserts, "In order for the exercise to take its place in the learning of the skill, it is necessary as a result of attempts to organize and develop the conditions surrounding the exercise and diversify it, and avoiding error helps in developing the skill and participates practically in learning and performance (Singer, 1980, 382). The first experimental group and through a lot of practice in feeling the ball and directing it to the direction that qualifies it to bounce the ball from the wall correctly, as well as the learner's control over the speed of the ball and his expectation of its direction. The wall is a necessary means to improve the forehand and backhand strikes, and it is also an aid in strengthening the rebounds from the wall, as the player can develop and improve the strikes and get used to feeling the appropriate place to meet the ball when hitting it and the way the racket is weighted backwards and move very quickly to touch the ball (Al-Sarraf, 1987, 128). In addition to the above, the researcher sees that continuous practice and a lot of repetition helped the learner to feel the point of the ball hitting the racket (timing) and to rely on himself in correcting mistakes (self-feedback), and the opportunity for the coach's presence and his continuous monitoring in providing immediate feedback to the learner led to accurate Performing the basic skills under study better than other educational programs. And (Osman, 1987) mentions that "feedback is one of the most important basic requirements in increasing the learning process" (Osman, 1987, 186). As (Robb, 1972) confirms, "If we want to obtain complete motor performance, this does not come through exercise only, but rather exercise in addition to feedback" (Robb, 1972, 31). Accordingly, the first educational program gave the learner a great opportunity in training and taking advantage of the time of the applied part in practice, which led to his mastery of the accuracy of feeling and hitting the ball in the middle of the racket and determining the real distance between him and the wall when returning the bounced balls from the wall and from different directions, as well as organizing The speed of the balls and subjectively from the learner, as both (Mosston and Ashwart, 1994) confirm that "the investment of time in increasing the number of iterative attempts constitutes a correlation to create conditions that enhance the efficiency of the learning process" (Mosston and Ashwart, 1994, 157). As for the second educational program (the use of the method of implementing applied exercises in the regular playground) and the third educational program (the use of the method of implementing the applied exercises on the wall and in the regular playground), and through the results, we found that there is a discrepancy in the level of accuracy of achievement for the skills under discussion and for the two programs above, the members of the group The second pilot who applied the second educational program had implemented the skill exercises within an open environment (open skills), as the skill exercises were performed in a changing and unpredictable state and the movement was expected. This led to the failure of the implementation of the assigned exercises in the educational unit in the first stage to learn the skills, which leads to frustration of a number of learners in the subsequent practice, in addition, the learner makes more effort to collect balls

than to practice exercises with the colleague on the field, due to the weakness of the skills that he has It is educated.

4- Conclusion

In light of the findings of the researcher that the use of auxiliary means has a clear impact on acquiring the art of performance and the accuracy of achievement for the transmission skill in ground tennis, and the use of the first educational program "using the method of implementing applied exercises on the wall" proved effective in acquiring the art of performance and the accuracy of achievement for the skill of a blow. Sending when compared with their colleagues in the second and third experimental groups, the results of the third educational program were better when compared with the second educational program in the accuracy of achievement for the skill of serving.

References

1. Al-Banna, Laith Muhammad Dawood (2001): The effect of using the daily practice scheduling of the educational unit in acquiring and retaining the art of performing and the accuracy of some easy and difficult dispatches in volleyball, an unpublished Ph.D. thesis, University of Mosul.
2. Al-Sarraf, Abdul-Sattar (1987): Racquet Games, Ministry of Higher Education and Scientific Research Press, Baghdad.
3. Al-Taie, Majed Khalil (2003): The effect of different heights of the net on the development of acquiring the skill of serving and the front and back ground kicks in tennis, unpublished master's thesis, College of Physical Education, University of Diyala.
4. Al-Talib, Nizar, and Al-Samarrai Ahmed (1981): Principles of Statistics and Physical and Mathematical Tests, Dar Al-Kutub for Printing and Publishing, University of Mosul.
5. Al-Tek, Qutaiba Zaki (1998): The effect of using educational methods in the partial method in acquiring and retaining some gymnastics skills, unpublished doctoral thesis, College of Physical Education, University of Mosul.
6. Farag, Eileen Wadih (2000): Tennis, Manshaat Al Maaref, Alexandria, Egypt.
7. Hassanein, Muhammad Sobhi (1995): Measurement and Evaluation in Physical Education and Sports, Volume 1, 2nd Edition, Dar Al Fikr Al Arabi, Cairo.
8. Mahjoub, Wajeeh (1987) Kinetic Analysis, Higher Education and Scientific Research Press, Baghdad.
9. Mohamed, Badawy Abdel-Aal Badawy (1991): The effect of using the ball thrower on the level of physical and skill performance of junior tennis players, published research, Volume 1, the first scientific conference at Zagazig University, Cairo.
10. Muska, Mosston and Sara Ashworth (1994): Teaching physical education, 4th ed., Macmillan publishing Co.., New York.
11. Othman, Muhammad (1987): Kinetic Learning and Sports Training, 1st Edition, Dar Al-Ilm for Publishing and Distribution, Al-Faisal Press, Kuwait.
12. Robb, D. Margnte (1972): The Dynamics of Motor skills, Acquisition Prentice-Hill, Englewood, Cliffs, New JERSEY.
13. Salloum, Ali Jawad (2002): Ball and racquet games in tennis, Ministry of Higher Education and Scientific Research Press, Al-Qadisiyah University.
14. Shawkat, Hilal Abdul-Razzaq, and others (1991) Technical and planning preparation in tennis, Dar Al-Kutub for Printing and Publishing, University of Mosul.
15. Singer, n. Robert (1980), Motor learning and human performance, micmillan pub. Co. inc, Ner York, USA