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# Transition of Learning between High and Fast Spike Skills in Volleyball

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***Abstract---*** *The researcher spoke in the introduction of the research on highlighting the role and importance of the property of the effect of the transfer of learning, which plays a role in the economy of time in the stages of learning and reducing the effort exerted and hence the importance of research in the need to find new ways and ways to help students to learn the skill of spike, which is one of the skills that the student finds himself Obliged in its learning despite its difficulty on beginners and the need to recognize the impact of the transfer of learning in teaching the skill of spike multiplication, so the question of the form of the problem that is whether the student's learning to spike in its various forms plays an effective role in improving the evaluation of the performance of the spike or not either the goal of the lake W was first in recognizing the impact of the education of spikes in its various forms on the evaluation of the performance of the high and fastspike of volleyball and secondly in helping to develop a method for the best method in the education of spike without going out of the program of the college, but the imposition of research was to learn different types of spike achieves a positive transition in Evaluation of the performance of the high and fastspike and fast and the research sample of the second stage students in the Faculty of Physical Education and Sports Sciences - University of Baghdad - University of Baghdad (80) students and the time period for the conduct of the research between 26/2/2018 and 11 April 2018 on The internal hall in the Faculty of Physical Education and Sports Sciences / University of Baghdad (Al-Jadriya) the research method used by the researcher was the experimental method of the system of equal groups because it is the most appropriate method, as the sample of (80) students is divided into four groups by (20) students for each group of students of the second stage In the Faculty of Physical Education and Sports Sciences University of Baghdad for the academic year 2017-2018, where the first group learned division (d) fast and then high spike while learning the second group Division (b) high spike and then fast and learning the third group division (and) beating The researcher found that the second experimental group, Division B, which learned the high spike multiplication and then the fastspike, had a moral effect in evaluating the performance of the high-hit crush, as the learning of fastspikes had a positive effect in the high spike learning (the first group and the second best of the fourth group in the high spike) and did not appear to learn the spike beating with a positive effect in the beating. The researcher recommended that the learning of the high spike first and then followed by learning fastspike as a new method of gradualization in the learning of spike and utilizing similar motor skills in volleyball, which help to speed up learning for its effectiveness in transmitting the impact of positive learning and add the education of fastspike of various types and introduce it in the educational program followed by the college.*

***Keywords---*** *Transition, Learning and Spike Skills.*

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## I. INTRODUCTION

The progress and development achieved in the technical performance of the game of volleyball forced us to study the modern scientific methods in the field of learning to improve the level of performance and in accordance with the mental and physical abilities of the player, and in order to save the effort and time it became possible to benefit from the property of the transfer effect Motor learning between two or more skills in the same game or from a single skill in its different ways as in our study.

The transition of motor learning shortens the learning stages to be utilized in focusing on difficult skills or to learn another skill that has not allowed time to learn, and the transition of the learning effect occurs between many things, including the transfer from within one skill from one position to another and from one form to another.In the game of volleyball there is a convergence of some movements within the same skill can be used in the transmission of the impact of learning to the economy in time and effort in addition to achieving a high level of learning,[1] and of these skills is the skill of spike multiplication, which the researcher will study the transmission of the impact of learning in it and to identify On the effectiveness of the transfer of the education of different types of spike beating on the evaluation of the performance of the spike multiplication and we can summarize the importance of research in the following:

1. The research is an attempt to solve an important problem which is the low level of skill of spike among college students.
2. Trying to find exercises similar to spike exercises controlled by the student himself
3. Getting students to the stage of good performance of the skill of spike.
4. Arranging the vocabulary of the program for volleyball subject to benefit from the transition of the impact of learning.

While learning students from the researcher noted the desire of a number of them to learn more than one method or some kind of spike despite the difficulty of learning them and since the time to learn the skill of multiplication of different types during the college program does not allow to give more than the type of beating high, and by knowing that the early stages of The science of spike batting depends on the right timing to hit the ball from the student either in training on the wall or from above the net,[2] prompted the researcher to think why we do not teach students other ways of volleyball skills is not in the vocabulary of learning volleyball in college works as an adjunct in learning the skill of beating In addition to learning the student new types of spike and in order not to waste the time of the learner without knowing the result the researcher decided to compare this method with the traditional method, which is to learn the skill of spike high directly, which is an answer to the question of when and how to teach the skill of spike?

***Research Objectives***

1. Identify the impact of the education of spike in its various forms on the evaluation of the performance of the high and fastspike of volleyball
2. Help to develop a program for the best way to teach spike without going outside the college program

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***Research Hypothesis***

1. There are differences of significant moral significance in learning the skill of high and fastspike between the research groups.
2. Learning different types of spike achieves a positive learning transition in evaluating the performance of high and fastspike multiplication.

***Field of Research***

- Human field: A sample of the 80 students of the second stage of the Faculty of Physical Education and Sports Sciences- University of Baghdad.
- Time field: Time period between 26 February 2018 and 11 April 2018.
- Spatial field: Indoor Hall at the Faculty of Physical Education and Sports Sciences / Baghdad University (Al-Jadriya).

## II. RESEARCH METHODOLOGY AND FIELD PROCEDURES

***Research Methodology***

The researcher used the experimental method of the system of equal groups, as this method is the most suitable to solve the problem of research, as the researcher relied on comparing the performance of the experimental group with the performance of members of an officer group, as the members of the experimental group learn a certain educational activity such as learning fastspike multiplication and then after They learn another educational task, such as high spike, but the members of the control group learn only the second task, which is the high spike, which is the first design of the transition design after learning and known as Elise designs.

| Transferable skill or task | Original skill or task |
|---|---|
| Learn skill or mission A (quick spike) | Learn skill or task B (high spike) |
| | Learn skill or task B (high spike) |

***Sample Search***

The sample of the research was selected in a random manner from the people (D, B, G) and by making a lot of drawings on four out of seven people, dividing the sample of (80) students into four groups by (20) students for each group of second-stage students in the Faculty of Physical Education and Sports Sciences Baghdad University for the year of study J 2017-2018 After the draw again, it became clear that Division D is the first group, which learned the fast and then high spike, while the second group, Division B, was tapped by the high spike, then the fast, the third group, the division (and) the fastspike and the fourth group learning. Division (g) High spike.

After excluding students over the age of 21, the average age ranged from (20-21) years, as well as the exclusion of the failed, deferred, experienced players and members of sports clubs, i.e. the percentage of the sample of the research constitutes (40 percent). Out of a total of 200 students, the original community.

***Homogeneity and Parity of Search Groups***

In order to achieve homogeneity and parity between the four groups, the researcher used the statistical method (contrast analysis) between the averages of height, weight and age as well as the evaluation of performance in the

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pretest of high spike from center 4 in order to adjust the variables affecting the performance of volleyball, Because the sample is from one stage and at similar ages and of the same sex and beginners who did not practice volleyball previously, and who did not receive any information from the competent professors as well as performance in the stadiums themselves and on a specific day of their study in volleyball, which constitutes homogeneity factors for the research sample as described in the tables (1،2).

Table 1: Shows the Homogeneity of the Four Groups in Terms of Height, Weight and Age

| Variables | Source of variation | Total squares | df | Average squares | Calculated (F)value | Tabulated (F)value | Significant value | Statistical significance |
|---|---|---|---|---|---|---|---|---|
| Length | Between groups | 28.5 | 3 | 9.5 | 0.14 | 2.75 | 0.05 | Non sig. |
| | Within groups | 5293.27 | 76 | 69.65 | | | | |
| Weight | Between groups | 11.36 | 3 | 3.79 | 0.09 | | | Non sig. |
| | Within groups | 2643.84 | 76 | 39.64 | | | | |
| Age | Between groups | 70 | 3 | 23.33 | 2.25 | | | Non sig. |
| | Within groups | 789 | 76 | 10.38 | | | | |

Table 2: Shows the Parity of the Four Groups in Terms of their Level of Learning in Assessing the Performance of High and Fastspike

| Variables | Source of variation | Total squares | df | Average squares | Calculated (F)value | Tabulated (F)value | Significant value | Statistical significance |
|---|---|---|---|---|---|---|---|---|
| High spike hit | Between groups | 0.4 | 2 | 0.2 | 0.29 | 3.15 | 0.05 | Non sig. |
| | Within groups | 38.51 | 57 | 0.68 | | | | |
| Fastspike beating | Between groups | 0.41 | 2 | 0.21 | 0.02 | | | Non sig. |
| | Within groups | 59.76 | 57 | 1.05 | | | | |

***Information Collection Methods (Search Tools and Devices)***

- Arab and foreign sources.
- Data registration form.
- Assistant Staff (Appendix 4).
- Volleyball Number (15) Ball.
- Legal volleyball court.
- Hand watch.
- Whistles.
- Wooden terraces number (4)
- And the media.

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***Choose the Test***

The researcher has prepared a special questionnaire that includes standardized tests to evaluate the technical performance and accuracy of the spike of the center 4 in volleyball to suit the level of the research sample and available in the sources and this form was presented (see appendix 1) with its vocabulary to the experts specialized in tests and ball game The aircraft and the experts have been pointing out the best appropriate tests for the level and capabilities of the research sample and after collecting these forms from the relevant experts were used as identified by the experts, and the results showed the agreement of the experts to choose the test of evaluation of the performance of the spike multiplication and that the accuracy test does not suit The sample in the spike beating of its difficulty on the sample as the experts agreed to divide the grades of the calendar for the technical performance of the skill of the high spike of the rank of 4 or fast (front altogether) in volleyball by giving (2) degrees on the preparatory section and (4) degrees on the main section and (2) degrees on the section Final and (2) degree at the level of performance and the researcher filmed the tests and gave them to the experts for evaluation.[3]

Table 3: Shows the Percentage of Experts Nominating for the Test for Measuring the Spike Accuracy

| Skill name | Aim of the test | Tests | Number of experts nominated | | Notes |
|---|---|---|---|---|---|
| | | | Number | % | |
| Spike | Accuracy and evaluation of spikespike performance | Straight spike multiplication accuracy test | | | |
| | | Country spike accuracy test | | | |
| | | Test the accuracy of straight and diagonal spike | | | |
| | | Spike performance evaluation test | 5 | %100 | |

## III. RESEARCH TESTS

***Spike Test*** [4]

- The purpose of the test
- Measurement performance evaluation of high spike skill
- Hardware and tools: Volleyball court, ten volley balls.
- Performance specifications: After throwing the ball from the equipment that prepares from center (3) and directing the ball to the center (4) in which the laboratory is located and after the ball arrives the laboratory performs the skill of high spike 5 times in a correct legal manner. As for the speedy, the ball is thrown by the equipment that He stands between center 2 and 3, and close to the net, so that the laboratory behind the attack line can perform a quick spike beating (kidnap in front of me) 5 times in a correct and timely manner with the ball.

***The Conditions***

1. Each laboratory has (5) attempts
2. To perform an spike beating each time, it is required that it be in accordance with the legal conditions for skill

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3. In the event that the trainer or preparer is wrong in preparing for an spike beating, the attempt will be repeated.

- Registration method: As for the performance evaluation, it was of (10) degrees given (2) degrees for the preparatory side, (4) degrees for the main side, (2) degrees for the closing side and (2) degrees for the level of performance to put the expert in front of each student the degree of evaluation.

***Pilot Study***

The researcher conducted a reconnaissance experiment on Monday 26/2/2018 on one of the units before conducting the research and the purpose of the experiment was:

1. Checking the validity of the tools and devices used.
2. Ensuring the adequacy of the work team to accomplish its mission masterfully.
3. Knowing the difficulties and obstacles that the researcher is likely to encounter.

***Search Procedures***

Before starting the testing procedures, the researcher organized the research sample and divided it into four groups. The names of the entire sample of people (numbering 80) were recorded in the pre-test and preparing the educational program to perform the skill. And instructions concerning experimental research procedures, the sample was given sufficient time to take the test, and the researcher organized the stadium before starting the test and organized the results form for each laboratory.[5]

After conducting the pre-test, the researcher discussed the results with all the testers and informed them of the degrees they obtained to help them understand and understand the instructions, instructions and feedback on how each player performed, because it is necessary to discuss the student with the teacher to know the results of his performance.

***Pre- and Post-test***

The pre-test of all the research sample was conducted on Monday 5/3/2018 on the internal hall of the College of Physical Education and Sports Science, and each student was given (5) attempts to overwhelm.

After completing the program, the post-test of the research sample, which was completed for (8) educational units, was completed on Wednesday, 11/4/2018, after the expiry of the time period specified for applying the educational method to teach spike skills.

***Studies Programs***

The researcher implemented the program that included (8) educational units by two units per week in volleyball lessons for the second stage in the period from Monday 12/3/2018 until Wednesday 4/4/2018 and it was taken into account that these skills are required The student has learned it for the second semester, and this is what actually happened, so the post test was a substitute for the practical exam, whereas the theoretical exam was one of the requirements for completing the student’s degree for the second semester, that not disrupting the college’s educational program and continuing to teach the vocabulary prescribed for a volleyball lesson and the researcher's

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commitment to the basic factors of the process Education is a Target content and the way as the program is (an organized plan to train a group of individuals on a particular skill mastered).[6]Therefore, the researcher took into account the following matters when developing the vocabulary of the program:

- With the start of applying the program, the researcher gave two unified educational units for the samples, starting with a theoretical explanation of the spike skill, then typical performance by the teacher, and how to benefit from it in playing to the practical application of the skill extensively.
- These two educational units had the basic effect on how to deal with the sample dealing with high and fastspike multiplication exercises as they must change from high to fast or vice versa so their exercises to apply them should take these educational units for each type knowing that their exercises were Performed with a structured sequencing exercise method.
- Support the educational program with specialized exercises, physically and mentally, and follow the method of explanation and presentation in the application of exercises.
- Paying attention to warm-up before starting giving training and doing individual, double and group races on the accuracy of the skill to improve performance.
- Increasing skill requirements by changing the target's location from one place to another, as in high spike beating, beating starts from center 4, then from center 2 or center 3 (meters), and in fast speeds (front hijacking), (front cutting) and (back hijacking).
- The information provided to learners is about their motor achievement and about the performance result, and it is not limited to being corrective information but includes information about promoting good performance, as the learner must learn both the correct movement model and the correct feeling of the model, so the researcher used immediate feedback (auditory) Visual) to achieve this.
- To ensure that one group does not excel over another due to the difference in the number of performance iterations performed by members of the four groups, the researcher has adopted the principle of equality in the time of one performance for the members of the groups.
- The educational curricula have continued to be applied within a specific time (75) minutes per unit of instruction and by two units per week on Mondays and Wednesday and divide the performance time in the educational unit into three time sections as shown in Figure (4).

Table 4: Shows the Division of the Educational Unit into three Sections

| Sections of the educational unit | | Time during unity | Time in 8 units |
|---|---|---|---|
| Preparatory section | General warm-up | 5Min. | 40 Min. |
| | Special warm-up | 10Min. | 80 Min. |
| The main section | The educational part | 10Min. | 80 Min. |
| | The practical part | 45Min. | 360 Min. |
| The final section | | 5Min. | |
| Total | | 75 Min. | |

***Statistical Means***

The researcher used the following statistical methods to treat the results:

- Mean.
- Standard deviation.

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- T-test for symmetric samples.
- Variation Analysis Test (F).
- Test for the least significant difference to5 * sd = (L.S.D).
- The law of evolution ratio.

## IV. RESULTS AND DISCUSSIONS

Table 5: Shows Mean, Standard Deviations, and (t) Value for Pre- and post-tests to Evaluate the High Spike Multiplication of the three Groups

| Groups | Pretest | | Posttest | | (t) calculated | (t) tabulated | Significant value | Statistical significance | Evolution rate |
|---|---|---|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | | | | | |
| Fast - high | 0.91 | 0.58 | 6.25 | 0.84 | 29.38 | 2.09 | 0.05 | Sig. | 58.75 |
| High - fast | 0.66 | 0.73 | 7.08 | 0.72 | 38.50 | | | Sig. | 68.74 |
| High | 0.71 | 0.58 | 5.83 | 0.65 | 22.79 | | | Sig. | 55.11 |

From table (5) the results showed that the average of the first experimental group (fast-high) in the pretest was (0.91), standard deviation (0.58), computational medium for the post test (6.5) and standard deviation (0.84), while the (t) value calculated to determine the moral differences between the two pretests The dimension was (29.38) which is greater than the (t) scheduled value (2.09) with a degree of freedom (19) and below the level of indication (0.05) and this indicates that there is a moral difference in favor of the post test.

The second experimental group (high-speed) showed that the mean in the pretest was (0.66), standard deviation (0.73), computational mean for the post test (6.83) and standard deviation (0.72), while the calculated (t) value was (38.50), which is greater than the numerical (t) value ( 2.09) With a degree of freedom (19) and below the level of indication (0.05) this indicates a moral difference in favor of the post test, which is the highest difference between the totals. The fourth group (high) showed that the amount of the mean in the pretest was (0.71), the standard deviation (0.58), the numeric average of the remote test (4.16) and the standard deviation (0.65), while the calculated (t) value (22.79) was greater than the (t) tabular value (2.09) by a degree Freedom (19) and below the level of indication (0.05) this indicates that there is a moral difference in favor of the posttest.

Table 6: Shows the Results of the F Test to Analyze the Contrast between and within the three Groups of the Posttest to Assess the Performance of High Spike Multiplication

| Source of variance | Total squares | df | Average squares | (F) calculated | (F) tabulated | Significant value | Statistical significance |
|---|---|---|---|---|---|---|---|
| Between groups | 9.72 | 2 | 4.86 | 13.14 | 3.15 | 0.05 | Sig. |
| Within groups | 20.84 | 57 | 0.37 | | | | |
| Total | 30.56 | 59 | | | | | |

Table (6) shows the results of the contrast analysis to assess the performance of the high spike of the three totals and within them and the results showed the existence of moral differences between and within the totals, because the value of (F) calculated (13.14) is greater than the value (F) table (3.15) at the degrees of freedom (2/57) and below the level of indication (0.05) and this indicates that there is a difference in the effect in the evaluation of the high spike performance between the (first, second and fourth).

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Table 7: Shows the Results of the L.S.D Test to see the Lowest Moral Difference between the three Totals in the High Spike Multiplication

| Groups | The difference between means | Results of differences | L.S.D | Statistical significance |
|---|---|---|---|---|
| Group1- group2 | 7.08 – 6.25 | 0.83 | 1.15 | Non sig. |
| Group1- group4 | 5.83 – 6.25 | 0.42 | | Non sig. |
| Group2- group4 | 5.83 – 7.08 | 1.25* | | Non sig. |

Table (7) shows the results of (LSD) to find out which groups achieved a better level of learning in evaluating the performance of high spike as the table shows the value of the least significant difference under the level of significance (0.05) which is (1.15) and after comparing the values of the difference between the media For each two groups separately with the value of (LSD) and under a level of significance it appeared to the researcher that the difference appears between the second group and the fourth group as it appeared that the highest moral difference (1.25) and for the benefit of the second group that was trained on the high and fastspike beating and this indicates that the group The second is the most effective group in evaluating the performance of the high spike hit, and then comes after a less impact of the group The other, with no significant difference appears between the first group and the second (0.83), and between the first group and the fourth (0.42).

It is clear from the research results presented in Table (4) to clarify the percentage of development taking place in learning the skill of high spike between the pre and posttests that all research groups have achieved their goal in the moral influence in learning with the appearance of differences in the rate of development between them, and the researcher attributes that to a process The planning studied by the research sample through attention to structured training that includes exercises and exercises applied regularly and the availability of tools as well as following the easy method in training and repeating the exercise as well as fixing errors in technical performance.[7]

The researcher believes that the clarity of the goal of educational programs and their consistency with the level of beginners and their ability to lead to a clear improvement in the research test and in favor of the post-test, and this is consistent with what was stated by "Fouad Suleiman Qabilah 1979" of (that the clarity of the goals and their identification in the form of behavior or certain performance levels, it is Be meaningful and effective).This is what the researcher expected in his first hypothesis, which states that there are significant differences affecting learning the skill of high spike.[8]

When analyzing the results of Table (6), it appeared that there is a significant difference in the effect in learning the skill of high spike between the three educational groups. The researcher attributes this to each type of spike different methods in each group and their influencing factors, and this shows a difference in influence and development.

This discrepancy was expected by the researcher in the second hypothesis, which includes that there is a variation in the effect of assessing the performance of the high spikespike between the research groups, and this is consistent with Muhammad Hassan Allawi (1987) in that (it is necessary to work on providing the individual with a large number of different motor skills as well as his doing By performing the acquired motor skills under multiple and varied circumstances).[9]

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Upon analyzing the results in Table (7), which shows the knowledge of the least significant difference between groups (L.S.D) for the purpose of reaching knowledge of the best educational groups influencing the evaluation of the performance of the high spike hit, the researcher noted the following:

**First:** There are significant differences between the second group (high and fast) and the fourth group (high), and there are no significant differences between the first and second, and between the first and fourth.

The results showed that the fourth group that took the higher method is the least influential educational group in evaluating performance between the three groups and the researcher attributes the reason for this that the diversity in exercises and repetitions and the change of places and others have helped those groups to outperform the fourth group and this is consistent with Ahmed Ezzat Rajeh 1970 who He pointed out (It is not sufficient for the student to learn a rule or principle in one of the lessons as an independent piece of knowledge. Rather, he must know a clear and clear knowledge that this rule or principle can be applied to other situations).[10]

**Second:** The best groups are the second group, which takes the high and fast exercise, and then the first group (the quick and the high) comes, and finally the fourth group that takes the high exercise only.

The researcher attributes the preference of the effect of the group that takes the high and then fast exercise over the rest of the groups to the fact that this group has obtained more experiences in the field of the quality of exercises and their change and the correct timing of the student's movement and this allowed them freedom to respond to the type of preparation and adaptation with it which developed the skill of high spike She has an spike multiplication skill that is one of the open skills that the student cannot train in isolation from the skill of numbers, as it is one of the skills in which the environment is mobile and the body is moving (moving / moving), and it is also one of the skills in which the beginning and end of the movement are clear and specific and they are The so-called separate skills (intermittent, and single), but the researcher was keen during the training of this skill to make it lead in a stable environment,[11] as it is performed without a blocking wall and the student’s thinking becomes about how to hit the ball correctly above the level of the network and thus makes the process of pre-performance programming possible as The ease of the test subject to spike beating caused students to start as if it was a closed skill, as the student was only asked to hit the ball correctly from its top and at the highest point, but despite the simplicity of the exercise and the test, we find that the students were mistaken in the first attempts before the test became like an exercise in subsequent attempts And that I made them take the test. All of these factors made the serial exercise the ideal method for spike training, as it is characterized by the following points:

- The skill area is not different from one attempt to another.
- That skill can be trained to become a habit.
- Serial skill training is consistent, robust and consistent.
- The circumstances in which a student gets an achievement do not change from one case to another.
- Repetitions can be increased to any number up to good mastery.

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Table 8: Shows Mean, Standard Deviations, and (t) Value for Pre- and Post-tests to Evaluate Fastspike Multiplication of the three Groups

| Groups | Pretest | | Posttest | | (t) calculated | (t) tabulated | Significant value | Statistical significance | Evolution rate |
|---|---|---|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | | | | | |
| Fast - High | 0.55 | 0.47 | 4.13 | 0.62 | 15.46 | 2.09 | 0.05 | Sig. | 37.88 |
| High - Fast | 0.58 | 0.53 | 4.84 | 0.51 | 17.54 | | | Sig. | 45.22 |
| Fast | 0.62 | 0.61 | 5.55 | 0.84 | 21.42 | | | Sig. | 52.56 |

From table (8) the results showed that the average of the first experimental group (fast-high) in the pretest was (0.55), standard deviation (0.47), computational medium for the post test (4.13) and standard deviation (0.62), while the (t) assessed to determine the moral differences between the two tests Pre and remote (15.46) which is greater than the value of (t) table (2.09) with a degree of freedom (19) and below the level of indication (0.05) and this indicates that there is a moral difference in favor of the post test.

The second experimental group (high-speed) showed that the mean in the pretest was (0.58), standard deviation (0.53), computational mean for the post test (4.84) and a standard deviation (0.51), while the calculated (t) value was (17.54), which is greater than the numerical (t) value (2.09) With a degree of freedom (19) and below the level of indication (0.05) this indicates a moral difference in favor of the post test.

The results of the third experimental group (fast) showed the largest moral difference, with the mathematical average in the pretest being (0.62), standard deviation (0.61), the mean for the post test (5.55) and a standard deviation (0.84), while the calculated (t) value (21.42) was greater than the value of (t) Scheduling (2.09) with a degree of freedom (19) and below the level of indication (0.05) this indicates a moral difference in favor of the post test, which is the highest difference between the totals.

Table 9: Shows the Results of the (F) Test to Analyze the Contrast between the three Groups of the Posttest and within it to Assess the Performance of the Fastspike

| Source of variance | Total squares | df | Average squares | (F) calculated | (F) tabulated | Significant value | Statistical significance |
|---|---|---|---|---|---|---|---|
| Between groups | 7.42 | 2 | 3.71 | 8.24 | 3.15 | 0.05 | 7.42 |
| Within groups | 25.86 | 57 | 0.45 | | | | |
| Total | 33.28 | 59 | | | | | |

Table (9) shows the results of the analysis of variance to evaluate the performance of the high spike multiplication of the three groups and within them. The results showed that there were significant differences between the groups and within them, because the calculated value of (F) reached (8,24) is greater than the value of the table (F) (3,15) At the degrees of freedom (2/57) and below the significance level (0.05), this indicates that there is a variation in the effect in the evaluation of performance of fastspike beating between the three groups (first, second, and third).

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Table 10: Shows the Results of the (L.S.D) Test to Find the Least Significant difference between the three Groups in Fastspike

| Groups | The difference between means | Results of differences | L.S.D | Statistical significance |
|---|---|---|---|---|
| Group1- group2 | 4.84 –4.13 | 0.71 | 1.35 | Non sig. |
| Group1- group3 | 5.55 –4.13 | *1.42 | | Sig. |
| Group2- group3 | 5.55 –4.84 | 0.71 | | Non sig. |

Table (10) shows the results (L.S.D) to see which totals achieved a better level of learning in assessing the performance of fast multiplication, as the table shows the lowest moral difference below the level of significance (0.05) which is (1.35) and after comparing the values of the difference between the mathematical circles of two groups separately with the value (L.S.D) and below the level of significance lost It appeared to the researcher that the difference appears between the first group and the third group as it appeared that the highest moral difference (1,42) and in favor of the third group that trained on the fastspike only and this shows that the third group is the best groups affecting in the evaluation of the performance of the fastspike and comes after a lower percentage The impact of the other groups, as there was no moral difference between the first and second groups (0.71) and between the second and third groups (0.71).

It is clear from the results of the research presented in table (6) to illustrate the rate of development in the learning of the multiplication between the pre and dimension tests that all research groups have achieved their goal in the moral impact in learning with the emergence of differences in the rate of development between them, and the researcher attributes this to the exercises applied in the form of Regular fastspike and gradualinion in giving exercises easy to hard by giving exercises for the front snatch and then for the front cut from a distance or from the stomach and front cut from a distance of 2 m from the stomach and repeat the exercise as well as repairing errors in the technical performance and the researcher's interest in distance and sensation With the time and space of the ball, it has helped to increase the speed, accuracy of observation and concentration in the student, which in the research sample has developed the ability to perceive spatially through learning.[12]This is what the researcher predicted in his first imposition, which states that there are differences of moral significance that influence the learning of the skills of the transmitter and the defense of transmission and preparation.

In analyzing the results of table (7) it appeared that there is a moral variation in the effect in learning the skill of fastspike between educational groups and the researcher attributes this to the fact that each type of spike and training used in each group has its own factors and this shows a difference in impact and development. This discrepancy was predicted by the researcher in the second hypothesis, which includes a variation in the effect in evaluating the performance of fastspike. When analyzing the results in Table (10) which show the lowest moral difference between totals (L.S.D) for the purpose of reaching the best educational totals to influence the evaluation of fastspike performance, the researcher noted the following:

**First,** There are moral differences between the first group that takes (fast and then high) and the third group that trains to quickly learn the fastspike, and did not show moral differences between the first and second, and between the second and third.

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The results showed that the first group that took fast and then higher is the least influential educational totals in the evaluation of performance and the researcher attributes the reason for this that the diversity in exercises, repetitions and change of places did not help those groups to outperform the third group that takes the spike multiplication exercises This skill needs a large number of repetitions and this is consistent with what Abdul Ali Nassif stressed (that scheduled exercise has a great impact on performance).[13]

**Secondly,** the best totals are the third group, which took only quick exercises and followed by the second group that took the exercises (high and then fast) and finally the first group that took exercises (fast and then high).

The researcher is due to the superiority of this group to the fact that the student has reached good performance in skill through continuous and focused training on this skill and make the student not suffer from intellectual and physical stress and this is what the researcher considers to have influenced the level of learning in terms of evaluation of performance and this allowed him to perform Freely passed without being affected by the motor performance of the skill as it was trained in all situations, although the researcher has equalized the totals in the time times given to the exercises.[14]

## V. CONCLUSIONS

1. There are significant differences between the pre and posttests for the four educational groups and in favor of the post exams.
2. Significant differences appeared in the effect on the evaluation of the performance of the spike high rate among the research groups.
3. There were significant differences in the effect on the evaluation of the performance of the spike high rate between the second group (high and fast) and the fourth (high).
4. There were no significant differences in the effect on the evaluation of the performance of the high spike between the first group (fast and then high) and the second (high and then fast) and between the first (fast and then high) and the fourth (high).
5. The results of the high spike hit test showed that the best influencing groups in spike learning are high and fast training.
6. There was a significant difference in the effect of the evaluation of the performance of the fastspike multiplication between the research groups.
7. There were significant differences in the effect on the evaluation of the performance of fastspike beating between the first group (fast and then high) and the third (fast).
8. No significant differences in the effect on the evaluation of the performance of fastspike beating between the first group (fast and then high) and the second (high and fast) and between the second (high and fast) and the third (fast).
9. The results of the fastspike multiplication test showed that the best group that influences the learning of multiplication is only fast training in isolation and with its full characteristics.

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