A STUDY OF THE EFFECT OF LEARNING TRANSMISSION ON HORIZONTAL JUMP ACTIVITIES WITH STRENGTH GAMES AND THE LEVEL OF ACHIEVEMENT OF UNIVERSITY STUDENTS

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ABSTRACT

The world progresses when it invests the intellectual, scientific and research energies of its scientists in a way that serves their peoples in all their vital requirements in economic, political and social terms. The sports aspect is not excluded from these requirements and some countries consider it the main requirement because of its effective role in the individual’s life in terms of health, economic or social. Everyone knows very well what is the role of sport and how it led to the progress of most peoples and to have a prominent role in leading the world in terms of sports and education in universities. The aim of this research is to identify the differences in performance and achievement among university students for the initial stages when different starting to learn the activities of the horizontal jump (the long jump - the triple jump) up to the difficult task in athletics, as well as identifying the preference for the effect of the learning transition between the two tasks at the level of performance and the catcher they have. The researchers used the experimental approach, and the implementation of the educational program took (6) weeks, at (3) educational units per week, for the two experimental groups. The study sample consisted of (40) students from the College of Physical Education and Sports Sciences / Phase Two / Basra University for the academic year 2020. The sample was divided into two experimental groups, the first (20 students) and the second (20 students) by a lottery method. Where the results showed that the educational program has a positive effect on learning the easy task up to the difficult task in learning when performing, and that there is a positive transition effect on performance and achievement of the effectiveness of the triple jump, and the researchers recommended the need to apply the foundations of positive transition to learning in arranging teaching activities throughout the curriculum to save time And an acceleration of learning in athletics in universities.

Key words: Impact of Learning Transition, Acceleration of Positive Learning.

I. INTRODUCTION AND IMPORTANCE RESEARCH

Learning is considered one of the higher mental capabilities that distinguish a person from other living things, as the requirements of human life that aim to interact with the vocabulary of life and overcome the difficulties facing the course of this life expand, so that the person learns models of certain movement, cognitive and emotional activities that affect different life situations, and he does not stand At this point, it goes beyond it to use these vocabulary to solve problems on these dimensions that may face it in the future without a specific time, but according to the succession of the different vocabulary of life, Where Perkins, Salaman, and Droaterky agree that the learning effect is the use of previous learning in the performance of new skills or duties (Drowatrky 15: 153 Perkins) (17: 98) in the sense that it is the process by which an individual uses the learning acquired in one of the cases. And applying it to new situations, and movement is an important and wide-ranging part of a person’s life, as it is the first thing that starts his life and what continues his life and is most used in overcoming mistakes or solving problems that he faces in his life, and a person does not learn to use what he learned in the classroom only, as if he gets A specific mark or feature given by the teacher Rather, he learns to use this information in solving his public and private life problems, which is one of the foundations that distinguish humans from other living creatures. Minds, we touch it as a reality in our practical life, so what students learn in schools, colleges
and universities must have its impact outside these places, to be applied in practical life "(7:60)"Al-Azirjawi points out that had it not been for the transmission of learning, it would have become imperative for every learner to learn what he needs from special responses to every situation in his life, and this is a difficult matter that cannot meet the years of the learner's life to master it" (164: 2). Consequently, a person seeks to shorten time in many vocabulary of his life, and among the most important shortcuts is what is known as setting preconceived goals, which help in determining learning priorities for life skills, including mathematical skills, as many students follow random movements in choosing to start teaching these skills, which makes each single Learning is a unit in itself that needs special arrangement, and Thompson points out that the mind works, as it is known, according to the sequence of cognitive and psychological goals in order to learn a new skill. The human mind arranges the information that reaches it until it learns it first, and then maintains its retention for as long as possible through its arranged features as if it were a section of the kinetic threshold that interacts with it in every retrieval or use. For the skill, the arrangement is originally the work of the human mind to make the vocabulary and components of the human personality, where the last goal of Bloom's emotional in physical education ends with the concept of organization, which expresses the organization of the motor singular with its psychomotor, cognitive and emotional dimensions within the personality of the individual to become a feature of this personality(5: 3), as Arnouf points out that "learning is a relatively constant change in the behavioral outcome of the living organism as a result of its educational experience." (14: 184), Khyon also asserts, "The process of obtaining and improving the initial movement information and initial experiences of performance and improving them, and then confirming them is part of the general development process of the personality. Moreover, learning in general is based on what an individual learns can be transferred to different fields." In public life "(8:41).

The importance of the impact of the learning transfer appears in the process of preparing the skills of learners and players alike, as skill performance plays an important role in any sporting game, and is a fundamental pillar of the comprehensive preparation of sports, as it aims to teach, develop, refine, mastery, stabilize and accomplish sports motor skills. The skill of the individual is extremely important in athletic performance, especially at the competitive level. Whatever the level of physical fitness of the athlete, regardless of his moral and voluntary qualities, he will not achieve the desired results unless all of this is related to the complete mastery of sports motor skills with the specialized activity he is practicing.

1.1 Research Problem

Through the researchers following up on teaching athletics, especially the horizontal jump activities in particular, since they are two teachers specializing in athletics, they noticed the irreversibility by following a specific order for the succession of giving special skill education in teaching the technical stages of the effectiveness of the triple jump from the easy task to the difficult of the technical stages of Faglia, but rather follows the teachers The traditional approach is to choose to begin with the teaching of these skill phases of activityFailure to take into account many factors that may hinder or delay the process of learning skills, acquiring them and then retaining them due to the difficulty of performance. Likewise, the time period for the process of learning skills that could be shortened if we followed a modified or suggested method, such as the exploitation of the learning process of skills that are similar or convergent in performance, and in that some motor skills may be characterized by difficulty through the physical and motor capabilities required by the motor performance. General and private compared to others for the same stages of motor performance, despite the similarity of some of the vocabulary of her performance with those skills, As this corresponds to a clear weakness in the performance of new learners for the technical stages or for novice players in general, and Khayoun refers to "the importance of defining the vocabulary of the educational curriculum on scientific grounds, and taking into account the characteristics that characterize the learned skills in addition to the method of building the curriculum, which must be flexible according to What dictates learning conditions, needs, training and previous experiences, and accordingly, the possibility of modifying the arrangement of curriculum content or presentation and delay in its contents is a matter that falls within the privacy of the supervisor of the educational process in order to achieve the goals he seeks(8:49) Therefore, the researchers consider that it is very important for the teacher and the trainer to give sufficient importance to the method, method and arrangement that is followed in the process of scheduling the educational and training program for the movement activities during the educational curriculum or the one educational or training unit in order to activate and accelerate the teaching of the technical stages and develop their level.

1.2 Research Objectives
1. Recognizing the preference for the impact of learning transition from the easy task of the long jump to the difficult task of performing the triple jump for students of the College of Physical Education and Sports Sciences / University of Basra

2. Identifying the differences in performance and achievement in horizontal jump activities among students of the College of Physical Education and Sports Sciences / University of Basra

1.3 Research hypothesis

1. The presence of statistically significant differences in the performance and achievement of students of the College of Physical Education and Sports Sciences / University of Basra, learning the effectiveness of the triple jump.

2. There is a positive transmission effect to start learning the easy task at the level of learning the technical stages of horizontal jump activities among students of the College of Physical Education and Sports Sciences / University of Basra

1.4 Fields of Research

1. The human field: Second stage students / College of Physical Education and Sports Sciences / University of Basra.

2. Spatial domain: the course of the College of Physical Education and Sports Sciences / Basra University for Athletics


II. THEORETICAL STUDIES

The process of preparing the student or player is closely related to the process of planning educational and training programs for learners and players, as it affects the process of preparing the player, as Hassan points out that the educational and training program is essential in the educational and training process in the sports field, and the primary goal and desired of any educational program or training is to reach the players or learners to the best educational and training level that their capabilities allow. In order to benefit from the transmission of the impact of learning, the teacher and the trainer must take this into account when planning educational and training programs, and point out the similarities between the new and old learned skills, in addition to explaining the mechanical principles in the performance of the skills provided to the learners "(6: 81)

2.1 Theories of transmission of learning effects

Formal training theory: This theory is based on the fact that the human mind consists of a group of independent faculties and forms such as remembering, willpower and inference, which need training in order to be strengthened and refined, meaning that each form has its own training material. It is not important in and of itself, but it helps in training the ability associated with it regardless of its value (8:33)

The theory of similar elements (Thorndike): This theory is based on the existence of common and similar elements between the previously learned subject and the subsequent and new topic, which helps in the process of the learning effect transfer, and the transition increases as the elements of similarity between the previous and subsequent situations increase, while the transition decreases if the symmetry between the two positions decreases (9: 18).

Generalization theory: This theory is based on the fact that the individual can transfer the experience he acquired in one situation to another, and generalization occurs to the individual's ability to understand the common relationship, and to make it between a number of situations, and then generalize it. (8:78)

The theory of identical components: This theory is based on the fact that the transfer of learning from one situation to another occurs according to the similarities between the components of the successive situations, regardless of their forms (2:39).
III. RESEARCH METHODOLOGY AND FIELD PROCEDURES

3.1 Research methodology

The researchers used the experimental method as one of the research methods to solve the research problem, as the experimental method is “a deliberate and controlled change of the specific conditions of a specific event and observing the resulting changes in the same event to explain it” (12:46) and by designing the two experimental groups and by pre and post testing.

3.2 Research Society and Sample

The research sample consisted of (40) students from the College of Physical Education and Sports Sciences / Phase Two / University of Basra for the academic year 2020/2021, the sample was divided into two experimental groups, the first (20 students), and the second (20 students) by a lottery method. About conducting an exploratory experiment (12) students from outside the research sample.

Table (1) shows the research groups

<table>
<thead>
<tr>
<th>Totals</th>
<th>The timing of data teaching skill</th>
<th>number</th>
<th>The arithmetic mean for age</th>
<th>the middle Arithmetic for length</th>
<th>The arithmetic mean of the weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>The first group</td>
<td>Long jump / triple jump</td>
<td></td>
<td>20</td>
<td>20.40</td>
<td>174</td>
</tr>
<tr>
<td>Teaching the long jump</td>
<td>Teaching the triple jump</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The second group</td>
<td>Triple and then the long jump</td>
<td></td>
<td>20</td>
<td>20.81</td>
<td>172</td>
</tr>
<tr>
<td>Teaching the triple jump</td>
<td>Teaching the long jump</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2.1 Group Equalization

The two researchers distributed the students into two groups by drawing a lot, after identifying the variables that affect the performance and achievement of the activities subject of the study from the special tests for the motor and physical characteristics, where the results were recorded on these tests for the two groups.

Table (2) shows the parity of the two groups through the arithmetic means, standard deviations, and the t-test on the pre-tests for physical and motor characteristics affecting the two research groups.

<table>
<thead>
<tr>
<th>Tests</th>
<th>Group</th>
<th>SMA</th>
<th>Standard deviation</th>
<th>T test</th>
<th>Indication level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Run 50 meter</td>
<td>First</td>
<td>7.1550</td>
<td>0.31167</td>
<td>0.3 15</td>
<td>0.782</td>
</tr>
<tr>
<td></td>
<td>second</td>
<td>7.0827</td>
<td>0.50802</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arm bending and extension (compression)</td>
<td>First</td>
<td>26.2500</td>
<td>6.01702</td>
<td>0.8 00</td>
<td>0.592</td>
</tr>
<tr>
<td></td>
<td>second</td>
<td>29.6364</td>
<td>5.66167</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sitting from lying down</td>
<td>First</td>
<td>27.7500</td>
<td>3.64629</td>
<td>1.2 06</td>
<td>0.181</td>
</tr>
<tr>
<td></td>
<td>second</td>
<td>29.2727</td>
<td>2.86674</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agility</td>
<td>First</td>
<td>9.4925</td>
<td>0.52324</td>
<td>1.8 24</td>
<td>0.129</td>
</tr>
<tr>
<td></td>
<td>second</td>
<td>9.8064</td>
<td>0.31322</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A long jump of stability.</td>
<td>First</td>
<td>2.2333</td>
<td>16.96699</td>
<td>0.9 06</td>
<td>0.329</td>
</tr>
<tr>
<td></td>
<td>second</td>
<td>2.1757</td>
<td>16.33457</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As for these tests the necessary scientific transactions were carried out, the results of which indicated the suitability and ability of the specialists to properly evaluate the validity and reliability of their ability to evaluate these parameters.

Validity: The subjective validity of the test was found through the reliability factor, which is equal to the "square root of stability" and its value was (.95)
Stability: by applying the test and retest and finding the correlation coefficient between them, where the value of the correlation coefficient reached 0.92).

Authenticity of the content: The content of the educational program was verified after being presented to a group of judges.

3.2.2 Educational unit

The researchers applied a unified educational program on the two groups, which is an approved program in the college in the plan of teaching athletics for these activities, as each activity was taught by (6) lectures, each one hour, meaning that the educational program for these two activities took a month and a half at the rate of (12) educational units for each A group, where the educational units applied the same to the two groups alternately and the duration of the educational unit was (60 minutes) divided into three main sections:

Preparatory part (15) minutes and includes general and special warm-up.

The main part: Its duration is (40) minutes and includes the explanation of the technical stages, the presentation of the kinetic model of the parts of the stage, the application of the motor skill by the teacher, the practical application of the students, which is represented by the sense of performance exercises, and special motor exercises, where the skill is taught for each stage according to the technical steps of the motor skill and in order so that he repeats the technical step and its exercises until mastery to move to the next step and so on in both activities of the long jump and the triple jump by applying the technical stages of the approach stage, the hopscotch, the ascension and the jump

The closing part: It lasts 5 minutes and includes calming and relaxing.

The Experimental Design Used: The researchers used an experimental design aimed at identifying whether learning one pre-task facilitates, hinders, or does not affect the transfer of learning to the second task.

3.3 Field Research Procedures

Exploratory experience: The two researchers conducted an exploratory study on 11/16/2020 on a random sample consisting of (12) students from outside the research sample before starting the research procedures in order to ascertain some aspects related to the implementation of the educational program and skill tests, and to identify the problems that You may encounter the researchers while applying the search.

3.3.1 Pre-tests

• The pre-tests were conducted at the end of the first educational period, that is, two weeks after the start of the program, and on 1/12/2020.

3.4 Post-Tests

The post-tests were conducted at the end of the second educational period, that is, five weeks after the start of the program on 12/22/2020.

3.5 The statistical treatments used: The researchers used the statistical bag SPSS issue 16

Table (4) the results of the test "T" for differences in the collection (performative and achieving) between the arithmetic averages of the experimental groups

<table>
<thead>
<tr>
<th>Collection type</th>
<th>skills</th>
<th>measuring unit</th>
<th>Groups</th>
<th>Averages For performance</th>
<th>Standard deviation</th>
<th>T test</th>
<th>Indication level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance achievement</td>
<td>long jump</td>
<td>Degree</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; task</td>
<td>3.5417</td>
<td>0.51779</td>
<td>2.683</td>
<td>Function</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Degree</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; task</td>
<td>4.9545</td>
<td>1.39382</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The jump</td>
<td>Triple</td>
<td>Degree</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; task</td>
<td>9.2523</td>
<td>1.17593</td>
<td>3.3405</td>
<td>Function</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Degree</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; task</td>
<td>9.8500</td>
<td>0.42906</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement collection</td>
<td>The jump the long</td>
<td>meter</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; task</td>
<td>4.166</td>
<td>3.01008</td>
<td>3.1753</td>
<td>Function</td>
</tr>
<tr>
<td></td>
<td></td>
<td>meter</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; task</td>
<td>4.727</td>
<td>2.41209</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The jump</td>
<td>meter</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; task</td>
<td>10.272</td>
<td>3.40855</td>
<td>2.254</td>
<td>Function</td>
</tr>
</tbody>
</table>
**IV. PRESENTING, ANALYZING AND DISCUSSING RESULTS**

To verify the first hypothesis of the study, which refers to "the existence of statistically significant differences at a level of 0.05 in the performance and achievement results of the two genders in the activities under study when the start of their teaching is different."

Through Table No. 4, which shows the arithmetic means, standard deviations, and the results of the “t” test for the two dimensional measures for each experimental group, as it is clear that the differences in performance and achievement improvement were significant, and the performance and achievement improved in the triple jump for the group that started to learn the long jump.

4.1 Table 5 shows the arithmetic averages and standard deviation of performance in (long jump and triple jump) for experimental groups and values of the transition rates of the impact of learning the first section of the learning.

<table>
<thead>
<tr>
<th>The whole collection of instruction</th>
<th>Average</th>
<th>Standarddeviation</th>
<th>Absolute transition</th>
<th>Transmission ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mission (1)</td>
<td>Long jump</td>
<td>3, 5417</td>
<td>0,5177</td>
</tr>
<tr>
<td></td>
<td>Mission (2)</td>
<td>Long jump</td>
<td>10, 5800</td>
<td>0,4290</td>
</tr>
<tr>
<td></td>
<td>Mission (1)</td>
<td>Long jump</td>
<td>10, 5253</td>
<td>1,1759</td>
</tr>
<tr>
<td></td>
<td>Mission (2)</td>
<td>Long jump</td>
<td>4, 9545</td>
<td>1,3938</td>
</tr>
</tbody>
</table>

The two researchers believe that the second hypothesis of the study, which indicates that "there is a positive transition effect upon starting to learn the easy task for the effectiveness of the long jump in the level of learning the difficult task for the effectiveness of the triple jump and the achievement with them."

That is, the transition is negative for the performance and achievement by learning the effectiveness of the long jump for those who first learn the effectiveness of the triple jump, while the transition is positive for learning the effectiveness of the triple jump when starting to learn the effectiveness of the long jump first in the two groups. You need a jump event The triple to physical features in general and especially more than the effectiveness of the long jump, and thus the transition was positive by moving from simple to more complex, while on the contrary, when moving from difficult to easy.

4.2 (Table 6) shows the arithmetic averages and the standard deviations in the two activities ) the long jump and the triple jump ( for the two experimental groups and the values of the transfer ratios for the effect of learning ) absolute and control ( on the two activities for the second part of learning.

<table>
<thead>
<tr>
<th>Totals</th>
<th>Missions by start of instruction</th>
<th>Statistical parameters of groups</th>
<th>Absolute transition</th>
<th>Exact transition ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
<td>Standard deviation</td>
<td>Long jump</td>
<td>Triplet jump</td>
</tr>
<tr>
<td></td>
<td>Mission (1)</td>
<td>Long jump</td>
<td>4, 7111</td>
<td>1, 55003</td>
</tr>
<tr>
<td></td>
<td>Mission (2)</td>
<td>Long jump</td>
<td>1, 4750</td>
<td>1, 39341</td>
</tr>
<tr>
<td></td>
<td>Mission (1)</td>
<td>Long jump</td>
<td>4, 4600</td>
<td>1, 70361</td>
</tr>
<tr>
<td></td>
<td>Mission (2)</td>
<td>Long jump</td>
<td>4, 4600</td>
<td>1, 70361</td>
</tr>
</tbody>
</table>
The researchers attribute this to the similar technical performance between the initial technical stages of performance in terms of the stage of approach, then rise, flight and landing, which in turn require converging physical and kinetic specifications, and this led to the emergence of a positive transition effect to a large extent in learning the technical stages of the effectiveness of the triple jump after learning the technical stages for the effectiveness of the long jump. Where the results of this study agree with (Thorndike's theory) about the importance of the similarity elements in the transition between the learned skills, as it positively affects and facilitates the process of transferring the effect of previous learning to new learning, as Thorndike also confirms that the transition occurs when the internal common components are available, and this means the amount of transition is the amount in the two skills. Similar (9: 18), as each of (3: 301) (125: 13) emphasizes the importance of the common elements between the previous and subsequent motor tasks in the subsequent learning speed.

This agrees with Berliner and Gage, (16:352) They argue that learning similar movements in terms of their frequency makes there an easy and positive transition with a high degree of learning for the next skill.

And Aqil (11:12) believes that for a positive transition to occur, the content of the two skills must be similar, which is the minimum degree of similarity. The researchers also believe that the unified method of education has a positive effect on the positive transmission of learning between activities, as (1: 288) stresses the importance of the similarity of learning principles in the two skills for the occurrence of positive transmission, and this is exactly what applies to the unified learning method used in this study.

The results of this study also agreed with the results of all studies conducted in the field of transmission of learning effect. They agreed with the results of the Al Bayati study (4:54), which all indicated “positive transmission of learning effect in the topics that were examined, and which were similar in their technical performance.”.

V. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

1-The methods of learning from easy to difficult had a positive effect on learning the technical stages of both activities.

2-That there is a positive shift in the performance and achievement collection on the effectiveness of the triple jump when learning the long jump in the two groups.

3-That the similarity of the motor components and the conditions and surroundings of the game facilitate and accelerate the learning of similar skills.

4- The arrangement of activities in education in the curriculum has a great impact in providing conditions for positive transition, which saves time and effort, improves and accelerates the learning of the motor performance of skills.

5.2 Recommendations

1-The necessity of applying the foundations of positive transfer of learning in arranging teaching activities throughout the curriculum in order to save time and accelerate learning.

2-Applying the characteristics of positive effect transmission between the vocabulary of teaching lectures from the vocabulary of the introduction to the end of the lesson.

3- Paying attention to the foundations of positive transition when developing academic curricula for athletics in universities.

REFERENCES

1. Ijih, Ahmad Ezzat, Usul Psychology, Dar Al-Qalam, Beirut, p. 2001
5. Thompson, Peter J.L., Introduction to Training Theories, Translated by the Regional Development Center, Cairo, Egypt, 1996
7. Khalaf, Moein, the impact of the quality of badminton used in learning the basic skills of badminton for beginners, published research, Drsat Magazine, University of Jordan, a special issue, the scientific conference “Sports is a model for contemporary life.” 2004
11. Sane, luxurious, educational psychology, the Anglo-Egyptian Library, Cairo, Egypt. 1999
12. Fahmy, Muhammad, kinetic learning and sports training, Dar Al-Qalam, Kuwait. 1986
13. Fahmy, Mustafa, Psychology of Learning, Misr House for Printing, Cairo, Egypt. 1984