The Swedish Journal of Scientific Research

Original Article

"The Effect of Self-Learning on Learning Hook Pass Overhead and Shooting while Jumping in Handball"

Huda Naji Zaidan, Abdulkareem Ibrahim Jasim

Department of Individual Sports, Faculty of Physical Education & Sport Sciences/Diala University

ABSTRACT

Learning basic skills for each event is one of the most important conditions for successful progress in performance on condition that it is based on correct scientific basics. This helps in quick learning, economic effort and movement. In addition, learning and good practicing certain skills contributes directly and indirectly in learning other skills, especially in team sports as they include various skills that may be similar in their paths. They include handball, which is considered one of the games in which the principle of transferring learning effect during education stages of basic skills, which in turn contributes to accelerate learning and save time, effort and money if used in a scientifically correct manner depending on learning transfer percentages.

Keywords: Effective self-learning in handball, handball, shooting while jumping, hook pass overhead

INTRODUCTION & SIGNIFICANCE OF THE STUDY

Learning basic skills for each event is one of the most important conditions for successful progress in performance on condition that it is based on correct scientific basics. This helps in quick learning, economic effort and movement. The only thing that distinguishes the educational unit is training in the light of building amount of learning and performance development. In addition, using scientific basics and diversification in training methods adopted by the physical education sciences within the scope of scientific and technical development around the world was the result of research and studies that led to the development of levels and sport achievements. Self-learning was, and still, receiving considerable attention by psychologists and education scholars as the best way to learn for any achievement by each learner that copes with his abilities and self-depending speed depending on motivation (Zaiton, Kamal Abdel-Hamid, 2004:45).

Access this article online

Website: http://sjsr.se/

ISSN: 2001-9211

Learning and good practicing of certain skills contributes directly and indirectly in learning other skills, especially in team sports as they include various skills that may be similar in their paths. They include handball, which is considered one of the games in which the principle of transferring learning effect during education stages of basic skills, which in turn contributes to accelerate learning and save time, effort and money if used in a scientifically correct manner depending on learning transfer percentages. In addition, shooting and passing are among the most important handball skills as both skills are similar in formation and response.

Significance of the study is shown by preparing and educational method through employing self-learning in learning hook pass overhead and shooting while

Address for correspondence:
Huda Naji Zaidan, Department of Individual Sports, Faculty of Physical Education & Sport Sciences/Diala University.
E-mail: alaakh.sport@gmail.com

jumping in hand ball besides increasing awareness of significance of physical activity in daily life.

PROBLEM OF THE STUDY

Choosing optimal method achieves our desired results and ensures the transfer of positive impact of learning among skills to be learned in accordance with age that this stage is the best stage for the learner and mastery of basic skills in this phase helps the player to the perform requirements of the game properly and correctly. Therefore, both researchers used the influence of self-learning effectiveness in learning hook pass overhead skill and shooting while jumping high in handball. In addition, traditional method of physical education lesson practiced and available teaching aids used in learning handball skills have little effect which results in loss of a lot of time and effort at a time when we need special curricula and teaching methods that provide a special opportunity for all students regardless of their abilities and interests to participate in sports activities so that physical education classes can benefit in an appropriate manner from the educational program.

OBJECTIVE OF THE STUDY

The study aims to determine the effect of self-learning on learning hook pass overhead and shooting while jumping in handball.

HYPOTHESES OF THE STUDY

1. There are statistically significant differences between pre- and post- tests for both the control and empirical groups in acquiring the skills under study.
2. There are statistically significant differences between post- tests for both the control and empirical groups.

METHODOLOGY OF THE STUDY

The researchers used the empirical method with the design of two empirical and control groups with pre- and post- tests.

SAMPLE OF THE STUDY

The sample was selected randomly among students of Faculty of Physical Education & Sport Sciences/Diala University (Second Stage). The sample consists of 16 students selected randomly for the academic year 2016/2017 to from (34%) of original population of the study (130 students).

SELECTION OF SKILLS AND THEIR TESTS

Legalized tests are these prepared by experts and they give the opportunity to use means and tools to get results using regular and consistent procedures with the same content of test. It shall be applied according to the same instructions and timing for performance in addition to main indications of good testing such as validity, reliability and objectivity. In addition, these tests are often applied on one or more groups of players in order to explain individual's performance in light of such standards.

First Test

Passing overhead on an oval drawn on a wall for (30) seconds and a distance of (3) meters (Mohamed Hassan Allawi, Mohamed Nasreldin Radwan 1979: 357).

Second Test

Shooting while jumping and overhead on shooting accuracy boxes (Mohamed Hassan Allawi, Mohamed Nasreldin Radwan 1979: 357)

Exploratory Trial

This trail was made on 01/10/2016 in the outdoors court of handball in Faculty of Physical Education & Sport Sciences/Diala University on a sample consisting of 10 students selected randomly from outside main sample of the study. The exploratory trial showed some matters that benefited the researcher including:

1. Validity of tools and equipment.
2. Consistency of tests with sample of the study.
3. Recognize the difficulties and obstacles faced by the research.
4. Setting the assistant team sufficient for the trial.
5. Identifying suitability of the educational unit time and number of repetitions allowed by the respondents.

Pre-tests

Before they started pre-test, the researchers organized the sample and divided it into two groups of the same number with the registration of names of the

players and then giving two educational units on how to perform the tests and the method of performance with explanation and clarification of the tests on 3-4/10/2016 After that, the researcher conducted tests on 06/10/2016 on the members of the sample.

Curriculum

The researcher prepared a curriculum for the first experimental group including the following:

A. The empirical group
   This group used the effect of self-learning on learning hook pass overhead and shooting while jumping in handball.

B The control group
   This group used traditional method for learning hook pass overhead and shooting while jumping in handball.

The period of this curriculum is 8 weeks (16 units distributed as two units per week for each group). Duration of the educational unit is (90) minutes (refer to annex 1 for details of units).

Post-tests

Post-tests were made on Sunday 27/11/2016 in the outdoors court of handball in Faculty of Physical Education & Sport Sciences/Diala University for both groups of the study in the same conditions in which pre-tests were conducted.

PRESENTING, ANALYZING & DISCUSSING RESULTS

Presenting and analyzing results of pre- and post-tests for the control group in skill tests and their discussion.

DISCUSSING RESULTS

Table 1 shows insignificant effect of the educational exercises used in the study for the control group. The researchers attribute it to two reasons as the used educational units have a positive effect on learning the skills of hook passing overhead and shooting while jumping in handball with requirements of learning the skill. The method of effective self-learning is training on a certain skill from a fixed position such as training on passing from a fixed point with the purpose of adapting and mastering spatial aspect of passing. Learning from a fixed position with the same conditions and requirements of the skill facilitate storing in memory and retrieve it in each time of using it (Kassem Lazam, 2005: 232). This method is related to open skills and makes them closed by fixing the variables which facilitate the education task (Wagih Mahgoub, 2001: 20).

Table 2 shows the empirical group in the skills of hook passing overhead, shooting from position, shooting overhead and shooting while jumping. This matches the opinions of many experts and specialists in the field of motor learning who asserted the effectiveness of self-learning or learner's ability to respond performance of a certain skill as a result of learning and training on similar previous skills in terms of performance of other skills. Wageh Mahgoub (2000) asserted on the fixed changes that happen on learner's behavior while acquiring skills as they will transfer and become experiences acquire other skills. This makes us say that we learn in order to transfer the effects of what we learned into new experience. The educational program prepared by both researchers played a great role in transferring learning, mastery and establishing the skill of hook passing overhead as a result of various exercises in the unit and performance variables (i.e., distance, speed, angles, etc). Moreover, both researchers in the curriculum focused on similarities between this skill and other skills for learning to be transferred to. In addition to common elements between both skills, learning one of them led to learn two skills that have not been learned by sample members in both groups. Moustafa Fahmy 1984 says that if there are common factors between a subject and another, training and learning will affect quick learning of the other (Moustafa Fahmy 1984: 110).

Results of Table 3 concerning pre- and post-tests for the control and empirical groups showed that there are statistically significant differences in favor of the empirical group. The researchers attribute this development to the use of visual educational aids as "audio and video aids are explanatory means that help recognize facts in clear and interesting manner for students and then become attached in their minds for a long time (Saher Al Khafagi, 1993: 38). Both researchers agree with (Afaf Abdelkerim 1990) concerning "the effect and impact of previous practices on learning or later performance" (Afaf Abdelkerim 1990: 45 - 47). Trough transfer of learning, we can notice different effects according to type of transferring used by the

Table 1: Arithmetic means, standard deviations, calculated & tabulated "T" values and their statistical significance for pre- and post- skill tests for the control group

S	Statistical treatments Tests	Control group				Calculated (T) value	Tabulated (T) value	Significance
		Pre-test		Post-test				
		Mean	S.D	Mean	S.D			
1	Passing from overhead (30) sec	18	0.845	19	0.895	1.523	2.36	Insignificant
2	Shooting while jumping	7	0.675	8	0.724	2.489		Insignificant

(*) under significance level (0.05) and freedom degree (7)

Table 2: Arithmetic means, standard deviations, calculated & tabulated "T" values and their statistical significance for pre- and post- skill tests for the empirical group

S	Statistical treatments Tests	Empirical group				Calculated (T) value	Tabulated (T) value	Significance
		Pre-test		Post-test				
		Mean	S.D	Mean	S.D			
1	Passing from overhead (30) sec	19	0.895	22	1.540	2.552	2.36	Significant
2	Shooting while jumping	9	1.256	13	0.930	2.95		Significant

Table 3: Arithmetic means, standard deviations, calculated & tabulated "T" values and their statistical significance for post- skill tests for the empirical and control groups

S	Statistical treatments Tests	Both groups						Calculated (T) value	Tabulated (T) value	Significance
		Empirical G			Control G					
		No.	Mean	S.D	No.	Mean	S.D			
1	Passing from overhead (30) sec	8	19	0.895	8	22	1.540	8.935	2.14	Significant
2	Shooting while jumping	8	8	0.724	8	13	0.930	7.835		Significant

(*) under significance level (0.05) and freedom degree (14)

teacher, skill nature, type and duration between a skill and another. Accordingly, the researcher found that the transfer of learning effect is the use of previous learning or information in performing new skill or motor task with a negative or positive effect.

CONCLUSIONS

1 Self-learning on learning hook pass overhead and shooting while jumping in handball is effective.
2 The prepared curriculum has a positive effect in acquiring skills under study.
3 There are statistically significant differences between results of post- tests in favor of the empirical group affecting students' acceptance of self-learning with poor response of control group students to the traditional method.

REFERENCES

Saher al-Khafaji "The impact of A Model Displayed by Audio-Visual Devices on Motor Performance in Rhythmic Gymnastics", Master Thesis, Baghdad University/Faculty of Physical Education, 1993.

Afaf Abdelkerim "Teaching to Learn in Physical and Sports Education", Alexandria, Monsha'at Al Maaref, 1990.

Kasem Lazam "Subjects in Motor Education", Baghdad 2005.

Mohammad Hassan Allawi and Mohamed Nasreddin Radwan "Measurement in Physical Education and Sports Psychology", 1st Edition, Dar Al Fikr Al Arabi, Cairo, 1979.

Moustafa Fahmy "Psychology of Learning", Cairo: Dar Masr Press, 1984.

Wageh Mahgoub "Learning & Scheduling of Sports Training", Amman, Dar Wael Publishing, 2001.