

# THE IMPACT OF THE INTERFERENCE OF SOME EXERCISE METHODS IN LEARNING THE STUDENTS TWO SKILLS OF HANDLING AND PEACEFUL SCORING IN BASKETBALL.

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## **Abstract**

- 1- Recognize the impact of some overlapping educational exercise methods in learning the skills of handling and peaceful scoring in basketball.
- 2- Recognize the best method for training in learning the skills of handling and peaceful scoring in basketball. The search society is determined in the students of the first stage in the faculty of physical education- Diayla university in the school year 2013-2014 who are 189 students distributed on four experimental groups thus on the exercise methods thus each group represents a method. Each group includes 15 male students per each group thus the total of the search sample will be 60 students. This number represents a percentage of 31.75% of the search society and it is suitable for representing the society honestly. The female researcher used the Statistical package SPSS for processing data and getting the results from the used methods (the mathematical mean, the standard deviation, T test for the independent samples and the variance analysis). The female researcher has reached the following results:
- 1- The interference process between a numbers of exercising methods affects greatly and effectively on learning the skills of handling and peaceful scoring in basketball.
- 2- There aren't any significant differences between the used exercise methods in learning the skills of handling and peaceful scoring in basketball between the dimensional tests for the four search groups.

KEYWORDS: The exercise methods. The handling. The scoring and the overlapping methods.

# 1. INTRODUCTION

The basketball is considered one of the team sports which witnesses major development by the good performance for the main skills of the game. Certainly the favor in it is due to use the modern scientific methods for learning these skills whether these skills were Offensive or defensive. This development makes basketball one of the important team sports in the world. It is practiced in various countries of the world. It concerns a lot whether of the athletes or the non athletes. The cause of it is what this game includes of excitement, suspense and performance characterized by beautiful harmony between the performance force and the movement speed which show a wonderful total performance. The most important and beautiful skills are the two skills of handling and peaceful scoring because of what is added of enthusiasm and suspense in the game.

The exercise and its organization is one of the important and due matters in the educational process as it achieves large share of interest for those who are concerned with the educational process because it contributes positively to achieve variation in the used exercise and its implementation methods rather than facilitating the education process and keeping the skills taking into consideration the difficulty or the ease of the skill to be learned by the graduation and following the organization in exercise methods when performing the skills. The exercise organization and using the scientific methods for its distribution from investing the educational methods and its intervention is the scientific approach which aims to raise the educational level, to achieve the educational process objectives effectively and to make these methods suitable for the learner's desires and tendencies for achieving additional educational experiences. Different and several educational methods are found because of the major differences in the motor skills thus choosing the educational method should be suitable for the skill to be learned and the students potentials.

The female researcher depends in this search on the interference principal between the educational methods by using the interference between the serial method in both the total and partial method and also the fixed and variable method in learning the handling and peaceful scoring in basketball, organizing the interference process consistently and following the proper planning in the interference process between the learning methods.

The research importance lies on finding new methods of interference between the exercise methods and identifying the best methods of the learners and providing suitable and meaningful learning opportunities which serve the educational process.

**Research problem:** The learning methods are considered one of the most important sides in the educational process success which is achieved by the interference between the educational process sides which are the teacher, the learner and the educational curriculum.

Through the female researcher experience in teaching and her observation for several methods in teaching, she found that there are some methods which don't achieve the desired benefit in accelerating the education when using it unilaterally. So the possibility of innovating new methods are the ideal solution for moving away the traditional methods and also the cause



of choosing the female researcher for the two skills of handling and peaceful scoring as two skills which hope for achieving the benefit in its learning thus perfecting its performance.

#### Research two aims:

- 1- Recognize the impact of some educational overlapping methods on learning the two skills of handling and peaceful scoring in basketball.
- 2- Recognize the best method for exercise in learning the two skills of handling and peaceful scoring in basketball.

# The research two hypothesizes:

- 1- The interference of some exercise methods has a positive impact in learning the two skills of handling and peaceful scoring in basketball.
- 2- There is no preference between the interference of the used exercise methods in learning the handling and peaceful scoring in basketball.

# 2. MATERIAL AND METHODS

The research approach: The female researcher used the experimental approach (the equal groups) as it is compatible with the nature of the research problem which is considered one of the most adequate methods for reaching a reliable knowledge. (Van Daleen, 1985, P.407)

**The research society:** The research society is determined by the first stage students in the faculty of physical education-Diyala university in the scholar year 2013- 2014 who are 189 students distributed on five scholar sections.

The sample is chosen deliberately from the research society. It is consisted from the two sections A and B which are divided into four experimental groups. Thus the exercise methods which represents a group for one of the methods which is consisting of 15 students per each group thus the total number for the research sample will be 60 students. This number constitutes a percentage of 31.75% of the search society and it is a suitable percentage for representing the society a reliable representation. Table 1 shows that:

Table no. 1 shows the number of the sample members according to the eighth groups:

The groups	The exercise methods	The number per the group	The sample's percentage
The first	The fixing partial serial	15	31.75%
The second	The variable partial serial	15	
The third	The fixing total serial	15	
The fourth	The variable total serial	15	

## The research groups equality:

Before starting in applying the educational approach, the female researcher should form equal groups at least with regard to the variables related to the research (van Daleen, 1985. P 398). The equality process has been done between the groups using the statistical method for analyzing the variance of the search variables.

The equality in the variables related to the gross measurements

- The Chronological age is measured by the year
- The length is measured by the centimeter.
- The body mass is measure by Kilogram.

As indicated in table 2.

The statistical parameters for the variables	mathematical mean	variance sources	deviations	df	variance	calculated F value	significance type
The work/ year	21.73	between the groups	13.70	3	1.957	0.457	random
		Inside the groups	309.3	56	4.295		
The length/ cm	175.66	between the groups	0.00359	3	0.0005	0.159	random
		Inside the groups	0.23409	56	0.0032		



The body mass/	65.89	between the groups	143.09	3	20.441	0.314	random
kgm		Inside the groups	4679.9	56	64.998		

Table 2 shows that the calculated F value for the variables of age, length and the body mass is less than F tabular value of 2.85 at significance level of 0.05 and two fee degrees of 56.3 thus the differences will be random between the four search groups which yields the equality between them in these variables.

## The equality in the skill tests:

Table 3: shows the equality of the four search groups in the skill tests

The statistical parameters for the variables	variance sources	deviations	df	variance	calculated F value	significance type
The handling test	between the groups	28.467	3	9.489	1.462	random
	Inside the groups	363.467	56	6.490		
The peaceful scoring	between the groups	2.267	3	0.756	0.508	Random
	Inside the groups	83.333	56	1.488		

Table 3 indicates that the calculated value of F for the tests of performance handling and the peaceful scoring in the basketball is less than the tubular F value of 2.85 at the significance level 0.05 and two free degrees of 3, 56. Thus the differences will be random between the four search groups which yields the equality between them in these variables.

## 3. RESULTS AND DISCUSSION

The most important matters that should be provided in the scientific researchers are the tests that are considered the most important methods in the life fields generally and the education field particularly because of because of its progress in the last years (Kais Nagy and Bastawesy Ahmed, 1984:12)

The female researcher has determined the tests related to the two skills of the front handling and the peaceful scoring which are the standardized tests on the Iraq environment as the following:

- 1- Testing the ball handling and its delivery towards the integrated circles on the wall from the distance of 4.50 m (Ali salom, 2004: 175).
- 2- Testing the scoring from the peaceful movement after performing the tapotement (Moaied Ab dAllah and Faeez Beshier, 1999: 234-235).

# The pre-tests:

The pre-tests are conducted for the research study on 23-12-2014.

## The educational approach:

The female researcher has used the interference in using the exercise methods through the used educational approach for learning the two skills of handling and the peaceful scoring as it is launched from 26/2/2014 till 16/4/2014.

- the educational approach has taken 8 weeks for the handling skill and 4 weeks for the peaceful scoring skill by the rate two educational units weekly thus the total educational units of handling skills will be 8 units and the total educational units for the peaceful scoring skill will be 8 units thus the total of the educational units will be 16 units.
- The educational unit time is 90 minutes according to the distributed exercise methods on the four research groups and an assistant team.

The female researcher used four educational methods which are:

## 1- The exercise method (the variable partial serial)

Which is the interference in the skill or movement segmentation regularly from and to variable places.

### 2- The exercise method (the fixing total variable)

It is the interference in the skill or the movement performance regularly from and to fixing places.

#### **3-** The exercise method (the variable total method)

It is the interference in the skill or the movement performance regularly from and to variable places.

## 4- The exercise method (the fixing partial method)

It's the interference in the skill or movement fragmentation regularly from and to fixing places.

## The post tests:

After completing the educational curriculum, the female researcher has conducted the post tests on four research groups and in the same conditions of the pre tests on Sunday 20-4-2014.

Display the results of the pre and post tests for the four searching groups in the two tests of handling and the peaceful scoring, its analysis and discussion:



Table 4: shows the values of the mathematical means, the standard deviations, the differences mathematical means, the total of the differences standard deviation of the mean of these differences, the calculated T value, the differences significance of the pre and post tests for the four experimental groups in the handling skill.

No	variables	pr measur		po measur	ost rement	differences mathematical	total of the differences	calculated T value	wrong percentage	differences significance
		-S	A	-S	a	means	standard deviation			
1	The first experiment al group	16.533	2.588	2.374	19.733	3.200	3.745	3.309	0.005	significant
2	The second experiment al group	14.933	2.251	18.800	3.256	3.867	3.137	4.774	0.000	significant
3	The third experiment al group	14.800	2.624	20.267	1.907	5.466	3.182	6.654	0.000	significant
4	The fourth experiment al group	15.200	2.704	20.000	2.104	4.800	3.649	5.095	0.000	Significant

Table 5: shows the values of the mathematical means, the standard deviations, the differences mathematical means, the total of the differences standard deviation of the mean of these differences, the calculated T value, the differences significance of the pre and post tests for the four experimental groups in the peaceful scoring skill.

No	variables	•	re rement	po measur		differences mathematical	total of the differences	calculated T value	wrong percentage	differences significance
		-S	a	-S	a	means	standard deviation			
1	The first experimental group	4.733	1.163	6.733	0.799	2.000	1.648	4.702	0.000	significant
2	The second experimental group	4.533	0.915	6.533	0.915	2.000	1.464	5.292	0.000	significant
3	The third experimental group	5.067	1.335	6.667	1.113	1.600	2.028	3.055	0.009	significant
4	The fourth experimental group	4.867	1.407	6.667	0.976	1.800	1.821	3.829	0.002	Significant

The results of the both table no 4 and 5 show the significant difference of the four groups in the handling test and the peaceful scoring. The calculated T value should be more than the tabular T value for the sake of the pre-tests with a significance of 0.05 and free degree of 13.

The female researcher attributes this reason for that the exercise methods interference has a positive impact on learning the handling and peaceful scoring skills. As the exercise method (the fixing partial serial) means the sequence in learning the technical performance details one after the other, followed by the correction and the enhancement for the learner currently avoiding the falling in the educational mistakes especially in the first learning stages because the existence of these mistakes and not discovering it will affect negatively on the rest of the technical performance of the skill thus it will effect on one hand the whole detailed technical performance and on the other hand its division into parts and learning each part separately thus integrating, linking and performing these parts as a unit. As we can divide the skill and training it then connecting the parts and exercise on it fully as the most moving skills are learnt by the fragmentation method of the skill into divisions then the image is integrated in performance (Wageh Mahgoub, 2000: 185).

The partial exercise method is very important for the difficult skills lest of occurring obstacles of the learner as a result of its not arrival to the automatic stage for dispersing the skill or the movement and not arriving the neural signals from the brain to the muscles clearly and the overwhelming sending skill is one of the difficult and complex sending which its learning needs using the partial exercise method as the more the skill's complexity and difficulty, the better its learning on stages (Ameen Anwar El-Khouly and Osama Rateb, 1982: 57).

For the exercise method (the variable total method) the change in the learning place in different places of playground is suitable conditions for the variable exercise method which is considered the best method in the subsequent learning stages for what it is achieving in finding the moving programs and laws which the learner utilizes and helping him in performing this skill under conditions of the match as the performance of different places and directions must be done using the distributer



and the collector according to the training systems and different effort circumstances, Doctoral thesis, Baghdad University: the physical education university, 1998: 78) thus the integration and the interference of these methods in a common way will create a state of development as a result of exploiting the positive specifications which describes each method and investing it with a common method which will work on acquiring the performance learning rapidly and properly.

Display the results of the pre and post tests for the four searching groups in the two tests of handling and the peaceful scoring, its analysis and discussion:

Table 4: shows the values of the mathematical means, the standard deviations for the post tests of the four searching groups in the handling ad peaceful scoring skills.

No	The groups	The pre	handling	The peaceful scoring		
		-s	a	-S	a	
1	The first experimental group	19.733	2.374	6.733	0.799	
2	The second experimental group	18.800	3.256	6.533	0.915	
3	The third experimental group	20.267	1.907	6.667	1.113	
4	The fourth experimental group	20.000	2.104	6.667	0.976	

Table 7: shows the calculated T value between the four groups in the pre tests for the handling and peaceful scoring skill.

statistical parameters for the variables	variance sources	deviations	df	variance	calculated F value	significance type
The handling test	between the groups	18.333	3	6.111	1.006	random
	Inside the groups	340.267	56	6.076		
The peaceful scoring	between the groups	0.317	3	0.106	0.115	Random
	Inside the groups	51.333	56	0.917		

Table 7 shows that the calculated F value of the performance tests of handling and peaceful scoring in basket ball is less than the tubular F value of 2.85 at a significance of 0.05 and two free degrees of 3K 56 thus the differences will be random between the four search groups indicating the nonexistence of significant differences between the used methods.

The female researcher attributes the cause of it to that the used training methods has contributed effectively too learn the two skills and it has a positive effect on the two skills, being the different methods specifications make the learner recognize the performance details and its diagnosis during the moving performance rather than increasing the repetitions which is an important requirement which the learner needs in order to convey high level of the motor learning that leads to organize the skill's flow or the movement as the flow is considered a standard of the technical performance integration (the technique) and the level which is reached in the motor learning stages. (Kort Maniel, 1987: 101).

In addition the variance in the exercise practicing whether in the fixing or moving cases increases the different performance formations thus increasing the adaption to the game and control requirements and the final result is accelerating the learning process by investing the time and effort during the learning period.

This is what Mahmoud Dawoud Salman has confirmed in 2005 that the exercise scheduling methods works on organizing and processing the information, the experience by the repeated and distinctive performances of learning which are the evidence of the learner's learning method, his method of receiving information from the surrounding environment honesty and its adoption. So we should choose the most suitable and economical methods in the motor learning because the aim of these methods and its variance is to convey some objectives in the determined exercise period whether for the learning or the training. (Mahmoud Dawoud salman, 2005, 104).

According to the above, it is necessary to integrate these methods into one method which will serve the detailed technical performance on one hand and increasing the accuracy levels of the skill performance on the other hand.

## 4. CONCLUSION

- 1. The process of interference between a numbers of the exercise methods has a big and effective influence in getting the learning of the handling and peaceful scoring to basketball.
- 2. There is a significant difference in affecting the learning of the handling and peaceful scoring skills in basketball between the pre and post tests of the four search groups.
- 3. There are no significant differences between the used training methods in learning the handling and the peaceful scoring in basketball between the pre tests of the four research groups.



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