# Study the Effect of Educational Activities "Exercises" to Improve Some Offensive Skills of Wheelchair Basketball Players Indirectly

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#### Abstract

The present study aims at investigating the effect of educational activities "Exercises" to improve some offensive skills of Wheelchair Basketball Players indirectly. The study significance lies in focusing on the importance of Kinesthetic learning methods and the role of these methods in teaching offensive skills to beginner wheelchair basketball players, just by being help them to improve the skills in accordance with these educational exercises as well as the indirect method, its effectiveness and significance showed that they have an importance in conveying the right information during performance, the statement of the problem was manifested in the presence there learning basic offensive skills does not live up to the level of ambition and because of the lack of experimentation purposeful exercises and the successful scientific method of it indirect method.

#### **Objectives**

This study aims at investigating the effect of Educational Activities "Exercises" to Improve Some Offensive Skills of Wheelchair Basketball Players Indirectly.

This study has come with some conclusions:

- 1. Selected educational exercises and indirect learning have achieved their aims in the dynamic learning of some of the basic offensive skills of wheelchair basketball players.
- 2. Indirect learning has important characteristics in learning success better than the traditional teacher-based approach as it relieves fear and anxiety in the early stages of learning, especially in learning some basic offensive skills for wheelchair basketball players.

As well as the present study has recommended that: Adopting selected educational exercises and indirect learning style because it has achieved its goals in the Kinesthetic learning of some basic offensive skills for basketball players on the chairs.

Keywords-- Exercises, wheelchair basketball players, educational activities

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## I. Introduction

## 1.1 Introduction and the Significance of the Study

Cultures develop when they take care of humanity as well as achieve what they aim to i.e. desires and achieving themselves in various areas, including social, educational and sports.

In the educational field, it has a big role in building the ideas and movements that man seeks, including sports movements, and for this is the basis of building the sports side and achieving future sporting achievements and for various individual and team games.

Wheelchair Basketball game is no different in terms of difficulty in learning basic skills for healthy people that due to the difficulty of learning becomes more difficult because the performance on the wheelchairs and thus the learner needs the ability to move on the wheelchair and learn basic skills with movement.

Hence the role of using the correct method in learning and influence, as there are multiple methods in Kinesthetic learning, including what depends on the teacher directly is the mentor and responsible in communicating the correct information and indirect ones depends on the ability of the student to learn and in all cases these methods have their characteristics and objectives in learning and achieving the correct success of learning.

Hence the importance of research to emphasize the importance of the methods of Kinesthetic learning and its role in learning beginners Wheelchair Basketball for offensive skills as it helps them to improve the skilled side according to these educational exercises and indirect method as well as show us its effectiveness and importance in conveying the correct information during performance.

#### 1.2 Statement of the Problem

Wheelchair basketball at the beginning of its initial stages of learning, especially offensive skill performance requires us to choose the right instructional exercises and a successful scientific method in learning and acquiring skill in the right scientific way.

Through the researcher's experience in Kinesthetic learning, especially in the special needs "Disability" and basketball game, there was learning basic offensive skills that do not rise to the level of ambition and because of the lack of experimentation, purposeful exercises and successful scientific method of which the indirect method of relying on the student during learning, this requires us to experiment and investigate the scientific facts of these types of learning methods and a course to learn the correct skills.

# 1.3 The Objectives of the Study

This study aims at:

- 1. Investigating the effect of educational activities "Exercises" to improve some offensive skills of wheelchair basketball players indirectly.
- 2. Identifying the differences between the results of pre-and post-test and the experimental and control groups in learning some offensive skills in wheelchair basketball.

3. Identifying the differences between the control and experimental groups in the results of

the post-tests in learning some offensive skills of wheelchair basketball.

1.4 Hypotheses

1. There are significantly differences between the results of pre- and post-tests and the control

and experimental groups in learning some offensive skills in wheelchair basketball.

2. There are significantly differences between the experimental and control groups in learning

some offensive skills in wheelchair basketball.

1.5 Limitations

**1. Human limit:** the beginner players of jury in Maysan in wheelchair basketball.

2. Place limit: Wisaam Arribi Hall for Sports in Maysan.

**3. Time limit:** from 2/11/2019 to 3/1/2020.

II. **Theoretical Studies** 

2.1 Educational Activities "Exercises" (3:2)

Exercises are the conditions and physical movements that form the body and develop its motor ability and

which perform for an educational purpose in order to reach the best possible motor ability in performance for the field

of satisfaction and professionalism and work in different fields of life and take into account the educational foundations

(psychology, sociology, education, teaching methods, scientific principles, physiology, Orthopedic Biomechanics and

public health).

2.2 Kinesthetic learning (24:7)

There are several methods of Kinesthetic learning and each method has educational objectives that help in

learning basic skills, including these methods of indirect Kinesthetic learning: it is the kind of method of Kinesthetic

learning which is to absorb the opinions of the learner and his ideas with encouragement and became the teacher to

involve him in the educational process and that the teacher seeks to identify the opinions of the learner and his

problems, and tries to represent them, then invites the learner to participate in the study of these opinions and problems

and develop appropriate solutions to them.

III. Methodology and the Field Procedures of the Study

3.1 Methodology

The researcher has used the experimental approach of equal groups (control and experimental) because this

approach is appropriate to deals with the problem of study and achieve its objectives.

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## 3.2 The Community and the Sample of the Study

The research community identified the beginners of Maysan Sports Team Committee for (2019-2020), that made up of (15 beginner players), and was excluded (5) because of their different degree of disability. That's why the research sample consists of (10) players became a player and constituted a percentage (66.66%) From the original community, they were randomly divided (lottery) into two groups (control and experimental groups), each group made up of (5) players, and the two samples were homogenized and equalized as in table (1) using the heterogeneity coefficient of homogeneity and the use of test (s) for non-interrelated samples in equivalence.

Table (1) Shows the homogeneity and equivalence of the control and experimental groups

No.	Variables	Control group				Experin	T. value		
				coefficient	of			coefficient of variation	
				variation (CV)				(CV)	
1	Length/ cm.	122.23	2.45	2.004		123.41	2.62	2.123	0.658
2	Weight/ kg.	27.65	0.451	1.631		27.64	0.364	1.316	0.034
3	Side shot/ degree	15.22	0.341	2.24		15.63	0.471	3.013	1.413
4	The interview	21.362	0.325	1.521		21.741	0.712	3.274	0.969
	ending with the								
	shot/ sec.								
5	subsonic speed/	11.236	0.235	2.091		11.364	0.247	2.173	0.752
	number								

The value of calculated (t) at the degree of freedom (8) and under the probability of a line (0.05) is (2.306)

#### 3.3 Means of Data Information

#### 3.3.1 Means of Data Collection

- Arabic and English References
- Tests and Measurements used

#### 3.3.2 Devices and Materials Used

- 1. Electronic stopwatch.
- 2. Measuring tape length (6 meters).
- 3. Basketballs (5).
- 4. A legal basketball court.
- 5. Pillars (15)
- 6. Moving wall.

#### 3.4 The Field Procedures

#### 3.4.1 Identifying the Variables

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After reviewing the sources and references and according to the specificity of the research and its

requirements in identifying the problem of research and addressing it, the researcher found that the skill variables

under study are necessary for basketball players in wheelchairs and variables are:

1. Side shot/ degree

2. The interview ending with the shot/ sec.

3. subsonic speed/ number

3.4.2 Test Used (6: 165-183)

3.4.2.1 Side shot test

- The aim of the test is to measure the skill of shooting by making shots towards the basket from a specific

place on one side of the goal near the two corners of the field.

- The necessary tools: goal basketball, basketball.

- Performance description: The laboratory aims from the specified place on both sides of the goal near the

two corners of the field and a distance (6 m) from the center of the basket with one hand or one hand, to perform (10

corrections) from one side of the basket, and then moves to the other side.

- Registration: Two degrees are calculated for each successful shot in which the basketball is included, and

one score for each shot touches the ball ring and does not enter the basket and does not count the grades for the

corrections in which the ball touches the ring and does not enter the basket.

3.4.2.2 The test of the interview ending with the correction.

- The purpose of the test: measuring the speed of the interviewer and the speed of correction.

- The necessary tools: three chairs placed on one line to be followed by the third chair the goal, draws the

starting line at a distance (19.5 m) of the goal, the distance between the starting line and the first chair (6 m) and the

distance between the rest of the chairs (4.5 m), stop hour.

- Performance description: When hearing the start signal the laboratory begins to run in the wheelchair from

the beginning and with it the ball and in a zigzag between the chairs with bouncing the ball until it reaches the bottom

of the goal to score and then picks up the ball to return in the same style, notes at the correction the need to score a

goal if the laboratory does not succeed in that again try again.

- Registration: Calculates the time that the laboratory has taken from the moment the start signal is issued

until it exceeds the starting line again after the implementation of the previous steps in the performance specifications.

3.4.2.3 The recoil wall test.

The purpose of the test: to measure the speed of scrolling.

- The necessary tools: a smooth wall painted with a rectangle (120cm x 60 cm) the height of its lower edge

from the ground (90 cm) and draws a line on the ground away (180 cm) from the wall, stop watch, basketball.

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Description of performance: The laboratory sits in its chair behind the line drawn on the ground, which is

away from the wall by (180 cm) and using a basketball the laboratory scrolls on the wall for as many consecutive

passes as possible in (10 seconds) and not to touch the ball ground during the performance.

- Registration: Score the number of passes on the wall during (10 seconds), with the need to direct the ball

towards the rectangle each time.

3.4.3 Exploratory experiment:

The researcher conducted the exploratory experiment on 2/11/2019 on a sample of the same beginners in

order to legalize the load of exercises used and apply them and to know how difficult it is when individualizing the

sample and the required repetitions and the time taken to apply the program.

3.5 The Field Experience

3.5.1 Pre-Tests were conducted on 6 November 2019

3-5-2 Exercises used: The researcher prepared basketball exercises on chairs and programmed them into

educational units and applied them according to the conditions of indirect motor learning methods, and the exercises

were applied during an educational unit and its three sections (see appendix (1)) and for eight weeks within and within

the reality of one teaching unit and according to the stages of learning basic skills basketball, and began the application

of educational exercises on 7/11/2019 and ended its application on 2/1/2020.

3.5.3 Post-tests were conducted on 3 January 2012

3.6 Statistical means: use of the SPSS system with statistical treatments and to find the following:

1. Arithmetic medium

2. Standard deviation

3. Difference factor

4. T test for interrelated samples

5. T test for independent samples

6- Percentage.

IV. Results Analysis and Discussion

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 $\label{eq:Table 2} Table\ (2)$  Shows the pre and post- values of the control group in the offensive skill tests used

No.	Assessment	Pre		Post		standard	Calculated	Significant
	used					error (SE)	T value	level
1	Side shot/	15.22	0.341	16.98	0.348	0.522	3.371	Sig.
	degree							
2	The	21.362	0.325	20.33	0.47	0.371	2.781	Sig.
	interview							
	ending with							
	the shot/ sec.							
3	subsonic	11.236	0.235	13.56	0.714	0.778	2.987	Sig.
	speed/							
	number							

The calculated (t) value has a degree of freedom (4) and under the probability of a line (0.05) was = 2.132

Table (3)

Shows the pre and post values of the experimental group in the offensive skill tests used

No. Assessment		Pre		Post		standard	Calculated	Significant
	used					error (SE)	T value	level
1	Side shot/	15.63	0.471	18.96	0.745	0.789	4.22	Sig.
	degree							
2	The	21.741	0.712	18.23	0.741	0.889	3.949	Sig.
	interview							
	ending with							
	the shot/ sec.							
3	subsonic	11.364	0.247	15.78	0.554	1.22	3.619	Sig.
	speed/							
	number							

The calculated (t) value has a degree of freedom (4) and under the probability of a line (0.05) was = 2.132

 $Table\ (4)$  Shows the post (T) values between the control and experimental groups in the offensive skill tests used

No.	Assessment used	Control Group		Experimental group		standard error (SE)	Calculated T value	Significant level
1	Side shot/degree	16.98	0.348	18.96	0.745	4.817	16.98	Sig.
2	The interview ending with the shot/ sec.	20.33	0.47	18.23	0.741	4.794	20.33	Sig.
3	subsonic speed/ number	13.56	0.714	15.78	0.554	4.922	13.56	Sig.

The calculated (t) value at the degree of freedom (8) and under the probability of a line (0.05) is (2.306)

By observing tables (2) and (3) it was shown that there were moral differences between tribal and dimensional testing and the control and experimental groups in the tests used and for the benefit of the dimensional test, this indicates that the two groups have learned the offensive skill performance under study, i.e. That the traditional and experimental methods, which is indirect, have achieved success in learning by the learner and this is normal because any exercises used are learned through regardless of the method followed and regularity and repetition also leads to learning as mentioned by Bastoisi Ahmed, Abbas Al-Samarrai (1984) "Exercises are organized and purposeful movements through which you get the development of motor and skill qualities in the field of life and sports", (1:235).

Either the successful method was for the experimental group which is indirect because it is important and essential, especially in the early stages of learning, as the learner cannot perform skills in the early stages of raw learning and the second minute as a result of the generation of excess movements resulting from fear and anxiety and here comes the role of the teacher by explaining and suspense and performing the correct model and then applying indirectly to the learner in the continuous repetition correct performance and this is what Afaf Abdul Karim (1990) Models are necessary so that the changing needs of skills can be met" (5:25).

According to (Nidal Boutros, 2004) the "clarity of learning steps in the learning cycle in its three stages as well as the nature of the presentation of the material to suit the needs of learners by linking the theoretical aspect to practical application, which leaves a clear and effective effect in the development of inference thinking in students, as it helps them to increase their cognitive possibilities so that it is easy for them to perform mental processes and apply them in practical terms.": 167).

Finally, we have found the importance of educational exercises and the successful method of learning basic skills in basketball, and this is confirmed by (Jassim Mohammed Nayef, 1986) "Exercise is one of the most important means that brings the athlete to the highest levels in achieving good motor performance to achieve high achievement both in the sports field and in other fields of life" (2:46)

#### V. Conclusions and Recommendations

#### 5.1 Conclusions

- 1. Selected educational exercises and indirect learning have achieved their aims in the dynamic learning of some of the basic offensive skills of wheelchair basketball players.
- 2. Indirect learning has important characteristics in learning success better than the traditional teacher-based approach as it relieves fear and anxiety in the early stages of learning, especially in learning some basic offensive skills for wheelchair basketball players.

## **5.2 Recommendations**

- 1. Adopting selected educational exercises and indirect learning style because it has achieved its goals in the Kinesthetic learning of some basic offensive skills of wheelchair basketball players.
- 2. Emphasizing the indirect learning method because of its important characteristics in the success of learning better than the traditional method that depends on the teacher as it relieves fear and anxiety in the early stages of learning, especially in learning some basic offensive skills of wheelchair basketball players.
- 3. Conducting similar studies of this study on other basic skills, especially defensive ones, to demonstrate the role of this method in correct learning.

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