

# THE EFFECT OF SOME PROPOSED PHYSICAL EXERCISE TO DEVELOP TECHNICAL PERFORMANCE FOR MOVEMENT STAND ON HANDS AND HUMAN WHEEL IN GYMNASTICS GAME

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## Abstract

The study aimed at identifying the impact of the proposed physical exercise on technical performance for movements to stand on the hands and human wheel at students of the second stage at the Faculty of Physical Education, Basra University for the academic year 2021/2022

The most important conclusions: the experimental group used physical exercises on the control group in motor skills on the ground movements.

The researchers recommended: the use of proposed physical exercises in developing special physical capacity in terrestrial movements as well as skillful performance.

**Keywords:** physical exercises, technical performance, stand on hands, gymnastics game.

## 1 - Definition of Research

### 1-1 Introduction to Research and Importance

The ground movements are the basic events in the game of your jeweler, whether women or men for this type of performance of performance that requires physically and very highly prepared to deal with the laws of nature that appear during performance, including the strength of the earth's attraction and the strength of external and internal friction. The movement was difficult whenever of these forces ...

The College of Physical Education and Sports Sciences is one of the general sports educational institutions, which has a distinctive role in teaching all sports for student and working on the numbers of scientific and theory in all games and

sports events and the game of the games. The student is the best ways in the educational process and prepares the movements of standing on hands and hIH. It can not perform properly because each of them is complementary to the other so there must be a good physical level that is true that there is a performance level in which it has a good evaluation of the student and here came the importance of researching some proposed physical exercises for students in order to improve performance in performance My movie stand on hands and heat wheel

### **1- 2 Research Problem**

The researchers are the teachers of the gymnastics and in contact with female students and in all stages. The basic causes of performance, including the physical and visualization causes, which affects the ability of physical and psychological student on the performance of the movement and from which the researchers see the status of palaces at the physical level of students in the game and specifically in these movements is the problem About

### **1-3 Research Objectives**

1. Preparation of some of the proposed physical exercise for the development of technical performance for their movement to stand on hands and human wheel at students of the second phase at the Faculty of Physical Education and Sports Sciences / University of Basra for the academic year 2021/2022.
2. Identify the impact of proposed physical exercise on technical performance for movements to stand on the hands and human wheel at the second phase students at the Faculty of Physical Education, Basra University for the academic year 2021 /2022

### **1-4 Research Hypotheses**

- 1- There are statistically significant differences between the results of standing on the hands and wheel on of tribal tests movements and post to the experimental and control groups.
- 2- There are statistically significant differences between the experimental and control groups in the tests of the hands and the human wheel on the ground movements.



## 1-5 Research Fields

1-5-1 Students of the second phase at the Faculty of Physical Education and Sports Sciences / University of Basra for the academic year (2020-2021)

1-5-2 Closed Hall at Faculty of Physical Education and Sports Sciences / University of Basra.

1-5-3 Time for the period from: 8/ 11 / 2021 – 25/1/2022

## 2 - Research Approach and Field Procedures

### 2-1 Research Curriculum

The researchers used the experimental curriculum for being the appropriate approach to the nature of the requirements of this "research and as it is the substantive means of helping to achieve the objectives of research and verification. Of reality and illness". (Saeed ,A, L:2012)

### 2-2 Sample of Research

The research community sets out the second phase students at the Faculty of Physical Education and Sports Sciences / University of Basra for the academic year 2021/2022 (30) Students with Vocabulary of Technical Research in the Courses group (H) & group ( E) Orthopedic (100)% of the research community. The indiscriminate method was adopted in the division of the research sample. the sample was divided into two groups in the random manner, and with the experimental and control groups.

### 2-3 Devices, Tools And Means Used In Research

#### 2-3-1 Hardware and tools used in Research:

For the purpose of completing field procedures, the researcher used the following tools

Table (1) The Tools used in research shows

NO	Tool	Number	TYPE
1	horse jump	1	legal
2	poles	7	wood
3	Dimples	12	2 KG
4	parallel	1	legal
5	gym mat	5	plastic



## 2-3-2 The Means Used To Collect Data Research

- Sources and references
- Test Dump Form

## 2-4 Field Procedures Used In Research

### 2-4-1 Tests used in research

#### 2-4-1-1 Test the movement (stand on hands) in your gym game

Where the sample leads the movement and the movement is evaluated by the arbitration committee (3) arbitrators and the final degree is obtained by collecting and dividing themes on (3) to reach one class, the three degrees

#### 2-4-1-2 Testing (Human Wheel) : (Reza, T, & , Salih , K, L, : 2018 )

In your gym game, the collection of motion features will evaluate each student performance by the Jury.

Where each court prohibits the degree of student performance and then the three grades are collected and divided on (3) for the purpose of obtaining the three grades.

#### 2-4-2 Exploratory Experience :( Nahed ,M, :2015)

13/11/2021 coincided with Saturday at 9:50 and at 9:50 and on the school hall for students conducted its surprising experience on sample consisting of (5) students from the group, where the purpose of the reconnaissance is: -

1. Ensure that all tools used in research are in order to ensure the safety of female students and no injuries.
2. Determine the most important obstacles and problems that may face the experimentation sample when implemented or proposed exercises.
3. Organize the entry and custody of female students during the implementation of tests and in order to assist the test and the arbitration committee to focus on performance and in the evaluation process.
4. Ensure understanding and understanding of the sample for exercise and how they performed correctly without any injury that may come from the wrong performance of exercises

### 2.4.3 Tribal Tests

On 16/11/2021 coincided on Tuesday and at 10:00 am and in the face hall of the Faculty of Physical Education, the researcher conducted the tribal tests for each

of my movements (standing on the hands) and (Human Wheel) and each of the control and experimental groups and have taken care of the researcher The arbitration committee, as well as the organization of women's sitting and how to perform the testing of the two tests and quiet in order to obtain data accurate and after completion of the performance of all students and after extracting the rate of each student of each of the two movements, by dividing the three scores of the three treasures The (T.Test) has then been implemented for the non-interrelated similar samples in the number of tribal tests to reach the equivalent of the sample before initiating proposed physical exercise and scheduling (3) illustrated Table (2)

value of the arithmetic and standard deviation and value (T) and value (T) collected for the tribal test for both movements (stand-by-hand) and (Human Wheel) movement in the game of the control and experimental **groups**

Statistical treatment Test	Sum S	Sum T		T collected		T table
	M	S	M	S		
stand-by-hand	2.923	0.547	2.840	0.545	0.420	0.048
Human Wheel	2.307	0.536	2.196	0.628	0.520	

Under Percent Error (0.05) and Free (N-2) = 28

Since each T (T) is calculated for the tribal test in both my movies (standing on the hands) and the Movement (HHR) was less than the value of the table (T), this means that there are no statistically significant differences between the control and experimental groups of the movements Between the two groups, because the two groups are located within the same age and study, as well as the approximation of the physical and skilled level.

#### 2.4.4 Proposed Physical Exercises

On 20 November 2022, the researchers involved in the implementation of the application for (6) weeks and 2 weeks in the week. Each (3) exercises are applied to each main section and exercise for students are usually explained for (2-3) d and a sample form is applied and (2) d to respond to the sample questions for exercise and shorten the period of exercise (50-40) minutes Performance of each exercise (10-13) accompanied by correcting the performance of the student either marital exercises. Performance of each exercise (5-7) d for each student is



given (3) d between each exercise and another .. The physical exercise has been displayed on a group Of specialists, the game came and approved (100%) of the total experts

### 2-4-5 Post Tests

On 4/1/2022 and Tuesday (Tuesday) and at 10:55 am and in the garden room for students and after the completion of the implementation of all proposed physical exercises have been conducted on the two groups and has been observed to provide all supplies and conditions to organize and arrange for a purpose The tests are properly keen on the researcher to similar circumstances for tribal and diminishing tests and in the presence of the jury that ruled the performance of female students in tribal tests.

### 2-5 Statistical Means: (Saad Zaghloul: 2003)

The researchers recorded the analysis process data and thus unloaded in the tables and introduction to the calculator for statistical analysis of data processing and obtaining results and statistical data were processed by the use of prefabricated programs (SPSS) and extracting what comes: -

- Percentage
- Arithmetic mean
- standard deviation
- Test (T) for interrelated and equal samples
- Test (T) for samples is not interrelated and equal

### 3- View and discussion results and discuss them

#### 3-1 Displays the results of the tribal and actual test of the movement (standing on the hands) of the officer group and analysis and discussion.

Table (3) The valuable value of the arithmetic and standard deviation and value (T) and value (T) for tribal and backup of the movement (stand-on-hand) of the control group

Statistical treatment Test	Tribal Test		Post Test		T collected	T table
	M	S	M	S		
stand-on-hand	2.923	0.547	3.694	0.467	2.43	2.145

Under Percent Error (0.05) and Free (N-1) = 14

Table 3 shows that the value of the arithmetic in the tribal test of the movement of standing on the hands of the control group has reached (2.923), while the value of the normative deviation (0.547) was ... The normative deviation has reached (0.467) ... The calculated value (2.43) was (2.43) ... while the value (T) (2.145) was the ratio of 0.05 and free (14) degrees.

Since the value (T) is greater than the value of the table (T), this means there are statistically significant differences between the tribal and actual testing of the control group and the advantage of the Daddy's test, according to divisions of the two interviews, where the arithmetic be greater than the accounting center of the tribal test and Researchers.

As well as the positive effects of other students practiced and the practice of various physical activities raise the level of physical and skilled performance of the individual and after the movement of standing on the (Shahrazad ,M, S, & Yunis ,M, 2011) "hands of movements that carry something difficult and dissipate that the rest of the sports games are positive to the capacity "of students in the performance of this movement Better than the tribal test level where this movement needs to force on arms and back muscles as well as the full tension of the body and exercise various activities such as volleyball, basket, hand, square and field was the biggest worker who has better performing students and references both (Albashtawi and Ahmad Khawaja: 2005) "Collect all sports training experts that the performance of different kinetic skills is closely linked to the different aspects of physical curricula such as the speed, load, force, flexibility, flexibility and balance ... etc... for good performance for various kinetic skills are positive on the physical and mathematical skills.

### 3.2 View the results of the tribal and actual test of the Movement (Human Wheel) of the control and analysis and discussion

Table (4)The value of the arithmetic and standard deviation and value (T) and value (T) for tribal and actual testing of the Movement (Human Wheel) are for the control group

Statistical treatment Test	Tribal Test		Post Test		T collected	T table
	M	S	M	S		
Human Wheel	2.307	0.536	3.499	0.615	2.57	2.145

Under Percent Error (0.05) and Free (N-1) = 14

From Table( 4) The value of the accounting center of the tribal test of the Human Wheel Group has reached (2.307). 0.615) The calculated (2.57) value (2.57) (2,145) is the ratio of (0.05).

Since the calculated (T) value was greater than the table (T) value, this means there is statistically significant differences between the tribal and backward testing of the human wheel and the benefit of the academic test, where the arithmetic tests were greater than the accounting center of the tribal test.

The Researchers Believe That The Reason For The Performance Of The Performance Of The Control Group In The Human Wheel Test Is Due To Be The Midcult Movements Than Other Movements And For Students Using This Movement In The Kinetic Strings, Which Is An Important Part of the Matter So That's Movement Is Repeat. LEVEL OF PERFORMANCEL (Attiyat Mohammed & Maha Mohammed & Shara Abdel Wahab: 2006) "Is A Repetition Exercise or Motion For A Large Number of Times One of the Most Important Methods of Applying for Exercise or Motion Performance And Is a Means Of Spying Exercise Performance To Increase & Misty.

### 3.3 Displays the results of the test and the back of the movement (stand on the hands) of the experimental group analyzed and discussed

Table (5) The valuable value of the arithmetic, standard deviation and value (T) and value (T) for the tribal and backy test of the movement (stand-on-hand) of the experimental collection

Statistical treatment Test	Tribal Test		Post Test		T collected	T table
	M	S	M	S		
stand-on-hand	2.840	0.545	5.827	0.433	2.47	2.145

Under Percent Error (0.05) and Free (N-1) = 14

It is clear from Table 5 that the value of arithmetic mean in the tribal test of the movement of standing on the hands of the experimental group has reached (2.840) and the value of the standard deviation has reached (0.545) and the value of the arithmetic surveys (5.827) has reached the value of the standard deviation (0.433 ) The calculated (T) value has reached (2.74), while the value (2.145) was the ratio of 0.05 and the degree of freedom (14) degrees and since the calculated value (T) is greater than the value T) This means there is statistically significant





differences between the tribal and post test of the movement of standing on the hands of the experimental group and the advantage of the academic test because of the arithmetic medium for the test is greater than the accounting center of the tribal test

The researchers believe that the development of the development of the experimental group for those movement, especially in the albums, (Karqouz , M, 2018) "due to the proposed physical exercise group that helped improve the physical aspect" and we know that the physical aspect is the basic basis for the performance of the individual and as physical qualities developed with it is known that the proposed physical exercise group within all parts of the body focused on both sides of the muscle strength and flexibility because the movement requires a muscle force for both arms, abdomen and appearance and include proposed physical exercises. (Lamia , H, & Hussein ,F, : 2016) "As well as exercises that help the body tighten it is the most important part of the movement". The movement needs the basis for tightening all parts of the body instant to stand on the hands. For working functions

3.4 Displays the results of the tribal and actual test of the Movement (Human Wheel) of the experimental group and analysis and discussion

Table (6) The valuable value of the arithmetic and standard deviation and value (T) and value (T) for the tribal and actual test of the Movement (Human Wheel) of the Experimental Group

Statistical treatment Test	Tribal Test		Post Test		T collected	T table
	M	S	M	S		
Human Wheel	2.196	0.628	5.854	0.634	2.83	2.145

Under Percent Error (0.05) and Free (N-1) = 14

It is clear that Table (6) is that the value of the accounting center of the tribal test of the Movement (Human Wheel) of the Trial Group has reached (2.196) and the value of the standard deviation (0.628) and in the test of the middle of the arithmetic (5.854) The value of the standard deviation is reported 0.643) The calculated value (2.83) was (2.83), while the value of (2.145) was greater than the value (T), this means there are statistically significant differences between the tribal and post test (Human Wheel) and the benefit of the academic test as the arithmetic center of the test is greater than the accounts of the tribal test ..



The researcher considers that the development situation obtained in the experimental performance in the post test returns to physical exercises on which female students have been trained during the period. By diversity, which included all parts of the body and the human wheel movement of repeated movements (Mohsen , A , :2015) "which are repeated in performance. Large on the strength of the muscle totals operating in performance and the qualities of flexibility", fitness, balance and compatibility ... etc in performance support and success and of course the rest of other games in which physical exercises enter the performance level in each game they also contribute to the development of the experimental group performance and was complementary to the role of physical exercise The proposed (Kamal Abdel Hamid: 1999) "The issue of diversity using sports games is different The sports game is important because it graduated from the usual routine frame to practice different sports supporting his fitness and develops its skill and psychological performance and vary more adaptable to different conditions, whether physical, male, psychological, psychological or even mental.

### 3.5 Displays the results of the test of my motion (standing on the hands and wheel) for both control and experimental and discussion groups and discussed them

Table (7) The value of the arithmetic and standard deviation and value (T) is based on the prevalent resident (T) for the interview (standing on hands and wheel) for both control and experimental groups.

Statistical treatment Test	control groups		experimental groups		T collected	T table
	M	S	M	S		
stand-by-hand	3.694	0.476	5.827	0.433	12.84	2.048
Human Wheel	3.499	0.615	5.854	0.615	10.25	

Under Percent Error (0.05) and Free (N-2) = 28

Table( 7 ) shows that in the remote test of the Movement (standing on the hands) of the control group has reached the value of the arithmetic center (3.694) while the value of the standard deviation (0.476) amounted to the value of the



experimental group (5.827) and the value of the standard deviation (0.433) The calculated value (T) has reached (12.84) ..

In the last test of the Movement (Human Wheel), the value of the arithmetic of the control group (3.499) was the value of the standard deviation (0.615) for the experimental group. Calculated (10.25)

The value (0.683) was amounted to (0.683) and the degree of freedom (28) degrees (2) (T), and each of the Human and Human Wheel) is greater than the value (T) This means there are statistically significant differences between the two groups in both movements and the benefit of the experimental group, where the value of the experimental group of the pilot group in both movements is greater than the valuable center of the control group and see the researcher to exceed the experimental group on the control group (Nazem, T, & Attieh , S, 2015) " was clear for reasons The experimental group has implemented proposed physical exercises", which supported the Group's physical aspect better as well as the effects of other events, while the control group adopted the effects of the rest of the sports games so there is more than a worker for the development of the physical aspect, which is the basis for the success of the technical performance for the experimental group Please exceed the control group (Miller: 1998) "The more athlete used a number of means that support his physical and functional adaptation whenever in other aspects of performance are aspects Complement table for achievement.

Researchers also believes that the matter of physical exercise for the experimental group has strengthened the psychological side of the group more than the control group and as we know that the psychological side has a significant impact on the general performance.( Nabil , W , & others, :2012) "Providing better performance, the Psychological Worker helped" the experimental group to exceed the performance of more than the control group, where the trial, design, design and will give better results from the control group, by the experimental group of physical effort in those exercises and reminds (Baha Salama: 1994) "The psychological qualities are developing through the development of some fitness elements such as the development of will, where the numbers are beginning for myself through physical and skilled numbers and planners and purposefully." It also provides that the Group's proposed physical exercises had positive impact at the level of my movements (standing on the hands) and the movement of (Human Wheel) and two movements of the most

refined movements and required in the kinetic chains or in individual performance. Their performance is in both movements.

#### 4. Conclusions and Recommendations

##### 4- 1 conclusions

1. The physical aspect was an important impact on the development of motor skills on the ground movements.
2. The results of the group have shown the control group in the development of kinetic skills on the ground movements.
3. The experimental group used physical exercises on the control group in motor skills was submitted on the motor skills.

##### 4.2 Recommendations

1. Use proposed physical exercises in the development of special physical capacity in terrestrial movements as well as skillful performance
- 2 - conducting other studies and research similar to other equipment.
3. Emphasize the ongoing testing of physical capacity for the purpose of ensuring the level of physical female students.

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