

THE MOST IMPORTANT MOTOR SKILLS AND THEIR RELATIONSHIP TO THEIR PERFORMANCE OF FRONTAL HANDS JUMP ON THE TABLE FOR GROUND MOVEMENTS ARTISTIC GYMNASTIC

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Abstract

This research was carried out in the internal hall of gymnastic in elementary school for boys in Diyala province for the year (2013) in order to identify the relationship between motor skills and their relationship to the performance of frontal hand jump on the ground movements rug of the technical gymnastic. The research sample consisted of 24 students representing the fourth stage - Institute of preparing teachers / effectiveness of artistic gymnastics, which can be invested properly and in a scientific manner that serves the achievement through the good performance. He has been used a descriptive approach with screening style for suitability of the nature of the problem. The sample was selected by intentional way and after the completion of the tests , data were processed according to the statistical program (spss) and analysis it in tables and discussed it , values of calculated (t) of the studied recipes (compatibility, speed of response, agility, flexibility) the total (0.70, 0.73, 0.80, 0.79) respectively, to achieve the goals of the research and provide everything modern like equipment and tools of technical gymnastic . The researcher found that there is a significant correlation between motor abilities and their relationship to the performance of frontal hand jump on the ground movement rug of gymnastic.

KEYWORDS: MOTOR. ABILITIES. FRONTAL. JUMP. HANDS.

1. INTRODUCTION

the motor abilities are considered one of the important factors affecting all the games and sporting events, and the availability of motor abilities for the gymnast sufficiently enable him to achieve better performance and high achievement, the importance of motor abilities are not confined only within the field of sports, but it also is important for everyone in the community in general.

According to each of Najwa Solomon and et al., 1991 that "motor abilities is one of the basic substrates on which depends the setup of skill in different activities as there is a relationship between motor abilities and the level of skilled performance and even if there is a difference in the levels of this relationship depending on the type of sporting activity, and therefore the possession of the individual a high level of the motor ability suggesting that this individual has a degree of ability to practice sporting activity successfully. "

Many nations of the world began to harness all the possibilities and scientific capacity in order to reach to the advanced levels in different sports, the continuous development in the collective and individual sporting games depends on the way in and how to setup and configure the players in all respects and motor abilities (physical skills as well as tactical, psychological and educational) for success and access to high levels.

The gymnastics considered one of the special sports that received attention from nations because the performance in this game reached to the creativity and innovation, and is also working to develop psychological and mental characteristics and boldness, courage, and the development of motor skills.

Also the ground movements considered as a basis for most of the movements on the rest of the hardware as learning them is associated with the basic conditions because it is being the basis of learning these movements and learning it in the suitable time, and the frontal hand jump on the ground movement rug is one of the skills that need a correlation and motor link which is a rotation of the body a full cycle around the transverse axis as well as the ability to require motor ability of legs and arms muscles, and here lies the importance of research to find out the relationship between the capacity and performance of motor skill of the frontal jump of hands on the land for students phase III / Institute of the preparation of teachers.

2. RESEARCH PROBLEM

Through the experience of the researchers in teaching and training, they noted that there is a weakness in motor and skilled abilities for the performance of students of Department of Physical Education- Institute of teachers preparing of Baquba, especially when their performance skills on the rug of ground movements of gymnastic. So the researchers felt to study the most important motor skills and their relationship with the performance of the frontal hand jump on the ground movement's rug of gymnastic.

3. AIM OF THE RESEARCH

To identify the most important motor skills and their relationship to the performance of the technical skill of the hand jump on the ground movement rug of gymnastic

4. RESEARCH HYPOTHESES

There is a significant correlation between motor abilities and technical performance of the hands jump skill on the rug of ground movement of gymnastic.

5. RESEARCH METHODOLOGY

For the purpose to access to scientific facts based on objective grounds, it is important to choose the right choice for the curriculum and to study the problem of being "the way used by the researcher in the studying the real problem" (Ahmad Badr 0.1987) so the researcher used a descriptive approach because it is suitable for the research problem.

6. RESEARCH SAMPLE

The sample is the group that are being tested or studied, may be from one person or more (Wajih Mahjoub, 2002) and on this basis the research sample is selected from the community which is represented by students of the fourth phase - Department of Physical Education / Institute of preparing teachers, the sample reached to (20 students) from the research community which is twenty-four students and were excluded from the four students who conducted exploratory experiment on them and so that the sample represents 83% of the research community.

7. IDENTIFYING THE MOST IMPORTANT MOTOR ABILITIES

For the purpose of determining the most important motor skills, the researcher organized a questionnaire form and then presented it to the group of experts and specialists in the field (science of training, testing and measurement - gymnastics) and after unloading forms and extraction ratio of (80%) or more and the researcher has the right to choose the rate at which it deems appropriate when selecting indicators (Mohamed Nasr and et al., 2000) as shown in the following table.

Table (1) shows the relative importance of the capacity of the motor abilities which are selected by the opinions of experts and specialists.

The basic skill	The total degree	The relative importance	The accepted rates	The unaccepted rates
Compatibility	32	80%	√	
Agility	35	87.5%	√	
Response speed	33	82%	√	
Flexibility	36	90%	√	
Motor accuracy	20	50%		X
balance	28	70%		X

Standardized tests of motor abilities by (Mohamed Sobhi 2000 and Salum Ali, 2004)

First / throw and receive balls:

- The purpose of the test: measuring the compatibility between the eye and the hand.

Secondly / running zigzag by Barrow manner:

- The purpose of the test: Barrow put this test within his known battery to measure the motor ability and it is a valid test for measuring agility.

Third / Nelson test of motor speed:

- The purpose of the test: measuring the link between reaction speed and motor speed of the arms.

Fourthly / test of bending the trunk from standing

- The purpose of the test: measuring the extent of the flexibility of the torso and thigh movements in front of the crease to a standing position.

8. THE MAIN EXPERIMENT

The main experiment was conducted on 16.11.2013 on the research sample as included tests of motor abilities as was filmed the performance of hands jump at 19.11.2013 and has been presented to the rulers which totaling (4) for the purpose of evaluate the performance of the frontal hands jump.

9. STATISTICAL METHODS

The researcher used the following statistical methods according to SPSS to deal with the results which are obtained from the experiment, and according to the following laws (Ayed Kareem 2009)

Arithmetic mean, standard deviation, correlation coefficient (Pearson).

10. SHOWING RESULTS ANALYZING AND DISCUSSED THEM

This chapter include displaying the results analyzed and discussed them , so the researchers presented the results of research in the form of a table, as it is considered an illustrative way of the research results, the researchers also displays the results for the purpose of access to the achievement of the objectives and research hypotheses.

SHOWING RESULTS OF ARITHMETIC MEANS AND STANDARD DEVIATIONS OF MOTOR CAPABILITIES AND PERFORMANCE OF HANDS JUMP AND ANALYZING THEM

Table (2) shows the values of arithmetic means and standard deviations of motor abilities and skilled performance of the frontal hands jump

variables	mean	Standard deviation
compatibility	9.266	1.341
Speed of response	18.066	2.086
agility	9.266	1.341
flexibility	6.643	0.525
Performance the skill of frontal jump	6.958	1.071

Table (2) shows arithmetic means and standard deviations for the variables as the arithmetic mean reached (9.266) and standard deviation (1.341) and the arithmetic mean – the speed of response (18.066) and standard deviation (2.086) and the value of the arithmetic mean -agility (9.266) and standard deviation (1.341) and the value of the arithmetic mean - flexibility (6.54) and standard deviation (3.67) and the arithmetic mean of the performance of the skill of frontal hands jump (6.958) and standard deviation (1.071).

Showing the results of calculated (t) between motor abilities and their relationship to the performance of frontal hands jump on the ground movement’s rug, analyzing and discussing them.

Table(3) shows the value of calculated (t) between motor abilities and their relationship to the performance of frontal hands jump on the ground movement’s rug.

Motor abilities	Calculated (t)	Tabulated (t)	Significance
compatibility	0.70	0.387	significant
Response speed	0.73	0.387	significant
agility	0.80	0.387	significant
flexibility	0.79	0.387	significant

The Value of tabulated (t) with level of significance (0.05) and the degree of freedom (18) equal to 0.387

The table (3) shows the values of the relationship between motor abilities and performance of hands jump on the ground movements rug since the value of the correlation coefficient between compatibility and performance of frontal hands jump was (0.70) while the value of the correlation coefficient between the speed of the response and performance of the frontal hands jump (0.73) and the value of the correlation coefficient between the agility and performance of frontal hand jump reached (0.80) and the value of the correlation coefficient between flexibility and performance of frontal hands jump (0.79) and when compared with the value of tabulated (t) below the level of significance (0.05) and the degree of freedom (18) which is (0.387) we conclude the existence of a correlation between the motor abilities like (synergy, speed motor, agility, flexibility) and performance of frontal hand jump on ground movements rug as the value of calculated (t) is greater than the value of tabulated (t) and this indicates the presence of a high correlation between motor abilities by performance of frontal hands the ground movements rug.

DISCUSSING THE RESULTS OF THE SIMPLE CORRELATION COEFFICIENT BETWEEN MOTOR ABILITIES AND PERFORMANCE OF FRONTAL HANDS JUMP ON THE GROUND MOVEMENTS RUG.

from the above results, which showed that all the values of the correlation coefficient are significant, which indicate the presence of significant correlation and the researchers attribute this to the motor compatibility which is an important factor

to help the student to perform the prescribed movements skillfully especially if there were so many of these movements because it is difficult for him to do them to the fullest if not characterized by compatibility which is considered the first factor to perform it (Abdul Ali and et .al. , 1988), and the frontal hands jump considers rich in gradient movements by compatibility as the student can install movements, skills and understanding their sequences and achievement frontal hands jump needs well compatibility between the arms and the eye and this is what Aweys Hayani confirmed in 2000 that owning a player and student high capabilities of compatibility not only assisted him in the performance of motor skills and fully accurate, but beyond that to include avoiding the expected errors.

The results also indicated the presence of strong links between the speed of motor response and hands jump and the speed of response has an extreme importance in most sports, if not all, and gymnastics sport is one of the sports that depends on the speed of response dramatically because this motor ability has an importance in achieving the desired benefit this is confirmed by (Abbas Hadi, 2002) that "the introduction of stimuli and sudden situations help the player to visualize the location and the accuracy of performance, and with high response speed and continuous observation and constant vigilance and speed of making the right decision for the suitable performance, which requires early preparation through training on motor abilities and thus helps the player to overcome sudden situations and unexpected difficulties that appear often in real playing conditions "

While agility , it also has pointed to the existence of strong links among research samples although it is very important for the performance of the skill in the game of gymnastics as confirmed by (Qassim Hassan, 1998), quoting from Harrah's that agility is the ability of an individual to control the consensus and capabilities of the rapid control of the sporting movements and application of the motor performance specifically and suitable in accordance with the requirements of rapid and serious change) and also it is an important factor for the movement and this is confirmed by (Ayad Hamid and et .al.,) that "the abilities of agility in motor performance in terms of the adaptation ability and ability of the right response to the variable requirements and ability to control and not losing the aesthetic movement, and the possibility of changing direction, according to the requirements of the game and the ability to direct the path of the movement in order to serve the achievement of the objectives of the movement and its purpose "

The researchers attribute the flexibility as it is bending the trunk from standing to the use of prolongation trainings orderly and the use of the arms and feet movements and the ratios of increase running movements and speed changing and the pivot during the work and rubbery of ligaments and muscles during movements and maintaining the good muscular equilibrium. And on this basis that the flexibility of the joints and muscles play an important and senior role in gymnastics because the rug of ground movements is small in size and with the large number of movements of the players and the different skilled performance and from skill to skill raises the temperature of the muscles and change their viscosity and raise the level of their rubbery and flexibility, and this is confirmed by (Salim Ahmed 2012)the change in muscle temperature raises or decrease flexibility in the range of 20% and individuals usually with high temperatures more flexible for people with low temperature.

11. CONCLUSIONS

1. presence of significant correlation between compatibility and frontal hands jump on the ground movements rug
2. presence of significant correlation between the speed of response and the frontal hands jump on the ground movement rug
3. there is a significant correlation between agility and hands jump on the ground movement rug
4. there is a significant correlation between flexibility and frontal hands jump on the ground movement rug.

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