Effect of using core stability trainings on the level of the performance of some skills in volleyball

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Introduction:

And by observing the researcher in the field of training and his presence in many tournaments organized by the Union weakness of the muscles of the trunk when performing offensive skills, including the spike skill and Spike serve, which leads to weak strength of the ball with the possibility of injury during performance.

The volleyball player cuts in average during the performance of the game about 1500 - 2000 m interspersed with about 100 - 350 movements, and each movement in the preparation and then rapid running and then a dynamic leap and therefore requires volleyball players exercises for the development of fitness Anaerobic especially for the elements of skill, speed, muscle strength.

In light of this opinion researcher trying to design a training program using training core stability to development some of its skills in volleyball.

Objectives of the research :-

This research aims to design a training program using training core stability, to identify the impact on:
1. physical variables to the development of the research sample.
2. Development of the skill level of the research sample.
3. Identify the percentages of improvement of physical and skill tests for the research sample.

Research hypotheses:

1. There is a significant statistical differences between the averages of the two measurements (pre- post) of the sample in the development of some of the physical variables in favor of the post measurement.
2. There are significant differences between the averages of indices (pre- post) of the sample in the development of the skill level in favor of the post measurement.

Research Methodology:
The researcher used the experimental method due to its suitability to the nature of this study, it has hired one of the experimental designs for one group of measure (pre- post).

The research community:
The research community has been chosen the way deliberate from volleyball players at the Cairo area under 19 years old, reaching a strength of the research community (150) for the player.

Sample search:
Was selected sample way deliberate on the (10) players from the Police Sports Club under 19 years old season 2015/2016, and the number of exploratory sample (20) player (10) players from the Police Sports Club and outside the core sample, (10) players from Esco sports Club in order to conduct scientific transactions (Believe – stability).

Tools and means of data collection:
To collect data and information on this research was to use the following tools and methods:

1- Reference and research and studies related to research:
Was found on references and research associated with the sport of volleyball, so take advantage of them in determining the physical and Special skill variables under discussion.

2- Personal interview:
Has been conducting several interviews with a number of experts in the sport of volleyball and the number (3) experts in the field of volleyball to determine the appropriate tests, as well as to stand in the form of the proposed training program.

3- Tests used:
(A) Physical tests:
• Vertical jump of run.
• Wide jump of stability.
• Sit Ups (Bent Knees).
• Reverse Sit Ups.
• push the Medical ball handed.
• push the Medical ball of the right hand.
• push the Medical ball of the left hand.

(b) skill tests:
• Spike serve.
• Cross spike.
• Line spike.

4- Forms Search:
Data collection forms for the sample were prepared for unloading and processing statistically.

Tools and devices used in the search.
It was used the following tools and hardware:
- Electronic scales to measure weight, Ristamitr device for measuring length, Dinamocitr device for measuring force, Swiss balls, medical balls.
- Volleyball court, volleyballs legal, wall and chalk, stop watch to measure time.
- Tape measure, protractor scale on the wall, foam mattresses, cones.

Scientific Transactions:
The researcher calculated the transactions of all scientific tests to find the veracity of the tests using the sincerity of differentiation, and the calculation stability factor.

The training program:
And includes (48) unit for a period of training (12) a week at four units per week and the time variable according to the severity of.

Statistical treatments:
- Descriptive statistics "central tendency measures of the standard torsion coefficient of deviation".
- The correlation coefficient to calculate the stability tests.
- Test "T" (T. test).
- Analysis of variance in one direction.
- Ratio improvement by percentages.
Conclusions:

In light of the nature of this study and the sample and the methodology used and the results of the statistical analysis in the scope of this research researcher reached the following conclusions:

- The impact of the training program in the development of the physical requirements for a moment the muscles of the trunk through the implementation of the program for 12 weeks.
- There is a strong correlation between the development of the ability of muscle of the trunk and the ability for muscular arms and legs through the implementation of the program for 12 weeks.

Recommendations:

In the light of the conclusions adopted on the nature of the study and the sample and the methodology used and the results of the statistical analysis, the researcher was able to identify recommendations that benefit the work in the field of training for volleyball players is as follows:

1. The need for the training program in volleyball includes the many different models for training core stability because of its significant impact in the progress of the skills difference levels.
2. Carry out similar studies on different skills in the sport of volleyball.