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REVIEW ARTICLE

EFFECT OF FOUR WEEKS PLYOMETRIC TRAINING EXPLOSIVE STRENGTH OF FEMALE VOLLEY BALL PLAYERS

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Effect of Four Weeks Plyometric Training Explosive Strength of Female Volley Ball Players

Atul Saharan

Arya College of edu. Bhambhewa, Jind (Haryana)

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SUMMARY

As we know by nature human beings are competitive and aspire for excellence in every given field. Not only individuals but nations also want to show their supremacy in the field of sports. This friendly rivalry has inspired and motivated all to sweat and strive in the competition arena. Training in game and sports is no longer a myth and it has no casual approach but it provides opportunities for scientific process and verification.

Training and conditioning includes those practices which are to best prepare the players for efficient performance through a carefully planned programme of progressive practices which will perfect co-ordination, eliminate unnecessary movements accomplish results with minimum of energy expenditure, and condition of muscle structure and circulation to withstand intensive demand made upon them. Training for competitive sports should be conducted in such a way so as to cover all these physical and mental qualities which the athlete needs in order to realize his goal.

STATEMENT OF THE PROBLEM

The purpose of the study was to find out the "Effect of four weeks plyometric training explosive strength of female volley ball players"

OBJECTIVES OF THE STUDY

1. To construct and standardize a four weeks plyometric training programme.
2. To find out the effect of the four weeks plyometric training on the explosive strength of female volley ball players.
3. To make specific recommendation regarding employment of plyometric, emerging out of the study in improving explosive strength of volley ball players.

DELIMITATIONS

1 The study was delimited to the age group of 15 to 22 years.

2 The study was delimited to 40 female volley ball players.

3 The study was delimited to measure the explosive strength of leg and arms.

4 The study was mainly restricted to following experimental exercise:- standing board jump, vertical jump, push-ups and medicine ball throw.

5 The study was delimited to plyometric training only.

HYPOTHESIS

There would be increase in the explosive strength of selected female volley ball players after four weeks of plyometric training.

DEFINITION AND EXPLANATION OF THE TERM

Explosive strength

It can be defined as the ability to overcome resistances with high speed, depending on the nature of combination of strength and speed.

Plyometric Exercise

Plyometric exercise is a relatively new concept of training that applies the specificity principles regarding the present stretch condition of muscle prior to explosive contraction.

The purpose of the study was to determine the effects of plyometric strength training explosive strength of volley ball players.

Forty girls volley ball players from govt. Senior secondary school, Sirsa and C.M.K. Girls College Sirsa and Shah Satnam Ji Girls College or School. Sirsa (Haryana) were selected as subjects for study. The subject was equally assigned following the

random sampling technique into one experimental and control group with twenty subjects in each group. The experimental group performed plyometric exercise namely. Depth jumps, squat box jump and double leg zig-zag hop for leg strength and plyometric push ups, two hand over head throw and power drop for arm strength for the period of four weeks. The variables selected for this study were medicine ball throw, push ups, standing board jump and vertical jump performance.

Quantitative measurement of selected variables for each of the subjected were taken at the beginning and at the conclusion of the experimental period of four weeks. Training was carried out six day a week during evening session.

The 't' test were applied to examine the data with regard to the experimental group and control group. The 't' test was applied to find out the significant of difference among the pre-test and post-test means for the experimental and control group. In order to find out the comparative effects among the difference experimental and control group. The level of significance chosen was 0.05. The findings revealed no significant improvement in plyometric training on the selected explosive strength variable.

CONCLUSION :-

On the basis of the findings of the study the following conclusions are made:-

- 1 The four weeks plyometric training significantly improved the push-ups and arm strength performance.
- 2 In medicine ball throw performance, was no significant difference between the pre and post-test of experimental group.
- 3 In standing broad jump and vertical jump group performance, there was no significant difference between the pre-test and post-test of experimental group.

RECOMMENDATIONS:-

In the light of the conclusion drawn, the following recommendations may be made:-

- 1 Plyometric training programme such as plyometric pull-ups and depth group may be preferred to the conventional training programme of pull-ups and step-ups for arm and leg strength development.
- 2 The present study may be repeated with subject of age, sex and sports groups other than those employing in this study.
- 3 Similar study may be undertaken by employing other methods of plyometric training such as bounding jumps, hop step, plyometric exercise using weighted balls, pulleys and elastic plyometric drills, etc.