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EFFECT OF PLYOMETRICS TRAINING ON LONG JUMP PLAYERS

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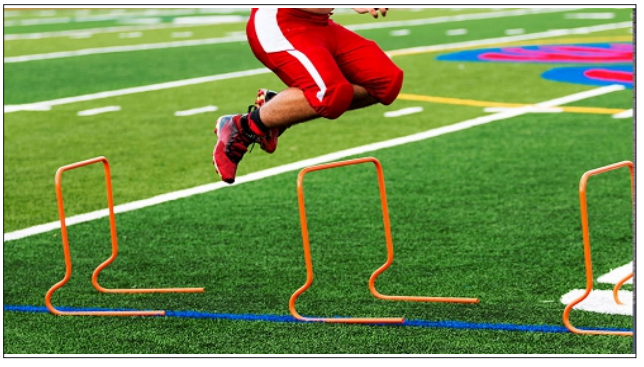
ABSTRACT

The purpose of the present Study was to compare the effects of plyometrics training on long jump players . Subjects were 40 interschool athletes assigned to one plyometric group completed a 12-week training program. There were statistical increases in pre–test long jump Mean (4.143) and Post-test long jump Mean (4.2705) There were significant differences for pre–test post-test long jump The findings of this study demonstrate that there is difference in long jump among plyometric training experimental 12-week timeframe. pre–test S.D is 0.037955 and post-test S.D 0.029267

KEYWORDS:*Plyometric training, long jump, training program.*

INTRODUCTION:

Plyometric, otherwise called "bounce preparing" or "plyos",



are practices in which muscles apply greatest power in short interims of time, with the objective of expanding power (speed-quality). This preparation centers around figuring out how to move from a muscle expansion to a constriction in a fast or "dangerous" way, for example, in particular rehashed jumping.Plyometric are basically utilized by competitors, particularly military specialists, sprinters and high jumpers,to enhance performance, and are utilized in the wellness field to a substantially lesser degree.

Plyometric incorporates hazardous ground-breaking preparing practices that are prepared to enact the snappy reaction and versatile properties of the significant muscles in the body. It was at first made celebrated by Soviet Olympians in the 1970s, giving the center component in the quality projects of tip top brandishing competitors around the world. Games utilizing plyometric incorporate b-ball, tennis, badminton, squash and volleyball and in addition the different codes of football.

The expression "plyometric" was begat by Fred Wilt subsequent to watching Soviet competitors get ready for their occasions in olympic style events; he felt this was a key to their prosperity. He started a coordinated effort with Soviet (Russian) coach Michael Yessis to advance plyometric.

Since its presentation in the mid 1980s, two types of plyometric have developed. In the first form of plyometric, made by Russian researcher Yuri Verkhoshansky, it was characterized as the stun technique. In this, the competitor would drop down from a stature and experience a "stun" after landing. This thus would realize a constrained unusual compression which was then instantly changed to a concentric constriction as the competitor hopped upward. The arrival and departure are executed in an amazingly brief timeframe, in the scope of 0.1– 0.2 second. The stun strategy is the best technique utilized by competitors to enhance their speed, speed, and power after advancement of a solid quality base.

As opposed to utilizing the term plyometric to demonstrate practices using the stun technique, it might be desirable over utilize the term hazardous or genuine plyometric which can be viewed as the same as the plyometric initially made by Verkhoshansky.The stun strategy that he made was the aftereffect of concentrate the activities that happen in running and hopping. He found that the arrivals and departures in these two abilities included high ground response powers that were executed in a to a great degree brisk and unstable way. For instance, time of execution of the arrival and departure in hopping was near 0.20 second and in dashing it was around 0.10 second.

Since one of the primary destinations of the Soviet research was to create functional techniques for preparing to enhance athletic execution, Verkhoshansky handled the errand of how these powers in dangerous execution could be copied in an activity. By doing activities, for example, the profundity hop, that he made, the competitor would improve his capacity in the departure and his resultant execution in the running or hopping occasion. He explored different avenues regarding various activities, however the profundity hop had all the earmarks of being the best to duplicate the powers in the arrival and departure.

METHODS

Experimental Approach to the Problem

One group of 40 male athletes is experimental group (X) and they were participated in a 12-week Plyometrics training program with upper & lower extremity resistance.

Design

This was a pre-test post-test randomized group experimental pre–post design with all subjects being randomly assigned.

R O1 X O2

O1 Pre-test, O2 is a Post-test, X is experimental group,R is Randomization

Methodology

Each subject underwent measurements of bodyweight and long jump. Pretesting was conducted the week prior to the initiation of the training period. Posttesting was conducted the week following training completion. Subjects were instructed to refrain from exercise for 48 hours.

Long Jump Distance

Long jump length was measured by the jump in sand pit used meter tape and Subjects were allowed a minimum of 3 test jumps with a 30-second recovery between each jump. If subjects improved their jump length between the second and third jump, they were allowed an additional jump. The highest jump recorded was used for data analysis.

Training Protocols

Subjects then were randomly assigned one training group experimental (X) long jump prior to the commencement of the training program. It was the intent of this study to compare the effects of different types of plyometric modalities, not to compare if these modalities improve lower body power versus no training. Also, the researchers, as well as the subjects' respective coaches, did not want the athletes to miss12 weeks of training if placed into. Additional plyometric training was not allowed during the study. Aerobic training and participation in the subjects' respective sports was allowed. The subjects were instructed to continue their usual dietary habits throughout the study. All training was performed 3 days per week with 1 day of rest in between each training day.

Statistical Analyses

was used to determine statistical differences between pre-test and post-test. Significant within-subjects factors were followed up using protected dependent . Effect sizes were calculated by determining the difference between pre-and post-test means, divided by the pretest SDs. Statistical significance all statistical analyses.

	Pre-test	post test
Mean	4.143	4.2705
S.D.	0.037955	0.029267

Training Compliance

There were 36 training sessions over the 12-week training program. There was significant difference among the pre-test and post-test for training compliance. Attendance was pre-test (X) mean value was (4.143) and post-test (X) mean value (4.2705), The good training session was compliance.

DISCUSSION AND CONCLUSIONS

The current investigation compared the effects of a Plyometrics training program The findings of this investigation were that there were significant mean differences for pretest and posttest long jump . Training compliance across group was 80% throughout the 12-week training program. There were statistical differences, however, with training compliance across the group. We had hypothesized that the Plyometrics training would show the greatest amount of change in Long jump .

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