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# REVIEW OF RESEARCH

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## THE EFFECT OF EIGHT WEEKS PLYOMETRIC TRAINING ON LEG POWER

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### ABSTRACT: -

**T**he purpose of the study was to investigate the effect of plyometric training on leg power. To achieve the purpose of the study 20 male subjects were selected randomly. The age ranged between 17 to 19 years. To find out the leg power the standing broad jump test was administered. The data was collected before the training was started and after eight weeks of training. To analyze the data statistical technique 't' test was used. The result shows that there was a significant difference between pre-test and post-test data.

**KEYWORDS:** Plyometric, Training, power .

### INTRODUCTION :

Successful sporting performance at elite levels of competition often depends heavily on the explosive leg power of the athletes involved. In many individual sports such as Track and Field events, Gymnastics and Diving the ability to use high levels of strength as quickly and as explosively as possible is essential to perform at elite levels. Many team sports also require high levels of explosive power, such as Basketball, Volleyball, Netball and the Rugby and Football codes for success at elite levels of competition. The importance of strength and power in the majority of sports is well-accepted and early identification of high strength and power levels can be a useful tool for talent identification, strength diagnosis, development of sport specific profile, and to record the effects of training. Plyometric training is defined as a quick, powerful movement involving an eccentric contraction, followed immediately by an explosive concentric contraction. This is accomplished through the stretch-shortening cycle or an eccentric-concentric coupling phase. The ability of muscles to exert maximal force output in a minimal amount of time (also known as power) enhances performance during functional activities.

### OBJECTIVE OF THE STUDY:

The purpose of this study was to find out the effects of eight weeks plyometric training on leg power.



### METHODS

The subject for present study were forty (n=20) male pre-university college students. They were engaged in regular fitness activities. Before the start of the intervention, the subjects were fully informed about the aims of the study. The standing broad jump test was conducted before the starting plyometric training and after eight weeks training to find out the leg power. The scoring was recorded in meters. plyometric training. The plyometric training was conducted four times a week of approximately 90 minutes. These subjects did not participated in any training activity during this period.

**STATISTICAL ANALYSIS**

To assess the effect of six weeks' plyometric training on leg power, statistical technique t-test was performed on pre-test and post-test data. And the level of significance was set at 0.05 level.

**RESULTS:**

The data collected to achieve the objective of the study was analyzed and results are presented in the following table.

**Table showing the mean value, standard deviation and t value of leg power of the subjects**

	N	Mean	Std. Deviation	t
Pre -test	20	1.94	.32	5.11
Post -test	20	2.06	.36	

\* Significance at 0.05 level

It is clear from the above table that 't' value of leg power was 5.11 which is greater than the table value. And hence it was found significance difference between pre-test and post-test at 0.05 level of confidence.

**CONCLUSION:**

On the basis of the findings, the following conclusions have been drawn

There is significant difference was observed in leg power of the subjects. Hence the effective plyometric training for minimum six weeks will deferrer in leg power in pre-university level males.

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