

Effect Of Plyometric Training On The Development Of Physical Fitness Among Hyderabad Athletes

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Abstract

The Fitness is the ability of an individual to live a full and balanced life. It involves physical, mental, emotional, social and spiritual factors and a capacity for their wholesome expression.” Participation in daily physical activities results in the proper growth and maintenance of good health. Running, jumping, throwing, climbing and hanging from the basic pattern of motor movements throughout the life of human beings; The purpose of the study was to find out the effect of plyometric training whether or not any significant difference found between pre-test and post-test of selected physical fitness variables on Athletes of men and their performance. Hypothesis: There may not be any significant difference between pre – test and post on effect of Plyometric training program among men Hyderabad athletes in relation to physical fitness variable. Methods and Materials: The Hyderabad athletes consisting 50 athletes from Hyderabad district, Telangana State in the age group 18 to 22 years. The selected physical fitness variables i.e speed, agility, endurance, explosive strength, was administrated on Hyderabad athletes after systematic training of plyometric training. Results & Discussions: The speed mean value of pre test of Hyderabad men athletes is 9.94, SD value is 0.818, and for post test of Hyderabad men athletes the value is 7.98 and SD value is 0.553. The agility mean value of pre test of Hyderabad men athletes is 14.22, SD value is 0.932, and for post test of Hyderabad men athletes the value is 9.70 and SD value is 0.580. The endurance mean value of pre test of Hyderabad men athletes is 4852.44, SD value is 326.798, and for post test of Hyderabad men athletes the value is 5952.16 and SD value is 529.358. the explosive strength mean value of pre test of Hyderabad men athletes is 1.86, SD value is 0.351, and for post test of Hyderabad men athletes the value is 2.12 and SD value is 0.328. Hence it is concluded that the pre test and post test of physical fitness variables i.e speed, agility, endurance and explosive strength on effect of plyometric training on the development of physical fitness among Hyderabad athletes in Hyderabad district of Telangana state in their related physical fitness. Keywords: physical fitness, speed, agility, endurance, explosive strength and plyometric training

Introduction:

Physical activity is probably the most enjoyable and yet most inexpensive form of preventive medicine. A sport is an important ingredient of Physical Education and is a worldwide phenomenon today. The unprecedented popularity and better organization of sports activities and competitions would have been impossible without the recognition of the importance of sports for the modern civilization. The value of exercise programmes is becoming evident as more and more people are participating in such programmes and scientific evidence shows that their benefits are accumulated. Recent medical experiments have indicated that a higher level of strenuous activity must be performed over a relatively long excessive period for prevention of heart diseases. The benefit of more strenuous exercise program includes the development of mental discipline and the building of self-confidence in addition to physical benefits.

“Fitness is the ability of an individual to live a full and balanced life. It involves physical, mental, emotional, social and spiritual factors and a capacity for their wholesome expression.” Participation in daily physical activities results in the proper growth and maintenance of good health. Running, jumping, throwing, climbing and hanging from the basic pattern of motor movements throughout the life of human beings., Physical activities promote muscular strength, endurance, agility, speed and coordination of muscular strength, which are the basis for all physical work of the human body. One of the greatest pleasures in the sports is exposure to performance at its highest level. There is something almost artistic about an athletic that is well beyond the normal and demonstrates exceptional grace speed, and control while performing a skill. Getting to the highest level requires skill attainment, mental toughness, years of purposeful practice and dedication (Cho 1990).

Objective of the study:

The purpose of the study was to find out the effect of plyometric training whether or not any significant difference found between pre-test and post-test of selected physical fitness variables on Athletes of men and their performance.

Significance Of The Study

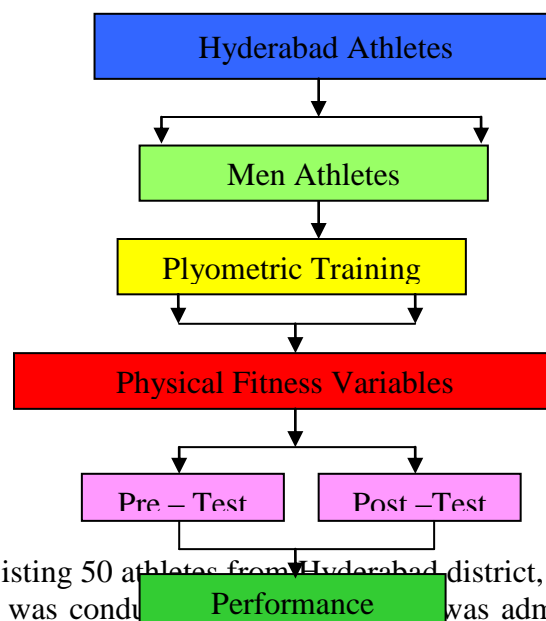
The study investigates the existing difference between pre-test and post-test in relation to their effect of plyometric training on selected physical fitness variables amongmen Athletes and their performance. The finding of the study may provide guidance to the physical education teachers and coaches to prepare training programmes on the basis of the study.It may further help the researchers who are interested in sports and games.The findings of the study may add to the quantum of knowledge in the area of sports and physical education.

Hypothesis:

There may not be any significant difference between pre – test and post on effect of Plyometric training program among men Hyderabad athletes in relation to physical fitness variable.

Design Of The Study

The diagrammatic presentation was presented hereunder.



Methods and Materials:

The Hyderabad athletes consisting 50 athletes from Hyderabad district, Telangana State in the age group 18 to 22 years. The pre-test was conducted and post-test was administrated after the experimental

treatment of the plyometric Training on Hyderabad athletes for 12 weeks. The researcher has collected the data separately from experimental group and control group for pre -test and post –test of 50 Hyderabad athletes of men athletes from Hyderabad district, Telangana State. The subjects were measured with physical fitness variables i.e speed, agility, endurance, explosive strength were administered on Hyderabad athletes after systematic training of plyometric training.

Tools Used:

The following selected physical fitness variables i.e speed, agility, endurance, explosive strength, was administered on Hyderabad athletes after systematic training of plyometric training. The subjects of the study were in the age group between 18 to 22 years from two groups i.e., experimental group and control group.

Results&Discussions:

Table Showing the significance between Pre- Test and Post – Test on effect of plyometric training program on development of Hyderabad men athletes in relation to physical fitness i.e. speed.

Sl. No.	Subjects	N	Mean	SD	df.	't' value	Sig. (2-tailed)
1.	Pre - Test	50	9.94	0.818	98	16.187	0.000
2.	Post - Test	50	7.98	0.553			

The mean value of pre test of Hyderabad men athletes is 9.94, SD value is 0.818, and for post test of Hyderabad men athletes the value is 7.98 and SD value is 0.553. It is very clear a significant difference was found between pre-test and post-test of Hyderabad men athletes at Hyderabad district of Telangana state with regards to the physical fitness i.e. speed.

Table Showing the significance between Pre- Test and Post – Test on effect of plyometric training program on development of Hyderabad men athletes in relation to physical fitness i.e. Agility.

Sl. No.	Subjects	N	Mean	SD	df.	't' value	Sig. (2-tailed)
1.	Pre - Test	50	14.22	0.932	98	29.770	0.000
2.	Post - Test	50	9.70	0.580			

The mean value of pre test of Hyderabad men athletes is 14.22, SD value is 0.932, and for post test of Hyderabad men athletes the value is 9.70 and SD value is 0.580. It is very clear a significant difference exists between pre-test and post-test of Hyderabad men athletes at Hyderabad district of Telangana state with regard to the physical fitness i.e. agility.

Table Showing the significance between Pre- Test and Post – Test on effect of plyometric training program on development of Hyderabad men athletes in relation to physical fitness i.e. Endurance.

Sl. No.	Subjects	N	Mean	SD	df.	't' value	Sig. (2-tailed)
1.	Pre - Test	50	4852.44	326.798	98	13.130	0.000
2.	Post - Test	50	5952.16	529.358			

The mean value of pre test of Hyderabad men athletes is 4852.44, SD value is 326.798, and for post test of Hyderabad men athletes the value is 5952.16 and SD value is 529.358. It is very clear that significant difference was found between pre-test and post-test of Hyderabad men athletes at Hyderabad district of Telangana state with regard of to the physical fitness i.e. endurance.

Table Showing the significance between Pre- Test and Post – Test on effect of plyometric training program on development of Hyderabad men athletes in relation to physical fitness i.e. Standing Broad jump.

Sl. No.	Subjects	N	Mean	SD	df.	't' value	Sig. (2-tailed)
1.	Pre - Test	50	1.86	0.351	98	4.149	0.000
2.	Post - Test	50	2.12	0.328			

The mean value of pre test of Hyderabad men athletes is 1.86, SD value is 0.351, and for post test of Hyderabad men athletes the value is 2.12 and SD value is 0.328. It is very clear a significant difference was found between pre-test and post-test of Hyderabad men athletes at Hyderabad district of Telangana state with regards to the physical fitness i.e. standing broad jump.

Conclusions:

Hence it is concluded that the pre test and post test of physical fitness variables i.e speed, agility, endurance and explosive strength on effect of plyometric training on the development of physical fitness among Hyderabad athletes in Hyderabad district of Telangana state in their related physical fitness. The science of sports training is a recent to field of sports science. The sports science discipline have improved at a very fast pace in the past few decades. The knowledge gained by these disciplines has to be understood by the coaches and trainers to apply it correctly to the training process. Sports training aims to improving the performance of sports persons, Weight training and Plyometric training are very popular now a days and effective training methods to promote higher performance in sprinting and jumping events. Plyometric training exercises are included depth jumping, hopping, bounding drills etc. Are legs plyometric and medicine ball exercise are arms plyometric exercise; these exercises are used to improve speed, explosive strength and other motor ability components. Weight training is on activities of high intensity, short duration and opposite side low intensity and high volume or build muscle, strength and endurance.

In conclusion the major role of recent modernization, commercialization and increased work schedule of an athlete's lifestyle has prompted the need for higher physical fitness levels. A key component of physical fitness in athlete is to maintain high agility levels. Several study have shown the programs of PT, to increase physical ability and such training leads to increase of muscles power and boosts explosive needs in the bodies. The factors such as power and acceleration have the range of motion exercises that are useful for many sports movement. According to previous studies, this method in PT can be currently most useful training to increase the explosive power in athletes is the requirement for athletes to achieve high levels of performance. Plyometric training is a training strategy designed to improve the performance by incorporating the basic needs of agility and power, allows muscle to reach exponential increase in the maximum strength and speed of movement

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