

RESEARCH ARTICLE

EFFECT OF WEIGHT TRAINING EXERCISES FOR DEVELOPMENT OF SPEED AND AGILITY AMONG DISCUS THROWERS OF HYDERABAD IN INDIA

Prof. RAJESH KUMAR

Chairman, Board of Studies in Physical Education
Osmania University, Hyderabad



ABSTRACT

The Purpose of the study is to find out the effect of Weight Training exercises for development of Speed and agility among discus throwers of Hyderabad in India. The Sample for the Study consists of 20 Male Discus Throwers of Hyderabad District between the age group of 18-21 Years, 10 are Experimental Group and 10 are Control group. Weight training exercises are given Three times a week for eight weeks for experimental group and controlled group were given general training of Discus Throw. It is concluded that due to the weight training that Speed and Agility has improved in the Discus throwers. It is recommended that similar studies can be conducted on other events in Athletics.

Article Info

Article Received:22/11/14

Revised from:29/11/14

Accepted on: 30/11/14

Available online:02/12/14

Key words: Weight Training, Discus, speed, agility etc.

©KY Publications

INTRODUCTION

Weight training is a common type of strength training for developing the strength and size of skeletal muscles. It uses the weight force of gravity (in the form of weighted bars, dumbbells or weight stacks) to oppose the force generated by muscle through concentric or eccentric contraction. Weight training uses a variety of specialized equipment to target specific muscle groups and types of movement. Sports where strength training is central are bodybuilding, weightlifting, power lifting, and strongman, Highland games, shot-put, discus throw, and javelin throw. Many other sports use strength training as part of their training regimen, notably; mixed martial arts, American football, wrestling, rugby football, track and field, rowing, lacrosse, basketball, baseball and hockey. Strength training for other sports and physical activities is becoming increasingly popular.

The discus throw is a track and field event in which an athlete throws a heavy disc—called a discus—in an attempt to mark a farther distance than his or her competitors. It is an ancient sport, as evidenced by the fifth-century-B.C. Myron statue, Discobolus. Although not part of the modern pentathlon, it was one of the events of the ancient Greek pentathlon, which can be dated at least to 708 BC. The discus throw is a routine part of most modern track-and-field meets at all levels and is a sport which is particularly iconic of the Olympic Games. The men's competition has been a part of the modern Summer Olympic Games since the first

Olympiad in 1896. Images of discus throwers figured prominently in advertising for early modern Games, such as fundraising stamps for the 1896 games and the main posters for the 1920 and 1948 Summer Olympics.

The women's competition was added to the Olympic program in the 1928 games, although they had been competing at some national and regional levels previously.



The discus throw is the subject of a number of well-known ancient Greek statues and Roman copies such as the Discobolus and Discophoros. Discus throwers have been selected as a main motif in numerous collectors' coins. One of the recent samples is the €10 Greek Discus commemorative coin, minted in 2003 to commemorate the 2004 Summer Olympics. On the obverse of the coin a modern athlete is seen in the foreground in a half-turned position, while in the background an ancient discus thrower has been captured in a lively bending motion, with the discus high above his head, creating a vivid representation of the sport.

METHODS AND MATERIALS

The sample for the present study consists of 20 Male Discus throwers out of which 10 are experimental group and 10 are controlled group between the age group of 18-21 Years. Weight training exercises are given Three times a week for eight weeks for experimental group and controlled group were given general training of Discus Throw.

The following are the weight training exercises were given three times a week for eight weeks to the experimental group discus throwers.

1. Biceps Curls
2. Triceps Curls
3. Bench Press
4. Back Press
5. Bent Over Rowing
6. Up right Rowing
7. Wrist Curls
8. Half Squats
9. Full Squats
10. Dead Lifts
11. Good Morning
12. Side Wards Bend
13. Heel raising with weights
14. Leg Press
15. Push ups
16. Sit Ups
17. Medicine Ball Exercises



18. Dumbell Exercises
19. Half Squat Jumps
20. High Knee action with weights
21. Hopping with weights

The above exercises used as per the requirement in the three sessions in a week. The controlled group were given general training of Discus Throw.

To assess the Speed and Agility the Pre Test and Post Test the following tests were conducted

1.50 Meters run

2. Shuttle Run

RESULTS AND DISCUSSION

The results of the study shows that Discus Throwers of Experimental group has increased in Speed and agility due to strength Training compare to discus Throwers Control group which does the general training of discus throw

Table: I Showing the Values of Discus Throwers Experimental and control Groups in 50 M Run Test for Speed

group	N	Mean	Std. Deviation	Std. Error Mean
50 M Run Pre Test Exp	10	6.771	.1577	.0499
50 M Run Pre Test Control	10	6.811	.1425	.0451
50 M Run Post Test Exp	10	6.595	.1517	.0480
50 M Run Post Test Control	10	6.887	.1203	.0380

		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
50 M Run Pre Test	Equal variances assumed	-.595	18	.559
50 M Run Post Test	Equal variances assumed	-4.770	18	.000

Table: II Showing the Values of Discus Throwers Experimental and control Groups in Shuttle Run Test for Agility

group	N	Mean	Std. Deviation	Std. Error Mean
Shuttle Run Pre Test Exp	10	14.372	.3977	.1258
Shuttle Run Pre Test Control	10	14.412	.4032	.1275
Shuttle Run Post Test Exp	10	14.195	.3954	.1250
Shuttle Run Post Test Control	10	14.482	.4393	.1389

		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Shuttle Run Pre Test	Equal variances assumed	-.223	18	.826
Shuttle Run Post Test	Equal variances assumed	-1.535	18	.142



In Table I in 50 M Run to assess the speed the experimental group mean values in Pre Test is 6.771 has decreased to 6.595 in Post Test due to the weight training the control group mean values in Pre Test is 6.811 has increased to 6.887 due to general training. Hence the weight training is beneficial for development of speed in Discus throwers.

In Table II in Shuttle run to assess the agility the experimental group mean values in Pre Test is 14.372 has decreased to 14.195 in Post Test due to the weight training the control group mean values in Pre Test is 14.412 has increased to 14.482 due to general training. Hence the weight training is beneficial for development of agility in discus throwers.

CONCLUSIONS

It is concluded that due to the weight training that Speed and Agility has improved in the Discus throwers.

RECOMMENDATIONS

It is recommended that similar studies can be conducted on other events in athletics and also female discus throwers. This type of study is useful to coaches to give proper coaching for development of motor qualities for improvement of performance in Discus Throwers.

REFERENCES

- [1]. Wikipaedia, Weight Training
- [2]. Wikipaedia, Discus Throwers
- [3]. <http://en.wikipedia.org/wiki/Discus>
- [4]. <http://dictionary.sensagent.com/Discus%20throw/en-en/>
- [5]. <http://j-douglas1114-dp.blogspot.com/2012/01/100-things-collect-communicate.html>