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STUDY ON WEIGHT TRAINING EFFECTS AND THEIR IMPACTS ON THROWER PERFORMANCE

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ABSTRACT

The main objective of the study was to find out the Weight Training Effect and their Impacts on thrower Performance. For the present study 50 Shot Put (25 male and 25 female) athletes were selected randomly from inter-collegiate Athletic students who participated in inter-collegiate athletic competition at Dr.RLA University, Ayodhya. The age of the subjects were ranging from 17 to 28 years. Researcher divided 50 subjects into two homogeneous groups. i.e. 25 in group 'A' as experimental group and 25 in group 'B' as control group. To collect the data from shot putters in Shoulder strength (Pull-ups for boys & flexed arm hang for girls), Arm strength (Pushups), Flexibility (Sit & Reach test) and Shot put performance were administrated on the selected subjects. After the statistical analysis the significant difference were found between the pre and post test of experimental group and also in post test of control and experimental group hence researcher hypothesis was accepted.

Keywords: Weight Training, & Thrower Performance.

INTRODUCTION

Physical fitness has been acclaimed as one of the essential requirements of personality development; it is a quality of men and women athletes in all spheres of life. Throughout the world physical fitness movement has grown in size and it gives special importance to youth. Increasingly, the medical profession generally agrees that proper exercise is highly desirable as an integral part of maintaining health is far more enjoyable than trying to regain it. Fitness is a product of exercise and training has been shown

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through research to process important implications in the general health of people. Weight training exercises are a type of strength training exercises in which you use the force of gravity to build muscle strength, often through the use of fitness equipment such as dumbbells, barbell bars or gym equipment.

HYPOTHESIS OF THE STUDY

It was hypothesized that there would be significant differences in the effect of weight training programme on male and female thrower athletes.

DESIGN OF THE STUDY

The sources of data were inter-collegiate student athletes who participate in inter-collegiate athletic competition at Dr.RLA University, Ayodhya. For the present study 50 Shot Put (25 male and 25 female) athletes was selected randomly from participation in inter-collegiate athletic competition at concerned university. The age of the subjects is 17 to 28 years.

ANALYSIS OF THE DATA

To determine the significant difference in the means of weight training effect and their impacts on Shot put Performance of shot putters between the male groups and between the female groups as well as between the pre-test and post test means of experimental and control group 't'-test was employed.

Table No-I

Pull-ups (Boys) and Flex Arm Hang (Girls) between the Means of Pre and Post-tests

Group	Test	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Boys	Pre-test	8.5	1.509	0.5	0.548	0.913@
	Post-test	9.0	1.491			
Girls	Pre-test	9.429	1.687	0.652	0.619	1.054@
	Post-test	10.081	1.703			

@ Not significant at 0.05 level Tabulated t0.05 (9) = 2.262

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The above Table no-I show that, Pull-ups for boys mean difference between the Pre-test and Post-test of Control group is not significant, because the calculated t-value of 0.913 is less than the tabulated t-value of 2.262 at 0.05 level of confidence of 9 degree of freedom.

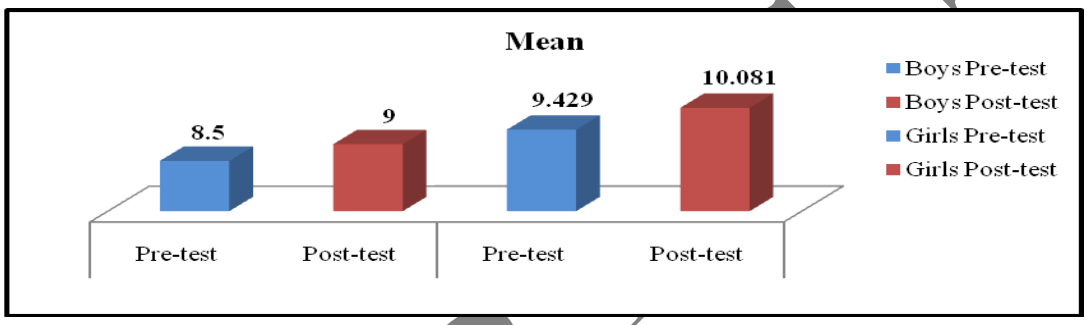

Table No-II

Push-ups of Boys & Girl between the Means of Pre and Post-tests of Control Group

Group	Test	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Boys	Pre-test	5.500	1.650	0.500	0.561	0.891@
	Post-test	6.000	1.414			
Girls	Pre-test	3.900	1.287	0.400	0.430	0.930@
	Post-test	4.300	1.059			

@ Not significant at 0.05 level Tabulated t0.05 (9) = 2.262

The above Table no- II show that, Push-ups for boys mean difference between the Pre-test and Post-test of Control group is not significant, because the calculated t-value of 0.891 is less than the tabulated t-value of 2.262 at 0.05 level of confidence of 9 degree of freedom.

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Table No-III

Sit & Reach Test between the Means of Pre and Post-tests of Control Group

Group	Test	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Boys	Pre-test	15.000	2.494	0.600	0.732	0.819@
	Post-test	15.600	1.350			
Girls	Pre-test	12.800	2.300	0.500	0.759	0.659@
	Post-test	13.300	1.829			

@ Not significant at 0.05 level Tabulated t0.05 (9) = 2.262

The above Table no-III show that, Sit and Reach Test for boys mean difference between the Pre-test and Post-test of Control group is not significant, because the calculated t-value of 0.819 is less than the tabulated t-value of 2.262 at 0.05 level of confidence of 9 degree of freedom.

Table No-IV

Shot-put Performance between the Means of Pre and Post-tests of Control Group

Group	Test	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Boys	Pre-test	22.960	3.057	0.740	1.131	0.654@
	Post-test	23.700	3.137			
Girls	Pre-test	9.160	1.335	0.720	0.477	1.509@
	Post-test	9.880	1.277			

@ Not significant at 0.05 level Tabulated t0.05 (9) = 2.262

The above Table no-IV show that, Shot-put Performance for boys mean difference between the Pre-test and Post-test of Control group is not significant, because the calculated t-value of 0.654 is less than the tabulated t-value of 2.262 at 0.05 level of confidence of 9 degree of freedom.

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Table No-V

Pull-ups (Boys) and Flex Arm Hang (Girls) between the Means of Pre and Post-tests of Experimental Group

Group	Test	Mean	Standard Deviation	Mean Difference	Standard Error	't'-ratio
Boys	Pre-test	8.4	1.838	2.1	0.649	3.235*
	Post-test	10.5	1.716			
Girls	Pre-test	9.309	1.556	2.1	0.546	3.844*
	Post-test	11.409	1.434			

* Significant at 0.05 level Tabulated t0.05 (18) = 2.100

The above Table no-V show that, Pull-ups for boys mean difference between the Pre-test and Post-test of Experimental group is significant, because the calculated t-value of 3.235 is greater than the tabulated t-value of 2.100 at 0.05 level of confidence of 18 degree of freedom.

FINDINGS ON THE STUDY

1. Insignificant difference observed in pre-test and post-test of control group boys Pull-ups (t = 0.913), girls Flex Arm Hang (t = 1.054), boys Push-ups (t = 0.891), girls Push-ups (t = 0.930), boys Sit and Reach Test (t = 0.819), girls Sit and Reach Test (t = 0.569) and boys Shot-put Performance (t = 0.654) and girls Shot-put Performance (t = 1.509), because the calculated t-values are less than the tabulated t-value of 2.262 at 0.05 level of confidence of 9 degree of freedom.
2. Significant difference observed in pre-test and post-test of experimental group boys Pull-ups (t = 3.235), girls Flex Arm Hang (t = 3.844), boys Push-ups (t = 3.646), girls Push-ups (t = 3.394), boys Sit and Reach Test (t = 2.937), girls Sit and Reach Test (t = 2.964) and boys Shot-put Performance (t = 2.793) and girls Shot-put Performance (t = 3.414), because the calculated t-values are greater than the tabulated t-value of 2.262 at 0.05 level of confidence of 9 degree of freedom.

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3. Significant difference observed in post-test of control and experimental group boys Pull-ups (t = 2.556), girls Flex Arm Hang (t = 2.311), boys Push-ups (t = 2.585), girls Push-ups (t = 2.483), boys Sit and Reach Test (t = 3.020), girls Sit and Reach Test (t = 2.271) and boys Shot-put Performance (t = 2.307) and girls Shot-put Performance (t = 2.140), because the calculated t-values are greater than the tabulated t-value of 2.100 at 0.05 level of confidence of 28 degree of freedom.

CONCLUSION

On the basis of findings following conclusions were drawn:-

1. Significant difference found in Shoulder strength i.e. in Pull-ups for boys and in flexed arm hang for girls because of weight training.
2. Significant difference found in boys and girls in Arm strength (Pushups).
3. Significant difference found in boys and girls in Flexibility (Sit & Reach test).
4. Significant difference found in boys and girls in all the variables, hence that effect also observed in Shot put performance.

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