



ISSN: 2456-0057

IJPNPE 2020; 5(2): 17-19

© 2020 IJPNPE

[www.journalofsports.com](http://www.journalofsports.com)

Received: 12-05-2019

Accepted: 14-06-2019

**Atul Subhas Gorde**

Sports Teacher, Govt. Aashram  
School, Danrat, Nandurber  
Maharashtra, India

**Dr. Sanjay D Chaudhari**

Professor, Director of Physical  
Education and Sports The PCS's  
D D N Bhole College, Bhusawal  
Dist. Jalgaon Maharashtra,  
India

## A study of effect of six week training programme on selected motor fitness component of rugby players

**Atul Subhas Gorde and Dr. Sanjay D Chaudhari**

### Abstract

The purpose of the study was to determine the "Effect of Six Week Training Programme on Selected Motor Fitness Component of Young Rugby Players. The study was delimited to the male Young Rugby Players of Jalgaon City. The age of selected subject were ranging from 16 to 19 years and their status was inter School level. The researcher had selected 80 Young Rugby Players. Their fitness was tested by some selected exercises for Explosive Strength, Speed, Endurance and Agility. The scores were arranged in descending order. Twenty (20) of high performance along with Twenty (20) of low performance, were eliminated. It was done to selected the subjects of an average standard. Remaining forty (40) were finally selected for the study, twenty subjects in each control and experimental group respectively. Initial or pre test was conducted before the start of the experiment and was conducted on both the groups "A" and "B". The endurance was measured by using 600 yard run which was recorded in minutes and seconds. The explosive strength of shoulder was measure by using soft ball throw which was recorded in feet. (Maximum Distance Covered). The speed was measured by using 50 yard dash which was recorded in seconds. The agility was measured by using shuttle run (20x4) which was recorded in seconds and micro seconds.

**Keywords:** selected motor fitness, rugby players

### Introduction

These days coaches and physical education teachers and experimenting on ways and means to find out the best. The physical fitness components are very essential for the Rugby players. players required arm and shoulder strength to maintain the speed, Agility and Endurance in the Game. The purpose of the study was to determine the Effect of Six Week Training Programme on Selected Motor Fitness Component of Young Rugby Players The study would help in finding out the methods of improving the Speed, Agility, Explosive Strength and Endurance of male Young Rugby Players. The study was delimited to the male Young Rugby Players of Jalgaon City. The age of selected subject were ranging from 16 to 19 years and their status was inter School level. It might help the players to develop their physical fitness. It would help the players to select the correct exercises of coaching for their Rugby Players.

### Procedure

The researcher had selected 80 Young Rugby Players. Their fitness was tested by some selected exercises for Explosive Strength, Speed, Endurance and Agility. The scores were arranged in descending order. Twenty (20) of high performance along with Twenty (20) of low performance, were eliminated. It was done to select the subjects of an average standard. Remaining forty (40) were finally selected for the study, twenty subjects in each control and experimental group respectively. Initial or pre-test was conducted before the start of the experiment and was conducted on both the groups "A" and "B". The endurance was measured by using 600 yard run which was recorded in minutes and seconds. The explosive strength of shoulder was measure by using soft ball throw which was recorded in feet. (Maximum Distance Covered). The speed was measured by using 50 yard dash which was recorded in seconds. The agility was measured by using shuttle run (20x4) which was recorded in seconds and micro seconds.

**Corresponding Author:**

**Atul Subhas Gorde**

Sports Teacher, Govt. Aashram  
School, Danrat, Nandurber  
Maharashtra, India

**Table 1:** Training Schedule for Six Weeks

Week	Days	Exercise Programme	Intensity	Repetition	Sets	Recovery	Duration	Total Volume
I & II	Mon	Zig-Zag Run	50-55%	3	3	10 Seconds between repetition and 1 minute between sets and 2 minutes between activity.	15 minutes warm-up approx. 15-20 min. for activities (with recovery) 15 min. cool down.	Appro. 1.15 min.
	Wed	Weight Scott & 60 Yard Dash		4	3			
	Fri	Medicine Ball Throw & 800 yard Run		10	3			
III & IV	Tues	Medicine Ball Throw & 800 yard Run	55-60%	3	1	2 min. between sets. (Incomplete) 2 min. for each Repetition (Incomplete)	15 min. warming up. -- 2 min. between repetition. 15 min. cool down	Appro. 1.15 min
	Thur			12	3			
	Sat.			3	1			
<b>Sunday Rest</b>								
V & VI	Mon	Zig-Zag Run	60-70%	3	3	20 Seconds between repetition and 2 minute between sets. 2 minutes between activities.	15 minutes warm-up approx. 15-20 min. for activities. 15 min. cool down.	Appro. 1.15 min
	Wed	Weight Scott & 60 Yard Dash		4	3			
	Fri	Medicine Ball Throw & 800 yard Run		12	3			
III & IV	Tues	Medicine Ball Throw & 800 yard Run	60-65%	3	1	2 min. between sets. (Incomplete) 3 min. between sets. (Incomplete)	15 min. warming up. -- 1.5 min. for each repetition. 15 Min. Cool Down	Appro. 1.15 min
	Thur			3	1			
	Sat.			3	1			
<b>Sunday Rest</b>								
V & VI	Mon	Zig-Zag Run	65-75%	3	3	30 Seconds between repetition (Complete recovery between sets i.e. 3-4 minutes)	15 minutes warm-up approx. 25-30 min. for activities. 15 min. for cool down.	Appro. 1.15 min
	Wed	Weight Scott & 60 Yard Dash		3	3			
	Fri	Medicine Ball Throw & 800 yard Run		4	3			
V & VI	Tues	Medicine Ball Throw & 800 yard Run	75-85%	3	1	3 min. between sets. (complete) 3-4 min. between sets (complete)	15 min. warming up. -- 1.5 min. for each repetition. 15 min. cooling down.	Approximately 1-15 minutes
	Thur			3	1			
	Sat.			3	1			

**Analysis and interpretation of data**

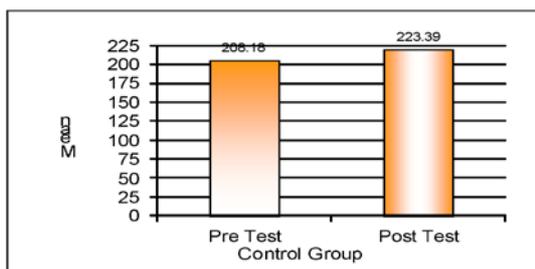
The statistical analysis of the data consisting of raw scores made by the subjects by constructing a motor fitness (4 item) test by the help of AAHPERD Fitness Test have been presented in this chapter. The level of significance to test the hypothesis in term of 't' ratio obtain was chosen as 0.05 level of confidence. The obtain raw scores in each test items were converted into standard scores with the help of 't' scale and composite score was formed, which were subjected to 't' test to find out the overall significant difference between the two groups i.e. pre-test and post-test. After calculating the overall significant difference in pre and post test, each item of test was subjected to 't' test to find out the significant difference.

**Table 2:** Significance of Mean Difference between Pre-Test and Post-Test of Control Group

Group	Mean	Mean Diff.	S.D.	't' ratio
Pre Test	208.18	15.21	26.781	1.86
Post Test	223.39		26.194	

Tabulated  $t_{0.05}(20) = 2.09$

If calculated 't' is greater than the tabulated  $t_{0.05}$ , then there is a significant difference between the means of two test performance of group. It is observe that calculated the 't' value of 1.86 is less than the tabulated 't' value of 2.09. Hence there is no significant difference between the means of pre and post test of control group.



**Fig 1:** Graph Showing Mean Difference Between Pre-Test and Post-Test of Control Group

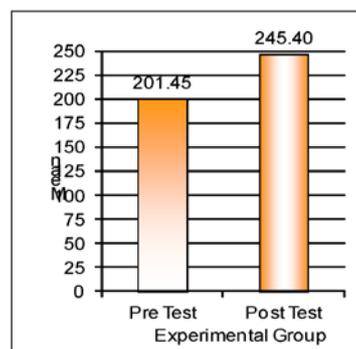
**Table 3:** Significance of Mean Difference between Pre-Test and Post-Test of Experimental Group

Group	Mean	Mean Diff.	S.D.	't' ratio
Pre Test	201.45	43.95	30.423	5.184
Post Test	245.45		25.116	

Tabulated  $t_{0.05}(20) = 2.09$

If calculated 't' is greater than the tabulated  $t_{0.05}$ , then there is a significant difference between the mean of two test performed of group. It is observed that calculated the 't' value of 5.184 is greater than 't' value of 2.09. Hence there is significant difference between the means of pre and post test of experimental group.

Cal.  $t = 5.184 > \text{tab. } t_{0.05}(20) = 2.09$



**Fig 2:** Graph Showing Mean Difference Between Pre-Test and Post-Test of Experimental Group

**Table 4:** Significance of Mean Difference between Post Test of Control Group and Experimental Group

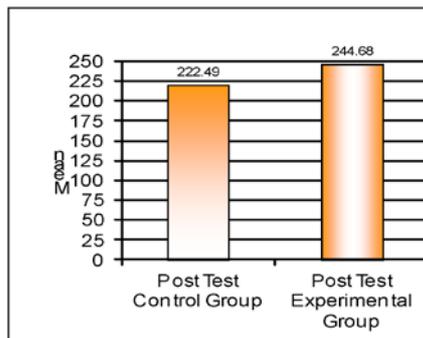
Group	Mean	Mean Diff.	S.D.	't' ratio
Post Test Control Group	222.49	22.19	25.194	3.366
Post Test Experimental Group	244.68		24.118	

Tabulated  $t_{0.05}(20) = 2.09$

If calculated 't' is greater than the tabulated  $t_{0.05}$ , then there is a significant difference between the mean of two test performance of groups. It is observed that calculated 't' value of 3.366 is greater than the tabulated 't' value of 2.09.

Hence there is a significant difference between the means of post test of control and experimental group.

Cal.  $t = 3.366 > \text{tab. } t_{0.05}(20) = 2.09$



**Fig 3:** Graph showing Mean Difference Between Post Test of Control Group and Experimental Group

Study of the selected motor fitness training programme of Young Rugby Players of age group 16 to 19 years of Jalgaon city indicates there is a significant difference between the motor fitness of both the group i.e. control and experimental group.

### Finding

Table-2 it shows that the mean differences between the pre-test and post-test of control group is 1.86, so it is found that there is no significant difference in both the tests. Table-3, found that the experimental group have more speed, explosive strength, endurance and agility compare to the control group as their performance is found to be significant. Table-4, show that experimental group of post test have more mean in their motor fitness as compared to the pre-test and performance is found to be significant.

It has been observed from the result of the finding of the study that the pre and post test experimental group between the age group of 16 to 19 years had better motor fitness (Explosive Strength, Speed, Endurance and Agility) of pre and post test of control group as measured by there overall performance by some selected exercises of motor fitness.

### References

1. Chui, Edward F. "Effect of Isometric and Dynamic Weight Training Exercises Upon Strength and Speed of Movement", 1964.
2. Daniel P. McNair, "Effect of Different Exercise Programme on the Development of Cardio-Vascular Fitness, Strength and Muscular Endurance", Completed Research in Health, Physical Education and Recreation, X, 1968.
3. Gordon A Olafson. "The Effect of an Endurance Exercise Programme on Cardio-Vascular Variables of a Group of Middle-Age Men", Completed Research in Health, Physical Education and Recreation, 1966, 10.
4. Hardayal Singh, Sports Training -General Theory of Method, NIS Patiala, 1984.
5. Harold M, Barrow PED, Rosemy McGee. A Practical Approach to Measurements in Physical Education, (London: Henry Kimpton Publishers), 1976.
6. Joseph B. Oxidine, Psychology of Motor Learning, (New York: Application Century Crafts), 1968.
7. LN Mathur. The Encyclopaedia of Indian Rugby, (Udipur: Rajhans Publication), 1965.
8. Narottam Puri, Rugby Quiz, (New Delhi: Ansari Road, Vikas Publishing House), 1977.