

ISO 9001 - 2015

ISSN 2349 - 4891

Monthly



IF
4.665

Volume 4, Issue 8, August 2017

International Journal of
Recent Research and Applied Studies

SURRAGH PUBLICATIONS
SURRAGH PUBLICATIONS





Effect of Physical Activity on Selected Physical Fitness Components of the Sedentary Students

R.Anista¹, Dr.P.Sivagnanam² & Dr K.Devaraju³

¹Director of Physical Education, Wavoo Wajeetha Women's College of Arts and Science, Kayalpatnam, Tuticorin, Tamilnadu, India.

²Director of Physical Education, VOC Arts and Science College, Tuticorin, Tamilnadu, India.

³Director of Physical Education, Dr Sivanthi Aditanar College of Engineering, Tiruchendur, Tuticorin, Tamilnadu, India.

Received 28th June 2017, Accepted 5th August 2017

Abstract

The Purpose of the study to find out the Effect of Physical activity on selected Physical Fitness components of the Sedentary Students. To achieve this purpose of the study has selected 26 students among M.Sc Integrated women students of Pondicherry University from various departments. They are aged from 17 -18 years as per the university records .The subject voluntarily participated in the physical activity programme. The training programme was included Pre test and Post test session. The training was given for 3 days per week for two months. The data were collected from the selected Physical fitness variables namely Strength, Explosive Power, Cardio Respiratory Endurance was statistically examine by using "t" ratio. Pre test and Post test were taken for analysis of data from the single group design. The level of significance was fixed at 0.05 level of confidence.

Keywords: Physical Exercise, Strength, Explosive Power, Cardio Respiratory Endurance.

© Copy Right, IJRRAS, 2017. All Rights Reserved.

Introduction

Physical fitness is an inseparable part of total fitness for effective living. Fitness involves interrelationship between intellectual and emotional as well as Physical factors, Good health is the basic component of fitness. Physical fitness only one components of the total fitness of the individual which also includes mental fitness, social Fitness and emotional fitness. Physical fitness is an ability to carry out daily tasks with ample energy to engage in leisure pursuits and to meet emergency situations. Regular participation in sports and games not only reduce extra body fat but also increase the strength, speed and endurance etc. Physical exercise is important for maintaining physical fitness and can contribute to maintaining a healthy weight, regulating digestive health, building and maintaining healthy bone density, muscle strength, and joint mobility, promoting physiological well-being, reducing surgical risks, and strengthening the immune system. Physical exercise specializing in the use of resistance to induce muscular contraction which builds the strength, anaerobic endurance. Strength exercise is beneficial for everyone, even people in their 90s. Flexibility exercises are activities that improve the ability of a joint to maintain the movement necessary for carrying out daily tasks and physical activity.

Methodology

To achieve this purpose of the investigator has selected 26 M.Sc integrated women students were selected from various department in Pondicherry University Puducherry. The training programme was included Pre test and Post test session. The training was given for 3 days per week for two months. The data were collected from the selected Physical fitness variables namely Strength, Explosive Power, Cardio Respiratory Endurance was statistically examine by using "t" ratio. Pre test and Post test were taken for analysis of data from the single group design. The level of significance was fixed at 0.05 level of confidence.

Result and Discussion

Table 1
Computation of Mean, Standard Deviation and Standard Error of the Mean on Strength Test

Group	Mean	Standard Deviation	Mean Difference	rDM	T ratio
Pre Test	14.269	5.762	4.231	1.885	2.244
Post Test	18.50	7.072			

Table 1 shows that the significance difference in sit ups between Pre test and Post test. The "t" value required to be significance at 0.05 levels for 26 degrees of freedom is 2.056. The calculated "t" value is 2.244 for

Correspondence

R.Anista

E-mail: anistarajagopal@gmail.com

26 degrees of freedom at 0.05 level of confidence. Since, the calculated “t” value is greater than the required “t” value there is significant difference between the two

groups. Hence the Hypothesis was accepted. The mean difference in sit ups is 4.231 are found to be significant.

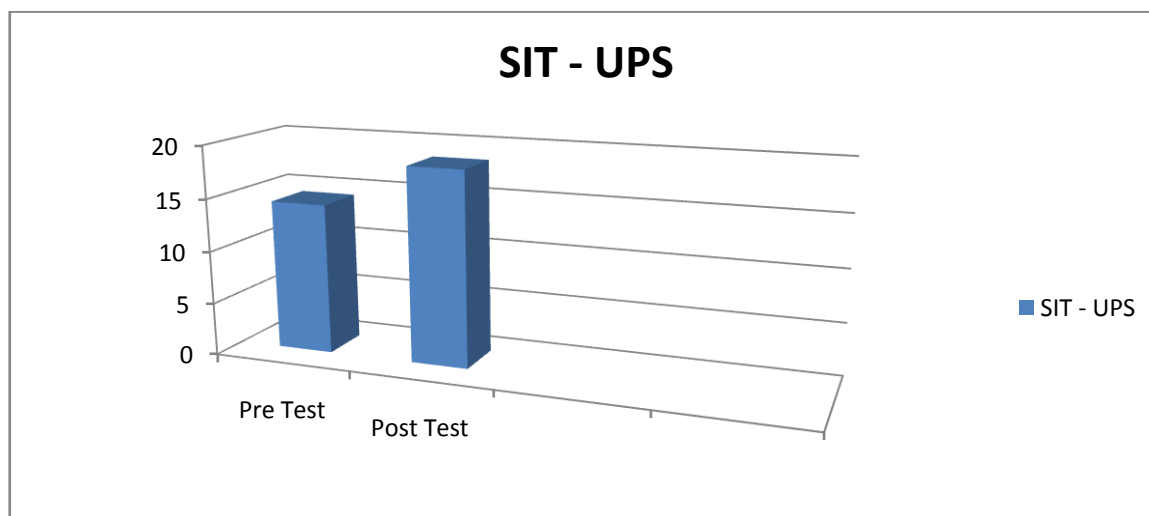


Table 2

Computation of Mean, Standard Deviation and Standard Error of the Mean on Explosive Power Test

Group	Mean	Standard Deviation	Mean Difference	rDM	T ratio
Pre Test	1.302	0.159	0.128	0.049	2.588
Post Teat	1.431	0.196			

Table 2 shows that the significance difference in Standing Broad Jump between Pre test and Post test. The “t” value required to be significance at 0.05 levels for 26 degrees of freedom is 2.056. The calculated “t” value is 2.589 for 26 degrees of freedom at 0.05 level of

confidence. Since, the calculated “t” value is greater than the required “t” value there is significant difference between the two groups. Hence the Hypothesis was accepted. The mean difference in Standing Broad Jump is 0.129 are found to be significant.

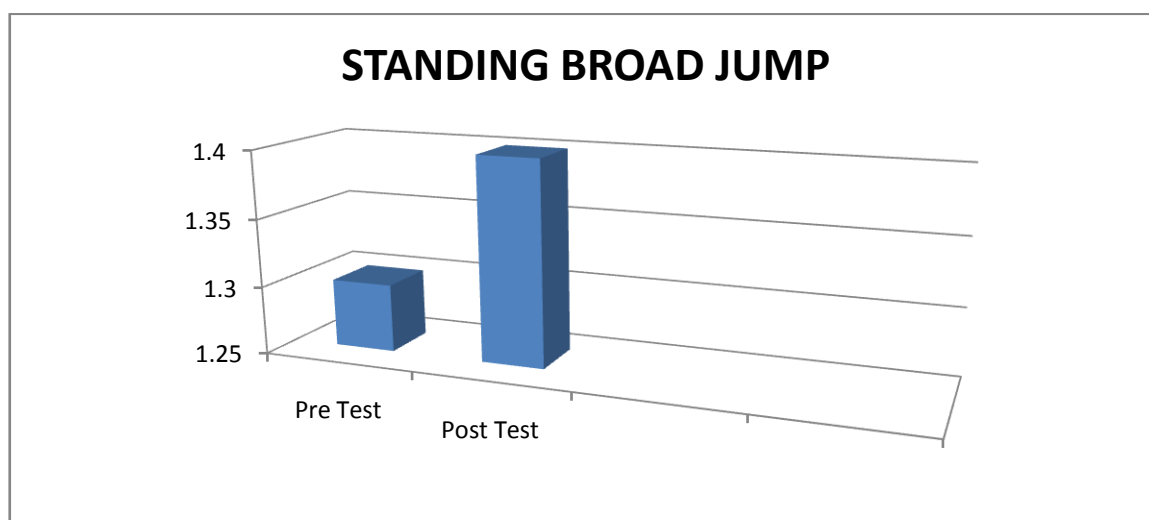


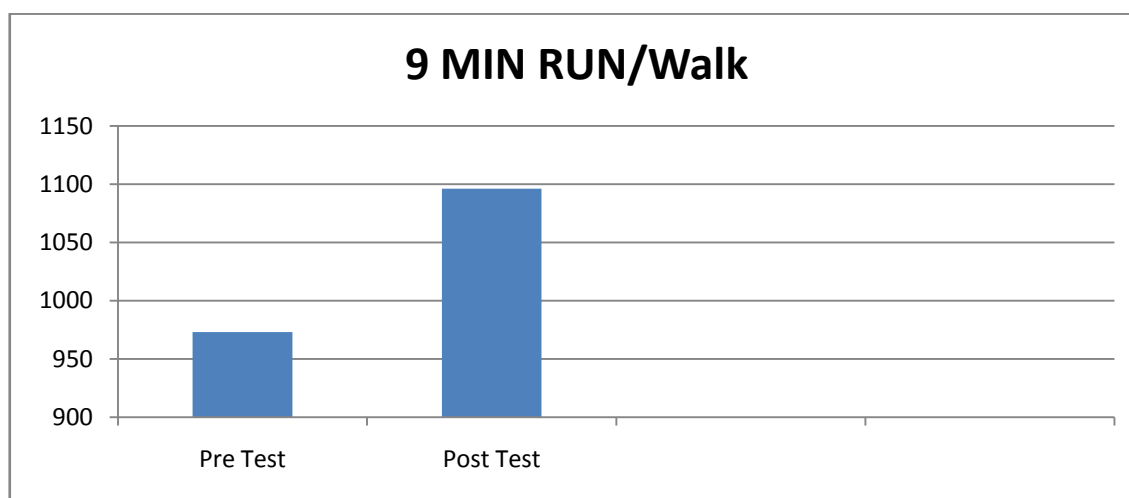
Table 3

Computation of Mean, Standard Deviation and Standard Error of the Mean on Endurance

Group	Mean	Standard Deviation	Mean Difference	rDM	T ratio
Pre Test	973.077	94.289	32.426	122.923	3.7908
Post Teat	1096.154	135.819			

Table 3 shows that the significance difference in 9 min Run and Walk between Pre test and Post test group. The “t” value required to be significance at 0.05 levels for 26 degrees of freedom is 2.056. The calculated “t” value is 3.791 for 26 degrees of freedom at 0.05 level

of confidence. Since, the calculated “t” value is greater than the required “t” value there is significant difference between the two groups. Hence the Hypothesis was accepted. The mean difference in 9 min Run/Walk is 122.923 which are found to be significant.



Conclusion

1. Physical activity group significantly improved strength, explosive power and endurance.

Reference

1. Harrison H. Clarke. Application Measurement to Health and Physical Education (Engle woods cliffs, New Jersey: Prentice hall .inc.,1976):173.
2. Hallal PC et.al., "Adolescent Physical Activity and Health: A Systematic Review", Sports Medicine, (2006):36(12):1019-30.
3. Frank W.Bick, "Vital Individual Fitness Programmes"(Engle Wood N.J: Prentice Hall, 1973):229.