

Research Paper

**EFFECT OF SELECTED FREE HAND EXERCISES ON THE PHYSICAL FITNESS
COMPONENTS OF COLLEGE STUDENTS.****S.Jayasingh Albert Chandraekar¹, Dr. J. Samuel Jesudoss²**

1.S.Jayasingh Albert Chandrasekhar, Ph.D Research scholar, Tamilnadu Physical Education and Sports University, Chennai, Tamilnadu, India.

2. Assistant Professor, YMCA College of Physical Education
jayasinghalbert@yahoo.com,

Abstract

For the purpose of the study, 20 college men were selected as subjects randomly from the YMCA college of physical education, Chennai who were not participated any of the special training or the coaching programme. However they were allowed to participate in their regular physical education classes in the college as per their curriculum. The subjects were aged between 20 and 25. For the present study the following dependent variables were selected Coordination, Flexibility. Free hand exercise training was selected as independent variable. To find out whether there was any significant difference between the pre-test means the dependent 't' ratio was used. The result of the study showed that the training program has resulted in a significantly improved the flexibility and coordination of college students.

Introduction

A sport is an indoor or outdoor activity involving physical and mental effort and skill, a game where people compete with each other according to fixed rules. It is an activity people take up during their free time, usually for fun, amusement, recreation or entertainment, It is used to be considered mere trivia, a peripheral activity, a part time and an appendage to the core of life which life can do without a refuge for the escapist. But such a definition of sports has undergone a sea change in the modern days when sports have become indispensable for life to be meaningful and wholesome, both playing (sports) and watching sports.

Methodology

For the purpose of the study, 20 college men were selected as subjects randomly from the YMCA College of physical education, Chennai who were not participated any of the special training or the coaching programme. However they were allowed to participate in their regular physical Education classes in the college as per their curriculum. The subjects were aged between 20 and 25. For the present study the following dependent variables were selected Coordination, Flexibility. Free hand exercise training was selected as independent variable. During the training programme the subjects underwent their training programmes for five days per week (morning) over 6 weeks. Every training session lasted for 45 to 60 min. approximately.

Analysis and interpretation of the data

Single group design was used for the study. The following statistical procedures were used to analyze the obtained data. To find out whether there was any significant difference between the pre-test means the dependent 't' ratio was used. To test the level of significant of difference between the means 0.01 level of confidence was fixed.

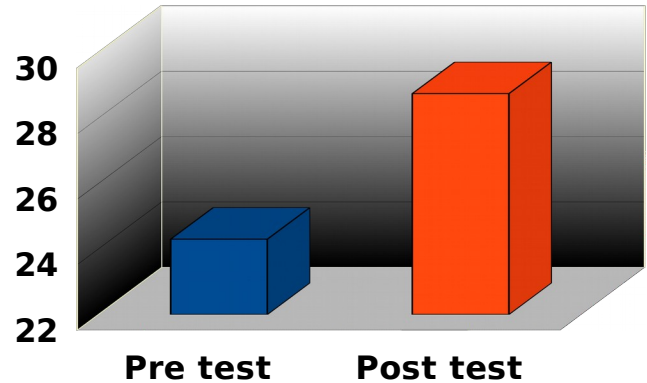
Table - 1
Summary of mean, standard deviation and dependent 't' test for the pre and post tests on flexibility of experimental group

Group	Number	Mean	S.D	Obtained 't' ratio
Pre test	20	24.30	3.60	4.06*
Post-test	20	28.75	2.93	

*Significance at 0.05 level, $t(0.5)_{19} = 2.093$

From the table I shows that the pre test and post-test mean values were 24.30 and 28.75 respectively. The obtained dependent 't' ratio value between the pre and post-test means of experimental group is 4.06. The obtained value was greater than the required table value 2.093 with df 19 at 0.05 level of confident. It may be concluded that, there was significant improvement between the pre and post-test means in improving the performance of flexibility.

The mean values of pre and post-test of experimental group on flexibility were graphically represented in Figure I.



the pre and post test mean values of experimental group on flexibility

Table-2
Summary of mean, standard deviation and dependent 't' test for the pre and post tests on coordination of experimental group

Group	Number	Mean	S.D	Obtained 't' ratio
Pre test	20	0.314	0.125	5.78*
Post-test	20	0.173	0.131	

*Significance at 0.05 level, $t(0.5)_{19} = 2.093$

From the table II shows that the pre test and post-test mean values were 0.314 and 0.173 respectively. The obtained dependent 't' ratio value between the pre and post-test means of experimental group is 5.78. The obtained value was greater than the required table value 2.093 with df 19 at 0.05 level of confident. It may be concluded that, there was significant improvement between the pre test and post-test means in improving the performance of coordination.

The mean values of pre and post-tests of experimental group on coordination were graphically represented in Figure II.

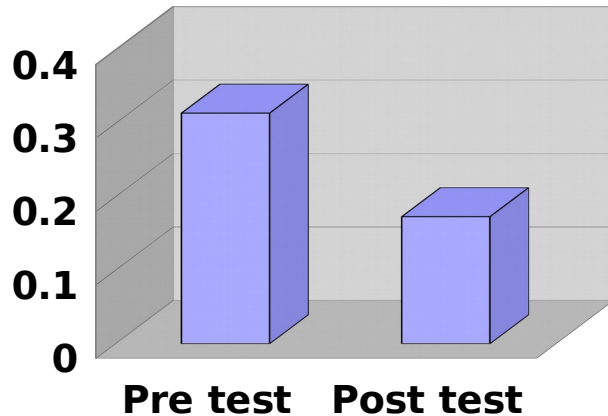


Figure-2:
the pre and post test mean values of experimental group on co ordination

Conclusion

The result of the study showed that the training program has resulted in a significantly improved the flexibility and coordination of college students.

References

1. Author's Guide, Our Physical Activities, Bombay: Printing Works, 1955.
2. Beashel, Paul and John Taylor, The World of Sports Examined, United Kingdom: Nelson Publication, 1996.
3. Bucker, Charles. A., Foundation of Physical Education, Saint Louis: C.V. Mosby Company, 1964.
4. Dawer Victor, P and Robert P. Pengrazi, Dynamic Physical Education for Elementary School Children, New York: Macmillan Publishers, 1989.
5. Goldberg, Barry, Sports and Exercise for Children with Chronic Health Conditions, Champaign Illinois: Human Kinetics Publishers, 1986.
6. Jack Wilmore, Matchacell Pullock and Samuel M. Foxill., Health and Fitness Through Physical Activi
New York: John Willay and Sony Inc, 1978.

8. Mc Gettiyan, James P., Soccer Drills for Individual and Team Play, Champaign Illinois: Human Kinetics Publishers, 1987.
9. Rouland, Thomas W., Exercise and Children's Health, Champaign Illinois: Human Kinetics Books, 1990.
10. Singh, Hardayal., Science of Sports Training, New Delhi: D.V.S. Publications, 1991.
11. Uppal, A.K., Principles of Sports Training, New Delhi: Friends Publications, 1992.