FINDINGS OF EFFECTIVENESS OF HANDBALL PRACTICE DRILL PROGRAMME ON PHYSICAL FITNESS

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ABSTRACT: *The purpose of the study was to find out the effect of handball training drill programme on physical fitness on school students. Forty male students aged between 14 to 18 years were selected for the study. They were divided into two equal groups, each group consisting of twenty students in which one of the groups was experimental group, training was given to them 4days per weeks and other group acted as controlled group, which did not participate in any training. The subjects were tested on the selected criterion variables such as strength, flexibility, endurance, speed and agility at prior to and immediately after the training period. The analysis of covariance (ANCOVA) was used to find out the significant difference if any, between the experimental group and controlled group on the selected variables separately. The selected criterion variables such as strength, flexibility, endurance, speed and agility were improved significantly for experimental group when compared to controlled group.*

Keywords: Physical fitness, sports training, handball, strength, flexibility, endurance, speed and agility.

INTRODUCTION

Physical fitness is regarded as the preparedness for performance with special regard for big muscles activity. As a more general phase of physical fitness, motor fitness is judged by performance and its common factors are strength, endurance and Speed. In the recent sears greater stress has been laid on the quality of training, the rather than the quantity of training. The sports scientists and experts of sports want their sportsmen to extract maximum achievement from their training Procedures without causing too much strain on them. This is possible only if coaches and teachers of physical education apply the most economical manner for enhancing the performance of athletes. The ideal level of fitness is arguable never achieved. Athletes always strive to improve, to push their limits as far upwards as possible. As Handball demands on the majority of the body's physiological systems, fitness for the game includes many factors besides competence in game skills and tactical awareness. A key aim in fitness for handball is to enhance or maintain fitness in areas of strength while correcting weaknesses. In this way the goal of securing an optimal combination of fitness measures can be realized.

METHODOLOGY

In the study it was aimed to find out the effect of handball training drill programme on the physical fitness variables like Strength, Endurance, Speed and Agility. To achieve the purpose 40 male students were selected from std VIII to XII with average age of 16 years from O.P. Jindal Vidhyaniketan In Samaghogha, Mundra (Kutchh). Subjects for the study were selected randomly and divided in two groups of twenty each. In which one of the group was experimental group (n=20) to which training was given. The training was given Four days per week for six weeks and the other group acted as a controlled group (n=20) which did not participate in any training. For every training programme there would be a change in various structure and systems in human body. So, the researchers consulted with the experts and then selected the following variables as criterion variables: strength, flexibility, endurance, speed and agility.

ANALYSIS OF DATA

The analysis of covariance (ANCOVA) were used to find the significant difference if any, among the experimental and control groups on selected criterion variables separately. In all the cases, 0.5 level of confidence was fixed to test the significance, which was considered as an appropriate.

Table 1
ANALYSIS OF COVARIANCE OF SCORES IN STANDING BROAD JUMP WITH ONE LEG

Group	Experimental Group	Control Group	Sum of Square	df	Mean Sum of Square	F-Ratio
Pre-Test Mean	1.637	1.667	A=.016 W=2.702	1 38	.016 .0711	.225
Post-Test Mean	1.9085	1.6655	A=.5905 W=6.8223	1 38	.5905 .179	3.2889
Adjusted Post-Test Means	1.9187	1.6553	A=0.6893 W=6.1248	1 37	0.6893 0.16883	4.1641

*Significant at .05 level of confodance.

Table 2
ANALYSIS OF COVARIANCE OF SCORES IN MODIFIED SIT AND REACH

Group	Experimental Group	Control Group	Sum of Square	df	Mean Sum of Square	F-Ratio
Pre-Test Mean	3.375	3.302	A=.0533 W=19.619	1 38	.0533 .5163	.103
Post-Test Mean	3.967	3.324	A=4.1409 W=13.336	1 38	4.1409 .3509	11.799
Adjusted Post-Test Means	3.939	3.3521	A=3.44 W=1.7141	1 37	3.44 0.46327	74.3

*Significant at .05 level of confidance.

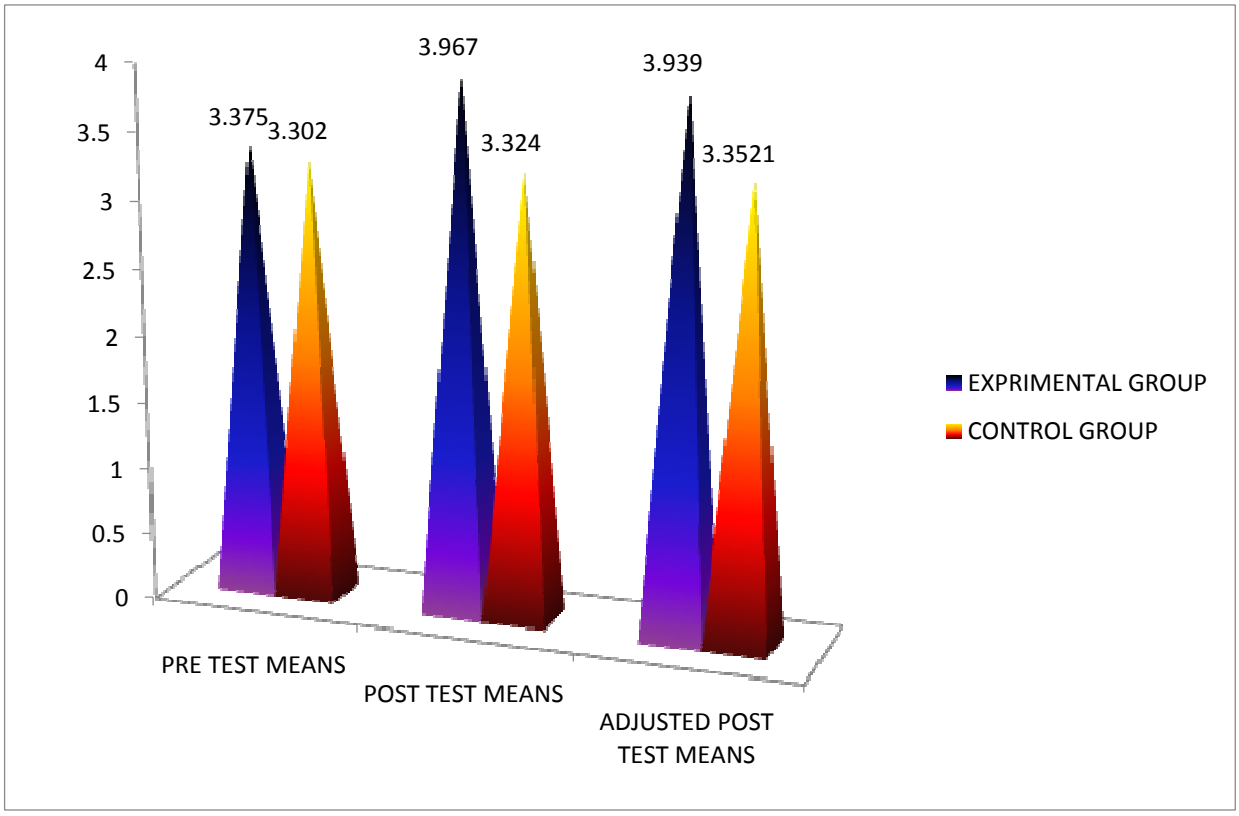


Table 3
ANALYSIS OF COVARIANCE OF SCORES IN ONE MILE RUN/WALK

Group	Experimental Group	Control Group	Sum of Square	df	Mean Sum of Square	F-Ratio
Pre-Test Mean	13.039	11.746	A=16.718 W=50.325	1 38	16.718 1.3243	12.624
Post-Test Mean	8.3425	11.414	A=94.341 W=29.08	1 38	94.341 0.765	123.27
Adjusted Post-Test Means	8.1381	11.618	A=90.918 W=24.051	1 37	98.14 0.6500	140

*Significant at .05 level of confidance.

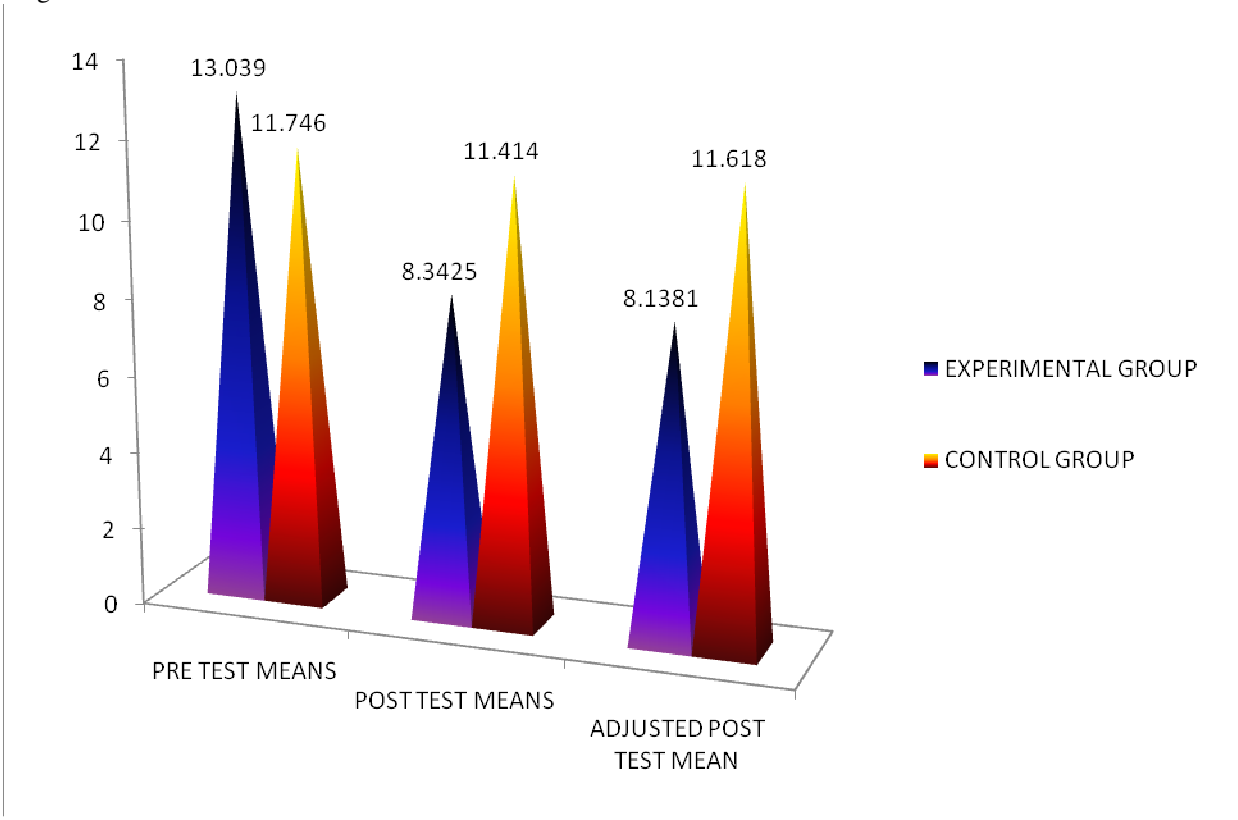
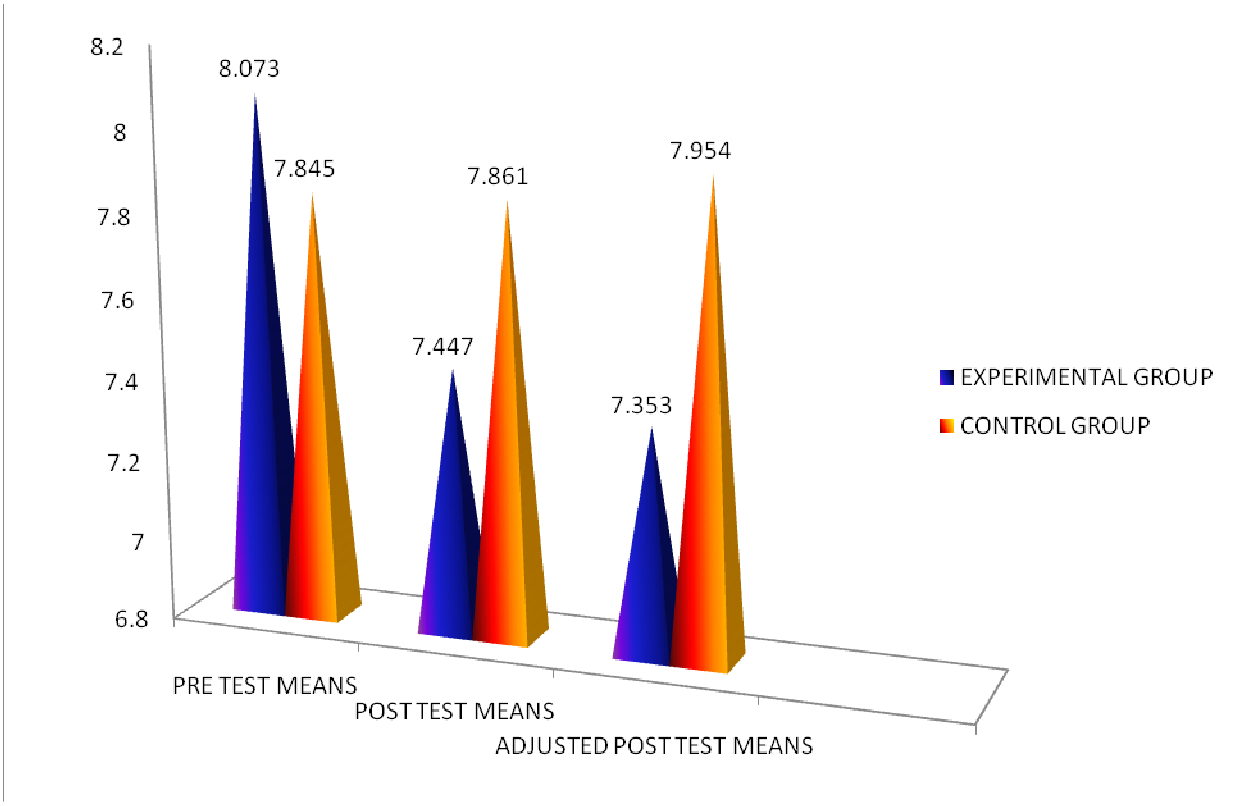


Table 4
ANALYSIS OF COVARIANCE OF SCORES IN 50 YARD DASH

Group	Experimental Group	Control Group	Sum of Square	df	Mean Sum of Square	F-Ratio
Pre-Test Mean	8.289	7.97	A=1.0176 W=17.581	1 38	1.0176 0.4626	2.1995
Post-Test Mean	7.6405	7.9185	A=0.7728 W=16.424	1 38	0.77284 0.43220	1.788116
Adjusted Post-Test Means	7.5513	8.0077	A=1.9687 W=10.928	1 37	1.96872 0.29534	6.67

*Significant at .05 level of confidence.



DISCUSSION OF FINDINGS

Statistical calculation of the gathered data showed that there is increase in all the selected variables of physical fitness i.e. strength, endurance, speed and agility as tested by standard tests. The tests includes standing broad jump with one leg test, modified sit and reach test, one mile run/walk test, 50 yard test and dogging and run test respectively of the experimental group in comparison to controlled group. Despite of the fact that there was no specific exercise in the training schedule for the development of the selected physical fitness variables still there was improvement.

So, above study and analysis reveals that handball training drill programme has been quite effective for the development of physical fitness which includes dribbling, passing, kicking, throw-in, heading and various running, sprinting and stretching exercises.

CONCLUSION

Based on the findings of the study, the following conclusions are drawn:-

1. Handball training drill programme leads to development of the following, standing broad jump with one leg, modified sit and reach, one run/ walk, 50 yard dash and dogging and run.
2. Handball training drill programme is effective in improvement of physical fitness.
3. The hypothesis proposed by the scholar is rejected.

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