



EFFECT OF BENCH STEP TRAINING ON THE SELECTED PHYSICAL FITNESS COMPONENTS AMONG COLLEGE STUDENTS

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ABSTRACT

The purpose of the study was to find out the effects of bench step training on the selected physical fitness components among college students. In order to achieve these purpose thirty college men students were selected from villupuram district, Tamilnadu as subjects at random and their age was ranged between 18 to 21. The subjects were divided into two groups such as experiment group and control group. In this study, bench step training was given to experimental group for the period of 6 weeks. The pre-tests were taken from the subjects before administrating the training. The subjects were involved with their respective training for a period of 6 weeks. At the end of the sixth weeks of the training post-tests were taken. The significant differences between the means of experimental group and control group for the pre-test and post-test scores were determined by paired 't' ratio. The level of significance was fixed at 0.05 level of confidence for the degree of freedom 14. The strength, flexibility and speed were improved due to the influence of bench step training.

KEYWORDS: Bench Step Training, College students, Physical Fitness.

INTRODUCTION

The training process acts a means of improvement of sports performance. In order to ensure fast development in every individual, the physical education teachers, the coaches and the instructors must possess a thorough knowledge of the improvement aspects of sports training. Training demands correct understanding and realisation of the sportsman's strength, capacity and weakness so planned and formulated that the strong points are further encouraged and developed and his weakness are discriminated and eliminated. Bench step training plays a vital role in determining the sports performance. Bench step training must develop the specific physiological capabilities required to perform a given sports skill or activity. The successful coach provides his or her athletes with a group strategy, a psychological environment conducive to a medium level of performance a means of learning skills and a proper course of bench step training. In the stepping up exercise, each subject will be asked to stand near the twenty two inch high bench. On the command "ready start the subject began stepping for a period of three minutes. The first method of bench step exercise the subject was performed the bench step exercise for three minutes with thirty cadence per minute. By this

method the experimental group I could be followed. The second method of bend step exercise the subject was performed the bench step exercise for three minutes with forty cadence per minute. By the methods the experimental group II could be followed (Bennet, 1995).

METHODOLOGY

The purpose of the study was to find out the effects of bench step training on the selected physical fitness components among college students. In order to achieve these purpose thirty college men students were selected from Villupuram district, Tamilnadu as subjects at random and their age was ranged between 18 to 21. The subjects were divided into two groups such as experiment group and control group. In this study, bench step training was given to experimental group for the period of 6 weeks. The pre-tests were taken from the subjects before administrating the training. The subjects were involved with their respective training for a period of 6 weeks. At the end of the sixth weeks of the training post-tests were taken. The significant differences between the means of experimental group and control group for the pre-test and post-test scores were determined by paired t ratio. The level of significance was fixed at 0.05 level of confidence for the degree of freedom 14.

RESULTS

TABLE I

DESCRIPTIVE ANALYSIS OF PRE AND POST TEST MEANS OF EXPERIMENTAL AND CONTROL GROUP ON SELECTED VARIABLES

S.No	Variables	Pre Test Mean	Post Test Mean
1	Strength	Exp:6.60	Exp:8.67
		Con:7.60	Con:7.80
2	Flexibility	Exp:44.07	Exp:47.80
		Con:39.47	Con:39.67
3	Speed	Exp:8.29	Exp:8.21
		Con:8.17	Con:8.14

TABLE II

COMPUTATION OF 't' RATIO BETWEEN THE PRE TEST AND POST TEST MEANS OF STRENGTH OF EXPERIMENT GROUP AND CONTROL GROUP

S. No	Variables	Mean diff	SD	σ DM	't' ratio
1	Strength	Exp:2.07	Exp:0.80	Exp:0.21	10.02*
		Con:0.20	Con:0.41	Con:0.11	1.87

*Significant at 0.05 level

An examination of table II indicates that the obtained 't' ratios for strength of experimental group was 10.02. The obtained 't' ratio on strength were found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The obtained 't' ratios for

strength of control group was 1.87. The obtained 't' ratio on strength were found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be not significant. The mean scores of strength of experimental group and control group were shown graphically in figure I.

FIGURE I

BAR DIAGRAM SHOWING THE PRE MEAN AND POST MEAN OF STRENGTH OF EXPERIMENTAL GROUP AND CONTROL GROUP

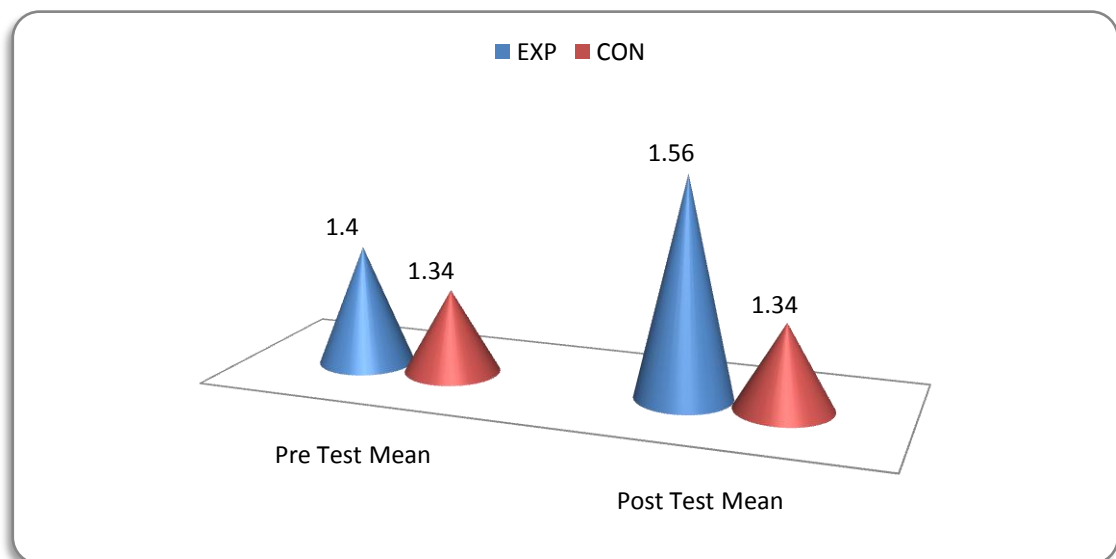


TABLE III
COMPUTATION OF ‘t’ RATIO BETWEEN THE PRE TEST AND POST TEST MEANS OF FLEXIBILITY OF EXPERIMENT GROUP AND CONTROL GROUP

S. No	Variables	Mean diff	SD	σ DM	‘t’ ratio
1	Flexibility	Exp:3.73	Exp:1.03	Exp:0.27	14.00*
		Con:0.20	Con:0.41	Con:0.11	1.87

*Significant at 0.05 level

An examination of table III indicates that the obtained ‘t’ ratios for flexibility of experimental group was 14.00. The obtained ‘t’ ratio on flexibility were found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The obtained ‘t’ ratios for flexibility of control group was 1.87. The obtained ‘t’

ratio on flexibility were found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be not significant. The mean scores of flexibility of experimental group and control group were shown graphically in figure II.

FIGURE II
BAR DIAGRAM SHOWING THE PRE MEAN AND POST MEAN OF FLEXIBILITY OF EXPERIMENTAL GROUP AND CONTROL GROUP

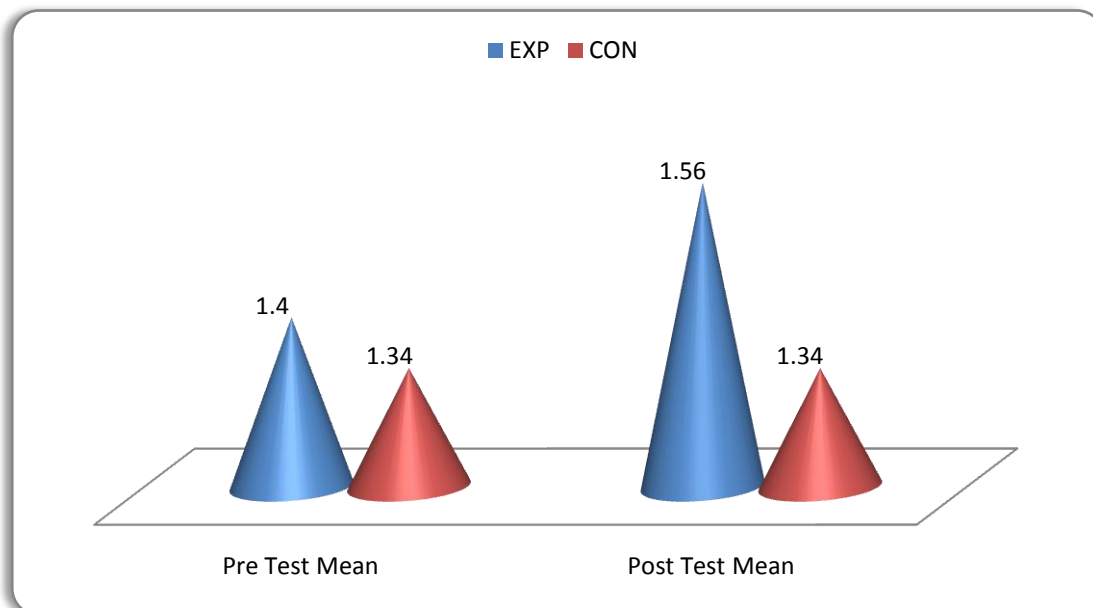


TABLE IV
COMPUTATION OF ‘t’ RATIO BETWEEN THE PRE TEST AND POST TEST MEANS OF speed OF EXPERIMENT GROUP AND CONTROL GROUP

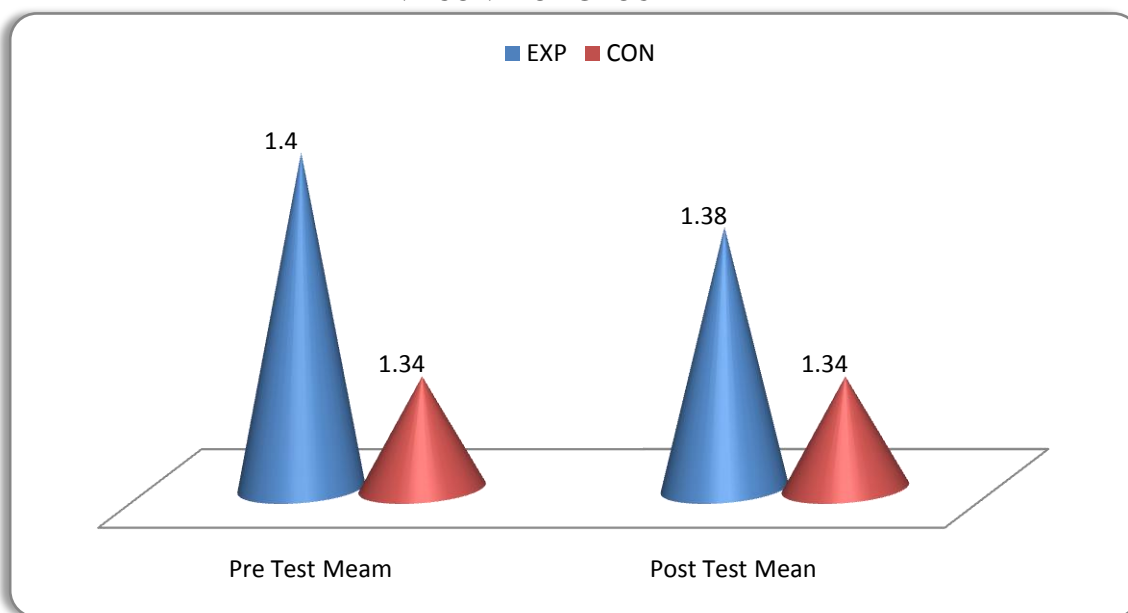
S. No	Variables	Mean diff	SD	σ DM	‘t’ ratio
1	speed	Exp:0.07	Exp:0.05	Exp:0.01	5.21*
		Con:0.29	Con:0.10	Con:0.27	1.07

*Significant at 0.05 level

An examination of table IV indicates that the obtained ‘t’ ratios for speed of experimental group was 5.21. The obtained ‘t’ ratio on speed were found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The obtained ‘t’ ratios for speed

of control group was 1.46. The obtained ‘t’ ratio on speed were found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be not significant. The mean scores of speed of experimental group and control group were shown graphically in figure III.

FIGURE III
BAR DIAGRAM SHOWING THE PRE MEAN AND POST MEAN OF SPEED OF EXPERIMENTAL GROUP AND CONTROL GROUP



CONCLUSION

The strength, flexibility and speed were improved due to the influence of bench step training.

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