

EFFECT OF FARTLEK AND COMPLEX TRAINING ON SPEED AMONG PHYSICAL EDUCATION STUDENTS

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ABSTRACT

The study was formulated as a true random group design consisting of a pre-test and post test. The subjects (N=45) were randomly assigned to three equal groups of 15 physical education students. The groups were designed as fartlek training group -1, complex training group- 2 and control group- 3 respectively. Pre test was conducted for all the 45 subjects on speed. The experimental groups were participated in respective training for a period of six weeks. The control group did not participate in any of the training programme. Speed was assessed by 50 M dash. The training programme was scheduled at 6.00 to 7.30 am three days per week (Monday, Wednesday, and Friday). The Analysis of covariance (ANCOVA) was used to test the treatment effect. When the adjusted post-test was significant, the Scheffe's post-hoc test was used to find out the paired mean differences. It was observed that fartlek training have showed better in speed.

KEYWORDS: Fartlek, Complex, Speed, Physical Education Students.

INTRODUCTION

Fartlek training sessions can greatly help in increasing speed and endurance in runners. This is often especially useful if the athlete reached a plateau in the training sessions. While experienced runners who are already into interval training can use Fartlek for increasing their anaerobic threshold and stamina, newbies to the running circuit can use Fartlek for helping their speed training and endurance training and for adding variety to their cardio workout program. Fartlek scores over interval training during a number of the way. Complex training is one among the foremost advanced sorts of sports training, integrates strength training, plyometric, and sport-specific movement. It consists of an intense strength exercise followed by a plyometric exercise. The mixture of plyometric training and weight training are thought to be useful for developing athletic power. More specifically, complex training alternates biomechanically similar high load weight training exercises with plyometric exercises, set for set, within the same workout. An example of complex training would come with performing a group of squats followed by a group of jump squats. Anecdotal sources have described the appliance of complex training. (Ebben, 2002)

METHODOLOGY

The study was formulated as a true random group design consisting of a pre-test and post test. The subjects (N=45) were randomly assigned to three equal groups of 15 physical education students. The groups were designed as fartlek training group -1, complex training group- 2 and control group- 3 respectively. Pre test was conducted for all the 45 subjects on speed. The experimental groups were participated in respective training for a period of six weeks. The

control group did not participate in any of the training programme. Speed was assessed by 50 M dash. The training programme was scheduled at 6.00 to 7.30 am three days per week (Monday, Wednesday, and Friday). The Analysis of covariance (ANCOVA) was used to test the treatment effect. When the adjusted post-test was significant, the Scheffe's post-hoc test was used to find out the paired mean differences.

RESULTS

TABLE - I
COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF SPEED OF EXPERIMENTAL AND CONTROL GROUPS

	Fartlek	Complex	Control	Sum of variance	Sum of squares	df	Mean square	F
Pre Test Mean	7.79	7.71	7.72	BG:	0.04	2	0.02	0.29
				WG:	3.29	42	0.07	
Post Test Mean	7.46	7.56	7.71	BG:	0.46	2	0.23	3.80*
				WG:	2.56	42	0.06	
Adjusted Mean	7.44	7.57	7.71	BG:	0.54	2	0.27	5.29*
				WG:	2.11	41	0.05	

* Significant at 0.05 level

Table value for df 2 and 42 was 3.21

Table value for df 2 and 41 was 3.22

The above table indicates the adjusted mean value of speed of experimental and control groups were 7.44, 7.57 and 7.71 respectively. The obtained F-ratio of 5.29 for adjusted mean was greater than the table value 3.22 for the degrees of freedom 2 and 41 required for significance at 0.05 level of confidence. The result of the study indicates that there was a significant difference among experimental and control groups on speed. The above table also indicates that both pre and post test means of control and experimental groups also differ significantly. The mean values of speed of both experimental and control groups are graphically represented in the figure-I

FIGURE - I
BAR DIAGRAM SHOWING THE PRE MEAN, POST MEAN AND ADJUSTED
MEAN ON SPEED

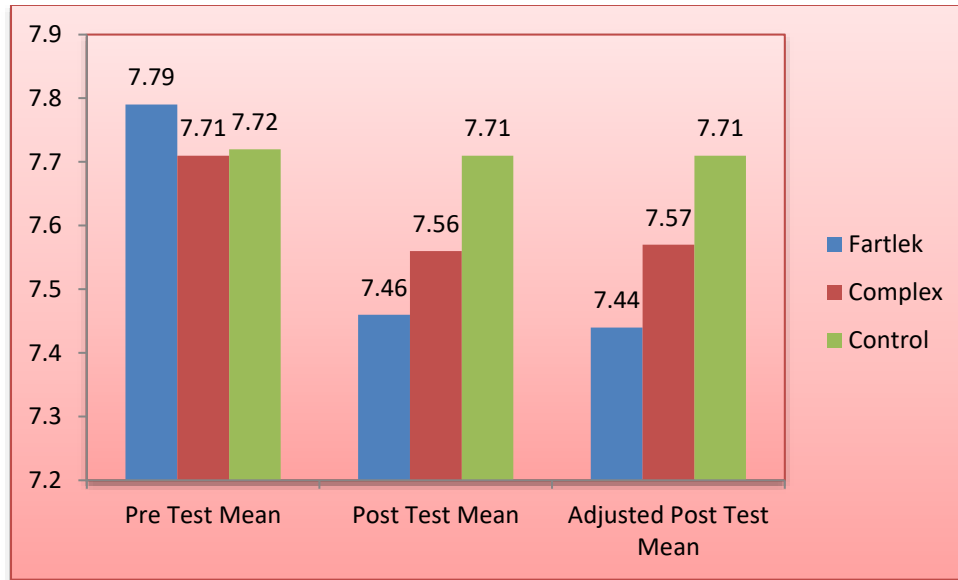


TABLE - II
ADJUSTED MEAN AND DIFFERENCES BETWEEN THE MEANS OF FARTLEK,
COMPLEX TRAINING AND CONTROL GROUPS ON SPEED

Fartlek Training Group	Complex Training group	Control Group	Mean Difference	CI Value
7.44	7.57	---	0.13	0.14
7.44	---	7.71	0.27*	
---	7.57	7.71	0.14*	

Table - II shows the adjusted means on speed and difference between the means of the fartlek, complex training and control groups. The mean differences of fartlek training group and control group, complex training group and control group were 0.27 and 0.14 respectively was greater than the CI value 0.14. Hence there exists significant difference. The mean difference between fartlek training group and complex training group was 0.13 lesser than the CI value 0.14. Hence there exists no significant difference.

CONCLUSION

1. It was observed that fartlek training have showed better in speed.

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