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Effect of Varied Pace Training on Selected Physical Fitness Parameters among Cricket Players

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Abstract

The study's goal was to investigate how different training tempos affected cricket players' strength endurance and cardiopulmonary endurance. Thirty cricket players from AVC College in Mayiladuthurai were chosen as study subjects. There were two equal groups formed out of them. Every group comprised the fifteen participants. For twelve weeks, Group I received training at varying speeds three days a week. Group II served as the control group and was not subjected to any additional training beyond their usual physical education curriculum. Strength endurance and cardio-respiratory endurance were the variables that were chosen as criteria. Prior to and right after the training programme, all of the participants in the two groups underwent tests on specific dependent variables, such as strength endurance and cardio respiratory endurance, using bend-knee situps and Cooper's 12-minute run/walk test, respectively. To determine whether there was a significant difference between the groups, the analysis of covariance was employed. The significance level for testing the 'F' ratio derived from the analysis of covariance was set at the.05 level of confidence, which was deemed suitable. The results of the study showed that there was a significant difference between varied pace training group and control group on strength endurance and cardio respiratory endurance. And also it was found that there was a significant improvement on selected criterion variables such as strength endurance and cardio respiratory endurance due to varied pace training.

Keywords: Varied Pace Training, Physical Fitness, College Men

Introduction

Running enthusiasts utilise varied pace training as a well-liked and useful training technique to enhance their running speed, endurance, and general performance. The word "fartlek" comes from the Swedish word "speed play," and this training style does exactly that—it alternates between faster and slower running intervals, or recovery runs. Because of its adaptability and flexibility, runners can tailor their workouts to their goals, fitness level, and the terrain that is available.

Because runners can modify their pace changes and intervals based on perceived effort, personal preference, or environmental cues, varied pace training is unstructured. Fartlek exercises don't include predetermined distances or rest intervals, in contrast to more structured training techniques like interval training. Instead, it's an exciting and dynamic form of exercise because runners can change up how fast and how hard they run during the run. Variable pace training tests the anaerobic and aerobic energy systems by adding faster-paced intervals. As a result,

there is an increase in oxygen utilisation, cardiovascular endurance, and tolerance to higher levels of lactic acid accumulation.

Methodology

The study's goal was to investigate how different training tempos affected cricket players' strength endurance and cardiopulmonary endurance. Thirty cricket players from AVC College in Mayiladuthurai were chosen as study subjects. There were two equal groups formed out of them. Every group comprised the fifteen participants. For twelve weeks, Group I received training at varying speeds three days a week. Group II served as the control group and was not subjected to any additional training beyond their usual physical education curriculum. Strength endurance and cardio-respiratory endurance were the variables that were chosen as criteria. Prior to and right after the training programme, all of the participants in the two groups underwent tests on specific dependent variables, such as strength endurance and cardio respiratory endurance, using bend-knee situps and Cooper's 12-minute run/walk test, respectively. To determine whether there was a significant difference between the groups, the analysis of covariance was employed. The significance level for testing the 'F' ratio derived from the analysis of covariance was set at the.05 level of confidence, which was deemed suitable.

Analysis of the Data

Table I

Analysis of Covariance of the Data on Strength Endurance of Pre And Post Tests Scores of Varied Pace Training

Test	Varied pace training group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	34.13	33.93	Between	0.30	1	0.30	0.02
S.D.	3.84	3.50	Within	448.67	28	16.02	
Post Test							
Mean	37.00	34.20	Between	58.80	1	58.80	3.49*
S.D.	3.89	3.90	Within	471.20	28	16.83	
Adjusted Post Test							
Mean	36.91	34.29	Between	51.23	1	51.23	52.56*
			Within	26.32	27	0.97	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 28 and 2 and 27 are 3.34 and 3.35 respectively).

Table I shows the adjusted post-test means for the control group (34.29) and the varied pace training group (36.91). At the.05 level of confidence in strength endurance, the adjusted post-test means' obtained "F" ratio of 52.56 is greater than the 3.35 table value for df 1 and 27 required for significance.

The results of the study demonstrated a significant difference in strength endurance between the adjusted post-test means of the varied pace training group and the control group.

Table II Analysis of Covariance of The Data on Cardio Respiratory Endurance of Pre and Post Tests Scores of Fartlek

Test	Varied pace training group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	1454.67	1460.00	Between	213.33	1	213.33	0.09
S.D.	49.65	39.43	Within	66173.33	28	2363.33	
Post Test							
Mean	1521.33	1462.00	Between	26403.33	1	26403.33	9.19*
S.D.	44.12	45.27	Within	80466.67	28	2873.81	
Adjusted Post Test							
Mean	1523.48	1459.85	Between	30271.76	1	30271.76	74.03*
			Within	11040.96	27	408.92	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 28 and 2 and 27 are 3.34 and 3.35 respectively).

Table II displays the adjusted post-test means for the control group (14590.85) and varied pace training group (1523.48 and 14590.48, respectively). With regard to cardio-respiratory endurance, the obtained "F" ratio of 74.03 for adjusted post-test means is greater than the table value of 3.35 for df 1 and 27, which is necessary for significance at the.05 level of confidence.

The study's findings showed a significant difference in cardio-respiratory endurance between the adjusted post-test means of the varied pace training group and the control group.

Conclusions

1. There was a significant difference between varied pace training group and control group on strength endurance and cardio respiratory endurance.
2. And also it was found that there was a significant improvement on selected criterion variables such as strength endurance and cardio respiratory endurance due to varied pace training.

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