



AFFLUENCE OF FARTLEK TRAINING ON SELECTED PHYSICAL FITNESS PARAMETERS AMONG COLLEGE MEN STUDENTS

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Abstract:

The purpose of the study was designed to examine the effect of fartlek training on leg strength and strength endurance among college men students. For the purpose of the study, thirty college men students from Dr. Sivanthi Aditanar College of Physical Education, Tiruchendur, Tamilnadu, India were selected as subjects. They were divided into two equal groups. Each group consisted of fifteen subjects. Group I underwent fartlek training for three days per week for twelve weeks. Group II acted as control who did not undergo any special training programme apart from their regular physical education programme. The following variables, namely leg strength and strength endurance were selected as criterion variables. All the subjects of the two groups were tested on selected dependent variables namely leg strength and strength endurance by using leg lift with dynamometer and bend knee sit-ups at prior to and immediately after the training programme. The analysis of covariance was used to analyze the significant difference if any among the groups. The .05 level of confidence was fixed as the level of significance to test the 'F' ratio obtained by the analysis of covariance, which was considered appropriate. The results of the study showed that there was a significant difference between fartlek training group and control group on leg strength and strength endurance. And also, it was found that there was a significant improvement on selected criterion variables such as leg strength and strength endurance due to fartlek training.

Key Words: Fartlek Training, Leg Strength, Strength Endurance, College Men Students

Introduction:

Fartlek training, which translates to "speed play" in Swedish, is a form of running that combines continuous running with interval training. Fartlek workouts are unstructured and involve varying your pace throughout the run, alternating between periods of faster running and slower recovery or easier jogging. This type of training is flexible and can be adapted to suit different fitness levels and goals. Fartlek is a less rigid form of training compared to traditional interval training. It allows for spontaneity and flexibility in adjusting your running pace based on how you feel during the workout. Fartlek workouts involve alternating between periods of higher intensity (fast running or sprints) and lower intensity (easy jogging or walking). The variations in speed can be based on time, distance, landmarks, or personal perception. Fartlek can be adapted to different fitness levels and environments. Whether you're a beginner or an experienced runner, you can tailor the intensity and duration of the fast and slow intervals to suit your preferences and goals. Fartlek training is well-suited for outdoor running, as it often involves incorporating changes in terrain, such as hills or trails, to add an additional challenge and variety to the workout. The mix of faster and slower running engages both aerobic and anaerobic energy systems, contributing to overall cardiovascular fitness and improving the body's ability to handle different intensities. Fartlek training can be mentally engaging and enjoyable as it breaks the monotony of steady state running. The freedom to adjust your pace spontaneously adds an element of fun to the workout. Fartlek workouts enhance both your speed and endurance by challenging your body to adapt to varying intensities. The unstructured nature of fartlek allows for flexibility in adjusting the workout on the fly, making it suitable for different fitness levels and preferences. The unpredictable nature of fartlek training builds mental toughness as you learn to push yourself during faster intervals and recover during slower segments. Fartlek can be done on various terrains, making it suitable for road running, trail running, or even on a treadmill. Many runners find fartlek training enjoyable due to its playfulness and the variety it introduces to their running routine.

Methodology:

The purpose of the study was designed to examine the effect of fartlek training on leg strength and strength endurance among college men students. For the purpose of the study, thirty college men students from Dr. Sivanthi Aditanar College of Physical Education, Tiruchendur, Tamilnadu, India were selected as subjects. They were divided into two equal groups. Each group consisted of fifteen subjects. Group I underwent fartlek training for three days per week for twelve weeks. Group II acted as control who did not undergo any special training programme apart from their regular physical education programme. The following variables, namely leg

strength and strength endurance were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables namely leg strength and strength endurance by using leg lift with dynamometer and bend knee sit-ups at prior to and immediately after the training programme. The analysis of covariance was used to analyze the significant difference if any among the groups. The .05 level of confidence was fixed as the level of significance to test the 'F' ratio obtained by the analysis of covariance, which was considered appropriate.

Analysis of the Data:

Leg Strength:

The analysis of covariance on leg strength of the pre and post test scores of fartlek training group and control group have been analyzed and presented in table 1.

Table 1: Analysis of Covariance of the Data on Leg Strength of Pre and Post Tests Scores of Fartlek Training and Control Groups

Test	Fartlek Training Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	93.00	92.87	Between	0.13	1	0.13	0.10
S.D.	1.10	1.06	Within	35.73	28	1.28	
Post Test							
Mean	94.93	93.13	Between	24.30	1	24.30	11.54*
S.D.	1.09	1.09	Within	58.97	28	2.11	
Adjusted Post Test							
Mean	94.88	93.19	Between	21.27	1	21.27	63.59*
			Within	9.03	27	0.33	

* 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). The table 1 shows that the adjusted post-test means of fartlek training group and control group are 94.88 and 93.19 respectively. The obtained "F" ratio of 63.59 for adjusted post-test means is more than the table value of 3.35 for df 1 and 27 required for significance at .05 level of confidence on leg strength. The results of the study indicated that there was a significant difference between the adjusted post-test means of fartlek training group and control group on leg strength.

Strength Endurance:

The analysis of covariance on strength endurance of the pre and post test scores of fartlek training group and control group have been analyzed and presented in table 2.

Table 2: Analysis of Covariance of the Data on Strength Endurance of Pre and Post Tests Scores of Fartlek Training and Control Groups

Test	Fartlek Training Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	36.93	37.13	Between	0.30	1	0.30	0.14
S.D.	1.34	2.14	Within	60.67	28	2.17	
Post Test							
Mean	45.07	37.40	Between	440.83	1	440.83	23.06*
S.D.	1.50	1.31	Within	535.37	28	19.12	
Adjusted Post Test							
Mean	45.14	37.32	Between	456.68	1	456.68	213.67*
			Within	57.71	27	2.14	

* 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). The table 2 shows that the adjusted post-test means of fartlek training group and control group are 45.14 and 37.32 respectively. The obtained "F" ratio of 213.67 for adjusted post-test means is more than the table value of 3.35 for df 1 and 27 required for significance at .05 level of confidence on strength endurance. The results of the study indicated that there was a significant difference between the adjusted post-test means of fartlek training group and control group on strength endurance.

Conclusion:

- There was a significant difference between fartlek training group and control group on leg strength and strength endurance.
- And also it was found that there was a significant improvement on selected criterion variables such as leg strength and strength endurance due to fartlek training.

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