



CONSEQUENCE OF FARTLEK TRAINING ON SELECTED PHYSICAL FITNESS AND PHYSIOLOGICAL VARIABLES AMONG UNIVERSITY MALE PLAYERS

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ABSTRACT

The present study was designed to find out the consequence of fartlek training on selected physical fitness and physiological variables among university male players. To fulfill the purpose of the study 30 students from Kalasalingam University represented male players are selected and they are divided in two equal groups namely experimental and control group and their age ranged from 19 to 23 years. To find out the consequence of fartlek training on selected physical fitness variables data was collected through the administration of 50 mts run, shuttle run and sit and reach. The physiological variables data was collected through the administration of breath holding time and resting heart rate. The collected data was calculated with the application of dependent 't' test. Finally the results of the study concluded that with the comparison of pre-test and post-test of experimental group due to the effect of 12 weeks fartlek training have an positive impact on speed, flexibility, agility (Physical Fitness Components) resting heart rate, breath holding time (Physiological Components).

Keywords: Speed, agility, flexibility, physical fitness

INTRODUCTION

Fartlek, which means 'speed play' in Swedish, is a popular form of training used by runners to provide a satisfying and effective alternative to rigid training sessions. Fartlek training does not involve having to run over a specifically measured route — it is more a case of altering running speeds over varying distances. Reduces overuse injuries by varying the periods of high intensity and low intensity exercise. Offers an efficient way to incorporate high intensity and low intensity workouts into one routine. Improves athletic performance by mimicking the intensity and flow of competition. Helps prevent boredom. Physical fitness is an important part of life. It is an indicator which shows whether you have the ability to perform and enjoy day to day physical activities with ease. Physical fitness is defined as the state of general well being, physically sound and healthy, along with mental stability.

Aim of the Study

The aim of the study is to find out the consequence of fartlek training on selected physical fitness and physiological variables among university male players.

Hypothesis

1. It is hypothesized that there was a significant difference on experimental group of selected physical variables.
2. It is hypothesized that there was a significant difference on experimental group of selected physiological variables.

Significant of the Study

This study was helpful to the coaches to take this training as initial device for developing physical and physiological variables and performance of the players in respective games and sports. This study shows the positive effect on speed, flexibility, agility and breath holding time, resting heart rate of university represented male players.

METHODOLOGY

This study was designed to deal with the consequence of fartlek training on selected physical and physiological variables among university represented male players. To facilitate the study, thirty male students of Kalasalingam University, Tamilnadu, India selected as subject were randomly selected and their age were between 19 to 23 years. They were assigned in to two groups namely experimental as well

as control group. The experimental group were under specific exercise and 15 minutes for cooling down go with Fartlek training weekly 4 days with the exercise. duration of 1 hour including 15 minutes general and

TABLE - I Criterion Variables And Tests

S.No	Variables	Test	Unit of measurement
1.	Speed	50 Mts Run	In seconds
2.	Flexibility	Sit and reach test	In centimeters
3.	Agility	Shttle run	In Seconds
4.	Breath holding time	Breath holding Test	In Seconds
5.	Resting pulse rate	Digital pulse monitor	Beats per minute

Statistical Procedure

To observe the results of the study dependent “t” test was used for the interpretation of the pre and post-test date of experimental group as well as control group.

RESULTS AND DISCUSSION

TABLE - II Table Showing the Mean, Mean Difference, Standard Deviation and ‘T’ Value of Experimental and Control Group on Speed

Group	Number of Subjects	Pre-Mean	Post-Mean	Standard Deviation		Std. error Mean	“t”
				Pre	Post		
Experimental	15	5.18	4.97	0.27	0.40	0.09	2.402*
Control	15	5.15	5.14	0.21	0.42	0.10	0.136

*Significance at 0.05 level of confidence

Experimental group pre and post-test mean value were 5.18 and 4.97 respectively. In Control group pre and post-test were mean value was 5.15 and 5.14 respectively. In experimental the obtained t-ratio 2.402 was greater than the table value of 2.15 so it is

found significant. In control group the obtained ‘t’ratio 0.136 was lesser than the table value of 2.15 so it was found not significant. Difference in two group-ratios was employed and the level of significance was set at 0.05.

TABLE- III Table Showing the Mean, Mean Difference, Standard Deviation and ‘T’ Value of Experimental and Control Group on Flexibility

Group	Number of Subjects	Pre-Mean	Post-Mean	Standard Deviation		Std. error Mean	“t”
				Pre	Post		
Experimental	15	11.93	13.13	1.87	2.10	0.17	6.874*
Control	15	11.00	11.27	1.25	1.79	0.34	0.774

*Significance at 0.05 level of confidence

Experimental group pre and post-test mean value were 11.93, 13.13 respectively. In Control group pre and post-test were mean value was 11.00, 11.27 respectively. In experimental the obtained t- ratio 6.874 was greater than the table value of 2.15so it is found as significant. In control group the obtained t- ratio 0.774 was lesser than the table value of 2.15 so it was found as not significant. Difference in two group’s t- ratio was employed and the level of significance was set at 0.05.

TABLE - IV Table Showing the Mean, Mean Difference, Standard Deviation and ‘T’ Value of Experimental and Control Group on Agility

Group	Number of Subjects	Pre-Mean	Post-Mean	Standard Deviation		Std. error Mean	“t”
				Pre	Post		
Experimental	15	21.61	21.41	0.91	0.91	0.09	2.323*
Control	15	21.59	21.49	1.08	1.00	0.17	0.561

*Significance at 0.05 level of confidence

Experimental group pre and post-test mean value were 21.61 and 21.41respectively. In Control group pre and post-test were mean value was 21.59 and 21.49 respectively. In experimental the obtained t- ratio 2.323 was greater than the table value of2.15 so it is found as significant. In control group the obtained t-ratio 0.561was lesser than the table value of 2.15 so it was found as not significant. Difference in two group’s t-ratio was employed and the level of significance was set at 0.05.

TABLE - V Table Showing the Mean, Mean Difference, Standard Deviation and ‘T’ Value of Experimental And Control Group on Resting Heart Rate

Group	Number of Subjects	Pre-Mean	Post-Mean	Standard Deviation		Std. error Mean	“t”
				Pre	Post		
Experimental	15	74.13	72.07	1.36	1.44	0.38	5.39*
Control	15	73.60	73.87	1.18	1.19	0.45	0.59

*Significance at 0.05 level of confidence

Experimental group pre and post-test mean value were 74.13 and 73.87 respectively. In Control group pre and post-test were mean value was 73.60 and 72.07 respectively. In experimental the obtained t- ratio 5.39 was greater than the table value of 2.15 so it is found as significant. In control group the obtained t- ratio 0.59 was lesser than the table value of 2.15 so it was found as insignificant. Difference in two group t- ratio was employed and the level of significance was set at 0.05.

TABLE - VI TABLE SHOWING THE MEAN, MEAN DIFFERENCE, STANDARD DEVIATION AND ‘T’ VALUE OF EXPERIMENTAL AND CONTROL GROUP ON BREATH HOLDING TIME

Group	Number of Subjects	Pre-Mean	Post-Mean	Standard Deviation		Std. error Mean	“t”
				Pre	Post		
Experimental	15	25.07	27.87	3.51	3.24	0.19	3.57*
Control	15	25.20	26.47	3.38	3.26	0.23	0.29

*Significance at 0.05 level of confidence

Experimental group pre and post-test mean value were 25.07 and 27.87 respectively. In Control group pre and post-test were mean value was 25.20 and 26.47 respectively. In experimental the obtained t- ratio 3.57 was greater than the table value of 2.15 so it is found as significant. In control group the obtained t- ratio 0.29 was lesser than the table value 2.15 so it was found as not significant. Difference in two groups t- ratio was employed and the level of significance was set at 0.05.

CONCLUSIONS

In the light of the study undertaken certain limitations imposed by the experimental conditions, the following conclusions were arrived that speed, flexibility, agility, resting heart rate, breath holding time, were significantly improved due to the influence of fartlek training in experimental group.

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