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Effect of Fartlek Training on Selected Motor Fitness Variables Among Male Powerlifters

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ABSTRACT

The purpose of the present study was to find out the effect of fartlek training on selected motor fitness variables among male powerlifters. To achieve the purpose of the study, male powerlifters were selected from university-level participants at Calicut & Kannur University. The subject's age is between 18 and 25 years. The selected subjects were divided into two equal groups, each consisting of twenty powerlifters, namely the experimental group and the control group. The experimental group underwent a Fartlex training program for twelve weeks. The control group was not participating in any training during the study. Speed, agility, and strength were taken as criteria variables in this study. The pre test was conducted before the training period, and the post test was conducted immediately after the twelve-week training period. The "t" coefficient statistical technique was used to analyze the mean pre-test and post-test data of the experimental and control groups. The results showed that there was a significant difference in the criterion variables. The difference is found due to Fartlex training given to the experimental group on speed, agility, and strength when compared to the control group.

Keywords: Fartlex Training, Motor Fitness Variables, Powerlifters.

INTRODUCTION

Powerlifting is a strength sport consisting of three exercises: the squat, the bench press and the deadlift. powerlifting requires specialized training techniques that focus on strength and explosive power. Traditional training methods dictated a low number of repetitions at maximum load. These practices are still relevant today. A well-known training method is the Westside Barbell method developed by Louie Simmons or high-volume exercises developed by Boris Sheiko. Other approaches to powerlifting training include Metal Militia-style bench press training, Mike Tuscherer's RPE-based training, and the classic progressive overload approach.

Fartlek training is defined as "periods of running only fast followed by periods of running slow." A fartlek racer might run full speed between two light poles, run to the corner, exert moderate effort for a few blocks, run between the four light poles, and run quickly till they stop. They could also run until they see a sign that indicates the required amount of time or distance, among other things. The variable intensity and continuous nature of exercise places stress on both the aerobic and anaerobic systems. It is not structured like standard interval training; instead, the athlete chooses the intensity and/or speed that suits them best. Fartlek training usually involves running, but can include almost any exercise. Fartlek running involves varying your pace throughout the run, alternating between fast segments and slow runs. Unlike traditional interval training, which involves specific timed or measured segments, fartlek is more

unstructured. Intervals of work and rest may depend on how the body is feeling. **Pardeep Kumar (2015)**

SELECTION OF SUBJECTS

The point of the present study was to find out the effect of fartlex training on selected motor fitness variables among male powerlifters. To achieve the purpose of the study male powerlifters players were selected from university level participants, Calicut & Kannur university, kerala, India.

SELECTION OF VARIABLE

INDEPENDENT VARIABLE

- Fartlex training

DEPENDENT VARIABLE

- Speed
- Agility
- Strength

METHODOLOGY

The selected subjects were divided into two equal groups consisting of twenty male powerlifters, namely the experimental group and the control group. The experimental group underwent a Fartlex training program for twelve weeks. The control group did not take part in any training during the study. Speed, agility, and strength were taken as criterion variables in this study. A pre-test was taken before the training period, and a post-test was measured immediately after the twelve-week training period.

Sl.no	Variables	Test items	Units of Measurement
1	Speed	50 mtr dash test	In seconds
2	Agility	4x10 m Shuttle Run test	In seconds
3	Strength	Chin up Test	In seconds

STATEMENT OF THE PROBLEM

The purpose of the study was to assess the effect of fartlek training on selected motor fitness variables among male powerlifters.

HYPOTHESES

- It was hypothesized that there would be a significant improvement on fartlek training among university-level male powerlifters.
- It was hypothesized that there would be a better significant improvement in fartlek training on selected motor fitness variables among university-level participants male powerlifters.

STATISTICAL TECHNIQUE

The t-test was used to analyze the significant differences, if any, between the groups respectively.

LEVEL OF SIGNIFICANCE

The 0.05 level of confidence was fixed to test the level of significance, which was considered appropriate.

ANALYSIS OF THE DATA

The significance of the difference among the means of the experimental group was determined by a pre-test. The data were analyzed, and the dependent 't' test was used with 0.05 levels as confidence.

RESULTS

TABLE-I Comparison of Mean, and't'-Values of Motor Fitness Variables between Pre & Post Test among Experimental and Control Groups

Sl. No	Motor Fitness Variables	Groups	Test	Mean	"t" Values
1.	Speed	Experimental group	Pre test	9.25	9.02*
			Post test	10.05	
		Control group	Pre test	12.28	6.63
			Post test	10.85	
2.	Agility	Experimental group	Pre test	18.58	12.14*
			Post test	17.33	
		Control group	Pre test	22.13	5.09
			Post test	22.03	
3.	Strength	Experimental group	Pre test	75.30	11.50*
			Post test	94.02	
		Control group	Pre test	60.40	6.10
			Post test	61.00	

*Significant at 0.05 level of confidence

Table I reveals that the obtained mean values of per test and post-test of the experimental group for speed pre-test is 9.25 and post-test is 10.05, agility pre-test is 18.58 and post-test is 17.33, strength pre-test is 75.30 and post-test is 94.02, respectively; the obtained 't' ratio was speed (9.02), agility (12.14), and strength (11.50), respectively. The tabulated 't' value is 2.14 at a 0.05 confidence level for the difference at 95%. The calculated coefficient "t" exceeded the table value.. It is a significant change in speed, agility, and strength of the powerlifters. The obtained mean values of the pre-test and post-test scores of the control group were speed pre-test 12.28 and post-test 10.85, agility pre-test 22.12 and post-test 22.03, and strength pre-test 75.30 and post-test 94.02, respectively. The obtained 't' ratio was speed (6.63), agility (5.09), and strength (6.10). The required table value is 2.14 at a 0.05 confidence level for the difference at 95%. The calculated 't' ratio was less than the table value. It is found to be insignificant changes in speed, agility, and strength of the powerlifters. The mean values of selected motor fitness variables among the experimental group and control group are graphically represented in Figure.

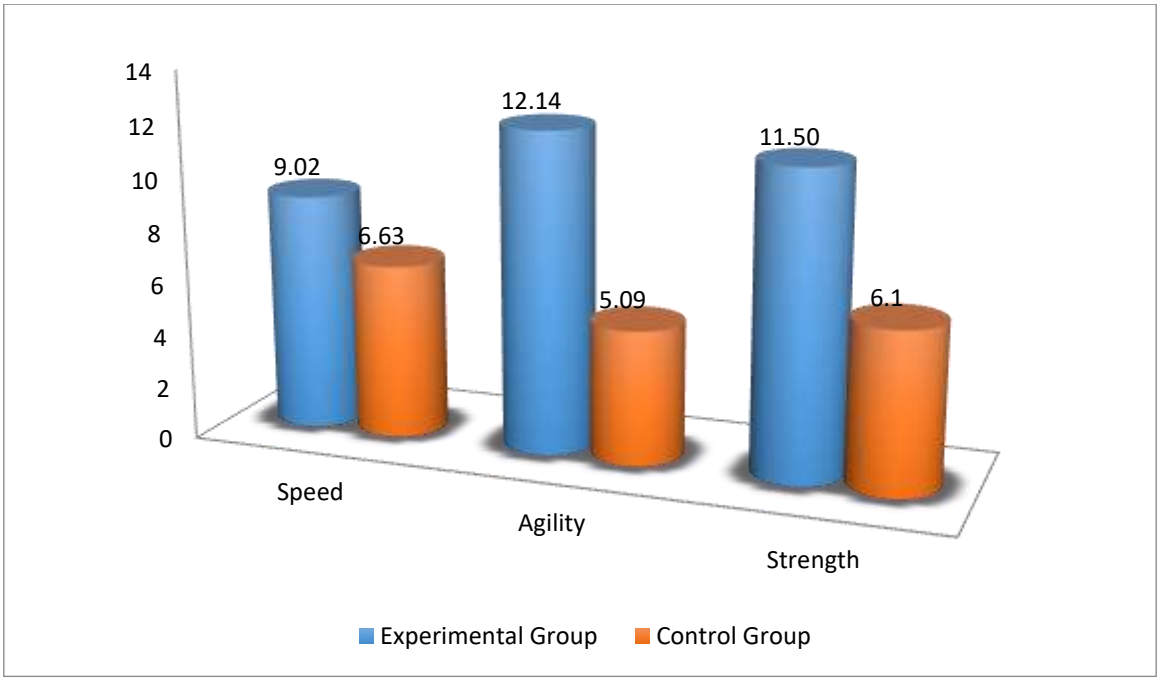

Figure: Bar Diagram Showing the Pre Test and Post Test on Selected motor fitness Variables of Experimental group and Control Groups

DISCUSSION OF FINDINGS

The results of the study indicated that the selected motor fitness variables, such as speed, agility, and strength, were improved significantly after undergoing Fartlex training. The changes in the selected parameters were attributed to the proper planning, preparation, and execution of the training package given to the players. The findings of the present study had similarities with the findings of S. Senthil Kumaran (2018). The results of the present study indicate that the Fartlex training method is an appropriate protocol to improve the speed, agility, and strength of university-level participants at Calicut & Kannur University. From the result of the present study, it is very clear that the selected motor fitness variables, such as speed, agility, and strength, improved significantly due to male powerlifters.

CONCLUSIONS

Based on the findings and within the limitations of the study

1. It was noticed that the practice of fartlek training helped to improve selected motor fitness variables of university-level male powerlifters.
2. It was also seen that there is progressive improvement in the selected criterion variables of the experimental group of university-level male powerlifters after twelve weeks of the Fartlex training program.

Further, it also helps to improve selected motor fitness variables such as speed, agility, and strength.

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