ISSN: 2349 - 4891

International
Journal of Recent Research and Applied Studies

Effect of Fartlek Training on Vital Capacity among Hockey Players

Ashwin Antony Louis[1], Dr. V. Vallimurugan[2]

[1]*Ph.D., Research Scholar, Department of Physical Education, TNPE&SU, Chennai, Tamilnadu, India.*
[2]*Principal, Selvam College of Physical Education, Namakkal, Tamilnadu, India.*

Received 11th June 2014, Accepted 25th June 2014

Abstract

The purpose of the study was to find out the effect of fartlek training on vital capacity among hockey players. It was hypothesized that the fartlek training group would show significant improvement on vital capacity among hockey players than control group. To achieve the purpose of the present study, thirty hockey players were randomly selected from Ernakulam district, Kerala, Tamilnadu, India and their age ranged from 18 to 25 years. The selected subjects were divided into two groups of fifteen subjects in each. Group I acted as fartlek training group and Group II acted as control group. The Fartlek Training group participated for a period of eight weeks for alternate three days in a week and the post-tests were taken. Vital capacity was measured by using spirometer. To find out the difference between the two groups paired 't' test was used. The findings of the present study have strongly indicates that eight weeks of fartlek training group had significant influence on vital capacity of hockey players. Hence the hypothesis earlier set that fartlek training would have been significant influence on vital capacity in light of the same the hypothesis was accepted.

Keywords: Fartlek, Vital Capacity, Hockey, Spirometer.

Introduction

Fartlek means "speed play" in Swedish, is a training method that blends continuous training with interval training. The variable intensity and continuous nature of the exercise places stress on both the aerobic and anaerobic systems. It differs from traditional interval training in that it is unstructured; intensity and/or speed varies, as the athlete wishes. Most fartlek sessions last a minimum of 45 minutes and can vary from aerobic walking to anaerobic sprinting. Fartlek training is generally associated with running, but can include almost any kind of exercise. Swedish coach Gosta Holmer developed fartlek in 1937, and, since then, many physiologists have adopted it. It was designed for the downtrodden Swedish cross country running teams that had been beaten throughout the 1920s by Paavo Nurmi and the Finns. Holmer's plan used a faster-than-race pace and concentrated on both speed and endurance training **(Schatzle, & Joe, 2002).**

The name hockey is thought to have originated from the French word 'hocquet', meaning a crooked stick or shepherd's crook. Field hockey is a popular sport for men and women in many countries around the world. In most countries, especially those in which ice hockey is not very prominent, it is simply known as hockey. Field hockey has several regular and prestigious international tournaments for both men and women. These events include the Olympic Games, the quadrennial World Hockey Cups, the annual Champions Trophies, and World Cups for juniors **(Richard, Aggiss, 1984).**

Correspondence
Ashwin Antony Louis,
E-mail: ashwinlouis06@yahoo.co.in, Ph. 098959 33148

Purpose of the study

The purpose of the study was to find out the effect of fartlek training on vital capacity among hockey players.

Hypothesis

It was hypothesized that the fartlek training group would show significant improvement on vital capacity among hockey players than control group.

Methodology

To achieve the purpose of the present study, thirty hockey players were randomly selected from Ernakulam district, Kerala, Tamilnadu, India and their age ranged from 18 to 25 years. The selected subjects were divided into two groups of fifteen subjects in each. Group I acted as fartlek training group and Group II acted as control group. The Fartlek Training group participated for a period of eight weeks for alternate three days in a week and the post-tests were taken. Vital capacity was measured by using spirometer. To find out the difference between the two groups paired 't' test was

used.

Results and Discussions

The primary objective of the paired 't' ratio was to describe the differences between the pre-test and post-test mean.

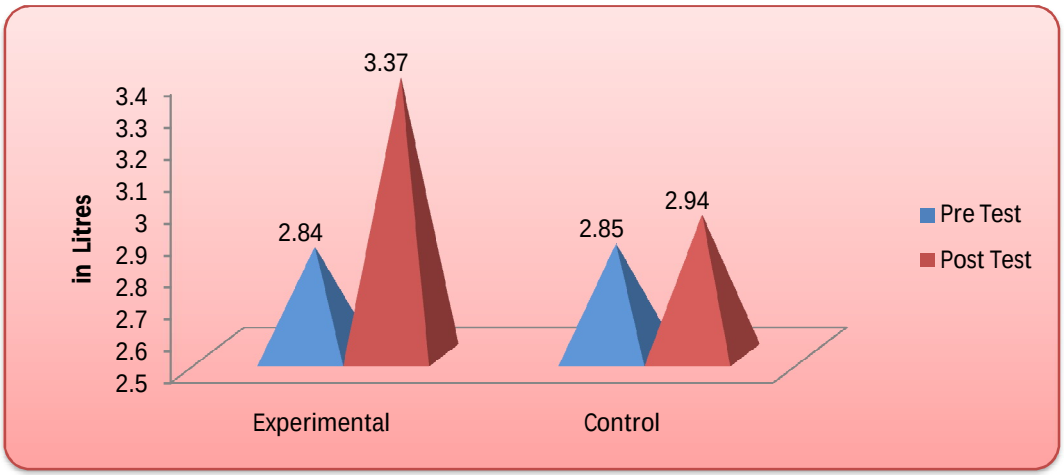
.

Table 1. Summary of 't' Ratio on Vital Capacity of Experimental and Control Groups

S.No	Vital capacity	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Experimental	2.84	3.37	0.53	0.24	0.13	14.20*
2	Control	2.85	2.94	0.09	0.12	0.02	1.55

An examination of table - I indicates that the obtained't' ratio for experimental group was 14.20 for vital capacity. The obtained't' ratio was found to be greater than the required table value of 2.14 at 0.05 level of significance for 1, 14 degrees of freedom. Hence it was found to be significant. The obtained 't' ratio for control group was 1.55 for vital capacity. The obtained't' ratio was found to be lesser than the required table value of 2.14 at 0.05 level of significance for 1, 14 degrees of freedom. Hence it was found to be insignificant. The results of this study showed that the control group was statistically insignificant.

Figure I. Pre and Post test Differences of the Experimental and Control Groups on Vital Capacity



Discussions and Conclusions

In case vital capacity the results between pre and post (8 weeks) test has been found significantly higher in experimental group in comparison to control group. The findings of the present study have strongly indicates that eight weeks of fartlek training group had significant influence on vital capacity of hockey players. Hence the hypothesis earlier set that fartlek training would have been significant influence on vital capacity in light of the same the hypothesis was accepted. The result reveals that the fartlek training group showed better performance on vital capacity than the control group.

References

1. Alcaraz, P.E., Perez, G. J., Chavarrias, M. & Blazevich, A.J. (2011). Similarity in adaptations to high-fartlek circuit vs. traditional vital capacity training in fartlek-trained men. *J Vital capacity Cond Res.* 25(9):2519-27.
2. Anne, L. Rothstein. (1985). Research Design and Statistics for Physical Education (Englewood Cliffs, N.J: Prentice Hall, Inc.).
3. Dorthy, Y. & Landie, S. (1992). *Field Hockey-Fundamental and Techniques.* London: Faber and Faber limited.

4. Dureha, K.D. & Akhil, M (2003). *Teaching & Coaching Hockey*. New Delhi: Paperbacks.
5. Morrow, James R., (2005). *Measurement and Evaluation in Human Performance*, (3ED), Champaign Illinois: Human Kinetics Publishers Inc.,
6. Richard, Aggiss., Paul, Dearing., Brian, Glencross., Denis, Glencross., Don, Mcwatters., Ian, Pitt., Ric, Purser., Hugh, Robson., Don, Smart. & Ivan, Spedding. (1984). *Coaching Hockey, The Australian way*. Australian Hockey Association, Australia.

Please cite this article as: Ashwin Antony Louis, Dr. V. Vallimurugan, Effect of Fartlek Training on Vital Capacity among Hockey Players. *International Journal of Recent Research and Applied Studies*, 1 (10), 37 - 39.