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Effect of fartlek training cardic-respiratory endurance and resting pulse rate and kabaddi male players

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Abstract
The purpose of the study was to find out the effect of fartlek training on cardiac respiratory endurance and resting pulse rate. To achieve this purpose 20 male kabaddi players were randomly selected from the state Kabaddi players Gautam Buddha Nagar. The age of the players were ranged from 18 to 20 years. The players were further classified at random into two equal groups of 10 kabaddi male players each. Group-I underwent fartlek training for three days per week for eight weeks and Group-II acted as control. The selected criterion variables namely cardio respiratory endurance and resting pulse rate were assessed before and after the training period the collected data were statistically analyzed by using analyzing of covariance (ANCOVA) from the results of the study it was found that there was a significant improvement on cardio-respiratory endurance and resting pulse rate for fartlek training group when compared with the control group.

Keywords: kabaddi, endurance, cardic-respiratory

Introduction
All these activities are healthy, easier to perform and inexpensive. Conditioning exercise are beneficial in so many ways like strengthening the respiratory muscles, strengthening and enlarge the hearts muscle and improve its pumping, improving blood circulation and red blood cells, reducing stress and depression, increasing your stamina and endurance and endurance of your muscles, In shorts it reduces the risk of hearts attacks. Sports training is a scientifically based and pedagogically organized process which through planned and systematic effect on performance improvement as ability and performance readiness aims at sports perfection and performance improvement as well as at contest in sports competition. Training is usually defined as a systematic process of repetitive progressive exercise of work involves also the learning process and acclimation.

Fartlek training is said to be the forerunner of the interval training system which involves alternative fast and slow running over natural terrain. It can be through of as an informal interval training programmed in that neither the work nor relief intervals are natural terrain more, the proportions of fast and slow running are left entirely up the running are left entirely up the runner as they feel the need or urge to run them. Such a programmed will develop both aerobic capacities (Fox and Donald 1981) [3] Fartlek training is ideally suited for general conditioning of off- season training and for main training a certain freedom and variety in work hours (Frank *et al*.,1991) [4]

Fartlek, which means "speed play", is a form of conditioning which puts stress mainly on the aerobic energy system due to the continuous nature of the exercise. The difference between this type of training and continuous training is that the intensity or speed of the exercise varies, meaning that aerobic and anaerobic system can be put under stress. Most fartlek sessions last a minimum of 45 minutes and can vary from aerobic walking to anaerobic spiriting Fartlek training is generally associated with running, but can include almost any kind of exercise. Fartlek training was developed in 1937 by Swedish coach Gosta Holmer (1891-1983) and has been adopted by many physiologists since. It was designed for the downtrodden Swedish cross-country teams that had been thrashed throughout the 1920 by Paavo Nurmi and the Finns. Holmer's plan used a faster-than-race pace and concentrated on both speed and endurance.

Methodology
The purpose of the study was a find out the effect of fartlek training on cardio respiratory endurance and resting pulse rate. To achieve the purpose of the study 20 district male kabaddi player who were studding in district kabaddi player 2016-17 in G.B. Nager were randomly selected. The age of the subjects was 18 to 25 year. The selected subjects were divided in to two group's ten subjects each. Group (experimental group) underwent fartlek training and group II (Control group) did not undergo any special training programmed.

The experimental group underwent fartlek training for 3 days per week for 8 weeks. The control group did not participate in any special training programmed of strenuous physical activities apart from their day activities.

The experimental group underwent their fartlek training under the instruction and supervision of the investigator.

The date were collected on selected criterion variables hamely cardio-respiratory endurance and resting pulse rate were measured by using cooper's 12 minutes run/walk test and counting the pulse at resting condition for one minute before (pre) and after eight weeks of fartlek training (post). Analysis of covariance (ANCOVA) was applied to fine out significant difference if any between the experimental and control group.

Analysis of covariance of cardio-respiratory endurance and resting pulse rate for fartlek training froup and control group

Table 1

Variable name	Group name farlek training	Control group 'F' ratio
Cardio-respiratory Endurance (in meters)	Pre –test 1631.33 Mean ± S.d. ± 22.949 Post –test 1697.33 Mean ± S.d. ± 24.044 Adj. Post-test 1698.016 Mean	1634.67 0.186 ± 19.223 1627.33 76.868* ± 445 1626.651 90.82*
Resting pulse rate (in number)	Pre-test 73.13 Mean ± S.d. ± 1.06 Post–test 71.00 Mean ± S.d. ± 1.512 Adj. Post –test 70.86 Mean	72.80 0.774 ± 1.014 73.00 20.00* ± 0.845 73.144 52.703*

*****significant at. 05 level of confidence. (The table values required foe significance at. 05 level of confidence for 1 and 18 and 1 and 17 are 4.41 and 4.45 respectively).

Results

The adjusted post test means of experimental and control group on cardiovascular endurance (1698.01 Vs 1626.65) resulted in a F-ratio of 90.82, which shows a significant difference. The adjusted post-test mean of experimental and control group on resting pulse rate (70.86 Vs 73.144) resulted in a F-ratio of 50.703, which shows a significant difference. Further the results of the study showed that there was a positive change in the performance of cardio-respiratory endurance and resting pulse rate due to eight weeks of fartlek training. However the change was in favor of experimental group.

Conclusions

Uppal (1982) [5] found that endurance type of training can improve efficiency of the circulatory and respiratory systems Dhavanithi (1991) all kinds of endurance training caused a significant improvement in developing cardio-respiratory endurance due to six weeks of endurance training works outs. Form the results of this it was concluded that there was a significant difference between experimental and control groups on cardio-respiratory endurance and resting pulse rate, and also there was a significant improvement in the performances of cardio-respiratory endurance and resting pulse rate. However this improvement was in favor of experimental group due to eight weeks of fartlek training.

References

1. Hardayal Singh, Science of sports Training, General theory and Methods, Delhi Surjeet Publication, 1993, 14
2. Robert v. Hockey Physical Fitness; The pathway to healthful living (7th ed.) Saint Lauis: Mosby-Year Book inc, 1993
3. Edward Fox, Donald K Mathew. The physiological Basic of phy edu and Athletica, New York, CBS College Publishing, 1981, 284
4. Willam D. McArdle, Frank Katich, Victor L Katich. Exercise Physiology Philadelphia and Fibeger Ltd. 1991, 444
5. Uppal AK. Comparative Effects of Slow continuous Running, Running and Intergral Running Methods on Maximal oxygen Uptake'' Research Report, 1982.
6. Dhjyanithi. Comparative Analysis of Continuous Running, lnterval Running And The Combined Effects on cardio Respiratory Endurance'' Unpublished M/Phil Dissertation, Pondicherry University Pondicherry
7. Vermon S Bamay, Cynthia C Hirst, Clayne R Jenson. Conditioning Exercise st. louis; The mosby Company, 1972, 4