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Impact of Fartlek Training on University Men Kabaddi Players Ability to Improve Endurance.

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Abstract

The current study set out to investigate how fartlek training affects University Men Kabaddi Players' ability to improve endurance. For the study, 30 University Men Kabaddi Players, 15 in the experiment group and 15 in the control group, were chosen between 18 to 24 years old. The experimental group received a customized sixweek endurance program of training that included additional sand workouts on alternate days, whereas the control group received general athletic training. For both groups to figure out the impact of sand running, the post-tests passed the Cooper test with proficiency. According to this study, sand training improved the University Men Kabaddi Players' physiological capability and endurance across the experimental groups. Sand training is good for University Men Kabaddi Players looking to build their endurance, but it's optional.

Keywords: University Men Kabaddi Players, endurance capacity and fartlek training.

Introduction

Fartlek, which translates to "speed play" in Swedish, is a type of training that combines interval and continuous training. An extremely basic type of long-distance run is a fartlek run. "Simply put, fartlek training is defined as intervals of fast running mixed with slower running." This can involve a combination of sprinting and jogging for some, but for novices, it might only involve walking with occasional jogging intervals. The essential progression of a fartlek run involves a runner sprinting full out across a single light pole toward the after that, jogging to the corner, exerting a medium power for a few blocks, jogging through four light poles & sprinting to the stop sign, & so on, for a certain amount of time or distance. Both the aerobic & anaerobic systems are strained by the exercise's continuous nature and varying intensity. It is unstructured and allows the athlete to choose the intensity and/or speed, which sets it apart from standard interval training. Although it can involve nearly any type of exercise, fartlek training is most commonly linked with running.

Running a fartlek entails changing up your pace throughout the run by switching between fast and slow jogs. Fartlek is more free-form than standard interval training, which consists of precisely timed or measured parts. The body's sensations can be used to determine work-rest intervals.

Students can play with pace & endurance with fartlek training, as well as experiencing tempo variations. Due to the emphasis on speed work, fartlek training is popular among runners, particularly novices. However, it is less rigorous and more adaptable than conventional interval training.

The fact that fartlek training may be performed on a variety of surfaces, including hills, roads, and trails, is an additional advantage.

Try mixing in a few short bursts of somewhat faster running to perform a fartlek workout. For a certain period or distance, like 200 meters or 30 seconds, keep up the quicker speed. Throughout the workout, you may change up the intervals and mark your segments with objects like telephone poles or streetlights.

After finishing a rapid section, reduce your running speed to a level below your typical running speed until you've completely healed and your breathing is regular again.

Later in the run, add slightly faster intervals and go back to jogging at your regular pace.

A fartlek exercise gets a runner ready for the unpredictable pace of a race. During a race, a participant often dashes, slowly, and quickly again. The terrain of the race course and the competitors' use of surges are to blame for this variance in speed. The most adept runners are those who can adapt both mentally and physically to changes in pace.

Here are some tips on how to execute a fartlek exercise to get in shape for an amazing race. During a run, a Fartlek workout—Swedish for "speed play"—involves intermittent sprinting and jogging. A typical fartlek exercise, for instance, would involve a 40–60-minute training run. But rather than working out at a constant speed, you sprint, jog, and then sprint some more wherever you are feeling it. Fartlek is adaptable to your mood. Reduce the amount of sprints you do and give yourself more time to recuperate if you're feeling lethargic.

Run the sprints hard if you're feeling terrific, and maybe do another sprint later on if you haven't fully recovered. Identifying items ahead of you, such as a telephone pole, and sprinting from one to the next, followed by a jog, is a fantastic method to complete this workout. The fact that fartleks are so adaptable is one of its main appeals. Warm up for at least 10 to 15 minutes before beginning a fartlek to make sure your muscles are relaxed enough to withstand the accelerations. After your workout, take ten to fifteen minutes to relax. Fartlek exercises can be challenging, and if you don't warm up and then cool down, your muscles may be sore the next day.

If your body isn't prepared for the increased pace, beginning a fartlek run can be hard on it and result in ailments like a runner's knee, IT band discomfort, and Achilles tendonitis. Make sure you are wearing appropriate running shoes and don't exhibit any symptoms of overtraining to assist reduce the chance of injury. To get the most out of fartlek workouts and aid in muscle recovery, it's also critical to replenish your body's energy afterward with foods high in protein and water.

Structured Fartlek

While the flexibility of the fartlek exercise contributes to its appeal, a lot of runners like to add more discipline and track interval feel to their workouts. A systematic fartlek could look something like this: warm-up for ten to fifteen minutes, then two hard, 2:30 easy, three hard, 2:30 easy, four hard, 2:30 easy, four minutes of hard, 2:30 easy, three hard, 2:30 easy, two hard, then ten to fifteen minutes for cool down. Calling this exercise a: 2, 3, 4, 4, 3, and 2, with 2:30 rest, makes it simpler to understand. Because an organized fartlek is conducted on roads or trails, it offers you the opportunity to run hills in addition to the advantages of a track exercise.

When feeling tired, Coach Jack Daniels recommends the following workout in his fantastic book "Daniel's Running Formula": Running 10 steps (counting only one foot, not both) is followed by jogging 10 steps, running 20 and jogging 20, running 30 and jogging 30, and so on until you reach 100 & jog 100 (or more if you choose). When your body just doesn't feel like working itself out, this is a terrific method to still get solid exercise.

The ability of an organism to exert itself and stay active for an extended length of time, as well as its capacity to withstand, recover from, as well as immunity to stress, wounds, or weariness, is known as endurance. Endurance is also associated with suffering, resilience, constitution, fortitude, and toughness. It is typically

applied to anaerobic or aerobic workouts. The term "long" has different meanings depending on the type of exercise: days or hours for low-intensity aerobic exercise, and minutes with anaerobic exercise.

If someone doesn't also do resistance training to offset the effects of endurance training, it may negatively affect their capacity to exert strength.

A person's endurance increases when they can perform or endure more effort than they were previously capable of, which many personnel interpret as growth. To enhance endurance, one can gradually increase the number of repetitions or the length of time spent; if more repetitions are performed quickly, muscle strength increases but endurance decreases. It has been demonstrated that increasing endurance releases endorphins, which improve mental health. It has been demonstrated that increasing physical endurance through exercise reduces stress, anxiety, and depression as well as all chronic diseases combined. Increased endurance can benefit the cardiovascular system, but this does not mean that a cardiovascular condition will necessarily get better.

"The field of study metabolic repercussions of muscle adaptations to endurance activity are a slower use of muscular glycogen and blood the sugar glucose, a greater dependence on fat oxidation, which and less lactate accumulation during activity of a given intensity." Sometimes, the terms endurance and stamina are used interchangeably. Another definition of endurance is the capacity to persevere in the face of difficulty, stress, etc.

The benefits of sand running include the following.

- Enhances muscular flexibility and power.
- Increases stride length and frequency.
- Encourage strength and endurance.
- Reach your full strength and speed
- Enhanced resistance to lactate

Objective of the study

The study's goal is to determine how fartlek training affects University Men Kabaddi Players' ability to build endurance.

Hypothesis

It was predicted that University Men Kabaddi Players' fartlek training regimens for building endurance would differ significantly.

Methods and Materials

Thirty University Men Kabaddi Players from IDSG College in Chikkamagaluru, who range in age from eighteen to twenty-four, were selected for the study (15 Experimental Groups & 15 Control Groups). Data is gathered using Cooper's 12-Minute Test.

The procedure of data collection

The experimental group and the controlled group took the 12-minute Cooper test as a pre-test, and the results were noted. The experimental group was given a six-week training program that included alternating days of Fartlek Training Sessions. The experimental group received training in the Fartlek training sessions, which involved short sand sprints, and continued running in sand, and sand hills. The general training was specified for the control group. Following six weeks of training, the experimental group and the control group completed the post-test. The University Men Kabaddi Players typically come from diverse socioeconomic backgrounds with unique nutritional preferences, lifestyles, and other characteristics. It was unable to control certain elements, such as daily schedule, way of life, and eating habits, which would affect how both groups presented themselves.

Findings and Discussion

Cardiopulmonary endurance was measured using the 12-meter run/walk test both before and after each of the experimental conditions. This time, the items are weighted so that a lower score corresponds to a higher level of cardiopulmonary endurance fitness.

Table 1: Post-test descriptive data for several groups measured.

Group	Mean	Std. Deviation	N
Experimental group	3599.27	130.38	15
Control group	3472.59	172.69	15
Total	35.35.93	151.53	30

Table 1 Displays the mean as well as the standard deviation for the data collected after testing on a 12-meter R/W comparing the experimental and control groups. The mean for the experimental group was 3599.27 (SD = 130.38), while the mean for the control group was 3472.59 (SD = 172.69).

Table 2: Cooper Test pair-wise comparisons.

Group	Mean	Mean Difference	Std. Error
Experimental group	Control group	126.68	42.31
Control group	Experimental group	-126.68	42.31

Table 2 displays the pairwise comparisons of the two groups' 12 m run/walk times. The experimental group displayed an MD = 126.68, while the control group displayed an MD = -126.68.

Conclusion and suggestions:

With fartlek training, the calf muscles become more controlled and learn to contract faster, producing work at greater intensity. When compared to jogging on the flat, the calf muscles engage roughly two to three times as many muscle fibers. For endurance University Men Kabaddi Players, sand running is advised more during the off-season and less during the season.

References:

- 1. Hawley J, Burke L. Peak Performance: training and nutritional strategies for sport. Allen & Unwin, 1998.
- 2. Siff M. Super training (4th Edition) Super training Institute; 6th edition, 2003.
- 3. https://en.wikipedia.org/wiki/Endurance
- 4. http://www.trainingconditioning.com/2014/04/19/quick_sand/index.php
- 5. Bompa T. Periodization: Theory and Methodology of Training (4th Edition). Champaign, Illinois: Human Kinetics, 1999.
- 6. http://www.bodybuilding.com/fun/inmag21.htm
- 7. http://www.stack.com/2012/07/29/sand-speed-training/
- 8. https://en.wikipedia.org/wiki/Fartlek
- 9. http://breakingmuscle.com/strength-conditioning/trainingin-sand-has-increased-benefits-compared-to-grass
- 10. http://runners-resource.com/training/fartlek/
- 11. https://www.verywell.com/what-is-fartlek-training2911954