

EFFECT OF ISOLATED AND COMBINE INTERVAL TRAINING AND YOGIC PRACTICE ON PHYSICAL FITNESS AND PHYSIOLOGICAL VARIABLES AMONG COASTAL KABADDI PLAYERS

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Abstract

The investigation 40 coastal men kabaddi players were selected from the Chennai region, TamilNadu and their age range between 17 to 23 have participating in this study. That is made to examine the effect of isolated and combine interval training and yogic practice on physical fitness and physiological variables among coastal kabaddi players. Players were separated into four equal groups of 10 subjects for each group. Group A – interval training, Group B- yogic practice, Group C- combine training and Group D- control group. Experimental group are group A, B, C only control group have general warm up only given. Experimental group are participated in 3 alternate days of training protocol in 12 weeks. Data's were collected to all groups before and after the training. The data retrievals process is done by agility with T-Test and breath holding time with nose holding method at pre-test and post test. Collected data's will be analyzed by ANCOVA in order to determine the differences. Scheffe's post hoc test was applied to examine the difference between groups and testing condition. The level of confidence was fixed a 0.05 level. Result of the investigation shows interval training, yogic practice and combine training have positive on agility and breath holding time when compare to the control group.

Keywords: Interval Training, Yogic Practice, Combine Training, Coastal Men Kabaddi Players

Introduction

Sports are one of the striking features of twentieth century life, as evidenced by the variety and popularity of sporting events in the most diverse parts of the world. The Kabaddi is ancient and essentially of Indian origin. Kabaddi is basically an outdoor team game played in the tropical countries of Asia. The excitement and thrill provided by the game has made it very popular and Kabaddi. The game demands agility, muscular co-ordination, breath holding capacity, quick responses and a great deal of presence of mind.

The natural activities of catching, pulling, pushing, throwing, running, jumping instinctively to human beings are called into play in the game of Kabaddi. Kabaddi was probably invented to develop defensive responses by an individual against group attacks and a group's responses to an individual attack.

Interval training is perhaps the most method for improving endurance of Various types. Interval training is a method of training where you increase and decrease the intensity of your workout between aerobic and anaerobic training. Interval training is a type of discontinuous physical training that involves a series of low- to high-intensity exercise workouts interspersed with rest or relief periods. Interval training organization of any cardiovascular workout cycling, running, rowing and is prominent in many sports increase and decrease the intensity of workout between aerobic and anaerobic training.

Interval training method that in based on the contractions of the body's muscles. Athletes improve their endurance ability, upper body strength, speed and agility. The body to reach its maximum endurance in the smallest amount of time possible. The maximum gains towards their endurances, acceleration, power, strength and agility

Yoga is an ancient art based on a harmonizing system of development for the body mind and spirit. It is an art and takes into purview the mind, the body and the soul of the man in its aim of reaching Divinity. The continued practice of yoga will lead to a sense of peace and wellbeing the practice of yoga makes the body strong and flexible. Yoga is the means to control body and mind and has gained world-wide popularity.

Yoga has become an essential part of the curriculum of sports and in almost every walk of life. Kabaddi has also been related to Yoga Pranayama of Yoga taking a deep breath and with-holding it plays a major role in Kabaddi. Kabaddi while with-holding breath by the raider during the entire duration of his attack. Controlling breath as in Yoga together with physical activity as in any other sport. The game combines Yoga with vigorous physical activity.

Proclamation of the study

The purpose of the study was effect of isolated and combine interval training and yogic practice on physical fitness and physiological variables among coastal kabaddi players

Methodology

To achieve the purpose of present study 40 coastal men kabaddi players from Chennai region, TamilNadu at the age of 17 to 23 years. The subject was divided into four equal groups. The investigator selected the following variables for the present investigation.

Table-I

| Sn.No | Variables | Test Items | Units |
|-------|---------------------|------------|---------|
| 1. | agility | T-Test | Seconds |
| 2. | Breath holding time | | seconds |

True randomized experimental group design has been employed with four groups, namely interval training, yogic practice, combine interval and yogic practice and control group with 10 subjects of each group. Group A- as interval training, Group B- as yogic practice, Group C- combine interval and yogic practice and Group D- as control group. Group A, B, C participated their respective treatment for a period of twelve weeks and general training were given to the control group. The training should be given at morning time with proper warming up exercise for 3 times a week (Monday, Wednesday and Friday) of twelve weeks. The data should be collected before and after the training protocol. The four groups were statistically analyzed by using analysis of covariance (ANCOVA). In case of significance, sheffie's post hoc tests were calculated to detect differences between groups. All analyses were executed IBM- SPSS 22.0 software was used the confidence level maintained at 0.05

Analysis of covariance of pre-test post- test and adjust post-test on agility among interval training group, yogic practice group, combine group and control group

| Test | Interval group A | Yogic practice B | Combine group C | Control group D | Sum of square | df | Mean square | F ratio |
|------------------|------------------|------------------|-----------------|-----------------|---------------|----|-------------|---------|
| Pre test | 15.47 | 15.46 | 15.40 | 15.39 | .052 | 3 | .017 | .097 |
| | | | | | 6.44 | 36 | .179 | |
| Post test | 14.54 | 14.45 | 14.26 | 15.42 | 8.02 | 3 | 2.67 | 13.92* |
| | | | | | 6.91 | 36 | .192 | |
| Adjust post test | 14.50 | 14.42 | 14.28 | 15.45 | 8.54 | 3 | 2.84 | 48.65* |
| | | | | | 2.04 | 35 | .059 | |

The value of agility pre-test for interval training, yogic practice, combine training and control group was 15.47, 15.46, 15.40 and 15.39 respectively and the f ratio value .097 was found to be lower than the table value 2.84 was significantly lesser than the table value 2.84 df 3 and 36 significance at the level of confidence 0.05. The obtained agility post-test for interval training, yogic practice, combine training and control group was 14.54, 14.45, 14.26 and 15.42 respectively and the f ratio value **13.92*** was found to be greater than the table value 2.84 was significantly greater than the table value 2.84 df 3 and 36 significance at the level of confidence 0.05.

The obtained agility adjust post-test for interval training, yogic practice, combine training and control group was 14.50, 14.42, 14.28 and 15.45 respectively and the f ratio value **48.65*** was found to be greater than the table value 2.84 was significantly greater than the table value 2.84 df 3 and 36 significance at the level of confidence 0.05.

Sheffe's post hoc test on agility among interval training group, yogic practice group, combine group and control group

| Interval training group A | Yogic practice group B | Combine training group c | Control group D | Mean value | C.I value |
|---------------------------|------------------------|--------------------------|-----------------|------------|-----------|
| 14.50 | 14.42 | -- | -- | 0.08 | 0.35 |
| 14.50 | -- | 14.28 | -- | 0.22 | |
| 14.50 | -- | -- | 15.45 | 0.95 | |
| -- | 14.42 | 14.28 | -- | 0.14 | |
| -- | 14.42 | -- | 15.45 | 1.03 | |
| -- | -- | 14.28 | 15.45 | 1.17 | |

The mean difference among four groups in agility during the adjust post-test session according the difference in interval training and yogic practice groups was 0.08, interval raining and combine training was 0.22, interval training and control group was 0.95, yogic practice and combine training was 0.14, yogic practice and control group 1.03, combine training and control group 1.17 both having significance at 0.05 confidence level. The agility is greater than the confidence interval value 0.35 which shows significant difference in interval training and control group, yogic practice and control group, combine training and control group at 0.05 level of confidence.

Analysis of covariance of pre-test post- test and adjust post-test on breath holding time among interval training group, yogic practice group, combine group and control group

| Test | Interval group A | Yogic practice B | Combine group C | Control group D | Sum of square | Df | Mean square | F ratio |
|------------------|------------------|------------------|-----------------|-----------------|---------------|----|-------------|---------|
| Pre test | 26.80 | 26.70 | 26.50 | 26.60 | .500 | 3 | .167 | .051 |
| | | | | | 118.6 | 36 | 3.29 | |
| Post test | 29.20 | 29.50 | 30.70 | 26.90 | 75.67 | 3 | 25.22 | 7.25* |
| | | | | | 125.1 | 36 | 3.47 | |
| Adjust post test | 29.06 | 29.45 | 30.84 | 26.94 | 77.87 | 3 | 25.95 | 42.82* |
| | | | | | 21.21 | 35 | .606 | |

The value of breath holding time pre-test for interval training, yogic practice, combine training and control group was 26.80, 26.70, 26.50 and 26.60 respectively and the f ratio value

.051 was found to be lower than the table value 2.84 was significantly lesser than the table value 2.84 df 3 and 36 significance at the level of confidence 0.05. The obtained breath holding time post-test for interval training, yogic practice, combine training and control group was 29.20, 29.50, 30.70 and 26.90 respectively and the f ratio value 7.25* was found to be greater than the table value 2.84 was significantly greater than the table value 2.84 df 3 and 36 significance at the level of confidence 0.05.

The obtained breath holding time adjust post-test for interval training, yogic practice, combine training and control group was 29.06, 29.45, 30.84 and 26.94 45 respectively and the f ratio value 42.82* was found to be greater than the table value 2.84 was significantly greater than the table value 2.84 df 3 and 36 significance at the level of confidence 0.05.

Sheffe's post hoc test on agility among interval training group, yogic practice group, combine group and control group

| Interval training group A | Yogic practice group B | Combine training group c | Control group D | Mean value | C.I value |
|---------------------------|------------------------|--------------------------|-----------------|------------|-----------|
| 29.06 | 29.45 | -- | -- | 0.39 | 0.34 |
| 29.06 | -- | 30.84 | -- | 1.78 | |
| 29.06 | -- | -- | 26.94 | 2.12 | |
| -- | 29.45 | 30.84 | -- | 1.39 | |
| -- | 29.45 | -- | 26.94 | 2.51 | |
| -- | -- | 30.84 | 26.94 | 3.90 | |

The mean difference among four groups in agility during the adjust post-test session according the difference in interval training and yogic practice groups was 0.39, interval raining and combine training was 1.78, interval training and control group was 2.12, yogic practice and combine training was 1.39, yogic practice and control group 2.51, combine training and control group 3.90 both having significance at 0.05 confidence level. The agility is greater than the confidence interval value 0.34 29 which shows significant difference at 0.05 level of confidence.

Conclusion

Based on the result of study the conclusion was drawn. The result of the study was significant improvement in the experimental groups on compare to the control group after the completion effect of isolate and combine interval training and yogic practice on agility and breath holding time among coastal men kabaddi players. The combine training shows better performance

on agility and breath holding time compare to interval training, yogic practice and control group. Combined of interval training and yogic practice will help the coastal men kabaddi players to improve her performance in a great manner.

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