

## COMPARE THE INFLUENCE OF SPECIFIC HIGH INTENSITY TRAINING AND TRADITIONAL TRAINING ON SELECTED FITNESS AND PERFORMANCE VARIABLES AMONG INTER-COLLEGIATE KABADDI PLAYERS

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**Purpose:** The purpose of this study was to find out the compare the influence of specific high intensity training on selected fitness and performance variables among intercollegiate players. Forty five (45) male students from KPR college of Arts and Science, Coimbatore were participant randomly sampled. The age of the participant was ranged from 17 to 22 years. The selected fitness variables Muscular endurance of fatigue index were assessed by using abdomen test and the performance variable hand touch ability were assessed by using Judges rating scale. **Methodology:** The selected students were divided randomly in to three groups. The randomly selected participants were divided in to Control group, Traditional Training group and High Intensity Training Group. Control group underwent zero training whereas Traditional training and High Intensity Training group underwent specific drills/exercise according to their training design which is instructed by the researcher. The designed dependent selected fitness variables are Muscular endurance and the selected performance variables Hand touch ability. **Statistical Technique:** The obtained data were statistically analysed by ANCOVA was used to find out the significant difference. An alpha level of 0.05 was used for all tests. **Results:** The results indicate that there is significant difference between Control group, Traditional Training group and High Intensity training group. **Conclusions:** The two training groups shows better results compared to control group.

**keywords:** Traditional Training group, High Intensity training group, Muscular Endurance and Toe touch ability and Kabaddi.

### Introduction

Don't give up and keep singing. Kabaddi is the life of our Tamils. Kabadi field is the temple of our soldiers. The Kabaddi Field is the Temple of Our Soldiers. The Kabaddi Field is the Temple of Our Soldiers. We have prepared this review article for our Kabaddi players who live by the proverbial saying that “Kabaddi is the blood of our body and soul”. Kabaddi is one of the traditional games will teach us the techniques and tricks, playgrounds and rules. Those discipline will help us not only in the game but also in our daily life. From the *Guru or Coach* to learn the strength of the body, mental health, virtue and restraint, a state of mind. Do you think we are not selected for the Kabaddi district, national and Indian team? A study of the players of our Tamil Nadu striving for a place in the Indian team or a government job. From the Guru to learn the strength of the body, mental well-being and restraint, a state of mind, timely and proper training, we need to learn the health and well-being.

Kabaddi is a game that is played quickly, with players having to move and think extremely fast. While playing the game you will have very little time to assess the situation and the fact that you are not allowed to take a breath means that you will have to move rapidly. Over time, you will find yourself much becoming much faster in terms of your physical and mental abilities even outside the game, with quick reflexes and the ability to instantly gauge the advantages and disadvantages of a situation and make snap judgments. In addition to all these health benefits, kabaddi is an easy and inexpensive sport to take up. Unlike other sports like cricket, football, tennis, squash, badminton or table tennis, which happen to require both equipment and space, kabaddi does not need either. All you require is a few friends, a grassy field and a little bit of spare time a few times a week.

**Stamina:** Since the game requires you to chant the word 'kabaddi' over and over again without taking a breath, you will learn to stretch your endurance way past its usual limits. Controlling one's breathing has historically been a powerful form of yoga, and when combined with the hard physical activity that the game demands, it will help you develop considerable stamina and concentration that you will also be able to apply to other areas of your life.

**Agility:** As per the game, players from each team take turns holding their breath and crossing over to the other side of the line in order to try and touch as many of the opposing team's players as they can, while the opposing team does everything it can to prevent that player from returning back to his side of the line without taking a breath. Running, kicking, dodging and feinting are therefore skills that are essential to the game, and as you start picking them up, your muscles will become much stronger and your movements more agile.

In addition to all these health benefits, kabaddi is an easy and inexpensive sport to take up. Unlike other sports like cricket, football, tennis, squash, badminton or table tennis, which happen to require both equipment and space, kabaddi does not need either. All you require is a few friends, a grassy field and a little bit of spare time a few times a week.

### **Review of related literature**

**Suman Rani (2018)** The present study has been designed to investigate the flexibility of kabaddi and kho-kho players. For accomplish the study total 50 players (25 kabaddi and 25 kho-kho) were randomly selected as sample. All samples were selected from the Rohtak district. The age of the subjects was ranged from 16-19 years. To measure access the flexibility we used sit and reach test in the study. The data was analyzed by applying 't' test in the order to determine the difference of flexibility between kabaddi and kho-kho players. The level of significance was set at 0.05. A significant

difference was observed between kabaddi and kho-kho players in their flexibility. We find out that kabaddi players having more flexibility in comparison of kho-kho players.

**Yuwraj shrivestava and Jai Shankar Yadav (2014)** conducted the study to find out the impact of playing surface i.e. clay & met motor coordinative ability of male state kabaddi players, to conduct the study, 80 male kabaddi players age group 18-25 years, who took part in state level kabaddi tournament, were selected as sample. The selection of subjects was done from players of such teams who stood in top four places of state tournament in Chhattisgarh. agility of the selected male kabaddi players was assessed by shuttle run test item of Cooper's motor fitness test (1974). This test is performed twice by the subject i.e. on clay & met surface respectively. Results indicate the shuttle run performance of male kabaddi on clay surface was significantly better as compared to met surface at .01 level of statistical significance. It was concluded that playing surface effect motor coordinative ability of male kabaddi players.

**Sabir Ali and Samirranjan Adhikari (2014)** In India Kabaddi is considered as National Game. Much impetus has been putting only very recently to make it an international game. For this purpose academic research should be done. There is only a few research works in this field. The present study was carried out through descriptive survey method within ex-post-facto research design. Seventy one men Kabaddi players of the teams of different Indian Universities were considered as the sample here. Data was collected from the Kabaddi players in course of Inter-University Kabaddi (Men) Tournament, held in the University of Kalyani during October 12-14, 2006. The height, weight, leg length, arm length, mid thigh girth, calf girth, body composition (i.e. body fat %, fat mass and lean body mass) and body mass index were considered as physical and anthropometric characteristics. These were measured in usual and popular method. Descriptive statistics of the physical and anthropometric characteristics of Kabaddi players was calculated by using SPSS 10.1 software

## **Methodology**

### **Population and Samples**

Forty five (45) students were selected from Sankara college. The selected students were divided randomly into three groups. The randomly selected participants were divided into Control group, Traditional Training group and High Intensity Training Group. Control group underwent zero training whereas Traditional training and High Intensity Training group underwent specific drills/exercise according to their training design which is instructed by the researcher. The age of the participant was

ranged from 17 to 22years. The designed dependent selected fitness variables are Muscular endurance and the selected performance variables Hand touch ability.

## **Procedure**

### **Data and source of data**

In the beginning of the test all forty five students were instructed to do the of test designed dependent selected fitness variables are Muscular strength and Muscular endurance and the selected performance variables are Kicking ability and Hand touch ability. From this pre test data were collected. After the test three groups were randomly designed fifteen. Control group, Traditional Training group and High Intensity Training Group. Control group underwent zero training whereas Traditional training and High Intensity Training group underwent specific drills/exercise according to their training design which is instructed by the researcher. From this pre-test data were collected

Both training group were underwent set of training program which is instructed by the researcher. .

At the end of sixth week take both the group were instructed to take the dependent selected fitness variables are Muscular strength and Muscular endurance and the selected performance variables are Kicking ability and Hand touch ability. From this post test data were collected.

### **Experimental design and Statistical Technique:**

Pre and Post Random Experimental design used for this study as being there is control group involved. The obtained data were statistically analysed with ANCOVA was used to find out the significant difference. In all the cases the criterion for statistical significance was fixed at 0.05 level of confidence ( $P < 0.05$ ).

**TABLE I**  
**COMPUTATION OF ANALYSIS OF CO-VARIANCE ON**  
**MUSCULAR ENDURANCE.**

Pre test Mean			Post test Mean			Adjusted post test means			Sources of Variance	Sum of square	df	Mean squares	F ratio
CG	TTG	HITG	CG	TTG	HITG	CG	TTG	HITG					
12.33 ± 1.97	12.67 ± 1.89	13.10 ±1.92	12.73 ±1.90	16.87 ±1.85	17.10 ±1.82	12.80	16.80	17.02	Between	163.07	2	81.53	33.4*
									Within	100.08	41	2.44	

**CG** – Control Group, **TTG** – Traditional Training Group, **HITG** – High Intensity Training Group

\*significant at 0.05 level of confidence (The table value required for significance at 0.05 level with df 2 and 41 is 3.23)

Table I shows the pre test mean of Control Group, Traditional Training Group and High Intensity Training Group are 12.33, 12.67 and 13.10 respectively and the post mean of Control Group, Traditional Training Group and High Intensity Training Group are 12.73, 16.87 and 17.10 respectively. The adjusted post test means of Control Group, Traditional Training Group and High Intensity Training Group are 12.80, 16.80 and 17.02 respectively. The obtained f-ratio of 33.4 which is higher than the table value 3.23 with df 2 and 41 required for significance. The result of the study indicates that there are significant mean differences on Muscular Endurance among the adjusted post test means of Control Group, Traditional Training Group and High Intensity Training Group at 0.05 level. Hence it is clear that the Traditional Training Group and High Intensity Training Group significantly improved the Muscular Endurance of the Participants. Among this two training groups High Intensity Training group seems to be the best.

**TABLE II**  
**COMPUTATION OF ANALYSIS OF CO-VARIANCE ON**  
**TOE TOUCH ABILITY.**

Pre test Mean			Post test Mean			Adjusted post test means			Sources of Variance	Sum of square	df	Mean squares	F ratio
CG	TTG	HITG	CG	TTG	HITG	CG	TTG	HITG					
3.14 ± 0.35	3.54 ± 0.47	3.67 ±0.48	3.23 ±0.42	4.87 ±0.42	5.12 ±0.45	3.25	4.93	5.15	Between	30.8086	2	15.4043	61.69*
									Within	10.241	41	0.2497	

**CG** – Control Group, **TTG** – Traditional Training Group, **HITG** – High Intensity Training Group

\*significant at 0.05 level of confidence (The table value required for significance at 0.05 level with df 2 and 41 is 3.23)

Table II shows the pre test mean of Control Group, Traditional Training Group and High Intensity Training Group are 3.14, 3.54 and 3.67 respectively and the post mean of Control Group, Traditional Training Group and High Intensity Training Group are 3.23, 4.87 and 5.12 respectively. The adjusted post test means of Control Group, Traditional Training Group and High Intensity Training Group are 3.25, 4.93 and 5.15 respectively. The obtained f-ratio of 61.69 which is higher than the table value 3.23 with df 2 and 41 required for significance. The result of the study indicates that there are significant mean differences on Hand Touch ability among the adjusted post test means of Control Group, Traditional Training Group and High Intensity Training Group at 0.05 level. Hence it is clear that the Traditional Training Group and High Intensity Training Group significantly improved the Toe Touch ability of the Participants. Among this two training groups High Intensity Training group seems to be the best.

#### **Conflict of Interest:**

There will no conflict interest between the Authors

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