



## Effects of Pranayama on Selected Skill Related Physical Fitness Components of Kabaddi Players of Mumbai Region

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### Abstract

The current paper highlights the effects of yoga on athlete or sportsperson to improving and helping to boost the performance. Pranayama is the part of yoga, 'Pran' means life force and 'Ayam' means regulation. Pranayama hold the 10 types each type improve the different function of body. In India we are practicing of yoga and pranayama from the ancient time. Kabaddi is body contact team game performing by the seven players of each team. The offensive and defensive skills perfume by the kabaddi players. With the regular practice of kabaddi we add types of pranayama to see the difference in performances of kabaddi players.

**Key Words:** Pranayama, Kabaddi, Skill related physical fitness components

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### Introduction:

Kabaddi is a sport that has been built based on multiple versions of the game. Kabaddi is a fusion of the game that was played in varied incarnations under multiple labels; there existed games like Kabaddi since Vedic period. Kabaddi was included as part of the athletics system in 1919. Maharashtra was the first state to introduce the policy to a national level, and incentivize further use through monetary incentives. The first basic rules for football were first written in 1918, and were expanded in 1923, and again in this same year, (1923), a tournament at Baroda was held, which was the first time the standard rules were applied. As a consequence, kabaddi has not looked back since then and other various tournaments are held all over the world during the year.

India has a few Taric games that are variants of one another. Kabaddi is the one played in the northwestern area of North India. The game of go is an old backyard antique from Japan. According to common opinion, kabaddi is appropriately regarded as the "Game of the Masses" owing to its success, accessibility, simple to deciphered laws, and public appeal. The game of Kabaddi is named from a Tamil term that means "holding of hand", which is the key feature of the game: It is one of the national games of Bangladesh and one of the regional games of Tamil Nadu, Punjab, Maharashtra Andhra Pradesh in India. As pronounced, the phrase "Kabaddi" means "holding breath". The game of Soccer is quickly played on no complex facilities or computers (which make it a common sport in the developing countries). It's a common sport that is played on a synthetic-like surface in a gym. Of course, the true stars are those people who love to play badminton.

### Statement of the problem:

Physical fitness is required in all aspects of kabaddi be it offensive or defensive game. Depending on the role of player in the team, the important of fitness varies. To find out the optimum fitness of kabaddi players so the researcher has selected the topic – “Effects of pranayama on selected skill related physical fitness components of kabaddi players of



Mumbai region.”

### Objective of the study:

This investigation will be conducted with the following objectives:

- To conduct a controlled experiment for evaluating the efficacy of the specific pranayama training module on the selected variables so as to exhibit top performance in Kabaddi.
- To assess the selected attributes of skill related physical fitness of the kabaddi players.
- To prepare specific pranayama training module considering the enhancement of the selected skill related physical fitness variables of the Kabaddi players.
- To assess balance ability and speed which are the essential components needed for success in Kabaddi.

### Hypothesis:

H<sub>1</sub>: The pranayama may be effective in improving skill related physical fitness of the Kabaddi players.

H<sub>2</sub>: The selected training may help to improve selected skill abilities of the Kabaddi players.

### Limitations:

- The habit and punctuality of the subjects are not under the controlled of the research scholar.
- It is not possible to control the diet and eating habits of the subjects.
- The climatic conditions are not in control of the research scholar.

### Delimitations:

The present investigation has a large scope and the area is so vast, therefore the study is delimited to –

- The subjects was be delimited only for the kabaddi players.
- The study delimited to the skill related physical fitness variables of kabaddi players.
- The study was delimited to 24 kabaddi players.
- The study was delimited to only 17-21 age group

### Significance of The Study:

- This study will help to the method which used to assess the variables for testing purpose in other sports, sportsmen of different level with some modification.
- The result of this study might educate the kabaddi players and coaches in particular about the significance of skill related physical fitness variables.
- The study may help all the coaches, physical education teachers and also kabaddi players to prepare a specific training programmed to develop the required variables.

### Methodology:

#### Research design:

The main purpose behind this study was to compare the skill related physical fitness components of kabaddi players of Mumbai. The purpose of the study was to find out the performance of kabaddi players on skill related physical fitness components. Balance, speed, agility are tests were conducted as follows.

The experiment will be conducted in three phases:

- Pre-Test;
- During Treatment / Training,
- Post Test.

**Balance test:**

**Purpose:** To assess the ability to balance successfully on a single leg.

**Equipment required:** stopwatch, metal beam 50cm long, 5cm high and 3cm wide.

The test requires participants to stand on one leg on a beam, with the other leg flexed at the knee and the foot of this leg held close to the buttocks. This single leg balance test assesses the strength of the leg, pelvic, and trunk muscle as well as dynamic balance.

Explain the test procedures to the subject. Perform screening of health risks and obtain informed consent. Prepare forms and record basic information such as age, height, body weight, gender, test conditions. Perform an appropriate warm-up.

**Procedure:** Stand on the beam with shoes removed. Keep balance by holding the instructor's hand. While balancing on the preferred leg, the free leg is flexed at the knee and the foot of this leg held close to the buttocks. Start the watch as the instructor lets go. Stop the stopwatch each time the person loses balance (either by falling off the beam or letting go of the foot being held). Start over, again timing until they lose balance. Count the number of falls in 60 seconds of balancing. If there are more than 15 falls in the first 30 seconds, the test is terminated and a score of zero is given.

**Speed test:**

**Purpose:** The aim of this test is to determine acceleration and speed.

**Equipment required:** measuring tape or marked track, stopwatch, cone markers, flat and clear surface of at least 70 meters.

Explain the test procedures to the subject. Perform screening of health risks and obtain informed consent. Prepare forms and record basic information such as age, height, body weight, gender, test conditions. Measure and mark out the test area. Perform an appropriate warm up. See more details of pre-test procedures.

**Procedure:** The test involves running a single maximum sprint over 50 meters, with the time recorded. A thorough warm up should be given, including some practice starts and accelerations. Start from a stationary standing position (hands cannot touch the ground), with one foot in front of the other. The front foot must be behind the starting line. Once the subject is ready and motionless, the starter gives the instructions "set" then "go.". The tester should provide hints for maximizing speed (such as keeping low, driving hard with the arms and legs) and the participant should be encouraged to not slow down before crossing the finish line.

**Agility test:**

**Purpose:** to test the ability to manoeuvre the body in a forward, backward and sideward direction.

**Equipment required:** marker cones, measuring tape, non-slip surface, and stopwatch.

Explain the test procedures to the subject. Perform screening of health risks and obtain informed consent. Prepare forms and record basic information such as age, height, body weight, gender, test conditions. Measure and mark out the course. Ensure that the participants are adequately warmed-up.

**Procedure:** Start with one foot behind the start line, no rocking movement is allowed. Hand timing starts from the first movement from the set position. Starting at cone 1, move to cone 2 using a side-stepping motion, then turn around the cone and run backward to cone 3. Once you are around cone 3, sprint forwards to cone 1, go around the cone and backwards running again to cone 4. Once around cone 4, sprint forwards to cone 2, then side step back to the starting cone 1. Remain facing forwards towards the baseline throughout the test. Two trials are allowed.

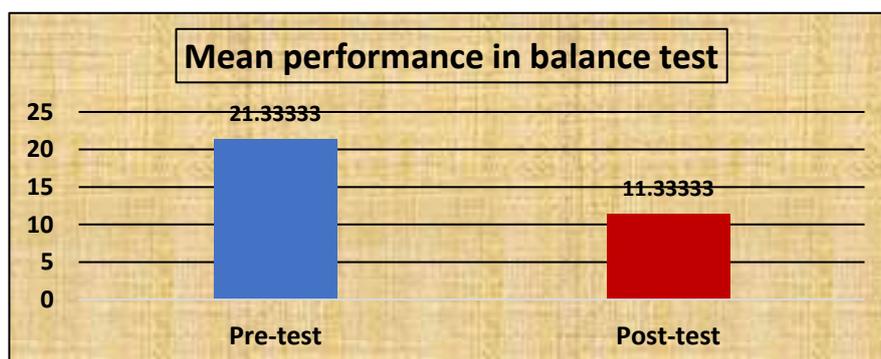
### Analysis and Interpretation of Data:

The present study was conducted to see the impact of a pranayama programme towards improvement of performance related fitness and skills of Kabaddi players.

And, in the next part, after reviewing the data collected, quantitative tools were used to accomplish the mission. The data is displayed in this manner by utilizing tables. The phase-wise findings and theoretical explanations have been provided, with all different stages in the method flowing from the previous step. The findings were debated and further endorsed with clear logic for the results to be confident and set. Since the groups were not equated the data pertaining to the variables of the study have been examined by an analysis of covariance for each variable separately in order to determine the difference. The level of significance to test the t-ratio, obtained by analysis of covariance was fixed at 0.05 level of confidence.

### Comparison of mean gains in balance test of kabaddi players:

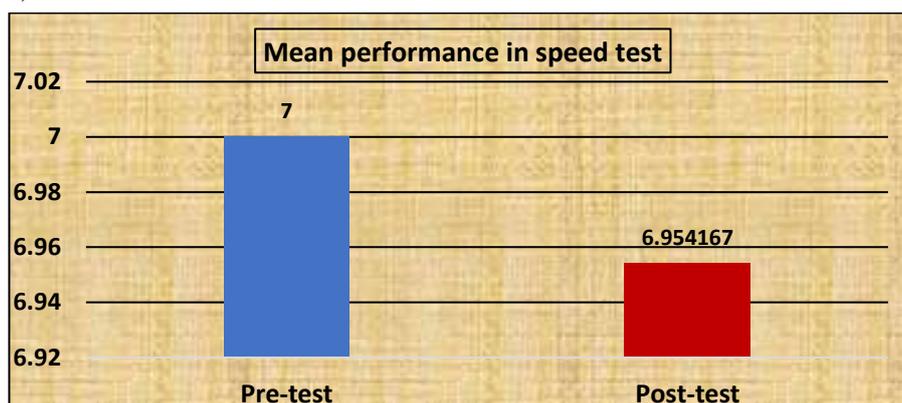
In the case of balance test, the mean performance of kabaddi players were 21.33333 and 11.33333 respectively. The mean differences for the groups were 10. The result of t-test of the groups show significant difference in balance test ( $t= 11.01851, p<0.05$ )



Thus the hypothesis  $H_1$ : “The pranayama may be effective in improving skill related physical fitness of the Kabaddi players” has been accepted.

### Comparison of mean gains in speed test of kabaddi players:

In the case of speed test, the mean performance of kabaddi players were 7 and 6.954167 respectively. The mean differences for the groups were 0.045833. The result of t-test of the groups show no significant difference in speed test ( $t= 0.686626, p>0.05$ )

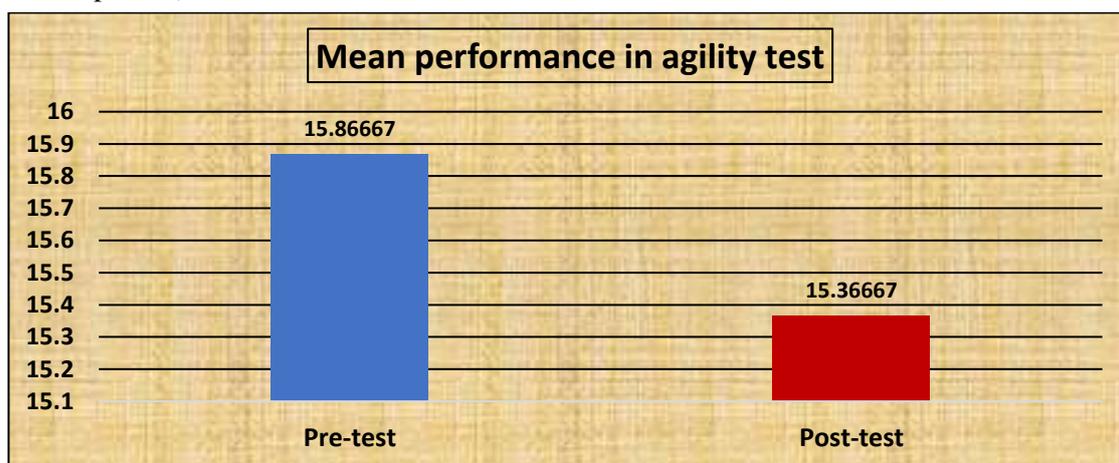




Thus the hypothesis H<sub>2</sub>: “The selected training may help to improve selected skill abilities of the Kabaddi players” has been rejected.

### Comparison of mean gains in agility test of kabaddi players:

In the case of agility test, the mean performance of kabaddi players were 15.86667 and 15.36667 respectively. The mean differences for the groups were 0.05. The result of t-test of the groups show no significant difference in speed test ( $t= 5.759607, p>0.05$ )



Thus the hypothesis H<sub>1</sub>: “The pranayama may be effective in improving skill related physical fitness of the Kabaddi players” has been rejected.

### Conclusion

The present investigation, within limitations, draws the following conclusion:

- The knowledge and practice of Yoga in India is vogue since time immemorial, it was bestowed and bequeathed to filial generations like a boon. The history reveals that it is a fruitful bless, its origin is subject to human for wellbeing. It is quite fully experimented from our ancestors as mentioned in the Ashtanga Yoga (Patanjali Yoga Sutra) covered the yoga ideology and technology.
- To play this game a player has to develop strength stamina, agility, flexibility etc. In fact, in this game due to repeated pitching, the shoulder joint is prone to injuries; therefore, it is essential that player should develop proper shoulder strength. Furthermore, there are several components of fitness that are important for the success of the Kabaddi players, though there are positional differences with different fitness levels. Perceiving the requirements of fitness components that are needed for the successful performance in Kabaddi game
- The most important factors which contribute towards a successful kabaddi player are agility, flexibility, muscular strength, cardiovascular endurance, neuro-muscular co-ordination, quick action, presence of mind, and immense courage. Kabaddi is a sport that needs physical actions along with a prolonged cant. It also considers ability for breath holding, maximum strength, fitness and stamina. In this game the raider has to hold the breath while chanting “Kabaddi-Kabaddi”, and touch the opponent and come back to court again while holding the breath. Thus, breath control plays an important role in achieving success. By controlling the act of breathing, one can efficiently control all the various motions in the body and the different nerve currents that are running through the body. So more the control over breath, more is the steadiness of mind and better is the performance. Nonetheless, for the success in this game one has to prepare to tackle seven strong and muscular opponents.

**Recommendation:**

The following recommendations were made in the light of this investigation for further research:

- Pranayama training program, as designed in this investigation, is useful exclusive for the school, state level male players of Kabaddi this study recommends for incorporation of this pranayama program for a minimum period of 8 weeks in the training schedule of the state level Kabaddi players.
- Though separate studies are necessary for Kabaddi's female players, the results of this research are extremely significant.
- The study can be applied to subjects of different states universities with different conditions, facilities and training

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