

A Special Study of Effect of Selected Yogasana on Selected Physical Fitness on Volley-Ball Players

Dr. Pradeep Ingale

Director of Sports,

Vasant Rao Kale Mahavidyalaya, Dhoki

Email – pradeepingale14@gmail.com

Introduction:

Yoga an ancient Indian science, aim to bring about functional harmony between body and mind through three main practices –Asanas, Pranayama, and meditation. The most benefit of yoga is Physical and mental development of the person. Now a days YOGASANA is the part of physical development. Simple and scientific movements makes more effective exercises to develop the skill and physical fitness.

Physical education and sports have an important place in India since ancient times because of several reasons. Sports of many kinds are being played in our country since a long time. Several kinds of exercises have been in vogue even today. Some sports are played in the festivals, some are played for the growth of our body. Whereas some are played for the purpose of entertainment. Later on the western sports have been spread and propagandized on a large scale in the British regime. Some VyayamShalas, Gymnastic Schools, Arneas and sport clubs seem to have maintained the continuity and importance of our Indian games and exercises. Still indigenous (Native) sports have not got the expected popularity. Some have tried best for achieving the same but in vain! But it seems that no expected success is got out of it. Therefore it is essential to prove the utility of indigenous games, their characteristics and importance.

Only for this target researches in India decided to study the YOGASANA being the tradition of Indian. The researcher in the aforesaid research studied the effects of after training Yogasana related to the players' physique and what results it shows on their selected physical ability. For this objective boys coming from 14 to 16 years age group are selected.

By using experimental research method to equal group are formed after training the experimental group for 45 days practically the game of Selected yogasana was played. The controlled group was sent to home. After 45 days in each group planning for developing physical fitness tests were formed in both the groups. The standardized measurements of the tests were taken and it was evaluated through the medium of ANOVA, and conclusions were drawn.

Objectives of the study:

1. To prepare the training programme of selected yogasana for Volley-ball players.
2. To find out the effects of selected yogasana [Bhujangasan, Parvatasan, Vakrasan, Paddamasan, Sadhasan, Halasan, Dhanerasan, Pashimotanasan, Sarvangasan] on selected Physical fitness of the Volley-ball players i.e. 14 to 16 years age group students.

Definitions of Important Terms :

Physical fitness :

Physical fitness is the ability to carry out one's own routine activity without fatigue.

Fowling selected components of Physical fitness----

- Body composition (percentage of body fat and lean body mass)
- Cardio respiratory functions of the body.
- Musculo-skeletal function is specially of abdominal and low back part of the body.
- Flexibility of the body.

Scope and limitations

This study has large scope to conduct similar research programme for other Indian cities.

The limitations of the study were as follows:

1. The researcher could not collect more data for more accurate results.
2. The researcher cannot impose restrictions on the diet of the subjects selected for the research.
3. No limitations can be laid upon the daily routine of the selected students for this research.

Delimitations of Research

- i. The study is delimited only for Z.P.High-school,Dhoki
- ii. The study is delimited only for 9th standard students (Boys Only)
- iii. The study is delimited only for the boys belonging to age group of 14 to 16 years ie. Adolescents.
- iv. The study is delimited only for the age group 14 to 16 years selected students' selected physical fitness factors.

Hypothesis:

- 1) Ho.1 :There is no significant effect of after training Selected yogasana on Cardio respiratory endurance the subjects.
- 2) Ho.2 :There is no significant effect of after training Selected yogasana on strength and endurance of Abdominal muscles of the subjects.
- 3) Ho.3 :There is no significant effect of after training Selected yogasana on Body Fat of Triceps, Subscapular, Thigh and calf muscles of the subjects.
- 4) Ho.4 : There is no significant effect of after training Selected yogasana on flexibility of the subjects.

Significance of the study

Following are the significant points of the present study.

- Training and its varied method in this selected yogasana are planned in order to develop different efficiencies hidden in physical education and games. But this seems to be limited in a particular class. It is not seen in the case of mass and it has many reasons. Everyone must be healthy, physically fit and all must study physical education. We often say this statement, but practically it is not

possible for this substantial reason. Researcher has studied the effects of students' physical fitness.

- It is an inexpensive Yoga.
- Especially it gives us easy exercises and it is expressed through this research.
- This study has observed the effects of after training Selected yogasana on student's physical fitness. This study helps to develop healthy body of student's and players. This research work also helps the teachers of physical education and sports directors. In building up health related physical fitness development of all.
- This research work assists to increase the standard of games
- This study increases the inexpensive health related fitness. It helps all to achieve the goal : physical education for all and in this context all are benefited.
- As no research is done so far on these subjects, the field of games and sports will certainly get valuable help.

Method of the Study

The experimental method was followed for this research work. The study was designed i.e. True experimental design and pre-test and post-test. Equivalent group design was applied.

Population sample

For the present research the total strength of the students includes the students (Boys) of 9th Standard belonging to the age group of 14 to 16 years i.e. Adolescents. Near about 80 students learning in Z.P.Highschool, Dhoki (2014-15) were taken into consideration for their selection.

Experimental and control group.

Simple random sampling method pertaining at Lottery system into the two groups of 30-30 will be divided as samples out of 60 students having equal ability.

Later on by way of Lottery system group number 1 was selected as experimental group and group number 2 was selected as control group.

Thus two groups were selected out of total strength of population from the sample.

Method of working was fixed as shown below in the present research.

Subject	Pre-test	→	Equal Group →	Experimental Group	→ Post-Test
Sample			Equal Group →	Control Group	

Planing of duration for treatment and test taken at the time of actual training:

The researcher had given the game Selected yogasana [Bhujangasan, Parvatasan, Vakrasan, Paddamasan, Sadhasan ,Halasan, Dhanerasan, Pashimotanasan, Sarvangasan] as the treatment of actual training of the experimental group where as only movements of warming up were given to the controlled group. But practically Selectedyogasana was not given the treatment but it had a duration of 45days. 45 days were divided into three parts each. Consisting of 45 days and after a gap of 45 days each post-test was taken. The planing of duration of this treatment was as follows.

(A) Stage I (Before Duration 45 days)

Pre-test : dated 3rd Oct 2014 and 4th Oct 2014

(B) Stage II (After Duration 45 days)

Treatment : dated 6th Oct 2014 to 30th Nov 2006 .

post-test : Dated 1st Dec 2006 and 2nd Dec 2006

	Treatment (Training)		Time Duration		Treated/Trained Group
1	Warming up	→	10 to 15 Minutes	→	Experimental Group and Control Group
2	Conditioning movements	→	10 to 15 Minutes	→	Experimental Group
3	Selected yogasana as a treatment	→	25 to 30 Minutes	→	Experimental Group
4	Relaxation Exercises	→	10 to 15 Minutes	→	Experimental Group

The above arrangement of the term for the experimental group was given in a weak for six days (Excluding Sunday). One session of 55 to 75 Minutes i.e 6.30 am to 8.30 am was given, where as the controlled group was given only warming up and sent home. The treatment of actual training was given for 45 days in three stages of 45 days for the main study.

Tools of Research :

It is essential to accumulate all kinds of procedures in the research work with its data, sources and equipments. It is equally necessary to collect

varied kinds of information’s for studying the problems, drawing final conclusions and for finding the solutions to the problem of research. The technique of scrutiny test and assessment will be used for this research work. The required information about the tests for its implementation and training of the ‘Selected yogasana’ is as follows:

Tests: Test certified by the experts of health related fitness and selected motor fitness was used.

Health related fitness tests:

1. Cardio respiratory endurance – 600 Yard Run / walk test
2. Muscular Strength – Sit-Ups (Bent Knee)
3. Body Fat – Skin Fold Score Test
4. Flexibility – Sit and Reach Test

Statistical Tools

The statistical principals were used for the scientific explanation of collected information and while giving up the main concepts or accepting it or presenting its conclusions, statistics is used.

The following statistical principals were used for drawing out conclusions which are obtained by the figures through the preliminary and the later tests on this present research work full of experimental and administrative conditions are as follows: Mean, Standard Deviation and ANOVA computer package.

Level wise Comparison and Discussion

1. 600 Yard Run/Walk Test :

- For level wise comparison between Level-1 Vs. Level-2 there was significant difference between experimental and control group. There was improvement of 0.421 sec. In experimental group and that in control group it was 0.119 sec. This implies after training Selectedyogasana improve the performance during first 45 days.

2. Sit-Ups (Bent Knee) Test :

- For level wise comparison between Level-1 Vs. Level-2 there was significant difference between experimental and control group. There was improvement of 8 Sit-Ups in experimental group and that in control group it was 0.2 Sit-Ups. This implies after training Selectedyogasana improve the performance during first 45 days.

3. Sit and Reach Test :

- For level wise comparison between Level-1 Vs. Level-2 there was significant difference between experimental and control group. There was improvement of 5.466 cms. in experimental group and that in control group it was 0.5 cms. This implies after training Selectedyogasana improve the performance during first 45 days.

4. Body Fat - Skin Fold Score Tests :

a. Triceps Skin Fold Score Test

- For level wise comparison between Level-1 Vs. Level-2 there was significant difference between experimental and control group. There was improvement of reducing body fat of triceps muscle of 0.27 mm. in experimental group and that in control group it was 0.04 mm. This implies after training Selectedyogasana improve the performance during first 45 days.

b. Sub Scapular Skin Fold Score Test

- For level wise comparison between Level-1 Vs. Level-2 there was significant difference between experimental and control group. There was improvement of reducing body fat of sub scapular muscle of 0.31 mm. in experimental group and that in control group it was -0.017 mm. This implies after training Selectedyogasana improve the performance during first 45 days.

c. Calf Skin Fold Score Test

- For level wise comparison between Level-1 Vs. Level-2 there was significant difference between experimental and control group. There was improvement of reducing body fat of Calf muscle of 1.087 mm. in experimental group and that in control group it was 0.07 mm. This implies after training Selectedyogasana improve the performance during first 45 days.

d. Thigh Skin Fold Score Test

- For level wise comparison between Level-1 Vs. Level-2 there was significant difference between experimental and control group. There was improvement of reducing body fat of Thigh muscle of 0.636 mm. in experimental group and that in control group it was 0.076 mm. This implies after training

Selected yogasana improve the performance during first 45 days.

- There was significant effect of Selected yogasana and it was observed at Level 1 Vs Level 2. This indicates that after training Selected yogasana improves muscular strength of the subjects.
- There was significant effect of Selected yogasana and it was observed at Level 1 Vs Level2. This indicates that after training Selected yogasana improves flexibility of the subjects.
- There was significant effect of selected yogasana and it was observed at Level 1 Vs Level 2. This indicates that after training Selected yogasana improves reducing body fat of triceps muscle Subscapular, calf muscle and Thigh muscle of the subjects.

Recommendations:

1. The researcher has studied the health related physical fitness as well as selected motor fitness abilities of the boys 14 to 16 age group. Research on the several factors and effects of them in relation to several abilities ie.total physical fitness, Fat in the Lean body fat, fat in the wrist can be investigated.
2. Only boys were selected for this research and the same experiment will be made on the girls.
3. Such type of research can be made on the boys and girls belonging to different age groups.
4. Only the factors of health related physical fitness are considered in this research and similarly all factors of physical fitness and motor fitness can be taken into consideration and research can be made on their effects.
5. Even such type of research can be made on other Indian sports.
6. Likewise by after training the selected yogasana for the long period of six months, one year research can be made on what effects are seen on their health related physical fitness or their complete physical fitness or motor fitness.

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