

EFFECT OF YOGIC ASANASON THE PHYSICAL FITNESS OF SOFTBALL PLAYERS

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Abstract

The purpose of the study was to see the effect of yogic asanas on the physical fitness of softball players. The variable selected for this study was Muscular strength, Muscular endurance, Cardiovascular endurance, Flexibility, Body Composition (freedom from obesity). The subject were 80 boys of school students of Rajasthan Govt. The age of the students was ranging between 11 to 16 years. The subject were equally assigned using random sampling procedure to four groups Calisthenics exercise, Yogasanas, Combined Calisthenics & Yogasanas (three experimental and one control group). The experimental group participated in the training programme for a period of 8 weeks. Qualitative measurements by qualified individuals, with standard equipments of the selected variable for each of the subjects were taken at the beginning and at the conclusion of an experimental period of 8 weeks. The data was collected from the four groups on selected Motor Fitness Components (muscular strength (arms), muscular strength endurance (abdominal), cardiovascular endurance, flexibility, body composition). On the basis of collection of data descriptive statistic was applied for the significant difference among groups ANCOVA was used. The level of significant was set at .05 level. Insignificant effect was found in three experimental group namely calisthenics group, yoga group, and combination of calisthenics and yoga group variables i.e., cardiovascular endurance, body composition (body mass index) and expiratory reserve volume in comparison to control group after eight weeks of training programme.

Keywords: *Yogasanas, Calisthenics exercise, Physical Fitness.*

INTRODUCTION

Physical training and sports is a complete education itself. Presently sports can give exceptional execution due to association of deductively substantiated preparing strategies and methods for execution of games exercise, for example, sports systems and strategies, enhancement of games rigging and gear just as different segments and states of games preparing.

Present day masterminds in training accentuate that best individual is one who is physically fit, rationally stable, sincerely adjusted and socially composed. Workout activities and Yogasanas rehearses are the critical apparatus in such manner. An end ever is made in this field by method of contrasting the impacts of workout, Works out. Yogasana rehearses freely and furthermore joined on chosen physical and physiological factors if there should be an occurrence of male understudies.

It is well said- 'Health is wealth'. Physical Education and sports develops the motor skill and enhances the mental spiritual and emotional movement. It always teaches us importance of the healthier life.

Since Vedic ages, Yoga has provided a stress free and very spiritual life-process. Basically, it is consisted of two words- Yoga and Asanas. Yoga as it reflects addition of something and here it adds up to bodily right postures for healing up of Body and Mind.

Literally Asana means – "Seat". Here it refers to Yogic postures or movements. It is said that the only posture in Yoga was a comfortable sitting for long period, known as meditation. These include the bottling up of all nadis and chakras of our body.

The goal of Yoga is to perceive every aspect in a clear manner. Actually, when we do not know about our breathing techniques, it means we are not bothering for our Body movements.

In modern world, everybody wants to be happy people are awakening for their health; They are joining gym, doing yoga-asanas, availing the yoga-camp, watching yoga-chapters on Media etc.

Now, yoga is taken as the "God of Personal heal-up, which will sensitize the whole world on a single platform.

When we use the term 'Asanas' – it surrounds with 84 Asanas, which not only help in the integration of the mind but it gives stability and effortless performance every time. It has three much renounced organs- Meditative, cultural and Relaxing, which emphasize all round figure of human behavior. Last but not least, Yoga is the medicine for every problem; moreover, it a life-long commitment. It is the philosophy of the combination of wisdom, ethics and spiritual manner.

OBJECTIVES OF THE STUDY

- To examine the effect of Yogasanas on physical fitness components of School going Softball Players.
- The result of study will be helpful in the evaluation of physical fitness of Softball players.
- This study will provide guidelines for better coaching & training programmes to players with a view to achieve goals.
- This study will be useful in talent search for canalizing Softball players to the games.

SELECTION OF SUBJECTS

To achieve the purpose of the study eighty (80) School Boys were selected randomly from Rajasthan. Their age range was from 11 to 16 years. The randomly selected subject was divided into three equal groups of twenty subjects each. There were three experimental groups namely Group I calisthenics exercise group (CEG), Group II Yogasanas group (YG), Group III combined calisthenics and Yogasanas (CEYG) and Group IV control group (CG) was subjected to a treatment for 8 weeks (6 days per week per group).

Selection of Variables

Independent Variables

- I. Calisthenics exercise
- II. Yogasanas
- III. Combined Calisthenics and Yogasanas

Dependent Variables

Motor Fitness Variables

- I. Muscular strength
- II. Muscular endurance
- III. Cardiovascular endurance
- IV. Flexibility
- V. Body Composition (freedom from obesity).

DESIGN OF THE STUDY

Pre Test, Post Test Randomized experimental Group Designed was used.

Testing Protocol

1. Experimental group was divided into three groups – Calisthenics exercise group (CEG) I and Yogasanas group (YG) II and combined (Calisthenic and Yogasanas) group III (CEGYG).
2. This study was used control group IV (CG).
3. Pre test in each group was done at the initiation of the study.
4. Post test was done in each group after 8 weeks Calisthenics, Yogasanas training and combined (Calisthenic and Yogasanas) group training.
5. Control group was go for regular schedule as usual.
6. The progressive training program of the Calisthenics and Yogasanas training was six (6) days a week for a period of (8) eight weeks (48 days) during regular and extra classes.

ADMINISTRATION OF TEST-

Collection of data

The data was collected on Motor Fitness Components (muscular strength (arms), muscular strength endurance (abdominal), cardiovascular endurance, flexibility and body composition. All four group participants Pre-Test data were collected. After eight weeks of treatment post-test data were collected N=20 for calisthenic CEG, N=20 for YG, N=20 for combined group CEGYG and N=20 for control group (CG) were followed their daily routine work. During the treatment of exercises students were not allowed to participate any training program.

STATISTICAL PROCEDURE

The following statistical procedures are adopted-

The data was collected from the four groups on selected Motor Fitness Components (muscular strength (arms), muscular strength endurance(abdominal), cardiovascular endurance, flexibility, body composition). On the basis of collection of data descriptive statistic was applied for the significant difference among groups ANCOVA was used. The level of significant was set at .05 level.

METHODOLOGY AND PROCEDURE

8 Week Training Program of CEG I

Warm –Up

Before the beginning of each session, the subject performed general warming up (mild stretching exercises, light and briskly walking, light jogging, slow to fast running then stretching exercises for joints and all muscles groups.)

CEG Training

TABLE-I

Callisthenic exercises: 30 Minutes

No.	Exercise	No. of count	Repetition	No. of set	Total work done
1	Free Hand Exercises				
	A. Both hand sideway and clap	16	1	1	16
	B. Jump and trunk forward bending	16	1	1	16
	C. Bilateral trunk bending	16	1	1	16
2	Light Dumbbell exercises				

	A. Both arms sideway with Dumbbell	16	1	1	16
	B. Hopping with knee raising forward with dumbbell	16	1	1	16
	C. Both arms double click with Dumbbell	16	1	1	16
3	Indian club exercises				
	A. Both Hand swing with Indian Club	16	1	1	16
	B. Jumping and swimming arms upward with Indian Club	16	1	1	16
4	Lazium Exercises				
	A. Dahine Baen Paon Harkat	16	2	2	32x2=64
	B. Lazium Chakkar	16	2	2	32x2=64

Rest between same Exercises-: 15 Seconds

Rest between one Exercises to another (A To B) exercise -: 30 Seconds

Rest between Set of Exercise-: 1 Minute and 30 Seconds

Equipment- Light Dumbbell, Indian Club and Lazium

Cool Down-

05 Minutes

At the end of each session students will be perform cooling down exercises (Limbering and stretching exercises followed by deep breathing relaxation exercises to held recovery as well as prevent injury).

8 Week Training Program of YG

TABLE-II

Group II- Yogasanas Exercise Group

Warm -Up

Before each session start students was perform general warming up (mild stretching exercises, light and briskly walking, light jogging, slow to fast running then stretching exercises for joints and all muscles groups and also suryanamaskar.

Warm up	5 to 10 minutes
Yogasanas training	30 minutes
Cool down	05 minutes
Total Time	40 to 45 minutes

Cool Down:- 05 Minutes

At the end of each session students was made to perform cool down exercises (Limbering and stretching exercises followed by deep breathing relaxation exercises and Savasana to held recovery as well as prevent injury).

TABLE-III**Yogasanas: 15 Minutes**

No.	Asanas	Repetition	Set	Total workout
1	<i>Tadasana</i>	1	2	1x2=2
2	<i>Hastapadasan</i>	1	2	1x2=2
3	Trikona asana	1	2	1x2=2
4	Chakra asana	1	2	1x2=2
5	Padmasana	1	2	1x2=2
6	Vajrasana	1	2	1x2=2
7	Suptavajr asana	1	2	1x2=2
8	Ardha matsyendra asana	1	2	1x2=2
9	Paschimottanasana	1	2	1x2=2
10	Halasana	1	2	1x2=2
11	Bhujangasana	1	2	1x2=2
12	Savasana	1	1	1x1=1

Rest between same Yogasana:- 15 Seconds

Rest between one Yogasana to another (A To B) Yogasana -: 30 Seconds

Rest between Set of Yogasana -: 1 Minute and 30 Seconds

Equipment- Mat / Dari

Cool Down:- 05 Minutes

At the end of each session students was made to perform cool down exercises (Limbering and stretching exercises followed by deep breathing relaxation exercises and Savasana to held recovery as well as prevent injury).

**Combined Training Program organised for the III group e.g. CEGYG
Warm –Up**

Before each session start students was perform general warming up (mild stretching exercises, light and briskly walking, light jogging, slow to fast running then stretching exercises for joints and all muscles groups and also suryanamskar.

**CEGYG Training
Table IV**

Warm up	5 to 10 minutes
CEG and YG training	30 minutes
Cool down	05 minutes
Total Time	40 to 45 minutes

TABLE-V

Calisthenic Exercise: 15 Minutes

No.	Exercise	No. of count	Repetition	No. of set	Total work done
1	Free Hand Exercises				
	A. Both hand sideway and clap	16	1	2	16x2=32
	B. Jump and trunk forward bending	16	1	2	16x2=32
	C. bilateral trunk bending	16	1	2	16x2=32

TABLE-VI

Yogasanas :15 Minutes

No.	Asanas	Repetition	Set	Total workout
1	<i>Tadasana</i>	1	2	1x2=2
2	<i>Hastapadasan</i>	1	2	1x2=2
3	Ardhachakra asana	1	2	1x2=2

4	Padmasana	1	2	1x2=2
5	Vajrasana	1	2	1x2=2
6	Savasana	1	1	1x1=1

CONCLUSION

Insignificant effect was found in three experimental group namely calisthenics group, yoga group, and combination of calisthenics and yoga group variables i.e., cardiovascular endurance, body composition (body mass index) and expiratory reserve volume in comparison to control group after eight weeks of training programme.

DISCUSSION AND FINDING

- In the present day scenario life have become fast and hectic that has resulted into mechanized kind of routine of every individual. People do not have time for thinking about their own body. Children are no exception the burden of schooling, tuition and to find their places in the merit list do not have time to play or exercise. Therefore, the researcher have taken our study to find out the effect of calisthenic exercises as well as Yogasana on health related physical fitness component and physiological variables.
- The result of the study revealed that there was significant difference found in the muscular strength (arms) as well as muscular strength endurance (abdominal). This may be due to the fact that the children were in adolescent age where exercises effects are seen very prominently. It is well know that yogic exercises are quite different than the normal aerobic exercise done in the modern world. A significant difference was found between calisthenic exercise group and the control group which clearly indicate that calisthenic exercise definitely improve the muscular strength. Similar result has been found in the yogic group and the control group this may again due to the fact that the children practicing yoga had to

repeatedly perform different Asanas that requires hard work from the muscles and hence resulting into improvement in the muscular strength and endurance of arm and abdominal.

- Chilamur K.C.D., Jyoti D.M. (2017) have reported in their study“Effect of Yogasanas, aerobics and callisthenic exercises on combined study in physical fitness variables of strength” that there Results revealed significant differences between pre and post-tests of experimental group in respect to Muscular strength (t-5.52) and also in between callisthenic and control group and Yogasana and control group.
- As far as cardiovascular endurance of the children is concerned the results reveal that there was no significant different found between the control and the experimental group. As discussed earlier the children were of adolescent age (11 + 15 year) which is age of growth and hormonal changes, the children in this age have abundance of energy and can work for long duration of time in the field. Performing callisthenic exercises or yogasnas was not found to be a detrimental factor as far as the endurance is concern.
- Similar result were found between the yogic group and the control group this may again due to the regular practices of various asanas that require the great demand from the muscles. Performing asanas require attaining various postures that results into stretching of muscles and hence improved the flexibility of the children.
- **Dhanraj (1974)** studied that the “effects of yoga and the 5 Bx fitness plan on selected physiological parameters:. The results indicated increase vital capacity, chest in expansion, breath holding time and flexibility after yoga training. Decreases in heart rate were also observed.

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