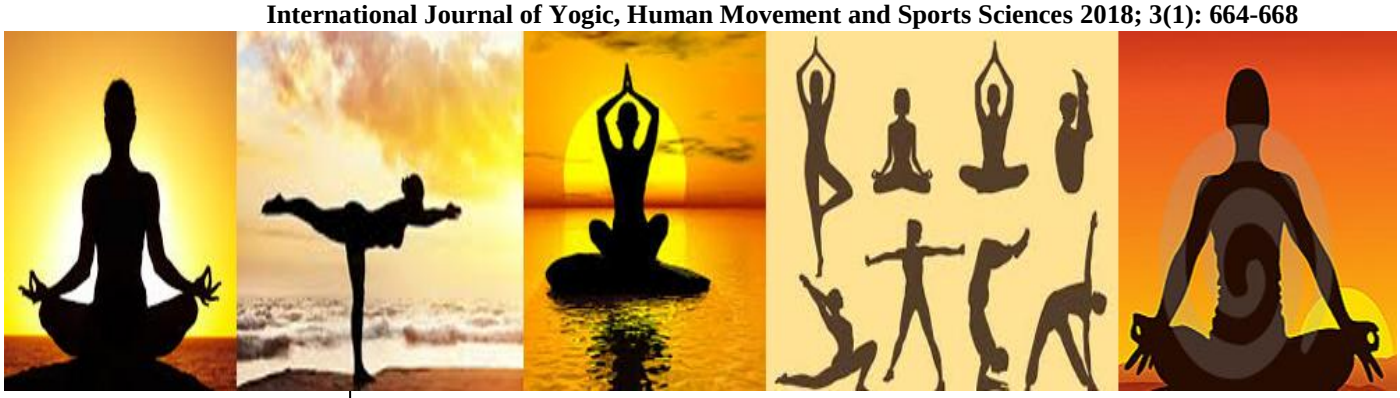
International Journal of Yogic, Human Movement and Sports Sciences 2018; 3(1): 664-668



ISSN: 2456-4419
Impact Factor: (RJIF): 5.18
Yoga 2018; 3(1): 664-668

www.theyogicjournal.com
Received: 22-11-2017
Accepted: 27-12-2017

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Effect of asana on physical fitness varaibles of secondary school students

Dr. Savitri S Patil

Abstract
The present study was made an attempt to evaluate the effect of Asana on Physical Fitness variables secondary school students. To collect the require data the purpose sample technique was used. The age limit of the sample was ranged between 14 to 17 years. The samples were taken from Vijayapur district, Karnataka. Asanas, Muscular Endurance and Flexibility were used to measure the Physical fitness variables of secondary school students. To assess the significance differences between the means between the sample sub group 't' was applied. And significant difference was found in physical fitness variables due to practices and training of yoga among sample group.

Keywords: Asanas, physical fitness and training

Introduction
The meaning of the Sanskrit word asana is study and comfortable posture. The postures performed in all yoga practices (Hatha Yoga and Ashtanga Yoga) are called asana. Although many people believe that they are physical exercises, it does not convey their full significance. Asanas aim at influencing the body, mind and consciousness, molding and yoking them into one harmonious whole'. The practice of asanas requires active involvement of one's entire being as fully as possible. In other words, try not to think about work or friends or food while performing them. The prime aim of asana is to help us tread the path to higher consciousness so we can begin to understand and know our relationship with existence. We cannot even consider attaining higher awareness if we are ill with disease, aches and pains or mental depression. Therefore, the initial purpose of practicing asana is to eliminate these disturbances and afflictions. A regular practice of asana makes us acquainted with the way our body is, and we then begin to understand the importance of breathing and staying still. The opening up of the body that results after a regular practice gives us a sense of freedom not only in the body, but more importantly in the mind driving us to come to terms with whatever is happening in our mind.

Physical Benefits
"The relaxation techniques incorporated in yoga can lessen chronic pain, such as lower back pain, arthritis, headaches and carpal tunnel syndrome," explains Dr. Nevins. "Yoga can also lower blood pressure and reduce insomnia."

Flexibility
If you ask people why they exercise, most will stay to stay healthy, keep fit, or because it makes them feel good. Not a lot will mention flexibility as a goal, but it's a key part of maintaining your health and avoiding injury, especially as you age. The stretching you do in yoga is a great way to improve your flexibility. It's a commonly held misconception that you have to already be flexible to do yoga. In fact, the opposite is true: doing yoga regularly is a sure way to become more flexible. The ten poses below target the three major muscles groups where most people are lacking flexibility: hamstrings, hips, and shoulders. These three areas tend to get even tighter from sitting for long periods or even from other types of exercise, like running.

Don't be in a rush to get through these poses. Many times you can feel several different phases of opening as you stay in a pose for longer. Don't expect overnight changes, however. For best results, do your stretches daily. The following poses are intended to give you some options to fit your current level of flexibility.

Muscular Endurance

Muscular endurance is the ability of a muscle or muscle group to exert force to overcome a resistance many times. Often the resistance is the body itself. The measurement of muscular endurance is based on the number of repetitions performed. Muscular endurance is specific to the assessment. The ability to perform upper-body exercises many times is separate from the ability to perform lower-body or abdominal exercises many times. Muscular endurance tests include push-ups, pull-ups and dips for the upper body, and sit-ups for the abdominals. Lower-body endurance can be assessed with squats. Consult a personal trainer to get help assessing your strength, power and muscular endurance. A trainer can also help you set reasonable goals and provide you with a training plan for reaching them. Always consult your healthcare provider before beginning a new exercise program. Your doctor or other medical provider can assess your general health and tell you if the program is right for you.

Statement of the Problem

The purpose of the study is to assess the "Effect of Asanas on Physical Fitness of Secondary School Students."

Hypothesis

- There is significant difference between pre test and post test group of high school students with respect to muscular endurance.
- There is a significant difference between pre test and post test among High school students with Respect to flexibility ability.
- It was hypothesized that training may effect and increases the flexibility and muscular endurance of the sample.
- It was hypothesized that there may not be positive effect of yoga asana on the flexibility and muscular endurance.

Limitations

- Measuring sophisticated equipments will be considered as limitation for this study.
- No motivational techniques applied while testing and training of the subjects.
- The daily routine work of the subjects might influence results, this is considered as limitation.
- Day to day activities, rest period, food habits and life style could not be controlled as it is considered as limitation of the study.
- The study is limited to the measuring the level of flexibility muscular endurance of Secondary school students

Delimitations

- The study is an Experimental.yogasanass conducting pre Test and post test.
- This study was confined to high school students only.
- The study was delimited to the age group of 15 to 16 years girls.
- This study is delimited to selected yogasanas only.
- This studies is delimited to flexibility, and muscular endurance, of high school students only.
- The study was delimited to Vijayapur district only**..**
- The study was limited to 30 control group and 30 experimental groups.

Methodology

The methodology adapted for the present study "Effect of Asanas on Physical Fitness of Secondary School Students." selection of subjects, experimental design, selection of variables, selection of tests, experimental design, collection of data and statistical procedure have been explained in the following para.

Selection of Subjects

The purpose of the study was to find out the" Effect of Asanas on Physical Fitness of Secondary School Students. ".age of the subjects ranged from 14 to17 year's girls. The investigator has been briefed about the purpose, nature, studying in Government School Ngathan /District Vjayapura.

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Selection of Variables

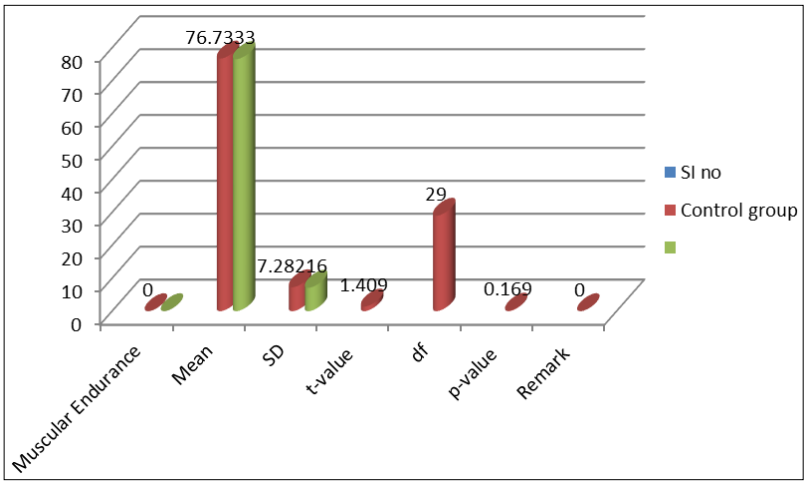
The research scholar reviewed the various scientific literatures pertaining to physical fitness and yoga training on selected physical fitness variables from books, journals, and research papers, taking into consideration the feasibility of criteria, availability of instruments and the relevance of the variables of the present study, the muscular. physical fitness and flexibility variables ware selected and assessed in following table.

Table 1: Showing the Mean, SD and t-value of Muscular Endurance of control group collected at Pre-Post condition during the study

S. No	Muscular Endurance	Mean	SD	t-value	Df	p-value	Remark
Control group	Pre test	76.7333	7.28216	1.409	29	.169	N S
	Post test	76.5667	7.11813				

The level of significant is 0.05

The mean and SD score of control group at pre-and post test is 76.7333 and 76.5667 respectively and calculated value is 1.409, it is lesser than table value i.e.0.005 level of significant, hence as per the formulated hypothesis there would be no significant difference between control group variables of Muscular Endurance at both pre and post test, the hypotheses was rejected, and alternative hypothesis that null hypothesis is accepted.



Graph 1: The Graph showing the Muscular Endurance means and t value of pre-post impact of control group

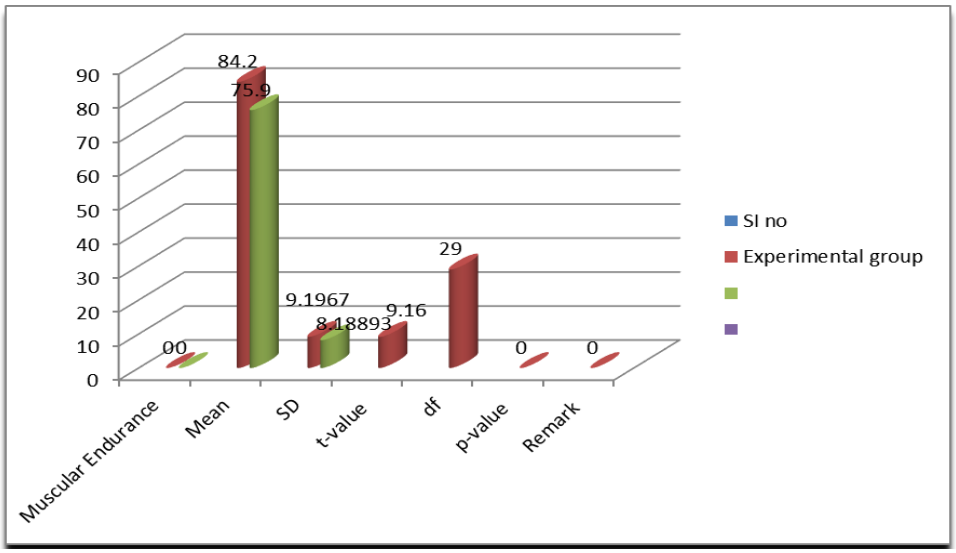
The above table and graph clearly express that the interval session did not influence and not effected on Muscular Endurance variables of the control group, when it was tested at pre-post-test. It is assumed that because the control group was not made to expose to any kind of training at pre and post-test; hence six week training gap given to control group also does not make any significant influence on their Muscular Endurance factors. The constant and similar life style condition and environment and sample nature has maintained previous status in their physical and yogasana qualities.

Table 2: Showing the Mean, SD and t-value of Muscular Endurance of Experimental group collected at Pre-Post condition during the study

S. No	Muscular Endurance	Mean	SD	t-value	Df	p-value	Remark
Experimental group	Pre test	84.2000	9.19670	9.160	29	.000	S
	Post test	75.9000	8.18893				

The level of significant is 0.05

The mean and SD score of Experimental group at pre-and post test is 84.200 and 75.9000 respectively and calculated value is 9.160, it is lesser than table value i.e.0.005 level of significant, hence it indicates that there is a significant development of Muscular Endurance component. Thus the hypothesis is accepted**.**



Graph 2: The Graph showing the mean, " t" value of Muscular Endurance collected at pre and post training session among the experiment group

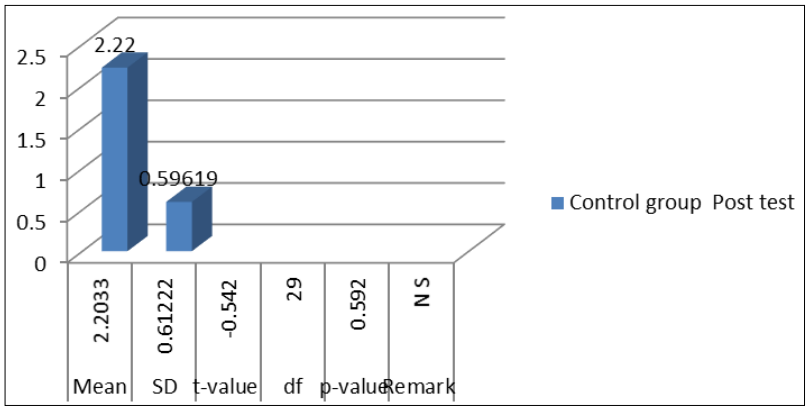
The above figure clearly indicates that six weeks yogasana training and (muscular endurance) for the training performance is statistically improved the of the nature of Harvard step test for flexibility has shown the significant difference in the Muscular Endurance. Hence the hypothesis was accepted.

Table 3: Showing the Mean, SD and t-value of control group with respective Sit and Reach test to assess the flexibility among school students at Pre and Post training session of the study

Sl no	flexibility	Mean	SD	t-value	df	p-value	Remark
Control group	Pre test	2.2033	.61222	-.542	29	.592	N S
	Post test	2.2200	.59619				

The level of significant is 0.05

The mean and SD score of control group at pre-and post test is 2.2033 and 2.2200 respectively and calculated value is -542, it is lesser than table value i.e.0.005 level of significant, hence as per the formulated hypothesis there would be no significant difference between control group variables of Flexibility at both pre and post test, the hypotheses was rejected, and alternative hypothesis that null hypothesis is accepted.



Graph 3: The Graph showing the flexibility means and t value of control group collected at pre and post training session

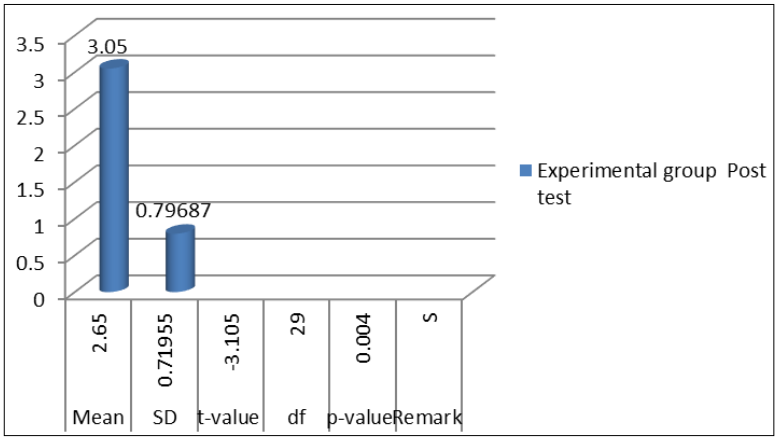
The above table and graph clearly express that the interval session did not influence and not effected on flexibility variables of the control group, when it was tested at pre-post-test. It is assumed that because the control group was not made to expose to any kind of training at pre and post-test; hence six week training gap given to control group also does not make any significant influence on their flexibility factors. The constant and similar life style condition and environment and sample nature has maintained previous status in their motor qualities.

Table 4: Showing the Mean, SD and t-value of Experimental group with respective Sit and Reach test to assess the flexibility among school students at Pre and Post training session of the study

S. No	flexibility	Mean	SD	t-value	df	p-value	Remark
Experimental group	Pre test	2.6500	.71955	-3.105	29	.004	S
	Post test	3.0500	.79687				

The level of significant is 0.05

The mean and SD score of Experimental group at pre-and post test is 2.6500 and 3.0500 respectively and calculated' t value is -3.105, it is lesser than table value i.e.0.005 level of significant, Hence it indicates that there is a significant development of flexibility component. Thus the hypothesis is accepted.



Graph 4: The Graph showing the flexibility means and t value of pre-post impact Of Experimental group

The above figure clearly indicates that six weeks physical variable (flexibility) for the game of (yoga), training performance is statistically improved the Flexibility of girls. The nature of sit and reach test for flexibility has shown the significant difference in the flexibility. Hence the hypothesis was accepted.

Conclusions

Based on the findings the following conclusions were drawn from the present study.

1. Six weeks yogasana training has shown significant improvement in experimental group on physical performance variables among the subject comparing to control group.
2. Six weeks of yogasanas training has shown improvement in muscular endurance and flexibility among the experimental group.

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