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## Analysis of effect of yogic exercise on Static and Dynamic flexibility among school students

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### Abstract

The authors in their research want to investigate the effect of three weeks exercise among students of XI(Boys and Girls)of DAV school in Ajmer. The pre and post test had taken by the author by using Dynamic flexibility test. The test which was conducted by the author are Shuttle run test and Trunk and Neck test. To determine this difference between the pre and post result was employed at the significance level of 5%. The authors in his research want to find out the difference in pre and post effect of yogic exercise in the general body posture of the students under observation. In this research paper the author measures the static and dynamic flexibility effect on yogic exercise among school students.

**Key words:** - *Dynamic and Static flexibility, Shuttle run test and Trunk and Neck test, comparative test.*

### Introduction

The history of yoga is very old in India and is one of the oldest form of exercise to keep oneself fit. The yogic practices have also been applied in the healing of many diseases, if practiced properly under the guidance of an expert. One of the best ways to keep yourself fit is to exercise regularly. In today's modern world the importance of yoga is growing very fast among all the sections of the society. In this fast moving lifestyle we don't have sufficient time to keep ourselves fit, and due to which we are affected from various kinds of diseases. The flexibility is of two types: - passive

and active flexibility. In case of passive flexibility during movement we require greater range with external help and in case of active flexibility during movement we require less movement as we do not require any external help. Active flexibility is always less than passive flexibility. The yogic practice is of great importance in keeping oneself fit both physically and mentally. Especially in case of school students awareness level is required, so that everyone benefits from it and makes it a habit as a regular routine. Body movement defines your physical well-being and regular yogic exercise will keep yourself fit. The

author in his research wants to find out the pre and post effect of yogic exercise. For this the author conducts experiment on the control group under investigation to find out the pre and post effect of yogic exercise on school childrens.

### Literature Review

Langpoklakpam Thumbi Devi and Nongmaithem Sundelal Singh (2014) in their research stated that, there is no immediate effect of yogic practices on flexibility but author in his finding stated that yogic practices help to improve dynamic flexibility. Deborah Bubela and Shanya Gaylord (2014) the authors in their finding stated that the children demonstrated significantly improved performance on the majority of the measures after participating in yoga training program. The author also stated that the yoga exercise help in the improvement of overall body postures. Ulger, O. and Yağlı, N. V. (2011) in their study with the purpose to investigate the effect of yoga found that the patient post result of gait parameter was higher than pre study. Harrison, A. J. and Bourke, G. (2009) in their study demonstrate, that training program (Physical exercise) can produce significant change in running speed than in normal condition. Kewal, Krishan et. al. (2004) on the basis of the study conducted by them on, the effect of the yogic asana on physical fitness of college students reveals that regular yogic practice of yogasana improved the physical fitness. Ghosh, S. K. (2003) under his study to find out the effect of yogic practices, found that there is decrease in pulse rate, respiratory rate and breath holding time as compared to the control group. Robson Moses

(1973) in his research reported that students doing yogic exercise have reported positive effect on breath control flexibility. Pratap, V. (1968) in his finding support the view that yoga exercise increase steaniness in normal students who are participating in yoga exercise.

### Objectives

1. To find out the effect of yogic practices on flexibility among school students
2. To find out the effect of yogic practices on Shuttle run test and Trunk and Neck test

### Research Methodology

The study was conducted on the school students of Class XI of various DAV School in Ajmer. For this 80 students were selected randomly from the Class XI. 40 boys and 40 girls. The average age of the students participated in the experiment is 15 to 17 years. For this the single group was designed for the experiment because the purpose of the study was to find out the effect of one experimental factor from a particular defined situation. The purpose of the study is to determine the effect of yogic exercise on flexibility. For analysis mean, standard deviation tests were used to test the pre and post effect of yogic exercise on the students under experiment.

### Analysis of Data

1. Pre-Post Test of Dynamic Flexibility for the Shuttle run test for Girls

Nature of Test	N	Mean	Standard Deviation
Pre Test	40	11.94	1.17
Post Test	40	11.08	1.17

**Table 1:- Pre-Post Test of Dynamic Flexibility for the Shuttle run test for Girls**

**Interpretation:** -The means and standard deviations for pre and post test of static flexibility shuttle run test of class XI (Girls) it was found that the score of the subjects was normal as per the national standards in pre test, difference is very significant as the score is in seconds and lesser the timing better the score, hence it could be said that the yogic practice has improved the dynamic flexibility of the subjects. The standard deviation in pre and post test was more or less same which suggests that the scores did not variate much among the subjects in pre as well as post test being from the same age group and sex.

2. Pre-Post Test of Dynamic Flexibility for the Shuttle run test for Boys

Nature of Test	N	Mean	Standard Deviation
Pre Test	40	11.58	1.53
Post Test	40	10.72	1.30

**Table 2:- Pre-Post Test of Dynamic Flexibility for the Shuttle run test for Boys**

**Interpretation:** -The means and standard deviations for pre and post test of dynamic flexibility shuttle run test of class XI (Boys) it was found that the score of the subjects was normal as per the national standards in pre test, difference is very significant as the score is in seconds and lesser the timing better the score, hence it could be said that the yogic practice has improved the dynamic flexibility of the subjects. The standard deviation in pre and post test was more or less same which suggests that the scores did not variate much among the subjects in pre as well as post test being from the same age group and sex.

3. Pre-Post Test of Static Flexibility for the Trunk and Neck test for Girls

Nature of Test	N	Mean	Standard Deviation
Pre Test	40	8.14	0.56
Post Test	40	9.41	0.32

**Table 3:- Pre-Post Test of Static Flexibility for the Trunk and Neck test for Girls**

**Interpretations:** - The means and standard deviations for pre and post test of Static Flexibility Test- Trunk and Neck, Class XI (Girls) it was found that the score of the subjects was normal as per the national standards in pre test, difference is very significant as the score is in seconds centimeters, hence it could be said that the yogic practice has improved the static flexibility- Trunk and Neck, of the subjects. The

standard deviation in pre and post test was more or less same which suggests that the scores did not vary much among the subjects in pre as well as post test being from the same age group and sex.

#### 4. Pre-Post Test of Static Flexibility for the Trunk and Neck test for Boys

Nature of Test	N	Mean	Standard Deviation
Pre Test	40	8.56	0.24
Post Test	40	9.53	0.16

**Table 4:- Pre-Post Test of Static Flexibility for the Trunk and Neck test for Boys**

**Interpretations:-** subjects was normal as per the national standards in pre test, difference is very significant as the score is in seconds centimeters, hence it could be said that the yogic practice has improved the static flexibility- Trunk and Neck, of the subjects. The standard deviation in pre and post test was more or less same which suggests that the scores did not vary much among the subjects in pre as well as post test being from the same age group and sex.

#### Discussions

The purpose of writing this research paper is to find out the effect of yogic exercise in the normal body postures. The result of pre and post effect were analyzed and, on the basis of finding it was found that there is variation in pre and post observation among both boys and girls students. The result is not immediate but after continuous yogic practice there have been seen changes in the

normal body postures (Flexibility). Hence we have proved from the above research that yogic exercise play significant role in shaping body postures.

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