



EFFECT OF YOGA PRACTICES ON SELECTED HEALTH RELATED VARIABLE OF SCHOOL STUDENTS

Anjum jaha A. Pattewale*

Dr. Sakpal Hoovanna**

**Research Scholar, Department of Studies in Physical Education and Sports Sciences, Karnataka State Akkamahadevi Women's University, Vijayapura, Karnataka*

***Research Guide, Department of Studies in Physical Education and Sports Sciences, Karnataka State Akkamahadevi Women's University, Vijayapura, Karnataka*

Abstract

The purpose of the study was to find out the "Effect of yoga practices on selected health related variable of school students". It was hypothesized that there would be significant differences on selected health related variable due to the Effect of yoga practices on selected health related variable of school students. For the present study the 40 school students from G.H.S. Chikkahattiholi, Khanapur Taluk, Belgaum District, Karnataka were selected at random and their age ranged from 13 to 15 years. For the present study pre test – post test random group design which consists of control group and experimental group was used. The subjects were randomly assigned to two equal groups of twenty each and named as Group 'A' and Group 'B'. Group 'A' underwent yogic practices and Group 'B' has not undergone any training. The data was collected before and after six weeks of training. The data was analyzed by applying dependent 't test and ANOVA. The level of significance was set at 0.05. The yogic practices had positive impact on Muscular Endurance of school students.

Key words: Yogic practices, Muscular Endurance, School Students.

Introduction

Yoga is a systematic practice for the realization of higher perceptions. It is the science of life and an ideal way of living, providing rhythm to the body, melody to the mind, harmony to the soul and thereby symphony to life. In short, Yoga is a way to achieve total health, peace, bliss and wisdom. Physical, mental and spiritual aspects of yoga help to make one's life purposeful, useful and noble. Thus Yoga is an art, science and philosophy, which influence the life of man at each level. Therefore, the effect of yoga must be felt in every movement of our day to day lives. Yoga is an ancient Indian science which teaches man how to live in unity within himself and with those around him. It is recognized as one of the most important and valuable heritages of India. More than 2000 years ago our ancestors developed it to bind the body, mind and spirit, as a harmonious whole. It has been growing in popularity with unbelievable rapidity over the years. Today the whole world is looking towards yoga for answers to the various problems the modern man is facing.

Yoga is an ancient form of relaxation and exercise that has many health benefits, including lowering cholesterol. Pranayama also helps to connect the body to its battery, the solar plexus, where tremendous potential energy is stored. When tapped through specific techniques this vital energy, or prana, is released for physical, mental and spiritual rejuvenation. Regular practice removes obstructions, which impede the flow of vital energy. When the cells work in unison, they bring back harmony and health to the system. 20 to 25 minutes (every morning or evening) of pranayama practice increases lung capacity, breathing efficiency, circulation, cardiovascular efficiency, helps to normalize blood pressure, strengthens and tones the nervous system, combats anxiety and depression, improves sleep, digestion and excretory functions, provides massage to the internal organs, stimulates the glands, enhances



endocrine functions, normalizes body weight, provides great conditioning for weight loss, improves skin tone and complexion (Eugene, 1997).

Hypothesis

- It was hypothesized that there would be a significant improvement between pre and post-test due to 6 weeks of Yogic practices on Muscular Endurance of school students.
- It was hypothesized that there would not be a significant improvement between pre and post-test for control group on Muscular Endurance of school students.
- It was hypothesized that there would be a significant difference between experimental and Control group on Muscular Endurance of school students.

Delimitations

- The following delimitations are considered in this study. 40 school students were selected randomly.
- The experimental group was given Yogic practices for a period of Six weeks.
- The subject's age group ranged from 13-15 years.
- The study was restricted to Muscular Endurance of school students.

Methodology

The purpose of the study was to find out the “Effect of yoga practices on selected health related variable of school students”. It was hypothesized that there would be significant differences on selected health related variable due to the Effect of yoga practices on selected health related variable of school students. For the present study the 40 school students from G.H.S. Chikkahattiholi, Khanapur Taluk, Belgaum District of Karnataka were selected at random and their age ranged from 13 to 15 years. For the present study pre test – post test random group design which consists of control group and experimental group was used. The subjects were randomly assigned to two equal groups of twenty each and named as Group ‘A’ and Group ‘B’. Group ‘A’ underwent yogic practices and Group ‘B’ has not undergone any training. The data was collected before and after six weeks of training. The data was analyzed by applying dependent ‘t’ test and ANOVA. The level of significance was set at 0.05.

Selection of Variables

Yoga Practices

- Halasana
- Chakrasana
- Janu sirasana
- Bhujangasana
- Saravangasana
- Dhanurasana
- Bakasana
- Yoga Mudhra
- Supta Vajrasana
- Pada Hasthasana
- Savasana



Health related variable

• **Muscular Endurance**

Test Items	Criterion Variables	Measurement
Push up test	Muscular Endurance	The aim of this test is to do as many push up as possible in one minute.

Results

The findings pertaining to analysis of dependent ‘t’ test between experimental group and control group on selected Health related variables of school students for pre-post test respectively have been presented in table I to II.

Table 4.1 The summary of mean and dependent ‘t’ test for the pre and post tests on Muscular Endurance of yoga training group and control group

Muscular Endurance	Yoga Training Group-I	Control group-II
Pre- test Mean	42.3667	46.0333
Post- test Mean	65.4667	46.0000
t-test	14.400*	.010

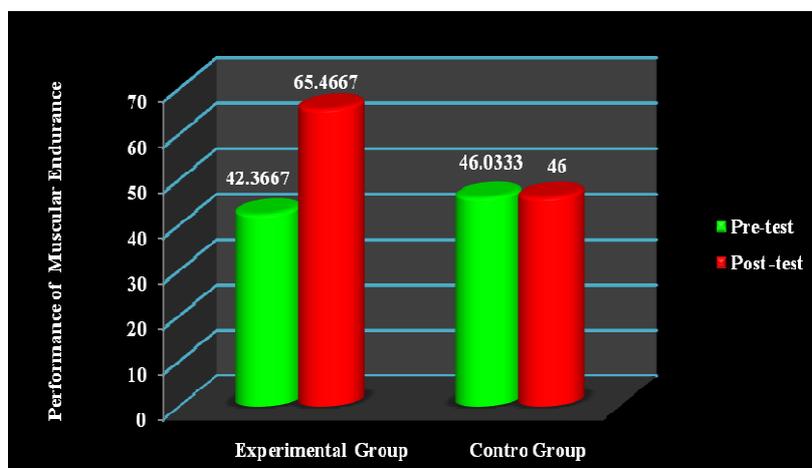
* Significant at .05 level.

(Table value required for significance at .05 level for ‘t’-test with df 29 is 1.684)

From Table 4.1 the dependent ‘t’ test values between the pre and post test means of Yoga Practices Group and Control Group are found to be 14.400 and .010 respectively. Since the obtained ‘t’-test values of Experimental groups are greater than the table value 1.684 with df 29 at .05 level of confidence, it is concluded that Yoga Practices Group had registered significant increased in performance of Muscular Endurance.

The Muscular Endurance Performance has been displayed in figure 4.1 (a).

Figure NO 4.1 (a) .Bar diagram showing the pre and post means of the experimental and control groups on Muscular Endurance.





The above figure 4.1 (a) indicates that the post test values of Experimental group significantly improved the performance of Muscular Endurance and also the post test values of Muscular Endurance were more than the pre test values due to 6 weeks of Yoga Practices. The Control group pre-test and post- test performance of Muscular Endurance shows no improvement.

Table No.4.2 Analysis of covariance on Muscular Endurance of yoga Yoga Practices group and control group

Adjusted Post-test Means		Source of Variance	Sum of Squares	Df	Mean Squares	‘F’ Ratio
Yoga practices group	Control group					
65.5530	46.1979	B.G	4725.618	1	4725.618	17.103*
		W.G	7736.382	28	276.299	

* Significant at .05 level of confidence

(The table value required for Significance at .05 level with df 1 and 28 is 1.684)

Table 4.2 (a) shows that the adjusted post-test mean values of Muscular Endurance for Yoga Practices Group and Control Group are 65.5530 and 46.1979 respectively. The obtained F-ratio of 17.103 for adjusted post test mean is much greater than the table value of 1.684 for df 1 and 28 required for significant at .05 level of confidence.

The results of the study indicate that there are significant differences among the adjusted post-test means of Yoga Practices Group and Control Group on the development of Muscular Endurance. To determine which of the paired means had a significant difference.

Figure no.4.2 Post-test Means of the experimental and control groups on Muscular Endurance

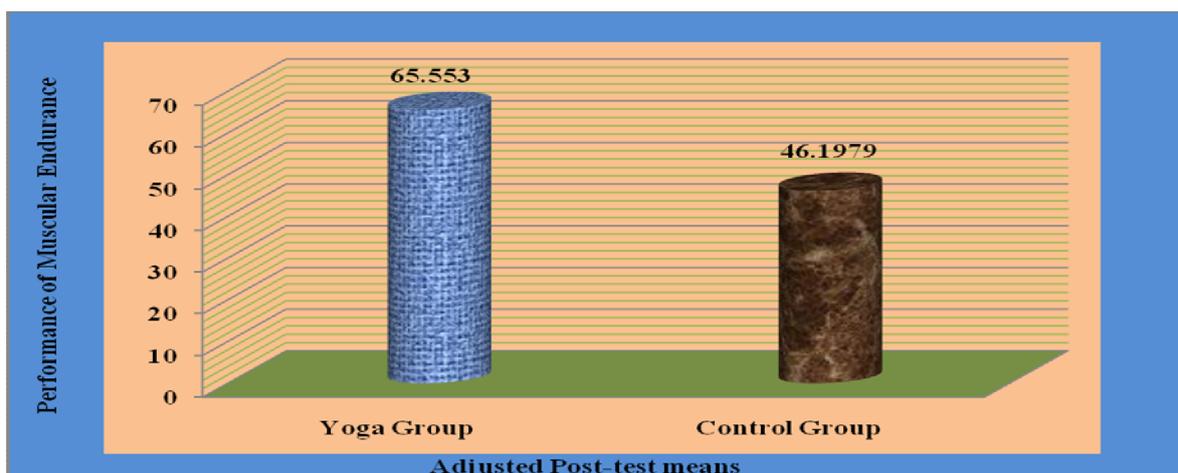


Figure 4.1 (b) Bar Diagram Showing the Adjusted post test Mean values of Yoga Practices Group and control Group significantly improved the performance of Muscular Endurance.



Summary

The purpose of this study was to find out the “Effect of yoga practices on selected health related variable of school students”. To achieve this purpose 6 weeks yoga practices was given to selected school students. To know the yoga practices developed Muscular Endurance performance.

Conclusion

The yoga practices group had shown significant improvement in Muscular Endurance of school students. The control group had not shown any significant changes on Muscular Endurance.

References

1. Cramer, H., Lauche, R., Haller, H., Steckhan, N., Michalsen, A. & Dobos, G. (2014). Effects of yoga on cardiovascular disease risk factors: A systematic review and meta analysis. *Int J Cardiol.* pii: S0167-5273(14)00370-2.
2. Eugene S.Rawles, (1997). *Yoga for Beauty and Health*. New York: Parker Publishing Company Inc.
3. Komathi R. & Kalimuthu, M. (2011). Effect of Yogic Practices on Abdominal Strength among School Boys, *Recent Trends in Yoga and Physical Education*, Vol. I, p.51.
4. Narasimhan, L., Nagarathna, R., & Nagendra, H. R. (2011). Effect of integrated yogic practices on positive and negative emotions in healthy adults. *International Journal of Yoga*, 4(1), 13-19.
5. Swami Kunalayananda (1977). *Asana, Lonavala: Kaivalya dhama*. 18. Swami Sivanandha (2001). *Radiant Health through Yoga*. The orient processors, Sivakashi.
6. Sharma, A. (2012). Monitoring aggression in adolescents: yoga as a panacea. *Global Journal of Human Social Science Arts & Humanities*, 12(15), 33-46.