



EFFECT OF DIFFERENT TRAINING REGIMES ON FLEXIBILITY AMONG SCHOOL STUDENTS

Dr.K.CHANDRASEKARAN

CHAIRPERSON, Professor & Head, Department of Physical Education, School of Education, Madurai Kamaraj University, Madurai, Tamilnadu, India.

Abstract

The purpose of the study was to determine the best training packages among the physical activity, yogic practices, combination of physical activity with yogic practices on flexibility among school students. To achieve the purpose of the present study, eighty school students from Madurai district, Tamilnadu were selected as subjects at random and their ages ranged from 14 to 16 years. The subjects were divided into four equal groups of twenty subjects each. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (N=80) were randomly assigned to four equal groups of twenty subjects each. The groups were assigned as physical activities, yogic practices, combined physical activity with yogic practices and control group in an equivalent manner. The group I underwent physical activities, group II underwent yogic practices, group III underwent combined physical activities with yogic practices and group IV acted as a control group. The three experimental groups were participated the training for a period of twelve weeks to find out the outcome of the training packages and the control group did not participated in any training programme. Analysis of covariance (ANCOVA) was applied because the subjects were selected random, but the groups were not equated in relation to the factors to be examined. Hence the difference between means of the four groups in the pre-test had to be taken into account during the analysis of the post-test differences between the means. This was achieved by the application of the analysis of covariance, where the final means were adjusted for differences in the initial means, and the adjusted means were tested for significance. Whenever the adjusted post-test means were found significant, the scheffe's post-hoc test was administer to find out the paired means difference. To test the obtained results on variables, level of significance 0.05 was chosen and considered as sufficient for the study. The significant mean difference does not exist among all the four groups in the pre test on flexibility. In testing post test mean difference among the four groups, it shows that statistically significant on flexibility. In testing the post adjusted mean among the four groups also predicts the above result.

Keywords: Physical Activity, Yoga, Flexibility, School Students.

INTRODUCTION

Yoga is essentially an art of understanding all about the soul and to realize the self. The inherent aim of human birth is to understand fully the self, the nature, the almighty and its order of function. Once the realization is achieved one should live respecting the order of function in peace and content. Yoga is one of India's wonderful gifts to mankind. One of its valuable qualities is that it builds up a store of physical health through the practice of a system of exercises called asanas which keep the body cleansed and fit. Yoga believes that exercise is essential for speedy removal of toxins and for keeping blood circulation and all internal processes functioning smoothly. Yoga is a science and it is based on observation and experiment. This method of observation and experiment is regarded in the west as a distinctly modern innovation, but as a matter fact it was adopted in India in very ancient time by the 'ishis. Through the process of close observation and constant experiment they discovered the fine forces of nature, as also the laws that govern our physical, mental and spiritual being. 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 (Iyengar, 1968).

METHODOLOGY

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best training packages among the physical activity, yogic practices, combination of physical activity with yogic practices on flexibility among school students. To achieve the purpose of the present study, eighty school students from Madurai district, Tamilnadu were selected as subjects at random and their ages ranged from 14 to 16 years. The subjects were divided into four equal groups of twenty subjects each. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (N=80) were randomly assigned to four equal groups of twenty subjects each. The groups were assigned as physical activities, yogic practices, combined physical activity with yogic practices and control group in an equivalent manner. The group I underwent physical activities, group II underwent yogic practices, group III underwent combined physical activities with yogic practices and group IV acted as a control group. The three experimental groups were participated the training for a

period of twelve weeks to find out the outcome of the training packages and the control group did not participated in any training programme. Analysis of covariance (ANCOVA) was applied because the subjects were selected random, but the groups were not equated in relation to the factors to be examined. Hence the difference between means of the four groups in the pre-test had to be taken into account during the analysis of the post-test differences between the means. This was achieved by the application of the analysis of covariance, where the final means were adjusted for differences in the initial means, and the adjusted means were tested for significance. Whenever the adjusted post-test means were found significant, the scheffe's post-hoc test was administer to find out the paired means difference. To test the obtained results on variables, level of significance 0.05 was chosen and considered as sufficient for the study.

RESULTS AND DISCUSSION

TABLE-I

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF PHYSICAL ACTIVITY, YOGIC PRACTICES, COMBINED PHYSICAL ACTIVITY WITH YOGIC PRACTICES AND CONTROL GROUPS ON FLEXIBILITY

	PAG	YPG	CPAYPG	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	24.34	24.05	23.91	24.23	BG	2.17	3	0.72	0.13
					WG	401.71	76	5.28	
Post-Test Means	30.46	30.82	33.98	24.30	BG	984.13	3	328.04	37.76*
					WG	660.18	76	8.68	
Adjusted Post-Test Means	30.41	30.83	34.03	24.27	BG	994.47	3	331.49	38.77*
					WG	641.26	75	8.55	

An examination of table - I indicated that the pretest means of physical activity, yogic practices, combined physical activity with yogic practices and control groups were 24.34, 24.05, 23.91 and 24.23 respectively. The obtained F-ratio for the pre-test was 0.13 and the table F-ratio was 2.72. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 3 and 76. The post-test means of the physical activity, yogic practices, combined physical activity with yogic practices and control groups were 30.46, 30.82, 33.98 and 24.30 respectively. The obtained F-ratio for the post-test was 37.76 and the table F-ratio was 2.72. Hence the pre-test

mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 76. The adjusted post-test means of the physical activity, yogic practices, combined physical activity with yogic practices and control groups were 30.41, 30.83, 34.03 and 24.27 respectively. The obtained F-ratio for the adjusted post-test means was 38.77 and the table F-ratio was 2.72. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 75. The adjusted post test mean values of physical activity, yogic practices, combined physical activity with yogic practices and control groups, on flexibility are graphically represented in the figure -I.

FIGURE - I
ADJUSTED POST TEST DIFFERENCES OF THE PHYSICAL ACTIVITY, YOGIC PRACTICES, COMBINED
PHYSICAL WITH YOGIC PRACTICES AND CONTROL GROUPS
ON FLEXIBILITY

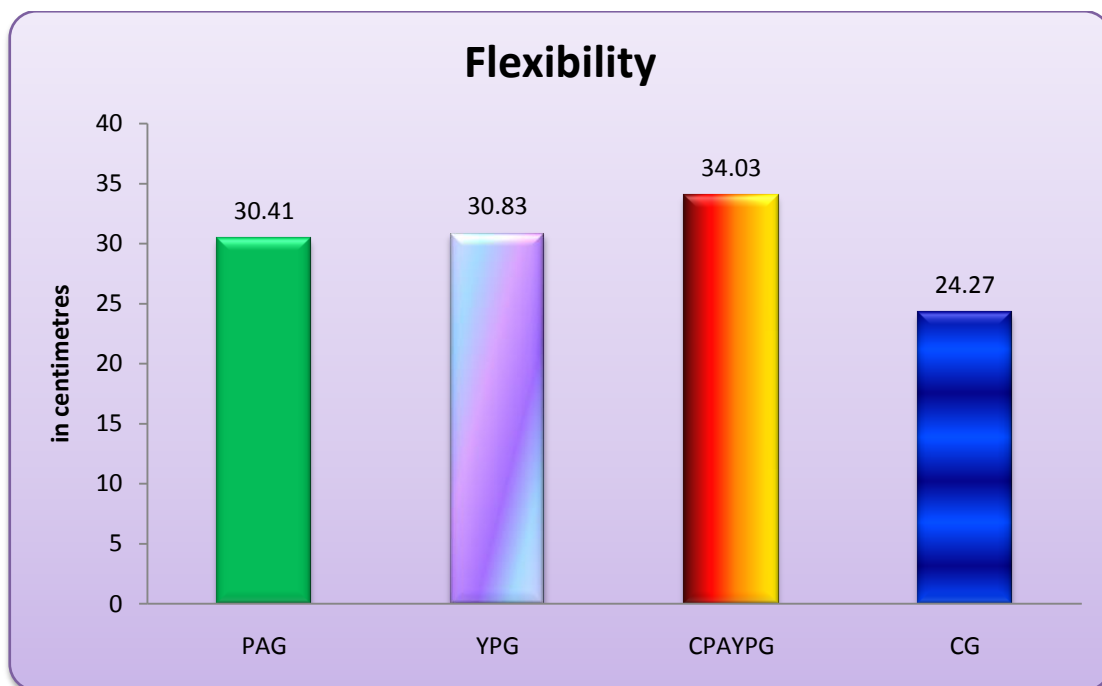


TABLE - II
THE SCHEFFE’S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST
MEANS ON FLEXIBILITY

Adjusted Post-Test Means				Mean Difference	Confidence Interval
PAG	YPG	CPAYPG	CG		
30.41	30.83	---	---	0.42	2.64
30.41	---	34.03	---	3.62*	
30.41	---	---	24.27	6.14*	
---	30.83	34.03	---	3.20*	
---	30.83	---	24.27	6.56*	
---	---	34.03	24.27	9.76*	

* Significant at 0.05 level of confidence

Table II shows that the mean difference between physical activity and combined physical activity with yogic practices group, physical activity and control group, yogic practices and combined physical activity with yogic practices group, yogic practices and control group, combined physical activity with yogic practices group and control group were 3.62, 6.14, 3.20, 6.56 and 9.76 respectively on flexibility are greater than the confidence interval value 2.64, which shows significant difference at 0.05 level of confidence. The mean difference between physical activity and yogic practices groups were 0.42 on flexibility are lesser than the confidence interval value 2.64, which shows insignificant difference at 0.05 level of confidence.

CONCLUSION

1. The significant mean difference does not exist among all the four groups in the pre test on flexibility.
2. In testing post test mean difference among the four groups, it shows that statistically significant on flexibility. In testing the post adjusted mean among the four groups also predicts the above result.

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