REVIEW OF RESEARCH

EFFECT OF YOGIC PRACTICE AND PRANAYAMA ON SPEED AND FLEXIBILITY OF WOMEN VOLLEYBALL PLAYERS

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ABSTRACT:

The aim of this study was to find out the effect of yogic practices and pranayama on speed and flexibility of women volleyball players. 60 women volleyball players from affiliated colleges from Sri Krishna Devaraya University Ananthapurumu in Andhra Pradesh in the age group of 18 to 21 were divided into three groups namely Yogasana Group, Pranayamas Group and control group on random basis. Pre test was conducted on all the three groups to determine their speed and flexibility and after 12 weeks training on yogic practices and pranayama post test scores were obtained. To test statistical significance ANCOVA was employed. The results of the study proved that flexibility of women volleyball players were significantly altered by 12 weeks yogasana and pranayama. The results further proved that even though speed was altered by yogic practices and pranayama that was not significant. It was concluded that either yogasanas or pranayama can be practiced to improve flexibility of women volleyball players.

KEYWORDS: *speed and flexibility of women , yogic practices.*

INTRODUCTION

Volleyball at the higher skill levels, technical performance may be limited by physical characteristics as well as physical fitness, and performance characteristics such as speed and flexibility. Kongkaew C et. Al. (2018) examined the effectiveness of Thai yoga on physical fitness and found yoga exercises appeared useful, in particular, on body and right shoulder joint flexibility. Satish V et.al. (2018) documented that Yoga is very effective in improving health especially cardio-respiratory fitness and also overall performance in adolescents and concluded yoga can improve cardio-respiratory fitness and aerobic capacity as physical exercise intervention in adolescent school children. Ramos-Jiménez A, et.al. (2009) observed that Hatha Yoga (HY) can be an alternative to improve physical activity in middle-aged and older women. Reddy and Ravikumar (2001) conducted a study on yogasanas and aerobic dance and their effects on selected motor fitness components in girl subjects. The speed, shuttle run, agility, sit and reach to test flexibility and 9 min run/walk to test cardio respiratory endurance were conducted for control, yogasana and aerobic dance groups. And found practice of Yogasana improved significantly the speed, agility, flexibility and cardio-respiratory endurance, while practice of aerobic dance also improved significantly the above factors and there was no difference in between yogasanas and aerobic dance groups after training with regard to the speed, agility, flexibility and cardio-respiratory endurance.

Thus, the theoretical foundations proved that yogic practices and pranayama together has contributed for improving selected physical fitness variables among different groups of women. However, it was found that there was further scope for research to find out whether yogic practices or pranayama is more effective in in improving speed and flexibility of women volleyball players which would directly influence their overall skills including speed and flexibility. Hence, this study was attempted.

METHODOLOGY

To achieve the purpose sixty women volleyball players from different colleges in Andhra Pradesh in the age group of 18 to 21 were selected randomly as subjects They were further divided into three groups namely Yogasana Group, Pranayamas Group and control group on random basis, each group consisting of 20 subjects. Pre test was conducted on all the three groups to determine their speed and flexibility through 50 M dash and sit and reach tests and after 12 weeks training on yogic practices and pranayama post test scores were obtained. To test statistical significance ANCOVA was employed.

RESULTS

Tab 1: Effect of Yogic Practices and Pranayamas on Speed and Flexibility of women Volleyball Players

	Yogasana Group	Pranayama Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained F
RESULTS ON SPEED								
Pre Test Mean	7.24	7.18	7.36	Between	0.16	2	0.08	0.53
				Within	8.43	57	0.15	
Post Test Mean	7.06	7.16	7.32	Between	0.98	2	0.49	2.40
				Within	11.56	57	0.20	
Adjusted Post Test Mean	7.11	7.17	7.31	Between	0.39	2	0.19	2.38
				Within	4.59	56	0.08	
RESULTS ON FLEXIBILITY								
Pre Test Mean	15.00	14.62	15.41	Between	6.24	2	3.12	3.87*
				Within	45.387	57	0.80	
Post Test Mean	15.37	15.20	15.32	Between	0.30	2	0.15	0.19
				Within	44.67	57	0.78	
Adjusted Post Test Mean	15.37	15.56	14.94	Between	3.57	2	1.78	22.02*
				Within	4.54	56	0.06	

Table F-ratio at 0.05 level of confidence for 2 and 57 (df) =3.10, 2 and 56 (df) =3.10.
*Significant

Since significant differences were recorded on flexibility due to experimental treatments, the results on flexibility were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table II.

Tab 2: Scheffe's Confidence Interval Test Scores on Flexibility

MEANS				Required . C I
Yogasana Group	Pranayama Group	Control Group	Mean Difference	
15.37	15.56		0.19	0.22
15.37		14.94	0.43*	0.22
	15.56	14.94	0.62*	0.22

* Significant

The post hoc analysis of obtained ordered adjusted means proved that there was significant differences existed between Yogasana group and control group (MD: 0.43). There was significant difference between Pranayama group and control group (MD: 0.62). There was significant no significant difference between treatment groups, namely, Yogasana group and Pranayama group. (MD: 0.19).

DISCUSSIONS

The results of the study proved that there was reduction in time to cover 50 M due to yogic practices and pranayama with mean differences of 0.17 and 0.12 respectively. However, the ANCOVA results proved that the reduction did not reached the significant level fixed for this study. As for the flexibility the results proved that there was significant improvement due to 12 weeks yogic practices and pranayama among women volleyball players. And there was no significant difference between treatment groups. The results of this study were in agreement with the findings of Kongkaew C et. Al. (2018), and Reddy and Ravikumar (2001) who found flexibility can be improved by yogasanas. .

CONCLUSIOINS

It was concluded that either yogasanas or pranayama can be practiced to improve flexibility of women volleyball players.

REFERENCES

Ananda R. (1982), **The Complete Book of Yoga Harmony of Body Mind**, (Delhi: India).

Kongkaew C et. Al. (2018), "The Effects of Thai Yoga on Physical Fitness: A Meta-Analysis of Randomized Control Trials**.", J Altern Complement Med.** Feb 13.

Ramos-Jiménez A, et.al. (2009), "Cardiovascular and metabolic effects of intensive Hatha Yoga training in middle-aged and older women from northern Mexico.", **Int J Yoga.** Jul;2(2):49-54.

Remesh Reddy, P and Ravikumar, P. (2001). " A Comparative Study of Yogasanas and Aerobic Dance and Their Effects on Selected Motor Fitness Components in Girls Students." **Bi-annual for Movement** 18: 34-36.

Satish V et.al. (2018), "Yoga versus physical exercise for cardio-respiratory fitness in adolescent school children: a randomized controlled trial.**", Int J Adolesc Med Health**. Jan 25.