

Effects Of Plyometric Training With And Without Yogic Practices On Balance Among Handball Players

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ABSTRACT

The purpose of the study was to find out the effect of plyometric training with and without yogic practices on balance among handball players. To achieve the purpose the study, forty five handball players were selected from Alagappa University College of Physical Education, Karaikudi were randomly selected as subjects. As per the records, their age ranged from 18 to 25 years. For this study the true randomized experimental group design has been employed with three groups namely plyometric training with yogic exercises group, plyometric training without yogic exercises group and control group with 15 subjects each. Group I and II participated their respective treatments for a period of twelve weeks and no training were given to the control group. The three groups were statistically analysed by using analysis of covariance (ANCOVA). In case of significance of mean difference was observed on the criterion measure, to find out which pair of group is high among the others, as a post – hoc test, the Scheffe's test was applied. The result of the study reveals that there was a significant improvement on the balance when compared to the control group and plyometric training without yogic practices after the completion of twelve weeks of plyometric training programme with yogic practices.

KEYWORDS: Plyometric Training, Yogic Practices, Handball.

INTRODUCTION

In the present time, more and more people, especially the Westerners, are resorting to Yoga to find cure for chronic health problems and attain a peace of mind. They are also curious about knowing what exactly is Yoga and what are included in it. Although many of us are well aware of the health benefits of the physical activity, not everyone knows about the origin and exact definition of Yoga. It is a popular belief that Yoga merely includes stretching and warm up exercises. Unlike many other forms of training, the practice of yoga unfolds over time to reveal many layers of physical benefits and personal revelations. Now, more and more people are discovering the myriad ways that yoga can be used to improve athletic performance from increasing mental concentration and improving flexibility and balance to preventing common injuries and honing skills in a particular sport. Whether by creating an entire training program for elite athletes or by simply integrating a few yoga poses into an existing group fitness class, fitness professionals at all levels can use yoga as an effective cross-training tool for their own athlete clients (Gore et al. 2003).

The main purpose of handball is to develop the personal qualities of each player; the physical fitness of a player will not suffice. His self-control, his fairness, his courage and his considerateness are constantly put to test. The idea of the game is clear; the game itself is elegant and varied. Handball combines all the advantages of a team-sport. Its fundamentals are skilful handling of the ball, swift physical reactions, mental flexibility, and team-work and, above all, fair play. Training is based upon the modern training methods of the three athletic disciplines of running, jumping and throwing, and necessitates a complete and harmonious physical education.

METHODOLOGY

The purpose of the study was to find out the effect of plyometric training with and without yogic practices on balance among handball players. To achieve the purpose the study, forty five handball players were selected from Alagappa University College of Physical Education, Karaikudi were randomly selected as subjects. As per the records, their age ranged from 18 to 25 years. For this study the true randomized experimental group design has been employed with three groups namely plyometric training with yogic exercises group, plyometric training without yogic exercises group and control group with 15 subjects each. Group I and II participated their respective treatments for a period of twelve weeks and no training were given to the control group. The three groups were statistically analysed by using analysis of covariance (ANCOVA). In case of significance of mean difference was observed on the criterion measure, to find out which pair of group is high among the others, as a post – hoc test, the Scheffe's test was applied.

RESULTS

TABLE – I
COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF BALANCE OF
PLYOMETRIC TRAINING WITH AND WITH OUT
YOGIC PRACTICES AND CONTROL GROUPS

	PTWYG	PTWOYG	Control group	Source of variance	Sum of squares	df	Mean square	F
Pre test mean	5.95	6.36	5.43	BG	6.54	2	3.27	0.37
				WG	369.9	42	8.8	
Post test mean	8.73	8.10	5.37	BG	95.73	2	47.86	4.27*
				WG	470.22	42	11.18	
Adjusted post mean	8.70	7.63	5.88	BG	59.96	2	29.98	22.23*
				WG	55.27	41	1.34	

* Significant at 0.05 level

Table value for df 2 and 42 was 3.21

Table value for df 2 and 41 was 3.22

The above table indicates the adjusted mean value of balance of game-specific skills training with yogic practice, game-specific skills training and control groups were 8.70, 7.63 and 5.88 respectively. The obtained F-ratio of balance for adjusted mean was 22.23 greater than the table value 3.22 for the degrees of freedom 2 and 41 at 0.05 level of confidence. The result of the study indicates that there was a significant difference among three groups on balance.

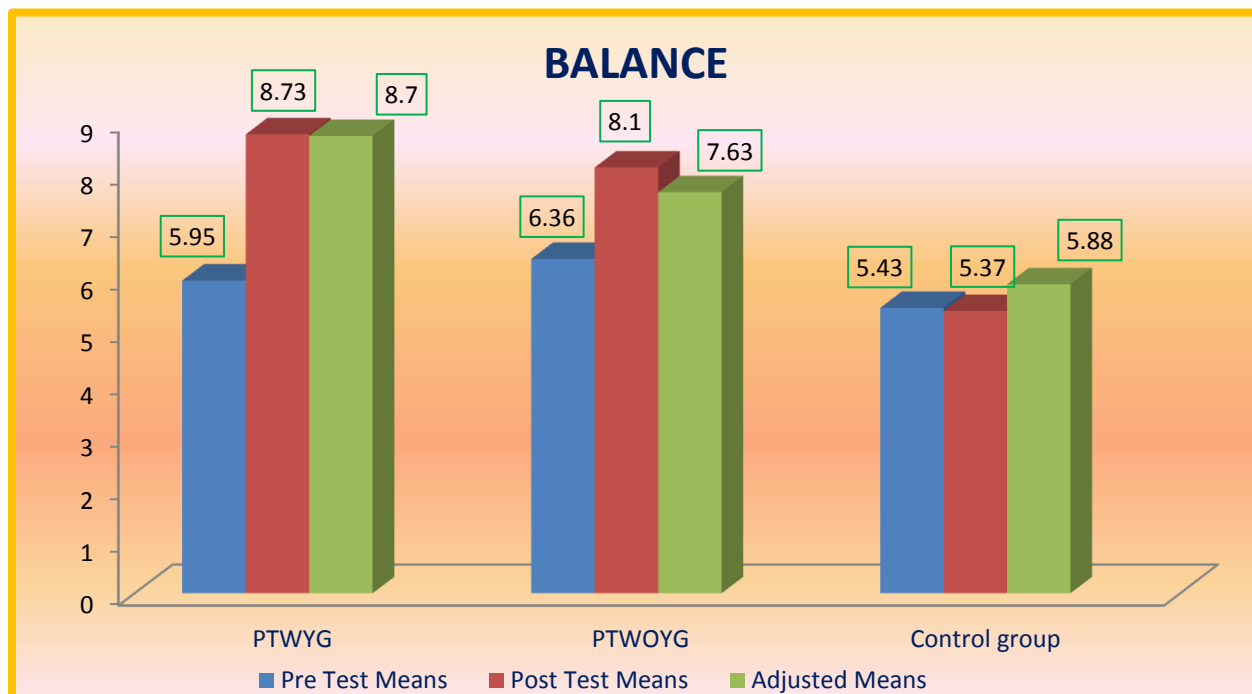
TABLE – II
SCHEFFE’S POST HOC TEST OF SIGNIFICANCE FOR BALANCE AND
DIFFERENCE AMONG THE MEANS OF PLYOMETRIC TRAINING WITH AND
WITH OUT YOGIC PRACTICES AND CONTROL GROUPS

PTWYG	PTWOYG	Control group	Mean Difference	CI value
8.70	7.63	-----	1.07	1.04
8.70	-----	5.88	2.82*	
-----	7.63	5.88	1.75*	

*P < 0.05, Confidence interval value (0.05) = 0.97

The result indicating that plyometric training with yogic practice have better score than the other two groups on reaction time. The pre, post and adjusted mean values of balance of plyometric training with yogic practice, plyometric training and control groups are graphically represented in the Figure-I.

FIGURE – I
BAR DIAGRAM SHOWING THE MEAN VALUES ON BALANCE OF
PLYOMETRIC TRAINING WITH AND WITH OUT YOGIC PRACTICES AND
CONTROL GROUPS



CONCLUSIONS

The result of the study reveals that there was a significant improvement on the balance when compared to the control group and plyometric training without yogic practices after the completion of twelve weeks of plyometric training programme with yogic practices.

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