

Effect of Varied Packages of Combination Training on Self Concept of Men Basketball Players

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Abstract – The present study was undertaken to analyze the effect of varied packages of combination training on self concept level of basketball players. Total N=48, inter collegiate level participated men basketball players chosen from National Institute of Technology, Tadepalligudem, Andhra Pradesh, India. Their age ranged from 18-25 years. The basket players chosen for the study were divided into four equal groups n=12 and designated as experimental group 'A' experimental group 'B' experimental group 'C' and control group 'D'. combined weight - plyometric training [Package I] were given to group 'A' combined plyometric - speed training [Package II] were given to group 'B' combined basketball training with yoga practice treatment [Package III] were given to group 'C' and the 'CG' control group 'D' were restricted to participate in any activities. The trainings were given for a period of twelve weeks. The data were collected before and after the training on self concept through Questionnaire (Muktha Rani Rastogi). The obtained data's were analyzed by Analysis of Covariance (ANCOVA). The level of significant was fixed at 0.05 levels. The results of the study showed that training Package I, II, & III significantly increased self concept level the basketball players when comparative with control group. Therefore there is no significant differences found between three experimental groups' basketball players.

Keywords: – Plyometric, Speed, Weight, Yoga, Basketball, Self-Concept.

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INTRODUCTION

Physical exercises are related to the action of muscles and it is necessary for the proper blood circulation so that the muscles should remain reasonably active. Exercises is therefore, very necessary for healthy growth of body and mind. Persons doing mental work need physical exercises. A regular physical exercise not only helps the muscles but also all the other organs of the body. Physical exercises making muscles strong, also helps their growth also helps in overcoming the mental defects, because brain becomes more powerful (Daya 2004).

Weight training that uses weights for resistance example weight plates, barbell, medicine ball, weight machine, body weight, resistance bands, wall bar physical exercises for strength, pull-ups, rope climbing, various types of abs exercises i.e. sit-ups, etc that provides a stress to the muscles that causes them to adapt and get stronger (Patel 2019). Plyometric exercises involve high intensity eccentric contraction of muscles immediately after a powerful concentric contraction of muscles. A vertical leap in

basketball also involves rapid & repeated muscle contraction & stretching Chhaya et al., (2014). Speed is that the product of two factors, i.e., strides length and stride frequency. Increasing either of those two factors mechanically will increase the players sprinting speed performance. From coaching or training purpose of opinion, it seems that up the leg strength will increase the stride, length. Although the frequency of the stride is associate inborn equality, it's being potential to enhance it to some extent through training (Eicher, 1975). The asanas can be classified on the basis of the postures and the base on which different postures are performed. Sitting posture – based padmasna, ardha padmasna, etc, supine – spine shalabhasana, shavasana, Abdomen – bhujangasna , hand – mayurasana, knee – vajrasan and head – sheersasan. Pranayam mean regulation of breath. The steadiness of posture – being there, the control of breathing is the interruption in the flow of inhalation and exhalation. After mastery of posture, one should attempt control of breathing. Inhalation – retention-exhalation – pranayama. Inhalation – breathing in air – puraka. Retention – retention of air –

kumbaka. Exhalation – breathing out air - reichaka (Mrunalini 2015).

STATEMENT OF THE PROBLEM:

The purpose of the study was to investigate the “Effect of varied packages of combination training on self concept level of basketball players”

HYPOTHESIS:

- It was hypothesis that there will be a significant increase on self-concept level of basketball players with the impact of combined weight - plyometric training, combined plyometric - speed training and combined basketball training with yoga practice treatment when compared with control group basketball players.
- It was hypothesis there would be significant differences between combined weight - plyometric training, combined plyometric - speed training and combined basketball training with yoga practice treatment group basketball players.

METHODOLOGY:

The purpose of this study was to find out the effect of effect of varied packages of combination training on self concept level of basketball players. To achieve the purpose of this study investigator has selected Total N=48, inter collegiate level participated men basketball players chosen from National Institute of Technology, Tadepalligudem, Andhra Pradesh, India .Their age ranged from 18-25 years. The basket players chosen for the study were divided into four equal groups n=12 and designated as experimental group ‘A’ experimental group ‘B’ experimental group ‘C’ and control group ‘D’. combined weight - plyometric training [Package I] were given to group ‘A’ combined plyometric - speed training [Package II] were given to group ‘B’ combined basketball training with yoga practice treatment [Package III] were given to group ‘C’ and the ‘CG’ control group ‘D’ were restricted to participate in any activities. The trainings were given for a period of twelve weeks. The data were collected before and after the training on self concept through Questionnaire (Muktha Rani Rastogi). The obtained data’s were analyzed by Analysis of Covariance (ANCOVA). The level of significant was fixed at 0.05 levels. The analysis of data on self concept have been examine by ANCOVA in order to determine the differences if any among the group at pre and posttest.

Table – I

Analysis of Covariance for Self Concept level on Pre Test and Post Test Data of Three Experimental groups and Control Groups basketball players (In Numbers)

Tests	CWTPTGBP GROUP	CPTSTGBP GROUP	CBTYPBP GROUP	CONG GROUP	Source of variance	Sum of Squares	df	Mean Squares	'F' Ratio
Pre Test Mean	83.00	83.50	83.16	83.58	B	2.72	3	0.91	0.24
SD	2.21	1.73	1.74	2.02	W	165.58	44	3.76	
Post Test Mean	87.08	87.33	87.75	81.41	B			107.91	
SD	1.44	1.49	1.28	1.50	W	323.72	3	2.06	52.32*
Adjusted Post Test Mean	87.24	87.23	87.82	81.27	B	341.39	3	113.79	102.92*
					W	47.54	43	1.10	

Table F-ratio at 0.05 level of confidence for 3 and 44 (df)=2.83, 3 and 43 (df)=2.83
*Significant

The above table-I shows that there is a significant difference on self concept level among the four groups such as combined weight - plyometric training [CWTPTGBP], combined plyometric - speed training [CPTSTGBP], combined basketball training with yoga practice treatment [CBTYPBP] and control group (CONG). Since the calculated ‘F’ value required being significant at 0.05 level for 3, 44 d/f and 3, 43 are 2.83 and 2.83, but the calculated values of self concept level for post and adjusted posttest ‘F’ values are 52.32 and 102.92 respectively. Which are higher than the tabulated value? Since the obtained ‘F’ ratio is found significant.

Table – II

The Scheffes Test for the Mean Differences between Paired Mean of Groups on Self Concept

Mean Values					Mean difference	CI
CWTPTGBP GROUP	CPTSTGBP GROUP	CBTYPBP GROUP	CONG GROUP			
87.24	87.23	-		0.01	1.27	
87.24	-	87.82		0.58		
87.24	-	-	81.27	5.97*		
	87.23	87.82	-	0.59		
	87.23	-	81.27	5.96*		
	-	87.82	81.27	6.55*		

*Significant

The above table shows that there existed significant differences between the adjusted means of combined weight - plyometric training group basketball players [CWTPTGBP] and control basketball players group [CONG], combined Plyometric - speed training group basketball players [CPTSTGBP] and control basketball players group [CONG], combined basketball training with yoga practice treatment [CBTYPBP] and control basketball players group [CONG]. Whereas calculated mean difference values 5.97, 5.96 and 6.55 higher than CI value 1.27.

There was no significant difference between combined weight - plyometric training group basketball players [CWTPTGBP] and Combined Plyometric - speed training group basketball

players [CPTSTGBP], combined weight - plyometric training group basketball players [CWTPPTGBP] and combined basketball training with yoga practice treatment [CBTYPBP], combined basketball training with yoga practice treatment [CBTYPBP] and combined plyometric - speed training group basketball players [CPTSTGBP]. Whereas calculated mean difference values 0.01, 0.58 and 0.59 lower than CI value 1.27.

The pre, post and adjusted scores in numbers means values on self concept were presented through bar diagram for better understanding of the results of this study in Figure -1.

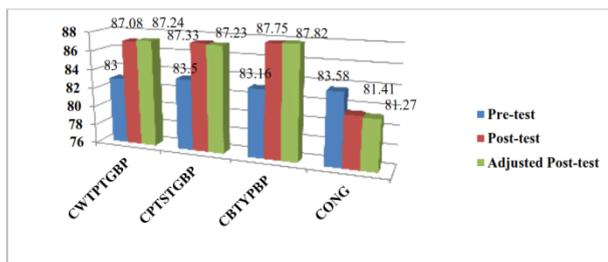


Figure 1: Graphical Illustration Showing the Pre-Test Post-Test and Adjusted Post-Test Mean Values on Self concept

DISCUSSION ON HYPOTHESIS:

- In the first hypothesis it was stated that there will be a significant increase on self-concept level of basketball players with the impact of combined weight - plyometric training, combined plyometric - speed training and combined basketball training with yoga practice treatment when compared with control group basketball players. The result of the study found that experimental group's basketball players self-concept performance level improved when compared with control group. Hence the research hypothesis is accepted.
- In second hypothesis mention that would be significant differences between combined weight - plyometric training, combined plyometric - speed training and combined basketball training with yoga practice treatment group basketball players. Hence study found no significant differences between experimental groups. Therefore research hypotheses rejected.

DISCUSSION AND FINDINGS:

This study analysis reported that combined weight training - plyometric training treatment [Package I], Combined Plyometric - speed training treatment [Package II] and Combined Basketball training with yoga practice treatment [Package III] significantly increased the self concept level of empirical groups

basketball players. The supportive studies on self-concept were Satheesh and Murugavel (2014) concluded that there was a significant improvement on psychological variables with the impact of plyometric training and resistance training programme. Meera et al., (2018) researcher suggested that yoga practice given beneficial positive impact in enhancement of self-esteem of women students. Hasan et al., (2013) study suggest that basketball exercise benefits for increasing children's self-esteem level. Tiziana et al., (2018) study found that self-concept in people significantly improved with the impact of physical activity. Seyed and Alireza (2016) results showed that mean self-esteem score was 32.36–42.89 before and after the intervention used improved significantly. Marco et al., (2016) proved that practice of regular physical activity proved a significant factor in the level of self-concept and self-esteem performance of students. Marzieh et. al., (2014) found that 8-weeks of aerobics exercise significantly improved self-esteem of female adolescents.

CONCLUSIONS:

On bases of statistical analysis it was concluded that 12-weeks of combined weight - plyometric training, combined plyometric - speed training and combined basketball training with yoga practice treatment was effective to increase the self concept level of basketball players comparative to control basketball players group. Whereas there is no significant has found between combined weight - plyometric training, combined plyometric - speed training and combined basketball training with yoga practice treatment to increase the self concept level of basketball players.

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