

EFFECTIVENESS OF WEIGHT TRAINING AND PRANAYAMA ON LEFT BACK SHOOTING ABILITY OF HANDBALL PLAYERS

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Abstract: Total , 50 handball players consider as a experimental group and 50 other players as a control group would be selected as subject for present study and their age ranged between 14-19. Only training was given to the experimental groups. This study involves the effects of Pranayama and weight training on the performance of handball players in an experimental design. Training program would be planned as 12 weeks 4 days a week and 60min. The Pranayama and Weight training the demonstration was given to the Players. Data was taken from the 50 handball players as a experimental group of similarly Pre and Post Test was taken from 50 other players as a control group. The training was given to the experimental group only. Analysis of Covariance (ANCOVA) was utilized by the investigator. The results of the study reveals that there was significant effects of weight training and pranayama was found in shooting ability of handball players with respect to Left Back . The weight training and pranayama was increase the shooting ability of handball with respect to left back.

Key Words : Left back, Shooting, weight training , Handball

INTRODUCTION

The game of handball as played today originated in Ireland, probably during the tenth century. The game became very popular and was referred to as “fives”, representing the five fingers used in hitting the ball.. The Competitive handball require a agility, coordination , sprinting, running, jumping and throwing, flexibility , and reaction time (Gorostiaga, 2006). Physical fitness ability, conditioning ability, Motor ability, that are required as important aspects of the game and contribute to the high top performance of the team (Zapartidis et al., 2009). The performance of handball is highly depend on cathing and passing and the ball control is another aspect to achieve a high performance in sports . The offensive players requires a variety of physical and physiological attributes for maximum scores during play. The passing the ball grom one players to others players give the bacgruond of successful performance (Clanton & Dwight, 1997). There is general agreement among sports historians that handball is the oldest of all games played with a ball. It is impossible to place a specific date of the first handball game although to place a specific date on the first handball game although some historians believe that it occurred during the early Egyptian era of 4,000 years ago. The writings of Homer tell of the Princess of Corcepa playing “handball” with her maidens and early Aztec driving reveal young men chasing a small ball as it rebounds from a wall. The Romans found many uses four a ball as described in “Exercises with A small Ball” written by Galen in A.D. Weight training is a common type of strength training for developing the strength. It uses the weight force of gravity to oppose the force generated by muscle through concentric or eccentric contraction. Weight training uses a variety of specialized equipment to target specific muscle groups and types of movement. (Sinku 2013;Sinku2012;Singh 2012; Sinku S.K. & chavan,2013)

METHODS

Two group were targeted experimental & control .50 handball players consider as a experimental group and 50 other players as a control group would be selected as subject for present study and their age ranged between 14-19. Only training was given to the experimental groups. This study involves the effects of Pranayama and weight training on the performance of handball players in an experimental design. The data was collected through respondents in the form of different experimental tests. The demographic information about Age, height ,weight etc. was obtained before seeking responses. Weight Training program would be planned as 12 weeks 4 days a week and 60min. training programme that use large muscles groups that can be maintained continuously and are aerobic in nature. Warm - up period was approximately 10 min., this was combine callisthenic– type stretching, exercise and progressive aerobic activity. However, cool down period were 5 to 10 min. The yogic Pranayama includes Kapalbhathi ,Anulom Vilom ,Bhastrika and nadi shodhan before starting above Yogic Pranayama the demonstration was given to the Players.

To measure the jump shot ability of handball from left back . On signal the same ready to the position marked for jump shot shooting and shoots into the goal post. The scoring were awarded to the respective boxes on the assumption that at the time of jump shot shooting from the left. The obtained data Mean, Standard Deviation and Analysis of Covariance (ANCOVA) was utilized by the investigator. The level of significant was set up at 0.05 level.

RESULTS AND DISCUSSION

The results and discussion have been presented in concise and comprehensive manner that is easy to comprehend starting with selected physical parameter.

Table 1
Means &SDs of shooting ability in handball with respect to left Back in pre and post-test of control group.

shooting ability in handball	Test	Number	Mean	S.D.
Left Back	Pre Test	50	2.78	0.69
	Post Test	50	2.74	0.71

Table -5 Shows that Means &SDs of shooting ability in handball with respect to left back in pre and post-test of control group. With regards to shooting ability in hand ball with respect to left back of pre and post-test of control group they have obtain the mean value of 2.78 and 2.74 respectively.

Table 2
Means &SDs of shooting ability in hand ball with respect to left back in pre and post-test of experimental group.

Shooting ability in handball	Test	Number	Mean	S.D.
Left back	Pre Test	50	2.74	0.73
	Post Test	50	3.52	0.90

Table -6 Shows that Means &SDs of shooting ability in handball with respect to left back in pre and post-test of Experimental group.

With regards to shooting ability in hand ball with respect to left back of pre and post-test of experimental group they have obtain the mean value of 2.74 and 3.52 respectively.

Table-3
Analysis of Covariance of effects of Pranayama and weight training on shooting ability in handball with respect to left back

source of variation	Degree of freedom	Ssx	Ssy	Ssxy	Ssyx	mssyx	F-ratio
Treatment Group	1	0.44	19.99	2.32	24.12	9.55	7.02*
Errors Group Means	196	14.23	15.88	8.77	11.98	1.36	

* Significant at .05 level.

Table-3, Illustrates the statistical information of analysis of co- variance of pre and post-test of shooting ability in Handball with respect to left back.

DISCUSSION

The objectives of the study were to determine the effects of weight training and pranayama on shooting ability of handball players. The results of the study reveals that there was significant effects of weight training and pranayama was found in shooting ability of handball players with respect to Left Back ($F= 7.02, P>.05$). The results of the study reveals that there was significant effects of weight training and Pranayama was found in shooting ability of handball players with respect to Left Back. The weight training and pranayama was enhancing the shooting ability of handball players with respect to Left Back. Handball is a strenuous semi - contact team game that places emphasis on turning , running, jumping, sprinting, arm throwing, hitting, blocking, and pushing. The goals of the run, jump, shoot are ball velocity and accuracy. Maximum ball velocity and precision is required to minimize the chance of the opponent or goal keeper intercepting the shot (Granados M, Ibáñez J, Izquierdo M, 2004). In team handball, shooting to score goals is one of the most important aspects of the game. The most important skill in handball is passing or throwing Gorostiaga EM, Granados C, Iba'n~ ez J, et al,2006; Gorostiaga E, Granados M, Ibáñez J, Izquierdo M, 2004),. You need to be able to pass the ball with accuracy (Volossovitch, 2005). Throwing and shooting drills are normally incorporated into every training session for handball. You need to have good reaction times to be able to catch and throw the ball quickly and effectively (Sinku S.K. & Chavan 2013; Singh S.K, & Tuteja, 2013), Singh S.K (2018), Singh & Nadeem (2017), Singh S.K(2017), Bhosale V & Sinku S.K (2014) , Singh S.K and Firdous (2014), Singh S.K, & Tuteja (2013), Gorostiaga EM, Granados C, Iba'n~ ez J, et al.(2006), Gorostiaga E, Granados M, Ibáñez J, Izquierdo M (2004), Volossovitch A .(2005) Sinku (2013), Sinku(2012),Singh 2012, Sinku S.K. & chavan(2013)

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