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FREE WEIGHTS' IMPACT ON VOLLEYBALL PLAYERS' SKILL VARIABLES

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Abstract:

The purpose of the study was to find out the effect of free weights on volley pass among volleyball players. To achieve the purpose of the present study, thirty volleyball players from Bishop Heber College, Tiruchirappalli were selected as subjects at random and their ages ranged from 17 to 21 years. The subjects were divided into two equal groups of fifteen each. Group I acted as Experimental Group I (Free weights) and Group II acted as Control Group. The requirement of the experiment procedures, testing as well as exercise schedule was explained to the subjects so as to get full co-operation of the effort required on their part and prior to the administration of the study. Volley pass was assessed by subjective rating. The variable to be used in the present study was collected from all subjects before they have to treat with the respective treatments. It was assumed as pre-test. After completion of treatment they were tested again as it was in the pre-test on all variables used in the present study. This test was assumed as post-test. Analysis of covariance (ANCOVA) was used to test the treatment effect of the training programmes on all the variables used in the study. It was observed that the twelve weeks of free weights have significantly improved the volley pass.

Key Words: Free Weights, Volley Pass, Volleyball Players.

Introduction:

The practice of using skills other than those directly required for an event to help athletes maintain their muscular and aerobic strength is known as weight training. The major objective is to prevent injuries and preserve muscular balance during a period of rigorous sports training. The game that relies on speed and endurance would benefit greatly from additional weight training as an aerobic and aerobic-in nature training program. To enhance overall performance on the court, weight training emphasises both power and strength, with a focus on explosive movements and functional strength [Sheppard et al. 2012].

The fundamental elements of volleyball are passing, serving, spiking, blocking, setting, and digging. In every team football game, skill is crucial. We can observe the growing importance of appropriate and correct skills as science and technology advance. The team that can use the skill in the most accurate and perfect way will benefit the most. Every coach, athlete, media analyst, and sports enthusiast will tell you that "skill" is the most important component of all sports [Gregory, 2006].

Methodology:

The purpose of the study was to find out the effect of free weights on volley pass among volleyball players. To achieve the purpose of the present study, thirty volleyball players from Bishop Heber College, Tiruchirappalli were selected as subjects at random and their ages ranged from 17 to 21 years. The subjects were divided into two equal groups of fifteen each. Group I acted as Experimental Group I (Free weights) and Group II acted as Control Group. The requirement of the experiment procedures, testing as well as exercise schedule was explained to the subjects so as to get full co-operation of the effort required on their part and prior to the administration of the study. Volley pass was assessed by subjective rating. The variable to be used in the present study was collected from all subjects before they have to treat with the respective treatments. It was assumed as pre-test. After completion of treatment they were tested again as it was in the pre-test on all variables used in the present study. This test was assumed as post-test. Analysis of covariance (ANCOVA) was used to test the treatment effect of the training programmes on all the variables used in the study.

Results:

Table 1: Computation of Mean and Analysis of Covariance of Volley Pass on Experimental and Control Groups

	Experimental Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	F
Pre Test Mean	45.45	46.10	BG	0.001	1	0.001	0.50
			WG	0.055	28	0.001	
Post Test Mean	61.56	47.28	BG	0.083	1	0.083	38.09*
			WG	0.061	28	0.002	
Adjusted Post Mean	61.50	47.21	BG	0.082	1	0.082	31.18*
			WG	0.071	27	0.002	

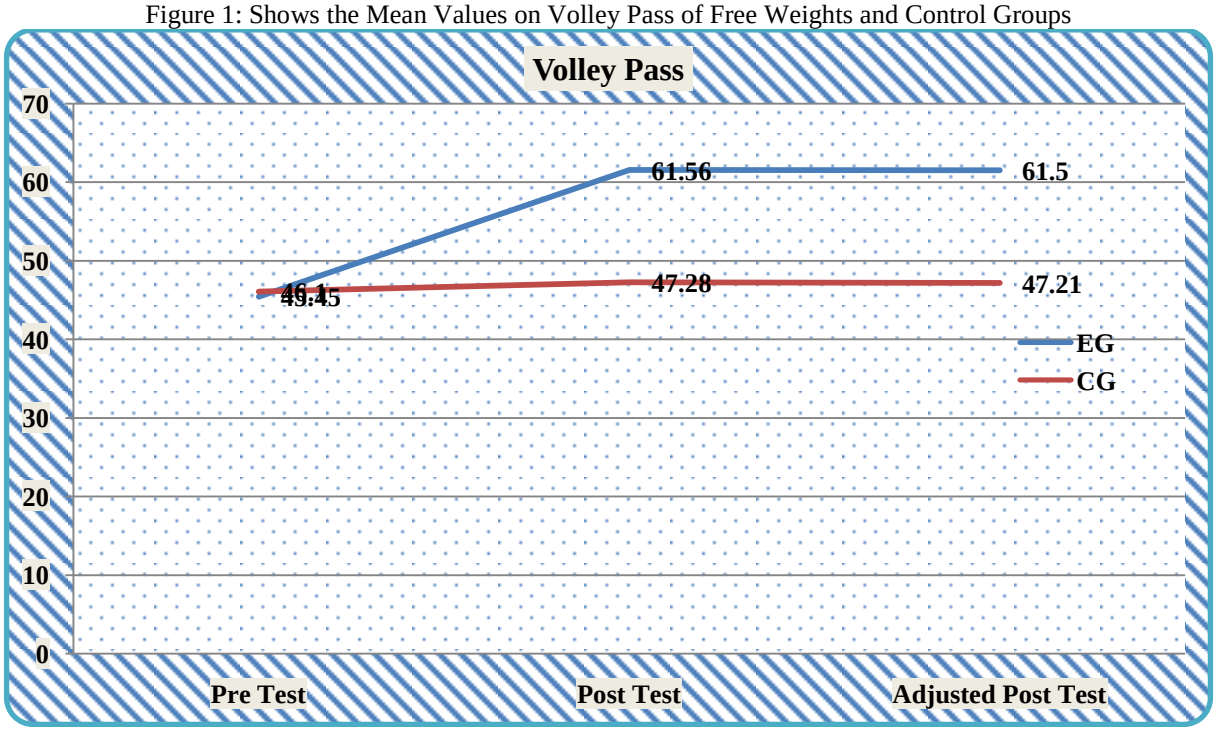
* Significant at 0.05 level

Table value for df 1, 28 was 4.20, df 1, 27 was 4.21

The above table indicates the adjusted mean value of volley pass of experimental and control groups were 61.50 and 47.21 respectively. The obtained F-ratio of 31.18 for adjusted mean was greater than the table value 4.21 for the degrees of freedom 1 and 27 required for significance at 0.05 level of confidence. The result of the study indicates that there was a significant difference among experimental and control groups on volley pass. The above table also indicates that both pre and post test means

of experimental and control groups also differ significantly. The pre, post and adjusted mean values of volley pass of both control and experimental groups are graphically represented in the figure 1.

Figure 1: Shows the Mean Values on Volley Pass of Free Weights and Control Groups



Conclusion:

It was observed that the twelve weeks of free weights have significantly improved the volley pass.

References:

1. Gregory, F. (2006). Volleyball performances. JOPESS. 8(3).
2. Hammami, R., Chaabene, H., Kharrat, F. et al. Acute effects of different balance exercise types on selected measures of physical fitness in youth female volleyball players. BMC Sports Sci Med Rehabil 13, 29 (2021).
3. Kumar, M.S. (2024). Resting Heart Rate Effects of Yogic Practices Involving Resistance and Plyometric Training on Teenage Volleyball Players, International Journal of Advanced Trends in Engineering and Technology, 9, 1, 15-19.
4. Malik,Y. (2016). Analysis of playing ability and explosive power and muscular endurance among women volleyball players. International Journal of Recent Research and Applied Research, 1, 1, 11-16.
5. Martha Y, Salazar-O, Jose A, Tamayo-Soler, 2016, The muscle force in volleyball atlhetics ecoliers of EIDE, OLIMPIA. Revista de la Facultad de Cultura Física de la Universidad de Granma, Vol.13 No.39.
6. Sheppard JM, et al. The effect of assisted jumping on vertical jump height in high-performance volleyball players. J Strength Cond Res. 2012; 26(6):1475-1480.
7. Trajkovic N, et al. The effects of 6 weeks of preseason skill-based conditioning on physical performance in male volleyball players. 2011; 25(6):1686-1694.
8. Ziv G, Lidor R, (2010). Vertical jump in female and male volleyball players: a review of observational and experimental studies. Scand J Med Sci Sports; 20: 556-567.