

# REVIEW OF RESEARCH



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# INFLUENCE OF RAPID STRETCHING ON SELECTED PHYSICAL VARIABLES AMONG VOLLEYBALL PLAYERS

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## **ABSTRACT:**

The purpose of the study was to find out the influence rapid stretching training on physical variables among volleyball players. To achieve the purpose of this study, thirty intercollege volleyball players from Jairam arts and Science College and Mahendra Arts & Science College, Salem, Tamilnadu were selected as subject at random and their ages ranged from 18 to 24 years. The subjects were divided into two equal groups of fifteen volleyball players each group. The study was formulated as a purpose random group design, consisting of a pre-test and post-test. The groups were assigned as rapid stretching training and control group in an equivalent manner. The experimental group participated the training for a period of six weeks training to find out the outcomes of the training packages and the control group did not participated in any training programmer. Paired 't' test was applied. In this research done all cases 0.05 level of confidence was fixed to test hypotheses. The Rapid Stretching group had shown significant improvement in all the subjected physical variables among volleyball players after undergoing on rapid stretching training group for a period of six weeks.

**KEYWORDS:** Rapid training, Physical fitness variables, Volleyball players.

#### **INTRODUCTION:**

The purpose of the rapid stretching is to increases the power movements and contracting muscles by using both exercises. Rapid Stretching that involves stretching an active muscle prior to its shortening have been shown to enhance performance during the concentric phase of muscular contraction. Observed during the concentric phase, this enhancement has been attributed to the release of elastic energy stored in the series elastic elements of the muscle during stretch.

Fast extending, otherwise called bounce preparing or contracting muscles preparing, are practices in which muscles apply greatest power in short interims of time, with the objective of expanding power (speed-quality). This preparation centers around figuring out how to move from a muscle expansion to a withdrawal in a quick or "unstable" way, for example, in specific continued bouncing. Quick extending is principally utilized by competitors, particularly military specialists, sprinters and high jumpers, to improve execution, and is utilized in the wellness field to an a lot lesser degree. Plyometric exercises stimulate several different muscle groups at the same time. Although rapid are generally used to improve athletic performance, they can also be used to improve strength and endurance.

Rapid stretching is great for challenging your fast-twitch muscle fibers, coordination and agility. These exercises are very high impact, so proceed with caution if you decide to implement them into your training regimen. There's a lot of jumping involved, and it's relatively easy to twist an ankle, sprain

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a knee, or herniate a bulging disk. Introducing rapid stretching into your cardio routine can spice up your workout. Plyometric training challenges your muscles, nerves, and tendons because you need explosive power to perform the repetitions. You'll burn twice as many calories and have way more fun than plodding away on a treadmill or stair-master. Not at all like run of the mill quality preparing practices that include long, sluggish developments intended to increment strong quality and mass, plyometric preparing comprises of brisk, unstable developments intended to build speed and power.

## **METHODOLOGY**

The purpose of the study was to find out the influence rapid stretching training on physical variables among volleyball players. To achieve the purpose of this study, thirty intercollege volleyball players from Jairam arts and Science College and Mahendra Arts & Science College, Salem, Tamilnadu were selected as subject at random and their ages ranged from 18 to 24 years. The subjects were divided into two equal groups of fifteen volleyball players each group. The study was formulated as a purpose random group design, consisting of a pre-test and post-test. The groups were assigned as rapid stretching training and control group in an equivalent manner. The experimental group participated the training for a period of six weeks training to find out the outcomes of the training packages and the control group did not participated in any training programmer. Paired 't' test was applied. In this research done all cases 0.05 level of confidence was fixed to test hypotheses.

Table- I. Variables and test items

S.No	Variables	Test
1	Speed	50 mts Dash
2	Leg explosive power	Standing board jump

#### RESULT

**Table II** Significance of Mean Gains & Losses between pre and post test Scores on Selected Variables of Rapid Stretching Group (RSG)

S.No	Variables	Pre-test	Post-test	Mean	Std error	't' Ratio
		mean	mean	difference	Dm	
1	Speed	6.79	6.76	0.36	0.06	5.92*
2	Leg explosive	2.23	2.27	0.41	0.07	5.88*
	power					

<sup>\*</sup> Significant at 0.05 level

Table II shows the obtained 't' ratios for pre and post-test mean difference in the selected variables of speed (5.92) and leg explosive power (5.88). The obtained ratio when compared with the table value of 2.14 of degrees of freedom (1.14) it was found to be statistically significant at 0.05 level of confidence. It was observed that the means gain and losses made from pre and post-test were significantly improved in physical variables of sped (0.36, p<0.05) and leg explosive power (0.41, p<0.05).

Figure I. Shows the Pre and Post Mean Values of Experimental Group on Selected Variables

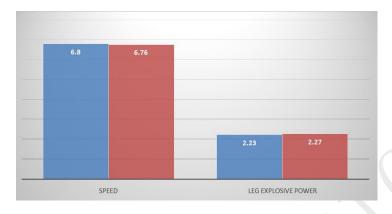


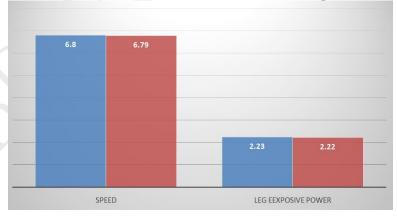
Table III Significance of Mean Gains & Losses between pre and post test Scores on Selected Variables of Control Group (CG)

S.No	Variables	Pre-test	Post-test	Mean	Std error	't' Ratio
		mean	mean	difference	Dm	
1	Speed	6.80	6.79	0.05	0.02	1.97
2	Leg explosive	2.23	2.23	0.03	0.02	1.07
	power		/		2	

<sup>\*</sup> Significant at 0.05 level

Table III shows the obtained 't' ratios for pre and post-test mean difference in the selected variables of speed (1.97) and leg explosive power (1.07). The obtained ratio when compared with the table value of 2.14 of degrees of freedom (1.14) it was found to be statistically significant at 0.05 level of confidence. It was observed that the means gain and losses made from pre and post-test were significantly improved in physical variables of sped (0.05, p<0.05) and leg explosive power (0.3, p<0.05).

Figure II. Shows the Pre and Post Mean Values of Control Group on Selected Variables



#### **CONCLUSIONS**

From the analysis of the data, the following conclusion was drawn:

**1**. The Rapid Stretching training group had shown significant improvement in all the selected physical variables among volleyball players after undergoing rapid stretching training group for a period of six training.

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