

# **EFFECTIVENESS OF SHORT TERM PLYOMETRIC TRAINING ON SPEED, STRENGTH AND AGILITY OF HOCKEY PLAYERS**

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## **Abstract**

The purpose of this study was effectiveness of short term plyometric training on speed, Strength and agility of Hockey players. The 18 Girl Hockey players were selected age group of 14 to 16 years Inter- District representation in 2016 -2017 year in Warangal on non-randomly by purposive sample was used. The short term plyometric training was given for 6 weeks. The physical fitness variables are speed, strength and agility coefficient of correlation with short term plyometric training had been positively with significant level 0.05. Key words: Plyometric, speed, strength, Agility etc.

## **Introduction**

Plyometrics, also known as "jump training" or "plyos", are exercises in which muscles exert maximum force in short intervals of time, with the goal of increasing power (speed-strength). This training focuses on learning to move from a muscle extension to a contraction in a rapid or "explosive" manner, such as in specialized repeated jumping. Plyometrics are primarily used by athletes, especially martial artists, sprinters and high jumpers, to improve performance, and are used in the fitness field to a much lesser degree. Plyometrics is a suitable form of power training for many team and individual sports. High Jumpers today are bigger, faster and more explosive than ever before. Explosive Strength defined as the rate of force development at the onset of the contraction. The goal of training Plyometric training is to improve the rate of force development to create more force in less time for the optimum results

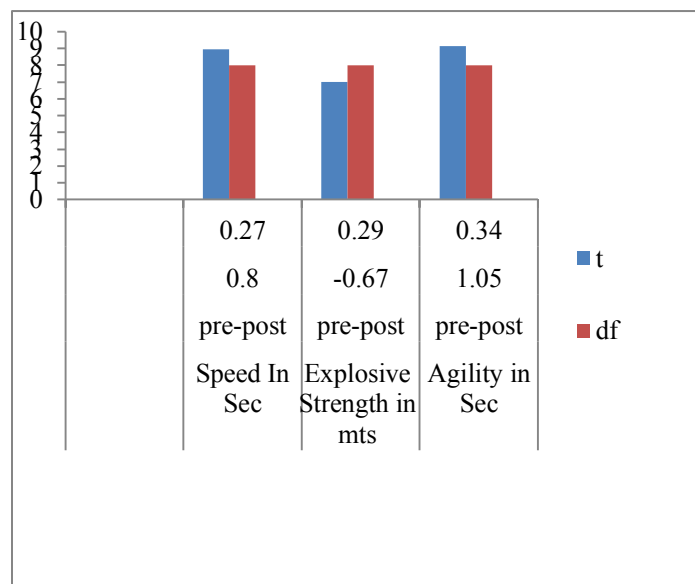
## **Methodology:**

This study would be decided the effectiveness of short term plyometric training on speed, Strength and agility of Hockey players .Selection of the Subjects: 18 Girl Hockey players were selected age group of 14to 16 years Inter-District representation in 2016 -2017 year in Warangal on non-randomly by purposive sample was used. Divide the subjects in two groups control group (9) and experimental group (9).The short term plyometric training was given for 6 weeks.

Physical fitness variable	Test
Speed	30 Meters flying start
Strength (Explosive strength)	Standing broad jump
Agility	T Shuttle run test

							t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Speed In Sec	pre-post	.80	.27	.09	.59	1.00	8.96	8	.000*
Explosive Strength in mts	pre-post	-.67	.29	.10	-.89	-.45	7.00	8	.000*
Agility in Sec	pre-post	1.05	.34	.11	.78	1.31	9.15	8	.000*

N=09, \*Significant at 0.05 level. An analysis of the above table reveals that plyometric training had been significantly related to physical fitness variables were speed (8.96\*), explosive strength (7.00\*), Agility (9.15\*).



As for the results finally, the study exposes that plyometric training would be significantly related to physical fitness variables were speed (8.96\*), explosive strength (7.00\*), Agility (9.15\*).

## References

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