



## Effect of Ladder Training on Agility among College level Football Players

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Received 5th February 2016, Accepted 22nd April 2016

### Abstract

The purpose of the study was to investigate the effect of ladder training on agility among college level football players. It was hypothesized that there would be significant differences on agility due to the effect of ladder training among college level football players. For the present study the 30 male level football players were selected as subjects at random from Annamalai University, Tamilnadu, India and their ages ranged from 18 to 25 years. For the present study pre test – post test random group design which consists of control group and experimental group was used. The subjects were randomly assigned to two equal groups of fifteen each and named as Group ‘A’ and Group ‘B’. Group ‘A’ underwent ladder training and Group ‘B’ underwent no training. Agility was assessed by shuttle run test. The data was collected before and after twelve weeks of training. The data was analyzed by applying Analysis of Co-Variance (ANCOVA). The level of significance was set at 0.05. The aerobic training had positive impact on agility among college level football players.

**Keywords:** Aerobic Dance, Agility, Football.

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### Introduction

Ladder training is an excellent way to improve foot speed, agility, coordination and overall quickness. Speed ladder drills are about quality and form rather than producing overload. The drills are not meant to leave the fatigued or breathless in the way that shuttle runs might, for example. It is better to perform these drills at the start of a session after the warm up. The muscles should be fresh to ensure good quality of movement. And because it will not leave the exhausted can perform resistance or endurance training afterwards. A ladder is an excellent piece of training equipment and is useful to enhance body control and agility and increase the foot speed. For this training need not to go out and purchase the own Ladder, it is just as easy to use throw-down lines and as far as juniors are concerned, they may be found to be better as there is no chance of their getting tangled up in the Ladder. The added advantage of lines is that the distance between them can be changed to suit various exercise patterns. Using a building block system of skill development is very important to achieve success in training with a Ladder. The training start with general development up to advanced skill development, from a full range of motion to smaller, quicker movements. Keeping in mind the principle of working from slow and controlled movements and moving onto fast, explosive movements as a teaching and learning progression will have a greater amount of success.

### Methodology

The purpose of the study was to investigate the effect of ladder training on agility among college level football players. It was hypothesized that there would be significant differences on agility due to the effect of ladder training among college level football players. For the present study the 30 male level football players were selected as subjects at random from Annamalai University, Tamilnadu, India and their ages ranged from 18 to 25 years. For the present study pre test – post test random group design which consists of control group and experimental group was used. The subjects were randomly assigned to two equal groups of fifteen each and named as Group ‘A’ and Group ‘B’. Group ‘A’ underwent ladder training and Group ‘B’ underwent no training. Agility was assessed by shuttle run test. The data was collected before and after twelve weeks of training. The data was analyzed by applying Analysis of Co-Variance (ANCOVA). The level of significance was set at 0.05.

### Results

The findings pertaining to analysis of co-variance between experimental groups on agility among college level football players for pre-post test respectively have been presented in table I.

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**Table I.** ANCOVA between Experimental Groups on Agility of College level football players for Pre, Post and Adjusted Test

	Experimental Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	F
Pre Test Mean	11.41	11.35	BG	0.56	1	0.56	1.87
			WG	8.36	28	0.29	
Post Test Mean	10.90	11.33	BG	12.22	1	12.22	133.13*
			WG	2.57	28	0.09	
Adjusted Post Mean	10.89	11.32	BG	13.85	1	13.85	148.39*
			WG	2.52	27	0.09	

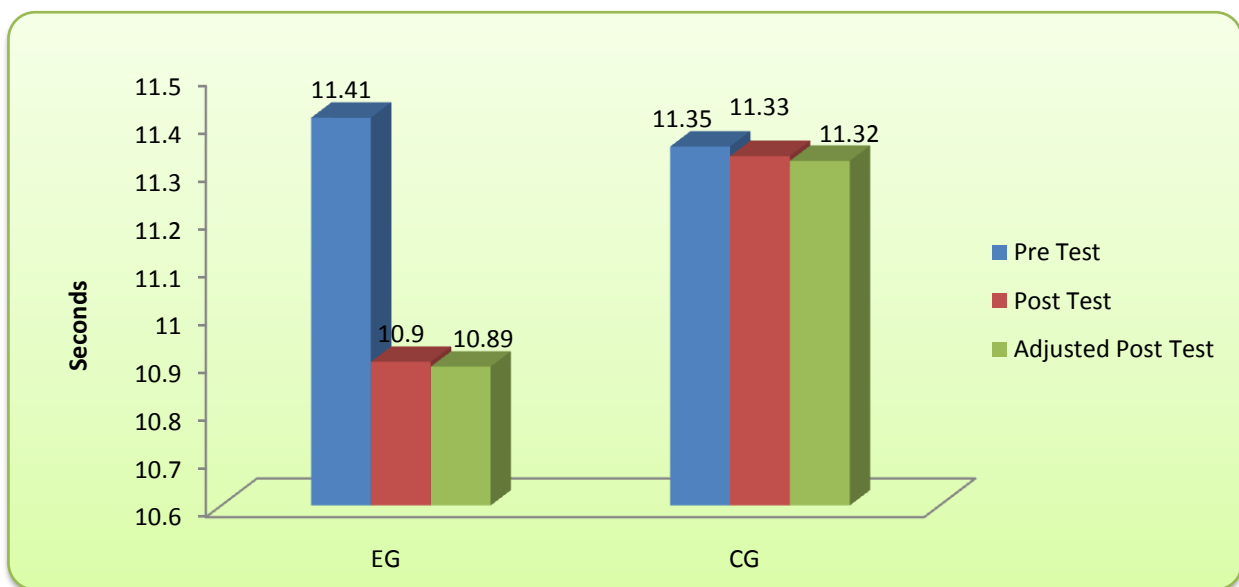
\* Significant at 0.05 level.

df: 1/27= 4.21

Table I revealed that the obtained ‘F’ value of 148.39 was found to be significant at 0.05 level with df 1, 27 as the tabulated value of 4.21 required to be significant at 0.05 level. The same table indicated that

there was a significant difference in adjusted means of agility of college level football players between experimental groups. The graphical representation of data has been presented in figure I.

**Figure I.** Comparisons of pre – test means post – test means and adjusted post – test means for experimental groups in relation to cardio respiratory endurance



The findings of the present study have strongly indicates that ladder training of twelve weeks have significant effect on agility of college level football players. Hence the hypothesis earlier set that ladder training would have been significant effect on agility in light of the same the hypothesis was accepted.

**Conclusion**

On the basis of findings and within the limitations of the study the following conclusions were drawn:

1. The aerobic training had positive impact on agility among college level football players.

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