

ANALYZE THE EFFECT OF CIRCUIT TRAINING ON VERTICAL JUMPING AND SKILL ABILITY OF FOOTBALL PLAYERS



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ABSTRACT

The main objective of the study was to analyze the effect of Circuit Training on Vertical Jumping and Skill Ability of Football Players. 40 players (Boys) were selected on the basis of simple random sampling method for data collection. The data were taken from the various schools of Patiala City. The selected subjects were divided into two equal groups of 20 each, namely experimental group and control group. The experimental groups have undergone 08 weeks of training namely, circuit training whereas the control group maintains their daily routine activities and no special training was given. The subjects of the two groups were used standardized tests and procedures on selected variables before and after the training period. To collected data were analyzed statistically to find out the pre and post training performances. The circuit training showed significant improvement number of physical fitness variables and their magnitude of improvement through training. The Circuit training exercise group was found to be the better group when compared to the other group.

Keywords: Circuit Training, Vertical Jumping Ability, Skill Ability & Football Players.

INTRODUCTION

Circuit training is a form of body conditioning that involves endurance training, resistance training, high-intensity aerobics, and exercises performed in a circuit, similar to high-intensity interval training. It targets strength building and muscular endurance. An exercise "circuit" is one completion of all set exercises in the program. When one circuit is completed, one begins the first exercise again for the next circuit. Traditionally, the time between exercises in circuit training is short and often with rapid movement to the next exercise. Studies at Baylor University and the Cooper Institute shows that circuit training is the most time-efficient way to enhance cardiovascular fitness and muscle endurance. Studies show that circuit training helps women to achieve their goals and maintain them longer than other forms of exercise or diet. Perhaps a most profound finding of this study, from a health perspective, is that this investigation clearly shows that performance of this circuit of exercises, this level of intensity elicited oxygen consumption values (39% to 51.5% of VO₂max) that meet established guidelines of

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the American College of Sports Medicine (ACSM) for the recommended intensity (40% to 85% of VO₂maxR) of exercise for developing and maintaining cardio-respiratory fitness.

OBJECTIVE OF THE STUDY

The main objective of the study was to analyze the effect of Circuit Training on Vertical Jumping and Skill Ability of Football Players.

DESIGN OF THE STUDY

To conduct the study experimental method was adopted as Research Methodology:-

For the present study parallel group design was selected, which consists of one control group and one experimental group used to find out the effect of Circuit Training on Vertical Jumping Ability, Endurance, Agility and Skill Ability of Football Players. Both the groups the subject were 30 in numbers assigned randomly. The experimental group was trained with Circuit Training exercise for a period of 8 weeks.

Selection of the Subject:

It was decided to select district-level soccer players from various schools in and around Patiala City. 40 soccer plays were randomly selected from various schools and their age ranged between 10 to 14 years. They were medically fit enough to under training schedule of Circuit Training Exercises. The subjects were divided into two groups of 20 each,

Selection of Variables and Tests:

Factor	Test
Cardio Vascular Endurance	Turtle Pulse Ratio Test
Vertical Jumping Ability	Sargent Test
Agility	Shuttle Run
Muscular Endurance	Bent Knee Sit-Ups
Football Skill Test	30 minute Running the ball

Training Details of Exercise:

Duration of Exercise	8 Weeks
Numbers of Days per week	6 Days
Duration of Session	60 Minutes

Training Phases and Time:

Phase I	Warming Up and Stretching	10 Minutes
Phase II	Circuit Training	40 Minutes
Phase III	Warm Down	10 Minutes
Total Time		60 Minutes

Statistical Procedure:

The data were analyzed by using the 't' test as suggested by Me. Guiana for significance of difference. The analysis was done by SPSS 11.5.

ANALYSIS AND INTERPRETATION OF DATA

Table No-I

Table showing the Comparison of Experimental and Control Group Means of Post Test of Physical Fitness and Performance Factors

Variables	Experimental Group Post Test		Control Group Post Test		MD	SEM	't'	Significance
	Mean	SD	Mean	SD				
Turtle Pulse Ratio	1.86	0.11	2.07	0.07	0.21	0.03	6.85	P<0.05
Vertical Jump	34.15	8.61	32.65	4.65	1.50	0.80	1.87	P<0.05
Shuttle Run	11.16	1.16	11.02	2.54	0.13	0.05	2.39	PO.05
Bent Knee Sit Ups	46.15	5.71	39.25	5.54	6.90	1.73	3.98	PO.05
30 meter Run with Football	6.13	0.10	6.52	0.13	0.39	0.03	11.29	PO.05

CONCLUSION

Within the limitation of the present experimental study, the following conclusions have been made in the light of the findings from the present study. The selected Circuit training exercise were contribute positively towards the improvement of Cardio-Vascular Endurance, Vertical Jumping Ability, Agility, Muscular Endurance and Skill Ability of Football Players as tested by Turtle Pulse Ration Test, Sargent Test, Shuttle Run Test, Sit Ups Test, 30 m. Running with the Ball Test and Accuracy Test.

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