



EFFECTS OF CIRCUIT TRAINING SKILL TRAINING AND COMBINED CIRCUIT TRAINING AND SKILL TRAINING AMONG COLLEGE MEN BASKETBALL PLAYERS

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ABSTRACT

To achieve the purpose of this study, the investigator select forty-five college Men basketball players from various affiliated colleges of University of Madras, Chennai, Tamilnadu. The subjects were selected randomly and their age ranged from 18 to 21 years. They were assigned into three groups, of which one group served as a Circuit Training group, the second group served as a Skill training group and the third group served as a combined Circuit training and Skill training group. The experimental groups participated in their respective training programmes for a period of six weeks. The selected subjects were measured by their shooting by lay up shooting test before and after the training period of six weeks. The differences between the initial and final scores of shooting were subjected to statistical treatment using Analysis of Covariance (ANCOVA). The results further revealed that, compared with other groups, the combined group significantly improved shooting. It was concluded that a combined training group was better than a Circuit training group and Skill training group.

Keyword: Circuit training group, Skill Training, Shooting.

INTRODUCTION

CIRCUIT TRAINING

Circuit training is a method of physical conditioning that employs both apparatus resistance training and calisthenics' conditioning exercises. It provides a means of achieving optional fitness in a systemized controlled fashion. The intensity and vigor of circuit training are indeed challenging and enjoyable to the performer. The system produces positive changes in motor performance, general fitness, muscular power, endurance and speed (Aruheim, 1987).

SKILL TRAINING

A Skill is the learnt capacity or talent to carry out pre-determined results often with the minimum outplay of time energy or both.

Exploring one's own capabilities, a game or sport allows a player to look at, understand, and experience the various expected and unexpected requirements and demands of the game or sport because the performance and situations of the game is largely depended on the on ground reality.

OBJECTIVES OF THE STUDY

1. To find out the effect of circuit training on shooting among college Men basketball players.
2. To find out the effect of skill training on shooting among college Men basketball players.
3. To find out the combined effects of circuit training and skill training on shooting among college Men basketball players.

METHODOLOGY

The study was formulated as a true random group design, consisting of pre-test and post-test. The subjects (N=45) were randomly assigned into three equal homogeneous groups of 15 basketball players each. Among the three groups, the experimental groups underwent experimental treatments. The groups were assigned as Experimental Groups I, II and III. Pre-tests were conducted for all the selected subjects on shooting by free throw shooting. The experimental groups participated in their respective Circuit training, Skill Training, and combined (Circuit training and Skill Training) for a period of six weeks. The training programme was scheduled from 6.30 a.m. to 7.30 a.m. on all weekdays except Sundays. The posts test were made on the selected dependent variable after six weeks of training.

STATISTICAL ANALYSIS

The differences between the initial and final test scores on shooting were subjected to statistical treatment using Analysis of Covariance (ANCOVA) to find out whether the mean differences were significant or not. The Scheffe's post hoc test was used to find out whether the pair of significant differences.

RESULTS ON SHOOTING

The analysis of covariance in shooting of the pre, post and adjusted test scores of Circuit Training, Skill Training and Combined training have been analyzed and presented in Table-I.

TABLE - I

COMPUTATION OF ANALYSIS OF COVARIANCE ON SHOOTING

Test	Circuit Training Group (Group-I)	Skill Training (Group-II)	Combined Training Group (Group- III)	Source of Variance	Sum of Squares	df	Mean Squares	F-ratio
Pre-Test Mean	6.33	6.20	6.07	Between Groups	0.53	2	0.27	7.63
SD	±1.54	±1.42	±1.33	Within Groups	86.67	42	2.06	
Post-Test Mean	8.53	9.07	10.07	Between Groups	18.18	2	9.09	7.70*
SD	±1.13	±1.03	±1.10	Within Groups	49.60	42	1.18	
Adjusted Post-Test Mean	8.47	9.07	10.13	Between Sets	20.93	2	10.46	13.41*
				Within Sets	31.99	42	0.78	

Table F-ratio at 0.05 level of confidence for 2 and 42 (df), 2 and 42(df) was 3.23.

* Significant.

Table I showed the pre test mean scores of Circuit Training group 6.33, Skill Training group 6.20 and Combined training group 6.07. The post test means showed differences due to experimental training and mean values recorded were 8.53, 9.07 and 10.07 respectively. As shown in table I the obtained F value on the scores of pre test means 7.63 was less than the required value 3.23, which proved that the random assignment of the subjects were successful and their scores in shooting before the training were equal and there was no significant differences.

The post test scores analysis proved that there was significant difference between the groups, as the obtained F value 7.70 was greater than the required F value of 7.63. Thus proved that the differences between the post test means of the subjects were significant.

Taking into consideration the pre and post test scores among the group's adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value of 13.41 was greater than the required F value of 7.63. This showed that there were significant differences among the adjusted means on the Men basketball players.

Since the significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in table – II.

TABLE - II

SCHEFFE'S TEST FOR THE DIFFERENCE BETWEEN PAIRED MEANS ON SHOOTING

Circuit Training Group-I	Skill Training (Group-II)	Combined Training (Group- III)	Mean Difference	Confident Interval Value
8.47	9.07	---	0.60	0.82
8.47	---	10.13	1.66*	
---	9.07	10.13	1.06*	

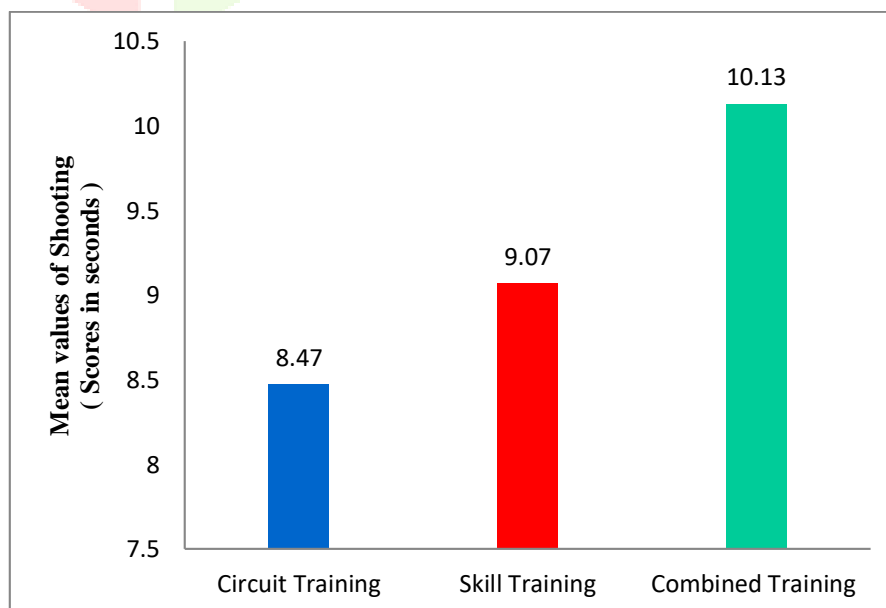
***Significant at 0.05 level of confidence.**

The above table shows that the mean difference values of Circuit training, Skill training and Combined training were 1.66 and 1.06 respectively, which were greater than the confidence interval value of 0.82 on Shooting at 0.05 level of confidence. The results of the study showed that there was a significant difference between Circuit training and Combined training, and Skill training and Combined training. The mean difference values between Circuit training and Skill training were 0.60, which was lesser than the confidence interval value of 0.82 at 0.05 level of confidence, which shows insignificant differences. The above data also reveals that a combined training group registered better performance in shooting.

The pre, post and adjusted mean values of circuit training, skill training and combined training (circuit training and skill training) group in shooting were graphically represented in figure - 1.

Figure: 1

ADJUSTED POST TEST MEAN FOR SHOOTING



DISCUSSIONS ON FINDINGS OF SHOOTING

The post hoc analysis of the obtained results proves that there are significant differences between a Circuit training group, Skill Training group and a combined group (Circuit training and Skill Training group) also it clearly indicating that the combined (Circuit training and Skill Training) group were considered significantly better than isolated Circuit training and Skill Training group in improving Shooting performance of college Men basketball players.

CONCLUSIONS

1. It was also concluded that the skill training group is significantly better than the Circuit training in improving the shooting performance among college Men's basketball players.
2. It is concluded that the combined (circuit training and skill training) group was significantly better than the skill training group in improving the shooting performance among college Men's basketball players.
3. It is further concluded that the combined (circuit training and skill training) group was significantly better than the circuit training group in improving shooting performance as measured by the free throw test

RECOMMENDATIONS

- 1 It is recommended that the coaches, physical educationists and sportspersons may include Circuit training and Skill Training in their training schedule to improve the fitness and psychological preparations for better performance.
2. It is recommended that people, irrespective of age, may practice circuit training and Skill Training to enhance their circuit level to lead a healthy life.

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