



## EFFECT OF CIRCUIT TRAINING ON AGILITY AMONG COLLEGE MEN

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### Abstract

The purpose of the study was to find out the effect of circuit training on agility among college men. To achieve this purpose of the study, thirty students from Annamalai University, Annamalai Nagar, Chidambaram, Tamil Nadu, and India were selected as subjects at random. The selected subjects were divided into two equal groups of fifteen subjects each, such as experimental group and control group. The group I underwent circuit training for three days per week for twelve weeks. Group II acted as control who did not participate any special training. The dependent 't' test was used to find out the difference between two means. It was concluded that the experimental group produced significant improvement on agility than the control group.

**Keywords:** Circuit Training, Agility, College Men.

### INTRODUCTION

Circuit training was invented in 1953 as an efficient way for coaches to train many athletes in a limited amount of time with limited equipment. The exerciser moved through a series of weight training or calisthenics arranged consecutively. It was a fast-paced workout of 15 to 45 seconds per station with little (15 to 30 seconds) or no rest between stations. Today, this is known as "circuit weight training". Research has shown that it can increase muscular strength and endurance. There is a mild improvement in aerobic stamina but only if the rest periods are kept very short. Another variation is "aerobic circuit training". Aerobic stations like a treadmill, rower, bike, or stepper (one to five minutes per station) are interspersed with weight training stations. This protocol has been found to increase aerobic stamina and muscular endurance and endurance.

Circuit training is an effective organisational form of doing physical exercises for improving all physical fitness components. Before and after training, the initial and final tests were conducted for the variables such as speed, agility, power, co-ordination, static balance and dynamic balance for the experimental and control groups. Circuit training was given for eight weeks for alternate days. The study showed that the skill related fitness components such as speed, agility, coordination, power, static balance and dynamic balance were significantly improved due to circuit training among college men soccer players. The maximum improvement attained at the sixth week of training. The problem in many cases has been the system of circuit or weight training employed and the fears of the possible side effects of strength training on speed, endurance, flexibility and so on. Circuit training is a new method of conditioning in the esteemed sports

field. It is a method of physical conditioning that employs both weight training and conditioning exercises. The unique contribution to sports training called the circuit training has come to us from England. It aims at developed the heart core of basic fitness. It is based on very extensive study and research by the sport and physical condition department.

It was immediately accepted by Physical educators, coaches and trainers as an excellent and self motivating means of increasing strength, flexibility and endurance in an orderly fashion within a group. The intensity and vigour of circuit training is necessary challenging and enjoyable to the performer. This system produces positive changes in motor performance. Circuit training is a practical method entailing some preliminary planning, but beyond that, it needs co-ordination. Athletes find it motivating since it makes conditioning fun and challenging through competition against team-mates.

### METHODOLOGY

The purpose of the study was to find out the effect of circuit training on agility among college men. To achieve this purpose of the study, thirty students from Annamalai University, Annamalai Nagar, Chidambaram, Tamil Nadu, and India were selected as subjects at random. The selected subjects were divided into two equal groups of fifteen subjects each, such as experimental group and control group. The group I underwent circuit training for three days per week for twelve weeks. Group II acted as control who did not participate any special training. The dependent 't' test was used to find out the difference between two means.

**RESULTS**

**TABLE - I**  
**COMPUTATION OF ‘t’ RATIO BETWEEN THE PRE TEST AND POST TEST MEANS OF AGILITY OF EXPERIMENTAL AND CONTROL GROUP**

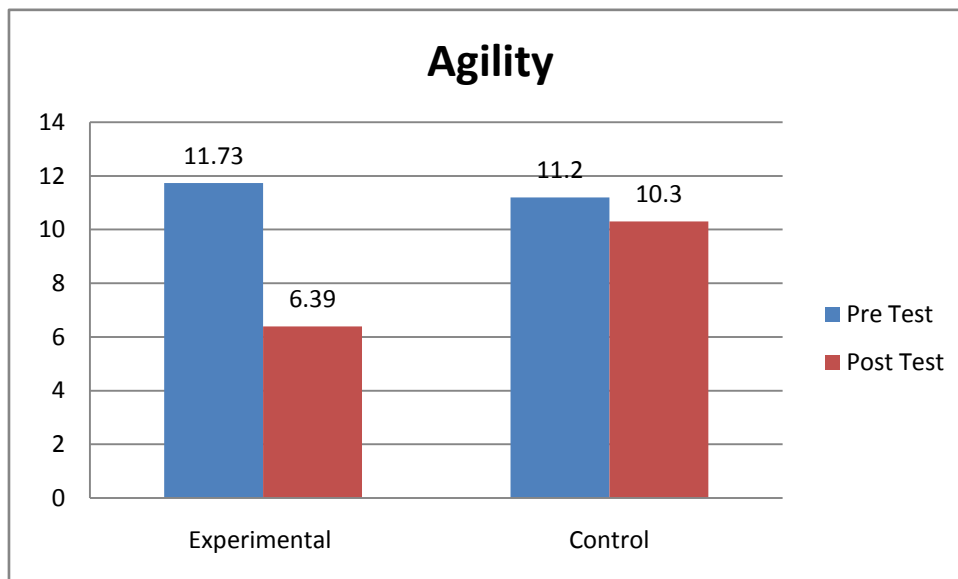
S. No	Variables	Mean diff	SD	σ DM	‘t’ ratio
1	Agility	Exp:5.33	Exp:0.80	Exp:0.21	25.79*
		Con:0.89	Con:1.79	Con:0.46	1.94

\*Significant at 0.05 level

An examination of table I indicates that the obtained ‘t’ ratio for agility of experimental group was 25.79. The obtained ‘t’ ratio on agility was found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The obtained ‘t’ ratios for agility

of control group was 1.94. The obtained ‘t’ ratio on agility was found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be not significant. The mean scores of agility of experimental group and control group was shown graphically in figure I.

**FIGURE - I**  
**BAR DIAGRAM SHOWING THE PRE MEAN AND POST MEAN OF AGILITY OF EXPERIMENTAL AND CONTROL GROUP**



**CONCLUSION**

It was concluded that the experimental group produced significant improvement on agility than the control group.

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