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EFFECT OF CIRCUIT TRAINING ON AGILITY AMONG RURAL SCHOOL CHILDREN OF RAM NAGAR DISTRICT IN THE AGE GROUP OF 15 AND 16 YEARS

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Abstract

The purpose of the study was to find out the effect of circuit training on agility of the rural school children of the age group between 15 and 16 years. The present study was conducted on 100 school children of 15 and 16 years of age taken from different rural schools in the district of Ramnagar of Karnataka State who never had any previous sports training. The circuit training exercises were planned for the experimental group and the control group did not participated in any training. Agility was measured by shuttle run. The data collected from the two groups on agility were used for the statistical treatment using paired 't' test . The levels of significance were fixed at 0.05 level of confidence. The experimental group showed significant improvement in agility than the control group the age group of 15 years students. The experimental group showed significant improvement in agility than the control group the age group of 16 years students.

Key Words: Circuit Training, Agility, Rural School Children.

Introduction

The modern world is the come out of many scientific outcome inventions through centuries. Scientific instruments and machinery big and small have helped to lead our daily life with ease and comfort. During this time we have seen the transformation of a basically hard working, physically active and rural based society into a population of anxious and disturbed city dwellers and sub-urbanites, who may feel faint at heart at the very thought of exercise and vigorous physical activity. Advancements in modern technology have enabled our present day society to exist in a world where the concept of hard or even moderate physical fitness is absolutely necessary.

Circuit training using weight machines improves aerobic fitness, flexibility, and strength. Each machine in the circuit is designed to exercise a different group of muscles. Individuals move from machine to machine completing a set of exercises, usually in a predetermined time. Generally there are between 6-15 stations to complete in a time of 5-20 minutes. Aerobic benefit is gained by moving swiftly between machines and completing the circuit as a continuous flow of activity. This keeps the heart rate at a steady and fairly high level.

STATEMENT OF THE PROBLEM

The purpose of the study was to find out the effect of circuit training on agility of the rural school children of the age group between 15 and 16 years.

HYPOTHESIS

It was hypothesized that the experimental and control group may have the improvement after the circuit training in the agility performance of the age group of 15 and 16 years.

METHODOLOGY

The present study was conducted on 100 school children of 15 and 16 years of age taken from different rural schools in the district of Ramnagar of Karnataka State who never had any previous sports training. The circuit training exercises were planned for the experimental group and the control group did not participated in any training. Agility was measured by shuttle run. The data collected from the two groups on agility were used for the statistical treatment using paired ‘t’ test . The levels of significance were fixed at 0.05 level of confidence.

RESULTS AND DISCUSSION

The mean and 't' ratio for agility for the Experimental and Control groups in the age group of 15 years are presented in table I.

TABLE I

MEAN AND STANDARD DEVIATION OF EXPERIMENTAL AND CONTROL GROUP FOR AGILITY IN THE AGE GROUP OF 15 YEARS

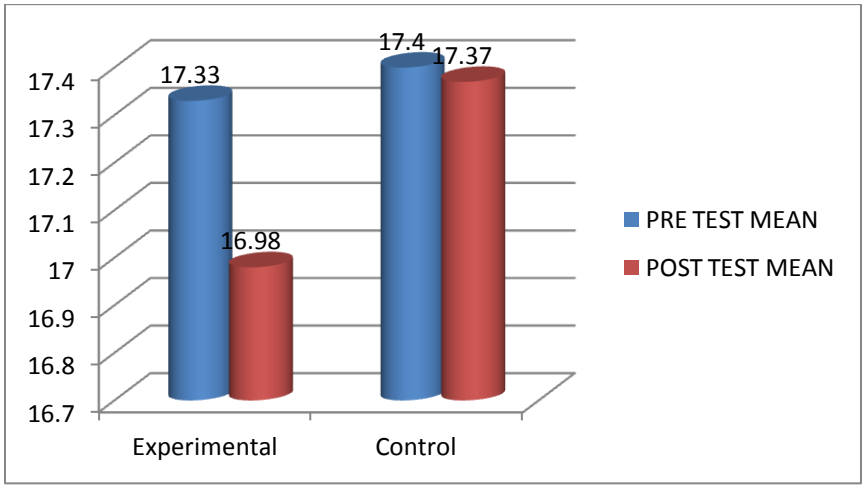
MEANS	MEANS		Df	t- VALUE
	PRE TEST MEAN	POST TEST MEAN		
EXPERIMENTAL	17.33	16.98	48	4.46*
CONTROL	17.40	17.37		0.97

(Performance in Seconds)

The mean and 't' ratio on agility for the Experimental and Control groups are presented in table I. The table I also reveals that, in agility there existed significant differences between the experimental and control groups. The t-ratio also indicated that the obtained value for experimental group was 4.46 were higher than the required table value 2.01. It is significant. The obtained value for control group was 0.97 were lesser than the required table value 2.01. Hence it is insignificant

FIGURE 1

THE PRE AND POST TEST MEANS BETWEEN THE EXPERIMENTAL AND CONTROL GROUP FOR AGILITY IN THE AGE GROUP OF 15 YEARS



The mean and 't' ratio for agility for the Experimental and Control groups in the age group of 16 years are presented in table II.

TABLE II

MEAN AND STANDARD DEVIATION OF EXPERIMENTAL AND CONTROL GROUP FOR AGILITY IN THE AGE GROUP OF 16 YEARS

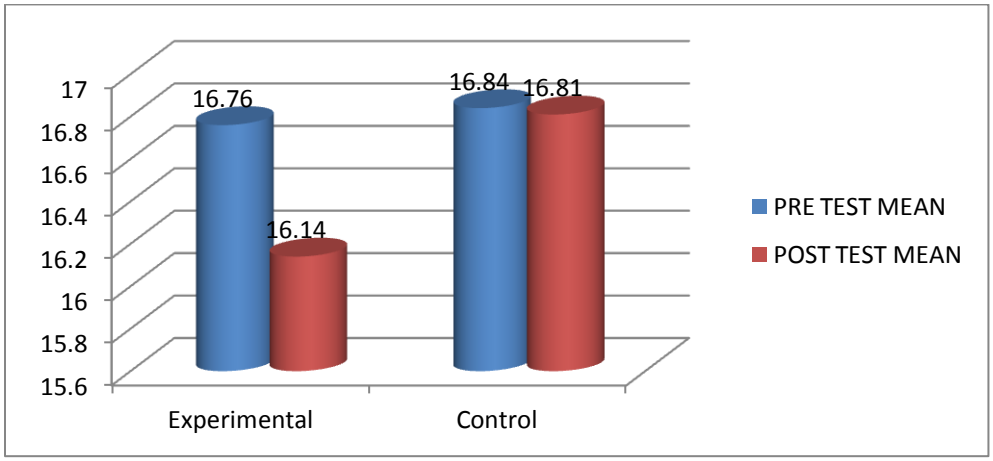
MEANS	MEANS		df	t- VALUE
	PRE TEST MEAN	POST TEST MEAN		
EXPERIMENTAL	16.76	16.84	48	4.84*
CONTROL	16.14	16.81		0.86

(Performance in Seconds)

The mean and 't' ratio on agility for the Experimental and Control groups are presented in table I. The table I also reveals that, in agility there existed significant differences between the experimental and control groups. The t-ratio also indicated that the obtained value for experimental group was 4.84 were higher than the required table value 2.01. It is significant. The obtained value for control group was 0.86 were lesser than the required table value 2.01. Hence it is insignificant

FIGURE 2

THE PRE AND POST TEST MEANS BETWEEN THE EXPERIMENTAL AND CONTROL GROUP FOR AGILITY IN THE AGE GROUP OF 16 YEARS



CONCLUSIONS

1. The experimental group showed significant improvement in agility than the control group the age group of 15 years students.
2. The experimental group showed significant improvement in agility than the control group the age group of 16 years students.

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