



INFLUENCE OF RESISTANCE TRAINING ON AGILITY AMONG SPORTS HOSTEL STUDENTS

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Abstract:

The purpose of the study was to find out the effect of resistance training on agility among sports hostel students. To achieve the purpose of this study thirty sports hostel students were randomly selected from Kallakurichi, Tamilnadu. The subject's age ranged between 14 to 17 years only. They were randomly divided into two equal groups, experimental group and control group. The study was formulated as a true random group design consisting of a pre test and post test. The subjects (N=30) were randomly assigned to two equal groups of fifteen school students. The groups were assigned as experimental group, and control group respectively. The experimental group participated resistance training for a period of six weeks. The post test was conducted on the above said dependent variables after a period of twelve weeks in the respective treatments. Agility was measured through spirometer. The data collected from the subjects were treated statistical technique, the analysis of covariance (ANCOVA) was used. It was concluded that there was significant improvement in agility due to resistance training when comparing to control group.

Key Words: Resistance Training, Agility, Sports Hostel Students.

Introduction:

Resistance training aims to "progressively and progressively overload the musculoskeletal system so it gets stronger." It is also advised that resistance training be progressive, customised, and stimulate all of the major muscle groups, including the arms, legs, shoulders, chest, and abs. One set of eight to ten exercises for the major muscle groups, eight to twelve repetitions until fatigue, should be performed by beginners two to three days a week, according to their recommendations (multiple-set regimens may provide greater benefits if time allows). Ten to fifteen repetitions may be more suitable for elderly and fragile individuals (around fifty to sixty years of age and older). In order to help muscles grow stronger and regenerate, resistance training causes microscopic damage or tears to the muscle cells, which the body promptly repairs. The process of breaking down muscle fibres is known as "catabolism," while the process of repairing and growing new muscle tissue is known as "anabolism." When the term "anabolic" is used in reference to steroids, one must most likely be familiar with it (Colado & Triplett, 2008).

Methodology:

The purpose of the study was to find out the effect of resistance training on agility among sports hostel students. To achieve the purpose of this study thirty sports hostel students were randomly selected from Kallakurichi, Tamilnadu. The subject's age ranged between 14 to 17 years only. They were randomly divided into two equal groups, experimental group and control group. The study was formulated as a true random group design consisting of a pre test and post test. The subjects (N=30) were randomly assigned to two equal groups of fifteen school students. The groups were assigned as experimental group, and control group respectively. The experimental group participated resistance training for a period of six weeks. The post test was conducted on the above said dependent variables after a period of twelve weeks in the respective treatments. Agility was measured through spirometer. The data collected from the subjects were treated statistical technique; the analysis of covariance (ANCOVA) was used.

Results:

Table 1: Descriptive Analysis of Agility

S.No	Variables	Pre Test Mean	Post Test Mean
1	Agility	Exp:11.79	Experimental: 10.99
		Control:11.61	Control:11.50

Table 2: Computation of 't' Ratio Between the Pre Test and Post Test Means of Agility of Experiment Group and Control Group

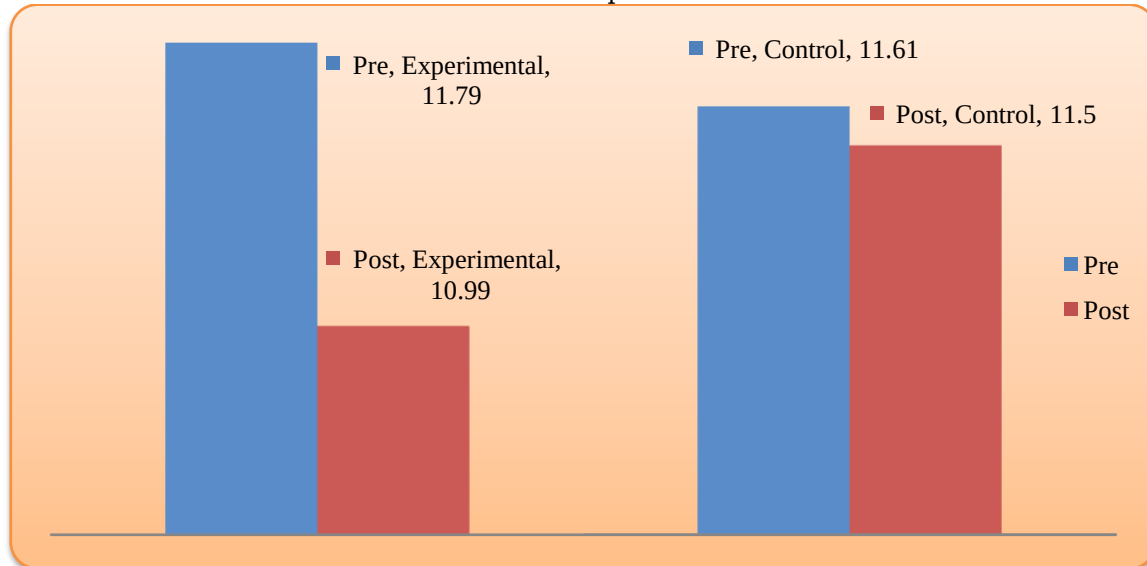
S.No	Variables	Mean Diff	SD	σ DM	't' ratio
2	Agility	Exp:0.80	0.30	0.08	6.16*
		Con:0.11	1.11	0.29	1.56

*Significant at 0.05 level

An examination of table 2 indicates that the obtained 't' ratios were 6.16 for experimental group and 1.03 for control group of agility. The obtained 't' ratio on agility of experimental group were 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 results of this study showed that 6 weeks of practice produced a significant improvement in agility. The obtained 't' ratio on agility were 1.56 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 experimental group and control group of agility were shown graphically in figure 1.

Figure 1: Bar Diagram Showing the Pre Mean and Post Mean of Agility of Experimental Group and Control Group



Conclusion:

It was concluded that there was significant improvement in agility due to resistance training when comparing to control group.

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