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INFLUENCE OF RESISTANCE TRAINING ON SPEED AMONG SPORTS HOSTEL STUDENTS

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Abstract:

The purpose of the study was to find out the effect of resistance training on speed 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. Speed was measured through spirometer. The data collected from the subjects were treated statistical technique, the analysis of covariance was used. It was concluded that there was significant improvement in speed due to resistance training when comparing to control group.

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

Introduction:

Over the past ten years, resistance training has become more and more popular. Any exercise that makes the muscles contract against an outside resistance with the goal of increasing strength, tone, mass, and endurance is referred to as resistance training. Dumbbells, rubber exercise tubing, bricks, bottles of water, your own body weight, or anything else that makes your muscles contract can all be used as external resistance. When all ranges of motion are used, this training is most effective and works the body's muscles. A variety of resistance-based exercises are performed two to three times a week, with an average of eight to twelve repetitions. Resistance training has been shown to have numerous benefits and is still a vital activity for people to participate in. Human muscles were worked out long ago in hunter-gatherer societies when they built shelter, hunted, farmed, and performed all the other manual tasks required to survive (Karuppaiah & Kumar, 2022).

Methodology:

The purpose of the study was to find out the effect of resistance training on speed 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 twelve weeks. The post test was conducted on the above said dependent variables after a period of six weeks in the respective treatments. Speed was measured through spirometer. The data collected from the subjects were treated statistical technique; the analysis of covariance was used.

Results:

Table 1: Descriptive Analysis of Speed

S.No	Variables	Pre Test Mean	Post Test Mean
1	Speed	Experimental:6.23	Experimental:6.01
		Control:6.34	Control:6.30

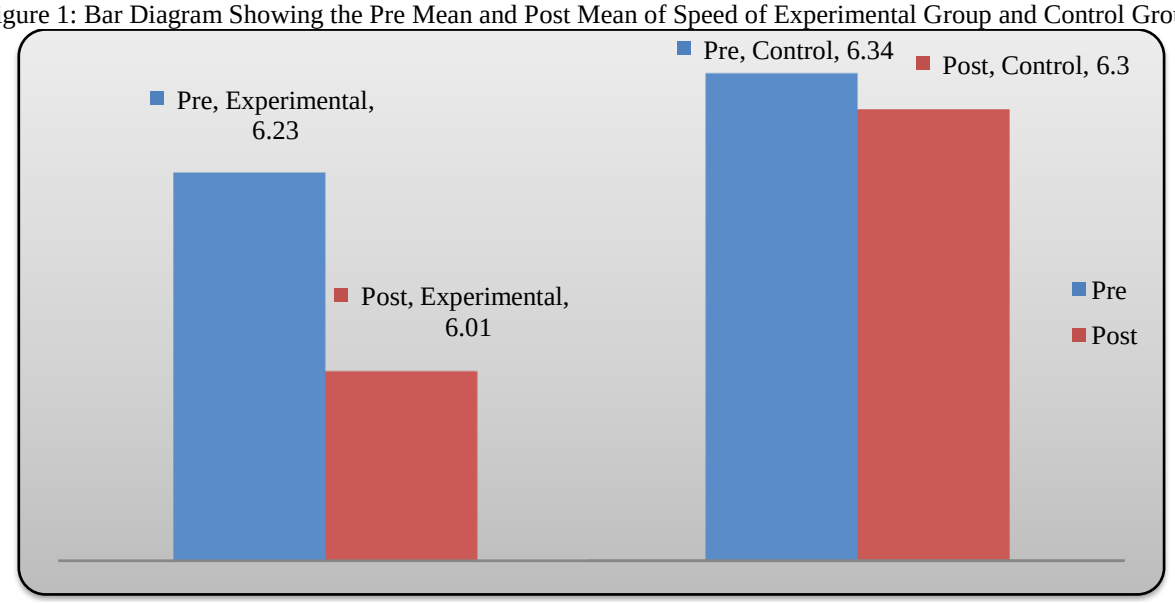
Table 2: Computation of 't' Ratio Between the Pre Test and Post Test Means of Speed of Experiment Group and Control Group

S.No	Variables	Mean diff	SD	σ DM	't' ratio
1	Speed	Exp:0.22	0.21	0.07	6.32*
		Con:0.04	1.01	0.29	0.99

*Significant at 0.05 level

An examination of table II indicates that the obtained 't' ratios were 6.32 for experimental group and 0.99 for control group of speed. The obtained 't' ratio on speed 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 speed. The obtained 't' ratio on speed were 0.99 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 speed were shown graphically in figure 1.

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



Conclusion:

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

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