

EFFECT OF INTERVAL TRAINING ON EXPLOSIVE POWER AMONG SCHOOL STUDENTS

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ABSTRACT

The purpose of the study was to investigate the effect of interval training on explosive power among school students. For this study the investigator selected 30 school students from Bengaluru, Karnataka. The age of the subjects was between 15 and 17 years. The subjects were divided into two group consists 15 subjects in each group. The random group design was used as experimental design for this study. The variable to be used in the present study was assessed from all subjects before the experiments. It was assumed as pre-test. After completion of treatment they were tested again as it was in the pre-test on all variables used in the present study. This test was assumed as post-test. The data collected for statistical treatment to find out significant difference between the pre test and post test means by computing dependent 't' test. In all cases 0.05 level of confidence was utilized to test the significance. The result of the experimental group showed significant improvement on explosive power when compared to the control group.

KEYWORDS: Interval Training, Explosive power, School Students.

INTRODUCTION

The concept of interval training has existed for a number of years in one form or another. The famous German coach, Woldemar Gerschler, with the formalization of a structured system of interval training in the 1930s. With interval training, short to moderate periods of work are alternated with short to moderate periods of rest, or reduced activity. The concept has a firm foundation in physiological principles. Researchers have demonstrated that athletes can perform a considerably greater volume of work by breaking the total work into short, intense bouts with rest, or reduced activity, intervals interspersed between consecutive work bouts. The intervals of work and rest are usually equal and can vary from several seconds to five minutes or more (Engel & Sperlich, 2014).

METHODOLOGY

The purpose of the study was to investigate the effect of interval training on explosive power among school students. For this study the investigator selected 30 school students from Bengaluru, Karnataka. The age of the subjects was between 15 and 17 years. The subjects were divided into two group consists 15 subjects in each group. The random group design was used as experimental design for this study. The variable to be used in the present study was assessed from all subjects before the experiments. It was assumed as pre-test. After completion of treatment they were tested again as it was in the pre-test on all variables used in the present study. This test was assumed as post-test. The data collected for statistical treatment to find out significant difference between the pre test and post test means by computing dependent 't' test. In all cases 0.05 level of confidence was utilized to test the significance.

RESULTS

TABLE-I
COMPUTATION OF t-RATIO BETWEEN THE PRE TEST AND POST TEST ON
EXPLOSIVE POWER OF EXPERIMENTAL GROUP

GROUP	M	SD	Σ DM	DM	t-RATIO
Pre Test	1.55	0.09	0.03	0.21	8.98*
Post Test	1.76	0.16			

It was observed that the mean value for pre test was 1.55 and post test was 1.76. The standard deviation for the pre test was 0.09 and post test was 0.16. The standard error of the different between the means was found out and the value was 0.03. The mean difference for the pre test and post test was 0.21. The obtained 't' ratio was 8.98. The table value of 't' ratio was 2.14. The obtained t-ratio was greater than the table value. Hence, the obtained 't' -ratio was significant at 0.05 level of confidence.

FIGURE-I
BAR DIAGRAM SHOWING THE MEAN VALUES OF PRE AND POST TEST ON
EXPLOSIVE POWER OF EXPERIMENTAL GROUP

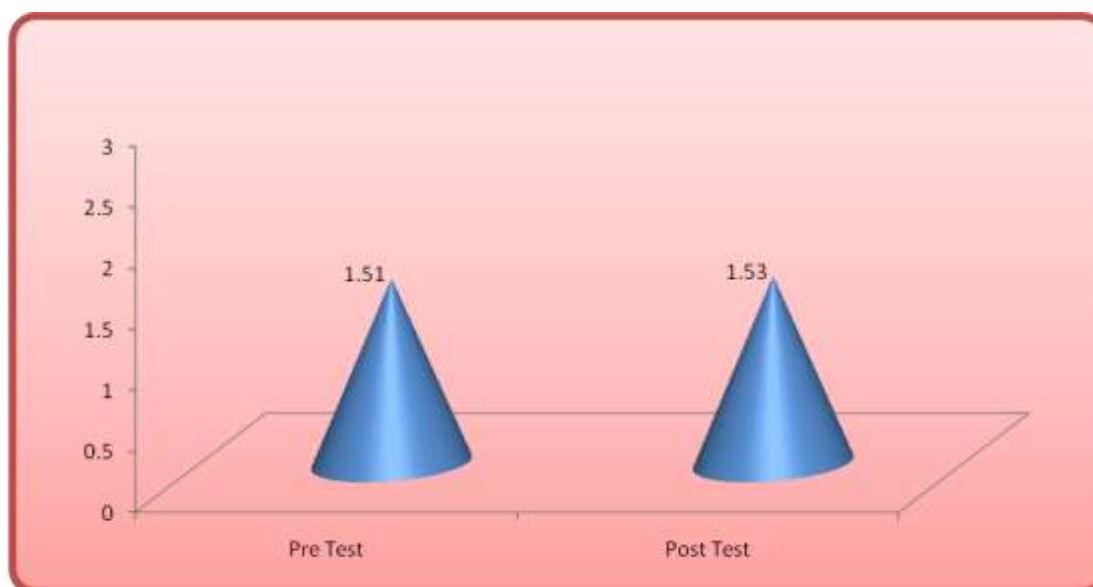


TABLE-II
COMPUTATION OF t-RATIO BETWEEN THE PRE TEST AND POST TEST ON
EXPLOSIVE POWER OF CONTROL GROUP

GROUP	M	SD	ΣDM	DM	t-RATIO
Pre Test	1.51	0.03	0.02	0.02	0.86
Post Test	1.53	0.04			

It was observed that the mean value for pre test was 1.89 and post test was 1.82. The standard deviation for the pre test was 0.04 and post test was 0.05. The standard error of the different between the means was found out and the value was 0.10. The mean difference for the pre test and post test was 0.08. The obtained 't' ratio was 0.70. The table value of 't' ratio was 2.14 at 0.05 level. The obtained t-ratio was lesser than the table value. Hence, the obtained 't' – ratio was insignificant at 0.05 level of confidence.

FIGURE-II
BAR DIAGRAM SHOWING THE MEAN VALUES OF PRE AND POST TEST ON
EXPLOSIVE POWER OF CONTROL GROUP



CONCLUSIONS

1. The result of the experimental group showed significant improvement on explosive power when compared to the control group.

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