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Influence of extensive interval training on forte of college students

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Abstract

The purpose of the study was to find out the impact of extensive interval training on FORTE of college students. To achieve the purpose of the study, thirty untrained men students were selected as subjects. The age, height and weight of the subjects ranged from 18 to 22 years, 162 to 175 centimetres and 56 to 70 kilograms respectively. The selected subjects were randomly assigned into two equal groups of 15 subjects each. Group I underwent extensive interval training, group II acted as control. The collected data analysed by analysis of covariance (ANCOVA) to determine the significant differences. The result of the study showed that significant differences exist among the adjusted post test means of experimental and control groups on FORTE.

Keywords: Extensive interval training and forte

Introduction

Interval training is a type of training that involves a series of low- to high-intensity workouts interspersed with rest or relief periods. The high-intensity periods are typically at or close to anaerobic exercise, while the recovery periods involve activity of lower intensity (MacInnis, and Gibala, 2016). Varying the intensity of effort exercises the heart muscle, providing a cardiovascular workout, improving aerobic capacity and permitting the person to exercise for longer and/or at more intense levels (Atkin, 2015) [1]. The time interval is intended to provide just enough recovery time. A runner will use this method of training mainly to add speed to their race and give them a finishing kick.

The extensive interval training constitutes the intermittent variation of exertion and active recovery periods within a training unit. Characteristics of the extensive interval method are medium or large exertion periods within the basic endurance range or within the FORTE endurance range with the duration of the recovery periods being half as long as those of the exertion periods. It is important to note that the recovery periods must not result in full recovery.

Methodology

The purpose of the study was to find out the impact of extensive interval training on FORTE of college students. To achieve the purpose of the study, thirty untrained men students were selected as subjects. The age, height and weight of the subjects ranged from 18 to 22 years, 162 to 175 centimetres and 56 to 70 kilograms respectively. The selected subjects were medically examined by a qualified physician and certified that they were medically and physically fit enough to undergo the sprint training programme. The selected subjects were randomly assigned into two equal groups of 15 subjects each. Group I underwent extensive interval training, group II acted as control. FORTE was measured by 1 RM bench press test. The collected data analysed by analysis of covariance (ANCOVA) to determine the significant differences.

Training programme

In this study, training was done under close supervision with frequent adjustments in training intensity to maintain the desired training stimulus. The training programmes were scheduled for one session a day each session lasted between thirty to forty five minutes approximately

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including warming up and warming down. During the training period, the experimental group underwent extensive interval training programme three days per week (alternative days) for twelve weeks in addition to their curriculum. The group—I concentrated on extensive interval training, Intensity starting

from @ 70% of HRR to @ 95% HRR, followed from first week to twelve weeks.

Result

Table 1: Analysis of covariance on forte of experimental and control groups

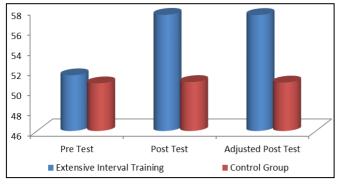
	Extensive Interval Training	Control Group	S O V	Sum of Squares	df	Mean squares	'F' ratio
Pre test Mean	51.53	50.73	В	0.53	1	0.53	0.22
SD	1.06	1.90	W	66.93	28	2.39	0.22
Post test Mean	57.53	50.86	В	333.33	1	333.33	93.83*
SD	2.06	1.68	W	99.46	28	3.55	93.83**
Adjusted Post test	57.51	50.81	В	331.30	1	331.30	89.96*
Mean	37.31	50.81	W	99.43	27	3.68	89.90

(The required table value for significance at 0.05 level of confidence with degrees of freedom 1 and 27 is 4.21 and degree of freedom 1 and 28 is 4.20.) *Significant at .05 level of confidence

Table shows that the pre-test means and standard deviation FORTE of extensive interval training and control groups are 51.53 ± 1.06 and 50.73 ± 1.90 respectively. The obtained 'F' ratio value is 0.22 of FORTE was less than the required table value of 4.20 for the degrees of freedom 1 and 28 at 0.05 level of confidence.

The post-test means and standard deviation on FORTE of extensive interval training and control groups are 57.53 ± 2.06 and 50.86 ± 1.68 respectively. The obtained 'F' ratio value is 93.83 of FORTE was greater than the required table value of 4.20 for the degrees of freedom 1 and 28 at 0.05 level of confidence.

The adjusted post test means on FORTE of extensive interval training and control groups are 57.51 and 50.81 respectively. The obtained 'F' ratio value of 89.96 on FORTE were greater than the required table value of 4.21 for the degrees of freedom 1 and 27 at 0.05 level of confidence. It is observed from this finding that significant differences exist among the adjusted post test means of experimental and control groups on FORTE.



Cylinder diagram showing the mean value on forte of experimental and control groups

Discussion and Conclusion

The finding of the study stated that significant differences exist among the adjusted post test means of experimental and control groups on FORTE. Moreover extensive interval training group had high impact to increase the FORTE of the subjects. The following studies are supporting my finding of the study. Palanisamy (2018) [3] analyze the effect of intensive and extensive interval training on FORTE. It is inferred that twelve weeks of intensive interval training and extensive interval training groups have significantly improved the

muscular FORTE as compared to the control group.

Conclusion

The result of the study showed that significant differences exist among the adjusted post test means of experimental and control groups on FORTE. Moreover extensive interval training group had high impact to increase the FORTE of the subjects.

Reference

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