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## **Golden Research Thoughts**



## EFFECT OF DIFFERENT INTENSITY AEROBIC EXERCISE ON SELECED BIO-MOTOR PERFORMANCE OF MIDDLE AGE MAN

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#### **ABSTRACT**

he purpose of the study has to find out and the effects of different intensity aerobic exercise on selected bio motor performance of middle age men. The present study was the descriptive survey method .Total numbers of 45 middle age men were selected as the sample for the study. The age of the subjects ranged between 35-40 years and all the subjects from district kulgam (J & K) during the year 2016. The number of groups for the study was three, they were named as Moderate Aerobic Intensity Training Group, High Aerobic Intensity Training Group and Control Group. The number of subjects in each group was confined to 15. The duration of the training program was restricted to twelve weeks , three days per week .The experimental groups 1st and 2nd were subjected 12 weeks of moderate intensity and high intensity aerobic exercise program



respectively. Training was given during alternative days for three days a week for both experimental groups .The aerobic exercise program was scheduled for one session per day in the morning between 6:30 AM to 7:30 AM. During every session the workout lasted approximately for 60 min. including warming up, Training program and warming down process. The data were collected on selected dependent variables such as speed and strength ,that was measured by using 50 meters run and hand group strength test . To examine the effect of different intensity aerobic exercise on selected Bio-motor performance of middle

age men ,analysis of covariance (ANCOVA) was computed for the data collected from moderate and high intensity aerobic groups and control group for the pre-test and post-test separately for each other .Since three groups were involved ,whenever the obtained 'F' ratio value was found to be significant for the adjusted post test means . Scheff"s Post Hoc Test was applied to determine the paired means difference if any . The pre and post test mean of speed for the moderate intensity aerobic training group and control group are (8.27,8.2,8.33) and (7.75, 7.53, 8.08)respectively. The obtained 'F' ratio of 8.56 is higher than the table

value of 3.22 required for significance at 0.05 level of df 2 and 42. It reveals that there was a significant improvement in speed among the three groups after the completion of the training program the pre and post test mean of group strength for the moderate intensity aerobic training group, high intensity and control group are (33.07,32.91, 33.49) and (34.25,34. 52,33.07) respectively. The obtained 'F' ratio of 9.32 is higher than the table value of 3.23 required for significance at 0.05 level of df 2 and 41.The result of the study indicates that there is a significant improvement among the adjust post test mean of moderate intensity aerobic training, high intensity aerobic training and control group on the development of strength.

**KEYWORDS:**Aerobic Training ,Middle age untrained men.

#### INTRODUCTION -

The present investigation

was carried out with a view to study the effect of different intensity aerobic exercise on selected bio motor performance of middle age men. The researcher was very much interested to study the effect of different intensity aerobic exercise on selected bio motor performance of middle age men. Thus, it can be concluded that there was a significant improvement on selected bio motor variables such as speed and strength for moderate aerobic intensity training group and high aerobic intensity training group as compared to control group .Sundara moorthy (2006) investigated the influence of aerobic training as selected motor fitness variables among intercollegiate players. The purpose of the study was to analyze the influence of aerobic training as selected motor fitness variables among inter collegiate players .The study revealed that aerobic training had significantly improved the criterion variables namely speed ,endurance , strength and agility among the criterion variables ,Strength endurance was better improved than that of the other variables due to aerobic training .

#### **AEROBICS**

According to Kenneth, Aerobics (pronounced: a-er-o-biks) refers to a variety of exercises that stimulate heart and lung activity for a time period sufficiently long to produce beneficial changes in the body, running, swimming, cycling and jogging are typical aerobic exercise.

'Aerobics' means 'in the presence of oxygen' many exercises are aerobics. Since these activities increases oxygen uptake in the body. whereas weightlifting ,sprints etc. are anaerobic exercises where players need to hold their breathing for a while.

#### **BIO-MOTOR PERFORMANCE:**

Bio-motor performance is an expression used to describe a persons ability to perform efficiently basic skills involving such functional components like speed , agility, power, strength, endurance etc .

#### **MATERIAL AND METHODS:**

The present study is the descriptive survey method. Total no of 45 middle aged men were selected as the samples for the study purposively from district Kulgam ( J & K). The chosen subjects were randomly assigned into three equal groups of 15 each. Group -1 underwent moderate aerobic intensity training group, Group-2 underwent high aerobic intensity training group and Group-3 acted as control group which did not participate in any special training apart from their regular activities to examine the effect of different intensity aerobic exercise on selected bio –motor performance of middle age men ,analysis of covariance [ANCOVA] was computed for the data collected from moderate, high and control group for the pre test and post test separately for each variable. Since three groups were involved , whenever the obtained 'f' ratio value was found to be significant for the adjusted post test means. Scheff's post hoc test was applied to determine the paired means difference if any .

Scheff's post Hoc test for the difference between the adjusted Post Test Mean on Speed

Moderate	High	Intensity	Control Group	Mean Difference	Cl
Intensity Group	Group				
7.75	7.58			0.17	0.28
7.75			8.04	0.29	0.28
	7.58		8.04	0.46	0.28

Significant at 0.05 level of confidence.

(The confidence interval required for significance at 0.05 level is 0.28)

The above table indicated that the adjusted post test mean difference of speed between moderate intensity aerobic training group, high intensity aerobic training group and control group are 0.29 and 0.46 respectively. These values are higher than the confidence interval value of 0.28, which shows significant difference at the 0.05 level of confidence.

It is concluded that the high intensity aerobic training group is better than moderate intensity aerobic training group in improving speed.

 $Scheff's \, Post \, Hoc \, Test \, for \, the \, difference \, between \, the \, adjusted \, Post \, Test \, paired \, mean \, on \, Grip \, Strength$ 

Moderate	High Intensity	Control Group	Mean Difference	C1
Intensity Group	Group			
34.25	34.52		0.27	0.90
34.25		33.07	1.18	0.90
	34.52	33.07	1.45	0.90

Significant at 0.05 level of confidence

(The confidence interval required for significance a 0.05 level is 0.90)

The above table indicated that the adjusted post test mean difference of grip strength between moderate intensity aerobic training group, high intensity aerobic training group and control group are 1.18 and 1.45 respectively. These values are higher than the confidence interval value of 0.90, which shows significant difference at the 0.05 level of confidence. However the above table showed that there is no significant difference between the moderate intensity aerobic training group in grip strength.

## SUMMARY AND CONCLUSION SUMMARY

The purpose of the study was to find out the effect of different intensity aerobic exercises on selected biomotor performance of middle age men. To achieve this purpose of the study, forty-five middle-aged men were randomly selected as subjects and they were divided into three equal groups. Each group consisted of the fifteen subjects. The group IST underwent moderate aerobic intensity training, group 2nd underwent high intensity training and group 3rd acted as control group, who did not participate in any special training apart from their regular activities. The subjects were tested on selected dependent variables such as speed was assessed by 50 meters. run and hand grip strength test. The analysis of covariance (ANCOVA) was used to find out the significant difference if any, among groups on each selected dependent variables separately.

#### **CONLUSION**

#### Based on the results of the study, the following conclusions were drawn:-

There was a significant improvement on selected bio motor variables such as speed for moderate aerobic intensity training group and high aerobic intensity training group as compared to control group.

There was a significant improvement on grip strength for experimental group as compared to control group.

#### **REFERENCES**

1.Sundaramorthy v.et.al. (2006) influence of aerobic training on selected motor fitness variables among intercollegiate players [Research Biannual for Movement, vol. 23, (1), pp.26]

2. Kenneth, H. (1970). Cooper. The new aerobies (New York: M Evains and Company). inc.



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