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EFFECT OF DIFFERENT TRAINING ON SELECTED PHYSIOLOGICAL VARIABLES AMONG STATE MALLAKHAMB BOYS

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Abstract: The aim of the study was to find out influence of different training on selected physiological variables amid state mallakhamb boys. **Methods:** To achieve this study thirty boys' mallakhamb performers in the TMA (Tamilnadu Mallakhamb Association), Tamilnadu were selected as subjects at random. Their age ranged between 14 to 17 years. The selected subjects were divided in to two equal groups of fifteen each namely different training group and control group. The succeeding variables namely blood pressure and VO_2 max were selected as measure in variables. The experimental groups have undergone twelve weeks of training program, whereas the control group maintained their daily routine activities and no special training was given to them. The subjects of the 2 groups were tested on selected physiological variables namely blood pressure and VO_2 max using sphygmomanometer test and Queens College step test respectively at pretest and immediately posttest the training period. The collected data were analyzed statistically through analysis of covariance (ANCOVA) to find out the significant differences, if any among the groups. The .05 level of significance was fixed to test the level of significance which was considered an appropriate. **Result:** The results of the study different training group showed significant development on selected physiological variables specifically blood pressure and VO_2 max when related to control group. **Conclusion:** Interval training and Aerobic training improve blood pressure and VO_2 max between state level Mallkahmab boys.

Index Terms – Different Training, Blood Pressure and VO_2 max, Mallakhamb.

1. INTRODUCTION

1.1 Interval Training

Interval training is maybe the most way for improving endurance of several types. In interval method the action is done at moderately higher Intensity with intermittent intervals of in whole retrieval, in this way the activity is done with satisfactory speed, distance and duration to rise the heart rate up to 180 beats / min. After this there should be a recovery passé and when the heart rate arises depressed to 120-130 beats / min this work must be ongoing again. Interval training is a method of workout where increase and decrease, the intensity of test amid aerobic and anaerobic training.

The procedure for interval training is to Push your body past the aerobic threshold for a few instants and then return to aerobic conditioning level with the objective of enlightening performance speed, strength, endurance. The aerobic threshold is the strength where body changes from burning a greater fraction of fat to a better percentage of carbohydrate and is usually 85% of your maximum heart rate train below 85% and it's aerobic; train above 85% units anaerobic. Interval training is basically exercised which consists of activity at high Intensity for a period of time, followed by low intensity exercise for a period of time. These 'sets' are repeated.

1.2 Sprint Interval

The high intensity portion is named sprint intervals. Sprint intervals are stately either by time or distance. They can be as short as fifteen seconds in movements like HIIT or as long as 20 minutes for aerobic interval training. An example of sprint intervals would be running at full pace lengthways a stretch of ground for 30 seconds, another would be indoor cyclist expenditure 15 minutes pretending a climb on the bike.

1.3 Intensity

Intensity is primarily by the strength of the individual stimulus or by the work achieved in a given time within services of exercises. The intensity is also denoted by a number of different units of measurement. It is above all differentiated by intensity of movement and density of load.

Interval training is category of physical drill that includes bursts of high intensity work scattered with eras of low intensity work .the high intensity phases are typically at or close to while the retrieval periods may include either whole rest or activity of lower intensity.

1.4 Benefits of Interval Training

Interval working out is a sports drill technique that in grounded on the reductions of the body's muscles. This method has been proven to improve the athletic performance of athletes in a number of sports. This training style can help athletes improve their endurance ability, upper body strength, speed and agility. In the lower body is generally trained using endurance training while the upper body is trained with medicine ball exercises.

Interval is a very active exercise technique as it helps the body to grasp its supreme endurance in the smallest amount of time likely. Athletes have exposed that the biggest developments to their recital have been when they syndicate interval training with endurance training. Scientific studies have shown that by combining these two styles of training athletes are able to get the maximum gains towards their endurances, acceleration, power, strength and agility. As interval training is very demanding for the body it is only suggested for athletes. Those that do not play sport for a living should not try interval. This training system involves a lot of endurance moments in the muscles. This makes it very easy for people to harm themselves when involved interval drills.

1.5 Aerobic Training

Aerobics is a form of physical exercise that combines regular aerobic exercise with stretching and strength training procedures with the goal of refining all elements of fitness, flexibility, muscular strength and cardiovascular fitness. It is typically achieved to music and may be practiced in a group although it can be done solo and without musical equipment. With the goal of avoiding illness and helping physical fitness practitioners perform various routines including a number of different dance like. Aerobics is a dynamic physical movement that can offer a cheap and applied workout for most individuals. Aerobic fitness helps to help the cardio- respiratory system from disease and it promotes physical, mental, emotional and spiritual improvement. Aerobic sequencer can be started at any age and the intensity of the package can also be suitable to meet the superior needs of the separate (Cooper, 1985).

1.5.1 Aerobics Benefits

1. Keep excess pounds at bay

Joint with a healthy nutrition, aerobic exercise helps lose weight and keep it off.

2. Increase stamina, fitness and strength

May feel tired when first start even aerobic workout. But over the extended period, enjoy augmented energy and reduced exhaustion.

Gain amplified heart and lung suitability and bone and muscle strength over time.

3. Ward off viral illnesses

Aerobic exercise triggers immune system in a good way. This may leave less liable to viral diseases, such as colds and the flu.

4. Reduce health risks

Aerobic exercise reduces the risk of many circumstances. These situations comprise fatness, heart disease, high blood pressure, type 2 diabetes, metabolic syndrome, stroke and certain types of cancer.

2. METHODOLOGY

The drive of the study was to discovery out consequence of different training on particular physiological variables amid state mallakhamb boys. To achieve this study, thirty boys' Mallakhamb players in the TMA, Tamilnadu were nominated as subjects at random. Their age group 14 to 17 old. The selected subjects were divided in to two equal groups of fifteen each namely different training group and control group. The succeeding variables explicitly blood pressure and VO_2 max were certain as criterion in variables. The experimental groups have undergone twelve weeks of training program, whereas the control group maintained their daily routine activities and no special training was given to them. The subjects of the two groups were tested on selected physiological variables blood pressure and VO_2 max with sphygmomanometer test and Queens College step test at before and immediately after the exercise period. The collected data were analyzed statistically through analysis of covariance (ANCOVA) to find out the significant differences, if any among the groups. The .05 level of significance was fixed to test the level of significance which was measured a suitable.

3. ANALYSIS OF THE DATA

The investigation of covariance on physiological variables blood pressure and VO_2 max of different training and control groups have been analyzed distinctly and obtainable below.

Table-I

Analysis of Covariance of the Data on Blood Pressure of Pre and Post Tests Scores of Different Training and Control Group

Test	Different training group	Control group	SV	Sum of squares	Df	Mean squares	Obtained "F" ratio
Pretest mean	124.40	124.47	B	0.033	1	0.033	0.021
S.D	1.24	1.30	W	45.33	28	1.17	
Post test mean	123.73	123.33	B	2.71	1	2.70	1.052*
S.D	1.49	1.18	W	50.27	28	1.80	
Adjusted post test Mean	123.75	124.32	B	2.50	1	2.50	1.496*
			W	45.12	27	1.67	

(The table value at 0.05 level of confidence with df 2 & 28, 2 & 27, were 0.38 and 0.52 singly.)

The adjusted posttest means of different training and control groups are 123.75 and 124.32 separately. The obtained "F" ratio of 1.496 for adjusted posttest means is more than the table value of 0.52 for df 2 and 27 mandatory for significance at .05 level of confidence on blood pressure.

Table-II

Analysis of Covariance of VO_2 Max of Pre and Post Tests Scores of Different Training and Control Group

Test	Different training group	Control group	SV	Sum of squares	Df	Mean squares	Obtained "F" ratio
Pretest mean	1267.67	1267.80	B	0.14	1	0.14	0.001
S.D	11.23	10.85	W	3659.73	28	130.705	
Post test mean	1529.67	1266.87	B	517978.80	1	517978.80	590.65*
S.D	39.05	10.59	W	24555.067	28	876.97	
Adjusted post test Mean	1529.67	1266.87	B	517978.87	1	517978.87	569.55*
			W	24555.12	27	909.45	

(The table value at 0.05 level of confidence with df 2 & 28, 2 & 27, were 0.38 and 0.52 singly.)

The adjusted posttest means of different training and control groups are1529.67 and 1266.87 respectively. The "F" ratio of 569.55 for adjusted posttest mean is more than the table value of 4.21for df 2 & 27 vital for significance at .05 level of confidence on VO_2 max.

5. RESULTS AND DISCUSSIONS

1. The results of the study indicated that there was a significant difference among different training group and control group on blood pressure and VO_2 max between state level Mallakhamb boys.
2. And the results of the study showed that there was a significant improvement on blood pressure and VO_2 max due to different training among state level Mallakhamb boys.

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