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A STUDY OF EFFECT OF TRAINING PROGRAMME ON BODY MASS

# **INDEX OF ADOLSCENCE**

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### ABSTRACT

Thirty male students were randomly selected as subjects from the Bhartiya Vidya Bhawan's Vidyashram school, Jaipur, Rajasthan for this study. They are aged between 13 to 18 years. Control group Pre and Post of Adolescence of Body Mass Index and the t-test was statistically insignificant as the obtained value (0.46) was less than the tabulated value (2.04) required for t-test to be significant at .05 level of confidence. Experimental group Pre & Post of Adolescence of Body Mass Index and the t-test was statistically insignificant as the obtained value (2.04) required for t-test to be significant at .05 level of confidence. Experimental group Pre & Post of Adolescence of Body Mass Index and the t-test was statistically insignificant as the obtained value (0.41) was less than the tabulated value (2.04) required for t-test to be significant at .05 level of confidence.

KEY WARDS: body mass, training, adolescence and well being

#### **INTRODUCTION**

Physical activity has important implications for the health and well being of all individuals. Easy Life has negatively influenced the development and maintenance of physical fitness. H.Barrett (1974) reported, "Evidence is mounting that physically fit persons lead longer lives, have better performance records and participate more fully in life than those who are unfit. A physical exercise is any bodily activity that enhances or maintains <u>physical fitness</u> and overall

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<u>health</u>. It is often practiced to strengthen muscles and the cardiovascular system, as also to hone <u>athletic</u> skills. Frequent and regular physical exercise boosts the immune system, and helps prevent <u>diseases of affluence</u> such as <u>heart disease</u>, <u>cardiovascular disease</u>, <u>Type 2 diabetes</u> and <u>obesity</u>. It also improves mental health and helps prevent depression. The body mass index (BMI) is a <u>heuristic</u> proxy for human body fat based on an individual's weight and height. Body mass index is defined as the individual's body weight divided by the square of his or her height.<sup>1</sup>

 $BMI = \frac{mass (kg)}{(height(m))^2}$ Normal BMI = 18.5 to 25

Regular and frequent aerobic exercise has been shown to help, prevent or treat serious and life-threatening chronic conditions such as high blood pressure, <u>obesity</u>, <u>heart disease</u>s, Type 2 diabetes, <u>insomnia</u>, and depression. <u>Strength training</u> appears to have continuous energyburning effects that persist for about 24 hours after the training, though they do not offer the same cardiovascular benefits as aerobic exercises do.

# ADMINISTRATION OF TEST AND COLLECTION OF DATA

Thirty male students were randomly selected as subjects from the Bhartiya Vidya Bhawan's Vidyashram school, Jaipur, Rajasthan for this study. They are aged between 13 to 18 years. The subjects were randomly divided in two similar groups. One group was the experimental and other object group the control group. All the subjects had the same diet, daily

routine and environment. All the subjects were residential in the school campus and had the same routine in terms of diet. This was considered as limitations.



#### **BODY MASS INDEX**

Equipments:- Weighting machine, stadio-meter.

Procedure:- The body mass index was calculated by weight and height of the subject with the help of the formula:

$$BMI = \frac{mass (kg)}{(height(m))^2}$$

Normal BMI = 18.5 to 25

#### **RESULTS AND DISCUSSIONS**

Statistical Comparison of Control group Pre Vs Post of

Body mass Index  $(kg/m^2)$ 

Group	N	Mean	S.D	Mean difference	t-test
Control Pre	15	50.32	8.40	1.42	0.46
Control Post	15	51.74	8.22		

Significant at .05 level of significance t .05(28) = 2.04

According to table No. 4.4, which indicates that Mean & S.D. of Body Mass Index of Control group Pre and Post of Adolescence i.e., Control group Pre BMI was 50.32±8.40, Control



group Post BMI was  $51.74\pm8.22$ . As per the table the mean difference of Control group Pre and Post of subject was (1.42) and the t-test was statistically insignificant as the obtained value (0.46) was less than the tabulated value (2.04) required for t-test to be significant at .05 level of confidence.

#### Statistical Comparison of Experimental group Pre Vs Post of

Group	N	Mean	S.D	Mean difference	t-test
Experimental Pre	15	48.11	12.47		
				1.79	0.41
Experimental Post	15	49.90	11.06		

Body Mass Index (kg/m<sup>2</sup>)

Significant at .05 level of significance t .05(28) = 2.04

According to table No. 4.18, which indicates that Mean & S.D. of Body Mass Index of Experimental group Pre and Post of Adolescence i.e., Experimental group Pre was  $48.11\pm12.47$ , Experimental group Post was  $49.90\pm11.06$ . As per the table the mean difference of Experimental group Pre and Post of subject was (1.79) and the t-test was statistically insignificant as the obtained value (0.41) was less than the tabulated value (2.04) required for t-test to be significant at .05 level of confidence.

#### CONCLUSION

Control group Pre and Post of Adolescence of Body Mass Index and the t-test was statistically insignificant as the obtained value (0.46) was less than the tabulated value (2.04) required for t-test to be significant at .05 level of confidence.

Experimental group Pre & Post of Adolescence of Body Mass Index and the t-test was statistically insignificant as the obtained value (0.41) was less than the tabulated value (2.04) required for t-test to be significant at .05 level of confidence.



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# RECOMMENDATIONS

Based on the conclusions drown, from the present study, some of the recommendations can be made:-

1. It is optional that similar study may be done by taking other physiological and biochemical variables.

2. The studies of similar nature may be conducted on females.

3. The studies of similar nature should also be taken up at all the schools, colleges and universities of the country.

4. The studies of similar nature may be conducted on non-sports persons for alertness about health.

5. There is a require to increase research agenda to be more inclusive like future research may be extended beyond an analysis of highly competitive sport to include a broader range of activities i.e., personal fitness.

6. It is also recommended that the studies of similar environment may be conducted in other age groups and high level players.

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