To Study The Effect of Training Program on School Going Obese Children of DAV Schools

[1]Rajwinder Pal Singh Gill, [2]Dr. Ravi Kumar, [3]Mr. Ravinder Singh Sohi

[1]Research scholar, Department of physical, Guru Kashi University Talwandi, Punjab.
[2]Assistant Professor, Department of physical, Guru Kashi University, Punjab.
[2]Assistant Professor, Department of Social Sciences, Tara Vivek College, Punjab

ABSTRACT

The aim of this study was to describe the impact of physical education program on obese children's of selected age group in the state of Punjab. This can be achieved by following objectives: To study the prevalence of obesity in school going children of class X standard, To measure Body Mass Index (BMI) and Anthropometric measurement of school going obese children of class X standard, To frame the physical exercise training program and yoga training program for school going obese children of class X standard, To study the effect of Physical exercise program on school going obese children of class X standard, To study the effect of Yogasanas on school going obese children of class X standard.

Keywords: DAV Schools, Anthropometric Measurements, Punjab.

INTRODUCTION

The last quarter of the twentieth century has seen childhood obesity emerging as an epidemic in developed countries and a cause of concern worldwide as it is being reported in significant numbers from nations previously considered poor or developing. It is no longer a problem of only the affluent countries.

The World Health Organization (WHO) describes Obesity as one of today's most important 'Public Health Problems', and has designated Obesity as a 'Global Epidemic' and also one of today's most neglected Public Health Problems(Health & Survey, 2002). More than 1.4 billion adults 20 years and older are overweight. Approximately 35 million overweight

children are living in developing countries and 8 million in developed countries. Thus, addressing obesity should be a priority. Overweight in adolescence is a marker of overweight in adult age, and is associated with the diseases such as diabetes mellitus and cardiovascular disease.

A study conducted by Alok et al. in urban and rural areas of Surat city in the 14–16 years age group found the prevalence of obesity to be 12.8% in rural and 14.6% in urban adolescents. JP Goyal et al. conducted a study on the prevalence of obesity in adolescents aged 12–15 years and RK Goyal et al. conducted a study in adolescents aged 12–18 years belonging to different socioeconomic status (SES) in Surat. The study data were collected to measure the prevalence of obesity in the adolescents aged 14–16 years and to review specific causes contributing to overweight and obesity.

RESEARCH METHODOLOGY

The study consisted of two parts: 1) Cross-sectional survey of children in grade tenth DAV schools randomly selected from the state of Punjab. Data were checked for completeness and accuracy. Coded data were computerized and analysed by using IBM SPSS Statistics Version 25. The descriptive statistics were presented in frequency tables, range, minimum and maximum descriptive, mean, standard deviation and variance for boys and girls separately(Ricardo, Gil, & Araújo, 2002).

The school teachers from department of physical education personally took different anthropometric (height, weight, triceps, biceps, abdomen, suprailiac, calf and fat percentage) measurements at the examination room after instructing the students to took off heavy clothes. The sample size (N) of students is 150. One suitable weight balance measuring to nearest 0.5 kg was used(Division & Report, 2017). Students were weighed while wearing light school uniform. Suitable metallic meter scale measuring to the nearest 0.5 cm, fixed on the scale was used. Body Mass Index was calculated by dividing weight in kg by square height in meters(Chou & Huang, 2017).

FINDINGS

Analysis and Interpretation of Research Hypothesis $H4a_0$ by using IBM SPSS Statistics Version 25:

Table No. 1: Paired Samples Statistics					
Training Program		**Mean**	**N**	**Std. Deviation**	**Std. Error Mean**
Boys	**Pre.Weight**	73.580	50	8.0181	1.1339
	Post.Weight	69.820	50	7.8134	1.1050

The result of paired sample t – test statistics is presented in table no. 1. The mean for pre weight measurement is 73.580 and the mean reading for post weight measurement is 69.820. The standard deviation for the pre weight measurement is 8.0181 and for post weight measurement is 7.8134. The number of boy's students (N) in each measurement is 50. The standard error of the mean for pre weight measurement is 1.1339 and for post weight measurement is 1.1050. The smaller the standard error, the more accurately the given sample represents the population.

Table No. 6: Paired Samples Test						
Training Program Pre.Weight - Post.Weight	**Paired Differences**			**t**	**df**	**Sig. (2-tailed)**
	Mean	**Std. Deviation**	**Std. Error Mean**			
Boys	3.7600	1.0214	.1444	26.030	49	.000

Table no. 6 depicts that the paired variables being tested (pre weight and post weight) and the order subtraction was carried out. The average difference between the two variables is 3.7600. The standard deviation of the difference scores is 1.0214. The standard error (standard deviation divided by the square root of the sample size) used in computing upper and lower bounds of the 95 % confidence interval is 0.1444. The degree of freedom for this test is 49. The *p*-value corresponding to the given test statistic t is 0.00. The p - value is less than 0.05. Hence the null hypothesis **$H4a_o$** there is no significant difference in training between pre weight measurements and post weight measurements in boys is rejected. It can be conclude that there is significant difference in training between pre weight measurements and post weight measurements in boys.

CONCLUSION

This was the first study in the state of Punjab that has examined the height, weight, triceps, biceps, abdomen, suprailiac, calf and fat percentage measurements for childhood obesity and used qualitative methodology(Gumparthi & Manickavasagam, 2010). The prevalence of overweight and obesity in school children in the state of Punjab was lower than that reported amongst most children in the other states(Banerjee & Pawar, 2013). This is important given the social changes that the community is undergoing and the rapid expansion of fast food outlets and western dietary influences(Bmi & Bmi, 2004). The focus group data provided important contextual information validated some findings from the cross sectional study and informs the development of future obesity prevention interventions appropriate to the local setting(Gill et al., 2001). With the diagnosis of overweight or obesity rising across the Punjab, the need for early interventions is critical(Lbs, 2004). There is a clear need for the collective effort of government officials, parents and teachers to provide measures that enhance prevention, control and management of overweight and obesity among Punjab DAV school children(Para-whakawai, 2014). School nurses could make substantial changes by assessing, monitoring and providing health teaching for parents and their children(Practice, 2017).

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