A COMPREHENSIVE STUDY OF I.Q BETWEEN NORMAL WEIGHT AND OVER WEIGHT OF URBAN SCHOOL GOING CHILDREN OF JALANDHAR

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ABSTRACT
The objective of this study was to comparison the I.Q of school going (male) children. One hundred sixty (N-160) subjects (male) are purposive randomly selected and further divided in two groups, group-A (N-80) and group-B (N-80), after done BMI test. Eighty (N-80) subjects Normal Weight School going (male) children belonging to age group of 14-16 years were selected as Group-A and Eighty (N-80) Over Weight school going (male) children belonging to age group of 14-16 were selected as Group-B subjects in this study. Then further conducted I.Q Test of both groups. The descriptive statistics shows the Mean and SD value of Group-A on the variable IQ as 29.70 and 5.45 respectively. However, Group-B had Mean and SD value as 29.12 and 6.06 respectively. The Mean deference and Standard Error Difference of Mean were 0.57 and 0.91 respectively. The t-value 0.630 as shown was found statistically insignificant (P>.05). But while comparing the mean value of both groups, it has been observe that Group-B have demonstrated better IQ than Group-A.

KEYWORDS: B.M.I, I.Q, Normal Weight, Over Weight, Urban.

INTRODUCTION
Health is the foundation of human life. It leads the individual towards progress and prosperity. Healthy people make a healthy society and A sound mind create new ideas for develop the society. In other words, a sound mind in a sound body. So Healthy people are built a healthy nation with their intelligence. We know intelligence is differ from man to man and age to age. It is also related our Physique, Health and Perception. The other name of intelligence is I.Q. It means Intelligence Quotient. It’s a matter of everyday experience that some people are more intelligent than the others. A French psychologist by name Alfred Binet working with a physical-associate, Theodore Simon, developed the Binet Simon test designed to measure the Intelligence of retarded children, based upon their observations. Some children are grow physically better as compare mentally, some children are mentally
better as compare physically, and some children are perform at their age and equivalent-grade levels above their chronological ages, while other children are perform at their age and equivalent-grade levels below their chronological ages. Today's way of life is less physically active than it used to be. School going children travel on buses and cars, rather than walking and most of students are bookworm, they are sitting still on his study table for most of the day. This means that the calories they eat are not getting burnt off as energy. Instead, the extra calories are stored as fat. Over time, eating excess calories leads to weight gain. Without lifestyle changes to increase the amount of physical activity done on a daily basis, or reduce the amount of calories consumed, people can become obese. Obesity is when a person is carrying too much body fat for their height and sex. An individual is considered normal if they have a body mass index (BMI) of between 18.5 to 24.9 and if his (BMI) between 25.00 to 29.9 consider over weight. BMI (Quetelet index) is a useful measure of overweight and obesity. It is calculated from your weight and height. BMI is an estimate of body fat and a good gauge of your risk for diseases that can occur with more body fat. The body mass index (BMI) is an index of weight adjusted for height. It is one of the useful tools for diagnosing obesity however; such diagnosis should take into account a person's age, gender, fitness. The objective of the study was also to compare level of I.Q among Normal Weight and Over Weight of school going children.

MATERIAL & METHODS : -
The (N-160) subjects (male) are purposive randomly selected and further divided in two groups, group-A (N-80) and group-B (N-80), after done B.M.I test. BMI calculate by Weight (kg) ÷ Height (cm)². Subjects (N-80) Normal Weight School going (Male) children belonging to age group of 14-16 years were selected as Group-A and The subject (N-80) Over Weight school going (Male) children belonging to age group of 14-16 were selected as Group-B in this study. Then further conducted I.Q Test of both groups. Actually, the intelligence quotient is defined as 100 times the Mental Age (MA) divided by the Chronological Age (CA). Designs an objective type symbolic questioner of 50 questions are multiple choice. The statistical package for the social science (SPSS) Version 14.0 was used for all analyses. The difference in the mean of each group for selected variable were tested for the significance of difference by t-test. In all the analyses, the 5% critical level (P>0.05) was considered to indicate statistical significance. The present study reveals that psychologically and physical anthropometric parameters were found to be within the expected range of normal in both
Group-A and Group-B subjects of Jalandhar district which reflects the adequate nutrition, socioeconomic status and normal life style of these individuals.

DESIGN OF THE STUDY

This is an exploratory study that has employed method of data collection and analysis quantitatively. The purpose of the study was to find out the difference of psychological variable IQ between normal weight and over weight of urban school going children. The purposive random selection technique was use to attain the objectives of the study.

STATISTICAL ANALYSIS :-

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group-A</th>
<th>Group-B</th>
<th>Mean Difference</th>
<th>SEDM</th>
<th>t-Value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.Q</td>
<td>29.70</td>
<td>29.12</td>
<td>0.57</td>
<td>0.91</td>
<td>0.63</td>
<td>0.52</td>
</tr>
</tbody>
</table>

*significant at 0.05 level, degree of freedom= 158

Table – Present the result of Group-A and Group-B with regard to the variable Intelligence Quotient. The descriptive statistics shows the Mean and SD value of Group-A on the variable IQ as 29.70 and 5.45 respectively. However, Group-B had Mean and SD value as 29.12 and 6.06 respectively. The Mean difference and Standard Error Difference of Mean were 0.57 and 0.91 respectively. The t-value 0.630 as shown in the table above was found statistically insignificant (P>.05). but while comparing the mean value of both groups, it has been observe that Group-B have demonstrated better IQ than Group-A. The comparison of mean score of both the Groups has been presented graphically in figure.
CONCLUSION

It is evident from the finding of table-1 with regard to Psychological variable of Group-A and Group-B. While comparing the mean value of both groups. It has been observed that Group-B performed better as compare with Group-A. It has been observe that Group-B have demonstrated better IQ than Group-A. The Over Weight School going (Male) children belonging to age group of 14-16 were selected as Group-B has better IQ. These results are in conformity with the study carried out by Chandola et al. (2009). To Childhood IQ in relation to Obesity and Weight gain in adult life: the national child development study. Result revealed that there exist significance difference in IQ level between normal weight (Group-A) and over weight (Group-B).

Recommendation of the study: -

Although the investigator has put in his best efforts on the present study, still the topic has a wide scope for further research. Thus, for further research and in the light of the result and conclusions of the study. The following recommendations are made:-

- Physical education teachers and coaches may utilize the finding of the present study by preparing or modifying the existing training schedules for school going children.
- The data regarding I.Q will help the coaches to adjusting the training program for school going children.
- A similar study may be undertaken with female individual sports and team sports as subjects.
- It is help to finding the talent among the school going children.
REFERENCES