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# A STUDY TO ASSESS THE CORRELATION OF ANGER, STRESS AND BLOOD PRESSURE AMONG OVERWEIGHT SCHOOL CHILDREN (6-12 YEARS) IN SELECTED SCHOOLS AT CHENNAI

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#### **Article Info**

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#### **ABSTRACT:**

School age children are often excited about going school and about their new responsibilities. It is important to set limits and let children know what is expected from them especially during school age. Obesity in childhood is rapidly becoming a major problems a result of the life style changes even children from rural area and lower socio-economic groups also. Childhood obesity in India cannot be denied that the rise on the following statistics source from the Indian journal of Endocrinology and metabolism, somewhere between 5.74 and 8.82% of school children are obese<sup>4</sup>. This study aims to assess the correlation of anger, stress and blood pressure among overweight school children (6-12 years). 100 students were selected using non probability purposive sampling technique. The inclusion criteria were 6-12 years aged school children and considered as overweight based on BMI. The tool used to collect data were (i) pediatric anger expression scale, (ii) perceived stress scale, and (iii) sphigmomanometry to check Blood Pressure. The correlated value between the anger, stress and blood pressure among over weight children is 2.416, which is highly correlated each other. Hence, there is positive correlation between anger, stress and blood pressure among overweight children, the lack of this relation can be described to the possibility of school children being healthier.

#### 1. INTRODUCTION

School age children are often excited about going school and about their new responsibilities. It is important to set limits and let children know what is expected from them especially during school age. There are different developmental areas of school children including physical, social, emotional and intellectual development<sup>1</sup>. Obesity in childhood is rapidly becoming a major problems a result of the life style changes even children from rural area and lower socio-economic groups also. Changes in lifestyle and child rearing practices are contributing towards the problems like hormonal changes, eating habits, lack of outdoor play, excessive television watching, over protective parenting and genetic predisposition are the important precipitating factors<sup>2</sup>.

## **Need For the Study**

The global prevalence of obesity has doubled from 1990 to 2015. Worryingly, the increase is more in children than in adults. In just three decades, the number of schoolgoing children and adolescents with obesity has increased by 10-fold, and the international association for the study of obesity(IASO) and international obesity task force(IOTF) reckon that 200 million school children worldwide are either overweight or obese<sup>3</sup>. Childhood obesity in India cannot be denied that the rise on the following statistics source from the Indian journal of Endocrinology and metabolism, somewhere between 5.74 and 8.82% of school children are obese<sup>4</sup>.

#### **Statement of the Problem**

A study to assess the correlation of anger, stress and blood pressure among overweight school children (6-12 years) in selected schools at Chennai

#### 2. METHODOLOGY AND MATERIALS

A correlation study was conducted in selected schools at Chennai to find out the correlation between anger, stress and blood pressure among over weight children. 100 students were selected using non probability purposive sampling technique. The inclusion criteria were 6-12 years aged school children and considered as overweight based on BMI. The tool used to collect data were (i) pediatric anger expression scale, (ii) perceived stress scale, and (iii) sphigmomanometry to check Blood Pressure.

#### **Procedure**

After obtaining the ethical permission the students were selected based on selection criteria. The investigator informed the parents and their children about nature and purpose of the study. Written consent from parents and assent from children were obtained before collecting the data. The data was collected as follows: level of anger by using pediatric anger expression scale, stress was assessed using perceived stress scale, blood pressure was assessed by using sphigmomanometry and BMI also assessed. Data was collected from each child for about 45 to 60 minutes.

Fig 1: Percentage distribution on association of anger among overweight school children. (N=100)

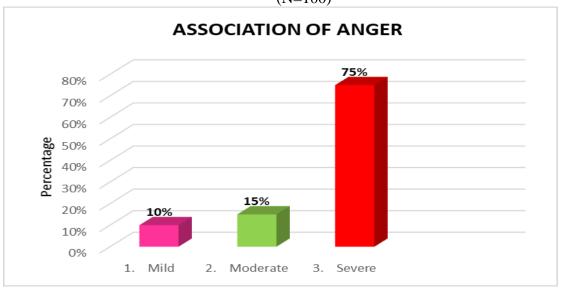


Fig 2: Percentage distribution on association of Stress among overweight school children. (N=100)

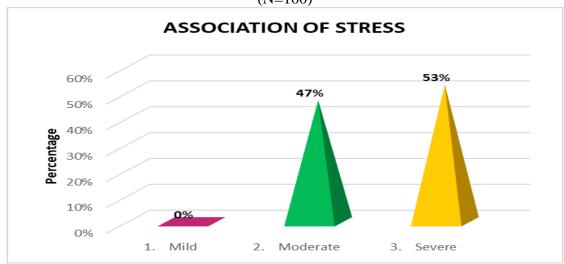
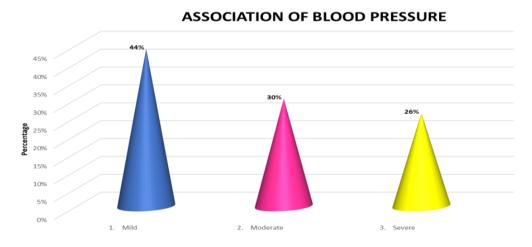


Fig 3: Percentage distribution on association of Blood pressure among overweight school children. (N=100)



CORRELATION OF ANGER, STRESS AND BLOOD
PRESSURE

1. Mild

2. Moderate

3. Severe

Correlation of anger, stress and blood pressure among overweight school children with their selected socio demographic variables. (N=100)

#### **Data Analysis**

Descriptive statistics were used to assess the level of anger, stress and blood pressure and Inferential statistics were used to find out correlation and association among variables.

## 3. RESULT AND DISCUSSION

The correlated value between the anger, stress and blood pressure among over weight children is 2.416, which is highly correlated each other. Hence there is a statistically significant correlation between the anger, stress and blood pressure among school children aged 6-12 years on selected schools at Chennai.

#### 4. CONCLUSION

This study enlightened the statistically significant association of anger, stress and blood pressure among overweight children. Hence, there is positive correlation between anger, stress and blood pressure among overweight children, the lack of this relation can be described to the possibility of school children being healthier.

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