



## A DESCRIPTIVE CORRELATIONAL STUDY: PERCIVED STRESS AND PHYSICAL ACTIVITY LEVEL AMONG UNIVERSITY STUDENTS IN INDIA

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### ABSTRACT

Mental health issues among college students are a growing public health concern. Physical activity is global term that refers to “any bodily movement produced by skeletal muscle those results in a substantial increase over the resting energy expenditure”. It is essential to know the rising stress levels among college students so ways to combat it can be done. To find the prevalence of stress using Perceived Stress Scale (PSS) and its correlation with physical activity among college students using International Physical Activity Questionnaires (IPAQ). Hundred students were screened. The prevalence of stress was found to be 80%. There was weak negative correlation between physical activity and stress.

**KEYWORDS :** Stress, Paramedical Students, Physical Activity

### INTRODUCTION

In the last decade, there has been a growing attention in investigating stress risk factors and well-being consequences among university student's population.<sup>1</sup> Stress and mental health of university students is a crucial public health subject as healthy students will be the healthier workers of the future.<sup>2</sup>

Perceived stress is a feeling of strain and pressure. Stress is a type of psychological pain.<sup>3</sup> Small amounts of stress may be desired, beneficial and even healthy, positive stress helps improve academic or athletic performance.<sup>4</sup> It also plays a factor in motivation, adaptation and reaction to the environment. Excessive amounts of stress however, may lead to bodily harm. Stress can increase the risk of strokes, heart attack, ulcers and mental illnesses such as depression.

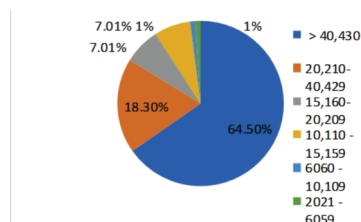
Stress can be external and related to the environment, but may also be caused by internal perceptions that cause an individual to experience anxiety or other negative emotions surrounding a situation, such as pressure, discomfort, etc., which they then deem stressful.<sup>5</sup>

Physical activity is defined as any bodily movement produced by skeletal muscles that require energy expenditure.<sup>5</sup> Physical activity encompasses all activities, at any intensity, performed during any time of day or night. It includes exercise and incidental activity integrated in to daily activity.<sup>6</sup> This integrated activity may not be planned, structured, repetitive or purposeful for the improvement of fitness, and may include activities such as walking to the local shop, cleaning, working, activity transport.<sup>7</sup>

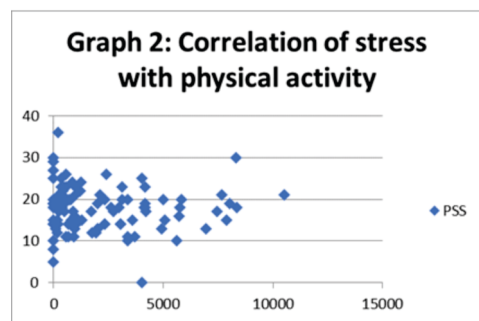
Academic stressors have been identified as including high workload, attending lessons, respecting deadlines, balancing university and private life, and economic issues. Those stressors are linked to a greater risk of distress and reduced academic achievement. Currently very few studies show the prevalence of perceived stress among students of India. Hence this study was undertaken to find the prevalence of stress and its correlation with physical activity.

### RESULTS:

The present study was conducted to find the prevalence of stress and correlation of stress with physical activity. Hundred students aged eighteen to twenty-five years studying in various colleges across India were screened. The mean age of the population was found to be 21.85 ± 4.24 years. From the 100 students evaluated 43 were females and 57 were males. The mean score of perceived stress scale was 17.86 ± 5.23. Graph 1 shows the annual family income of the students screened. It was found that 64.5% students had annual family income of more than 40,430 INR.



**Graph 1 : Annual family income of the population**



**Graph 2** shows the linear correlation test was applied ( $p = 0.2$ ) which was suggestive of statically significant weak but negative correlation between perceived stress and physical activity.

### DISCUSSION:

Stress among college students can be viewed as the bodies' reaction both neurologically and physiologically to adapt to the new condition.

A study revealed that the prevalence of stress among college students United States of America was 30%.<sup>7</sup> A study by M S Sherina et al, concluded the prevalence of perceived stress to be 37% among under graduate students of Malaysia. They had used perceived stress scale and student stress survey.<sup>8</sup> Walid et al had found the prevalence of the perceived stress in United Kingdom to be 29%.<sup>9</sup> Hence the world prevalence of stress among college students is 14 to 80%.

The current study shows that prevalence of high to moderate stress was 80% among college students. This shows that the prevalence of perceived stress among Indian students is at the higher end. Inter country variation of academic system social and cultural norms could be responsible for this difference.

Pursuing hobbies or extracurricular activities helps in coping with stress.<sup>10</sup> The current study shows 61% of students rarely perceived any hobby. Hence this could be the reason for high prevalence of stress.

Chronic exposure to stressful conditions leads to deterioration of academic performance, loss of memory, poor relationship with peers and family members, and overall dissatisfaction with life. It can also lead to serious health problems like hypertension, heart attack and stroke, diabetes mellitus and obesity, accelerated aging.<sup>11</sup>

### CONCLUSIONS

The current study found the prevalence of perceived stress to be 80% among college students 20% of students had low stress. There was negative but weak correlation found between stress and physical activity. This suggests that indulging in regular physical activity may help in reducing stress.

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