

# PHYSICAL COPING STRATEGY: STRESS MANAGEMENT FOR UNDERGRADUATE ENGINEERING STUDENTS

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*Abstract* : Stress is a common factor for every human being. College student's life is subjected to different kinds of stressors. The coping mechanism is the possible way for reducing the prevailing stress. This study aims to know the level of family stress and social stress among undergraduate engineering students and the application of physical coping strategies to manage those stressors. The study design was descriptive and the samples for the study were selected through random sampling method. The participants of the study were collected from engineering college students in four regions (Coimbatore, Trichy, Madurai and Tirunelveli) in Tamilnadu district. The study findings show that family stress and social stress have high significance towards physical coping strategies. Hostellers experience more family stress than day scholars.

*IndexTerms* - Stress,Physical Coping Strategies,undergraduate engineering Students

## I. INTRODUCTION

Stress is a natural and common phenomenon in every human life no disparity among the people might be how wealthy, influential, smart or cheerful. However, stress can happen when one is in difficult situation. Stress is viewed as a negative sentiment, cognitive dissonance, behavioural and physiological process that occurs as a person attempt to adjust to or deal with stressors (Bernstein, et al 2008). Personal and environmental dealings that cause pressure are known as stressors. Adolescence is a crucial period of time for everyone. In that period, younger generation experiences self-organization and role importance. For them, stress mainly arises out of academic pressures, interpersonal and intrapersonal relations, life changes and career studies. Such type of stress cause psychological, cognitive and behavioural problems (Kai-Wen, Cheng (2009). A student's life is subjected to various kinds of stressors, such as the pressure from parents with an obligation of academic success, financial constrains, comparing with siblings, conflict with friends. The learning ability and academic performance were affected when the students face certain social, emotional, physical and family problems. (Shaikh et.al, 2004). The importance of awareness about the level of stress has a main reason on one's mental and physical ability. (Hargreaves, 1998). The college students face a great deal of stress when they work jointly with the environments (Lee, Kang, Yum, 2005).

Coping strategies of adolescents are mainly focus on some major stressors includes, relationship, social life and financial hardship among college students. Females reported a higher level of perceived stress than males (Welle, Paul D.; Graf Helen M.2011). Coping strategies not only emphasizes a range of emotional regulation strategies but also the thought process and behaviours. This means that coping is founded through individual's psychological response to stress, their assessment of events of their notice and their aims or outcomes they wish. Coping also depends on the social contexts and interpersonal relationships. The college students' real life challenges leads to mental stress because of having more onus like peer relationship, grade performance, career choice and many other aspects related with college environments. (Misra, R., & McKean, M. (2000). Physical coping techniques such as deep breathing exercises, yoga and meditation, walking, physical exercise and prayer that change the reaction of the body to get relax from pressure, pain and other strains. All the stress-management techniques involve new learning skills to adopt and to be performed consistently to get long-term benefits.

## II. LITERATURE REVIEW

A study conducted by Dr. R. Sathya Devi and Shaj Mohan (2015) on the reason for stress among college students are academic stress factors, family stress factors, social stress factors, emotional stress factors and financial stress factors. Male students of 52%

strongly emphasize the strongest reason for family stress is the lack of support from the parents. Kashif Ud Din Khan et.al. (2013) stated in their findings the students' felt more family stress as they live with the rules and regulations of their family. Also found that the financial stress plays the less influencing factor among university students.

George Essel and Patrick Owusu (2017), have investigated that the students working with the new classmate and conflict between friends and genders were the major sources of stress among students of the Applied Sciences students of Seinäjoki University. The findings demonstrate that the stress have an effect on the overall activities of the students' and their social well-being. Juvilyn G. Buló & Dr. Marita G. Sanchez, (2014) have analysed the stressors that affect the college students' in dealing with their family, friends and notable persons. The results revealed that the interpersonal stressors such as change in social activities, work with the unknown people, conflict with roommates and friends, gender relationship and trouble with parents are ranked as the highest among college students.

Cheng and Cheung (2005) have stated that an individual experienced more stressful situation coped up successfully with the application of appropriate coping measures to match the demands. Also stated that the individual has to do regular exercise, relaxation techniques and seeking social support to reduce the stress level.

### III. RESEARCH METHODOLOGY

This research was conducted to study the stress and coping strategies among the undergraduate engineering students. The researcher considered the demographic profile of the participants, the family and social stress among them and the coping strategies applied to deal with stress.

The research has used descriptive design for sufficient fact finding investigations and ample interpretations. This study consists of the undergraduate engineering students in the regions of Coimbatore, Tirunelveli, Trichy and Madurai.

The sample size of 795 was selected through purposive sampling technique from the top 5 colleges in the regions. Structured Questionnaires used for data collection.

### IV. RESULTS AND DISCUSSION

In this study, participants are male and female are undergraduate engineering college students. 77.5% of the participants belong to the age group of 18-21 years. 58.7% of the students are hostellers and the remaining 41.3% of the students are day scholars. Majority of the students are from nuclear family with 83%. The grades obtained by the students' up to the previous semesters are in the average level with 57%.

#### 4.1 Results of Descriptive Statics of Physical Coping Strategies

Table 1: Perception about Physical Coping Strategies

Physical Coping Strategies	Mean	Std. Deviation
Do the vacation and holidays encourage you to take care of yourself and relax?	4.10	0.960
Do you get relaxation during yoga and meditation classes?	4.00	0.997
Does the personal counselling helps to know your strength and weakness?	3.63	1.296
Does your participation in sports activities bring physical strength?	3.59	1.317

Table 1 displayed mean, standard deviation, of the Physical Coping Strategies. the mean perception towards Physical Coping Strategies among the respondents ranges from 3.59 to 4.10. 69.8% respondents have not agreed that they the vacation and holidays encourage them to take care and relax. Similarly 66.4% have not agreed that they are relaxed by during yoga and meditation classes. Participation in sports activities and personal counselling has given them benefits.

#### 4.2 Results of Multiple Regression Analysis of Family Stress and Social Stress

Table 2 : Multiple Regression Analysis for Physical Coping Strategies

Variables	Unstandardized Co-efficient B	Standard Error	Standardised Coefficient B	t value	P value
X <sub>2</sub>	.292	.034	.322	8.703	.000
X <sub>3</sub>	.077	.035	.072	2.199	.028

Table 2 displayed the coefficient of  $X_2$  0.292 signifies the partial effect of family stress on Physical Coping Strategies. The estimated positive sign implies that such effect is positive and increase by 29.2% for every unit in family stress and this coefficient value is significant at 1% level. In the same way, the partial effect of social stress on Physical Coping Strategies represents the coefficient of  $X_3$  with 0.077. The estimated positive sign indicates that such effect is positive and increase by 7.7% for every unit in social stress with no significance.

#### V. CONCLUSION

Respondents from Tirunelveli region show higher level of social stress whereas the respondents from Trichy region are the lowest with respect to the family annual income. The third year students had difference of opinion with respect to year of study towards family stress. Tirunelveli students require more physical coping strategies. Trichy and Madurai regions respondents show no opinion difference about physical coping strategies with respect to year of study. There exists significant difference with regard to gender towards the students' attitude with physical coping strategies.

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