IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

GENDER DIFFERENCE ON COPING AND ITS ASSOCIATION WITH ACADEMIC STRESS AMONG ENGINEERING AND MEDICAL STUDENTS OF GODAVARI DISTRICTS.

ssvr kiranmayi malyala(Research scholar)*,Sr. Prof. MVR Raju**.
Department of Psychology. Andhra University. Visaakhapatnam.

Abstract

Medical school can be challenging and poses varied number of stressors to the students. Stress can affect well-being and hamper academic performance. Stress experience and coping may differ across genders. This study aimed to estimate the prevalence of stress, examine gender differences in stress experience and coping in a sample of 1000 students, 440 are male, and 560 are female students. All the 549 students were covered from the medical colleges, 229 students from Government medical colleges, and 320 students from Private Medical colleges. Consenting students were administered Student's Academic Stress Scale (SASS). (22.3%) of the students are having low academic stress, (44.3%) of the students were having below-average academic stress, (30.6%) of the students have average academic stress, and (2.8%) of them have high academic stress. Brief – COPE was employed for investigation 69.2% students having moderate approach coping, Academic performance and professional identity issues were of greatest concerns. Female students had more academic performance stress. Among coping strategies, support seeking was more in females as shown by the increased use of instrumental support seeking (problem-focused) and emotional support seeking (emotion-focused) in comparison to males. Humor, a positive emotion-focused strategy and self-blame, a maladaptive strategy, were used more by males. The findings point towards the crucial need for stress management programs and coping skills training to help medical students manage stress and enhance positive coping strategies.

Ketwords: Medical students, Gender, Stress, Coping strategies

Introduction

While pursuing studies, the young student has been particularly susceptible to stressful conditions, mainly because of the highly competitive atmosphere (WHO, 1994). Students face many problems every day, whether they are from academics, athletics, family situations, or relationships. People say college is the best time of one life, which it definitely can be, but one thing is sure: it is not easy. Stress can impact a student's academic performance; academic success is no easy task for most college students. Just studying will not lead to a rewarding career in the long run. Students are at risk in various ways: financial stress, time management issues, sleep deprivation, and social activities are all stresses that may harm their academic performance. In addition, Hirsch and Ellis (1996) observed that the stress-related dynamic connection between a person and their environment is most prevalent in college students. College students confront unique challenges and circumstances compared to those experienced by non-students. (According to the American College Health Association, 2006). Coping is defined as handling the demands of the stressor and maintaining a balanced emotional state. Because students in dynamic learning environments are at risk for poor academic discontent, it is essential to use these facilities at all grade levels. Stress may vary from minor to severe, and its consequences may be excellent or negative. Silver and Niemi state that when psychological factors like stress become too intense, it may be harmful and detrimental to pupils' regular functions. This may lead to more serious psychological problems and make the patient susceptible to psychological morbidity. Stress may lead to poor quality of life, low self-esteem, and reduced self-confidence, affecting pupils' capacity to deal with everyday life issues and succeed academically.

STRESS: This negative process of adjustment or dealing with stresses is regarded as having both emotional, cognitive, behavioral, and physiological elements (Bernstein et al., 2008).

Review of literature suggesting that Researchers have found many academic stresses, including the pressure of too many tasks, academic rivalry with peers, failure, and weak connections with teachers and classmates (Fairbrother& Warn, 2003). An academic stressor is a student's belief that they cannot understand the vast information base in a short time frame (Carveth et al., 1996).Students experience academic stress at regular intervals throughout each semester, with the leading causes of academic stress being exam, grade, and time pressure (Abouserie, 1994). When stress is seen as a bad thing or is in excess, pupils' physical and mental health suffers. To minimize stress among students, it is frequently advisable to adopt better time management, having a good attitude, receiving social support, and becoming involved in leisure activities (Murphy & Archer, 1996). The pressure to do well on exams and tests and the limited time frame puts the academic atmosphere under extreme stress (Erkutlu&Chafra, 2006). This is sure to impact both the internal and external social connections, which harms individual people" s lives in terms of dedication to the organization "s objectives (Fairbrother& Warn, 2003). Bisht (1989) described that academic stress occurs when students' internal or external resources are insufficient to cope with a specific academic requirement. Academic stress reflects the individual's dissatisfaction, conflict, pressure, and anxiety in the classroom, she says. There are three categories of academic stress, and they are as follows: The aggravation of academic difficulties occurs when pupils are forced to tackle a heftier task, which results in them feeling miffed. Students have academic

pressure when they devote an unreasonable amount of time and energy to achieve academic objectives. Anxiety and doubt may trigger anxieties relating to academic performance, leading to fear of potential damage. The findings of the studying of Jayashankara reddy, M.S.karishmarajanmenonand, anjanathattil (2018) have shown that the dimensions of academic stress vary considerably between women and men. That fear of failure is the only significant gender-based component.

Aafreen Maajida; Gayathri R; Vishnu Priya V (2018)The presence of internal and external stressors that are too great for a person to handle puts them at risk of being mentally distressed. The happiest days of life for most college and high school students occur while they are in school. May put your future at risk by suffering from despair, anxiety, and stress. Stress adversely affects students who have difficulty managing it, and the effects are evident in their work and behavior. The goal of the present research was to identify students' stress levels at different institutions and their correlation with variables including academic, social, and health-related elements. Science students were more stressed than their peers. It has a profound impact on their minds, bodies, and emotions. Academic performance suffers when students develop anxiety and despair. Conclusion: This study may assist us in identifying the source and reason for stress, allowing students to discover solutions to their issues and deal with their stress.

Significance of the Study

Students have It has been difficult for me because of the stress that accompanies getting a college degree in a very competitive field. Students face many problems every day, whether from academics, athletics, family situations, or relationships. People say college is the ideal time to get started on a career. One's life, which it definitely can be, but one thing is sure: it is not easy. A student's academic performance may be affected by stress, and college students face several challenges while attaining their optimum performance. This research study would be highly significant for the Indian Universities as far as managing academic stress. The higher learning universities in India represent the vast Indian society since they accommodate a diverse group of students from different academic, social, economic, caste, language, and religious backgrounds.

Stress among Students

The research aims to see the relationship between academic stress and coping technique among engineering and medical students in the Visakhapatnam District of Andhra Pradesh. These Academic stresses play a vulnerable significance in the life of students. The coping technique received by students differs among Medical and Engineering colleges, which may change students' behavior.

Objectives

To determine the variance in types of departments (Engineering & Medical students) and the number of academic stress kids encounters.

To see if there is a difference in Gender on the level of academic stress and coping technique among students.

To investigate the differences between types of college regarding college students' academic stress and coping mechanisms.

Hypotheses:

There is a big contrast between types of departments and the level of academic stress experienced by students.

There is a significant difference in the levels of academic stress and coping methods among students, and the pupils are more likely to be female.

There is a significant difference between types of college on academic stress and coping technique among students.

Sample

The sampling procedure adopted is a purposive sample. Out of the total 1000 students, 440 are male, and 560 are female students. All the 549 students were covered from the medical colleges, 229 students from Government medical colleges, and 320 students from Private Medical colleges. All the 451 students were concealed from the Engineering colleges. 175 students from Government Engineering colleges and 276 students from Private Engineering colleges, East Godavari and West Godavari districts, Andhra Pradesh.

Instruments of data collection:

Various instruments were used to gather data about students' academic stress and coping mechanisms in this study. Various Demographic Variables considered on the present study as Gender, age, and nationality are the factors in the current research, Year of Studying, Type of College, Place of Studying, and Parental Monthly Income.

- Student's Academic Stress Scale (SASS)
- Brief – COPE was employed for investigation.

Description of Instruments

A) Student's Academic Stress Scale (SASS)

Kim (1970) has developed a 40 item rating scale to determine where student academic stress comes from. R. Rajendran and K.V.Kaliappan modified the scale to fit better Indian circumstances Student's Academic Stress Scale (1991) consists of 40 items divided into five components. They are personal shortcomings, fear of failure, poor relations with parents and teachers, teacher-student relationships, and inadequate study resources. SASS Tool consisted factor items included in the questionnaire was "Personal inadequacy." Items for this measure are question numbers: 2, 5, 6, 20, 22, 27, 34, and 36. Failures. Items: 3, 7, 8, 12, 17, 28, 32, 33.

Interpersonal Difficulties with Parents and Teachers: 1, 4, 9, 10, 19, 23, 26, 28. Teacher Pupil Relationship: 11, 14, 16, 21, 24, 30, 37, 39. Inadequate Study Facilities Items : 13, 15, 18, 25, 29, 31, 35, 40. Scoring of Students Academic Stress Scale:It is a five-point rating scale varying from the response of "No Stress" to "Extreme Stress." The rating scale is scored as 0-1-2-3-4. Therefore, 160 (4*40) is the most excellent possible total score, and the top score for each factor is 32.

Data Collection Process:

The Andhra University's department head granted an official letter to the students, which was then used to gain approval from the institutions. After receiving authorization from several college administrators, the students were told about the goals of the research. The respondents were told that the response rate was as follows provided by the students will be kept highly confidential and will be used exclusively for analysis. The researcher administered the Student Academic Stress Scale and Brief COPE questionnaires. The participants were asked to complete the columns of Gender and place of study etc., related to individual information printed on the questionnaire. The researcher read the instructions loudly, appearing at the beginning of each inventory. Then Participants were asked to put checkmarks next to the items options provided on the right side of each item. There was no time limit for marking the three parts, but usually, 30 minutes were required to finish the questionnaire.

Data Analysis Technique

The data were analyzed to examine the significant differences in coping techniques and Academic student stress in Government and private colleges from Engineering and Medical colleges. This study used quantitative (paraphrased and implied)data analysis approaches as a powerful technique. To discover whether there was a meaningful mean difference, an independent sample t-test was used concerning Gender and type of college. One-way ANOVA (ANOVA) was conducted to see a variance difference in the three or more groups of the continuous variables.

- T-test and One-Way ANOVA are used to examine the differences between Government and private colleges in the field of Engineering and Medical on coping techniques and student academic stress with references of all demographical variables, i.e., Gender, type of college, year of studying, parental Income, etc.
- Pearson – product-moment correlation is used to study how student academic stress affects relationships. With types of coping techniques.

Finally, the quantitative data was entered, cleared, checked, and analyzed using SPSS version V-20.0.

3.2. Ethical Considerations

Ethical issues were given due emphasis in this study. A formal support letter was obtained from Andhra University, college of arts and commerce department of psychology, to collect data for the research purpose. A permission letter was received from the principals in the colleges before the data collecting process. After choosing their subjects, the researchers explained the study's goals to the participants, and all of them gave their verbal permission to participate. The researcher also confirmed to the participants that they have the right To get out of the procedure at any point; the participants were advised that the whole data they gathered would be kept private and would only be used for research purposes.

Results and discussion

From the total 1000 (100%) participants, the frequency distribution table shows that 440 (44%) of the participants were Males and 560 (56%) of them were female students. Most of the participants are from the Female group. The age differences of the participants were divided into four age groups, i.e., below 19 years, 20 years, 21 years, and 22 years and above, respectively. Table 4.2 above shows 502 (50.2%) of the students were below 19 years of age, 273 (27.3%) of students belong to 20 years of age, 154 (15.4%) of them were 21 years, and 71 (7.1%) students were above 22 years of age. In this study, the maximum numbers of participants (50.2%) were among the age group below 19 years of age. The minimum number of participants (7.2%) were from the above 22 years age group. the frequency distribution of the type of colleges the students are in. Out of 549 medical students, 229 (22.9%) were studying in the government medical college, whereas 320 (32.0%) students were in private medical colleges. And out of 451 engineering students, 175 (17.5%) of them were attending their study in the government engineering college, and 276 (27.6%) were in private engineering colleges. Here, it is evident that the number of students attending private colleges is more compared with government college students in both cases.

Frequency distribution of various domains in Student Academic Stress of the extent of personal inadequacy of the students. About 30% or 299 of the students have low personal inadequacy, indicating that they are good in academics, are hard workers, and are following proper study methods. 50% of students have below-average personal inadequacy. This is also a considerable number of students who are far from the average, which means these students feel adequacy in personal life and academics. 20% of students have average personal inadequacy, which means they have difficulty understanding some subjects and remembering concepts. Only a few of them, i.e., 0.3% of students, have high personal inadequacy. The study revealed that 501 (50 percent) of the students having below-average personal inadequacy. So, most of the students are good in academics, hard workers, and follow suitable study methods.

Gender effect on various Domains of Personal student inadequacy, fear of failure, interpersonal difficulties with instructor and peers, teacher-student interaction, and inadequate study facilities are all factors that may contribute to academic stress.

Table 4.16: Test of Variance among Gender and Domains of SASS

	Gender	N	Mean	Std. Dev.	T	P
Personal Inadequacy	Male	440	1.9000	.68435	-.159	NS
	Female	560	1.9071	.72419		
Fear of Failure	Male	440	1.9386	.72279	-.432	NS
	Female	560	1.9589	.74715		
Interpersonal difficulty	Male	440	1.6136	.63733	2.052*	<0.05
	Female	560	1.5321	.61208		
Teacher and Pupil	Male	440	1.8091	.68162	2.583**	<0.01
	Female	560	1.6946	.70620		
Inadequate Study	Male	440	1.8568	.67155	1.996*	<0.05
	Female	560	1.7696	.69664		
Total SASS	Male	440	2.1886	.76861	1.766	<0.01
	Female	560	2.1000	.80295		

**P <0.01, *P<0.05

The above Table indicates the test of variance among Gender on various domains of the Student's Academic Stress Scale. It has been observed that three out of five fields affect the college students of Engineering and medical. They are (i) Student-teacher relationships, (ii) Teacher-student connections, (iii) Lacking study aids. The difference concerning the remaining two factors – (i) Personal Inadequacy and (ii) Fear of failure are not significant because these factors indicate similar attributes in male and female college students of Engineering and medical.

Interpersonal Difficulties

Concerning the difference in Interpersonal difficulties with teacher's domain. It was observed that Male students have high scores on Interpersonal Difficulties (t=2.052; p<0.05*) than Female students in Engineering and medical colleges. Male students from Engineering and Medical colleges have difficulties with teachers, i.e., teachers are not a sense of humour with male students, teachers demanding more work from male students, allotting extra appointments, and have fewer peer-group relationships with others. Teacher and Pupil Relationship. The mean values indicate that the male students have more Teacher and pupil relationship problems (t=2.58; p<0.01**) than female students. Teachers are biased with male students, teachers are giving more punishments to male students, and male students are getting bore with insufficient teachers' teaching. Inadequate study facilities. Male Students in Engineering and Medical showed high inadequate study facilities than female students (t=1.99; p<0.05). Female students prepare notes they discuss doubts with peer groups and teachers in their leisure time. They follow time management techniques when they are preparing for exams. Whereas male students less focus on their studies, they didn't prepare study material, etc.

Gender and domains of Brief coping technique

Gender effect on various Domains of Brief coping technique i.e. approaching and Avoidant coping technique.

Table 4.17: Test of Variance among Gender and Domains of Brief

	Gender	N	Mean	Std. Dev.	t	P
Approach Coping	Male	440	2.8432	.56508	.443	NS
	Female	560	2.8589	.55123		
Avoidant Coping	Male	440	2.5705	.57633	3.178**	<0.01
	Female	560	2.4589	.53005		
Total Brief	Male	440	2.8068	.48339		
	Female	560	2.7946	.48480	.395	

**P <0.01, *P<0.05

Coping techniques are essential for controlling academic stress. In this study, there are two coping techniques are there (i) Approach coping style and (ii) Avoiding coping style. Males and females do not have any significant differences in approaching coping techniques. Whereas a substantial difference between males and females on avoiding coping techniques (t=3.17**; p<0.01).The result shows that the male group uses avoiding coping techniques when they have academic stress, i.e., Self-blame, using substance use like alcohol and smoking, etc., behavioural disengagement like showing aggressive behaviour, anger, etc., venting and self-distraction not focus on studies, difficulty to remember the subject.

Findings from the present study identified that Gender effects on Domains of Student Academic Stress

• Male students from Engineering and Medical colleges have difficulties with teachers, i.e., Teachers do not have a sense of humour with male students, demanding more work, allotting extra assignments, and having fewer peer-group relationships with others.

• Teachers are biased with male students, teachers are giving more punishments to male students, and male students are getting bore with insufficient teachers' teaching.

• Male students less focus on their studies, they did not prepare study material, etc.

Limitations of the Study

This study is limited to Engineering and medical colleges in East Godavari and West Godavari districts.

Recommendations:

• The Colleges have to provide proper awareness to the students regarding academic stress.

• The government has to give priority to trained psychologists to improve coping strategies and academic motivation.

• The government should recruit psychologists post in Schools and Colleges.

• In every college frequently organize training programs for stress management and personality development for the students

• In every college, once in six months conduct psychometric tests(anxiety, frustration, depression, and suicidal ideation) for students

• College management should initiate parent meetings and counsel for parents towards an academic career for achievement

• College management should conduct psychometric tests and performance appraisals for every teacher once a year.

References

Ahmad, M. Thawabich& Lama. M. Qaisy (2012) Assessing Stress among University Students, American International Journal of Contemporary Research Vol. 2 No. 2:

Ajit Singh Negi, Ashu Khanna, (2019). Psychological Health, Stressors and Coping Mechanism of Engineering Students, International Journal of Adolescence and Youth 24(4), 511-529.

Al-Ayadhi L.Y Neurohormonal Changes in Medical Students During Academic Stress. Annals of Saudi Medicine, 2005 ; 9(1): 36-40.

Alvi, S.R. (2012). A Tsunami of Suicides. Hindustan Times, A2.

Archer, J., &Lamnin, A. (1985). An investigation of personal and academic stressors on college campuses. Journal of Student Personnel, 26, 210-215. Page 41 of 12.

Archer.J&Laminan.A, (…). An Investigation of Personal and Academic Stressors on College Campuses. Journal of Student Personnel, 26,210-215.

Auer Bach , M.S., and Grambling.S.E.(1998). Stress Management Psychological Foundations, Scholarly Journal of Education, U.S.A, Prentice- Hall, Inc.

Azizah R.K. et.al., (2019). Stress and Academic Performance: Empirical Evidence from University Students. Academy of educational leadership journal publisher Jan 2019: 13(1).

Balakrishna Sharma, (2013). Academic Stress Due to Depression among Medical and Para Medical Students in an Indian Medical college: Health Initiatives cross Sectional Study, Journal of Health Sciences 3(5), 029-038.

Bataineh (2013). Academic stress among undergraduate students: the case of education faculty at King Saud University, International Interdisciplinary Journal of Education, 2(1), 82-88.

Bernstein, D.A, Penner, L.A, Stewart, A.C. and Roy, E.J. (2008). Psychology (8th edition), Houghton Mifflin Company Boston New York.

Busari A.O. (2011). Validation of Students Academic Stress Scale (SASS), European Journal of Social Sciences; 21(1): 94-105.

Busari. A.O. (2012). Evaluating the Relationship between Gender, Age, Depression and Academic Performance among Secondary School Students, International Journal of Interdisciplinary and Multidisciplinary Studies, 4(2), 6-12

Carr, A. (2004). Positive psychology: The science of happiness and human strengths. London: Routledge.

Chinthaka, B. Samaranayake& Antonio T Fernando (2011) Satisfaction with life and depression among medical students in Auckland, New Zealand, Journalof the New Zealand Medical Association, Vol 124, PIZ.URL: http://www.nzma.org.nz/journal/124-13414838/ CNZMA

Dev Gaurav, J Balamurugan, (2015). Stress, Cradles of Stress and ways of Coping and Management Among Engineering Students, Academia.edu, Cal 4(4).

Deb, Sibnath, Esben,S., and Jiandong,S. (2014). Academic-related stress among private secondary school students in India, Asian Education and Development Studies, 3(2), 118134.

Dimitrov.G (2017). A study on the impact of Academic Stress among college students in India, Ideal Research. 2(4)

Dusan.V.Backovik, (2012). Gender Differences in Academic Stress and Burnout Among Medical Students in Final years of Education, PsychiatriaDanubina , Vol-24, No.2.

El-Anzi, F.O. (2018). Academic Achievement and its relationship with Anxiety, Self-esteem, Optimism and Pessismism in Students. Social Behaviour and personality. Findarticles.com.

Enns, M.W.. Cox, B.J., Sarcen, J., Freeman, P. (2001). Adaptive and maladaptive perfectionism in medical students: a longitudinal investigation MedicalEducation, 35, 1034-42.

Fairbrother, K. & Warn, J. (2003). Workplace Dimensions, Stress and Job Satisfaction, J. Managerial Psychol. 18(1): 8-21.

Farahani, M. N., Shokri, A., Geravand, F. &Daneshvarpour, Z. (2009). Individual differences in academic stress and subjective welfare: the role of coping technique. Journal of behavioral sciences. Vol 2, No 4.297-304.

Fazaila Sabih., Farah Rashid Siddiqui, & Muhammad Naveed Baber (2013) Assessment of stress among physiotherapy students at Riphah Centre of Rehabilitation Sciences, Journal of Pakistan Medical Association.

Foster, C., & Spencer, L. (2003). Are undergraduate engineering students at greater risk for heart disease than other undergraduate students? Journal of Engineering Education, 92(1), 73-77. http://dx.doi.org/10.1002/j.2168 9830.2003.tb00740.x

Gerdens, H., & Mallinckrodt, B. (1994) Emotional, social and academic adjustment of college students. A longitudinal study of retention. Journal of counseling and Development, 72,

Givens, J.L. &Tjia, J. (2002). Depressed medical students' use of mental health services and barriers to use. Academic Medicine, 77(9). 918-21.

Goodman, E.D. (1993). How to handle the stress of being a student, Imprint, 40:43.

Guthire E, Black D (…). Psychological Stress in Medical Students ; A Comparison of two very different Courses. Stress Med; 13:179-84.

Hirsch, H. K., & Ellis, J. B. (1996). Differences in life stress and reasons for living among college suicide ideators and non-ideators. College Student Journal. 30(3), 377-387.

Sahana Madhyastha, K.S. Latha, Asha Kamath(2014)Stress, Coping and Gender Differences in Third Year Medical Students, First Published June 10, 2014 Research Articlehttps://doi.org/10.1177/0972063414526124 Journal of Health Management.