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A Study on Causes and Coping Strategies of Stress Among Engineering College Teachers with Reference to Coimbatore District

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ABSTRACT

This study investigates the causes and coping strategies of stress among engineering college teachers in the Coimbatore District, a prominent educational hub in Tamil Nadu, India. The research focuses on identifying primary stressors such as workload, administrative responsibilities, pressure to publish research, and the need to constantly update technical knowledge and examines their impact on teachers' professional and personal lives. A descriptive research design was employed, with data collected from 106 respondents using structured questionnaires and analysed through simple percentage analysis and chi-square tests.

Key findings reveal that workload (37.7% sometimes stressed), research pressure (74.5% stressed), and administrative duties (27.4% often stressed) are significant stressors. Additionally, 60.4% of respondents reported stress due to a lack of institutional support. Coping strategies like meditation/yoga (54.7%) and hobbies (48.1%) were commonly used, though their effectiveness was rated as moderate. Notably, 64.2% of teachers considered leaving their jobs due to stress, highlighting the severity of the issue.

The study concludes with actionable recommendations to enhance teacher well-being and job satisfaction, including institutional support programs, professional development opportunities, and stress management workshops. By addressing these challenges, educational institutions can foster a healthier academic environment, benefiting educators and students

Keywords: Stress, Engineering Teachers, Coping Strategies, Workload, Institutional Support, Coimbatore.

~~INTRODUCTION~~

Stress has become pervasive in professional environments, particularly in education, where teachers face high demands and expectations. Engineering college teachers, in particular, experience unique stressors due to the rigorous academic environment, rapid technological advancements, and the pressure to maintain high standards in teaching and research. These challenges, combined with administrative responsibilities and the need for continuous skill development, contribute to significant stress levels, impacting their mental health, job satisfaction, and overall performance.

Coimbatore, known as a leading educational hub in Tamil Nadu, hosts prestigious engineering institutions such as PSG Tech, CIT, and KCT. Despite its reputation for academic excellence, the stress levels among engineering college teachers in this region have not been extensively studied. Understanding the causes of stress and the strategies employed to manage it is crucial for improving the well-being and productivity of educators, who play a pivotal role in shaping future engineers. This study aims to fill this gap by exploring the stressors faced by engineering faculty and their coping mechanisms.

The findings of this research will provide valuable insights for educational institutions, policymakers, and individual teachers to develop effective interventions. By addressing stress-related challenges, institutions can create a more supportive environment, enhancing both teacher retention and the quality of education. Ultimately, this study seeks to promote a healthier academic culture, ensuring that engineering educators thrive both personally and professionally.

REVIEW OF LITERATURE

Sahu et al. (2019) conducted a study on workload and stress among college teachers in India, highlighting that excessive workload and administrative duties are major stressors. The research emphasizes the need for institutional reforms to reduce workload and improve work-life balance.

Kumar and Singh (2018) explored role conflict and job stress among engineering faculty, concluding that conflicting responsibilities and role ambiguity significantly contribute to stress. They suggest that clear role definitions and better support systems can alleviate stress.

Reddy and Patil (2021) examined the impact of institutional support on stress levels, finding that inadequate resources and lack of professional development opportunities exacerbate stress. They recommend that institutions invest in infrastructure and training programs to support teachers.

Das and Sen (2022) focused on student-related stressors, revealing that managing student diversity and academic dishonesty are significant challenges for teachers. They suggest that training programs on classroom management and student engagement can help reduce stress.

Sharma and Verma (2017) studied personal coping mechanisms for stress among college teachers, concluding that strategies like mindfulness, meditation, and physical exercise are effective in managing stress. They emphasize the importance of self-care in maintaining mental well-being.

Joshi and Desai (2019) explored professional development as a coping strategy, highlighting that continuous learning and skill development enhance teachers' confidence and competence. They recommend that institutions provide regular training and development opportunities.

OBJECTIVE OF THE STUDY

- To identify the primary causes of stress among engineering college teachers in the Coimbatore District.
- To explore the coping strategies adopted by engineering college teachers to manage stress.
- To analyse the impact of stress on the professional and personal lives of engineering college teachers.

RESEARCH METHODOLOGY

This is a Descriptive study. The Probability Convenience Sampling Method is used to collect 106 responses from the Engineering college teachers in Coimbatore city.

STATISTICAL TOOLS USED FOR DATA ANALYSIS

- Simple percentage analysis
- Chi-square test

DATA INTERPREATION AND ANALYSIS

CHI-SQUARE ANALYSIS

Table Showing Comparison of Stress Levels and Coping Strategies

Stress Level / Coping Strategy	Meditation / Yoga	Physical Exercise	Hobbies/ Leisure Activities	Socializing with Friends/Family	Seeking Professional Help	TOTAL
Always Stressed	15	10	12	8	2	47
Often Stressed	20	18	16	12	3	69
Sometimes Stressed	18	12	18	15	4	67
Rarely Stressed	5	5	5	5	0	20
Never Stressed	0	0	0	2	0	2
TOTAL	58	45	51	42	9	205

Source: Primary Data

Degree of Freedom

Degree of Freedom = (r - 1) (c - 1)

= (5 - 1) (5 - 1)

=4*4

= 16

Level of Significance at 5%

Calculated Value = 9.498

Tabulated Value = 26.296

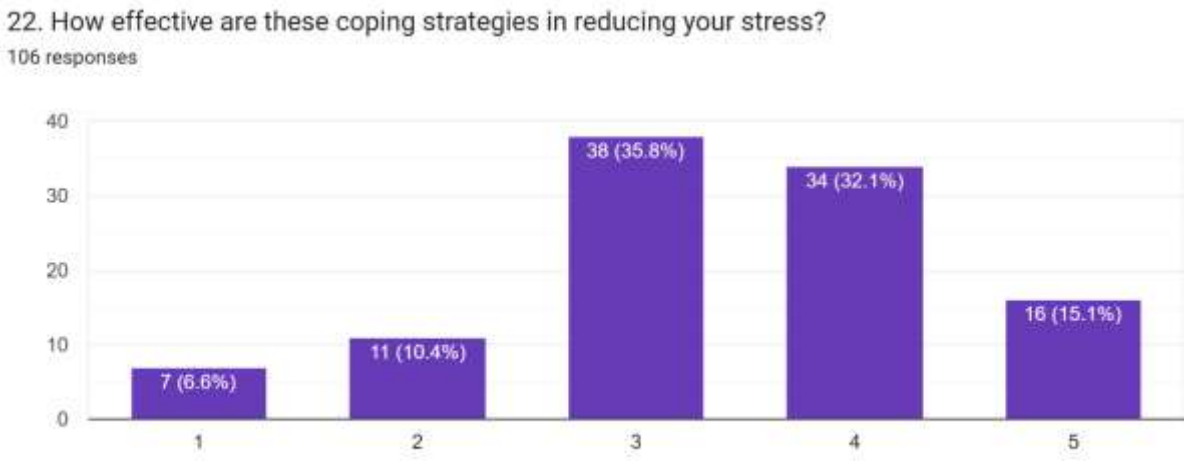
From the above analysis, **the calculated chi-square value of 9.498** is **less than the tabulated value of 26.296** at a 5% significance level. Since the calculated value is less than the tabulated value, **we accept the null hypothesis.**

Tabulated Value > Calculated Value

This means that there is **no significant relationship** between stress levels and the coping strategies adopted by engineering college teachers. In other words, the choice of coping strategies does not vary significantly based on stress levels, and teachers may use similar strategies regardless of their stress levels. This finding suggests that institutions should focus on promoting a wider range of effective coping mechanisms to address stress more comprehensively.

Simple Percentage Method

Chart showing how effective these coping strategies are in reducing the stress of respondents.



FINDINGS, SUGGESTIONS AND CONCLUSION

FINDINGS

Simple Percentage Method

- Most respondents find coping strategies moderately effective, with 35.8% rating them as "3" and 32.1% as "4" on a scale of 1 to 5.

Chi-Square Analysis

- The calculated Chi-square value 9.498 is less than the tabulated value 29.296 at a 5% significance level.
- This means that there is no significant relationship between the occupation of respondents and the advertising platforms they engage with the most.

SUGGESTIONS

- Conduct workshops and seminars to raise awareness about stress management techniques, such as mindfulness, meditation, and time management.
- Develop and implement institutional support programs, such as counselling services, stress management workshops, and wellness initiatives.
- Provide opportunities for continuous professional development, including training on the latest teaching methodologies, research skills, and technological advancements.
- Encourage a healthy work-life balance by promoting flexible work hours, remote teaching options, and recreational activities.

- Establish peer support groups or mentorship programs for teachers to share experiences, challenges, and coping strategies.
- Reduce administrative burdens by streamlining processes, providing administrative assistance, and ensuring clear communication of expectations.

CONCLUSION

The findings of this study reveal that engineering college teachers in Coimbatore face significant stress due to multiple factors, including heavy teaching loads, research publication pressures, administrative responsibilities, and the constant need for technical upskilling. While educators employ various coping mechanisms such as meditation, physical exercise, and leisure activities, these strategies show moderate stress reduction effectiveness. The research underscores the urgent need for institutional interventions, including better support systems, professional development opportunities, and stress management programs, to address these challenges and improve the overall well-being of faculty members in engineering education.

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