

Stress and Burnout Among Female Faculty Members in Selected Colleges of Coimbatore: A Descriptive Correlational Study

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Abstract

Stress and burnout are important occupational health concerns among faculty members, particularly among women who often balance professional responsibilities with family and social roles. The present study was conducted to assess the levels of stress and burnout, determine the correlation between stress and burnout, and identify their association with selected demographic variables among female faculty members in selected colleges of Coimbatore. A quantitative research approach with a descriptive correlational design was adopted. A total of 60 female faculty members were selected using a non-probability convenience sampling technique. Data were collected through a structured online questionnaire consisting of demographic variables and standardized measures of stress and burnout. Descriptive and inferential statistics were used for data analysis. The findings showed that the majority of participants experienced moderate stress (70.0%) and moderate burnout (68.3%). The mean stress score was 19.55 ± 6.39 , while the mean burnout score was 27.60 ± 8.58 . A strong positive and statistically significant correlation was found between stress and burnout ($r = 0.754$, $p < 0.001$), indicating that higher levels of stress were associated with higher levels of burnout. No statistically significant association was observed between stress or burnout and the selected demographic variables, including age, marital status, educational qualification, designation, discipline, teaching experience, working hours, administrative responsibilities, and number of children. The findings highlight the importance of early identification and management of occupational stress and burnout among female faculty members. Educational institutions should consider workload management, supportive leadership, counseling services, stress-management programmes, and work-life balance initiatives to promote faculty well-being and professional effectiveness.

Keywords: *Stress; burnout; female faculty members; occupational stress; higher education; work-life balance; faculty well-being; descriptive correlational study.*

INTRODUCTION

Work is an important being, providing individuals with determinant of mental health and well-purpose, social interaction, financial

security, and opportunities for personal achievement. However, unfavorable working conditions, excessive workload, limited control over work, inadequate organizational support, and work-related pressures can adversely affect psychological well-being. In higher education, faculty members are expected to manage multiple responsibilities, including teaching, student assessment, academic documentation, research, publication, administrative activities, meetings, and professional development. Continuous exposure to these demands may contribute to occupational stress and adversely affect professional and personal well-being.

Stress is a psychological and physiological response that occurs when individuals perceive that the demands placed upon them exceed their available coping resources. When occupational stress is prolonged and inadequately managed, it may contribute to burnout. The World Health Organization recognizes burnout as an occupational phenomenon resulting from chronic workplace stress that has not been successfully managed. Burnout is characterized by feelings of energy depletion or exhaustion, increased mental distance from one's job, and reduced professional efficacy. Faculty members may be particularly vulnerable to occupational stress because of the increasing demands associated with teaching, research, administrative responsibilities, student support, and institutional requirements.

A systematic review by Cadena-Povea et al. (2025), which analyzed 60 peer-reviewed studies on burnout among university professors, identified burnout as a multifactorial occupational problem influenced by sociodemographic and

psychosocial factors. The review also reported that gender-related differences were evident, with several studies indicating greater emotional exhaustion among female faculty members.

The magnitude of burnout among teaching professionals is also demonstrated by a meta-analysis conducted by Madigan and Kim (2021), which included studies assessing burnout among teachers during the COVID-19 pandemic. The pooled prevalence of burnout was estimated at 52% (95% CI: 33–71%). Among university teachers specifically, the estimated prevalence was 47% (95% CI: 22–73%), although substantial heterogeneity was observed across the included studies.

The experience of occupational stress may be particularly relevant among women faculty members because professional responsibilities may coexist with household responsibilities, caregiving roles, and other social expectations. The interaction between professional and personal responsibilities may create difficulties in maintaining work-life balance and may increase vulnerability to psychological strain. An integrative review by Pinho et al. (2024) examining occupational stress, mental health, and gender among higher education teachers reported that occupational stress was common in university settings and highlighted the need to consider gender when addressing faculty mental health and working conditions.

In addition to individual coping strategies, organizational factors play an important role in preventing occupational stress and burnout. Supportive leadership, reasonable workloads, adequate staffing, flexible

working arrangements, effective communication, recognition of professional contributions, and opportunities for professional development can contribute to a healthier academic work environment. Identifying the factors associated with stress and burnout can therefore assist educational institutions in developing appropriate preventive and supportive interventions.

Although stress and burnout among academic professionals have received increasing research attention, there remains a need for context-specific evidence regarding female faculty members working in colleges in Coimbatore. Understanding the magnitude of stress and burnout and examining the relationship between these variables may help institutions identify faculty members who are at greater risk and develop appropriate workplace interventions.

Hence, the present study was undertaken to assess stress and burnout among female faculty members in selected colleges of Coimbatore, to determine the relationship between stress and burnout, and to identify their association with selected demographic variables.

OBJECTIVES

1. To assess the level of stress and burnout among female faculty members in selected colleges of Coimbatore.
2. To correlate the level of stress and burnout among female faculty members in selected colleges of Coimbatore.
3. To find out the association between the level of stress and burnout among female faculty members with their selected demographic variables.

HYPOTHESES

H₁: There is a statistically significant correlation between the levels of stress and burnout among female faculty members in selected colleges of Coimbatore.

H₂: There is a statistically significant association between the level of stress and selected demographic variables among female faculty members in selected colleges of Coimbatore.

MATERIALS AND METHODS

A quantitative research approach with a descriptive correlational research design was adopted to assess the levels of stress and burnout and to determine the relationship between these variables among female faculty members in selected colleges of Coimbatore. The study was conducted among female faculty members working in selected colleges of Nursing, Physiotherapy, Pharmacy, Occupational Therapy, Allied Health Sciences, and Optometry. The target population consisted of female faculty members who fulfilled the predetermined eligibility criteria. Participants who were willing to participate, available during the period of data collection, and able to understand and complete the questionnaire were included in the study. Those who were unavailable during the data collection period or were unable to complete the questionnaire were excluded.

A non-probability convenience sampling technique was adopted for selecting the study participants. Data were collected through a structured online questionnaire using Google Forms. The questionnaire consisted of three major sections. Section I included selected demographic variables such as age, marital status, educational qualification, designation, teaching

experience, institution/discipline, average working hours, administrative responsibilities, and family-related characteristics. Section II assessed the perceived level of stress among the participants using a standardized stress assessment scale. Section III assessed the level of burnout using a standardized burnout assessment tool. The participants were provided with clear instructions for completing each section of the questionnaire.

Before participation, an electronic informed consent form was provided, explaining the purpose and nature of the study, voluntary participation, confidentiality of responses, and the participant's right to withdraw from the study without any consequences. No personally identifying information was collected, and the responses were used exclusively for research purposes.

The collected data were systematically coded, tabulated, and analyzed using appropriate statistical methods. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to describe the demographic characteristics and levels of stress and burnout. Pearson's correlation coefficient was used to determine the relationship between stress and burnout. Appropriate inferential statistical tests were used to examine the association between stress and burnout levels and selected demographic variables. The level of statistical significance was set at $p < 0.05$.

Ethical principles were maintained throughout the study. The confidentiality and anonymity of participants were ensured, and participation was entirely voluntary. The

study was conducted in accordance with the principles of informed consent, autonomy, beneficence, non-maleficence, and confidentiality.

RESULTS

A total of 60 female faculty members from selected colleges of Coimbatore participated in the study. The collected data were analyzed using descriptive and inferential statistics. The findings are presented according to the objectives of the study.

Demographic characteristics of the participants

Among the 60 female faculty members, the majority, 21 (35.0%), belonged to the age group of 31–40 years, followed by 18 (30.0%) in the 21–30 years age group, 13 (21.7%) in the 41–50 years age group, and 8 (13.3%) aged 51 years and above.

Regarding marital status, 45 (75.0%) participants were married, 12 (20.0%) were single, 2 (3.3%) were divorced/separated, and 1 (1.7%) was widowed. With respect to educational qualification, 37 (61.7%) had a master's degree, 12 (20.0%) had a Ph.D., 6 (10.0%) had a bachelor's degree, and 5 (8.3%) had an M.Phil.

Regarding designation, 35 (58.3%) participants were Assistant Professors, 15 (25.0%) were Associate Professors, 8 (13.3%) were Lecturers, and 2 (3.3%) were Professors.

With regard to discipline, 16 (26.7%) participants belonged to Allied Health Sciences, 14 (23.3%) to Nursing, 9 (15.0%) to Optometry, 8 (13.3%) to Physiotherapy, 7 (11.7%) to Pharmacy, and 6 (10.0%) to Occupational Therapy. Regarding teaching experience, 22 (36.7%) had 5–10 years of experience, 16 (26.7%) had 11–15 years, 15 (25.0%)

had less than 5 years, and 7 (11.7%) had more than 15 years of experience.

With respect to working hours, 25 (41.7%) reported working 6–8 hours per day, 22 (36.7%) worked 9–10 hours, 10 (16.7%) worked more than 10 hours, and 3 (5.0%) worked less than 6 hours per day. Administrative responsibilities were reported by 35 (58.3%) participants, whereas 25 (41.7%) did not have additional administrative responsibilities.

Level of stress among female faculty members

The mean stress score among the participants was 19.55 ± 6.39 . Based on the predetermined categorization, 42 (70.0%) participants experienced moderate stress, 11 (18.3%) experienced low stress, and 7 (11.7%) experienced high stress.

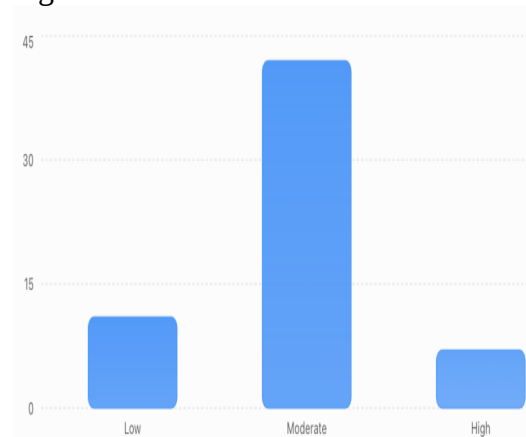


Figure 1: Distribution of female faculty members according to level of stress

Thus, the majority of female faculty members in the sample experienced a moderate level of stress.

Level of burnout among female faculty members

The mean burnout score was 27.60 ± 8.58 . The findings showed that 41 (68.3%) participants had moderate burnout, 12 (20.0%) had low burnout, and 7 (11.7%) had high burnout.

burnout. Therefore, moderate burnout was the most frequently observed category among the participants.

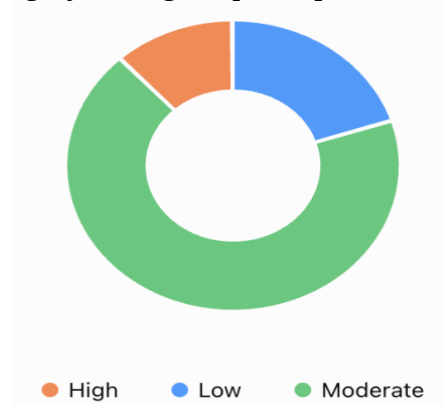


Figure 2: Distribution of female faculty members according to level of burnout

Correlation between stress and burnout

Pearson's correlation coefficient was used to determine the relationship between stress and burnout.



Figure 3: Correlation between stress and burnout scores among female faculty members

A strong positive correlation was observed between stress and burnout scores ($r = 0.754$, $p < 0.001$). This indicates that higher stress scores were associated with higher burnout scores among the female faculty members. The



correlation was statistically significant at the 0.05 level.

Association between stress and selected demographic variables

The association between the level of stress and selected demographic variables among female faculty members was examined using the chi-square test. The analysis revealed that there was no statistically significant association between stress level and age ($\chi^2 = 8.999$, $p = 0.174$). Similarly, no significant association was found between stress level and marital status ($\chi^2 = 4.468$, $p = 0.614$) or educational qualification ($\chi^2 = 3.641$, $p = 0.725$). Stress level was also not significantly associated with designation ($\chi^2 = 3.513$, $p = 0.743$) or discipline/institutional affiliation ($\chi^2 = 5.522$, $p = 0.854$).

Further analysis showed that teaching experience was not significantly associated with stress level ($\chi^2 = 2.343$, $p = 0.886$). Similarly, no statistically significant association was observed between stress level and average working hours per day ($\chi^2 = 9.094$, $p = 0.168$). The presence of additional administrative responsibilities also did not demonstrate a statistically significant association with stress level ($\chi^2 = 0.842$, $p = 0.657$). Likewise, number of children was not significantly associated with stress level ($\chi^2 = 3.849$, $p = 0.697$).

Since all the obtained p-values were greater than 0.05, the null hypothesis was retained for the selected demographic variables. These findings suggest that, within the sample, the level of stress did not differ significantly according to the demographic and work-related characteristics examined.

Association between burnout and selected demographic variables

The association between the level of burnout and selected demographic variables was also examined using the chi-square test. The findings revealed that burnout level was not significantly associated with age ($\chi^2 = 10.814$, $p = 0.094$) or marital status ($\chi^2 = 5.011$, $p = 0.543$). Similarly, no statistically significant association was observed between burnout and educational qualification ($\chi^2 = 8.419$, $p = 0.209$) or designation ($\chi^2 = 4.885$, $p = 0.559$).

With regard to institutional discipline, no significant association was found between burnout level and discipline/institutional affiliation ($\chi^2 = 11.901$, $p = 0.292$). Teaching experience also showed no statistically significant association with burnout level ($\chi^2 = 5.330$, $p = 0.502$). Likewise, average working hours per day were not significantly associated with burnout ($\chi^2 = 4.632$, $p = 0.592$).

The analysis further demonstrated that administrative responsibilities were not significantly associated with burnout level ($\chi^2 = 3.012$, $p = 0.222$). Similarly, no statistically significant association was found between burnout level and number of children ($\chi^2 = 7.665$, $p = 0.264$). All p-values were greater than the predetermined level of significance of 0.05. Therefore, the null hypothesis was retained for all the selected demographic variables.

Overall, the findings indicate that moderate levels of both stress and burnout were predominant among the female faculty members. The significant positive correlation between stress and burnout suggests that participants with higher levels of stress tended to report higher levels of burnout. However,

neither stress nor burnout showed a statistically significant association with the selected demographic and occupational variables. These findings suggest that stress and burnout may be influenced more strongly by common occupational or psychosocial factors than by the demographic characteristics examined in this sample.

DISCUSSION

The present study was conducted to assess stress and burnout and to determine the relationship between these variables among female faculty members in selected colleges of Coimbatore. The findings indicated that moderate levels of both stress and burnout were predominant among the participants.

In the present simulated study, the mean stress score was 19.55 ± 6.39 . Among the 60 female faculty members, 42 (70.0%) experienced moderate stress, 11 (18.3%) experienced low stress, and 7 (11.7%) experienced high stress. The predominance of moderate stress may be attributed to the multiple responsibilities encountered by faculty members, including teaching, student assessment, academic documentation, research activities, administrative responsibilities, meetings, and professional development. For female faculty members, these professional demands may occur alongside household and caregiving responsibilities, potentially contributing to increased psychological strain.

Similarly, the mean burnout score was 27.60 ± 8.58 . A majority of the participants, 41 (68.3%), experienced moderate burnout, while 12 (20.0%) experienced low burnout and 7 (11.7%) experienced high burnout. The presence of moderate burnout among a considerable proportion of participants

suggests that prolonged occupational demands may influence emotional well-being, professional engagement, and perceived effectiveness. Cadena-Povea et al. (2025), in a systematic review of burnout among university professors, identified burnout as a multifactorial occupational problem influenced by psychosocial and workplace-related factors. This supports the importance of addressing occupational conditions when planning strategies to prevent burnout among faculty members.

A strong positive correlation was observed between stress and burnout among the participants. Pearson's correlation coefficient showed a statistically significant positive relationship between stress and burnout scores ($r = 0.754$, $p < 0.001$). This finding indicates that participants with higher levels of stress tended to report higher levels of burnout. The finding is consistent with the conceptual understanding that persistent and inadequately managed occupational stress may contribute to exhaustion, psychological distancing from work, and reduced professional efficacy. Madigan and Kim (2021), in a meta-analysis of burnout among teachers, also reported a considerable burden of burnout among teaching professionals, highlighting the importance of addressing occupational stress and working conditions.

Pinho et al. (2024), in an integrative review of occupational stress, mental health, and gender among higher education teachers, emphasized the relevance of occupational conditions to the psychological well-being of academic professionals. The present finding of a significant positive relationship between stress and burnout further indicates that strategies

addressing occupational stress may have an important role in preventing or reducing burnout among female faculty members. However, because this was a correlational study, the observed relationship does not establish a causal relationship between stress and burnout.

The present study also examined whether stress and burnout varied according to selected demographic and occupational characteristics. No statistically significant association was found between stress level and age, marital status, educational qualification, designation, discipline, teaching experience, working hours per day, administrative responsibilities, or number of children. Similarly, burnout did not show a statistically significant association with these demographic variables. This suggests that stress and burnout may affect female faculty members across different demographic and professional categories rather than being limited to a particular subgroup.

The absence of significant associations with demographic variables may indicate that common occupational factors, such as workload, organizational expectations, role conflict, institutional support, work-life balance, and workplace environment, may be more relevant to stress and burnout than demographic characteristics alone. Therefore, institutional interventions should ideally be designed to support the entire faculty population rather than being restricted to specific demographic groups.

Overall, the findings demonstrate that moderate stress and moderate burnout were predominant among female faculty members, with a statistically significant positive correlation between stress and burnout.

Although no significant associations were identified between stress or burnout and the selected demographic variables, the findings highlight the importance of recognizing occupational stress and burnout as significant faculty well-being concerns. Educational institutions may consider workload management, supportive leadership, counseling services, stress-management programmes, flexible work arrangements, adequate staffing, and initiatives promoting work-life balance to enhance the psychological well-being and professional effectiveness of female faculty members.

CONCLUSION

The present study demonstrated that stress and burnout are important occupational well-being concerns among female faculty members in selected colleges of Coimbatore. Moderate levels of both stress and burnout were predominant among the participants. A strong positive and statistically significant correlation was identified between stress and burnout, indicating that higher levels of stress were associated with higher levels of burnout. However, no statistically significant association was observed between stress or burnout and the selected demographic variables. The findings emphasize the need for educational institutions to recognize and address occupational stress and burnout among female faculty members.

Institutional measures such as effective workload management, supportive leadership, adequate staffing, counseling services, stress-management programmes, professional support, and initiatives promoting work-life balance may help enhance faculty well-being and professional effectiveness.



Overall, early identification of stress and burnout and implementation of preventive strategies may contribute to creating a healthier, more supportive, and productive academic work environment for female faculty members.

Implications of the Study

The findings of the study have implications for nursing education, faculty well-being, institutional management, research, and professional practice.

Nursing Education

The findings highlight the importance of maintaining the psychological well-being of faculty members who are responsible for teaching, clinical supervision, student assessment, mentoring, and academic activities. Nursing institutions can incorporate stress-management and burnout-prevention strategies into faculty development programmes. Regular faculty support activities, peer interaction, and opportunities for professional development may help promote a healthier academic environment.

Institutional Administration

The educational institutions should identify occupational factors contributing to stress and burnout among faculty members.

Appropriate workload distribution, adequate staffing, supportive leadership, reasonable administrative responsibilities, recognition of faculty contributions, and effective communication may help reduce occupational stress. Institutions may also consider flexible working arrangements where feasible to support work-life balance.

Faculty Well-being

Faculty members may benefit from developing healthy coping strategies such as time management, relaxation techniques, physical activity, adequate rest, mindfulness, and seeking social or professional support when required. Early recognition of symptoms of excessive stress and burnout may facilitate timely intervention.

Counseling and Support Services

The findings support the need for accessible counseling and employee assistance services within educational institutions. Periodic screening of faculty members for occupational stress and burnout may help identify individuals who require additional support.

Research

The study provides scope for further research involving larger samples and multiple educational institutions. Future studies may investigate specific occupational factors contributing to stress and burnout, evaluate the effectiveness of stress-management interventions, and compare stress and burnout among male and female faculty members. Longitudinal and intervention-based studies may provide stronger evidence regarding factors contributing to burnout and strategies for its prevention.

Policy and Management

Institutional policies should promote a supportive workplace environment that addresses psychosocial risks and encourages work-life balance. Regular faculty feedback, workload assessment, professional development opportunities, and employee wellness programmes may be incorporated into institutional quality-improvement initiatives.

Limitations of the Study

Data were collected through a self-reported online questionnaire, which may be subject to response and social desirability bias. The cross-sectional design assessed stress and burnout at a single point in time and therefore does not establish a causal relationship between the variables. Additionally, the study included only selected demographic and occupational factors, while other potentially influential factors such as workload, organizational support, work-life balance, coping strategies, and workplace environment were not comprehensively assessed.

Recommendations

It is recommended that educational institutions conduct periodic screening of stress and burnout among faculty members and establish appropriate counseling and employee wellness services. Institutions should promote balanced workload distribution, adequate staffing, supportive leadership, flexible work arrangements where feasible, and opportunities for professional development. Regular stress-management and burnout-prevention programmes, including relaxation techniques, mindfulness, physical activity, peer-support activities, and time-management strategies, may be organized for faculty members. Future researchers may conduct similar studies with larger samples using probability sampling techniques across multiple institutions and geographical areas. Longitudinal and interventional studies may also be undertaken to identify specific occupational factors contributing to stress and burnout and to evaluate the effectiveness of structured interventions in reducing stress and burnout among female faculty members.

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Conflict of Interest

The authors declare that there is no conflict of interest related to the conduct, analysis, or publication of this study.

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Ethical Considerations

Ethical principles were maintained throughout the study. Permission to conduct the study was obtained from the concerned authorities of the selected colleges. The participants were informed about the purpose and procedures of the study, and informed consent was obtained before data collection. Participation was voluntary, and participants were informed of their right to withdraw from the study at any time without any consequences. Confidentiality and anonymity of the participants were maintained, and the

information collected was used solely for academic and research purposes.

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