

Work-related perceived stress, emotional intelligence and burnout among residents of a teaching hospital in India



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Introduction

Medical residency is a period of great professional growth for doctors. A combination of long working hours, academic pressure, night duties, financial strain and increased clinical responsibilities can place a heavy burden on residents.

Residents may experience perceived stress and progressive, accelerated burnout as a result of these circumstances. Research has shown that in clinical settings, burnout can lead to prescription errors and decline in the quality of medical services.

Burnout is one of the most common mental health issues faced by residents and is a known precipitating factor for depression and substance abuse among medical professionals.

Evidence suggests that doctors with high levels of emotional intelligence (EI) may be protected from developing burnout, as they possess more effective coping strategies that enable them to be more resilient and manage stress better.

The study aim was to estimate the role of work-related perceived stress and EI on burnout among resident doctors in a teaching hospital in India.

Methods

Study design: Descriptive cross-sectional study.

Population: Residents working in a teaching hospital in Mangaluru city in south India in 2022 over a period of four months.

Sample size: As no similar studies were found on prevalence of burnout in similar settings, therefore assuming a prevalence of 50%, sample size was estimated using $Z_{\alpha}^2 pq/d^2$ and assuming a non-response rate of 10%, sample size required was 105.

Sampling & tools: Simple random sampling was used to select residents. Data was collected by self-administered questionnaire, consisted of parts on demography & work-related variables. Also Perceived Stress Scale, Trait Emotional Intelligence Questionnaire-Short Form & Burnout Assessment Tool were used to assess work-related perceived stress, EI & burnout respectively.

Analysis: Spearman Rank correlation was used to find correlation between variables. Linear regression was performed to identify factors influencing perceived stress, EI & burnout. P-value of less than 0.05 was considered as statistically significant.

Results

Fig 1: Demographic & work-related data of residents

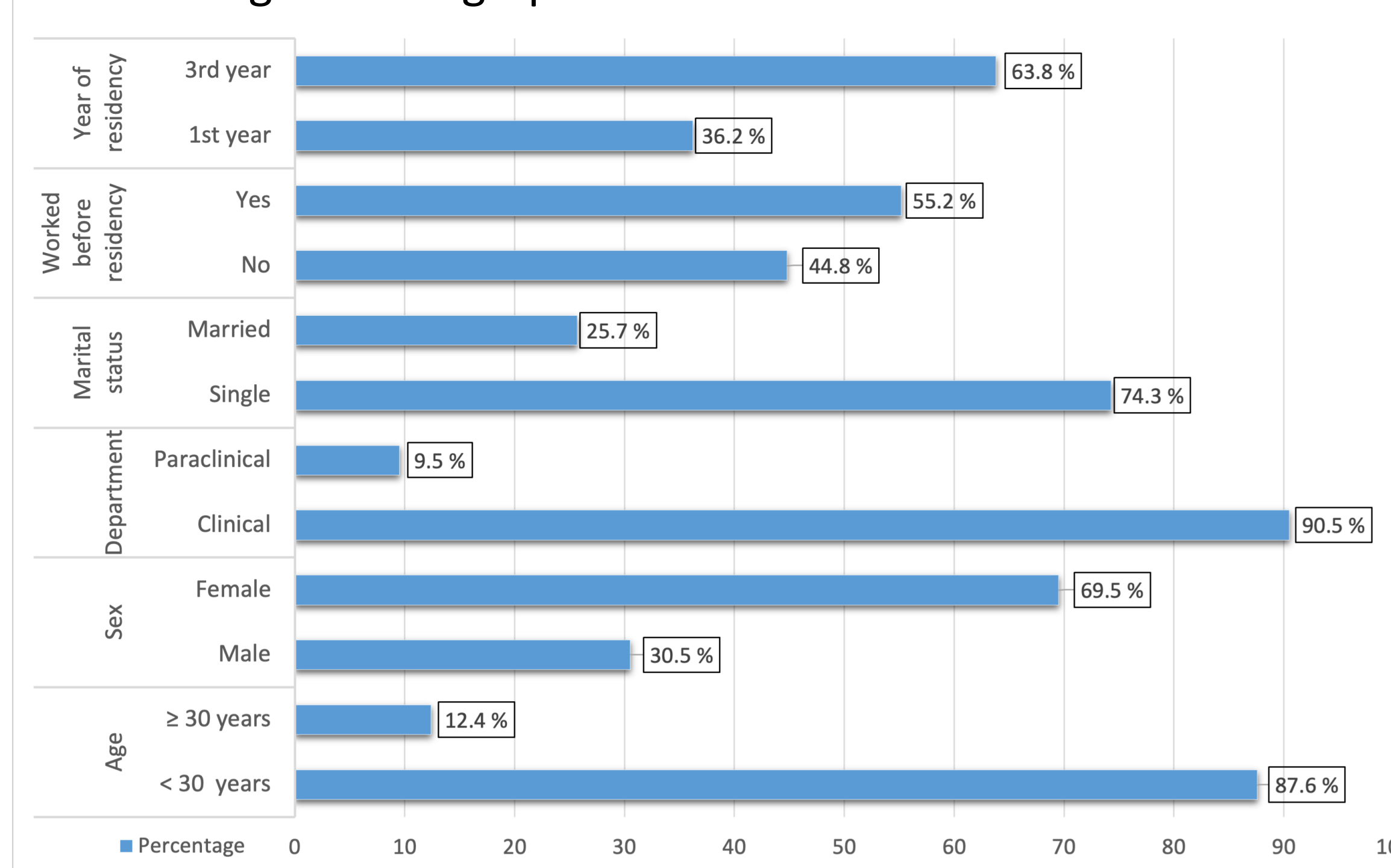


Fig 2: Correlation between work-related perceived stress & burnout

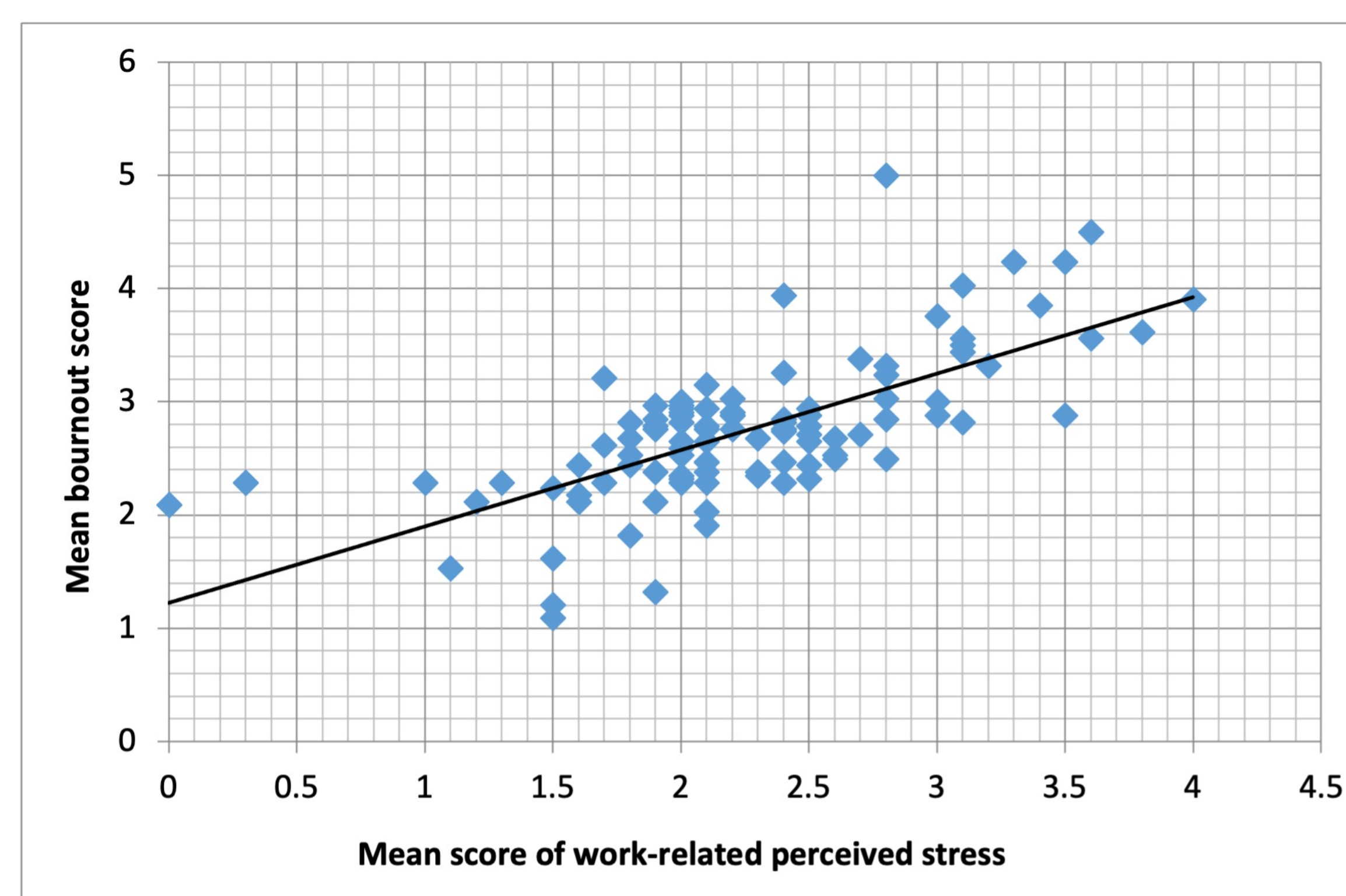


Fig 3: Correlation between emotional intelligence & burnout



- Burnout had a significant positive correlation with work-related perceived stress and significant negative correlation with EI.
- EI showed a significant negative correlation with perceived stress.
- Linear regression analysis showed a significantly higher EI levels among non-clinical residents as compared to clinical specialties (p=0.043).
- Linear regression analysis among the baseline characteristics of residents showed EI was significantly higher in residents of paraclinical departments as compared to the residents of clinical departments.

Conclusion

- Residents who showed signs of burnout had higher levels of work-perceived stress and lower levels of EI.
- Perceived stress was higher among those with lower levels of EI.
- Therefore, we recommend policy makers to consider EI enhancement training as an intervention to decrease burnout among residents.
- Also teaching hospitals need to implement maximum working hours per week, provide annual mental health screening and professional help for those in need.

Application/ translation of knowledge:

- Workload of residents has a role in burnout. But limiting workload through mandatory breaks during working hours & maximum working hours/ week can be difficult to implement in a country like India with a poor doctor patient ratio.
- Here the association of EI with burnout provides an avenue for intervention.
- A study has found that after providing EI training to a group of individuals, there was a significant increase in their emotion management abilities & these changes persisted even after six months.
- We recommend that EI training workshops need to be incorporated as a part of residency training which can help in reducing the levels of burnout among residents.