

The Pandemic PhD Journey: Doctoral Student Burnout and Stress in the COVID-19 Era

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Background

- The COVID-19 pandemic has had a major impact on the training of graduate students, particularly in STEM fields
 - Limitations on laboratory-based research
 - Online teaching and learning
- Evaluation of the effects of the pandemic on STEM graduate students
 requested by Graduate and Professional Student Association leadership
- Objectives:
 - Determine levels of burnout
- Assess impact of pandemic on time to graduation
- Identify key stressors and changes in professional interactions

Methods

- Qualtrics survey emailed by association leadership to all students in one UCSD STEM doctoral program in March 2022 (N=223)
- Copenhagen Burnout Inventory (CBI), a multi-item, Likert scale-based tool used to assess work, personal, and overall burnout
- Quantitative data analyzed using SPSS and Excel
- Qualitative data coded thematically using Excel

Results

• Response rate = 49% (109/223)

Quantitative Results:

- 65% of respondents indicated moderate or high levels of overall burnout
- 46% expected graduation delays of at least one year
- Those expecting delays were 1.3x as likely to be burned out (p=0.07)
- Greatest stressors:
- o finding time to accomplish tasks and balancing obligations (3.7/5)
- finding and affording housing (3.5/5)
- Respondents highly stressed by balancing obligations were 1.7x as likely to be burned out (p=0.002)
- Department support:
 - 55% felt professionally supported
 - 48% felt emotionally supported
- 25% felt financially supported

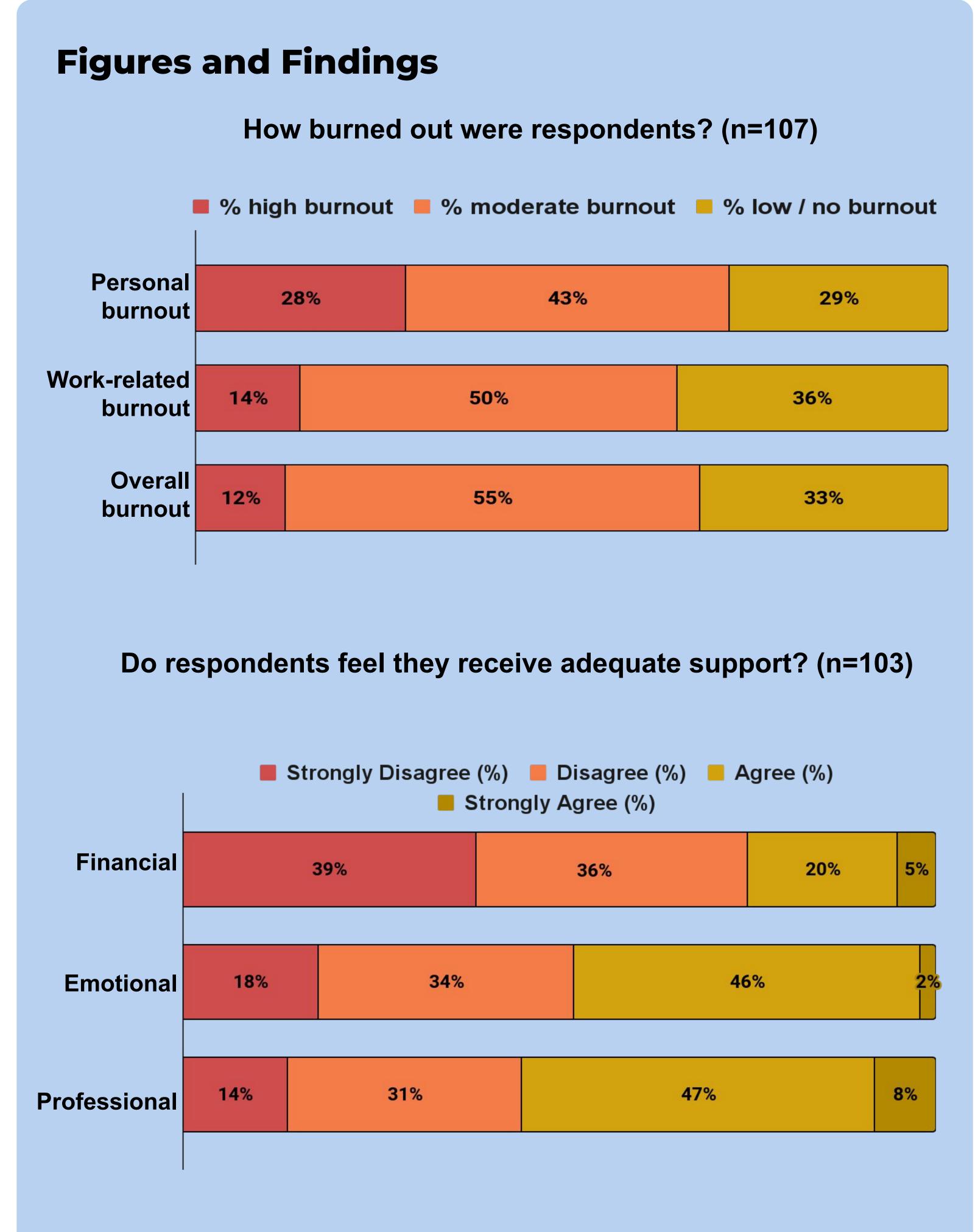
Qualitative Findings:

- Main themes:
- Inadequate wages
- Lack of affordable housing
- Decreased social interactions resulting from the pandemic

Conclusions

- Prevalence of burnout was high among STEM doctoral students
- Delayed graduation, balancing obligations, housing concerns, and inadequate financial and emotional support contribute to burnout
- Higher pay and increased social and professional interactions may decrease burnout and stress in this population





Qualitative Findings

"The longer I am here the less I make, it is exhausting, it is unsustainable. I wouldn't be tired of being a grad student if I wasn't getting poorer by the year as I get older. I didn't mind being poor at 25. I really, really mind being *poorer* at 30."

"COVID made the PhD struggle much more isolating. It's hard to talk to peers when no one else is around."