# The moderating effect of living situation on nurse burnout during COVID-19 Morgan Watkins, Megha Dilip, Ashley Go, Amanda Navin, Cassidy Gaddie, and Talia Culotta

### Summary

Through the lens of the global pandemic, we examined the association between psychological stress (PS), employee burnout (EB), and living situation (LS) in frontline healthcare workers, hypothesizing that LS would act as a moderator. Specifically, we predicted that living with high-risk relatives would increase both PS and EB for nurses during the pandemic. The results of a moderated regression showed a significant main effect of PS on EB, but there was little evidence for a moderating effect of LS, with the regressions in the opposite directions hypothesized. These results suggest that finding ways to reduce psychological stress may stave off employee burnout, particularly outside of living environment.

### **Research Questions**

- **RQ1**: What is the relationship between psychological stress and burnout in nurses during COVID-19?
- **RQ2**: Does living situation moderate the relationship between psychological stress and burnout?

## Method

- Recruited a sample of healthcare workers (N=667) for a survey on psychological stress, burnout, and living situation during COVID-19, (conducted between May 2020-April 2021)
- Recorded various self-reported, descriptive statistics for the surveyed group
- Analyses: Moderated linear regression using
- Moderator Coding:
  - Living alone  $\bullet$
  - Not Alone: spouse, significant other, (grand)child(ren), roommate, (grand)parent(s), other family
  - Living With High-Risk: based on the CDC definition of high-risk

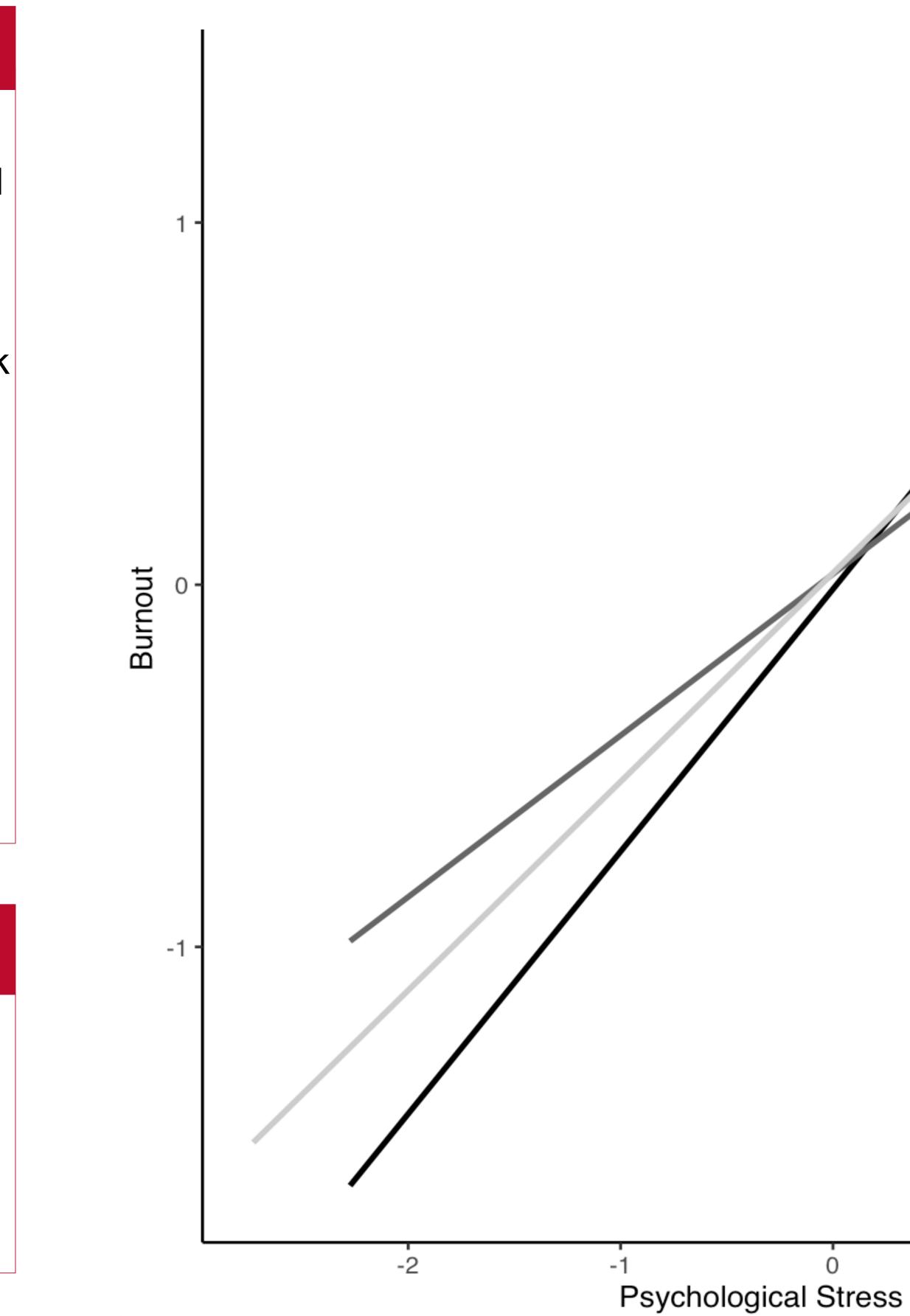


Table 2

Main findings: Moderated regression on Burnout

|   | В     | B SE | β   | Discu                                     |
|---|-------|------|-----|---|
| Psychological stress (A)                              | .72** | .09  | .72 | This stu                                  |
| Simple slopes   |       |      |     | PS, EB,                                   |
| High risk (B)   | .04   | .14  | .01 | during t<br>• LS                          |
| Not alone (C)   | .04   | .09  | .02 | the                                       |
| Moderation  |       |      |     | • Eve<br>livir                            |
| AXB   | 28*   | .13  | 10  | indi                                      |
| AXC   | 15    | .10  | 13  | <ul> <li>Implica</li> <li>Fine</li> </ul> |
| <i>Note.</i> * = <i>p</i> < .05, ** = <i>p</i> < .001 |       |      |     | • Incr                                    |
|   |       |      |     |   |

| Table | 1 |
|-------|---|
|-------|---|

- 1. CFHWB
- 2. COVID-19
- 3. Burnout

4. Psychologie

*Note.* \* = *p* < . family health and well-being.

Alone

— High risk

— Not alone

- Table 1)



### Correlation matrix of study variables

|  | М    | SD   | 1      | 2      | 3      |  |  |  |
|--|------|------|--------|--------|--------|--|--|--|
|  | 4.25 | 0.90 | -      |        |        |  |  |  |
| Exposure                                   | 3.37 | 0.89 | 0.12*  | -      |        |  |  |  |
|  | 4.56 | 1.29 | 0.14** | 0.32** | -      |  |  |  |
| ical Stress                                | 3.5  | 0.73 | 0.2**  | 0.2**  | 0.58** |  |  |  |
| .01, ** = $p < .001$ ; CFHWB = Concern for |      |      |        |        |        |  |  |  |

# Key Findings

• Overall, most results were not statistically and in the opposite direction hypothesized (See Table 1 and Figure 1)

• Results of a moderated regression showed a significant main effect of psychological stress on burnout (B = 0.27, SE = 0.09), p < .001• Simple slopes analyses did not reveal a significant effect of living situation on the psychological stress-burnout relationship (See

 Interaction term "High Risk x Psychological Stress" was significant (B = -0.28, SE =0.13), p < 0.05 but this is not substantial support for moderation

### cussion & Future Directions

tudy illuminates the correlations between 3, and LS with regards to nurse burnout the COVID-19 pandemic.

does not act as a significant modifier of e PS-EB relationship

ven with LS as an insignificant moderator, ring with others, even with high-risk

dividuals, helped alleviate PS

### ations:

nd ways to reduce PS outside of the home crease socialization when living alone