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 R
- Moderator Coding:
  - Living alone
  - 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 1
<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CFHWB</td>
<td>4.25</td>
<td>0.90</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>2. COVID-19 Exposure</td>
<td>3.37</td>
<td>0.89</td>
<td>0.12**</td>
<td>-</td>
<td>-</td>
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<tr>
<td>3. Burnout</td>
<td>4.56</td>
<td>1.29</td>
<td>0.14**</td>
<td>0.32**</td>
<td>-</td>
</tr>
<tr>
<td>4. Psychological Stress</td>
<td>3.5</td>
<td>0.73</td>
<td>0.2**</td>
<td>0.2**</td>
<td>0.58**</td>
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</table>

*Note.* * = p < .01, ** = p < .001; CFHWB = Concern for family health and well-being.

Table 2
<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>B SE</th>
<th>β</th>
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<tbody>
<tr>
<td>Psychological stress (A)</td>
<td>.72**</td>
<td>.09</td>
<td>.72</td>
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<td><strong>Simple slopes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High risk (B)</td>
<td>.04</td>
<td>.14</td>
<td>.01</td>
</tr>
<tr>
<td>Not alone (C)</td>
<td>.04</td>
<td>.09</td>
<td>.02</td>
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<tr>
<td><strong>Moderation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A X B</td>
<td>-.28*</td>
<td>.13</td>
<td>-.10</td>
</tr>
<tr>
<td>A X C</td>
<td>-.15</td>
<td>.10</td>
<td>-.13</td>
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</table>

*Note.* * = p < .05, ** = p < .001

Discussion & Future Directions
- 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 Table 1)
  - 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
- **Key Findings**
  - Overall, most results were not statistically and in the opposite direction hypothesized
  - Results of a moderated regression showed a significant main effect of psychological stress on burnout
  - Simple slopes analyses did not reveal a significant effect of living situation on the psychological stress-burnout relationship
- Interaction term “High Risk x Psychological Stress” was significant
- **Implications**
  - Find ways to reduce PS outside of the home
  - Increase socialization when living alone
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