



# Using the COPSOQ to guide individual behavioral interventions for burnout and depression.

Guy G. Potter, PhD

Department of Psychiatry & Behavioral Sciences

Employee Occupational Health & Wellness

Duke University



DukeMedicine





# EXECUTIVE LEADERSHIP

**Leadership**

**Management**

Unit management

employee



# EXECUTIVE LEADERSHIP

**Leadership**

**Management**

Unit management



employee



# Limitations of top-down intervention

- Organizations change slowly; but leadership can change mind frequently
- Penetration to all levels of management is challenging
- Organizations do not always prioritize employee needs
- Organizational interventions guided by the average responses, but individuals may have different needs



# Benefits of bottom-up intervention

- Even in a well-functioning job environment, some individuals need more support than others
  - Maladaptive coping behaviors
  - Problematic work environments
- Skill building can generalize to future stressors, carryover to non-work context
- Empower individuals to positively influence their work environment (autonomy)
- Better fit to individual needs = better outcomes



# Behavioral Activation Therapy (BA)

- Empirically validated and effective treatment for depression (e.g., review: Kanter et al., 2010)
- Engaging in positively reinforcing behaviors improves mood (positive feedback loop)
- Activation is key ingredient in change
  - Structured
  - Values driven



# Key BA principles

- Emphasize activities that are naturally reinforcing (value-driven)
- Act as a coach
- Emphasize a problem-solving empirical approach (e.g., SMART goals)
- Troubleshoot possible and actual barriers to activation
- Emphasize incremental change; all results provide useful data





# BA for psychosocial job stress

- Activate antidepressant effect of positively rewarding job activities
- Loosely on Job-Demands Resources (JD-R)
  - Emphasize job resources as consistently rewarding
  - Less emphasis on job stressors (quantitative demands, work pace, emotional demands), which are inflexible in many jobs
    - Can integrate work efficiency skills (demands)
    - Can integrate emotional coping skills as needed



# Depression predicting 12-month burnout

| Variables       | <i>b</i> * | 95% CI        | <i>t</i> value | <i>p</i> -value | <i>b</i> * | 95% CI        | <i>t</i> value | <i>p</i> -value | <i>b</i> * | 95% CI        | <i>t</i> value | <i>p</i> -value |
|-----------------|------------|---------------|----------------|-----------------|------------|---------------|----------------|-----------------|------------|---------------|----------------|-----------------|
| Depression      | 0.35       | 0.32, 0.39    | 19.53          | <.001           | 0.34       | 0.30, 0.37    | 19.15          | <.001           | 0.34       | 0.30, 0.37    | 19.10          | <.001           |
| Time, in months | 0.001      | -0.004, 0.006 | 0.46           | .65             | 0.002      | -0.004, 0.007 | 0.57           | .57             | 0.002      | -0.004, 0.007 | 0.57           | .57             |
| Age             | -0.09      | -0.16, -0.02  | -2.44          | .02             | -0.10      | -0.17, -0.04  | -3.16          | .002            | -0.09      | -0.16, -0.02  | -2.67          | .008            |
| Sex             | -0.38      | -0.66, -0.11  | -2.72          | .007            | -0.35      | -0.60, -0.10  | -2.80          | .005            | -0.38      | -0.62, -0.13  | -3.02          | .003            |
| Demands         |            |               |                |                 | 0.27       | 0.21, 0.34    | 8.25           | <.001           | 0.27       | 0.20, 0.33    | 8.07           | <.001           |
| Resources       |            |               |                |                 | -0.17      | -0.23, -0.10  | -5.08          | <.001           |            |               |                |                 |
| Influence       |            |               |                |                 |            |               |                |                 | -0.13      | -0.21, -0.06  | -3.57          | <.001           |
| Freedom         |            |               |                |                 |            |               |                |                 | -0.02      | -0.10, 0.05   | -0.56          | .58             |
| Development     |            |               |                |                 |            |               |                |                 | 0.05       | -0.01, 0.12   | 1.54           | .13             |
| Role Clarity    |            |               |                |                 |            |               |                |                 | 0.01       | -0.07, 0.08   | 0.16           | .88             |
| Leadership      |            |               |                |                 |            |               |                |                 | -0.08      | -0.150, 0.003 | -2.05          | .04             |
| Social Support  |            |               |                |                 |            |               |                |                 | -0.07      | -0.141, 0.001 | -1.99          | .047            |
| AIC             | 6707       |               |                |                 | 6618       |               |                |                 | 6629       |               |                |                 |



**Table 3**  
Fixed Effects and Contribution to Between-Individual Variation in Depressive Symptoms over 12 months.<sup>a</sup>

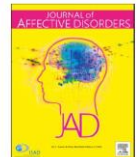
|   | Model 1       |                 | Model 2       |                 | Model 3       |                 | Model 4       |                 | Model 5       |                 |
|---|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|
|   | Estimate (SE) | <i>p</i> -value | Estimate (SE) | <i>p</i> -value | Estimate (SE) | <i>p</i> -value | Estimate (SE) | <i>p</i> -value | Estimate (SE) | <i>p</i> -value |
| Age <sup>b</sup>                                | 0.01 (0.02)   | 0.72            | 0.02 (0.02)   | 0.17            | 0.02 (0.02)   | 0.22            | 0.03 (0.02)   | 0.10            | 0.03 (0.02)   | 0.07            |
| Male  | −0.53 (0.86)  | 0.54            | −0.34 (0.70)  | 0.62            | −0.41 (0.68)  | 0.55            | −0.46 (0.64)  | 0.47            | 0.20 (0.63)   | 0.75            |
| Black race <sup>c</sup>                         | −0.58 (0.73)  | 0.43            | 0.45 (0.60)   | 0.45            | 0.22 (0.63)   | 0.73            | 0.14 (0.61)   | 0.82            | 0.27 (0.59)   | 0.64            |
| Other race <sup>c</sup>                         | −2.00 (0.98)  | 0.04            | −0.29 (0.80)  | 0.71            | −0.36 (0.77)  | 0.64            | −0.22 (0.73)  | 0.76            | −0.28 (0.70)  | 0.69            |
| Married   | −0.64 (0.47)  | 0.18            | −0.32 (0.38)  | 0.41            | −0.12 (0.37)  | 0.74            | −0.09 (0.36)  | 0.80            | −0.05 (0.35)  | 0.88            |
| Social inhibition <sup>d</sup>                  | —             | —               | 0.07 (0.04)   | 0.05            | 0.07 (0.03)   | 0.05            | 0.05 (0.03)   | 0.10            | 0.05 (0.03)   | 0.12            |
| Negative affectivity <sup>d</sup>               | —             | —               | 0.36 (0.04)   | < 0.001         | 0.31 (0.04)   | < 0.001         | 0.14 (0.04)   | < 0.001         | 0.12 (0.04)   | 0.004           |
| Nurse <sup>e</sup>                              | —             | —               | —             | —               | −0.44 (0.94)  | 0.64            | −0.66 (0.91)  | 0.46            | −1.07 (0.88)  | 0.22            |
| Quantitative demands <sup>f</sup>               | —             | —               | —             | —               | 0.04 (0.01)   | 0.002           | 0.03 (0.01)   | 0.009           | 0.009 (0.02)  | 0.48            |
| Work culture <sup>f</sup>                       | —             | —               | —             | —               | −0.80 (0.23)  | < 0.001         | −0.55 (0.22)  | 0.01            | −0.36 (0.23)  | 0.12            |
| Self-sufficient <sup>g</sup>                    | —             | —               | —             | —               | —             | —               | −0.12 (0.33)  | 0.71            | −0.09 (0.31)  | 0.78            |
| Social support <sup>g</sup>                     | —             | —               | —             | —               | —             | —               | −0.08 (0.28)  | 0.77            | −0.15 (0.27)  | 0.59            |
| Avoidant <sup>g</sup>                           | —             | —               | —             | —               | —             | —               | 1.9 (0.32)    | < 0.001         | 1.78 (0.31)   | < 0.001         |
| Humor <sup>g</sup>                              | —             | —               | —             | —               | —             | —               | 0.10 (0.19)   | 0.59            | 0.11 (0.18)   | 0.56            |
| Religion <sup>g</sup>                           | —             | —               | —             | —               | —             | —               | −0.13 (0.16)  | 0.43            | −0.12 (0.16)  | 0.43            |
| Exhaustion <sup>h</sup>                         | —             | —               | —             | —               | —             | —               | —             | —               | 2.49 (0.52)   | < 0.001         |
| Disengagement <sup>h</sup>                      | —             | —               | —             | —               | —             | —               | —             | —               | −0.88 (0.52)  | 0.10            |
| <b>% Between-Individual Variation Explained</b> | <b>0.9%</b>   |                 | <b>36.4%</b>  |                 | <b>41.5%</b>  |                 | <b>49.5%</b>  |                 | <b>53.5%</b>  |                 |



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Journal of Affective Disorders

journal homepage: [www.elsevier.com/locate/jad](http://www.elsevier.com/locate/jad)



Research paper

## 12-month trajectories of depressive symptoms among nurses—Contribution of personality, job characteristics, coping, and burnout

Wei Duan-Porter<sup>a,b,\*</sup>, Daniel Hatch<sup>c</sup>, Jane F. Pendergast<sup>c,d,e</sup>, Gabriele Freude<sup>f</sup>, Uwe Rose<sup>f</sup>, Hermann Burr<sup>f</sup>, Grit Müller<sup>f</sup>, Peter Martus<sup>g</sup>, Anne Pohrt<sup>f</sup>, Guy Potter<sup>h</sup>





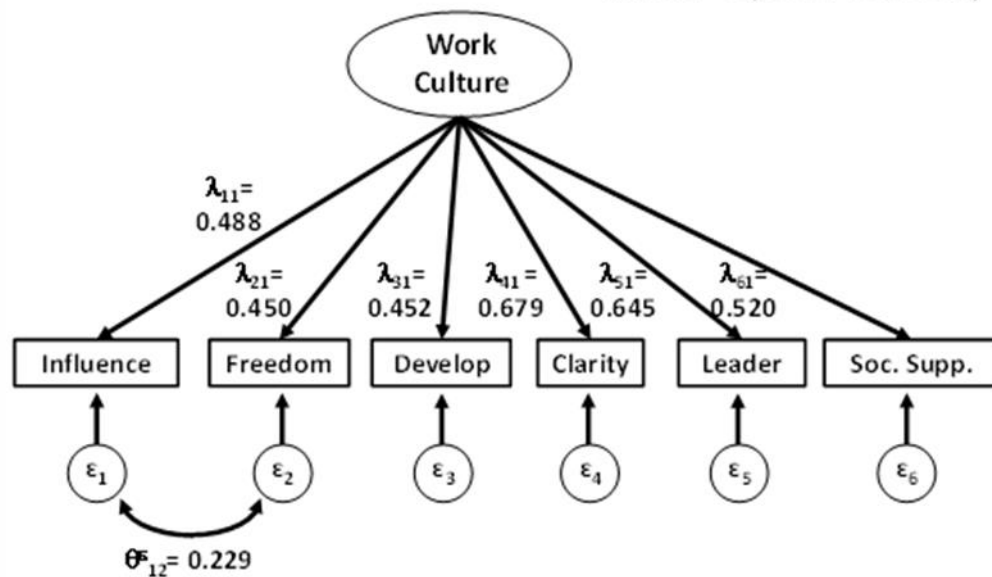
## B. Unitary Factor Model

### Fit Statistics:

$\chi^2 = 6.47$       p-value = 0.595

AIC = 32.5      BIC = -41.5

RMSEA = 0 (90%CI NA, 0.051)





# Why COPSOQ?

- COPSOQ scales provide a “vocabulary” for discussing job stressors and values to organize BA
- Multi-dimensional
  - Broad enough to capture actionable stressors for most individuals
- Flexible to different theoretical approaches
- Empirical research indicates what scales are associated with burnout and depression



# Case example

- Mid-career woman treated for acute stress reaction following critical incident involving multiple employees
- After treatment of acute stress, residual loss of motivation and interest in her job as a fundraiser
  - Could not motivate for work tasks
  - Less engaged & less energy for work
    - Worried about performance implications
  - Work less important; becoming a burden



# Case example

- Completed COPSOQ core items + burnout
  - Non-diagnostic review of results
- Found high Quantitative Demand + high autonomy (active job)
- Job resources reflecting low:
  - Social Support from Supervisors
  - Vertical Trust
  - Organizational Justice
  - Quality of Leadership



# Case example

- Based on COPSQQ results, employee was able to identify a violation of values
  - Supervisors and leadership who “moved on” and forgot about those with chronic trauma reaction
  - Rapid shift by supervisors to recovery of lost work time vs. emotional recovery of individuals
  - Lack of trust for information from leadership about incident





# Case example - Intervention

- Developed hierarchy of behaviors to restore job resources regarding trust and support
- Balance of most valued vs. lowest (worst) score
  - Coached employee on activity toward behaviors that would restore positivity
    - Find a champion for employees in **leadership**
    - Organize **social support** network of affected employees
    - Committee to work with leadership to disseminate information in a sensitive manner (**vertical trust**)



## Case example - Outcome

- Crisis counselors to return to worksite regularly following next year
- Organized informal social support group
- Employee champion meets with leadership and provides feedback on decision making (e.g., return of possessions, relocation, dissemination of information)



**Goal is to have integrated empirical approach to employee wellness based on COPSOQ/JD-R principles**

## **EXECUTIVE LEADERSHIP**





# Discussion

- Although COPSOQ conventionally used as an organizational survey, it may serve as a useful measure for defining and prioritizing psychosocial job stressors for behavioral (and cognitive) interventions – individual & small group
- Individual level use provides information on using COPSOQ for positive change
- Does deviate too far from purpose of COPSOQ?
- What are standards for use of COPSOQ on individual level?



# Discussion

- Although COPSOQ conventionally used as an organizational survey, it may serve as a useful measure for defining and prioritizing psychosocial job stressors for behavioral (and cognitive) interventions – individual & small group
- Individual level use provides information on using COPSOQ for positive change
- Does this deviate too far from purpose of COPSOQ?
- What are standards for use of COPSOQ on individual level?



# Discussion

- Although COPSOQ conventionally used as an organizational survey, it may serve as a useful measure for defining and prioritizing psychosocial job stressors for behavioral (and cognitive) interventions – individual & small group
- Individual level use provides information on using COPSOQ for positive change
- Does deviate too far from purpose of COPSOQ?
- **What are standards for use of COPSOQ on individual level?**