Stress and Wellbeing at Work: An Update

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A Case Definition for Work-Related Stress (2009)

• The person reports high levels of stress

• Unreasonable job characteristics

• Mental health problems

• Work-related problems (e.g. high sick-leave)

• Not due to confounding factors
The DRIVE MODEL OF OCCUPATIONAL STRESS

Individual Characteristics & Personal Resources & Demands

Work Demands

Job Stress

Health Outcomes and Work outcomes

Work Resources

1. \(X\)
2. \(Y\)
3. \(Z\)

Mediating effect of \(Y\), between \(X\) and \(Z\)

Main Effect

Moderating Effect

Moderating Effect of Job Resources on Job Demands
Perceived stress at work

- We have a single question, validated in the Bristol Stress and Health at Work study, which can assess whether a person is very or extremely stressed at work.

- This can be used as the first stage of the case definition.
A single measure of job characteristics
Combined effects and Occupational Stressors: Method

- Calculate a Total Negative Job Characteristics Score: e.g. Sum of job demands, lack of control, lack of support, poor working environment, long or irregular working hours etc

- Split sample into quartiles and use lowest quartile as the comparison group in logistic regressions.
Total negative job characteristics score and high stress

<table>
<thead>
<tr>
<th>Quartile</th>
<th>OR</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd Quartile</td>
<td>1.60</td>
<td>1.32-1.93</td>
</tr>
<tr>
<td>3rd Quartile</td>
<td>2.08</td>
<td>1.72-2.53</td>
</tr>
<tr>
<td>4th Quartile</td>
<td>3.84</td>
<td>3.17-4.66</td>
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</table>
Well-being at work: What is a good job?
There is a huge amount of research on negative job characteristics, occupational stress and mental health problems.

But positive and negative emotions are not just the opposite ends of a continuum, and the absence of negative emotion doesn’t mean the presence of positive emotion.
Work is good for you
or
Worklessness is bad for you
Good work is good for you!
What predicts positive outcomes?

- The combined well-being score (the sum of the presence positive job characteristics and appraisals and the absence of negative characteristics and appraisals).
- “The good job score”
<table>
<thead>
<tr>
<th></th>
<th>Odds ratio</th>
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</thead>
<tbody>
<tr>
<td>Low good job</td>
<td>1.00</td>
</tr>
<tr>
<td>Second quartile</td>
<td>2.89</td>
</tr>
<tr>
<td>Third quartile</td>
<td>5.24</td>
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<tr>
<td>High good job</td>
<td>22.83</td>
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</table>
The Need:
A multi-dimensional model of wellbeing at work that measures a wide range of job characteristics, job attitudes, individual characteristics and outcomes.

Development of the Wellbeing Process Questionnaire (WPQ) and use of short measures – Gary Williams
Single Items

(Demands). I feel that I do not have the time I need to get my work done (for example: I am under constant time pressure, interrupted in my work, or overwhelmed by responsibility or work demands).

Disagree strongly 1 2 3 4 5 6 7 8 9 10  Agree strongly

(Self Efficacy). I am confident in my ability to solve problems that I might face in life (For example: I can usually handle whatever comes my way, if I try hard enough I can overcome difficult problems, I can stick to my aims and accomplish my goals).

Disagree strongly 1 2 3 4 5 6 7 8 9 10  Agree strongly
### Initial Validation

<table>
<thead>
<tr>
<th>Single Item</th>
<th>Correlation with multi-item</th>
<th>Multi-item internal Comparison</th>
<th>Single Item</th>
<th>Correlation with multi-item</th>
<th>Multi-item internal comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Demands</td>
<td>.63</td>
<td>.41</td>
<td>Extraversion</td>
<td>.89</td>
<td>.38</td>
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<tr>
<td>Understanding Role</td>
<td>.60</td>
<td>.53</td>
<td>Neuroticism</td>
<td>.57</td>
<td>.42</td>
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<tr>
<td>Supervisor Relationship</td>
<td>.86</td>
<td>.69</td>
<td>Optimism</td>
<td>.80</td>
<td>.33</td>
</tr>
<tr>
<td>Work Characteristics Average</td>
<td>.70</td>
<td></td>
<td>Personality</td>
<td>.66</td>
<td>Average</td>
</tr>
</tbody>
</table>

All correlations significant at .01 (Pearson R)
Testing an established model

• Job Demands/Control/ Support (JDCS) and Effort/Reward Imbalance (ERI) models: strong evidence for their relationships with outcomes

• Examine associations between different combinations of demands/control/support and effort/reward with depression, anxiety, and job satisfaction

• Compare models using single items or traditional scales
Results

• Using 3 items does not give very different results to using 16 items (JDCS) or 32 items (ERI)

• At risk groups based on these models can be identified with single-items

• Predictive validity of single items is comparable to multi item scales
JDCS Long (16 Items)

Mean Score

- Depression
- Anxiety
- Job Satisfaction

Low Risk
Medium Risk
High Risk
Other factors:

• Work characteristics and personality both contribute to outcomes

• Work characteristics more important for job satisfaction/stress (appraisals) while personality more important for positive and negative affect (emotional)

• Only certain variables predict outcomes when all variables are included in the regression
Remaining Variables

- Work Circumstances
  - Positive
    • Reward
    • Control
    • Support
    • Consultation on Change
    • Supervisor relationship
  - Negative
    • Demands
    • Effort
    • Overcommitment

- Life Circumstances
  - Uplifts
  - Hassles
  - Flourishing

- Personality
  - Optimism
  - Self-Esteem
  - Self-Efficacy
  - Emotional Stability

- Coping Style
  - Avoidance
  - Self-Blame
  - Wishful Thinking

- Received Social Support
Wellbeing Outcomes and their Predictors

- Emotional Wellbeing
  - Personality
  - Negative Coping Style

- Satisfaction with Life
  - Life Experiences

- Work Wellbeing
  - Work Experiences
Where next?

- Refine the method of auditing wellbeing at work (both by surveys and by telephone) and use such audits as an indicator of the efficacy of interventions.

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