Development of a Workplace Resilience Instrument

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Objective

Build and test a resilience instrument for use in the workplace.

Need

- The dominant resilience scales found in the literature have been developed primarily with clinical populations, not workplace populations.
- Stress costs U.S. businesses an estimated $200-300 billion annually in medical costs.
- Resilience is a key construct in the performance of targeted behaviors for solving problems and taking action in the face of adversity.

Resilience Research Phases

1955-1987: Foundational research into the phenomenon.
1990s: Conceptualization of the resilience construct.
2000s-present: Measurement, but primarily in clinical and adolescent populations.

Existing Instruments & Focus

<table>
<thead>
<tr>
<th>Instrument Name</th>
<th>Research Participants</th>
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<tbody>
<tr>
<td>CD-RISC</td>
<td>Psychiatric pts., PTSD, some general population</td>
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<tr>
<td>DRS</td>
<td>Military survivor assistance officers</td>
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<tr>
<td>Resilience Scales (RS)</td>
<td>Elderly women</td>
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<tr>
<td>Resilience Scale for Adults (RSA)</td>
<td>Mental health outpatients</td>
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Results

The Four-Factor Solution

- **Active Problem-Solving.** An active approach to problem-solving demonstrates a need to do something positive, rather than merely talking about the problem or hoping it will go away.
- **Team Efficacy.** A resilient individual not only “works well in teams,” but has a systemic understanding of how the team operates and achieves its objectives.
- **Confident Sense-Making.** The ability to extract order out of chaos is a mark of the resilient individual. Making sense of one’s reality requires accessing the right resources quickly; to do so confidently is a key factor in workplace resilience.
- **Bricolage.** This French term, from Levi-Strauss’ The Savage Mind, captures another unique factor of the resilient individual. The bricoleur practices a highly applied engineering approach, much like the 1980s U.S. television character MacGyver. Resilience benefits from fashioning solutions creatively to address the situation.

Conclusions

- The WRI was shown to have four factors and convergent validity with a job stress instrument.
- The self-administered instrument was completed by 540 participants across two samples—healthcare executives and hospital-based nursing staff.
- This model has an acceptable RMSEA and has good fit indices as indicated by CFI and TLI.
- Psychometrics provided validation and support for the quality of the tool for use in workplace settings. The WRI has the potential to provide organizations and managers a useful tool for improving workplace resilience and helping employees achieve their potential.

Research Products

- Invited presentation delivered to the American Society for Engineering Management’s International Annual Conference in Virginia Beach in 2014.
- Serving as special issue editor for WORK journal on the topic of workplace resilience. Expected publication in late 2016.
- Invited to serve as an international advisory board member on a resilience research project in Sweden.
- Registered intellectual property in progress for the resilience instrument.

Acknowledgments

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MacGyver represents a resilient individual who exemplifies bricolage, or the ability to create a solution with materials on hand.