Behavioral Health Leadership in a High-Risk Occupation

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PTSD

Victim Model of PTSD
- Unexpected
- Discrete
- Unwanted

Traumatic Event

Reaction
- Freezing
- Intense fear
- Shutting down

Symptoms
- Maladaptive
- Spread across different dimensions

Impairment
- Social
- Work
- Family

Source: Castro & Adler (2011) “Re-Conceptualizing PTSD” in Deployment Psychology
Occupational Health Model of PTSD

- **Symptoms**
  - Adaptive
  - Maladaptive

- **Traumatic Event**
  - Expected
  - Consistent with identity
  - Multiple Events

- **Reaction**
  - Training Kicks In
  - “Autopilot”

- **Symptoms**
  - Grief
  - Second guessing
  - Anger
  - Risk-Taking
  - Moral injury

- **Impairment**
  - Functioning with symptoms
  - Unmasked post-transition

**Context**

**Source:** Adapted from Castro & Adler (2011) “Re-Conceptualizing PTSD” in Deployment Psychology
Leadership

• Leadership correlated with better mental health
  – Civilian contexts (Kelloway & Barling, 2010)
  – Peacekeeping (Bliese & Halverson, 1998)
  – Combat (Jones et al., 2012)

• General leadership skills
  – Relevant in many situations (Bliese & Britt, 2001)
  – Span transactional and transformational behaviors (Bass, 1990).

• Limitations
  – Relatively “blunt instrument” for addressing specific challenges
  – Harder to teach (Barker, 1997; Gunia et al., 2015)
<table>
<thead>
<tr>
<th>WRAIR Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Exhibits clear thinking and reasonable action under stress</td>
</tr>
<tr>
<td>✔ Tells soldiers when they have done a good job</td>
</tr>
<tr>
<td>✗ Tries to look good to higher-ups by assigning extra missions or details to soldiers</td>
</tr>
<tr>
<td>✗ Embarrasses soldiers in front of others</td>
</tr>
</tbody>
</table>

Domain-Specific Leadership

• Previous Research
  – Safety-specific leadership$^1$
  – Health-specific leadership$^2$
  – Family-supportive leadership$^3$

• Measures
  – Behaviors that can be observed
  – Referent varies depending on context

$^1$Source: Barling, Loughlin, & Kelloway (2002); $^2$Source: Gurt, Schwennen, & Elke (2011); $^3$Hammer et al. (2011)
Behavioral Health Leadership Domains

- Sleep leadership
- Combat Operational Stress Control (COSC) leadership
- Health-promoting leadership
- Resilience training leadership
- Emotion regulation leadership
- Post-traumatic growth leadership
Sleep Leadership
Sleep Hours

Reported Hours of Sleep Among Soldiers and Civilians

<table>
<thead>
<tr>
<th>Hours of Sleep</th>
<th>Soldiers</th>
<th>Civilians</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤5</td>
<td>61%</td>
<td>8%</td>
</tr>
<tr>
<td>6</td>
<td>25%</td>
<td>21%</td>
</tr>
<tr>
<td>7</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>≥8</td>
<td>4%</td>
<td>31%</td>
</tr>
</tbody>
</table>
Sleep: Background

• High-risk occupations and sleep problems
  – 20-30% (Seelig et al., 2010)
  – 28.7-32.2% (J-MHAT-7)

• Sleep problems linked to
  – Performance problems (Wesensten et al., 2006)
  – Mistakes (LoPresti et al., in press; MHAT-9)
  – Affect dysregulation (van der Helm & Walker, 2012)
  – Mental health problems (Seelig et al., 2010; Wright et al., 2011)
  – Moral decision-making (Barnes et al., 2012)
  – Health risk behaviors (Luxton et al., 2011)
<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Immediate Leaders Often/Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider sleep as an important planning factor</td>
<td>34.7%</td>
</tr>
<tr>
<td>Encourage Service Members to get extra sleep before missions that require long hours</td>
<td>34.6%</td>
</tr>
<tr>
<td>Encourage Service Members to try to go to sleep on time</td>
<td>29.8%</td>
</tr>
<tr>
<td>Encourages Service Members to get adequate sleep</td>
<td>25.6%</td>
</tr>
<tr>
<td>Work to ensure Service Members have a good sleep environment (quiet, dark, not too hot or cold)</td>
<td>23.6%</td>
</tr>
<tr>
<td>Support the appropriate use of prescription sleep medication</td>
<td>16.5%</td>
</tr>
<tr>
<td>Discourage the use of caffeine or nicotine within several hours before trying to go to sleep</td>
<td>14.1%</td>
</tr>
<tr>
<td>Encourage Soldiers to reduce sleep distractions by using earplugs, eye-masks or other strategies</td>
<td>10.8%</td>
</tr>
<tr>
<td>Encourage Service Members to nap when possible*</td>
<td>8.5%</td>
</tr>
<tr>
<td>Asks Service Members about their sleeping habits</td>
<td>5.8%</td>
</tr>
</tbody>
</table>
Sleep Leadership: Peacekeeping

• Survey of 623 US Soldiers deployed to Horn of Africa (alpha = .90)

Source: Gunia, Sipos, LoPresti & Adler, 2015, Military Psychology
Sleep Leadership: Combat

- Survey of 619 US Soldiers deployed to Afghanistan (alpha = .93)

Source: Gunia, Sipos, LoPresti & Adler, 2015, Mil Psych
• In both studies, indirect effect of sleep leadership

\[
\text{Sleep leadership} \rightarrow \text{Sleep quality} \rightarrow \text{Depression}
\]

-Bootstrap, CI = -0.87 to -0.27 (5000 iterations; Preacher & Hayes, 2004)

Source: Gunia, Sipos, LoPresti & Adler, 2015, Mil Psych

• Longitudinal study finding similar effects (Gunia et al., in prep)
Behavioral Health Leadership Domains

- Sleep leadership
- Combat Operational Stress Control (COSC) leadership
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- Emotion regulation leadership
- Post-traumatic growth leadership
COSC Leadership

- Combat Operational Stress Control (COSC) Leadership
  - COSC manual identifies a set of leader behaviors designed to reduce or ameliorate combat stress reactions of subordinates
<table>
<thead>
<tr>
<th></th>
<th>Often/Always</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Platoon Sergeant</td>
</tr>
<tr>
<td>Does not judge soldiers who seek behavioral health help</td>
<td>53.4%</td>
</tr>
<tr>
<td>Encourages soldiers to seek help for stress-related problems</td>
<td>47.7%</td>
</tr>
<tr>
<td>Demonstrates concern for how families are dealing with stress</td>
<td>48.0%</td>
</tr>
<tr>
<td>Intervenes when a soldier displays stress reactions such as anxiety, depression or other behavioral health problem</td>
<td>45.2%</td>
</tr>
<tr>
<td>Encourages soldiers to express emotions following losses and setbacks during deployment</td>
<td>42.3%</td>
</tr>
<tr>
<td>Reminds soldiers after intense experiences that we are here to serve with honor, mission, greater purpose</td>
<td>49.4%</td>
</tr>
</tbody>
</table>

COSC Leadership & Mental Health

• 2,072 US Soldiers in Afghanistan (alpha = .91-.94)

Rank & Combat Experiences + General Leadership (NCO & PL) + COSC-Specific Leadership → PCL
  Anxiety
  Depression
  Comfort talking to BH Provider

COSC Leadership & Combat

COSC Leadership Behaviors, Combat Exposure, and PTSD Symptoms

Low COSC Leadership
High COSC Leadership

Note: Analysis controlled for rank and general leadership.
Behavioral Health Leadership Domains

- Sleep leadership
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# Health-Promoting Leadership

<table>
<thead>
<tr>
<th>Thinking about your current team/unit, rate how often does your leadership</th>
<th>Often/Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emphasize maintaining professional standards</td>
<td>74%</td>
</tr>
<tr>
<td>Emphasize taking care of yourself physically</td>
<td>63%</td>
</tr>
<tr>
<td>Emphasize the importance of the medical mission</td>
<td>61%</td>
</tr>
<tr>
<td>Emphasize taking care of yourself mentally</td>
<td>52%</td>
</tr>
<tr>
<td>Give you positive feedback about your accomplishments</td>
<td>44%</td>
</tr>
<tr>
<td>Emphasize maintaining compassion</td>
<td>41%</td>
</tr>
<tr>
<td>Remind you to take a break/recharge</td>
<td>41%</td>
</tr>
<tr>
<td>Encourage you to get enough sleep</td>
<td>37%</td>
</tr>
<tr>
<td>Give you specific guidance on how to improve</td>
<td>35%</td>
</tr>
<tr>
<td>Reduce tension in the team/unit when emotions run high</td>
<td>34%</td>
</tr>
</tbody>
</table>

Source: Adler, Adrian, Hemphill, Scaro, Sipos, & Thomas, under review
Health-Promoting Leadership & Burnout

- 344 medical staff deployed to Afghanistan (alpha = .95)

Rank
PTSD Symptoms
Professional Stressors

General Leadership

Health-Promoting Leadership

Burnout
(Emotional Exhaustion + Depersonalization)

Source: Adler, Adrian, Hemphill, Scaro, Sipos, & Thomas, under review
Operation United Assistance

- 498 Soldiers in Controlled Monitoring Areas (CMAs)
- 21-Day CMA (quarantine)
- 4 cohorts (MAR-MAY 2015)
- Following 6-month deployment to Liberia in response to Ebola outbreak
CMA: Attitudes

- Will reduce anxiety in our communities: 71.8%
- Is understandable: 63.5%
- Will help keep our families safe: 54.0%
- Will help keep our communities safe: 52.5%
- Is a good idea: 42.7%
- Is a waste of time: 30.0%
- Will help me transition home more easily: 43.9%
- Should be a part of every deployment: 19.7%
CMA Version of Health-Promoting Leadership

- Emphasize taking care of yourself physically: 74.1%
- Emphasize maintaining professional standards: 73.9%
- Emphasize taking care of yourself mentally: 65.4%
- Lead by example by using health monitoring measures themselves: 62.5%
- Place command emphasis on importance of health monitoring measures: 58.6%
- Encourage you to get enough sleep: 58.4%
- Give you specific guidance on how to improve: 53.0%

* CMA Version of Health - Promoting Leadership
Health-Promoting Leadership in CMA

Rank + General Leadership + Health-Promoting Leadership → Depression Anxiety Attitudes toward CMA

Source: Adler, Kim, Thomas & Sipos, in prep – Alpha = .97
Behavioral Health Leadership Domains

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<table>
<thead>
<tr>
<th>Resilience Training Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immediate Leaders</strong></td>
</tr>
<tr>
<td>Attend resilience training activities</td>
</tr>
<tr>
<td>Emphasize the importance of resilience training skills</td>
</tr>
<tr>
<td>Refer to skills when talking with soldiers</td>
</tr>
<tr>
<td>Encourage soldiers to use the skills</td>
</tr>
</tbody>
</table>
Validation of Resilience Training Leadership

Figure 1. Soldier Perception of Leader Attitudes Toward Resilience Training and Training Attendance

- 9% Negative
- 21% Just going through the motions
- 35% Open to the idea it might be useful
- 62% Enthusiastic

Soldier Perception of Leader Attitude toward Resilience Training
Resilience Training Leadership & Unit Climate

- 2,181 Soldiers deployed to Afghanistan

Source: Sims & Adler (in press) Parameters
Additional Behavioral Health Leadership Domains

- Sleep leadership
- Combat Operational Stress Control (COSC) leadership
- Health-promoting leadership
- Resilience training leadership
- Emotion regulation leadership
- Post-traumatic growth leadership
Emotion Regulation Leadership

- 3,030 Soldiers surveyed in Afghanistan and Germany (alpha = .86)

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<tr>
<td></td>
<td>Platoon Sergeant</td>
</tr>
<tr>
<td>Can pause without immediately reacting in emotionally charged situations.</td>
<td>36.3%</td>
</tr>
<tr>
<td>Can calm down quickly if he/she gets upset.</td>
<td>48.0%</td>
</tr>
<tr>
<td>Is good at calming Soldiers down when they get angry.</td>
<td>41.7%</td>
</tr>
<tr>
<td>Is good at acknowledging when Soldiers are going through a tough time.</td>
<td>46.7%</td>
</tr>
</tbody>
</table>
Leadership vs. BH Leadership

- Are domain-specific leadership behaviors all the same?
  - Similar pattern for Platoon Leaders & Immediate Supervisors

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<thead>
<tr>
<th></th>
<th>Sleep Leadership</th>
<th>COSC Leadership</th>
<th>Resilience Training Leadership</th>
<th>Emotion Regulation Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Leadership</td>
<td>.35</td>
<td>.55</td>
<td>.28</td>
<td>.61</td>
</tr>
<tr>
<td>Sleep Leadership</td>
<td></td>
<td>.52</td>
<td>.40</td>
<td>.44</td>
</tr>
<tr>
<td>COSC Leadership</td>
<td></td>
<td></td>
<td>.43</td>
<td>.72</td>
</tr>
<tr>
<td>Resilience Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
<td></td>
<td>.35</td>
</tr>
</tbody>
</table>
Implications

• Validates doctrine
  – Sleep
  – COSC

• Training
  – Examine degree to which these skills are trainable
  – Assess efficacy of training in context

• Alternatives to Training
  – Over reliance of training as “The Answer”
  – Integrate into the culture
  – Consider role of “bystanders”
  – Train indirectly

• Work with Stakeholders
Implementation

Integrate into Master Resilience Training - Medical course

Integrate in pre-command course

Direct Training

Train Embedded Providers in “Conversation Starters”
Sleep Leadership Training

- Set conditions
- Lead by example
- Educate
- Encourage
- Prioritize & plan

Water

Sleep

Food

Sleep

Set Sleep, Tactical Naps, and Sleep (Recovery) Example

Baseline

Pre-set (Bank)

Mission

Reset (Recovery)

Baseline
Future Directions

- Complete analysis of behavioral health leadership scales
  - Emotion regulation
  - Post-traumatic growth leadership (Wood et al.)
- Sleep leadership training studies
  - Army study with Behavioral Health Officers
  - Hammer study with National Guard
  - Navy study of sleep leadership
  - International interest (5-nation program)
- Explore emotion regulation leadership
  - Mindfulness leadership
  - Self-distancing techniques
- Consider small-team culture & other occupational groups
Thank You!

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