Mindfulness for Stress Management & Wellness

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The body’s response to stress

- Amygdala is the fight or flight center
- Activation triggers cascade of neural, neuroendocrine, neuroimmune and behavioral responses
- Chronic or repeated activation of the stress response leads to health problems, premature mortality, and reduced quality of life
The mind’s response to stress

- Problem-solving, “fix it”
- Avoidance and aversion
- Rumination → depression
- Worry → anxiety
- Often makes the problem worse
What is mindfulness?

“The awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment to moment.”

(Kabat-Zinn, 2003)
The mindful approach to stress

- Being with experience without trying to change it
- Bringing curiosity and compassion to our experience – approaching difficulty rather than avoiding it
- With practice it is possible to become less reactive to experience, giving us the freedom to choose how to respond
How is mindfulness different from relaxation techniques?

• The intention with relaxation is to produce a special state
• The intention with mindfulness is to be fully present with experience, good or bad, as it is
Mindfulness Based Stress Reduction (MBSR)

• Stress reduction clinic at Umass founded in 1979 by Jon Kabat-Zinn

• 8 weekly 2 ½ hour classes and a single 7 hour retreat

• Classroom format with guided practice and group discussion
Mindfulness Based Stress Reduction (MBSR)

• Formal practices: body scan, yoga, sitting meditation, walking meditation

• Informal practices: moment-to-moment awareness of activities of daily life
Effects on mental health and psychological well-being

- Effective for chronic pain
- Reduces psychological stress, anxiety and depression
- Increased well-being
- Improved emotional regulation and positive psychological states
- Improved attention and information processing
Increased immune response

Davidson, et al. Alterations in brain and immune function produced by mindfulness meditation
Psychosomatic Medicine 65(4):564-70, 2003 Jul-Aug
Limbic stress response
MBSR changes amygdala connectivity

OFC

ACC

PreMBSR

PostMBSR
### MBSR changes emotional reactivity

<table>
<thead>
<tr>
<th></th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindfulness (KIMS)</td>
<td>↑ 27%</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>↑ 19%</td>
</tr>
<tr>
<td>Trait Anger</td>
<td>↓ 20%</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>↓ 21%</td>
</tr>
<tr>
<td>Perceived Stress</td>
<td>↓ 11%</td>
</tr>
</tbody>
</table>
Mindfulness for staff: Westborough adolescent unit

Comments from focus group:
• things that upset me before I gain perspective about a lot quicker
• class helped me validate my purpose in this work
• this class helped me see my work as a process and not a series of deadlines
<table>
<thead>
<tr>
<th>Role</th>
<th>More</th>
<th>Less</th>
<th>No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical or emotional energy?</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>That you are not getting what you want out of your job?</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Irritated by small problems, by co-workers and/or patients?</td>
<td></td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Frustrated with parts of your job?</td>
<td>1</td>
<td>4</td>
<td></td>
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