Mindfulness-Based Interventions with Justice-Involved Individuals

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Today’s Outline

- Stress & the Human Condition
- Mindfulness Defined
- Science of Mindfulness
- Our Data & Research
- Practical exercises
- Q&A
Stress & Human Health

- Psychological stress has been found to contribute to poorer health practices, increased disease risk, accelerated disease progression, greater symptom reporting, more frequent health service utilization, and increased mortality.

- Stress may influence the pathogenesis of physical disease by:
  - Causing negative emotional states (e.g. depression),
  - Direct effects on physiological processes,
  - Influencing behavioral patterns that increase disease risk

(Cohen, Janicki-Deverts, & Miller, 2007)
Stress & Human Health

- Psychological stress influences a wide range of physiological processes and disease states, with existing evidence supporting stress as a risk factor in:
  - Depression (Hammen, 2005; Kessler, 1997; Mazure, 1998; Monroe & Simons, 1991)
  - Cardiovascular disease (Krantz & McCeney, 2002; Rozanski, Blumenthal, & Kaplan, 1999)
  - HIV/AIDS (Cole & Kemeny, 2001; Pereira & Penedo, 2005)
  - Delayed wound healing (Kiecolt-Glaser et al., 2005)
  - Upper respiratory infections (Miller & Cohen, 2005)
  - Auto-immune diseases (Heijnen & Kavelaars, 2005)
  - Total mortality (Neilsen, Kristensen, Schnohr, & Gronbaek, 2008)
The Essence of Worry

He who fears suffering... is already suffering from what he fears

~Montaigne
Holmes and Rahe Scale

- To measure the amount of stress people have experienced, subjects check off each life event they have experienced during the past 12 months. The values of the check items are then totalled to give the stress score.
Holmes and Rahe Scale

- Death of spouse 100
- Divorce 73
- Separation 65
- Jail term 63
- Death of close family member 63
- Personal illness or injury 53
- Marriage 50
- Fired at work 47
- Marital reconciliation 45
- Retirement 45
Holmes and Rahe Scale

- Change in health of family member 44
- Pregnancy 40
- Sex difficulties 39
- Gain of new family member 39
- Business readjustment 38
- Change in financial state 38
- Death of close friend 37
- Change to a different line of work 36
- Change in number of arguments with spouse 35
- A large mortgage or loan 30
Holmes and Rahe Scale

- Foreclosure of mortgage or loan 30
- Change in responsibilities at work 29
- Son or daughter leaving home 29
- Trouble with in-laws 29
- Outstanding personal achievement 28
- Spouse begins or stops work 26
- Begin or end of school or college 26
- Change in living conditions 25
- Change in personal habits 24
- Trouble with boss 23
Holmes and Rahe Scale

- Change in work hours or conditions 20
- Change in school or college 20
- Change in recreation 19
- Change in church activities 19
- Change in social activities 18
- A moderate loan or mortgage 17
- Change in sleeping habits 16
- Change in number of family get-togethers 15
- Change in eating habits 15
Interpretation of Holmes and Rahe

- **< 150:** Really good shape

- **150-199:** A mild chance of some form of illness within a year; a 37% chance the impact will be with physical symptoms

- **200-299:** Moderate risk, with 50% chance of experiencing negative health change

- **>300:** In the group very likely to suffer serious physical/emotional illness
What is Mindfulness?

Mindfulness is non-evaluative and sustained moment-to-moment awareness of thoughts, physical sensations, and affective states.

(Grossman et al., 2004)
What is Mindfulness?

An attribute of consciousness, i.e. a state of being attentive to and aware of what is taking place in the present moment.

(Brown & Ryan, 2003)
What is Mindfulness?

- Mindfulness is about being fully aware of whatever is happening in the present moment, *without filters or the lens of judgment*.

Stahl & Goldstein, (2010). *A Mindfulness-Based Stress Reduction Workbook*
What is Mindfulness?

1. Awareness

2. Of present experience

3. With acceptance

Ronald Seigel, Psy.D.
What is Mindfulness?

Realizing the difference between actual pain (physical & emotional) and the suffering we create in our mind.
How is Mindfulness measured?

Mindful Attention Awareness Scale (MAAS), Brown et al, 2003.

1. I could be experiencing some emotion and not be conscious of it until some time later.

2. I break or spill things because of carelessness, not paying attention or thinking of something else.

3. I find it difficult to stay focused on what’s happening in the present.

4. I tend to walk quickly without paying attention to what I experience along the way.
Mindful Attention Awareness Scale (MAAS) cont...

5. I tend not to notice feelings of physical tension or discomfort.

6. I rush through activities without being really attentive to them.

7. I find myself preoccupied with the future or the past.

8. I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there.

9. I snack without being aware that I’m eating.

etc
Key Mindfulness Interventions

• Mindfulness-Based Stress Reduction, **MBSR** by Kabat-Zinn (1982)

• Mindfulness-Based Cognitive Therapy, **MBCT** by Segal, Williams & Teasdale, (2002)

• Acceptance and Commitment Therapy, **ACT** by Hayes et al., (1999), Bond and Flaxman

• Other adaptations
MBSR and MBCT

- Awareness of Habitual/Automatic Thought process
- Interrupt Automatic Thoughts
- Focus Less on Reacting to Thoughts
- Observe and Accept Without Judgment
What is the evidence?
Evidence

Mindfulness increases
- Positive mental states
- Self-regulated behaviours
- Heightened self-knowledge

(Brown et al 2003)

Self-awareness enhances
- Self understanding which allows choices in alignment with values and intrinsic motivations.

(Lyubomirsky et al 2005)
Changes in the Brain
Random Control Trial - Massachusetts Medical school
- Mindfulness-Based Stress Reduction

- N=16 ‘healthy’ participants vs 17 Control –
- **MRI scan:** Increase in grey matter density in left hippocampus, cortex, cerebellum etc, brain regions involved in *learning and memory, emotion regulation, self referential processing and perspective taking.*
- **Self-reports:** Increased on *Acting with awareness; Observing, Non judging.*

*Hotzel et al., (2011). Neuroimaging*
Mindfulness and cellular ageing

- Meditation may slow genetic ageing and enhance genetic repair
  - “...we propose that some forms of meditation may have salutary effects on telomere length by reducing cognitive stress and stress arousal and increasing positive states of mind and hormonal factors that may promote telomere maintenance. Aspects of this model are currently being tested in ongoing trials of mindfulness meditation.”

Evidence on Health (mental & physical)

- **Meta-analysis** (64 studies of which 20 high quality from 1995-2001) MBSR intervention (Pre-Post) (N=1605) (10 RCT)

- Clinical sample: chronic pain, cancer diagnoses, fibromyalgia, coronary artery disease, anxiety, depression, obesity, binge eating and stress.

- MBSR positive effects on a broad range of clinical and non-clinical problems: Medium strength effect size $d = 0.54$

Stress Reduction at Work

Random Control Trial

- 8-week Mindfulness training for health care employees

- Positive changes on all 5 scales:
  - Satisfaction with life
  - Burnout scale
  - Perceived stress
  - Brief symptom inventory
  - Self compassion

Many applications

- **Health** (preventative depression; lifestyles; etc)
- **Wellbeing** (resilience, stress reduction)
- **Cognitive skills** (attention, focus, memory)
- **Self-regulation of emotions**
- **Interpersonal skills** (communication, assertiveness)
- **Leadership** (decision-making, perspective)
- **Team development** (awareness of others’ needs)
County CHS pilot studies

- Two quality assurance studies
- Completed 6 sessions of **Mindfulness Group**
- **Stress** measured with *Perceived Stress Scale*
The Perceived Stress Scale (PSS)

- Most widely used psychological instrument for measuring the perception of stress

- It is a measure of the degree to which situations in one’s life are appraised as stressful

- Items were designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives
The Perceived Stress Scale (PSS)

• It has been used in prior studies assessing:
  o the stressfulness of situations
  o the effectiveness of stress-reducing interventions
  o the extent to which there are associations between psychological stress and various disorders
Pilot Study Results

- Pre-test: 25.0
- Post-test: 11.6

Participants experienced a significant decrease in perceived stress, $t = 4.743 \ p = .001$
Results: Pilot study
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Group Structure: Six Sessions

1. Thought/Mind/Body Interaction
2. Identifying Automatic Negative Thoughts
3. Breath Meditation
Group Structure: Six Sessions

4. Body Scan Meditation
5. Doing vs. Being
6. Radical Acceptance
Group 1: Thought/Mind/Body

- Stress Feedback Loop
- Mindfulness Meditation Check In (each session)
Group 1: Thought/Mind/Body

FEEDBACK LOOP

Event

Feeling:
physiological sensations
emotions

Thought
Group 2: Automatic Thoughts

- Identifying automatic negative thoughts

- Begin Using Thought Journal (each session)

CBT Vs. MBCT

- CBT: Identify/select negative thoughts and substitute or replace
- MBCT: Change relationship with all thoughts
Group 2: Automatic Thoughts

1. “Always/Never” Thinking
This happens when you think something that happened will “always” repeat itself, or that you’ll “never” get what you want. All-or-never words like *always*, *never*, *no one*, *every one*, *every time*, *everything* are usually wrong.

2. Focusing On The Negative
This occurs when your thoughts reflect only the bad in a situation and ignore any of the good things. Its getting 100 reviews back and all you can focus on are the 4 bad ones, forgetting about the 96 positive ones.

3. Fortune-telling
This is where you predict the worst possible outcome to any situation. When you go into a conversation assuming that the other person won’t like what you have to say, you change the way you communicate to usually make it come true.
Group 2: Automatic Thoughts

4. Mind Reading
- This happens when you believe that you know what other people are thinking, even though they haven’t told you directly. Taking someone’s silence as “They’re mad at me” is a perfect example of mind reading. They may just be thinking.

5. Thinking With Your Feelings
- This occurs when you believe your negative feelings without ever questioning them. Feelings are very complex and often based upon our past stories. Feelings are not always about truth. Feelings are your perception of certain situations.

6. Guilt Beating
- Also called shoulding on yourself, guilt beating is when you think words like should, must, ought, or have to to most situations. It’s healthier to say, “I’d like to be able to help them out” instead of “I should help them out”.
Group 2: Automatic Thoughts

7. Labeling
Whenever you attach a negative label like jerk, arrogant, irresponsible, or stupid to yourself or to someone else, you stop your ability to take a clear look at the situation.

8. Personalizing
This happens when you invest innocuous events with personal meaning. “My boss didn’t talk to me, so I must have done something wrong.” There are lots of reasons people do things. You never fully know why people do what they do.

9. Blaming
When you blame something or someone else for the problems in your life, you become a passive victim of circumstances and you make it very difficult to do anything to change your situation.
Thought Journal

Reviewed each group

Notice what you’re not accepting

<table>
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<tr>
<th>Situation</th>
<th>Feelings</th>
<th>Automatic Thoughts</th>
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<tbody>
<tr>
<td>When? Where? Who? What happened?</td>
<td>One-word summaries Rate 0-100</td>
<td>What you were thinking just before and during the unpleasant feeling</td>
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Group 3: Breath Meditation
Often first introduction to their mind
Breath Meditation
Dealing with the “Monkey Mind”
Group 3: Breath Meditation

- Wandering “Monkey” Mind
  - Thoughts of future (anticipatory anxiety)
  - Memories of the past (longing, guilt, anger)

- Return to the breath
  - Gently and without judgment
  - Practice “Letting Go”
  - You are mindful or you wouldn't notice
Breath Meditation

- Practice awareness of the present moment
Group 4: Body Scan Meditation
Often easier to recognize resistance to life in the body: tension, tightness, knots

Body Scan Meditation
Group 4: Body Scan

- Awareness of what is within our body and mind in any given moment, without trying

- Further practice in Letting Go
  - Letting go is necessary part of life
  - Start with forehead, eyes, shoulders, on down
  - If lost, start over
Group 5: Doing vs Being
“Don’t just sit there, Do something!”
“Don’t just do something, sit there.”

Sylvia Boorstein
Doing vs. Being

- The crucible of everyday life
- “Doing” mind sees things as other than it would like to be; dwells on discrepancy
- Self worth = Accomplishments
- Addicted to achievement, consumption, speed, and, yes, stress
Jail’s unique opportunity

No distracting technology toys

Not much to “do”

No way to hide

Doing vs. Being
Doing vs. Being

BEING

- Is not just “doing nothing”
- Is an inner experience
- Group meditation on Being & letting go of Doing
Radical Acceptance is the willingness to experience ourselves and our lives as it is.

Branch, Tara (2004) Radical Acceptance: Embracing your Life with the Heart of a Buddah
Group 6: Radical Acceptance

- **Mindfulness**
  - Observing without judgment
  - Detaching from thoughts

- **Radical Acceptance**
  - A step further
  - Observing + accepting = experiencing
  - Life is not fair
  - Bad things **do** happen to good people
Group 6: Radical Acceptance

- Difficult step for inmates/prisoners
- Accepting absolutely everything about ourselves and our lives
- Feel sorrows and pain without resisting
- Negativity Bias
  - Hard wired to hold onto bad memories more than good ones
  - Survival skill that leads to 21st century pain
Group 6: Radical Acceptance

Four Options for Painful Problems

1. Solve the Problem
2. Change Your Perception
3. Radically Accept It
4. Stay Miserable

Marsha Linehan/DBT
Group 6: Radical Acceptance

Turning the Mind

Use Daily Thought Journal

1. Notice what you’re not accepting
2. Make inner commitment to accept
3. Do it again

Marsha Linehan
The Guest House

This being human is a guest house.
   Every morning a new arrival.

A joy, a depression, a meanness,
Some momentary awareness
   comes as an unexpected visitor.

Welcome and entertain them all! . . .

The dark thought, the shame, the malice,
   meet them at the door laughing,
   and invite them in.

Be grateful for whoever comes,
   because each has been sent
   as a guide from beyond.

   -- Jalal Al-Din Rumi
“Mindfulness is not the answer for all life’s problems. Rather it is that all life’s problems can be seen more clearly through the lens of a clear mind”.

(Kabat-Zinn p25-26, 1991)
Mindfulness Groups: Analysis & Results

Three separate groups facilitated using the 6-session mindfulness
Pre-test, post-test, & **30-day follow-up**: Group 1
Group 1 Results

- Pre-test: 25.4
- Post-test: 16.0
- 1 month follow-up: 15.4

Participants experienced a significant decrease in perceived stress, and were on average able to maintain these gains post-treatment.
Pre-test, post-test, & 30-day follow-up: Group 2
Group 2 Results

- Pre-test: 27.1
- Post-test: 16.7
- 1 month follow-up: 18.1

Participants experienced a significant decrease in perceived stress, and were on average able to maintain these gains post-treatment.
Pre-test, post-test, & 30-day follow-up: Group 3
Group 3 Results

- Pre-test: 27.2
- Post-test: 17.3
- 1 month follow-up: 14.8

Participants experienced a significant decrease in perceived stress, and were on average able to maintain these gains post-treatment.
Attitudes of Mindfulness

- Beginner’s Mind
- Nonjudgment
- Letting Be
- Self Compassion
Throughout the Day

- S = Stop
- T = Take a Breath
- O = Observe
- P = Proceed
“Mindfulness meditation doesn't change life. Life remains as fragile and unpredictable as ever...
...mindfulness meditation changes the heart's capacity to accept life as it is”.

*Sylvia Boorstein, PhD, LCSW*