Mindfulness Over Matter: Integrating Mindfulness into the Treatment of Adolescent Depression

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Jill M. Emanuel, Ph.D.
Amanda G. Mintzer, Psy.D.
Child Mind Institute

Mark Shuldiner, M.S.
Nassau University Medical Center

Lindsey Giller, M.S.
Jacalyn Dillen, M.S.
Child Mind Institute

We have nothing to disclose.
Mindfulness Exercise!!

- Using five senses to experience the kiss
  - Touch, sound, sight, smell, then taste
- Observe and describe instead of judging
- Stay in the present moment
- Acknowledge non-related thoughts and let them go by
- Be fully in this present moment

What is Mindfulness?

What is Mindfulness?

What is Mindfulness?

Definitional Confusion

- Meditation - means of transforming the mind
  - Guided
  - Mantra (e.g., Transcendental)
  - Mindfulness Meditation
    - samatha - mindfulness of breathing
    - vipassana - insight meditation
- Mindfulness - secular definition
  - Paying attention in a particular way, on purpose, in the present moment, and non-judgmentally
  - Not equivalent to relaxation

Mindfulness
Mindfulness

Mind Full, or Mindful?

Key Components of Mindfulness

- Goal is freedom from suffering - as mindfulness deepens wisdom and compassion arise (Germer & Siegel, 2012)
- Bishop et al. (2004) model of mindfulness
  - The first component involves the self-regulation of attention so that it is maintained on immediate experience, thereby allowing for increased recognition of mental events in the present moment.
  - The second component involves adopting a particular orientation towards one's experience that is characterized by curiosity, openness, and acceptance.

History of Mindfulness as an Intervention

- Advent of Mindfulness in modern psychotherapy
- Mindfulness Based Stress Reduction (MBSR)
- Mindfulness Based Cognitive Therapy (MBCT)
- Dialectical Behavior Therapy with adults and adolescents (DBT)
- Acceptance and Commitment Therapy (ACT)

Advent of Mindfulness in Modern Psychotherapy

- 1970's: Meditative practices (Zen Buddhism, Vipassana, Yoga) were introduced to therapeutic settings as strategies for self-regulation
- "Consciousness disciplines" are based on assumptions about human nature which fundamentally differ from Western psychology paradigm (Walsh, 1990)
- 1980's: Increasing numbers of Westerners were trained in MM without cultural, ideological, or religious overtones

Advent of Mindfulness in Modern Psychotherapy

- Became the focus of systematic research efforts
  - Primarily Qualitative
  - Moving towards small randomized trials and meta-analysis
  - Robust effect sizes for improving anxiety and mood symptoms (Hoffman et al., 2010)

Mindfulness-Based Stress Reduction

- In 1979, Jon Kabat-Zinn, Ph.D, a molecular biologist, founded the MBSR Program at the University of Massachusetts
- Originally developed as a vehicle for effective training of medical patients in mindfulness meditation (MM)
- Designed as a service for medical patients who did not fully respond to traditional medical treatments
- Second goal of MBSR program was to offer training programs so that MM could be implemented in a variety of settings
- 250 hospitals around the country and world have MBSR programs as well as schools, prisons, community centers
Mindfulness-Based Stress Reduction

- Main Objectives:
  - Cultivating mindfulness through formal practices (yoga, body scans, sitting, standing, walking meditations)
  - Helping patients to assume a degree of responsibility for their own well-being
  - Integrating skills into a life-long practice to confront physical symptoms and difficult emotional situations
  - Integrating mindfulness into daily activities

Mindfulness-Based Stress Reduction

- MBSR provides significant psychosocial benefits for a variety of populations
  - Cancer and chronic disease (Bohlmeijer et al., 2010)
  - Anxiety and depression (Hoffman et al., 2010)
  - Nonclinical samples of stress (Chiesa & Serretti, 2009)
  - Health care professionals (Irving et al., 2009)
- Meets APA standards of "well-established" and empirically supported treatment

Mindfulness-Based Cognitive Therapy (MBCT)

- Main Objectives:
  - Intensive training in mindfulness to increase awareness of moment-to-moment experiencing
  - Teach the ability to recognize depressive mind states (e.g. patterns of ruminative, negative thoughts), feelings, and body sensations, and shift one’s perspective to acknowledgment and acceptance
  - Learn to choose a skilful response to unwanted thoughts, feelings, and sensations to decrease likelihood of relapse

Mindfulness-Based Cognitive Therapy (MBCT)

- Time commitment:
  - Initial orientation
  - 8 week course, 2 hours weekly in group format
  - Homework between sessions
  - Up to 4 group reinforcement sessions 4-12 months post-treatment
- Requires clinician have their own mindfulness practice and do intensive training to learn the treatment
- Recognized as evidence-based practice
- Being adapted for treatment of adolescent depression
Dialectical Behavior Therapy for Adolescents

- Cognitive-behavioral treatment originally developed to treat chronically suicidal individuals suffering from BPD - adapted for treatment of suicidal depressed adolescents
- Redefines BPD as dysfunction in the emotion regulation system.
- Blends behavior therapy and principles of Zen Buddhism
- 26-week manualized behavioral treatment that includes individual therapy and multi-family skills training group in an outpatient setting
- Skills grouped into five modules: mindfulness, interpersonal effectiveness, emotion regulation, distress tolerance, and waking the middle path

The Role of Mindfulness in DBT

- Plays a prominent role in the treatment both as set of skills to teach and a stance for the therapist
- Based on Zen principles of awareness and being open to the present moment
- Teach patients to respond to emotional dysregulation by "taking hold of (one's) mind" learned through regular mindfulness practice in skills group
- Mindfulness skills
  - WHAT - Observe, Describe, Participate
  - HOW - Nonjudgmental, One-Mindfully, Effectiveness

Acceptance and Commitment Therapy (ACT)

- Based on Relational Frame Theory (RFT)
  - Tools we use to solve problems → traps that create suffering
- Basic Concepts:
  - Psychological pain is normal, everyone has it
  - Cannot deliberately remove psychological pain; can take steps to lessen its impact
  - Pain and suffering are different states
  - Accepting pain decreases suffering
  - Daily pain diary
  - Mindfulness exercises throughout

Hayes, Steven C., Strosahl, Kirk D., Wilson, Kelly G. (1999)

Acceptance and Commitment Therapy (ACT)

- Acceptance:
  - Attempting to get rid of pain only "amplifies it, entangles you further in it, and transforms it into something traumatic" (Hayes & Smith, 2005)
  - Does not mean accepting self-defeat
  - "Taking completely, in the moment, without defense" (Hayes, 2005)
  - Acceptance = Willingness = the opposite of effortful control
  - Respond actively to feelings by "being with" them, respond actively to thoughts by "being with" them
  - Adopting a loving attitude toward self and history

Mindfulness in ACT

- Set aside time
- The goal isn't necessarily to be relaxed, but to be aware of whatever you are experiencing, even if it is the opposite of relaxation, without avoidance
- Getting in touch with own experiences, moment to moment, in an accepting way

Commitment:
- "Are you willing to experience experiences now, fully and without defense, as they are, not as they say they are, and actually do what takes you in the direction of your chosen values at this time and in this situation?" (Hayes, 2005)

Commitment to changing behavior
- Setting goals
- Taking responsibility for larger patterns
- Remaining mindful of your values
The Explosion of Research on Mindfulness

- Hofmann et al. (2010) - improved anxiety and mood symptoms
- Höfle et al. (2011) - neurological changes
- Grossman et al. (2007) - fibromyalgia
- Semple & Lee (2011) - anxiety in children
- Ledesma & Kurzana (2009) - cancer
- Williams et al. (2006) - bipolar disorder
- Ropclantski et al. (2010) - smoking cessation
- Chadwick et al. (2005) - psychosis
- Baer et al. (2005) - eating disorders
- Creswell et al. (2009) - HIV
- Williams et al. (2006) - prevention of recurrence of suicidal behavior

Evidence Base for Mindfulness Interventions for Depression

MBCT
- Teasdale et al., (2000) found that for patients with recurrent Major Depression who had experienced 3+ episodes, MBCT approximately halved rates of relapse and recurrence over the follow-up period compared with patients administered TAU
- First study to demonstrate that a group-based psychological intervention, initially administered in the recovered state, can significantly reduce risk of future relapse/recurrence in patients with recurrent major depression

Meta-Analyses of Mindfulness Based Treatment (MBT)
- Hofmann (2010) compared pre-post effect sizes from MBCT and MBSR on depression and anxiety symptoms in 39 studies
  - MBT in patients with anxiety disorders and depression was associated with large effect sizes (p = .87) for improving anxiety and (p < .95) for improving depression
  - Among individuals with disorders other than anxiety disorders or depression, but who had elevated levels of anxiety and depression symptoms, MBT was moderately strong (.67 and .52 respectively) but not significantly greater than among those with relatively lower pre-treatment levels of anxiety and depression (.53 and .50)

Evidence Base for Mindfulness Interventions for Depression

- Barnhofer et al., (2009) compared immediate effects of MBCT to TAU in patients with a history of severe depression and suicidal ideation

Beck Depression Inventory-II

<table>
<thead>
<tr>
<th></th>
<th>PRE</th>
<th>POST</th>
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<tbody>
<tr>
<td>MBCT</td>
<td>29.36</td>
<td>17.62</td>
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<tr>
<td>TAU</td>
<td>31.92</td>
<td>26.86</td>
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</table>

Change in Diagnostic Status (assessed by SCID)

MBCT: 70% no longer met criteria for full episode of MD
TAU: 10% no longer met criteria for full episode of MD
Evidence Base for Mindfulness Interventions for Depression with Children and Adolescents

- Growing evidence of acceptability and efficacy
- MBCT: recently extended and adapted for use with school-based and community samples of children and adolescents (Ames et al., 2014)
- Anxiety: Semple et al., (2010)
- Children with executive function difficulties (Flook et al., 2010)
- Physical pain (Petter et al., 2013)

Evidence Base for Mindfulness Interventions for Depressed Adolescents

- Ames et al., (2014) found reduction in depressive symptoms, positive change in mindfulness skills, quality of life, and rumination for female adolescents (N = 7; ages 12-18) with treatment refractory depression using an 8-week protocol based on adult MBCT program
- Designed to make mindfulness accessible to youngsters through simple sensory experiences and direct attention
- Provides preliminary evidence for MBCT in adolescent depression

Evidence Base for Mindfulness Interventions for Depressed Adolescents

- Raes et al., (2014) found that school-based mindfulness programs may help to reduce and prevent depression in adolescents
- Mindfulness intervention was a reported mix of MBSR and MBCT
- 8-week RCT with 408 students showed that students in 100 minute weekly mindfulness group (n=201) showed significantly greater reduction (and clinically significant change) in depression symptoms compared with controls at 8 weeks and 6 month followup

Mindfulness Exercise!!

Rationale for Mindfulness Based Interventions in Adolescent Depression

- Limited but compelling evidence for mindfulness as a primary intervention or treatment component for depression
- Proposed mechanisms of change of mindfulness based interventions (Hölzel et al., 2011)
  - Attention Regulation
  - Body awareness
  - Emotion regulation
  - Reappraisal
  - Exposure
  - Flexible sense of self
- Neurobiological impact of MIM on brain structures and regions (e.g. hippocampus, limbic system) that are affected in individuals with depression (Hilt et al., 2012)
How to Integrate Mindfulness with Depressed Adolescents

- Orienting to mindfulness - collaboration
  - Repeat often
- Integrate mindfulness exercise into each session
  - Beginning vs. and
- Tailor exercises to the individual
  - Start with easy and build to more challenging
  - Varying vs. the same
  - Finding the right fit
  - Elicit feedback after each exercise - "What are your observations?"
- Nonjudgmental language
  - Practice attending to thoughts/feelings in present

How to Integrate Mindfulness with Depressed Adolescents

- Connect exercises to behavioral activation
- Use to elicit negative thoughts and feelings
- Have adolescent come up with an idea for mindfulness and lead the exercise
- Assign mindfulness for practice
  - Determine frequency and type in advance
  - Informal practice (e.g., washing the dishes)
- Engage parents in mindfulness practice
  - Have teen lead
  - Assign family mindfulness homework
- Element of surprise
- Useful for building therapeutic relationship and increasing comfort levels in family sessions

Examples of mindfulness exercises with adolescents

- **Infinite number of possibilities - use your creativity and the internet!**
- Be creative AND keep it simple
- Go to examples:
  - Bubbles
  - Mindful eating
  - Listening to music - all types
  - Listen to sounds
  - Soundword ball
  - Drawing - dominant or nondominant hand
  - Yoga exercises, stretching, dancing
  - Mindful walking
  - Relaxation exercises, imagery, visualization

Clinician Mindfulness Practice

- "Mindfulness is not just a technique, it's a lifelong endeavor to embody awareness, compassion, and ethical behavior in one's life." (Pollack, 2015)
- "The teaching has to come out of one's own practice. There is simply no other way." - Jon Kabat-Zinn
- Build regular/daily mindfulness practice into your life
  - Formal vs informal
- Consider a training or retreat
- The level of training may depend on how much we want to integrate mindfulness into clinical practice
- Mindfulness with other clinicians

Ten Steps to Practicing Mindfulness

1) Create time and space - regular time, quiet place
2) Set a timer - Start with 5 minutes and build
3) Comfortable sitting position - chair, floor
4) Body position
5) Take deep breaths
6) Direct attention to the breath
7) Maintain attention to the breath
8) Repeat 6 and 7
9) Be kind to yourself
10) Prepare for a soft landing

**Courtesy of the Garrison Institute, Garrison, NY**

Case Presentation

- Lizzie
  - 14 years old
  - Major Depressive Disorder, Moderate
  - Generalized Anxiety Disorder
  - Presented with depressed mood, history of suicidal ideation (denied intent and plan)
  - Conflictsual relationship with parents
  - 10 mg of Lexapro
  - Only child lives with biological parents
  - Strong genetic loading for depression on both sides of family
Case Presentation: Lizzie*

- Treatment history:
  - Summer 2013: Psychiatrist for medication and bi-weekly individual therapy
  - Evaluation at large clinic in NYC and referred to DBT program
  - Evaluation at CMI in January 2015
    - CDI-2; Total T Score - 75 (very elevated)
    - CDI-2 Parent; Total T Score - 87 (very elevated)
    - CDI-2 Parent; Total T-Score - 68 (elevated)
- Current treatment:
  - Weekly individual DBT therapy
  - Weekly DBT multiform skills group with both parents

Lizzie’s* Symptoms

Depression Symptoms:
- depressed mood
- anhedonia
- socially withdrawn
- irritable
- trouble falling asleep
- fatigue
- lack of energy
- indecision
- agitation

Lizzie’s* Treatment

- Weekly Individual DBT Treatment
- Assessment of with the Mindful Attention Awareness Scale (MAAS-A) – Adolescent version
- Added mindfulness exercise in the beginning of each session
- Active and calm exercises
- Daily mindfulness HW and tracking sheet

<table>
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<tr>
<th>Depression measure</th>
<th>CDI January</th>
<th>CDI March</th>
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<tbody>
<tr>
<td>MAAS-A</td>
<td></td>
<td></td>
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<tr>
<td>T = 75 (very elevated)</td>
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<tr>
<td>T = 69 (raised)</td>
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<tr>
<th>Mindfulness measure</th>
<th>MAAS-A February</th>
<th>MAAS-A March</th>
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<tr>
<td></td>
<td>X = 3.97</td>
<td>X = 3.07</td>
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Higher scores reflect higher dispositional mindfulness

Case Presentation: Adam*

- Treatment:
  - Parents wanted to try CBT alone first before considering antidepressant (SSRI)
  - Evaluation at CMI in January 2015
    - CDI-2; Total T Score = 84
    - Emotional problems (T=72), Negative mood (T=69), Negative self-esteem (T=70)
- Current treatment:
  - Weekly Individual CBT (TADS manual initiated)
  - Behavioral activation, mindfulness
  - Parent sessions PRN
  - Monitoring by psychiatrist although not prescribing meds

Adam’s* Symptoms

Depression Symptoms:
- severe irritability
- anhedonia
- withdrawal from certain friends
- depressed mood
- trouble falling asleep
- lack of energy
- difficulty concentrating
- hyperfocus on videogames

- passive SI
- feelings of worthlessness (esp. with father)
- grades dropping
- increased agitation
- increased appetite
- flat affect or tearfulness in session
**Adam's Treatment**
- Mindfulness exercise in the beginning of each session with CBT and behavioral activation
- Mixture of active and quiet exercises
- Assigned mood diary and daily breathing
- Alliance established but noncompliant with homework
- Depressive symptoms increased - need for SSRI

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<tr>
<th>Depression Measure</th>
<th>CBER January</th>
<th>CBER After</th>
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<tbody>
<tr>
<td></td>
<td>1 = &lt;6 (improvement)</td>
<td>2 = (1 - highly elevating)</td>
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<tr>
<td>Anxiety Measure</td>
<td>DASS-A February</td>
<td>DASS-A April</td>
</tr>
<tr>
<td></td>
<td>2 = 3.18</td>
<td>3 = 5.34</td>
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Higher scores reflect higher depression and anxiety.

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**Mindfulness-Based Apps**
- Meditation:
  - Stop Breathe Think
  - Take a Break
  - Smiling Mind
  - Headspace
  - Pacifica
- Sleep:
  - Sleep Genius
- Depression:
  - MoodKit
  - Mood247

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**STOP, BREATHE & THINK**

**PHYSICALLY...**

**I'M MENTALLY...**

**YOUR RESULTS**

*Scores of how you are doing overall and broken down into further information for you to track your progress.*
Questions and Discussion

but you can't stop the waves

but you can learn to surf

Contact info –
Jill Emanuele, PhD
jill.emanuele@childmind.org