

Transforming Depression: Mindfulness- Based Cognitive Therapy for TBI Results from a Randomized Controlled Trial

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Disclosures

- The research team received a research grant from the Ontario Neurotrauma Foundation
- Melissa Felteau has no conflicts to report
- Dr Rolf Gainer has business relationships with Brookhaven Hospital, the Neurologic Institute of Ontario, Community NeuroRehab & Rehabilitation Institutes of America



Learning Objectives

1. To define mindfulness in the clinical setting.
2. To recognize the efficacy of MBCT-TBI in reducing depression symptoms.
3. To recognize the 5 ways MBCT was adapted for the TBI population.

Research Team

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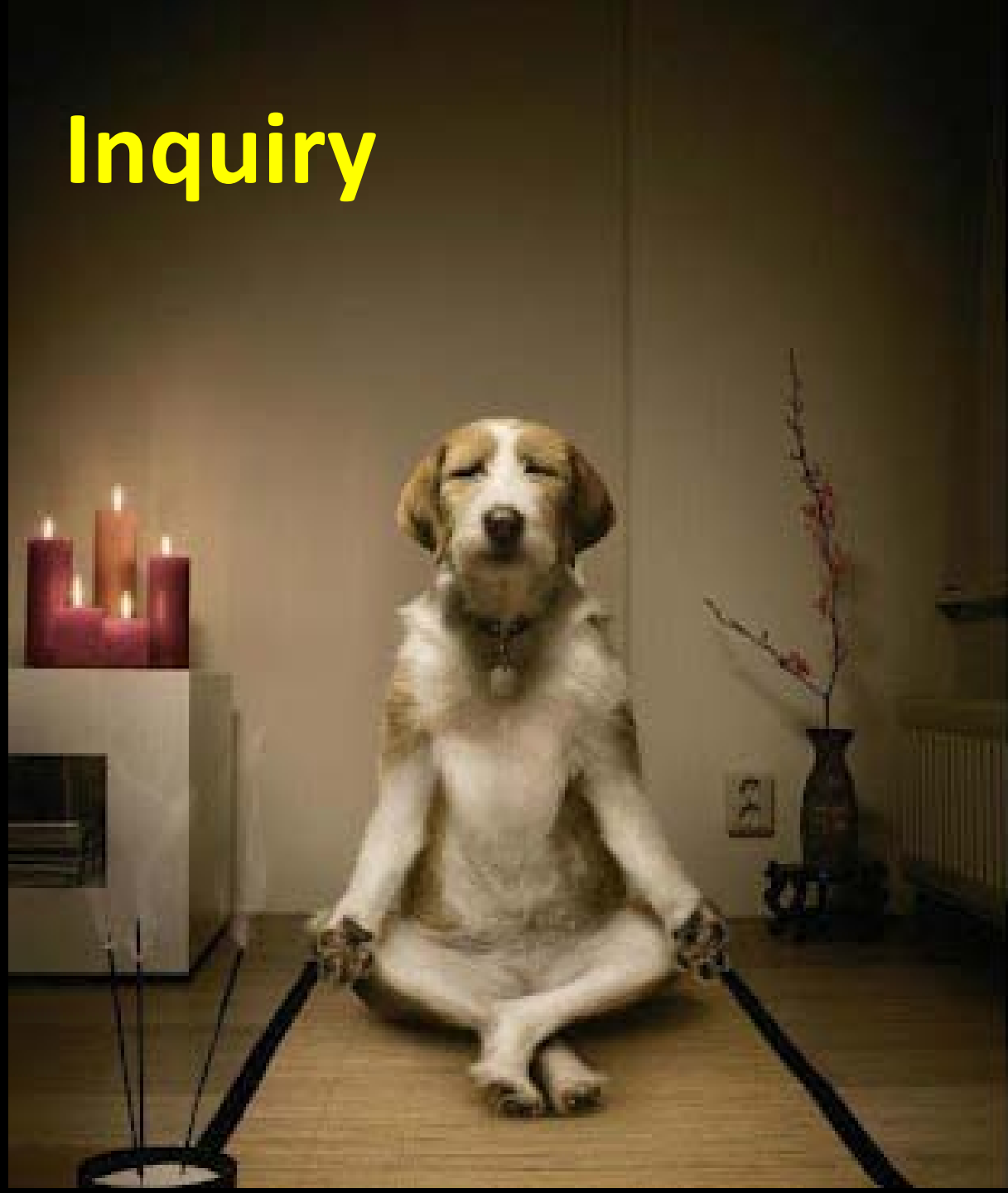
Evelyn Tan, MA, Speech Pathologist

*** We thank all the participants of this research study**



Inquiry

- Personal experience?
- Therapy practice?
- Client benefit?





We have 60,000 – 80,000
thoughts per day

That's one thought every
1.2 seconds!

Deepak Chopra, 2011



Mindfulness

- Witnessing constant flow of thoughts, judgments, daydreams, reminiscing, anticipations, emotions, sensations & **letting go**
- Emptiness training (Shunyata) watching mind phenomena arise & pass away through **attention & concentration**



Mindfulness is

**The awareness
that arises**

**By paying attention
on purpose**

**In the present
moment**

Non-judgmentally

Jon Kabat Zinn, 2013



**“Simple but not so
easy”**





Mindfulness-Based Cognitive Therapy

Prevalence of Depression

A close-up photograph of a person's face, focusing on the eyes and forehead. A piece of white paper is taped to the forehead, with the words "OUT OF ORDER!" written in black marker. The person has light blue eyes and blonde hair. The background is dark.

OUT OF
ORDER!

**Depression most common Axis 1
disorder following TBI
44 – 50% incidence post-TBI
depression** (Van Reekum, 1996, 2000)

**Often co-morbid with anxiety
Best predictor of psychosocial
adjustment, even 10 yrs post injury**
(Owensworth & Fleming, 2005; Draper, Ponsford & Schonberger, 2007)



Psycho-social Correlates of Post-TBI Depression

- Poorer rehab outcomes
- Greater functional disability
- Less employment potential
- Elevated divorce rates
- Greater caregiver burden
- Poorer subjective well-being
- Poorer quality of life
- Increased rates of suicidal ideation

(brainline.org)



**Can MBCT help people
manage the symptoms of
depression?**

The practice of meditation...

- Teaches us how to see thoughts with **non-judgment & compassion**



Teaching one
to sit with &
relate
differently



Decentering

A silhouette of a person stands with their arms raised in a 'V' shape against a dramatic sky at sunset or sunrise. The sky transitions from a deep blue at the top to a bright orange and yellow near the horizon, with wispy clouds catching the low light. The person's silhouette is dark and centered in the upper half of the frame.

- Helping to step away from unhelpful patterns of thinking associated with chronic sadness & depression

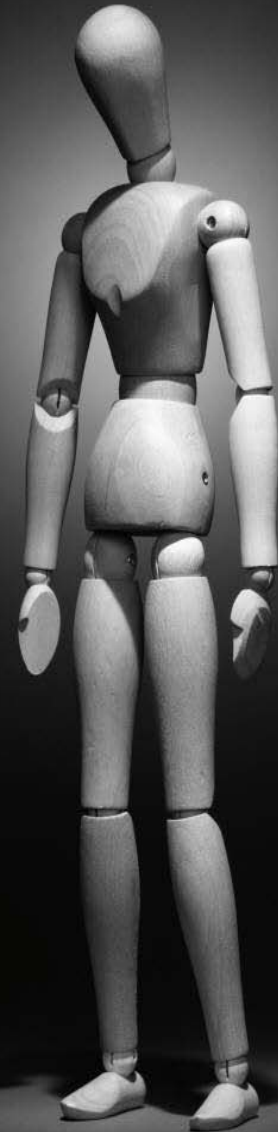
Slowing down to see own thoughts



Befriending difficult moments...



**Addresses
apathy**



**Helps to cope
with loss of self**



Helping restore the self



**Without the need to distract
avoid
cover-up**



Methodology

Mindfulness-Based Cognitive Therapy-TBI:



**10 week psycho-
educational group**







**Intensive training in
Mindfulness
meditation**



**To apply to challenges
of their daily lives**

Based on Segal, Williams, Teasdale, 2002
TBI Adaptation Felteau, 2010

Participants learn to:

-  Reduce reactivity
-  Decenter from ruminative thinking
-  'Sit with' + - +/- thoughts, emotions, physical sensations
-  Prevent further depressive relapse



Practices include:

body scans,
sitting meditation,
walking meditation,
3-minute breathing spaces,
mindful movement,
process of inquiry and dialogue



Brain on Meditation

Hippocampus ↑ learning & memory

Cingulate ↑ self-awareness, compassion & introspection

Amygdala ↓ anxiety & stress

Hoelzel et al., (2011). *Mindfulness practice leads to increases in regional brain gray matter density*. Psychiatry Research: Neuroimaging. 191;1:36-43. See also Davidson et al., 2003-2012



Multi-site RCT of MBCT-TBI

3 centers: Toronto, Ottawa, Thunder Bay Canada

Blinded, block randomization, of 120 participants

Controls were crossed-over

5 treatment waves Sept 2010 – June 2012

Kary J. Luffin

Outcomes Attained

RCT of MBCT – TBI Results

Our RCT
found a
**statistically
significant
26%
reduction
in
overall depression
symptoms** (BDI II)



RCT Results - Mindfulness

An improvement
in
depression scores
showed a
correlation
to
increases in
mindfulness scores



Adaptations



Gibbons, Felteau, et al., Training Clinicians to Deliver a Mindfulness Intervention, *Mindfulness*, 2012;3(4)

MBCT –TBI has been modified by:

- Time
- Program Planning/Learning Conditions
- Learning Accommodations
- Use of Critical Reflection



Felteau, Marshall & Gainer. The role of clinician training in MBCT for TBI. *Brain Injury*, 2012(26)4-5.

Time Accommodations

For attention, concentration, memory & fatigue:

- Shorter classes
- Shorter meditations
i.e. 30 min
- Shorter home practice

MBCT-TBI Learning Conditions



Trust
Non-judgment
Compassion



Safety
Confidentiality



Authenticity
Acceptance
Support

Felteau, 2010. *Understanding the Transformative Dimensions of Mindfulness Therapy*. Unpublished manuscript.

Learning Accommodations

- Simplified language
- Repetition
- Visual aids
- Flexible pacing
- Experiential learning
- Concrete examples
- Use of symbol, metaphor, poetry



Transfer of Learning is Key



- **Fostering critical reflection is key**
- **Use of New Learning Forms every session**



Please tell us about any new learning you have experienced or any new questions that have occurred to you as a result of this course.

**Self-reflective
questions asked at
end of each
session
Answers recorded
to make learning
explicit**

Please consider sharing this information with your MBCT facilitators to let them know what you're thinking and feeling by handing in the top copy and keeping the bottom for your records.

Fostering Reflection & Insight

Embodiment, not Methodology

- The teacher embodies the heart of inquiry; the possibility of encountering, being with and befriending experiences with
 - Loving kindness
 - Compassion
 - Sympathetic joy
 - Equanimity



Compassion

- The capacity for self-empathy is critical to recovery, thus being able to cultivate compassion for oneself acts as an **antidote to debilitating self-criticism and self-contempt.**

Bates, 2005

- Compassion invites us to soften our negative reactions & encourages a **tolerance for**
- **imperfection and failure.**

Felteau, 2010

- **Military**
- **Stroke**
- **MS**
- **Parkinson's**
- **Alzheimer's**
- **Cancer**
- **Other**

**Transferability to
Other Populations**



Transferability of MBCT

- Consider **unique characteristics** of disability
- But **avoid** focus on disability
- Foster **learning conditions** suitable for population
- **Accommodate** learning styles
- **Integrate** disability through **fostering self-compassion**

Implementation

- Publish MBCT-TBI curriculum in 2015
- Webinar in Winter 2015 see www.onf.org
- Offer MBCT-TBI teacher training programs
- Ongoing clinical supervision & consultation

Resources

1. Gibbons C, Felteau M, Mazmanian D, Cullen N, Marshall S, Maxwell H, Dubois S, Weaver B, Bedard M. Results from a healthy group trial of a modified mindfulness-based cognitive therapy intervention. *Mindfulness*, 2014(5:3) 232-237.
2. Bedard M, Felteau M, Marshall S, Cullen N, Gibbon C, Dubois S, Maxwell H, Mazmanian D, Weaver B, Rees L, Gainer R, Klein R, Moustgaard A. Mindfulness-based cognitive therapy reduces depression symptoms in people with a traumatic brain injury: Results from a randomized control trial. *Journal of Head Trauma and Rehabilitation*, 2013;28(6).
3. Gibbons C, Felteau M, Cullen N, Marshall S, Dubois S, Maxwell H, Mazmanian D, Weaver B, Rees L, Gainer R, Klein R, Moustgaard A, Bedard M. Training Clinicians to Deliver a Mindfulness Intervention. *Mindfulness*, 2012;3(4).

Resources

4. Bedard M, Felteau M, Marshall S, Weaver B, Dubois S, Gibbons C, Maxwell H, Klein R. Mindfulness-Based Cognitive Therapy: Benefits in reducing depression following a traumatic brain injury. *Advances in Mind-Body Medicine*, 2012;26(1):14-20.
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6. Felteau M, Bedard M, Marshall S, Dubois S, Weaver B, Gibbons C, et al., Mindfulness-based cognitive therapy reduces depression symptoms in people with traumatic brain injury: Results from a pilot study. *Brain Injury*, 22(1)67.
7. Moustgaard A, Bedard M, Felteau M. Mindfulness-Based Cognitive Therapy (MBCT) for individuals who had a stroke: Application of a novel intervention. *Journal of Cognitive Rehabilitation*, 2007(1)4-10.

Resources

8. Bedard M, Felteau M, Gibbons C, Klein R, Mazmanian D, Fedyk K, Mack G. A mindfulness-based intervention to improve quality of life among individuals who sustained traumatic brain injuries: One-year follow-up. *Journal of Cognitive Rehabilitation*. 2005.
9. Bedard M, Felteau M, Mazmanian D, Fedyk K, Klein R, Richardson J, Parkinson W et al., Pilot evaluation of a mindfulness-based intervention to improve quality of life among individuals who sustained traumatic brain injuries. *Disability Rehabilitation*. 2003;25(13);722-31.
10. Felteau M. Know thyself, heal thyself: Novel research using holistic techniques. In S. Abbey (Ed.), *Ways of knowing in and through the body: Diverse perspectives on embodiment*. (pp.121-125). Welland:Soleil Publishing Inc.

A close-up photograph of a person's hands holding a Tibetan singing bowl and its mallet. The person is wearing a red robe, and the background is dark. The hands are positioned to play the bowl, with the mallet resting on a small cloth pouch.

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This presentation may be downloaded at:

www.traumaticbraininjury.net

Under “Resources”

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