Mindfulness Training and Teacher Health, Well-Being and Classroom Behavior

Mindfulness and Total Worker Health Conference
Fall 2015

Robert W. Roeser, PhD

DEPARTMENT OF PSYCHOLOGY
PORTLAND STATE UNIVERSITY
Mindfulness Training for Teachers and Students

Department of Psychology
Culture and Contemplation in Education Laboratory
Portland State University

**PHASE I:**
Teacher Mindfulness Program Development
Feasibility, Efficacy and Process Studies of Mindfulness Program Effects on Teachers

- Teacher Study 1: Canada
- Teacher Study 2: USA
- Special Ed Teacher & Parent Study 3
- Teacher Program Process Study 4

**PHASE II:**
Teacher and Student Program Coordination
Efficacy Studies of Mindfulness Program Effects on Teachers, Classrooms, and Students

- Early Childhood Teachers+Students Study 5
- Middle School Teachers Study 6

**Receiving Care**
**Self Care**
**Extending Care**
Widespread
“Empathy-Fatigue” in
Human Service Professions

• Social workers
• Hospice workers
• Nurses
• Psychotherapists
• Childcare Workers
• Emergency Responders
• Teachers
Structural Stressors in Human Service Professions

• HSP are forms of emotional work requiring self-control and emotion regulation skills

• HSP are inherently social work requiring the management and maintenance of relationships over time

• HSP are inherently uncertain requiring mental flexibility, problem-solving, and attunement to others “on the fly”

• Human service professionals may benefit from skills and strategies that help them to meet the social-emotional demands of their work, while also practicing self-care.

• Human service professionals are often not given opportunities to developing stress-management and resilience skills and strategies in professional schools or professional development settings
Caring for Caregivers

First,

Then...

High quality employee wellness programs yield a $3:1$ rate of return on investment in people regarding health care and $2:1$ on absenteeism costs.\(^1\)

Mindfulness becoming more common approach to employee wellness.

Supporting teachers succeed in part by cultivating their **Self-Care Skills**
Shinzen Young

Three-fold attentional skillset consisting of concentration, clarity and equanimity that affords us insight into the nature of self, others & reality (inner, other, outer)

Concentration:
The ability to attend to what is deemed relevant at a given time and to let go of what is deemed irrelevant.

Clarity:
The ability to experience something just as it is. This requires the ability to note and label the components of experience as they rise moment to moment.

Equanimity:
The willingness to experience something just as it is; taking a matter-of-fact attitude to moment-to-moment experience such that we neither suppress or fixate on what is arising each moment.

Extending Care
Receiving Care
Self Care
Extending Care
Mindfulness-Based Skills hypothesized to Reduce Stress and Distress and Improve Health and Wellbeing

**Greater:**
- Mindful Awareness
- Self-Compassion
- Emotion Regulation
- Forgiveness

**Lesser:**
- Rumination
- Self-Criticism
- Emotional Reactivity
- Unforgiveness
Manualized Program

11 session after-work program

Most sessions are 2 or 2.5 hours; total of 28-36 contact hours

2 Saturday retreats (5-6 hours)

Program content:

- 60% Mindfulness-based Stress Reduction
- 30% Mindfulness and Emotion Theory
- 10% Mindfulness and Forgiveness
Personal Mindfulness Practices

- Body Scan
- Mindful Stretching
- Breath Practice
- Insight Practice
PHASE I RESEARCH STUDIES

RCT
Efficacy Studies

Canada
N = 57
Elementary & Secondary Teachers
Study 1
2009

USA
N = 56
Elementary & Secondary Teachers
Study 2
2010

Randomization

Treatment Group

Control Group

T1 March

T2 June

T3 Sept
Study Samples

- **Canada**
  - Study 1
  - N = 57
  - Elementary & Secondary Teachers
  - 2009

- **USA**
  - Study 2
  - N = 56
  - Elementary & Secondary Teachers
  - 2010

**Key Characteristics**

- **Self-Nominated (motivated) Samples**
- **90% Female**
- **85% European-American/Canadians Teachers**
- **Average experience in teaching = 15 years**
  - (Range 1-35, Mode = 6, Media = 13)
Attendance Rates (11 total)

- Participant Report: 95%
- Instructor Report: 91%

Program Completion Rates (=> 9 sessions)

- USA Study: 93%
- Canada Study: 90%

Session Attendance Rates

- (11 total)
Home Practice Minutes from Diaries (Teacher Self-report)

MT Instructor assigns 15 minutes of home practice per day.

Canada
N = 57
Elementary & Secondary Teachers
Study 1
2009

USA
N = 56
Elementary & Secondary Teachers
Study 2
2010

Average Daily Minutes

USA Study

M = 15.38
(SD = 5.00)

M = 14.96
(SD = 5.25)

For newer studies, we created an i-App and collect this data in real-time through use of the devices.
Mindfulness Training Reduces Job Stress & Burnout (ANCOVAs)
Perceived Job Stress
(7 items, Alphas > .70 at T1, T2, T3)

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- Trying to complete reports and paperwork on time causes me a lot of stress at work.
- Having to participate in school activities outside of normal working hours is stressful for me.
- I find dealing with student discipline problems puts a lot of stress on me.
- Trying to provide a good education in an atmosphere of decreasing financial support is very stressful.
- There is a lot of stress at work just keeping up with changing professional standards.
- I find trying to be attentive to the needs of fellow teachers is very stressful.
- I feel overwhelmed by the emotional-behavioral problems some of my students have.
- Trying to keep my work from being too routine and boring puts a lot of stress on me.
Mindfulness Training Associated with Moderate to Large Decreases in Teachers’ Job Stress

**Mindfulness Group**

- Baseline
- Post-Training

**Control Group**

- Baseline
- Post-Training

$d = -0.57$

$d = -0.73$

**ns**

- Agree
- Somewhat
- Disagree

Age

**”**

Disagreement
Symptoms of Occupational Burnout

- Emotional Exhaustion
- Depersonalization
- Lack of Accomplishment

Maslach et al. (2001)
Mindfulness Training Associated with Large Decreases in Teachers' Emotional Exhaustion at Work

Mindfulness Group

Control Group

Baseline

Post-Training

Never

d = -.76

d = -.68
Diurnal Cortisol Rhythm on Working Mondays by Condition

Non-significant Differences Controlling for Pre-Test Cortisol
Mindfulness Skillsets and Mindsets as Mediators
The 5-Factor Mindfulness Scale
(39 items, Alphas > .90 at T1, T2, T3)

Mindful awareness of sensations, emotions and thoughts
*I pay attention to sensations, such as the wind in my hear or the sun on my face.*

Being non-reactivity towards experience
*I perceive my feelings and emotions without having to react to them*

Taking a non-judgmental attitude towards experience
*I tell myself I shouldn’t be feeling the way I am feeling (reversed)*

Acting mindfully rather than mindlessly
*When I am reading, I focus all my attention on what I am reading.*

Competence at verbalizing emotional experience
*I am good at finding words to describe my feelings.*

Mindfulness Training Associated with Large Increases in Teachers’ Self-reported Mindfulness

- **Mindfulness Group**
- **Control Group**

<table>
<thead>
<tr>
<th>Response</th>
<th>T1 (PRE)</th>
<th>T2 (POST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Often</td>
<td><strong>ns</strong></td>
<td><strong>d = .79</strong></td>
</tr>
<tr>
<td>Sometimes</td>
<td></td>
<td><strong>d = .87</strong></td>
</tr>
<tr>
<td>Rarely</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: **ns** indicates no significance, **d = .79** and **d = .87** indicate effect sizes.
Reductions in Teacher Job Stress (and Burnout, Anxiety & Depression)

Mindfulness Mediates Reductions in Teacher Job Stress

\[ \beta = .49^{**} \]

Mindfulness Training (T1) \rightarrow Mindful Awareness (T2)

\[ \beta = -.49^{**} \]

Mindful Awareness (T2) \rightarrow Job Stress (T3)

\[ \beta = -.21 \]

(Without mediator \( \beta = -.45^{**} \))

Indirect Effect = -.24
Teacher Occupational Self-Compassion
(13 items, Alphas > .89 at T1, T2, T3)

Dimension 1: Self-Kindness vs. Self-Judgment
I try to be understanding and patient with myself when those aspects of my personality that I don’t like come out in the classroom.

*When times are really difficult at work, I tend to be tough on myself. (R)*

Dimension 2: Common Humanity vs. Isolation
When I feel inadequate in my role as a teacher in some way, I try to remind myself that most teachers experience feelings of inadequacy.

*When I’m really struggling with my teaching, I tend to feel like other teachers must be having an easier time of it (R)*

Dimension 3: Mindfulness / Equanimity (not included)
Changes in Teachers' Occupational Self-Compassion

- **Mindfulness training** associated with increase in teachers' self-compassion

- Treatment Group
- Control Group

- T1 (PRE) vs. T2 (POST)
  - d = .85
  - **ns**

- T2 (POST) vs. T3 (FOLLOW-UP)
  - d = .62
  - **ns**
Occupational Self-Compassion Mediates Reductions in Teacher Job Stress

\[ \beta = .49^{**} \]

MINDFULNESS TRAINING (T1) \rightarrow SELF COMPASSION (T2) \rightarrow JOB STRESS (T3)

\[ \beta = -.21 \]

Indirect Effect = -.24

(Without mediator \( \beta = -.45^{**} \))
Teacher Tendency to Forgive Others
(4 items, Alphas > .83 at T1, T2, T3)

I have a tendency to harbor grudges. (R)

When people wrong me, my approach is just to forgive and forget.

I tend to get over it quickly when someone hurts my feelings.

If someone wrongs me, I often think about it a lot afterwards (R).
Changes in Teachers’ Tendency to Forgive Others

Mindfulness training associated with increase in teachers’ extension of forgiveness to others:
- **Treatment Group:** 
  - T1 (PRE): ns
  - T2 (POST): d = .57
  - T3 (FOLLOW-UP): d = .49

- **Control Group:** 
  - T1 (PRE): ns
  - T2 (POST):
  - T3 (FOLLOW-UP):

Notes:
- **ns:** Not Significant
- **** Significant at p < .01
Tendency to Forgive Mediates Reductions in Teacher Job Stress

\[ \beta = 0.51^{**} \]

\[ \beta = -0.33^{**} \]

\[ \beta = 0.21 \]

(Without mediator \( \beta = 0.42^* \))

Indirect Effect = -0.17

Job worries distract me when I am at home.

Stress at work makes me irritable at home.

Mindfulness Training Associated with Large Decreases Teachers' Habit of Ruminating on Work at Home

Mindfulness Group

Control Group

$d = -0.82$

$d = -1.08$

**True**

**Somewhat True**

**A Little True**
Mindfulness Training Associated with Increases in Teachers’ Quantity of Weekday Sleep

USA Adult Average Sleep

$d = .45$

$d = .44$

Baseline
Post-Training
Follow-up

Hours per Night

Mindfulness Group
Control Group
Proof-of-Concept Study on Mindfulness Training for Kindergarten to 3rd Grade Teachers and Students

MindUp Program for Children
Study Design and Conditions

Quasi-Experimental, Proof-of-Concept Study

2-Year, Sequential Implementation of Programs
(Teacher Program, Student Program, Professional Learning Communities)

Two Highly Impacted Elementary Schools in Same District

Multi-Method Research

- Surveys, Interviews, Behavioral Measures, Observations, Field Notes and Archival Data

Sample = 21 K-3 grade teachers and 224 of their students
Emotional Support

Domains
- Positive climate
- Negative climate
- Sensitivity
- Regard for student perspectives

Dimensions
- Relationships, Affect, Respect, Communication
- Punitive, Sarcasm/disrespect, Negativity
- Aware, Responsive, Address problem, Comfort
- Flexibility, Autonomy, Student expression

Indicators:
- Emotional Support
  - Flexibility, Autonomy, Student expression
  - Awareness, Responsive, Address problem, Comfort
  - Punitive, Sarcasm/disrespect, Negativity
  - Relationships, Affect, Respect, Communication

Emotionally Supportive Classroom Climate

Standardized POST-PRE Change Score

- Emotional Support Composite: $\Delta ES = +.24$
- Positive Climate: $\Delta ES = +.44$
- Negative Climate: $\Delta ES = -.48$
- Teacher Sensitivity: $\Delta ES = -.02$
- Regard for Student Perspectives: $\Delta ES = +.12$

Treatment group: $(n = 14)$
Control group: $(n = 7)$
Overall Summary

- **Stress and related health problems** are very prevalent in the culture and affect worker health, absenteeism, relationships, productivity, and organizational health care and hiring costs.

- Workplace interventions for stress are effective, and **mindfulness approaches are a new frontier** beyond cognitive-behavioral programs.

- Promising evidence that **mindfulness interventions can be effective in high stress, human service professions** like teaching on measures of teacher well-being, health, and performance.

- **Next frontier is to create mindful and compassionate workplace settings** and not just interventions for individual employees (supervisors and supervisees).
Collaborators & Funders: 2008-2015

- Kimberley Schonert-Reichl (U British Columbia)
- Margaret Cullen (Berkeley, CA)
- Andrew J. Mashburn (Portland State)
- Ellen Skinner (Portland State)
- Jillayne Sorenson (Portland OR)
- Jacqueline Eccles (UC Irvine)
- Stephen Peck (U Michigan)
- Tim Urdan (Santa Clara)
- Dave Vago (Harvard)
- Mark Greenberg (Penn State)
- Tish Jennings (UVA)
- Linda Lantieri (New York, NY)
- Richard Davidson (UW Madison)
- Amishi Jha (U Miami)
- Rita Benn (U Michigan)
- Tom Akiva (U Pittsburgh)
- John Dunne (UW Madison)
- David Meyer (U Michigan)
- Mrinalini Rao (Facebook)
- Cynthia Taylor (Portland State)
- Jessica Harrison (Portland State)
- Eva Oberle (U British Columbia)
- Kim Thomson (U British Columbia)
- Cristi Pinela (Portland State)
- Nicolette Rickert (Portland State)
- Jaiya Choles (Portland State)
- Kyla Haimovitz (Stanford)
- Laurel Morris (U Cambridge)
- Jeff Beers (Portland State)
- Tori Crain (Colorado State U)
- Jodi Wall (ESD112)
- Corina McEntire (ESD112)
- Lana Penley (Portland Public Schools)
- Andre Jackson (Portland Public Schools)
- Lisa Padrini (Vancouver School Board)
- Bob Jameison (Boulder Valley School District)
- Mind & Life Institute
- Spencer Foundation
- William T. Grant Foundation
- Impact Foundation and Ulco Visser
- 1440 Foundation
- The Hawn Foundation
- Fetter Institute
- Random Acts of Kindness Foundation
- Portland State University