




UNIVERSITY of DELAWARE
College of Health Sciences www.udel.edu/chs

Mindfulness in Academia: Refining Awareness to Foster Learner Engagement

Michael J. Mackenzie, PhD
Assistant Professor
Departments of Behavioral Health & Nutrition,
Human Development & Family Studies

Explore  Engage  Experience  Excel™

UNIVERSITY of DELAWARE

Michael J. Mackenzie, PhD

- Assistant Professor, BHAN & HDFS
 - Program Director, Graduate Certificate in Health Coaching
 - Director, Applied Health Behavior Science Laboratory
- PhD in Health & Exercise Psychology and MSc in Counselling Psychology
 - Registered as Clinical Counselor in British Columbia, Canada
 - Worked in fields of mental health and rehabilitation since 1998
 - Extensive training in mindfulness-based therapies and as a yoga teacher



UNIVERSITY of DELAWARE



<http://sites.udel.edu/ahbsl>

Via innovative translational research approach the Applied Health Behavior Science Laboratory investigates:

- Vision:** Leaders investigation of physical activity and mind-body practices associations with biopsychosocial characteristics and their collective influence on health behaviors and health outcomes.
- Mission:** Advance development of clinically relevant health behavior science interventions, and community-based health education, programs, and services for disease prevention and health promotion.

UNIVERSITY of DELAWARE

Mindfulness in Academia: Refining Awareness to Foster Learner Engagement



- Based on research in area of Mindfulness in Education:
 - Participants will learn to develop and capitalize on both their own and student attentional skills for success in and outside the classroom.

UNIVERSITY of DELAWARE


What is Mindfulness?

UNIVERSITY of DELAWARE



UNIVERSITY OF DELAWARE


What is Mindfulness?



"The awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment."

- Jon Kabat-Zinn

UNIVERSITY OF DELAWARE



Mind Full, or Mindful?

UNIVERSITY OF DELAWARE

Okay... but really...

- Mindfulness as part of large number of contemplative practices:
 - Family of complex psychophysiological regulatory training regimes developed for various ends
 - Directing and regulating attention considered inherent parts of different contemplative techniques
 - Thought to lead to physical and mental relaxation, stress reduction, psycho-emotional stability and enhanced concentration.

Lutz et al., 2008


UNIVERSITY OF DELAWARE

Categories of Contemplative Practice

- 4 broad categories:
 1. Focused attention [concentration]
 2. Open monitoring [mindfulness]
 3. Mind-body [yoga, qigong]
 4. Relational [compassion, loving-kindness]

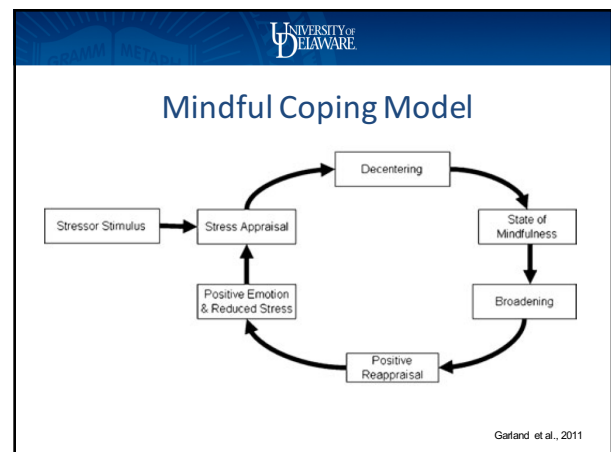
UNIVERSITY OF DELAWARE

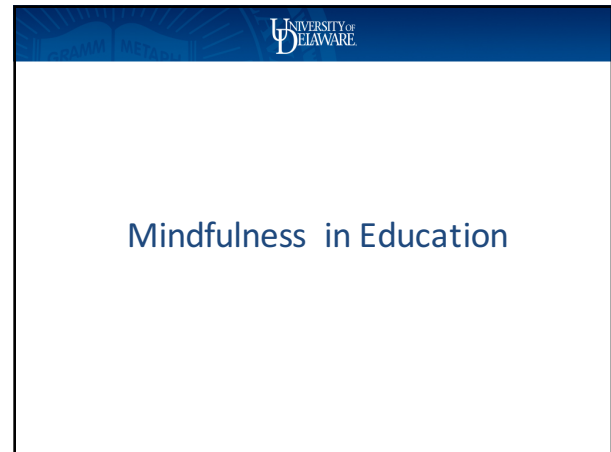
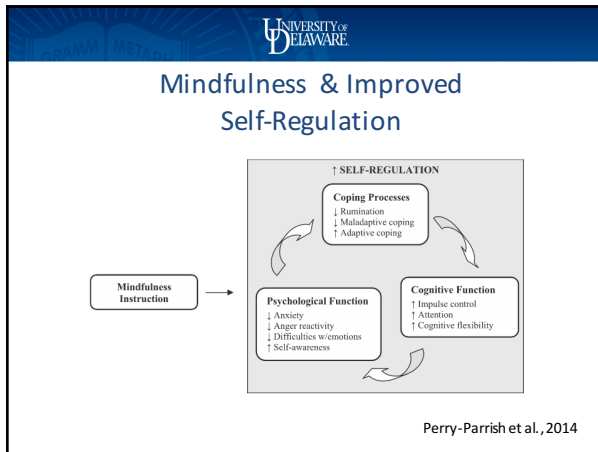
SOBER



- S – **Stop** and do this exercise
- O – **Observe** the sensations happening in your body
- B – **Breath**, focus on your breathing
- E – **Expand** awareness to include environment
- R – **Respond** mindfully

Bowen et al., 2011



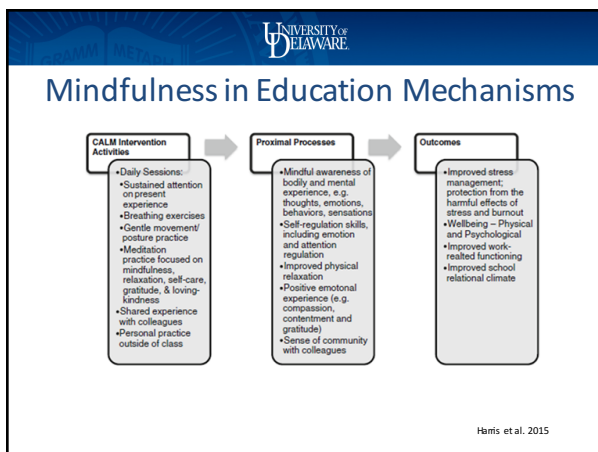
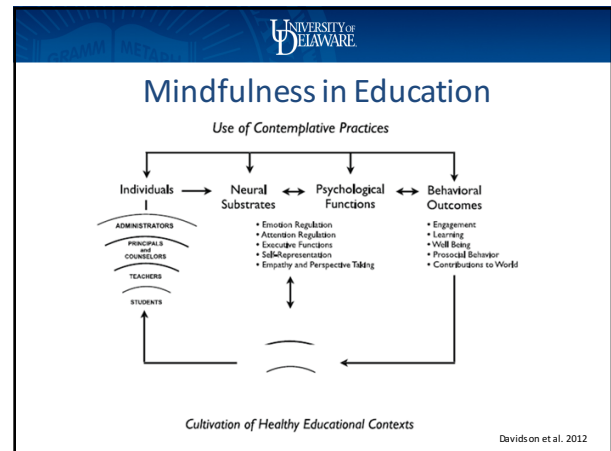


University of Delaware

Mindfulness in Education

- Contemplative practices emerged from wisdom traditions
 - Use in contemporary public educational settings rooted in scientific evidence-based approach.
- Ideas drawn from contemplative practices improve:
 - Regulation of attention, emotion, motivation, social cognition, and behavior
- Highlight set of mental skills and socioemotional dispositions central to aims of education in 21st century

Davids on et al. 2012

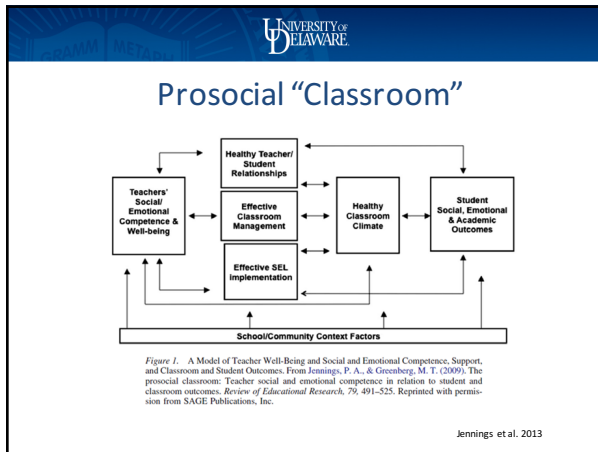


University of Delaware

Improving Classroom Learning Environment

- Social and emotional competencies (SEC) involving five primary skills:
 - Self-awareness
 - Self-management
 - Social awareness
 - Relationship skills
 - Responsible decision-making

Jennings et al. 2013



Mindfulness in Professional Development

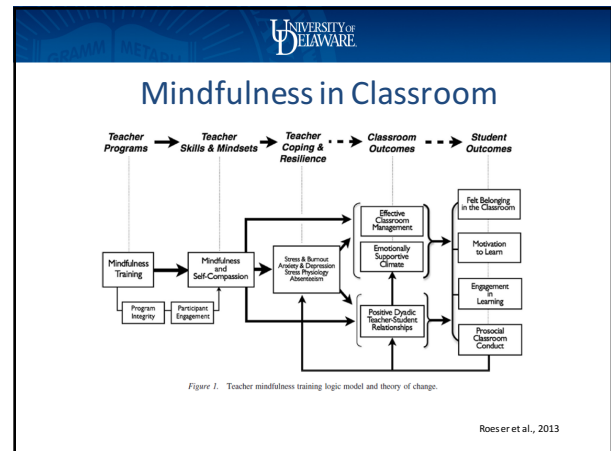
- Training in mindfulness promote educators’ “habits of mind”:
 - Capacity to create and sustain supportive relationships with students and classroom climates conducive to student engagement and learning.

Roeser et al., 2013

GRACE

- G – **Gather** your attention
- R – **Recall** your intention
- A – **Attune** to your environment
- C – **Consider** your actions
- E – **Enact** your plan

Jennings, 2015



Mindfulness on Campus

- Before faculty can feel comfortable and effectively share mindfulness in classroom they need to *embody and practice* mindfulness in their own lives.

Albrecht, 2012

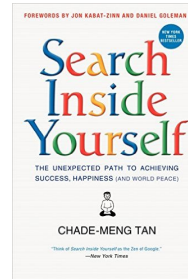
Mindfulness @ UD



Mindfulness in Academia

- Many educators experience stress and burnout
 - identifying factors that promote health and wellbeing among faculty and staff is critical
 - Accumulating evidence suggests mindfulness promotes resilience in educators and may foster healthy educators, classrooms, and students.

Abenavoli et al., 2013



- Mindfulness has recently emerged as a stress coping technique to teach employees.
- Mindfulness has been shown to have a positive impact on various work-related outcomes such as:
 - Stress reduction
 - Recovery
 - Resilience
 - Wellbeing
 - Job performance

Fries, 2009; Davidson, 2003; Dune, 2011; Glomb et al., 2011; Weick & Putnam, 2006



Mindful Employee & Occupational Wellness (MEOW)



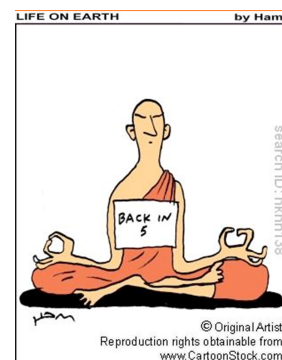
MEOW Program Description

- Develop and implement a stress management program for UD Employees, rooted in mindfulness-based interventions.
 - 6-week program provides instruction and skills-based activities on application of mindfulness-based to reduce daily workplace stress.



Mindfulness in MEOW Program

- Program consists of the following components:
 - Formal mindfulness practices
 - Informal mindfulness practices
 - Daily practices 3-15 minutes of formal and informal practice for entire duration of program
 - Discussion oriented around practice including exploration of obstacles, difficulties, and development of self-regulatory skills and capacities.





Mindful Employee & Occupational Wellness (MEOW)

- Week 1:** Intro to mindfulness and stressors
- Week 2:** Quick & easy mindfulness practices
- Week 3:** Starting home practice
- Week 4:** Mindful sleep
- Week 5:** Interpersonal stress
- Week 6:** Putting it all together



“Mini” Mindfulness Exercises

- Mini relaxation exercises focused breathing techniques, which help reduce stress and tension immediately
 - Can be done with eyes open or closed
 - Can do them any place, at any time

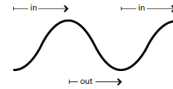


Figure 6.3 Wave Breath

Carlson & Speca, 2010

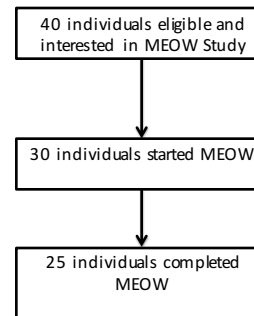


SOBER / GRACE in Difficult Situations

- Defining difficult situations/individuals and identifying automatic patterns of reactivity:
 - What are some difficult situations-people for you
 - How might mindfulness practice help?



Participant Recruitment Diagram



Procedures

- Participants attended program sessions once per week for six weeks in evenings for one hour each time.
 - Trained health professional with extensive training in mindfulness-based therapies for health and wellness instructed the class.
 - Clinical research coordinator also present at each class.



Measures

- Demographics
- Pre / post
 - Five Facet Mindfulness Questionnaire (FFMQ)
 - Distress Tolerance Scale (DTS)
 - Maslach Burnout Inventory (MBI)
- Weekly attendance
- Weekly practice logs

Baer et al., 2006; Maslach, Jackson, & Leiter, 1997; Simons & Gaher, 2005



Demographics

Variable Name	
Gender (Female)	25 (86.25%)
Mean age, years (SD)	45.55 (11.18)
Education Level	
1-3 years of college	6.9%
Bachelors degree	34.5%
Masters degree	48.3%
PhD or equivalent	10.3%
Employment Status	
Full time	93.1%
Part time	3.4%
Homemaker	3.4%
Average attendance (SD)	5.12 ((1.21)
Average Total Practice Minutes (SD)	418.92 (274.12)



Five Facet Mindfulness Questionnaire

Variable	Pre (SE)	Post (SE)	Sig.	Effect Size
FFMQ				
Observing	25.32 (1.02)	28.36 (.78)	.002	.55
Describing	28.00 (1.01)	30.64 (.98)	.000	.49
Awareness	25.54 (1.04)	26.29 (1.12)	.458	.13
Non-judging	29.21 (1.54)	32.88 (1.33)	.006	.43
Non-reactivity	21.00 (.97)	23.78 (.97)	.001	.51



Distress Tolerance Scale

Variable	Pre (SE)	Post (SE)	Sig.	Effect Size
DTS				
Absorption	7.21 (.68)	5.36 (.38)	.001	-.48
Appraisal	13.79 (1.10)	11.91 (.42)	.031	-.32
Regulation	7.62 (.55)	6.46 (.57)	.017	-.38
Tolerance	7.21 (.51)	5.73 (.51)	.003	-.51



Maslach Burnout Inventory

Variable	Pre (SE)	Post (SE)	Sig.	Effect Size
MBI				
Burnout	23.14 (2.03)	21.23 (1.98)	.188	-.17
Depersonalize	17.10 (1.36)	16.32 (1.41)	.463	-.10
Achievement	42.41 (1.33)	45.56 (1.35)	.009	.42



Discussion

- Participants had increases in mindful behaviors, increase in personal achievement, and decrease in distress.
 - Suggests feasibility of focusing on practical mindfulness techniques faculty and staff can incorporate into daily lives.
 - Highlights development of relatively short intervention that can be implemented in a university setting.



BHAN467 / HLPR 667: Mind, Body, Behavior

- Study & application of mind-body behavioral interventions and their collective importance to health, wellness, and performance.
 - Students develop abilities to critically evaluate mind body research and apply these interventions.





Course Objectives

- By end of semester students should be able to:
 1. Broadly define stress and recovery from a psychophysiological perspective.
 2. Explain role of mind-body in behavior change both in daily life and for performance enhancement.
 3. Critically evaluate mind-body research and apply from a pragmatic perspective.
 4. Assess stress and recovery via psychological (psychometric instruments) and physiological (various heart rate indices) means.
 5. Use variety of different mind-body techniques to aid in recovery.
 6. Prescribe a mind-body program based on individual needs.



I Can Be Mindful



Preschool Summer Camp



I Can Be Mindful 2.0

- Camp for 4 to 7 year olds:
 - Focus on teaching children about their brain, how it operates and things they can do to strengthen the “control center for their body”
 - Children will learn strategies that can be used to “slow down their minds and bodies” in order to pay attention in a more systematic way



Programmatic Goal

- Young children – across all types of diversity – have intrinsic desire to make sense of their world
 - Programmatic goal of “I can be mindful” is to **support children in mindful learning and exploration.**



Guiding Questions

- In what ways can an integrated mindful environment facilitate learning and cultivate awareness?
 - What does a mindful environment look like?
- How can mindfulness in early learning environments foster social-ecological communities between children, their teachers and families?
- What other types of environment-centered approaches to early learning intersect with mindfulness?



Practicing Safety Mindfulness for Mothers in Drug Treatment (PSMDT)

- Women with substance use disorders report high levels of depression and anxiety, parenting stress, and adverse childhood exposures.
- Mindfulness-Based Parenting (MBP) for Mothers in Drug Treatment is a United States Department of Health and Human Services (USDHHS)-funded project intended to improve parenting responsiveness among pregnant and parenting women in treatment for opioid dependence.
 - MBP is intended to mitigate parental stress by teaching parents to be present with their children when interacting, while simultaneously highlighting non-judgment, self-compassion, self-regulation, and emotional awareness.



Children's Bureau
An Office of the Administration for Children & Families





Applications

- Different contemplative practices produce different effects
 - No single best type of contemplative practice will work all of the time for every purpose.
- Several different contemplative practices may produce calming of mind and relaxation of body.
 - For each individual, one or two techniques will emerge as most helpful.
- Familiarity with several techniques will help person find those that match his or her needs and available time.

McGrady, 2007



Resources: Mindfulness Programs

- Mindfulness Institute, Thomas Jefferson University Hospitals
 - Mindfulness program is modeled after the MBSR program developed by Jon-Kabat Zinn at the University of Massachusetts Medical Center.
- Penn Program for Mindfulness, Penn Medicine
 - Penn Program for Mindfulness provides powerful tools for coping and personal growth.
 - Combines cognitive science with ancient mindfulness techniques.



Resources: Audio Recordings

- Center for Mindfulness at the University of California San Diego
 - UCSD Center for Mindfulness has prepared a number of practices available on the website in MP3 format.
- Mindful Awareness Research Center at the University of California Los Angeles
 - This website also has different MP3s



Resources: Mindfulness Apps

- Calm
- Stop, Breathe, & Think
- Mindfulness Daily
- Headspace Meditation
- Settle Your Glitter
- Breathing Bubbles
- Insight Timer



References

1. Abma et al. (2013). The protective effects of mindfulness against burnout among educators. *Psychology of Education Review*, 37(2), 57-69.
2. Baer et al. (2006). Using self-report measures: methods to explore facets of mindfulness. *Assessment*, 13(1), 27-46. doi:10.1177/1073426906287111
3. Brown et al. (2012). Mindfulness-based stress reduction for pediatric behavioral disorders: A meta-analysis. *Child Psychiatry and Human Development*, 43(1), 1-11.
4. Caron et al. (2013). The therapeutic application of mindfulness in pediatric settings. *Journal of Pediatric Psychology*, 138(1), 1-10.
5. Cavanagh et al. (2013). The Mindfulness-Based Stress Reduction Program: Integrating Mindfulness into Parent Training with an Evidence-Based Prevention Program. *New Directions for Youth Development*, 146(1), 46-58.
6. Dole et al. (2013). Parenting attention to mindfulness and effects on task performance in the workplace. *Journal of Management*, 39(1), 1-10.
7. Davidson et al. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine*, 65(4), 584-590.
8. Davidson et al. (2013). Mindfulness practices and mental training programs for American adolescents. *Child Development Perspectives*, 33(1), 14-19.
9. Duncan et al. (2009). A model of mindful parenting: implications for parent-child relationships and prevention research. *Clinical Child and Family Psychology Review*, 12(1), 186-200.
10. Eppley et al. (2004). "It's Like Breathing in Blue Skies and Breathing Out Bumpy Clouds": Mindfulness Practices in Early Childhood. *Young Exceptional Children*, 1(1), 1-10.
11. Hsieh, M. (2009). Mindfulness-based stress reduction for the changing work environment. *Journal of Academic and Business Ethics*, 2, 1.
12. Garland et al. (2012). Positive reappraisal mediates the stress-reductive effect of Mindfulness: An upward spiral process. *Mindfulness*, 3, 39-47.
13. Glaser et al. (2012). Mindfulness-based stress reduction for children and adolescents: A review of the literature. *Journal of Pediatric Psychology*, 137(1), 1-10.
14. Harris et al. (2012). The contribution of mindfulness-based therapy for children and adolescents: conceptual integration. *CNS and Adolescent Mental Health*, 7(4), 201-210.
15. Harris et al. (2013). Promoting Stress Management and Well-being in Educators: Feasibility and Efficacy of a School-Based Yoga and Mindfulness Intervention. *Mindfulness*, 4, 320-330.
16. Jennings, P. A. (2008). *Mindfulness for Teachers: Simple Skills for Peace and Productivity in the Classroom* (The Norton Series on the Social Neuroscience of Education). New York: McGraw-Hill.
17. Jennings et al. (2013). Improving classroom learning environments by cultivating awareness and resilience in education (CARE): Results of a randomized controlled trial. *School Psychology Quarterly*, 28(4), 27-39.
18. Kline et al. (2009). Employee assistance programs: A review of the management of stress and well-being through workplace counseling and consulting. *Australian Journal of Management*, 34(1), 1-10.
19. Kline et al. (2008). Attention regulation and monitoring in meditation. *Psychological Science*, 19(1), 18-26.
20. Malhotra et al. (1999). *Mindfulness: A Manual for Teachers*. Boston: Algonquin Books.
21. Penzel et al. et al. (2013). Mindfulness Meditation for Children: Instructional Strategies & Reliability. *Journal of Pediatric Psychology*, 138(1), 1-10.
22. McGrady, A. (2007). Mindfulness and meditation: Low-cost approaches to improve physical and mental health. *Health Affairs*, 26(1), 1-10.
23. Kline et al. (2013). Mindfulness at work: A meta-analysis of workplace interventions and their effectiveness. *Mindfulness*, 4(1), 1-10.
24. Kline et al. (2013). Mindfulness at work: A meta-analysis of workplace interventions and their effectiveness. *Mindfulness*, 4(1), 1-10.
25. Smeets et al. (2013). The effects of a mindfulness-based intervention on self-report measures. *Mindfulness*, 4(1), 1-10.
26. Wink et al. (2013). Organizing for mindfulness: eastern wisdom and western knowledge. *Journal of Management Inquiry*, 22(1), 25-39.
27. Shapiro et al. (2012). The therapeutic benefits of mindfulness training in early childhood: A meta-analysis of randomized controlled trials. *Child Development Perspectives*, 12(1), 1-10.



Michael J. Mackenzie, PhD
 Assistant Professor, Behavioral Health & Nutrition
 Joint Appointment, Human Development & Family Studies
 Department of Behavioral Health & Nutrition
 College of Health Sciences, University of Delaware
 Email: mmackenz@udel.edu
 Web: <http://sites.udel.edu/ahbsl>