#### Mindfulness at Work

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#### **Agenda**

- The High Cost of Stress
- What is Mindfulness?
- What is Mindfulness-Based Stress Reduction (MBSR)?
- Research on the Benefits of Mindfulness
   Training for individuals and organizations
- Direct Experience of Mindfulness



# High Cost of Stress in Workplace

 Stress has been called the "health epidemic of the 21<sup>st</sup> century" by the World Health Organization and is estimated to cost American businesses up to \$300 billion a year.

# High Cost of Stress in Workplace

- Absenteeism
- Presenteeism
- Accidents
- Employee turnover
- Diminished productivity
- Medical, legal, and insurance costs

# High Cost of Stress in Workplace



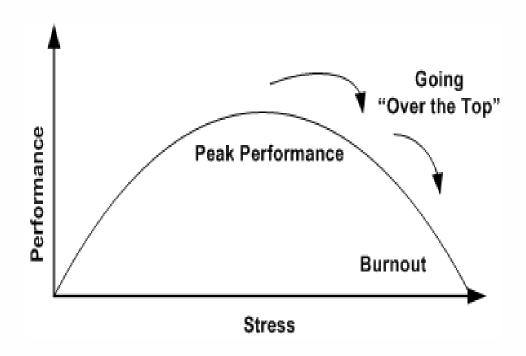
- Nearly three-quarters of American workers surveyed in 2007 reported experiencing physical symptoms of stress due to work.
- According to statistics from the American
   Psychological Association (APA) Stress in
   America Survey (2012), a startling two-thirds
   of Americans say that work is a main source
   of stress in their lives.

#### Stress in the Workplace

What are the stressors in the workplace???



## Yerkes-Dodson Human Performance Curve



#### **Work Stress And Health**

A recent study looked at stress and health outcomes of over 5,300 employees. After monitoring participants for a 13-year period, findings indicate that employees who feel significant pressure at work and little control over the things they do were approximately 45% more likely to develop a health issue. (Lees, 2014)



#### **Work Stress And Health**

- Chronic Work Stress has been linked to higher levels of heart disease and diabetes.
- These findings indicate serious implications for the effects of work stress on employee health.

# **Corporate Stress Reduction Programs**

25% of large US companies have now launched 'stress-reduction' initiatives.

# **Corporate Stress Reduction Programs- Mindfulness**

- Google
- General Mills
- Apple
- Nike
- Proctor and Gamble
- Aetna
- GlaxoSmithKline



### Mindfulness Begins With Attention

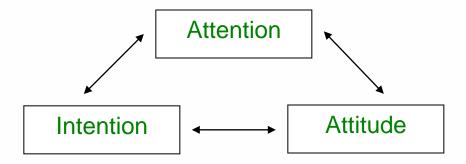
Jon Kabat-Zinn defines mindfulness as paying attention, on purpose, in the present moment non-judgmentally.

Being Here NOW



#### **Defining Mindfulness**

#### A Model of Mindfulness



**Attitude -** an accepting, open, and kind curiosity towards one's own experience



#### **Relaxation and Mindfulness**

#### Relaxation

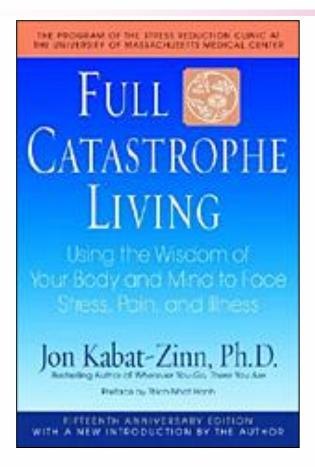
- Generally intended to produce a specific physiological state (relaxation);
- Generally intended to be used in times of anxiety or stress.

#### **Mindfulness**

- Relaxation may be a byproduct, but not the specific intention of the practice;
- Intended as a way to approach all experience.



### Mindfulness-Based Stress Reduction (MBSR)



Stress Reduction Clinic, UMASS Medical Center, established 1979

- Originally an 8-week program, 2-1/2 hours per week, plus full day of practice
- Educational, not therapeutic orientation — classes provide a community of learning and practice; for motivation, support, and belonging
- Medically heterogeneous environment; focus on what's right with you, not what's wrong...



## Mindfulness-Based Stress Reduction

- Offered at >700 medical centers in U.S. and around the world
- Over 30 years of research in a wide range of chronic clinical ailments

MBSR programs have expanded to Corporations, Lawyers, Military, Universities, Schools-teachers and children (K-12)

#### **February 3, 2014**



#### **MBSR** at Jefferson

Jefferson – Myrna Brind Center of Integrative Medicine

#### Mindfulness-Based Stress Reduction

- · Relieve tension and pain
- Enhance vitality and wellness
- Gain skills to manage the ordinary and extraordinary challenges of daily life

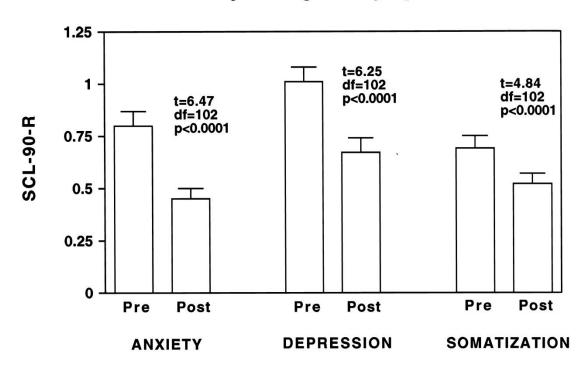
### Stress Reduction Program, established 1996

- Foundation program is an adaptation of the UMASS model
- "Graduate" programs to support alumni
- Medical student education
- Homeless shelters
- Mindfulness-Based Art Therapy
- Mindfulness at Work programs
- Academic course in the University
- Professional training: Practicum and Internships



#### **Stress Reduction Program**

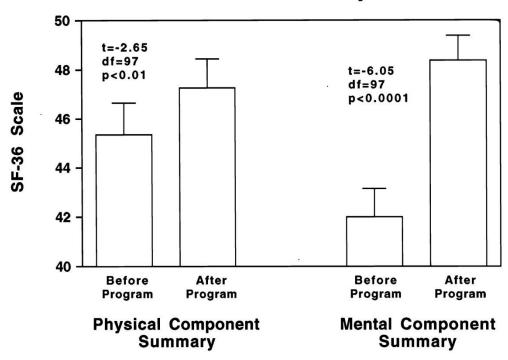
**Psychological Symptoms** 

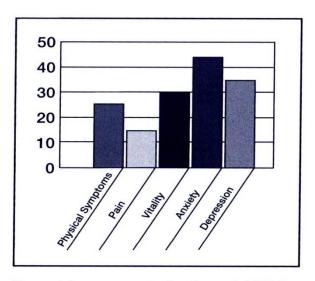




#### **Stress Reduction Program**

#### **Health-Related Quality of Life**





Percent improvement after 8-week MBSR program:

(Reibel DK, Greeson JM, Brainard GC, Rosenzweig S. Gen Hosp Psych, 2001, Vol 23, 183-192.)



- Improved glycemic control in people with Type 2 diabetics
- Reduced blood pressure in people with Type 2 diabetes
- Increased Natural Killer Cell activity( marker of immune function)





# Association of an Educational Program in Mindful Communication With Burnout, Empathy, and Attitudes Among Primary Care Physicians

Michael S. Krasner; Ronald M. Epstein; Howard Beckman; et al. JAMA. 2009;302(12):1284-1293

- ☐ 70 PCPs
- 8 week intensive intervention 2.5 hours/week + 7 hour day
- □ 10 month follow up (2.5 hours/month)



#### **MBSR** for Physicians

- Increase in mindfulness was positively correlated with significant improvements in a range of measures, for example:
  - Maslach Burnout Inventory: emotional exhaustion and personal accomplishment
  - Jefferson Scale of Physician Empathy: perspective taking
  - Profile of Mood States: total mood disturbance
- Improvements were maintained at 12- and 15-month follow up



#### Mindfulness and Physicians

A Multicenter Study of Physician Mindfulness and Health Care Quality.

Beach MC, Roter D, Korthuis D, Epstein, R et al. *Ann Fam Med September/October 2013 11:421-428.* 

Mindfulness among clinicians was associated with more rapport building and communication about psychosocial issues between patient and clinician, and a more positive emotional atmosphere within the clinical encounter.





# The Effects of Mindfulness-based Stress Reduction on Nurse Stress and Burnout

A Qualitative and Quantitative Study, Part III

- Joanne Cohen-Katz, PhD Susan Wiley, MD Terry Capuano, MSN, MBA
- Debra M. Baker, MA Lynn Deitrick, PhD Shauna Shapiro, PhD

Part III of the study on mindfulness-based stress reduction (MBSR) describes qualitative data and discusses the implications of the findings. Study analysis revealed that nurses found MBSR helpful. Greater relaxation and self-care and improvement in work and family relationships were among reported benefits. Challenges included restlessness, physical pain, and dealing with difficult emotions. **KEY WORDS:** *meditation*, *mindfulness*, *nurse*, *stress*, *stress management Holist Nurs Pract* 2005;19(2):78–86



# **Effects of Meditation Practice** on Therapists and Their Clients

 Controlled, double-blind study of outcomes of therapy in clients whose therapists meditated daily (Grepmair, et al., 2007)

Significant difference in symptom reduction measured by SCL-90: GSI, and 7 of 9 subscales – somatization, insecurity in social contact, obsessiveness, anxiety, anger/hostility, and psychoticism

Clients better understood their own psychodynamics, the structure, phenomenology, and characteristics of their difficulties, and the possibilities and goals of their development





#### **Neuroplasticity**

 Refers to changes in the brain in response to experience

Growth of new connections in the

brain

Growth of new neurons



#### **MBSR: An Exemplary Study**

- "Alterations in Brain and Immune Function Produced by Mindfulness Meditation"
  - Richard Davidson, Jon Kabat-Zinn, et al.
  - Psychosomatic Medicine, 2003
- MBSR for healthy employees in workplace setting
  - n=25; randomized to MBSR vs. WLC
- Associates changes in brain activity (left side, anterior regions)
  with:
  - Decrease in trait anxiety
  - Increase in positive affect
  - Enhancement of immune function





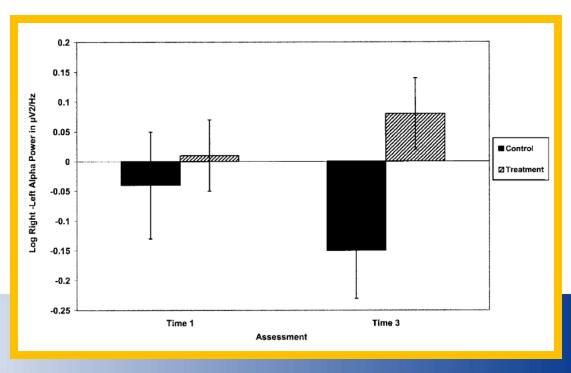
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#### Alterations in Brain and Immune Function Produced by Mindfulness Meditation

RICHARD J. DAVIDSON, PhD, JON KABAT-ZINN, PhD, JESSICA SCHUMACHER, MS, MELISSA ROSENKRANZ, BA, DANIEL MULLER, MD, PhD, SAKI F. SANTORELLI, EDD, FERRIS URBANOWSKI, MA, ANNE HARRINGTON, PhD, KATHERINE BONUS, MA, AND JOHN F. SHERIDAN, PhD

n=48 RCT





### Changes in the Brain with Meditation

- Cortical Thickening (areas associated with attention and sensory processing) — opposite of what happens with aging (Lazar)
- Reduced amygdala activation to emotional sounds and images (Davidson and Lutz)
- Increases in regional brain gray matter density (Holzel)- regions associated with learning, memory, emotion regulation, perspective.



#### **MBSR** and Cognitive Function

 Researchers have reported improvement in sustained attention and working memory measures in novice meditators who underwent MBSR training relative to a comparison group who did not undergo the training. (Amishi Jha)

- The Effects of Mindfulness
   Meditation Training on Multitasking in a High-Stress Information
   Environment (2012)
- A study of HR managers- mindfulness-based program- stayed on tasks longer, fewer task switches, less negative emotion after task performance, improved memory for the tasks performed.



 Dow Chemical Company Employeesmindfulness intervention effective in decreasing employee stress, while improving resiliency, vigor, and work engagement, thereby enhancing overall employee well-being.(2014)

Employees of a call center working for a financial institution took part in a mindfulnessbased intervention. The results showed that mindfulness increased while psychological distress (stress, anxiety/depression, fatigue, and negative affect) decreased for all employees throughout the intervention. The satisfaction level of the employees' internal clients significantly increased. (2014)



 Mindfulness courses offered to employees at Transport of London significantly reduced days off due to stress by 70 percent over three years,

 Mindful Leadership found that for 93% of leaders surveyed, mindfulness training helped them create space for innovation. Some 89% said it enhanced their ability to listen to themselves and others, and nearly 70% said it helped them think strategically.

