

Mindfulness-Based Intervention in College Students



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Stress



- **Mental health disorders nearly 50% disease burden young adults in the US. (Melnyk, 2011)**
- **Stress and stress-related illnesses major obstacle in completing degree program.**



Stressors Collegiate Environment

Include but not limited to:

- Establishing new relationships
- Adjusting to life away from family
- Acquiring new educational skill sets
- Public speaking
- Financial debt
- Pursuing a professional role



Health Promotion Standards American College Health Association (ACHA)



Health encompasses capacity of individuals and communities to reach their potential.

- Transcends individual factors; includes cultural, institutional, socioeconomic, political influences
- Not solely biomedical quality measured through clinical indicators. (ACHA, 2005)

Depression in College Students



- World Health Organization (WHO, 2012), depression leading cause of disability in adults.
- Suicide a major preventable health problem worldwide.
- Suicide second leading cause of death among college students.
- 10.4% college students considered suicide at least once in past year. (Lamis and Dvorak, 2013)

Risk Factors



Common risk factors of individuals who experienced persistent suicidal ideation through four college years:

- Exposure to childhood or adolescent domestic violence
- Limited social support
- maternal depression
- High depressive symptoms first year of college

Risk Factors



Level of depressive symptoms in first year independently predicted persistent suicidal ideation. (Wilcox, Arria, Caldeira, Vincent, Pinchevsky, and O'Grady, 2010)

ACHA/NCHA II Reference Group Executive Summary-Spring 2012

> 29% college students felt academic performance negatively affected by stress:

- ❖ Anxiety-20.2%
- ❖ Depression-12.4%
- ❖ Relationship difficulty-10.4%
- ❖ Sleep difficulty-20.6%.



ACHA 2012



Mental health issues experienced in the past 12 months:

- 48% overwhelming anxiety in past 12 months
- 58% “sad”
- 30% so depressed it was difficult to function
- 41% rated stress levels “more than average”

Stress #1 factor out of 31 assessed to negatively affect academic performance.

Advocates for Student Health



- **Acknowledge** differing systems of beliefs, values, rules, customs affect health promotion.
- **Guided** by cultural inclusion, respect, equality, and equity.
- **Mobilize** wide range of interdisciplinary campus and community partners for collective action.
- **Initiatives** theory-based and evidence-informed.
- **Implemented** to maximize effectiveness. (ACHA, 2011)

Academic Outcomes



Healthy Minds (2005) longitudinal study 3000 full-time students found depression, anxiety, eating disorders, other mental health issues may affect:

- Energy
- Concentration, cognitive ability (memory and processing speed)
- Sleep (amount and quality)
- Optimism about future

Academic Outcomes



Resulting in:

- Less time on school work
- Lower productivity time spent on studies
- Less efficient time allocation (all-nighters, missing deadlines).



Academic Retention



- Sample (n=121) university students diagnosed depression associated with 0.49 point (half letter grade) drop GPA. (Hysenbegasi, Haas, and Rowland, 2005)
- ACHA 2010 survey, depression significant predictor of lower GPA and higher probability of dropping out. (Melnyk, 2011)

Depression Screening



- Initiative at clinic each visit student offered PHQ-2
- **PHQ-2** first two items of PHQ-9, two core DSM-IV items for major depressive disorder with range of score of 0-6
- Score of 3 Or > given PHQ-9
- Student able to refuse both screens
- Interventions include referral to counseling
- Positive response to #9 immediate action

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME: _____

DATE: _____

Over the *last 2 weeks*, how often have you been bothered by any of the following problems?
(use "✓" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself in some way	0	1	2	3

add columns: + +

(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card.)

TOTAL:

10. If you checked off *any* problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all _____

Somewhat difficult _____

Very difficult _____

Extremely difficult _____

PHQ-9 is adapted from PRIME MD TODAY, developed by Drs Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke, and colleagues, with an educational grant from Pfizer Inc. For research information, contact Dr Spitzer at rs9@columbia.edu. Use of the PHQ-9 may only be made in accordance with the Terms of Use available at <http://www.pfizer.com>. Copyright ©1999 Pfizer Inc. All rights reserved. PRIME MD TODAY is a trademark of Pfizer Inc.

Mindfulness Definitions



- Paying attention in present moment
- Awareness of what occurring in present moment
- Waking from life lived on auto pilot/habitual responding
- Contrasted to mindlessness due to preoccupation with past or future plans/worries



A STATE OF BEING

Mindfulness-Based Stress Reduction (MBSR)



Meditation program created by Jon Kabat-Zinn (1979), roots in Buddhism, group-treatment modality for chronic pain, includes:

- **Body scan**
- **Sitting meditation** attention to breath and nonjudgmental observations of thoughts and distractions that flow through mind.
- **Hatha yoga** practices of stretches and postures to relax and strengthen. (Kabat-Zinn, 2009)
- E:\Mindfulness with Jon Kabat-Zinn - YouTube.mht

MBSR

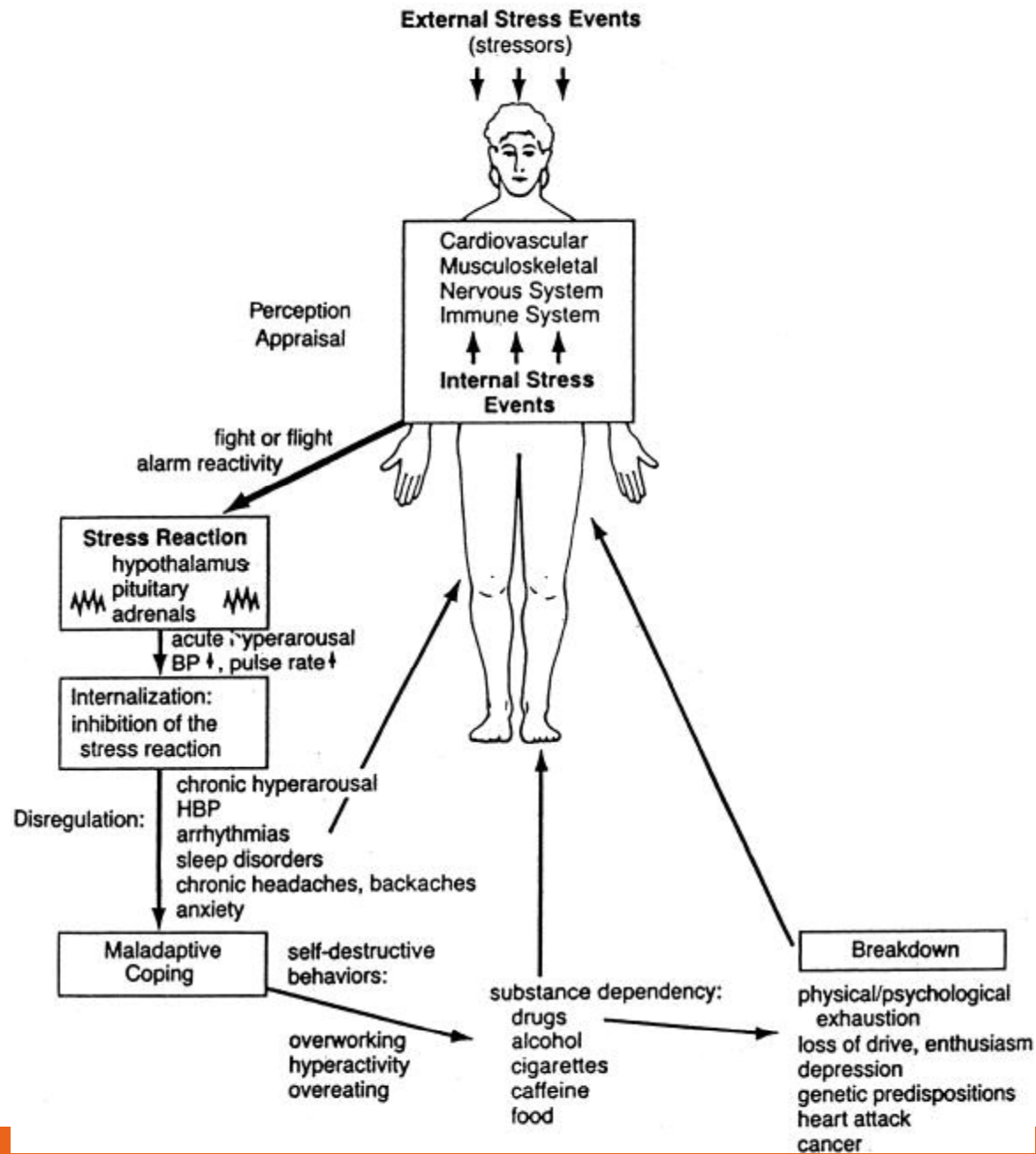


- ❖ **Attitudes** (a) non-judging, (b) patience, (c) “Beginner’s mind”, (d) trust, (e) non-striving, (f) acceptance, (e) letting go.
- ❖ **Elements** (a) **attention**, (b) **attitude**- wisdom, spirituality, compassion, peace of mind; (c) **intention**- self-regulation, self-exploration, self-liberation. (Kabat-Zinn, 2009).

Mindfulness Effects



- Interrupt or down regulate individual's psychological reactivity to stress triggers, in turn mitigating physiologic response. (Rosenzweig et al., 2007)
- Altering perceptions of depression and pain.
(Sephton et al. 2007; Kabat-Zinn, 2003)



Mindfulness Effects



- Enhance sense of control, accuracy of perception, and increased tolerance, acceptance, patience, and courage to deal with unpredictable events. (Grossman et al., 2010)
- Adjunct to medical care, with the potential to transform health and improve well-being. (Flugel Colle, Vincent, Cha, Loehrer, Bauer & Wahner-Roeddler, 2010)

MBSR



MBSR shown benefit in health-related quality of life, alleviation of physical symptoms, and decreased physiologic distress in adult patients with chronic pain, cancer, anxiety, and depression.

Mindfulness-Based Interventions (MBIs)



- **MBIs based on MBSR**, but shorter duration in weeks or hours.
- **Meta-analysis 39 studies**, MBIs efficacious for alleviating depressive symptoms in adults with mental disorders. (Klainin-Yobas, Cho, and Creedy, 2012)
- **Additional review both randomized and non-randomized trials (39)**, MBIs reduced depression and anxiety across wide range of severity and disorders, including medical disorders. (Hofman, Sawyer, Witt, and Oh, 2010)

Efficacy of MBIs



Systematic review 83 controlled interventions in college students focused on **three primary outcomes:**

- social and emotional skills
- self-perceptions
- emotional distress

Interventions six categories: (1) psycho-educational (2) cognitive-behavioral; (3) relaxation; (4) mindfulness; (5) meditation; and (6) other.

Efficacy of MBIs



Outcomes of 83 studies distributed in 6 categories:

- **Emotional distress** -depression, anxiety, stress and well-being
- **Social/emotional skills** -coping, mindfulness, relaxation
- **Self perceptions**- evaluating self-esteem, efficacy
- **Interpersonal relationship quality**-support system integrity
- **Health** and health related behaviors
- **Academics**

Significant Effectiveness



Mindfulness interventions significantly more effective (78.8%) than other categories of interventions.





Rest and

DE-STRESS

MBI- Group Elements



- ❁ Participants- students with positive PHQ-9 scores.
- ❁ Two groups 15 participants each.
- ❁ Co-led with family nurse practitioner and social worker.
- ❁ Held weekly; 4 weeks; 1 ½ hours in duration.
- ❁ Pre, post, and 6 weeks post-treatment PHQ- 9, MAAS administered to evaluate effect on depression.

PHQ-9



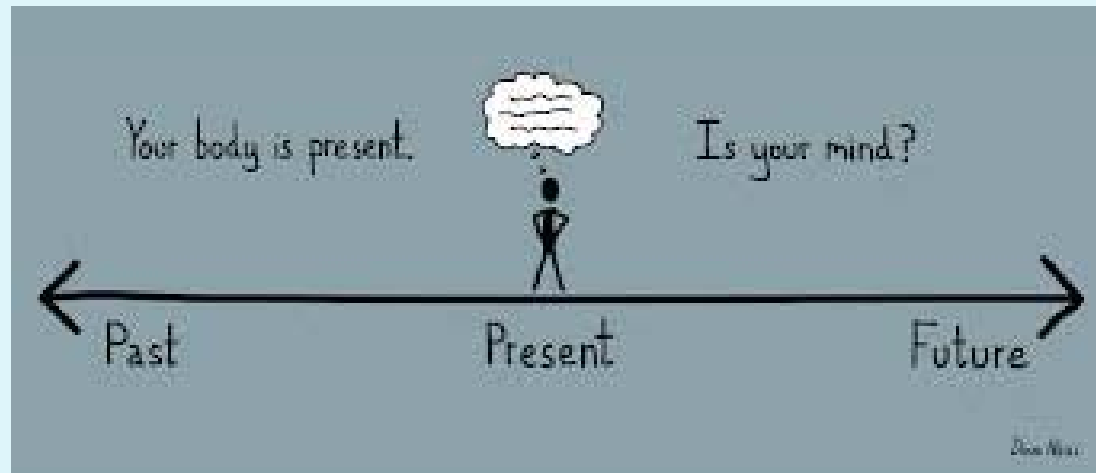
- **Patient Health Questionnaire (PHQ-9)** well-known, highly utilized, validated tool based directly on diagnostic criteria for major depressive disorder, Diagnostic and Statistical Manual 4th Edition (DSM-IV).
- **PHQ-9** effective detecting and measuring common concept of depression in diverse populations. (Huang, Chung, Kroenke, Delucchi, and Spitzer, 2006)
- **Sensitive to changes of condition severity over time.** (Lowe, Unützer, Callahan, Perkins, and Kroenke, 2004).

Mindful Attention Awareness Scale (MAAS)



- **MAAS** 15-item scale designed assess core characteristic of dispositional mindfulness- open or receptive awareness of and attention to what is taking place in present.
- Shows strong psychometric properties and has been validated with college, community, and cancer patient samples.
- Capacity to measure dynamically changing state of mindfulness. (Park, Reilly-Spong, and Gross, 2013)

MAAS



Collection of statements everyday experience; 1-6 scale indicating how frequently or infrequently currently have each experience. Answers reflects experience rather than what think experience should be.

Recruiting Strategies



- ❖ Educated organization regarding importance of identifying and treating depression in students.
- ❖ Educated organization about concepts of mindfulness and data about efficacy.
- ❖ Invite 25 patients to obtain 10 participants based on no show rate of clinic.
- ❖ Phone reminders day prior to group.

Methods



- Stable, depressed students treated in college health setting recruited for 4 week MBI.
- All participants given 4-CD practice set.
- Data collected includes PHQ-9, MAAS scores at week 1, week 4, and 6 weeks after group completion.
- Additionally, participant evaluation and demographic information analyzed.

MBI Structure



- **Week 1-** review body scan protocol, PHQ-9, MAAS.
- **Week 2-** review supine yoga and practices, review mindfulness concepts.
- **Week 3-** review sitting meditation concepts and practice.
- **Week 4-** review yoga postures, sitting meditation concepts, mindfulness concepts; PHQ-9, MAAS, evaluation.

Benefits



- Mindfulness training offers framework to support increased coping strategies, prevent future relapse and improve functional level.
- Mindfulness offers students tools/strategies improve stress level while allowing them to practice in own time frame and location regardless of state of health or physical abilities.

Stigma Mental Health Services



- Cognitive Behavioral Therapy (CBT) available to students through college counseling centers.
- Health Minds Study (2011) 64% of undergraduate college students agreed with statement “Most people think less of someone who has received mental health treatment”.
- Personal stigma higher among male, younger, Asian, international, poor families.
- Providing alternatives traditional CBT increases diversity services offered.

Health Promotion and Disease Prevention



In college setting, provision of health care often mimics primary care model, illness-driven.

Better model-wellness services:

- In stress reduction and health promoting activities, the problem (illness, stress) is addressed from several perspectives
- Stakeholders benefit from atmosphere less stressful, supports increased retention, affects revenue and enrollment.
- This in turn, supports local economy and community which depends on these present and future taxpayers and family members.

Health/Wellness



“Higher Education needs to give more broad- based attention to health and wellness. Our graduates will all have to deal with the facts that the general state of health of Americans is not good and our national health care system is badly in need of reform.”

(Kupchella, 2009)

Resources



- Center for mindfulness in medicine, health care, and society, <http://www.umassmed.edu/cfm/home/index.aspx>
- Kabat-Zinn, J. (1991). *Full catastrophe living: using the wisdom of your body and mind to face stress, pain, and illness*. New York, NY: Delta Trade Paperbacks.
- Santorelli, S., (2010). *Heal Thy Self: Lessons on Mindfulness in Medicine*. New York, NY: Harmony/Bell Tower.

Resources



Integrative Medicine for the Underserved

Mindfulness-based patient handouts, <http://www.im4us.org/>

General Introduction to Mindfulness - Describes the practice of mindfulness, its benefits, the approach to wandering thoughts, and a script for a meditation noticing thoughts, feelings, and sensations

Instructions for Mindfulness Meditation - A description of mindful practice noticing sensations

Body Scan - Script for the classic body scan technique for passive progressive relaxation

Mindfulness with Pain - A mindful practice focusing on pain sensations, acceptance and noticing or labeling the sensations without judgment

A short video of **Jon Kabat-Zinn presenting at Google**

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**Thank
You**