NEW DATA
KORU: A DEVELOPMENTALLY TARGETED MINDFULNESS PROGRAM FOR COLLEGE STUDENTS AND OTHER EMERGING ADULTS.

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Financial Disclosure

• Co-founder and co-director of the Koru Center for Mindfulness, an agency that trains and certifies individuals to teach Koru Mindfulness
Overview

• Review developmental stage of emerging adulthood.
• Consider mindfulness as a developmental aide for emerging adults.
• Review data on Koru, a mindfulness program developed at Duke CAPS for emerging adults.
Koru = Balanced Growth

The New Zealand Maori word for the spiral shape of the developing fern frond.
Emerging Adults

• Developmental stage defined by Jeffrey Arnett in 2000.
• Emerged as a result of changing social trends
• Includes roughly the ages 18-29
• Sometimes called the “in-between age”
• Focus is on values exploration and identity development
• Time of life with greatest number of transitions
• High levels of stress and stress-related problems
Looking beneath the surface: Arnett’s 2012 Survey

How does it feel to be an emerging adult?

- “This time of my life is fun and exciting” 83%
- “This time of my life is stressful” 72%
- “I often feel anxious” 56%
- “This time of my life is full of uncertainty” 64%
Survey Results: Employment

“It is more important to enjoy my job than to make a lot of money” 79%

“It is important to me to have a career that does some good in the world.” 86%
9 out of 10 agree that:

“I am confident that eventually I will get what I want out of life” and

“At this time of my life, it still seems like anything is possible”
Rising tides of stress in college students

• College counseling centers: 92% report increasing numbers of students each year and 82% report increasing psychopathology in students. (2012 National Survey of College Counseling Centers)

• 50% of students report significant levels of stress and anxiety and 16.5% report suicidal/self-harm behavior. (Downs, 2012)
Mindfulness training offers a solution for managing the pressures associated with the developmental stage.
Mindfulness

- Bringing attention, without judgment, to present-moment experience.
- This simple shift in awareness produces a myriad of physical and psychological benefits.
- Well documented positive outcomes in multiple studies. (*Khoury, meta-analysis 2013*)
- Almost all research based on MBSR or similar 8-week mindfulness training programs.
Mindfulness-Based Psychotherapies

- Dialectical Behavior Therapy (DBT)
- Acceptance and Commitment Therapy (ACT)
- Mindfulness Based Cognitive Therapy (MBCT)
- Mindfulness Based Relapse Prevention (MBRP)
- Mindfulness Based Eating Awareness Training (MB EAT)
Mindfulness as Developmental Aid

- Helps manage uncertainty about future, by shifting focus of attention to present-moment conditions
- Enhances emotion regulation
- Enhances self-awareness, which supports values clarification and identity development
- Reduces perceived stress and increases distress tolerance
- Increases self-compassion in face of inevitable losses and failures during period of intense transition
Koru: Getting Emerging Adults Practicing Mindfulness
Challenges and opportunities: Characteristic attitudes of EA’s when learning about mindfulness

- Skeptical of anything too “corny” or “new agey”.
- Needing relief and impatient for “improvement”.
- Feel pressed for time and this limits what they will commit to.
- Curious, open, flexible.
- Respond well to humor and stories, especially if relevant to their personal experiences.
- Intrigued by the science of mindfulness
Koru basic structure:

• Four, 75-minute classes.
• Classes are small, diverse groups with maximum of 12 students.
• Each class includes:
  short opening meditation
  check-in
  mind-body skill
  mindfulness meditation practice
Koru Student Expectations

• Mandatory attendance at all 4 classes
• Required homework of 10 minutes/day practice of mindfulness-based skill or meditation
• Required homework of identifying a routine activity that must be performed mindfully each day (e.g. brushing my teeth)
• Completion of log that documents homework and includes daily gratitude journal
• Required readings from book: Wherever You Go, There You Are
The Skills:

- Class 1: Dynamic Breathing and Diaphragmatic Breathing
- Class 2: Walking Meditation
- Class 3: Guided Imagery
- Class 4: Eating Meditation
The Guided Meditations

- Class 1: Body Scan
- Class 2: Gatha
- Class 3: Labeling Thoughts
- Class 4: Labeling Feelings
Koru Outcomes: Qualitative

- Over 500 students have been through the program and given written feedback about their experience.
- Large majority of students complete all 4 classes, meditate most days during the course, and report high satisfaction.
- At the end of the class students report changes that are consistent with greater resilience:
  - Finding it easier to let go of “negative” thoughts
  - Dealing with stress without feeling so overwhelmed
  - Managing relationships more thoughtfully
  - Feeling greater self-acceptance and confidence in themselves
Mindfulness for the Next Generation (Oxford Press, 2012)

Holly Rogers, M.D. & Margaret Maytan, M.D.

MINDFULNESS FOR THE NEXT GENERATION
Helping emerging adults manage stress and lead healthier lives
A RANDOMIZED CONTROLLED TRIAL OF KORU: A MINDFULNESS TRAINING PROGRAM FOR COLLEGE STUDENTS AND OTHER EMERGING ADULTS.

Koru Outcomes: The randomized, controlled trial.

- Lead researcher was Jeffrey Greeson, Ph.D. at Duke Integrative Medicine.
- Randomized Controlled Trial with a wait list control
- 90 students participated. 60% female, 84% non-hispanic, 62% white, 25% Asian-Amer., 5% African-Amer., 28% undergrad.
- Students sampled 7 days before and after active group participated in Koru.
- Wait-list group participated in Koru later in same semester.
Outcome measures

• Mindfulness: Cognitive and Affective Mindfulness Scale-Revised (CAMS-R)
• Self-compassion: Self Compassion Scale (SCS)
• Perceived Stress: Perceived Stress Scale (PSS)
• Sleep: Medical Outcome Study Sleep Scale (MOS SLP9)
• Gratitude: Gratitude Questionnaire (GQ-6)
### Changes in outcome variables for Koru and wait-list control groups

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Koru Group</th>
<th></th>
<th>Wait-list Control</th>
<th></th>
<th>Mixed Model ANOVA</th>
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<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td>F</td>
<td>p</td>
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<tr>
<td>Perceived Stress</td>
<td>23.71</td>
<td>20.43*</td>
<td>25.66</td>
<td>25.04</td>
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<td>Sleep Problems</td>
<td>41.36</td>
<td>32.52*</td>
<td>42.91</td>
<td>42.84</td>
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<tr>
<td>Mindfulness</td>
<td>28.69</td>
<td>33.77*</td>
<td>27.22</td>
<td>26.79</td>
<td>79.09</td>
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<tr>
<td>Self-Compassion (total)</td>
<td>2.73</td>
<td>3.25*</td>
<td>2.61</td>
<td>2.62</td>
<td>20.07</td>
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# RCT results: Koru vs wait-list

<table>
<thead>
<tr>
<th>Outcome</th>
<th>p (significance)</th>
<th>d (effect size)</th>
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<tbody>
<tr>
<td>Mindfulness (CAMS-R)</td>
<td>&lt; 0.001</td>
<td>0.95 (large)</td>
</tr>
<tr>
<td>Self-compassion (SCS)</td>
<td>&lt; 0.001</td>
<td>0.75 (large)</td>
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<tr>
<td>Perceived stress (PSS)</td>
<td>&lt; 0.05</td>
<td>0.45 (medium)</td>
</tr>
<tr>
<td>Sleep (MOS SLP9)</td>
<td>&lt;0.05</td>
<td>0.52 (medium)</td>
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Koru within group effects.

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<td>0.76 (large)</td>
</tr>
<tr>
<td>Self-compassion (SCS)</td>
<td>&lt; 0.001</td>
<td>0.93 (large)</td>
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<tr>
<td>Perceived stress (PSS)</td>
<td>&lt; 0.001</td>
<td>0.53 (medium)</td>
</tr>
<tr>
<td>Sleep (MOS SLP9)</td>
<td>&lt; 0.001</td>
<td>1.9 (large)</td>
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Koru outcomes: Conclusion

- The effect size for Koru is comparable to effect sizes from other mindfulness based training programs such as MBSR. (See 2013 meta-analysis by Khoury.)
- Koru is an effective mindfulness training program for university students, requiring only 4 weeks of classes and 10 minutes/day of practice.
Koru outcomes: Conclusion

• Koru is popular with university students. They like it and will do it.
• Because of positive effects on sleep, stress, mindfulness and self-compassion, Koru effective strategy for enhancing resilience and promoting healthy psycho-social development.
• Further research is needed to see if these findings generalize to other populations of emerging adults.
Resources for Learning More about Koru

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The Koru Center for Mindfulness
www.korumindfulness.org
Questions?
The unhappy man is always absent from himself, never present to himself. But one can be absent, obviously, either in the past or in the future. This adequately circumscribes the entire territory of the unhappy consciousness.

--Soren Kierkegaard
Sample questions from CAMS-R

- I am preoccupied by the future.
- I can tolerate emotional pain.
- I can accept the things I cannot change.
- I am preoccupied by the past.
- I try to notice my thoughts without judging them.
- I am able to accept the thoughts and feelings I have.
- I am able to focus on the present moment.
Sample questions from SCS

- When something painful happens I try to take a balanced view of the situation.
- When I fail at something important to me I try to keep things in perspective.
- When I’m really struggling, I tend to feel like other people must be having an easier time of it.
- When something upsets me I get carried away with my feelings.
- When something painful happens I tend to blow the incident out of proportion.
Sample questions from the SCS

- When I’m feeling down I tend to obsess and fixate on everything that’s wrong.
- When things are going badly for me, I see the difficulties as part of life that everyone goes through.
- When I fail at something important to me I become consumed by feelings of inadequacy.
- When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.
- When I’m feeling down, I tend to feel like most other people are probably happier than I am.
Survey results: Higher Education and Finances

“I have not been able to find enough financial support to get the education I need” 36% overall

45% from lower SES
34% from middle SES
28% from higher SES