Chade Owastege

“To have one’s heart in the right place”
A culturally-compatible mindfulness-based stress reduction intervention at Fort Peck

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To have one's heart in the right place
Introduction

The proposed research objective aims to introduce a culturally-compatible mindfulness-based intervention with salivary cortisol testing to Fort Peck Nakona and Dakota participants and measure its influence of stress and resiliency outcomes. The purpose of the proposed research is to

1) adapt a mindfulness-based stress reduction program to target unique strengths and needs of Fort Peck,

2) assess feasibility and initial efficacy for improving coping/resiliency, reducing stress and associated physical, psychological, and emotional conditions, and

3) provide data to support a larger scale intervention.
"Mindfulness is awareness that arises through paying attention, on purpose, in the present moment, non-judgmentally.”

Black Elk
And while I stood there I saw more than I can tell and I understood more than I saw; for I was seeing in a sacred manner the shapes of all things in the spirit, and the shape of all shapes as they must live together like one being.

Teach me how to trust my heart, my mind, my intuition, my inner knowing, the senses of my body, the blessings of my spirit. Teach me to trust these things so that I may enter my sacred space and love beyond my fear, and thus walk in balance with the passing of each glorious sun.

Lakota prayer
Lack of research on mindfulness in AIAN communities

Although there is strong evidence of benefits of mindfulness-based programs, few studies have adapted or assessed these interventions for the unique stressors and challenges faced by AIAN communities, nor for specific biological, behavioral, psychological, cultural, social, or economic factors promoting or hindering their health and well-being.
Mindfulness-based Interventions: Healthcare Settings

- Asthma
- Cancer (Breast, prostate)
- Transplants (solid organ, bone marrow)
- Pain (chronic, RA, fibromyalgia)
- Cardiovascular (hypertension, myocardial ischemia)
- HIV
- Diabetes (Types I & II)
- Obesity
- Irritable Bowel Syndrome
- COPD
- Immune Response to autoimmune disorders
Mindfulness-based Interventions: Behavioral Health Settings

- Anxiety Disorders
- Depression
- Suicidality
- Personality Disorders
- Eating Disorders
- Drug Abuse & Addiction
- PTSD
- Schizophrenia
Stress Response: Cortisol

All available data suggests that long term exposure to glucocorticoid cortisol can lead to harmful negative health outcomes like:

- diabetes mellitus,
- coronary artery disease,
- cerebral vascular accident (stroke),
- hypertension (high blood pressure),
- myocardial infarction (heart attack), and
- eventually even death.

According to Indian Health Service factsheet on health disparities in Indian Country, diseases of the heart, malignant neoplasm, unintentional injuries, and diabetes are leading causes of American Indian and Alaska Native deaths (2007-2009), elevated stress and cortisol are the culprits underlying all of these negative health outcomes.
Stress Response: DHEA

Ratio of cortisol to DHEA (dehydroepiandrosterone)

Higher DHEA

- Helps people thrive under stress
- Predicts academic persistence and resilience
- Higher GPA’s
- Greater focus
- Less dissociation
- Superior problem-solving skills
- Fewer PTSD symptoms
- Predicts resilience in extreme circumstances, such as recovering from child abuse
Mindfulness-based Stress Reduction (MBSR)

“The very first and most important step in breaking free from a lifetime of stress reactivity is to be mindful of what is actually happening while it is happening.”
Jon Kabat-Zinn (2013)

- Eight weeks; 2.5 hour class/week; 1 daylong retreat
- Modified programs for youth and teens; 8-15 sessions; 15 minutes per session
- Weekend retreats

**Commitment to practice**

**In Class:**
- Presentation and discussion; group support
- Sitting meditation – awareness of body sensations, thoughts and emotions, while returning attention to breath
- Walking meditation
- Body scan – moving attention through the body
- Hatha yoga
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- 5 Week Intervention following the medicine wheel model + ceremony
- Cultural Familiarity: tobacco, sage, sweet grass & cedar; language
- Teaching element: relating mindfulness to experience
- Experiential Practices: sitting meditation, mindful movement, body scan
<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Retreat/Ceremony</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Color:</strong> Yellow</td>
<td><strong>Color:</strong> Red</td>
<td><strong>Color:</strong> Blue</td>
<td><strong>Color:</strong> White</td>
<td>Medicine Wheel activity</td>
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<tr>
<td><strong>Direction:</strong> East</td>
<td><strong>Direction:</strong> South</td>
<td><strong>Direction:</strong> West</td>
<td><strong>Direction:</strong> North</td>
<td></td>
</tr>
<tr>
<td><strong>Offering:</strong> Tobacco bundle</td>
<td><strong>Offering:</strong> Sweetgrass</td>
<td><strong>Offering:</strong> Sage</td>
<td><strong>Offering:</strong> Cedar</td>
<td></td>
</tr>
<tr>
<td><strong>Symbols:</strong> Spirit, Child, Fire</td>
<td><strong>Symbols:</strong> Youth, Body, Wolf, Summer, Earth</td>
<td><strong>Symbols:</strong> Water, Fall Parents/Community, Horse, heart</td>
<td><strong>Symbols:</strong> Elders, wind, Winter, mind buffalo</td>
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</tr>
<tr>
<td><strong>Theme:</strong> <strong>Truth</strong>—naming my truth? Exploring values and perceptions of stress/resilience</td>
<td><strong>Theme:</strong> stability, <strong>healthy lifestyles</strong>, traditional healing practice</td>
<td><strong>Theme:</strong> support/interdependence, <strong>connection</strong>, involvement</td>
<td><strong>Theme:</strong> <strong>cultural identity</strong>/pride, self-esteem, hope/optimism, achievement, <strong>resilience</strong>/coping skills, cultural knowledge</td>
<td><strong>Theme:</strong> Coming full circle</td>
</tr>
<tr>
<td><strong>Foundation:</strong> Culture: Hx trauma Personal Journey Stress Physiology: cortisol/DHEA stress vs resiliency</td>
<td><strong>Foundation:</strong> - exploring sensations, thoughts, feelings, perceptions habitual ways of being - Self-Awareness: courage to sit with whatever comes up Embodiment: awareness throughout the day</td>
<td><strong>Foundation:</strong> Transforming Stress: turning self-focus into bigger-than-self goals: what kind of impact do you want to have on the people around you? What do you want to contribute to the world? What changes do you want to create?</td>
<td><strong>Foundation:</strong> Growth mindsets Post Traumatic Growth Restorative Narratives</td>
<td><strong>Foundation:</strong> Supporting mindfulness sustainability</td>
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<td><strong>Pre-test</strong></td>
<td></td>
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<td></td>
<td><strong>Post-test</strong></td>
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<tr>
<td><strong>Skills:</strong> breath meditation Body scan Mindful eating</td>
<td><strong>Skills:</strong> walking/yoga AOB meditation Labeling sensations</td>
<td><strong>Skills:</strong> guided imagery Labeling emotions Loving Kindness</td>
<td><strong>Skills:</strong> guided imagery Labeling thoughts</td>
<td><strong>Skills:</strong> ALL</td>
</tr>
<tr>
<td><strong>Journaling:</strong> values, anticipated stressors, perception vs change</td>
<td><strong>Journaling:</strong> re-thinking stress: what brings meaning to your life?</td>
<td><strong>Journaling:</strong> Is your environment facilitating healing/balance or supporting illness?</td>
<td><strong>Journaling:</strong> who would you be without your narrative?</td>
<td>Video journaling/reflection</td>
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<td><strong>Social Media:</strong> images, poems, language that supports the weeks theme</td>
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<td><strong>Bio Sampling:</strong> cortisol test prior to starting intervention</td>
<td><strong>Bio Sampling:</strong> post session</td>
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<td><strong>Bio Sampling:</strong> post intervention</td>
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Assessment Tools

Subjective Tools
- Adverse Childhood Experiences (ACE’s)
- Historical Loss Scale
- Brief Resiliency Scal
- Ryff’s Psychological Well-Being Scale (PWB), 42-item inventory
- Perceived Stress Scale
- Mindfulness-based Self Efficacy Scale (MSES)
- Applied Mindfulness Process Scale (AMPS)

Biological Sampling
- Baseline Cortisol & DHEA samples
- 2 samples during the intervention period
- 1 sample post-intervention
- Alumni sampling
Discussion

• Both cohorts have fully engaged in dialogue and practice pieces of the intervention: commitment to practice, support
• Saliva sampling (timing) has been challenging
• Understanding of biopsychosocial effects of stress
• Requests for continued practice/support beyond intervention timeframes
Looking behind I am filled with gratitude.
Looking forward I am filled with vision.
Looking upward I am filled with strength.
Looking within I discover peace.

A’ero Apache
Acknowledgments