Yoga as an Intervention for Test Anxiety

Sasha N. Flowers
Mentors: Santiago Papini, Ariel Handy
Test Anxiety

- Negatively affects students’ lives
  - Emotional stress
  - Physical discomfort
  - Lowers test performance

[Image: Illustration of a person experiencing test anxiety symptoms such as sweating, rapid breathing, tummy ache, rapid heart rate, and trembling.]
Test Anxiety

- Treatment
  - CMHC (time, effort, anxiety-inducing)
  - Psychoeducation (definition, purpose, ineffective)
  - Yoga

Test Prep New York & San Francisco 2017
Background

- Azadeh Nemati (2013)
  - Tested effects of pranayama yoga on test anxiety
  - Pranayama (58) 3-10 min yoga daily, Control (49)
  - End Result: 33% yoga group experienced test anxiety, 67% control group

- Shraddha and Nanda (2016)
  - Examined levels of test anxiety reported by yoga in daily life group versus non-yoga group
  - Yoga (30), Control (30)
  - End Result: 12% yoga group, 25% non-yoga group
Background

- **Strengths**
  - Shows clear link between yoga and decrease in test anxiety symptoms

- **Weaknesses**
  - Length of time for treatment
  - Necessitates finding instructor (inconvenient) or self-led practice (confusing)
Current Study

• Solutions
  • Brief yoga (accessible, instant gratification)
  • Video (accessible, guided)

• Hypothesis
  • Students with test anxiety who practice 15 min of yoga will exhibit lower levels of test anxiety and higher levels of performance than those who read psychoeducation materials.
Design and Methods

- Participants
  - Undergraduates age 18-65
  - Previous experience with test anxiety

- Variables
  - IV’s: yoga, psychoeducation
  - DV’s: anxiety, test performance
Measurements

- **Cognitive Test Anxiety Scale (CTAS)**
  - baseline level test anxiety
    - “I lose sleep over worrying about examinations.”
    - “I tend to freeze up on things like final exams.”
    - Not at all typical of me - Very typical of me

- **State Trait Anxiety Inventory (STAI-6)**
  - anxiety felt in the moment
    - “I am tense.”
    - “I am worried.”
    - Not at all – Very much

- **Five-Facet Mindfulness Questionnaire (FFMQ)**
  - baseline mindfulness (further discussed in “Expected Results”)
    - “I watch my feelings without getting lost in them.”
    - “When I’m walking, I deliberately notice the sensations of my body moving.”
    - Never or very rarely true – Very often or always true
Experiment Flow

- Test #1
- Intervention
- Test #2
Experiment Procedure

- Phase 1: Warning, STAI pre, **Test #1**, STAI post
- Phase 2: **Intervention** (yoga/psychoeducation)
- Phase 3: Warning, STAI pre, **Test #2**, STAI post, FFMQ
Expected Results

- Intervention decreases anxiety
  - Compare pre-Test #1 anxiety w/ pre-Test #2 anxiety
  - Compare post-Test #1 anxiety w/ post-Test #2 anxiety
- Effect size of yoga > effect size of psychoeducation
- Within yoga group, high benefit correlated to high score on FFMQ
- Test Anxiety ↓ Performance ↑
  - Test #1 scores compared to Test #2 scores
Alternative Results

- Psychoeducation large effect size
  - Still helpful
- Yoga no effect
  - 15 minutes performed once is too brief
Thank you