Yoga at Every Size:
A Preliminary Evaluation of a Brief Online
Size-inclusive Yoga-based Intervention for
Higher Weight College Women

Jennifer B. Webb, Ph.D.
UNC Charlotte Department of Psychological Science
Health Psychology Ph.D. Program
APA Division 35 Symposium Presentation
August 6, 2017
Student Co-Authors

- Meagan P. Padro, BS, BA
- Courtney B. Rogers, MA
- Erin R. Vinoski, MPH
- Lena Etzel, BA
Research Aims

- To evaluate the preliminary efficacy of a brief, minimally-guided, online size-affirming yoga-based intervention versus a wait-list control for increasing positive body image, self-compassion, and intuitive eating among higher weight college women.

- To assess the feasibility and acceptability of this integrative mind-body approach.
Conceptual & Empirical Foundations

- Body Functionality/Internal Body Orientation (Alleva et al., 2015; Avalos & Tylka, 2006; Rubin & Steinberg, 2011)
- The Developmental Theory of Embodiment (Piran & Teall, 2012)/The Embodiment Model of Positive Body Image (Menzel & Levine, 2011)
- Health at Every Size® Health Promotion Model (ASDAH, 2013; Bacon, 2010)
- Brief Web-based Guided Self-help Mindfulness and Self-compassion-based Intervention Science (Albertson et al., 2014; Cavanagh et al., 2013)
- Yoga and Embodiment Scholarship (Klein & Cook-Cottone, 2013; Neumark-Sztainer, 2014; Mahlo & Tiggemann, 2016)
Yoga and Embodiment: What about higher weight women?

- Binge eating and physical activity (McIver et al., 2009b)
- Perceived food choices, healthy reconnection to food and positive evaluation of physical well-being (McIver et al., 2009a)
- Perceived Barriers to Access
  - Mismatch with body type (Ipsos Public Affairs, 2016)
  - Media (mis)representations of “the yoga body” (Vinoski et al., 2017; Webb et al., 2017a, Webb et al., 2017b)
  - Limited size-diverse yoga clothing/athletic wear options
Advancing Body Positivity & Health Through Size-Inclusive Yoga
Size-Inclusive Yoga: Breaking Barriers and Challenging Stereotypes

https://www.youtube.com/watch?v=DnkG8U5WCwY
Method

Participants

- 66 undergraduate women between 18-30 with a BMI of at least 25 kg/m^2
- 42 completers (21 per condition; 36% attrition)
- Mean Age = 20.9 years (SD = 2.4)
- Mean BMI = 30.9 kg/m^2 (SD = 5.5)
- 50% White/European American, 31% Black/African American
- 50% senior class status
- 81% non-Psychology majors
Method

- **Measures**
  - Demographic Questionnaire
  - *Functional Body Awareness and Appreciation Scales* (Rubin & Steinberg, 2011)
  - *Body Image-Acceptance and Action Questionnaire* (Sandoz et al., 2013)
  - *Self-compassion Scale* (Neff, 2003)
  - *Intuitive Eating Scale-2* (Tylka & Kroon Van Diest, 2013)
  - Feedback Questionnaire (Yoga Group only)

- **Incentives**
  - $10 Amazon gift card (baseline)
  - $20 Amazon gift card (post)
  - Yoga equipment kit (block, strap, and mat; Yoga Group only)
Method

4-Week Intervention Components

- 3, 15-minute Curvy Yoga® Practice Videos featuring Anna Guest-Jelley
- Daily Body Positive Motivational Image
- Daily Body Gratitude Journaling
- Motivational Wristband: “Yoga is for EVERY Body! No weigh-in Necessary!”
Results: Baseline Differences

- **Completers (N = 42) vs. Attriters (N = 24)**
  - Body Image Flexibility ($p = .001; C > A$)

- **Yoga Group (N = 21) vs. Wait-list Control (N = 21)**
  - BMI ($p < .10; YG > WL$)
  - Functional Body Awareness ($p < .10; WL > YG$)
Results

**Body Image Flexibility**
- Time: $F(1, 40) = 5.15, p < .05$
- Baseline Mean: 49.1 ($SD = 13.1$)
- Post Mean: 53.1 ($SD = 15.4$)

**Self-compassion**
- Time: $F(1, 40) = 5.45, p < .05$
- Baseline Mean: 2.81 ($SD = 0.55$)
- Post Mean: 2.98 ($SD = 0.61$)

**Intuitive Eating**
- No significant effects
Results: Body Appreciation

Group x Time: $F(1, 40) = 5.47, p < .05, d = -.75$ (Yoga Group)
Results: Functional Body Awareness

Group x Time: $F (1, 40) = 7.09, p < .05, d = -.73$ (Yoga Group)
Results: Functional Body Appreciation

Group x Time: $F(1, 40) = 4.67, p < .05, d = -.61$ (Yoga Group)
Results:
Adherence and Acceptability

- 81% practiced the yoga videos at least 3-4 times per week
- 76% wrote in their body gratitude journal at least 1-2 times per week
- 81% were at least moderately satisfied with the program overall
- 72% found the daily images at least somewhat motivating or encouraging
- 52% wore the motivational wristband at least 1-2 times per week
- 76% reported having the yoga equipment supplied to them was very helpful
Discussion

- Evidence of preliminary efficacy for improving certain aspects of positive body image
- Greater intensity, direct guidance, and content focus may be warranted to achieve improvements in other outcomes.
- Most young women reported good adherence and were satisfied with their experiences in the program.
- Attrition was comparable to other brief, low-intensity online mindfulness-based guided self-help interventions.
Limitations

- Use of self-reported BMI for randomization
- No follow-up assessment
- Self-reported adherence measures
- Equipment (e.g., scale, BP cuffs)
- Multi-component intervention
**Future Directions**

- Evaluate potential effects on reducing negative body image and difficulties with embodiment.
- Make explicit that yoga is the basis of the intervention in recruitment materials.
- Consider using a stratified randomization procedure.
- Hold an in-person group yoga class led by a size-inclusive yoga instructor at the outset.
- Consider using body image flexibility scores as a screening tool.
- Include a follow-up assessment.
- Revise functional body appreciation journaling prompt.
- Include additional measures
  - Experiences of Embodiment (Piran & Teall, 2012)
  - Body Compassion (Altman et al., 2017)
  - Intuitive Exercise (Reel et al., 2016)
Thank you! 😊

Ideas? Comments? Questions?
References


