

# Yoga-based ACT for Anxiety: Development of a 10-week group protocol, and findings from a pilot study

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## Introduction

### ACT and Yoga for Anxiety

- ACT is an evidence-based approach for treating anxiety (Landy et al., 2015), delivered in the traditional psychotherapy format where therapists and clients are seated (one-on-one, or in a group).
- There is also preliminary support for yoga as an intervention for anxiety according to five literature reviews (DaSilva et al., 2009; Hofmann et al., 2016; Kirkwood et al., 2005; Li & Goldsmith, 2012; Sharma & Haider, 2013).

### Present Study

- We speculated that physical yoga practices (postures) could provide an alternate medium to sitting for delivering ACT components such as mindfulness, self-compassion and values.
- However, as far as we know, the combination of ACT and yoga for anxiety has not been empirically examined.
- Hence, a 10-week protocol for a yoga-based ACT group for anxiety was developed and a small pilot study examined the feasibility, acceptability and initial effectiveness of the protocol.

## Method

### Participants (N=7)

- Participants (6 females, 1 male) recently completed an ACT group for social anxiety or Compassion Cultivation Training (CCT) Group
- One individual dropped out after the first session and one after the second
- Ages of the 5 completers ranged from 27-61 years ( $M = 44.6$ ), 100% completed some university, 80% employed, 40% single, and 80% Caucasian

### Measures

Measures were administered before the group started (pre-group), after five (mid-group), and ten sessions (post-sessions):

- Depression, Anxiety, Stress Scales (DASS-21; Henry & Crawford, 2005)
- Self-Compassion Scale (SCS; Neff, 2003)
- Single-item ratings of past week anxiety, self-criticism, self-understanding, self-caring and depression
- Group Completion Questionnaire (GCQ) - Administered post-group only

### Procedure

- Participants received 10 weeks of Yoga-based ACT group therapy administered by JF (psychiatrist and certified yoga instructor).

## Protocol Development

- Each 90-minute session included five parts:
  - 15-minute guided meditation around an ACT concept (see Table 1 for details).
  - 55-minute yoga posture practice during which ACT concepts were integrated
  - 5-minute breathing practice
  - 5-minute closing relaxation
  - 10 minutes for general discussion
- Participant handouts summarized each session.

Table 1. Summary of 10-session Protocol

Session	Theme	Opening Meditation and other Exercises
One	Yoga Basics	Grounding, breathing, release of tension
Two	Observer Perspective	Lake Meditation
Three	Self-Compassion	Compassionate Image
Four	Mindfulness	Body Scan, Mindful seeing, hearing and walking
Five	Values and Goals	Compass metaphor, Identify values and goals relevant to yoga
Six	Defusion	Awareness of thinking, Thoughts projected on a movie screen metaphor
Seven	Acceptance	Acceptance of physical sensations and thoughts, Guest House poem; Finger traps
Eight	VITAL acronym*	Explore VITAL
Nine	Self-Compassion	Self-Compassion Break
Ten	Review	Yoga basics, VITAL

\*VITAL: V for values and goals, I for Into the present moment, T for Taking notice of one's inner experience, AL for ALlowing one's experience to be as it is

## Results

- **Feasibility:** Average attendance was 7.8 out of 10 sessions.
- **Acceptability:** On average, participants "agreed" or "strongly agreed" with 12 specific and general benefits of the group
- **Effectiveness:** Based on one-way repeated measures ANOVAs, there was support for change across time on the DASS, as well as the single-item measures of understanding toward anxious symptoms, and depression. Although none of the post-hoc tests were significant (all  $ps > .10$ ), the means were in the anticipated directions (see Table 2).

## Results (cont.)

Table 2. Summary of Results

Measures	Pre		Mid		Post		F(2,8)	p
	Mean	SD	Mean	SD	Mean	SD		
DASS	20.20	6.02	11.60	6.19	14.40	7.67	7.47	.02*
SCS	76.40	7.70	85.60	7.89	81.20	7.95	1.52	.28
MAAS	50.50	7.58	56.10	6.58	57.60	6.84	1.25	.34
<b>Single Items</b>								
Anxiety	50.00	23.45	40.00	17.32	36.00	19.49	.91	.44
Self-criticism	32.00	16.43	18.00	16.43	24.00	16.73	1.25	.34
Self-understanding	50.00	25.50	82.00	4.47	74.00	15.66	4.70	.045*
Self-caring	44.00	20.74	66.00	15.17	64.00	18.17	2.55	.14
Depression	1.60	1.14	0.40	0.55	1.00	0.71	4.70	.045*

\*Using the Bonferroni correction, the post-hoc tests revealed no significant differences between any time points (all  $ps > .10$ ).

## Discussion

- Findings from this pilot study provide initial support for the feasibility, acceptability and effectiveness of a yoga-based ACT group for anxiety.
- Larger, randomized, controlled trials are required to further explore the effectiveness of this novel approach to anxiety.
- It is important to examine the relative effectiveness of the different components of the group, especially in light of recent findings of comparable effectiveness of yoga postures, and mindfulness practices such as body scan, and sitting meditation, in reducing anxiety, stress, and rumination, and increasing self-compassion and well-being.
- Yoga-based ACT has the potential to be an effective, non-stigmatizing approach that could be available to individuals struggling with anxiety.
- Limitations: small sample size, all self-report measures, participants had prior experience with mindfulness and self-compassion practices.

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