

Supplementary Online Content

Simon NM, Hofmann SG, Rosenfield D, et al. Efficacy of yoga vs cognitive behavioral therapy vs stress education for the treatment of generalized anxiety disorder: a randomized clinical trial. *JAMA Psychiatry*. Published online August 12, 2020.

doi:10.1001/jamapsychiatry.2020.2496

eMethods. Statistical Analysis Details: Sensitivity Analyses, Mediation Analysis

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This supplementary material has been provided by the authors to give readers additional information about their work.

eMethods. Statistical Analysis Details: Sensitivity Analyses

A priori sensitivity analyses did not examine the repeated measures of response over time, but rather just investigated response at post-treatment (yes/no) using GLMM logistic regression. These analyses were performed to examine the robustness of the findings without imposing constraints of a specific growth curve model. As per our protocol, the logistic regression analyses included post-treatment response as the dependent variable, treatment groups as dummy coded independent variables, baseline anxiety symptom severity (as measured by CGI-Severity and the SIGH-A) as covariates, and participants nested within treatment cohort. Two of these sensitivity analyses were performed. The first treated missing data at post-treatment as missing (a “completer” analysis), and the second imputed missing data at post-treatment using last observation carried forward (LOCF). Thus, RRs estimated from the growth curve model and from the logistic regression models with covariates differed due to 1) the treatment of missing data and 2) the correction for baseline anxiety symptom severity (which was not controlled in the growth curve model, per protocol).

For the completer analysis, GLMM logistic regression showed that CBT post-treatment assessment completers had significantly higher response rates (73%) than SE completers (41%;OR=3.82, 95% CI [1.21, 12.06], $t(149)=2.31,P=.02,NNT=3.15,95\%CI [2.12,48.17]$), but KY completers did not (52%;OR=2.15, 95% CI [.49, 4.90], $t(149)=.76,P=.45$). Completer RRs were significantly higher for CBT than KY (OR=3.47, 95% CI [1.21,5.05], $t(149)=2.49,P=.01,NNT=4.81,95\%CI [2.44,14.53]$). LOCF results showed that CBT participants had higher response rates (65%) than SE participants (37%;OR=3.11, 95% CI [1.19,8.08], $t(188)=2.32,P=.02,NNT=3.63,95\%CI [2.25,45.74]$), but KY and SE did not significantly differ (41%;OR=1.44, 95% CI [.58, 1.31], $t(188)=.76,P=.45$). RRs in CBT were also higher than KY (OR=2.15, 95% CI [1.20, 3.90], $t(188)=2.57,P=.01,NNT=4.29,95\%CI [2.88,14.92]$).

Further results, examining the slopes of improvement in RRs in the primary GLMM analysis reported for Hypothesis 1, showed that RRs improved faster in CBT than SE (OR=1.49, 95% CI [1.17,1.92], $t(37)=3.21,P=.003$), but not in KY vs. SE (OR=1.16, 95% CI [.91, 1.46], $t(37)=1.24,P=.22$). Also, RRs improved faster in CBT than KY (OR=.77, 95% CI [.64, .93], $t(37)=2.70,P=.01$).

Statistical analysis details: mediation analysis

A longitudinal mediation analysis was performed to determine if FFMQ and/or MCQ mediated the significant treatment condition differences between KY and SE, and between CBT and SE, at post-treatment (see Figure 3). The *b* paths in the longitudinal mediation analysis (paths from the mediators to the outcome) were obtained by adding both FFMQ and MCQ as time-varying predictors (TVPs) in the growth model for response in Hypothesis 1. Because TVPs conflate between- and within-subject differences, we disaggregated each TVP into its between-subjects component (its mean level across assessments for each person) and its within-subject deviations from its mean level. It should be noted that because the mean component of each mediator reflects average levels of the mediator across time, its relation with RR may be confounded by other third variable between-subjects confounds and thus the mean components of FFMQ and MCQ may not be causes of changes in RR. The within-subject deviations (change scores), by contrast, are independent of third variable between-subjects confounds and hence are more likely to be quasi-causal. The *a* paths in the mediation model (the paths from treatment condition contrasts to the mediators; see Figure 3) were calculated using the same GCM as in Hypothesis 1, but with the mediators as the dependent variables.

eTable. Adverse Events in a Randomized Controlled Trial of Kundalini Yoga, Cognitive Behavioral Therapy, or Stress Education for Patients With Generalized Anxiety Disorder (n = 226)

	No. (%)	AE Severity			AE Relation to Treatment		
		Mild	Moderate	Severe	No	Possible	Definite
KY (n=93)							
Anxiety	20 (21.51)	11	6	3	29	0	0
Back Pain	3 (3.23)	1	2	0	3	0	0
Cyst	2 (2.15)	2	0	0	2	0	0
Depression	2 (2.15)	1	0	1	2	0	0
Hives	1 (1.08)	0	0	1	1	0	0
Infection	7 (7.53)	4	3	0	7	0	0
Insomnia	2 (2.15)	0	1	1	2	0	0
Joint Pain	5 (5.38)	3	2	0	2	1	2
Mental Distress	4 (4.30)	0	2	2	4	0	0
Muscle Pain	1 (1.08)	0	1	0	0	1	0
Nightmares	1 (1.08)	0	0	1	1	0	0
Tingling	1 (1.08)	1	0	0	0	1	0
Vertigo	2 (2.15)	1	0	1	1	1	0
Vision Abnormal	2 (2.15)	1	1	0	2	0	0
CBT (n=90)							
Accident	1 (1.11)	0	1	0	1	0	0
Anxiety ^a	10 (11.11)	1	3	5	7	3	0
Assault	1 (1.11)	0	1	0	1	0	0
Asthma	1 (1.11)	0	0	1	1	0	0
Back Pain	1 (1.11)	0	1	0	1	0	0
Bulimia	2 (2.22)	2	0	0	0	2	0
Depression	3 (3.33)	0	2	1	2	1	0
Flu	2 (2.22)	1	1	0	2	0	0
Headache	2 (2.22)	0	2	0	2	0	0
Infection	5 (5.56)	1	1	3	5	0	0
Joint Pain	5 (5.56)	2	3	0	5	0	0
Lymph Nodes Enlarged	1 (1.11)	0	0	1	1	0	0
Mental Distress	14 (15.56)	1	6	7	14	0	0
Muscle Pain	1 (1.11)	0	1	0	1	0	0
Pain	4 (4.44)	1	3	0	4	0	0
Stomach Pain	1 (1.11)	1	0	0	1	0	0
SE (n=43)							
Anxiety	3 (6.98)	1	2	0	2	1	0
Depression	2 (4.65)	0	2	0	2	0	0
Insomnia	1 (2.33)	0	1	0	1	0	0
Joint Pain	2 (4.65)	1	1	0	2	0	0
Mental Distress	1 (2.33)	1	0	0	1	0	0
Mood Change	1 (2.33)	0	1	0	1	0	0
Pain	1 (2.33)	0	1	0	1	0	0

Figure Legend:

Abbreviations: KY= Kundalini Yoga, CBT=Cognitive Behavioral Therapy, SE= Stress Education. Adverse event types reported by at least one participant within a given treatment group that occurred during at least one assessment between baseline and post-treatment endpoint are presented.

^aIn CBT group, one respondent did not report AE Severity

