

Stories of change: qualitative reports of improvements with yoga practice

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Changes in Diet and Exercise Behaviors in Yoga Participants

PRELIMINARY STUDY OF A YOGA PROGRAM TO
CATALYZE HEALTH BEHAVIOR CHANGE

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PRELIMINARY STUDY OF A YOGA PROGRAM TO CATALYZE HEALTH BEHAVIOR CHANGE

Mind-body practices such as yoga and meditation have been shown to be highly effective for reducing stress and enhancing wellness.

These practices may promote health behaviors such as changes in diet and exercise.

A team of yoga teachers from the Kripalu Center for yoga and Health have developed a standardized 16-week hatha yoga program which focuses on promoting skills for wellness.

PRELIMINARY STUDY OF A YOGA PROGRAM TO CATALYZE HEALTH BEHAVIOR CHANGE

preliminary data suggest that the program reduces stress and increases mindfulness and self-compassion (*Pilot*)

goals to obtain

preliminary estimates of effect sizes for health behaviors and to determine the optimal 'dose' of the program and home yoga to prescribe

information about mechanistic variables of interest and assess the feasibility of various aspects of our experimental design

PRELIMINARY STUDY OF A YOGA PROGRAM TO CATALYZE HEALTH BEHAVIOR CHANGE

establish the feasibility of using the yoga program to change health behaviors

provide valuable preliminary information about potential mechanisms through which the yoga program may be working

This information will then allow us to design a large RCT to formally test the efficacy of this program

In press results we did find that the dose varied on effective change and compliance. Compliance related to baseline self-efficacy and control.

Home Practice in Mind-Body Programs

- How to optimize the amount of prescribed home practice to achieve an effective “dose.”
 - 10min/day; 40min/day; your choice
- 12-week Kripalu Yoga program
- 85 participants randomized to low, medium, and high home practice conditions
 - Age 23-67
 - Self-described as “stressed”
- Baseline levels of self-efficacy and self-control related to home practice compliance
- Hypothesized mechanisms of change

Home Practice in Mind-Body Programs

- Intention: To explore psychosocial mechanisms underlying changes in Health Behaviors
- Interviews with a random sample $\frac{1}{2}$ of participants at program end and long-term follow up

Examples of Qualitative Data (Psychosocial Process Variables)

Reports of self-compassion:

Reports of emotion regulation:

Changes in relationships/context:

->Health Behaviors

Examples of Qualitative Data (Psychosocial Process Variables)

Reports of self-compassion:

- *It all starts off with the breathing and just kind of relaxing and using nonjudgmental thoughts when you kind of analyze things.*
- *I think what has changed is just the way that I view myself. I am not as hard on myself as I used to be.*

Examples of Qualitative Data (Psychosocial Process Variables)

Reports of emotion regulation:

- *I'd say calming my mind would probably be a big aspect of this that I wasn't aware of before I started.*
- *I'm not making a big deal about it and trying not to harp on it, just letting go and like breathe, relax, and not get stressed out.*
- *When I get upset about something that normally pissed me off and I'd want to punch a table or something, I don't do that anymore. I can calm myself down.*
- *When I have had troubling things going on lately, then I go to yoga. I find myself more emotional on the mat.*

Mechanisms of Change

Handle stress in Relationships:

- *[I am now] not immediately acting to however that person is reacting to me, and taking a step back.*

How see Self in relationships

- *At the end of our marriage she said to me “you’re not the man that I married” and my thought was, ...no I’m not because the man that you married is lost somewhere and now that man you married is finally back. I’ve rediscovered him and I love him.*

Mechanisms of Change

Many accounts of **Breathing** as Mechanism of Change for Emotion Regulation:

- *When I'm stressed, I do remember to chill out, take a step back, and breathe in and out and that helps.*

Awareness of body

- *In the past I never knew for sure, is this yoga, is this yoga and now I feel more confident in listening to what my body needs.*
- *I just feel like I can control my body more.*
- *When the program ended, it just became obvious to me, maybe because I was more in tune physically as a result of the yoga, that when I would overeat, I would feel sluggish.*

Awareness of thoughts

- *I'm 46 and so the yoga study came at a time when I could have easily had a midlife crisis. But I think that because I was in the program I kind of averted that.*
- *I was able through some of the mindfulness practices to slow down my brain enough so that I can catch that signal mid transit when my brain is saying "bite your nails." Normally I don't even know that the signal is happening.*

Examples of Changes in Health Behaviors:

- *I definitely have eaten healthier since leaving the program, and I always wanted to, but this was like an extra push to make me do it.*
 - dietary surveys as probes, part of mechanism of change
- *I know regardless of what's going on how important it is to get a good night's sleep and I think I would have sacrificed sleep over getting things done before now.*
 - Sleep taught about in yoga program

Next steps

- *Compare themes over time.*
 - *Look for evidence of movement through Stages of Change (Theory of Reasoned Action)*
 - *Look for evidence of elements of Social Cognitive Theory (Bandura)*
 - *Self-efficacy*
 - *Can we see in the qualitative data evidence for why some subjects showed change and others did not*
 - *Overall*
 - *By treatment assignment*



<https://www.prochange.com/transtheoretical-model-of-behavior-change>

Yoga in Schools

Parent RCT, Kripalu program 1 semester, local

Funded by Kripalu

Khalsa lab

Qualitative-Directed and Open questions about
program usability
subjects' experiences

Conboy LA, Noggle JJ, Frey JL, Kudesia
RS, Khalsa SB.(2013).

Yoga in Schools

9th and 10th grade

Most students reported
enjoying the classes and felt benefits
stress reduction related to participation in the class
reported using breath work outside of class
more optimism and ability to manage negative emotions

Most males felt peer pressure against yoga, yet most
would like to see program continue

Conboy LA, Noggle JJ, Frey JL, Kudesia
RS, Khalsa SB.(2013).

Yoga in Schools

9th and 10th grade

Greater kinesthetic awareness:

I learned to pay attention to how my body feels
(female grade 9)

...yoga gave me a new perspective on my body and I have more control than I thought I did.
(male grade 10)

Yoga may improve health behaviors although change is not prescribed

Conboy LA, Noggle JJ, Frey JL, Kudesia RS, Khalsa SB.(2013).

Yoga in Schools

9th and 10th grade

I have been eating healthier, more fruits and vegetables and not a lot of junk food; [for example] ice cream and candy...

Female, Grade 9

I have been a lot happier lately...I feel like a better person, making better choices, and staying out of trouble.

Male, Grade 9

Conboy LA, Noggle JJ, Frey JL, Kudesia RS, Khalsa SB.(2013).

Stories of change

- Yoga may improve health behaviors although change is not prescribed
- Supports observations from the yoga community
- Hard to study with a short-term RCT.
 - With qualitative reports-
 - Can hear subjects' lived experience and context
 - Can see precursors/proxies change.
- Evidence to support classical observations can be gathered qualitatively.
- Support yogic theory
- Help communicate with theories of behavior change