



The Tao of Obesity Prevention

Yoga as a Treatment for Binge Eating
Disorder (BED)

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Introduction

- Background/Rationale
- The problem of binge eating
- The program
- What happened
- Possible mechanisms
- Implications



Background/Rationale

- Emphasis on prevention of weight gain vs. weight loss
- Negotiating the maze of dieting and exercise advice, rules, regulations
- The need to examine our learned behaviours, habits and patterns (belief vs. truth)
- Negotiating a personal path: what do we do?

We can become extremely interested
in what we currently do (or don't do);
i.e. examine typically unexamined
habits and reactions...

...and see if the awareness creates change

The problem of Binge Eating

- Consumption of large amounts of food accompanied with feelings of being out of control
- A binge does not come out of the blue – it is anticipated and planned
- Binge eaters have rules – temperature, texture, etc (that's why diets don't work – they violate the rules)
- Needs distraction to function fully

Yoga as a Program

- Although yoga is both preventative and therapeutic, research typically addresses therapeutic issues.
- Difficulty measuring prevention as an outcome.
- Lack of validated instruments to measure relevant physical (e.g. flexibility) and psychological/spiritual outcomes (e.g. mindfulness/awareness).



The Yoga Program

- Explored the efficacy of a yoga program for treating binge eating disorder among a community-based female population ($N = 50$) with BMI > 25 (mean BMI: 34) (age: range 25 – 63 years, mean age: 43).
- RCT, combining qualitative and quantitative methods: Yoga group ($n = 25$) vs. control group ($n = 25$).
- Program: 12 weeks, 1 hour yoga session per week, complemented by CD with morning home-based 30-minute practice. CD featured guided hatha, pranayama and meditation practice.
- Also: instruction for eating mindfully.



Eating Mindfully – 4 main points

- Remove all distraction
(no television, no reading, while eating)
- Notice how much food is going in (i.e. on the fork)
- Notice the taste of the food
- Don't take another mouthful until you have swallowed the last

Primary outcomes –Yoga group

- Statistically and potentially clinically significant decreases in binge eating severity ($d=2.2$), retained at 3-month follow-up.
- Statistically significant increases in physical activity ($d=0.9$), also retained at 3-month follow-up.
- Statistically significant decrease in BMI, although small effect size ($d=0.1$) suggests that yoga promotes weight attenuation, rather than large weight losses among an obese population over 12 weeks.

Secondary outcomes – Yoga group



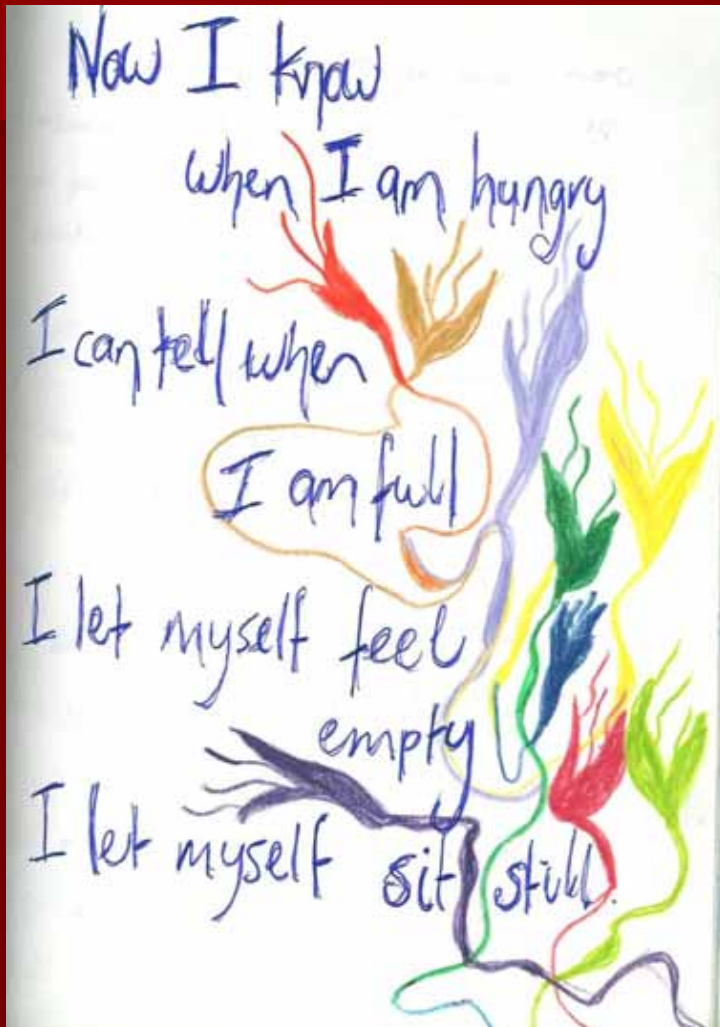
- Statistically significant decreases in depression* ($d=1.1$)
- and anxiety ($d=0.7$).
- Statistically significant increases in self-esteem ($d=0.8$)
- body image ($d=0.8$)
- quality of life* ($d=0.8$).
- *potentially clinically significant improvements
- No change for control group on primary or secondary outcomes

Food Intake – Yoga group



- Obtained from 3 day food diaries and analysed with nutritional software.
- Statistically significant decrease in amount of food consumed daily ($d=1.3$).
- Statistically significant decrease in consumption of fat ($d=1.4$) and sugar ($d=1.9$).

Journal Entries



- Data obtained from personal journals (diary entries)
Participants perceived:
- Eating less at post-test
- Choosing/craving healthier food
- Eating slower
- Leaving food on the plate when finished
- Genuine surprise at their own behaviour, especially in the absence of dietary or nutritional advice

Possible Mechanisms

Awareness of the Physical

- Initially magnifies problems, the disconnection, the grief associated with ignoring the body and its needs for so long
- Recognition of approaching exercise in the same way as a diet – do it until you don't (can no longer be bothered)
- Took time to connect to physical movement as a source of pleasure, rather than force under duress (this became a revelation)
- Unfamiliarity of the body (not knowing what it could or couldn't do) led to the development of the empowered body: enjoying the body more, worrying about it less
- Motivation to do more increased

Possible Mechanisms Awareness of Eating

- Initially dealing with the despair of being full, feeling empty, and giving bad food a second chance
- With awareness, comfort foods no longer provide comfort (too sweet, too salty)
- Eating mindfully short-circuits the rules around bingeing
- Over time, increased awareness of how what is eaten effects how the body feels
- Difficult to go back to old habits (despite attempts to try)
- Tendency to become more discerning (taste-wise), and greater enjoyment of food (vs. misery of the diet)



Implications

- Making food wrong is where we go wrong
- Ultimately, to work, exercise/health models must fit you, not the other way around
- The need to re-visit/re-think exercise models in primary, secondary schools and tertiary institutions (there is room for non-competitive, self-empowered models that emphasise pleasure, not just fitness under duress)
- Consider more fully the role of the environment (i.e. upgrading bike paths/walking trails)
- The physicality of yoga potentially augments the effects of typical mindfulness-based models

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