

MENTAL BALANCE AND WELL-BEING: THE ROLE OF MEDITATION AND MINDFULNESS

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Abstract

Meditation practice and the development of mindfulness have become an intensively researched area and first theoretical appraisals linking western psychological theories and ancient buddhist perspectives on mental balance and well-being have been proposed. These accounts suggest that a harmonic and balanced interplay of intention/motivation, attention, cognition and affect promotes well-being.

Our own research focuses on investigating how meditation and mindfulness practice influence these aforementioned four components and thus contributes to psychological (and also physiological) well-being.

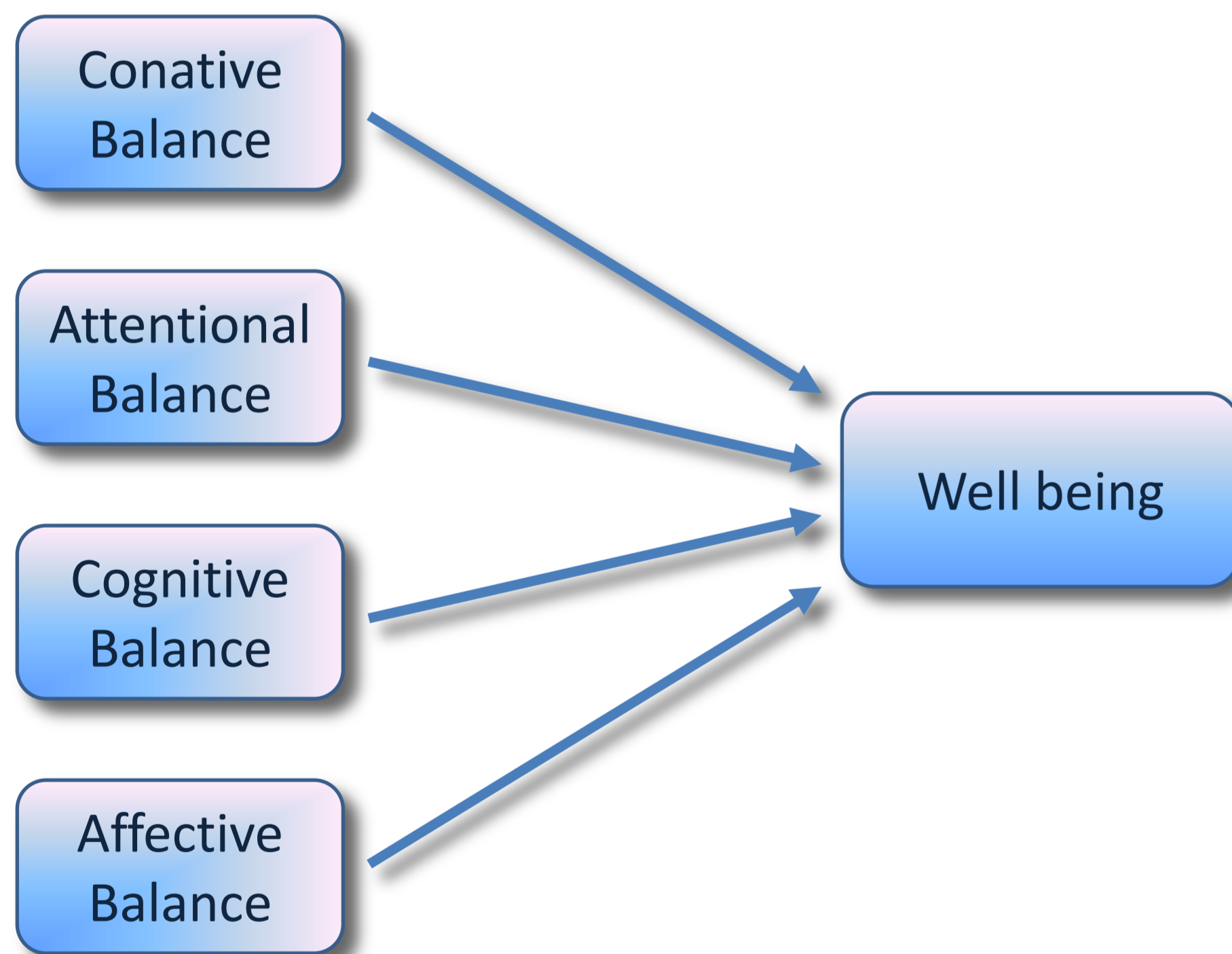
In a series of studies we (and others) have so far provided evidence for a relation between meditation/mindfulness practice and (a) several attentional functions, (b) perceived stress and (c) well-being.

This poster will present evidence from several cross-sectional, correlational studies confirming moderately strong correlations between several of these variables and supporting the assumption that attentional and emotional factors are linked to mindfulness and well-being.

The results from our studies as well as several others in this field generally are in line with the assumption that meditation practice and the improvement of mindfulness skills are conducive to mental balance and well-being. However, there is still a long way to go until principles and underlying mechanisms are clearly identified and confirmed.

Mental Balance Model of Wallace & Shapiro

This model^[1] bridges between buddhist and psychological approaches to well-being, suggesting that four components of experience need to be balanced for well-being to be achieved. It provides a useful theoretical framework for investigating the different avenues how meditation and mindfulness practice can influence well-being.



Meditation and Mindfulness

Within the context of psychology and health care mindfulness is usually conceptualised as ...

... the ability to maintain non-judgemental awareness of the present moment without getting caught up in habitual thoughts and automatic emotional responses.^[2]

In various applications and intervention programmes the old buddhist principle of *mindfulness* or *awareness* (Sanskrit: *smṛti*)^[3, 4] is combined with a variety of modern psychological concepts, e.g. stress, resilience, emotional processing and affect or impulsivity. Different **mindfulness-based meditation practices** are employed to foster the ability of maintaining mindful awareness.

The Research Question

What is the link between:

- regular (buddhist) meditation and mindfulness practice
- naturally occurring mindfulness
- and the four components of mental balance?

The Data

The data presented here are derived from a variety of cross-sectional studies we carried out. They are arranged in relation to the different components of the mental balance model.

Conative Balance

While from a conceptual perspective conative balance, motivation and intention appear to be very relevant and may even underpin the other components of mental balance, it is difficult to assess them scientifically. Thus, so far no studies on this aspect have come forward.

Indeed, when comparing meditators and non-meditators or even when recruiting participants for a meditation study, motivational aspects should be considered.

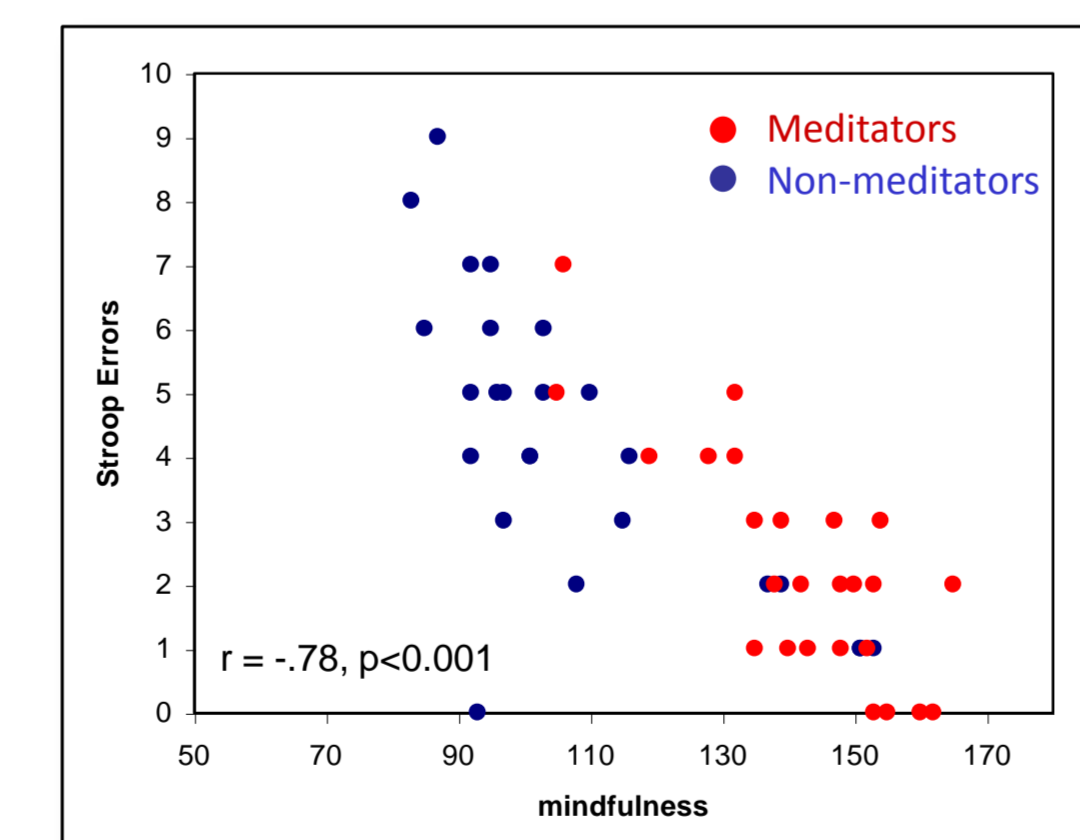
Attentional Balance

A growing number of studies, including brain imaging studies, confirm the positive effects of regular meditation practice on attentional performance and related neurophysiological parameters.

Here we present data from a behavioural study^[5] where we compared meditators and non-meditators on two attentional tasks and assess self-reported levels of mindfulness:

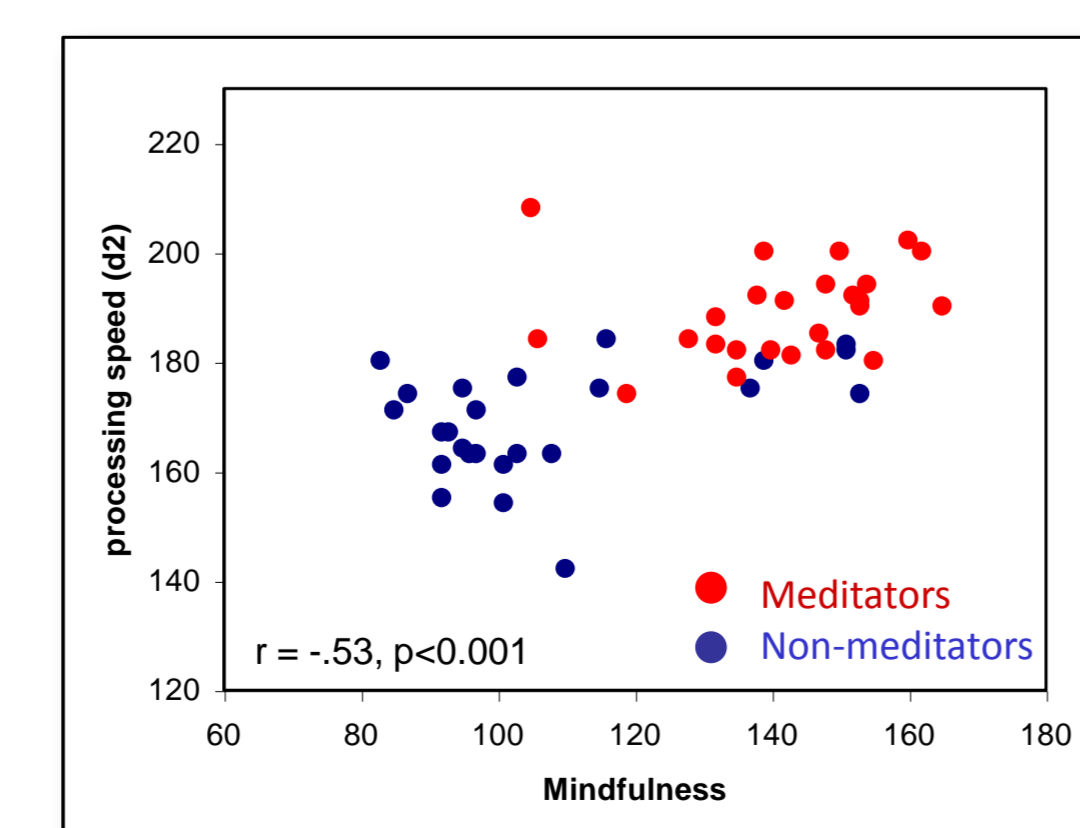
- 25 buddhist meditators vs. 25 non-meditators
- Mindfulness assessed with Kentucky Inventory of Mindfulness Skills^[6]
- Two speeded tests of attentional performance:

1. Stroop Test



- Name the *ink colour* presented colour words are printed in.
- Inconsistent condition (e.g. "BLUE") measures ability to control/withhold automatic responses
- Global mindfulness score was negatively correlated with Stroop errors

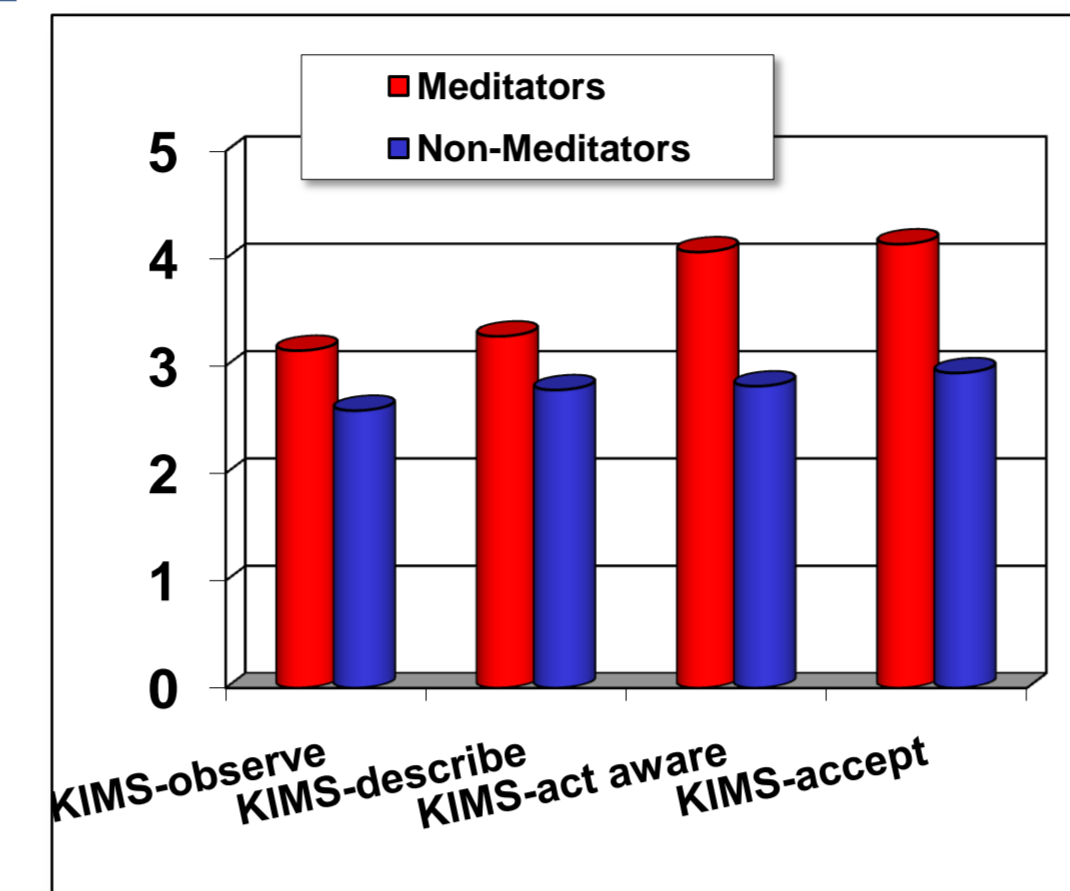
2. d2 – Attention Performance Test: Processing Speed



- Work through lines of similar symbols, identifying specific targets
- Processing speed was positively correlated with global mindfulness score

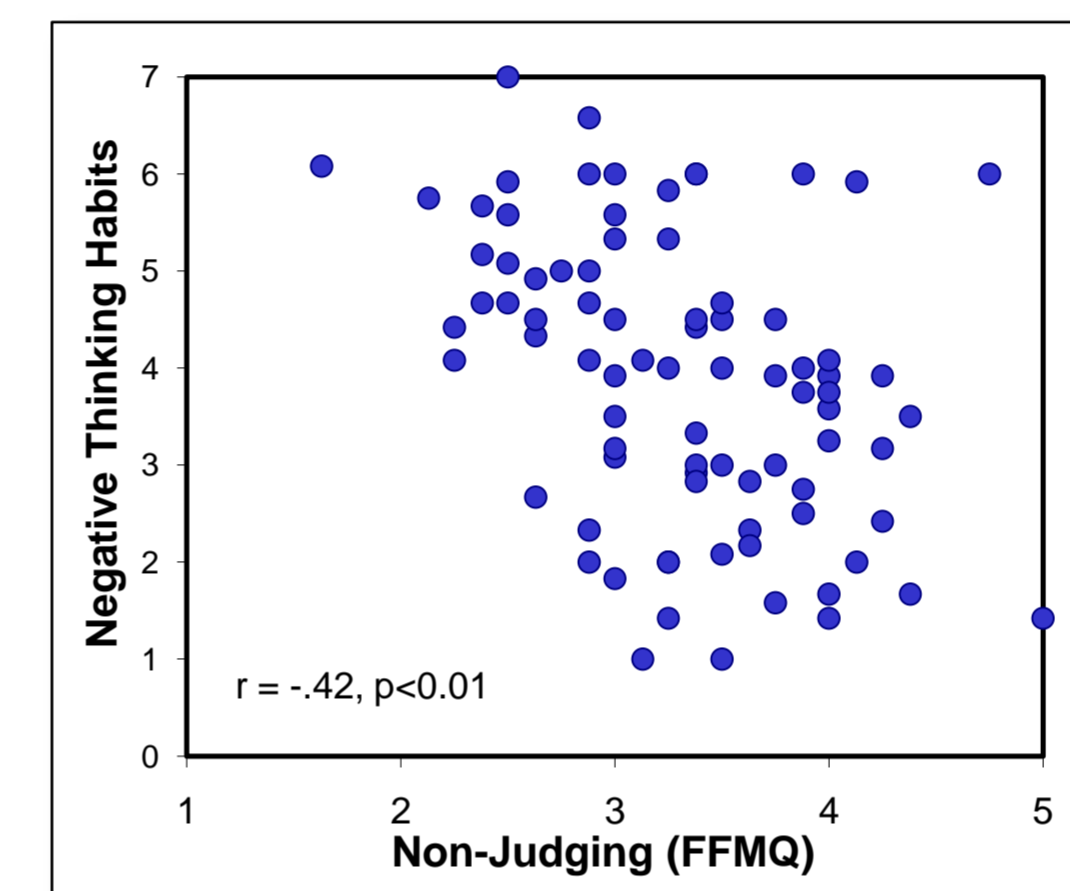
Cognitive Balance

Mindfulness in Meditators and Non-Meditators



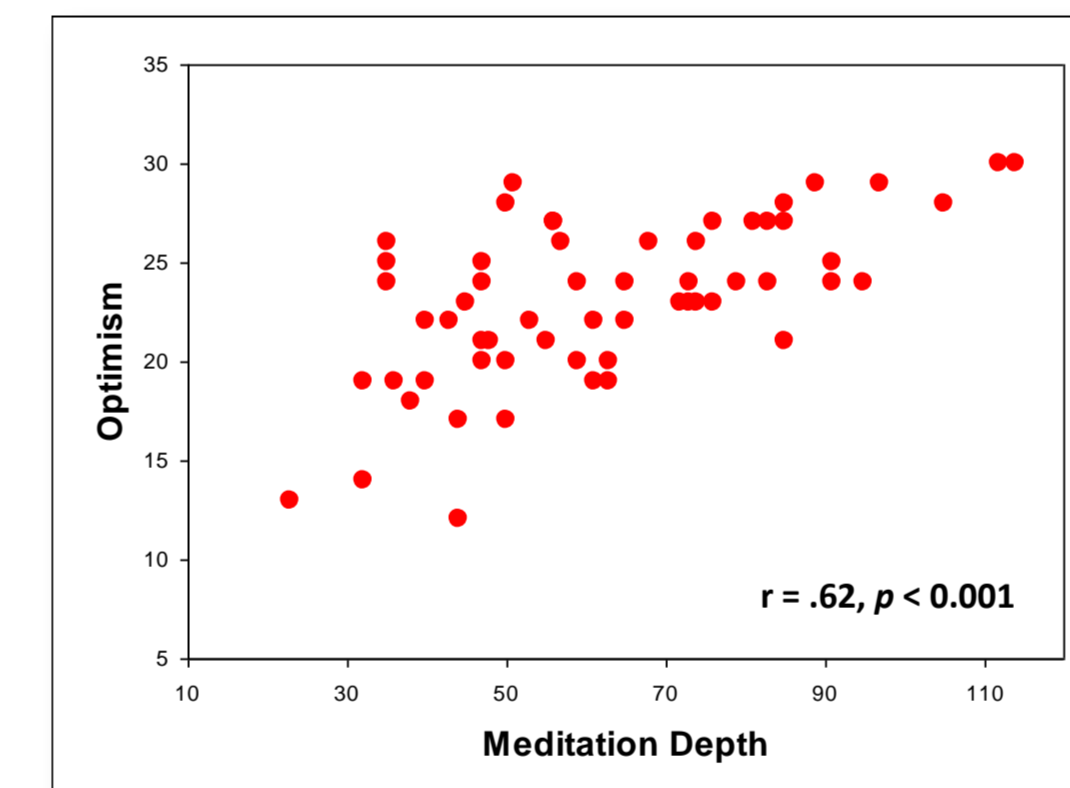
- 25 meditators vs. 25 non-meditators
- Same study as in 'Attentional Balance'
- Meditators scored higher on all mindfulness sub-scales of the KIMS (all $p < 0.01$)

Mindfulness and Negative Thinking Habits



- 84 non-meditators
- Questionnaire study using the FFMQ^[7] to measure 5 facets of mindfulness and the HINT^[8] to assess tendencies to think negatively about oneself
- The Non-Judging scale of the FFMQ (ability to refrain from involuntary judgements) was negatively correlated with negative thinking habits

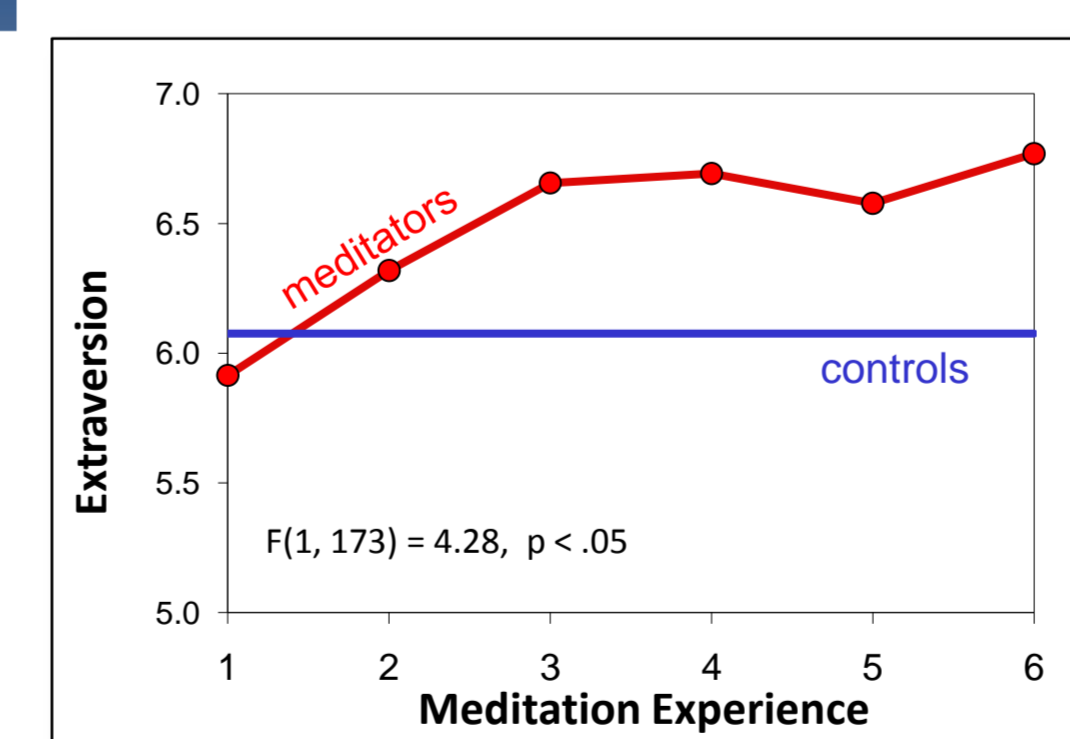
Depth of Meditation and Optimism



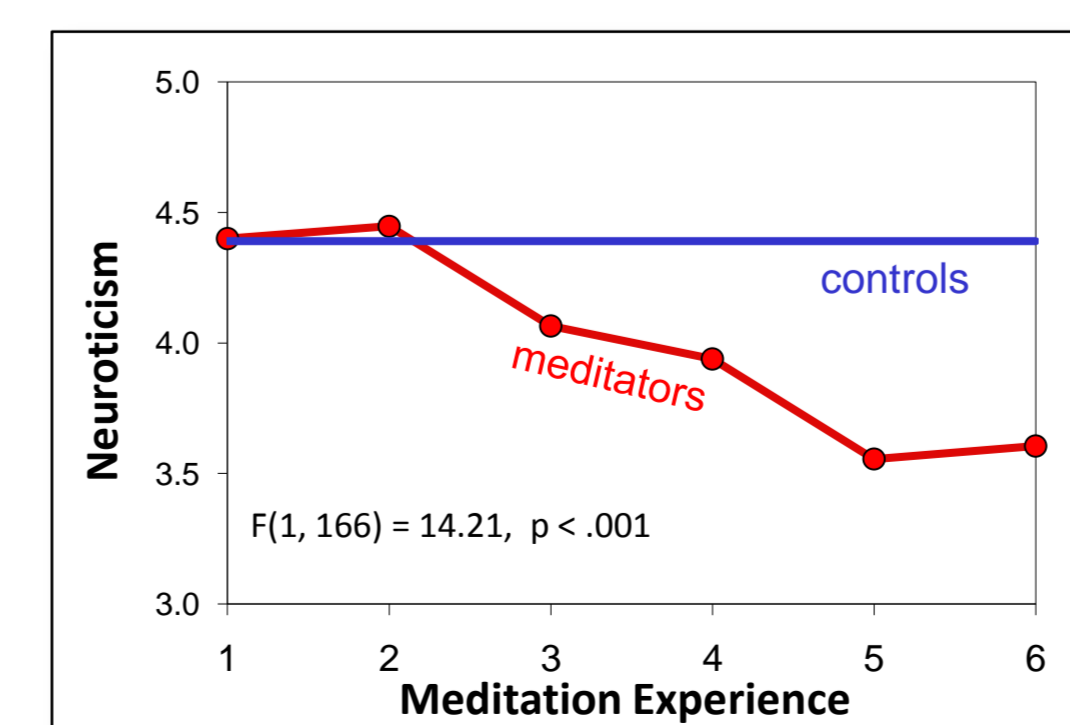
- 59 buddhist meditators
- Questionnaire study using the Meditation Depth Questionnaire^[9] and the revised Life Orientation Test (LOT-r)
- Depth of Meditation was positively related to optimistic life orientation

Affective Balance

Meditation Experience, Extraversion and Neuroticism



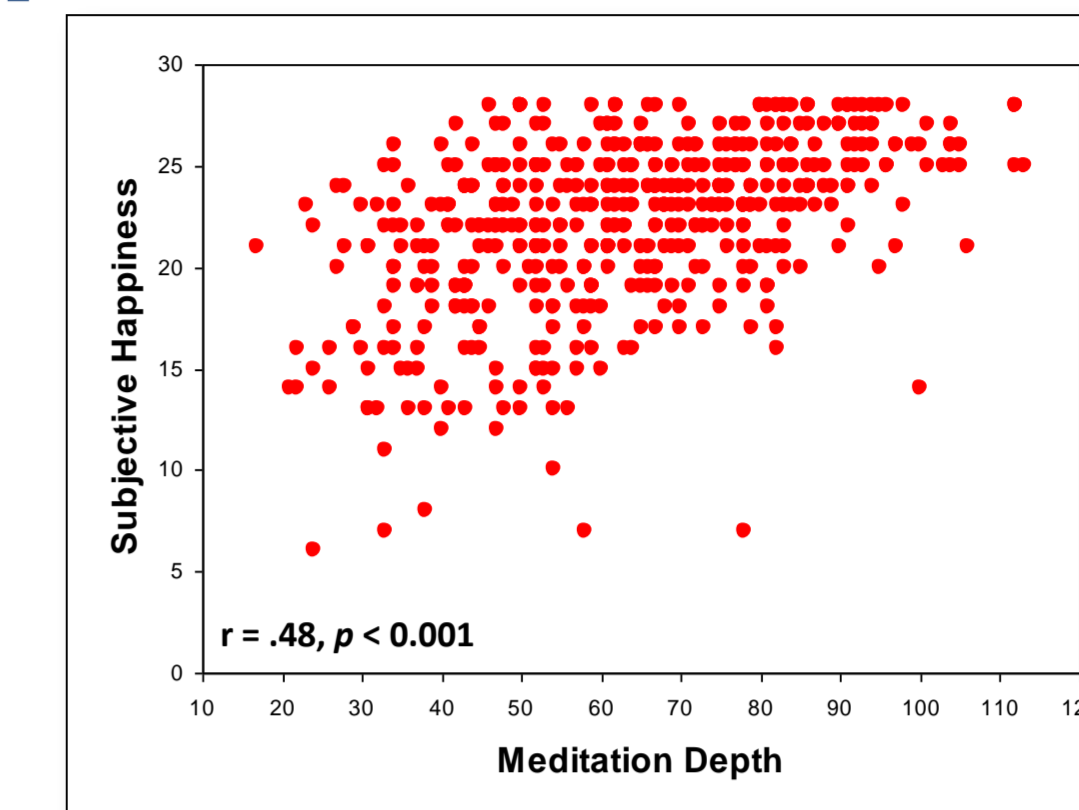
- Questionnaire study^[10]
- 189 buddhist meditators
- 111 non-buddhist control group
- Meditators sub-divided into 6 groups according to meditation experience (beginner to expert, 1 to 6 respectively)
- Extraversion and Neuroticism as sub-scales from Goldberg's 'Big Five'



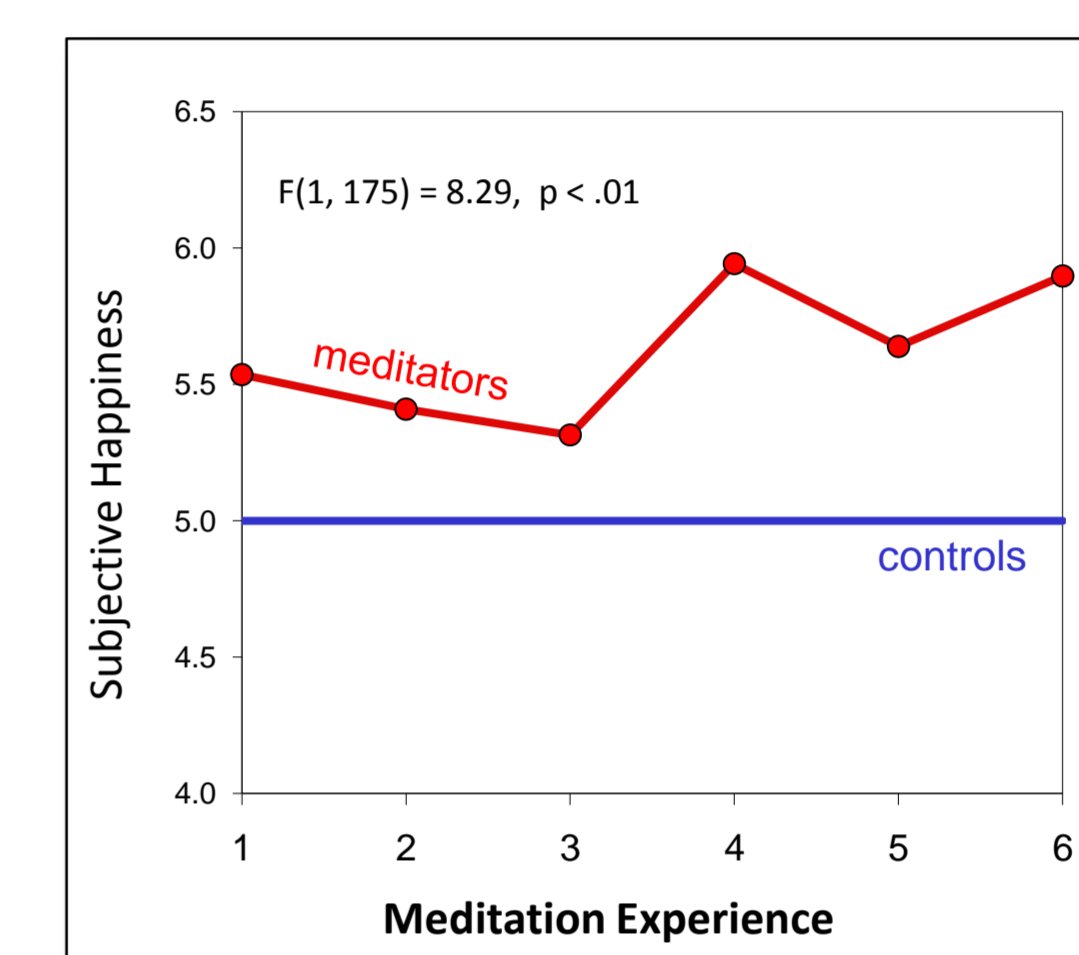
- Statistically significant increase of Extraversion with increasing meditation experience
- Statistically significant decrease of Neuroticism with increasing meditation experience
- Meditators reported higher levels of Extraversion ($p < 0.01$) and lower levels of Neuroticism ($p < 0.05$) than non-meditators

Well-being

Meditation Practice and Subjective Happiness



- 484 buddhist meditators
- Questionnaire study using the Subjective Happiness Scale (SHS) and the Meditation Depth Questionnaire^[9]
- Self-reported meditation depth was positively correlated with subjective happiness



- Questionnaire study^[10]
- 189 buddhist meditators
- 111 non-buddhist control group
- Meditators sub-divided into 6 groups according to meditation experience (beginner to expert, 1 to 6 respectively)
- Subjective Happiness Scale (SHS)
- Statistically significant increase of life satisfaction with increasing meditation experience (linear trend)
- Meditators happier than non-meditators ($p < 0.001$)

Conclusions

We presented a selection of data from some of our recent studies, relating them to Wallace & Shapiro's model of mental balance and well-being. These data, as well as those from many other studies, are in line with our main assumption that meditation and mindfulness training may lead to improvements in the three of mental balance studied so far.

However, as all presented data are cross-sectional any causal interpretation should be treated with care.

At the current stage of research the data are best understood as an indication that a more thorough, longitudinal investigation of the processes that link meditation and mindfulness practice to well-being is warranted and that we are looking in the right place.

Wallace and Shapiro's model of mental balance and well-being may provide a useful theoretical framework for studying the effects of mindfulness and meditation practice.

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