

**Multidimensional Assessment of Interoceptive Awareness** MAIA

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#### BACKGROUND

**Interoceptive Bodily Awareness** describes how we attend to our body and sensations that represent our internal state, incl. emotions ... Yoga and Meditation and other mind-body approaches train bodily awareness.

#### BENEFITS

systematic development with mind-body experienced participants, validated in in-experienced participants

**RCT FINDINGS** 

Not-Distracting mediates the effect of MBCT to comorbid

Whether health benefits of these therapies may be mediated—at least in part—by enhanced bodily awareness needs research.

MAIA is a self-report measure for clinic and studies that aim to fill this gap.

# **OBJECTIVE**

to review the MAIA's

benefits,

- assesses multiple dimensions incl. regulatory aspects
- broad applicability for clinic and research worldwide

# **SHORTCOMINGS**

- self-report, notoriously unrelated to objective measures of interoceptive **accuracy**
- in original version and numerous translations, internal consistency reliability (Cronbach's alpha) is low in 2 of the 8 scales. Version 2 is improved.
- cross-cultural differences

# **CONTROVERSIES**

nomenclature of the research field is confusing, most recent taxonomy in

depression and chronic pain.<sup>1</sup>

Self-Regulation + Attention **Regulation enhance the** ability to decenter mediating the effect of mindfulness training on depressive symptoms.<sup>2</sup>

**Attention Regulation** decreased pain rumination anticipating birth, which in turn decreased post-partum depression.<sup>3</sup>

Self-Regulation + Body-

- shortcomings, and
- controversies

### METHODS

Narrative Review

Measure: the MAIA questionnaire assesses 8 dimensions of BA :

> Noticing, Distracting, Worrying, **Attention Regulation**, **Emotional Awareness**, Self-Regulation, **Body-Listening**, Trusting.

Khalsa SS et al. (2018) Biol. Psychiatry

- the term 'Interoceptive Awareness' has had contradictory uses, confused with Interoceptive Accuracy, or operationalized as meta-cognitive error awareness of interoceptive accuracy
- self-reported interoception, e.g. by MAIA, now often labeled as measuring "Interoceptive Sensibility"



Listening improved together with Arousal and PTSD symptom intensity in war veterans with PTSD<sup>4</sup>

## TRANSLATION **VALIDATION STUDIES**

Completed for Chinese, German, Italian, Korean, Lithuanian, Persian, Portuguese, Spanish

Confirmed factor structure with minor modifications.

1) de Jong M et al. (2016) Front. Psychol. 7:967 2) **Fissler** M et al (2016) *Mindfulness* 7(5) 1170–1181



32 items on 8 scales

20 translations, of which

7 validation studies

Version 2 is close to completion

3) Duncan L et al.: (2017) *BMC Pregnancy Childbirth*. 17(1):140. **4) Mehling WE** et al.: (2017) *J. Clin. Psychol.* 2017;1–12

#### www.osher.ucsf.edu/maia/