Impacts of Intense Meditation-Related Experiences (IMREs) on Identity, Self-Narrative, and Meaning Making: A Cross-Sectional Survey

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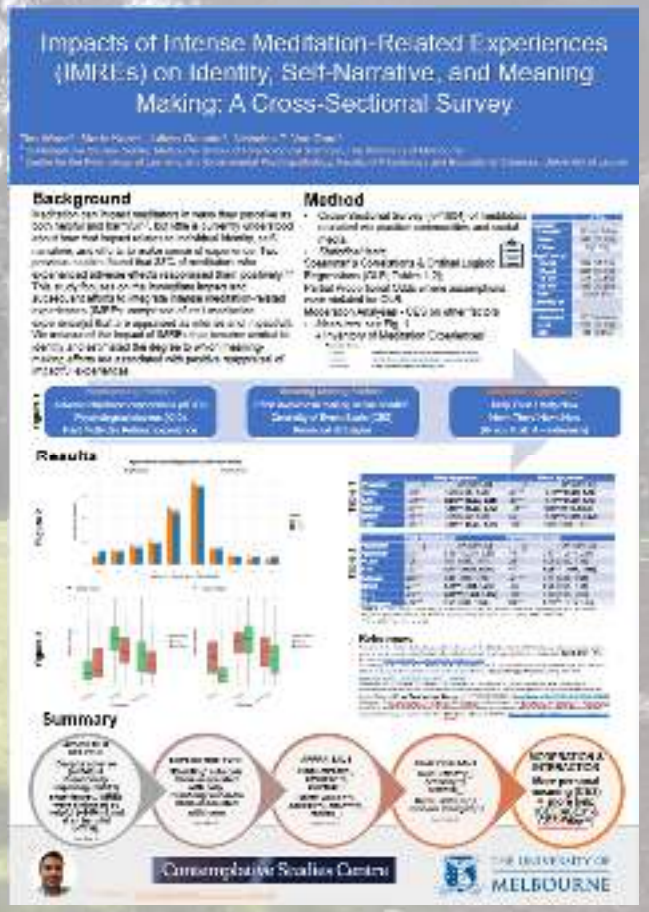
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Presentation Overview

- Promise of Stress Relief
- Adverse Effects of Meditation
- Most Intense – Sense of Self
- How and why?
- Research Team
- Intense Meditation-Related Experiences (IMREs)
- Survey
- Results
- Interpreting the Results
- Significance
- Q&A

Meditation widely promoted to relieve stress





[1] Chen, C. (2022). *Work pray code: When work becomes religion in Silicon Valley*. Princeton University Press.
[2] McMahan, D. L. (2023). *Rethinking Meditation: Buddhist Meditative Practice in Ancient and Modern Worlds*. Oxford University Press.
[3]Davies, J. N., et al., 2024

Previous Research on Adverse Effects

- 50%+ meditators report adverse effects[1,2,3]
  - (unexpected negative experiences)
- 88% helped not harmed[2,4]







[1]Lindahl, J. R., et al., 2017
[2] Goldberg, S. B., et al., 2022
[3]Van Dam, N. T., et al., 2025
[4]Hanssen, I., et al., 2021

Most Intense Experiences Impact the Sense of Self



Varieties of Contemplative Experiences Study (2017, Britton Lab, Brown University)

Asked about Intense Meditation-Related Experiences:

- 72% of participants reported changes in sense of self
- of those, 90% reported changes in multiple domains
- More change in sense of self = more long-term impact (Lindahl et al., 2017).

How and why does meditation help/harm?

- We know that meditation can help/harm.
  - Gap in the literature = *How* and *why* meditation helps/harms
    - Seeking a description adequate to lived experience
    - Seeking accuracy to predict patterns in a population
    - Using concepts and ideas acceptable in psychology and related disciplines

Intense Meditation-Related Experiences Research Team







Studying IMREs

1st person perspective	2nd person perspective	3rd person perspective
interviews	discourse among scholars (lit review)	survey
"I lost my sense of self while meditating."	mystical, nondual, selfless, nonordinary experiences	I lost my sense of being or having a self [1- totally disagree; 5 – totally agree]
words	constructs	numbers

Intense Meditation-Related Experiences (IMRE)

- Meditators differ:
  - Previous Experiences
  - Meaning making



Common Patterns of Experience

- Inventory of Meditation Experiences
  - Combines existing scales:
    - Mystical (+)
    - Nondual
    - Nonordinary Experiences
    - Meditation Related Adverse Experiences (-)
  - 3 Subscales:
    - Enabling Experiences
    - Disabling Experiences
    - Distortions of Self/Reality



IMRE = the key construct

Survey

Surveyed (n=1804) meditators

Cross-sectional data

Primary outcome measures (help/harm) at two time points:

- help/harm then (appraisal) and
- help/harm now (reappraisal)

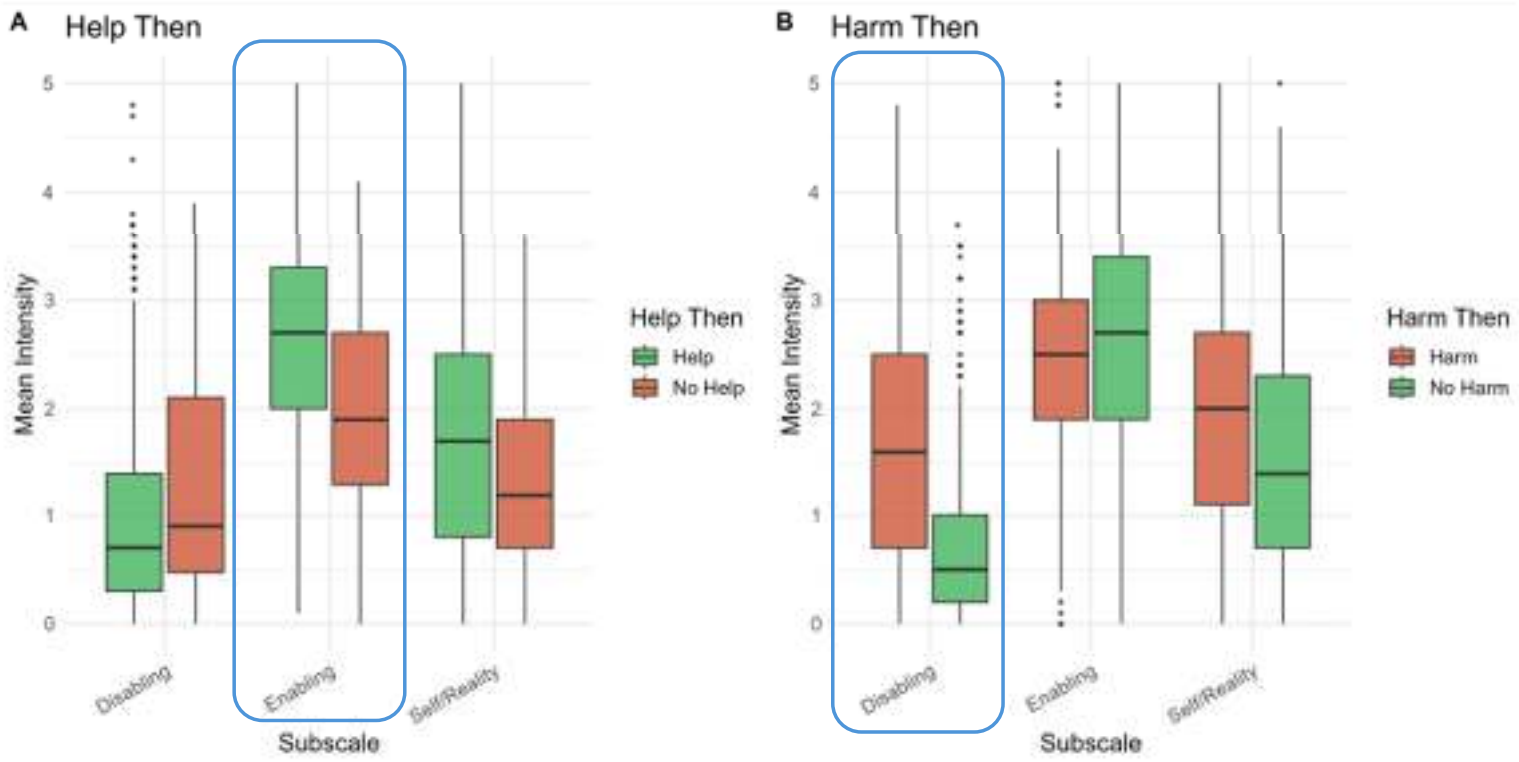
Ran ordinal linear regressions and other tests:

- Outcomes – help and harm appraisal and reappraisal
- Predictors – adverse childhood experiences, current psychological distress, past retreat attendance, centrality, effort, remedial strategies

General overview of the sample:

- **Despite adverse (n=743) &**
- **functionally impairing (n=351) experiences,**
- **IMREs were endorsed as helpful (~94%)**
- **& not at all harmful (~71%).**

Chapter 4 – Survey Results



Chapter 4 – Survey Results

APPRAISALS

Help: *retreat(↑), centrality(↑), distress(↓)*

Harm: *ACEs(↑), distress(↑), effort(↑), retreat(↓)*

(see Table 1)

REAPPRAISALS

Help: *effort(↑), centrality(↑), distress(↓)*

Harm: *distress(↑), remedial strategies(↑)*

(see Table 2)

Table 1

	Help Appraisal		Harm Appraisal	
Predictor	ρ	OR [95% CI]	ρ	OR [95% CI]
ACEs	-.06*	1.00 [0.95, 1.05]	.24***	**1.11*** [1.05, 1.18]**
K10	-.31***	**0.93*** [0.92, 0.95]**	.39***	**1.11*** [1.09, 1.13]**
Retreat	.24***	**1.69*** [1.30, 2.19]**	-.18***	**0.67* [0.49, 0.92]**
Effort	.17***	1.00 [0.92, 1.08]	.02	**1.19*** [1.08, 1.32]**
CES	.36***	**1.09*** [1.07, 1.11]**	-.06*	0.99 [0.98, 1.01]

Table 2

	Help Reappraisal		Harm Reappraisal	
Predictor	ρ	OR [95% CI]	ρ	OR [95% CI]
Appraisal	.72***	3.13*** [2.78, 3.55]	.74***	2.47*** [2.10, 2.90]
ACEs	-.05	1.01 [0.95, 1.07]	.25***	1.06 [0.99, 1.13]
K10	-.32***	**0.97** [0.95, 0.99]**	.41***	**1.06*** [1.04, 1.09]**
Retreat	.26***	1.33 [1.00, 1.79]	-.21***	0.74 [0.50, 1.08]
Effort	.27***	**1.14** [1.05, 1.24]**	-.03	1.05 [0.94, 1.18]
CES	.45***	**1.07*** [1.05, 1.09]**	-.08*	0.99 [0.96, 1.01]
Strategies	-.32***	0.95 [0.88, 1.04]	.69***	1.33*** [1.19, 1.49]

Note. n = 1,012. CES = Centrality of Event Scale; ACEs = Adverse Childhood Experiences; K10 = Kessler Psychological Distress Scale; Retreat = past participation (0 = no, 1 = yes). *OR* = odds ratio.
***p < .001, **p < .01, *p < .05

Interpreting Results

- IMREs HARM:
  - Perceptual & emotional changes (theory/interviews)
  - Loss of control or certainty (theory/interviews)
  - Need to invest effort to understand them (survey)
  - Traumatic re-experiencing (interviews/survey)
  - Displacing an old self, grief (interviews)
- IMREs HELP:
  - New perspectives on self and world (interviews)
  - Displacing traumatic memories (interviews/survey)
  - Re-work self-schema with current context and capabilities (theory/interviews)
  - Becoming central (theory/survey)

Significance

- Meditation may disrupt the automatic self schema
- The same meditator can feel both harmed and helped at different times
- Warn meditators not just stress relief
- Effort and centrality are new explanatory variables (for help)

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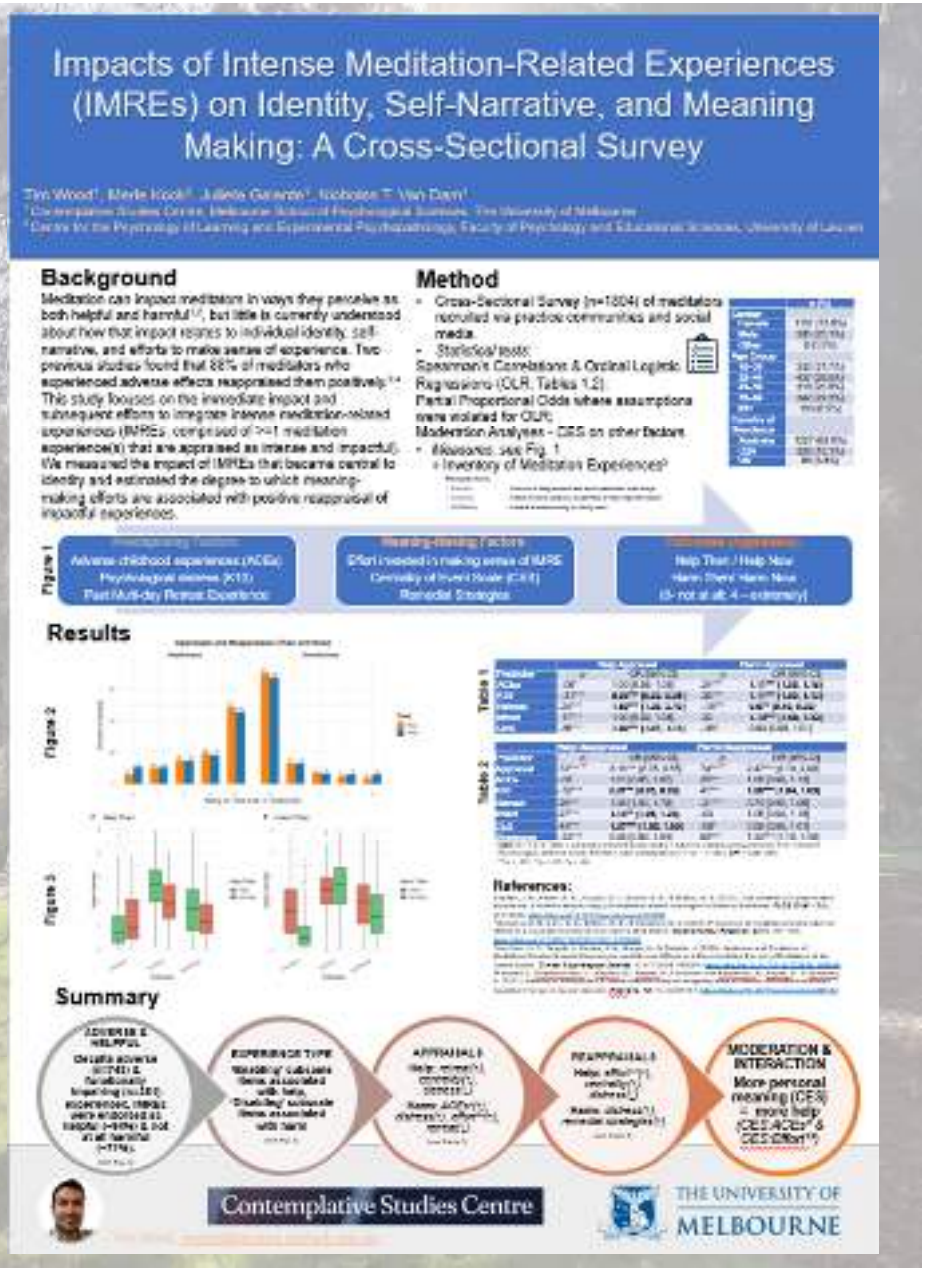
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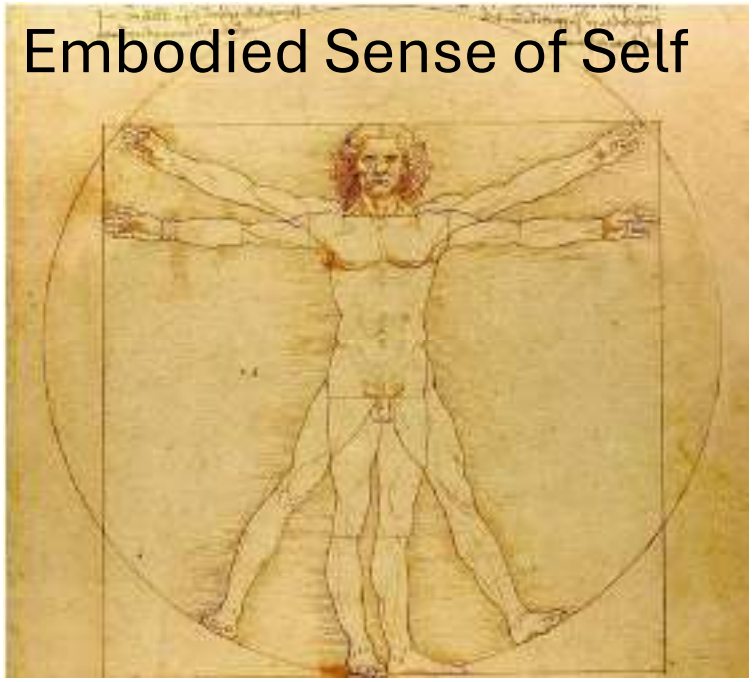
Q & A

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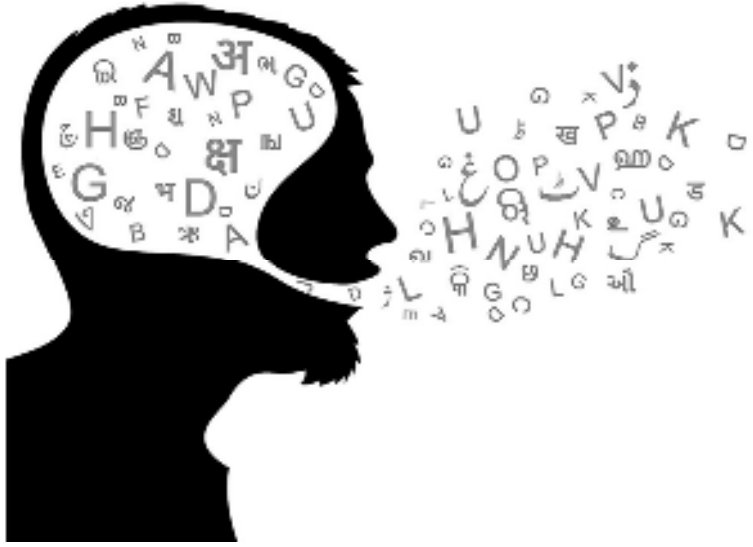


The Sense of Self: 2 Parts

Embodied Sense of Self



Conceptual Sense of Self



Theoretical Framework for the Empirical Study of Meditation Impacts on the Sense of Self

- IMREs as changes in the sense of self
- Sensation and perception are shaped by self-relevance and goals
- Meditation can drastically alter the sense of self
  - Loss of a sense of self
  - Alteration of its boundaries
    - These experiences can help or harm