

Body Awareness and the Practice of Yoga or Meditation in 443 Primary Care Patients with Past or Current Low Back Pain



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BACKGROUND

Low back pain (LBP) is the most common reason for patients to seek integrative medicine care. Neurologically, perceived pain is an element of interoceptive body awareness.

Body awareness (BA) describes how we attend to our body and to pain.

Yoga and meditation may help pain patients through improved BA, but BA has rarely been assessed in this population.

OBJECTIVE

- to provide the first quantitative data on Body Awareness in primary care patients with past or current LBP,
- to compare those who practiced yoga and/or meditation with those who did not.

METHODS

Design: 2-year observational cohort study; secondary data analysis.

Setting: large health care system: Kaiser Permanente, Northern California.

Subjects: 435 primary care patients, who had acute LBP at inception.

Measures: the Multidimensional Assessment of Interoceptive Awareness (MAIA) questionnaire assesses 8 dimensions of BA : noticing, distracting, worrying, attention regulation, emotional awareness, self-regulation, body-listening, and trusting.

Analysis: At follow-up, we compared rates of non-recovery (chronic pain) and MAIA scores between those who practiced a form of mind-body therapy and those who did not.

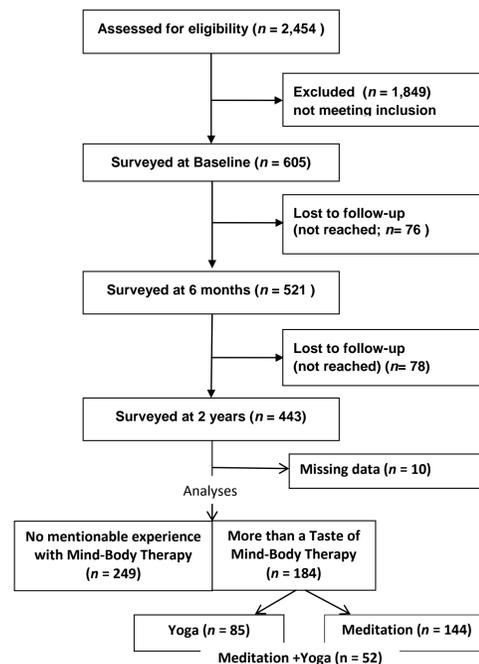


Table 1: Patient Characteristics (N = 605)

		Mean (SD)
Age		50.5 (12.6)
		N %
Sex	Female	339 56
Ethnicity	American-Indian	2 <1
	Asian-American	71 12
	African-American	51 8
	Latino-American	39 7
	Caucasian-American	395 65
	Other/Mixed/no answer	47 8
Education	Some High School	4 1
	High School	66 11
	Some College	165 27
	College Degree	209 35
	≥ Graduate School	161 26
Employment Status	Full time	357 59
	Part time	76 13
	Unemployed seeking work	11 2
	No paid work, not seeking	26 4
	Retired	135 22
Duration of LBP at baseline interview, mean days (±SD) [median], range 2-30		17 (±8) [14]

RESULTS

at 2-Year Follow-Up (N = 443)

Persistent/recurrent LBP:	82 (18.5%)
Experience with yoga ¹ :	80 (18.5%)
Experience with meditation ¹ :	144 (33.3%)
Experience with yoga and meditation ¹ :	52 (12.0%)
Experience with any kind of mind-body approach ¹ :	184 (41.5%)

¹ “more than a taste of ...”

Higher levels of yoga and meditation experience [4 levels] were associated with higher Body Awareness scores (MAIA).

The risk of having chronic pain 2 years after a first episode of acute low back pain was reduced by 38% (p=.041) in those who reported more than “a taste of” meditation experience and by 35% (p=.047) reporting any type of mind-body therapy experience.

Table 2: Self-Reported Interoceptive Awareness in a Cohort of Acute Low Back Pain Patients at 2-Year Follow-Up

	no mind-body therapy n = 62	yoga n = 85	meditation n = 144	yoga + meditation n = 52
Noticing	3.29 ± 1.37	3.89 ± 0.90	3.82 ± 0.98	3.96 ± 0.95
Non-Distracting	2.30 ± 0.97	2.1 ± 0.81	2.06 ± 0.87	2.12 ± 0.87
Non-Worrying	2.89 ± 1.13	3.04 ± 1.10	3.03 ± 1.10	3.12 ± 1.12
Attention Regulation	3.09 ± 1.18	3.22 ± 1.04	3.31 ± 0.94**	3.50 ± 0.97**
Emotional Awareness	3.00 ± 1.55	3.70 ± 1.00	3.81 ± 0.92***	4.01 ± 0.78**
Self-Regulation	2.44 ± 1.32	3.35 ± 1.12**	3.50 ± 1.00***	3.70 ± 0.91***
Body Listening	2.02 ± 1.40	2.91 ± 1.18*	2.99 ± 1.13***	3.21 ± 1.16***
Trust	3.80 ± 1.15	4.08 ± 0.84	4.00 ± 0.91	4.20 ± 0.87

*p <0.01; **p<0.001; ***p<0.0001.

p-values: patients reporting more than a taste of experience of yoga, meditation or both compared to those reporting just a taste of experience or less.

Table 3: Proportion of Chronic Pain at 2 Years

	% cLBP	OR	Risk
- Yoga	19.2	.83	-14%
+ Yoga	16.3		
- Meditation	21.7	.56*	-38%
+ Meditation	14.1		
- Mind-Body	21.4	.59*	-35%
+ Mind Body	13.2		

*p <0.5

CONCLUSIONS

- Primary care patients with **Acute Low Back Pain** were followed for 2 years. Those who reported having experience with **yoga** and/or **meditation** also reported higher levels of **Body Awareness** compared to those without such experience.
- Patients with mind-body experience reportedly (1) used more **Self-Regulation**, i.e. calming oneself by focusing attention on breath and body sensations when overwhelmed or distressed, and (2) **listened more to the body**.
- **Mind-body therapies** were associated with **better recovery from acute low back pain**.