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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.

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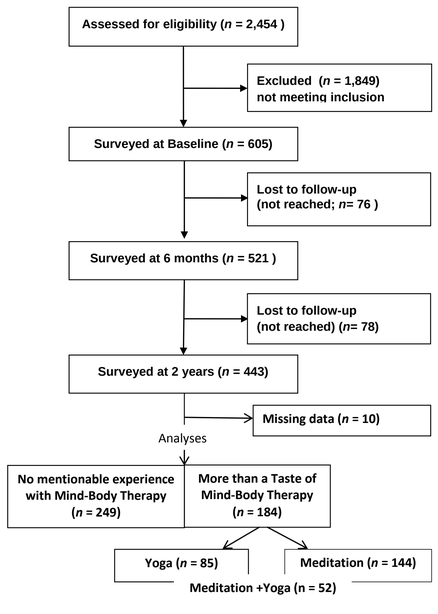

Table 1: Patient Characteristics (*N* = 605)

		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 by38% (*p*=.041) in those who reported more than "a taste of" meditation experience and by35% (*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	yoga	meditation	yoga + meditation
	n = 62	*n* = 85	*n* = 144	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

Miami, FL. May 2014

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) **listen**ed more **to the body**.
- **Mind-body therapies** were associated with **better recovery from acute low back pain.**