

A Monthly Publication by EIM Faculty

THE INSIGHT HUB



MEET THE EXPERT

Jennifer Stone PT, DPT, OCS, PHC

What is the best professional advice you have received?

People don't care how much you know until they know how much you care. This is true in patient care, teaching, parenting, and life.

What is one article all therapists should read?

Words That Harm, Words That Heal by Bedell et al. This is an older article, but if I have learned anything along the way, it's this: our words are just as powerful (if not more powerful) than our hands. Shifting our language is hard, so be kind to yourself while working on it. It's well worth the effort and pays dividends for your patients!

What is one book all therapists should read and why?

The Man Who Mistook His Wife for a Hat by Oliver Sachs is an amazing (and sometimes scary) look into the world of the brain and neurologic function/dysfunction. The brain drives so much about our inner and outer worlds, and this book is an easy-read way to help improve your understanding/appreciation for its power. This has implications into everything from therapeutic alliance to pain to musculoskeletal function to neuromotor retraining and more.

What are you working on right now?

I am working on learning balance. This is an ongoing challenge for me, as I have a tendency to get excited or passionate about something and dive too deep, then realize I have gotten out of sync physically, mentally, with some aspect of my work, or with self-care. While this can drive a high-performance personality, it's not good with regards to sustainability. This is quite uncomfortable for me, but as always, I appreciate the opportunity for growth! I'm also working on growing my skills in coaching and applying motivational interviewing techniques with those that I lead. In some ways, that feels trickier than utilizing them with patients in the clinic!

Do you have any advice for early-career therapists?

You know more AND less than you think you do! Remember, THE single most important thing you can do in an evaluation is establish a therapeutic alliance and gain your patient's trust. Everything else is secondary to that goal, and if you don't accomplish that goal, the best hand skills and exercise prescription in the world won't rescue it. Project confidence and care, while remaining humble and seeking lifelong learning. You've got this, and we "ma-ture" therapists are standing by to cheer you on and provide mentorship and support. Welcome to the profession!

BOOK CLUB

Have you ever made a judgement regarding the wishes, beliefs, or opinions of someone else, only to find out that you were wrong? Of course, we all have. Making, and acting on, incorrect assumptions of others, as well as assuming that others understand us better than they actually do, can erect walls in relationships and result in a loss of trust. In the realm of healthcare, this loss of trust can threaten therapeutic alliance and challenge our ability to help those that we serve. In *Mindwise: Why We Misunderstand What Others Think, Believe, Feel, and Want*, Nicholas Epley reminds us that the best way to understand others is to ask them for their own perspective. If we can remain open and curious and engage others with direct questions to understand exactly what they desire and believe, our relationships with clients, colleagues, neighbors, friends, and loved ones can become stronger and more resilient.

Eric Rebne, PT, DPT, TPS, CMTPT

About the book:

Why are we sometimes blind to the minds of others, treating them like objects or animals instead? Why do we talk to our cars, or the stars, as if there is a mind that can hear us? Why do we so routinely believe that others think, feel, and want what we do when, in fact, they do not? And why do we think we understand our spouses, family, and friends so much better than we actually do? In this illuminating book, leading social psychologist Nicholas Epley introduces us to what scientists have learned about our ability to understand the most complicated puzzle on the planet—other people—and the surprising mistakes we so routinely make. *Mindwise* will not turn others into open books, but it will give you the wisdom to revolutionize how you think about them—and yourself.



HEALTH CORNER: SOUND BATH

Natalie Johnston, MPT

Therapeutic Pain Specialist, Pain Fellow, Yoga instructor, Lifestyle Medicine trained



Contrary to the name, the sound bath does not involve a proper scrub down or actual water.

If you are looking for something new to try for self care, consider signing up to attend a “sound bath.” This involves singing bowls with various frequencies that may help your nervous system calm down. Make sure you dress comfortably, bring a pillow, blankets, and whatever other props you need to settle into a comfortable position. Then relax, and be present. You may find that some frequencies bring a sense of tension, followed by frequencies that allow a healing calm to settle over you.

RESEARCH CORNER



The utilization of dry needling - a survey of contemporary clinical practice within the USA



Emilio J PuenteDura, Keri Maywhort, Stephanie Pascoe, Bradford Tracy Adam Weaver, Millicent Weber, Dominic Severino, Shane Koppenhaver

BACKGROUND: Dry needling (DN) is a skilled intervention commonly used for pain relief and the management of movement disorders in neuromusculoskeletal conditions. Although systematic reviews indicate its effectiveness, variations in treatment parameters exist. This study surveyed U.S. healthcare professionals who utilize DN, examining their clinical techniques, rationale, and use of electrostimulation.

METHODS: An electronic survey was created and distributed via Qualtrics to healthcare providers performing DN. The survey link was shared through social media and e-mail, and data were analyzed using non-parametric statistical methods (Mann-Whitney U, Spearman's rho) to identify significant patterns in DN practices.

RESULTS: A total of 1,399 healthcare providers completed the survey, predominantly physical therapists (93.3%) with an average of 13.5 years of clinical experience and 5.2 years in DN. Most worked in outpatient orthopedics (90.3%). Common DN techniques included trigger point needling (95.8%) and deep needling (82.0%), with 44.5% using periosteal pecking. The majority of practitioners used up to 4 needles per session (68.1%), while 63.8% used more than 4. Electro-stimulation (e-stim) was commonly applied, with 62.5% using it after needle insertion and 55.6% combining it with needle manipulation. Differences in techniques were noted between physical and non-physical therapists, particularly in the practice of leaving needles in place without manipulation.

CONCLUSION: This study highlights the widespread use and evolving methodologies of DN practices in the U.S. noting the integration of electrostimulation and multimodal approaches. It also highlights inconsistencies in treatment parameters, underscoring the need for standardized protocols to enhance clinical effectiveness and research validity. Future research should focus on the long-term efficacy of various DN techniques and their applications in neurological rehabilitation.



Differences in tactile grid localization accuracy between people with back pain compared to individuals without pain



Kory Zimney, Tyler Turbak, Eric Fjeldheim

OBJECTIVES: The study aimed to investigate the grid localization test (GLT) between patients with lower back pain and those without back pain.

METHODS: Individuals receiving physical therapy were tested before treatment with a GLT to the low back. Testing was performed in the prone position. Participants were oriented to the 12-box, 50 mm grid squares, arranged in three rows and four columns, with a single touch in the center of each square, and provided with the corresponding number for that square. Twenty random touch points were then applied with a single touch in the center of the square, and the participant's accuracy in reporting the correct number associated with the touched square was recorded.

RESULTS: GLT was done on 26 individuals with lower back pain compared to 26 individuals without back pain. Those with back pain had a mean accuracy score of 52.41 %, compared to those without back pain, who averaged 76.18 % accuracy, adjusted for age as a covariate between groups. This was a significant difference ($p < 0.001$) that demonstrated a large effect size (partial $\eta^2 = 0.296$). Interestingly, those with acute pain (<3 months) scored ($n = 14$, mean = 48.9 %, SD = 21.2 %), similarly to those with chronic pain (>3 months) ($n = 12$, mean = 49.2 %, SD = 20.3 %).

DISCUSSION: When tested with GLT, individuals with low back pain exhibit poorer accuracy scores compared to those without pain. Future studies are needed to determine if treatment to improve accuracy scores has therapeutic benefits.

CLINICAL PEARL

Colleen Louw PT, MEd, CSMT, Pain Specialist and Fellow
Director of the EIM Therapeutic Pain Specialist Certification

PURPOSE:

To help patients with chronic foot symptoms such as numbness, tingling, burning, or pain retrain their brain's interpretation of sensory input and reduce overprotective responses.

CLINICAL RATIONALE:

- The foot's cortical representation is relatively small in the sensory homunculus, which may make it easier to "retrain" compared to other body regions.
- Chronic pain or dysesthesia in the feet often reflects central sensitization or maladaptive neuroplastic changes.
- Using multisensory input (visual + tactile + verbal) promotes cortical reorganization and more accurate sensory discrimination.
- Gamifying the process increases patient engagement and adherence.

INDICATIONS:

- Chronic pain (neuropathic, mechanical, or mixed)
- Persistent numbness, tingling, or burning with no progressive neurological deficit
- Sensory mismatch (patient perceives pain without mechanical provocation)
- Appropriate for patients who can tolerate light touch without severe allodynia

CONTRAINDICATIONS/PRECAUTIONS:

- Severe allodynia (consider graded exposure first)
- Open wounds or skin breakdown
- Cognitive impairments that limit ability to participate

HOW TO IMPLEMENT:

1. **Gather Materials:** Flooring or surface samples (carpet, tile, wood, rubber, etc.) — aim for varied textures.
2. **Patient Education:** Explain that the goal is to help the brain "re-learn" what normal sensation feels like and to reduce unnecessary pain signaling.
3. **Training Sequence:**
 - **Visual and Tactile Pairing:** Have the patient look at the surface, place their bare feet on it, and describe aloud what they feel.
 - **Eyes Closed Discrimination:** Patient closes eyes, places feet on a sample, and attempts to identify it by feel.
 - **Progression:** Start with 3 surfaces. Once the patient can reliably identify them, add more.
 - **Gamification:** Turn it into "Name That Floor" to encourage laughter and decrease threat.
4. **Homework:** Daily practice at home, barefoot when possible. Encourage consistent repetition to promote neuroplastic change.

CLINICAL TIPS:

- Incorporate motor tasks (e.g., shifting weight, tapping toes) to integrate sensory and motor systems.
- Use positive reinforcement — celebrate correct identifications to reinforce learning.
- Pair this activity with other graded motor imagery or pain neuroscience education interventions.

"People are fed by the Food Industry, which pays no attention to health, and are treated by the Health Industry, which pays no attention to food." - Wendell Berry

