

PSYCHOLOGICAL INTERVENTIONS TO ADDRESS EMOTION DYSREGULATION AMONG ADULTS WITH CHRONIC PAIN

How do emotions interact with chronic pain?

JOEL JIN, PHD

UW DEPARTMENT OF FAMILY MEDICINE







SPEAKER DISCLOSURES

✓ Any conflicts of interest? - None

PLANNER DISCLOSURES

The following series planners have no relevant conflicts of interest to disclose; other disclosures have been mitigated.

Mark Duncan MD
Rick Ries MD
Kari Stephens PhD
Barb McCann PhD

Anna Ratzliff MD PhD Betsy Payn MA PMP Esther Solano

Cara Towle MSN RN



OBJECTIVES

- 1. Identify at least *two* emotional indicators that suggest a patient's chronic pain may be maintained by emotion dysregulation.
- 2. Describe *one* core components of Emotional Awareness and Expression Therapy (EAET) and how they differ from cognitive-behavioral approaches to chronic pain.
- 3. Apply *one* brief EAET-informed skill (e.g., a patient education script or emotional inquiry technique) in a clinical or therapeutic interaction to begin addressing the emotional contributors to chronic pain.



PAIN (IASP)

- Pain: "An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage"
- Different types of pain
 - Nociceptive: Pain arising from actual or threat of damage to non-neural tissue.
 - Neuropathic: Pain arising from a lesion or disease of the somatosensory nervous system.
 - Nociplastic: Pain that arises from altered nociception.
 - Mixed pain types.



CHRONIC PAIN

- Reported +3 months of pain
- Affects 1 in 5 adults globally
- Costs >\$560B annually in the U.S. alone



COMORBIDITY

- 40% of adults w/ chronic pain had depression and anxiety (Aaron et al., 2025)
 - Comorbidity highest among people with pain associated with nociplastic mechanisms (e.g., fibromyalgia, complex regional pain syndrome, temporal mandibular disorder)
- 44.4% w/ comorbidity used mental health tx (De La Rosa et al., 2024)
- Treatment gap!

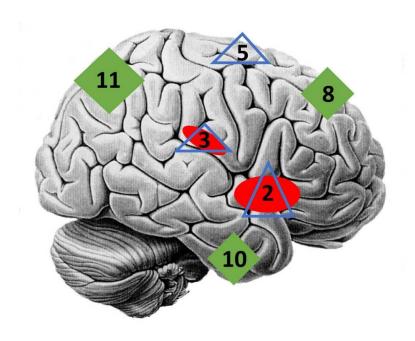


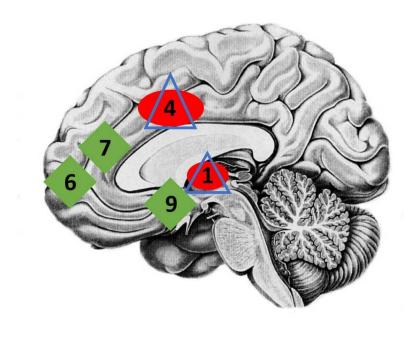
THE HIDDEN LAYER OF CHRONIC PAIN

- Often no clear injury or pathology
 - E.g., based on 222 Pts of a physical medicine and rehabilitation practice (<u>Schubiner et al.,</u>
 2024)
 - 97.7% had at least 1 spinal anomaly on imaging
 - 88.3% of patients had primary pain (nociplastic; without clear peripheral etiology)
 - 5.0% had secondary pain, and 6.8% had mixed pain
- Pt feel anger, invalidated, or hopeless (Sommer et al., 2019)



ANGER, BRAIN, AND NOCIPLASTIC PAIN MODEL YARNS ET Al., 2022







Acute Pain

- 1. thalamus
- 2. insula
- 3. SII
- 4. dACC



Nociceptive Pain

- 1. thalamus
- 2. insula
- 3. SII
- 4. dACC
- 5. SMA



Nociplastic Pain

- 6. mPFC
- 7. rACC
- 8. SFG
- 9. NAc
- 10. ITG
- 11. PPC



SUMMARY

- Given that pain is an emotional experience, at times present without actual tissue damage
- And that chronic pain sxs are...
 - Prevalent with high burden
 - Highly comorbid w/ anxiety/depression sxs
 - Related to nociplastic mechanisms (i.e., no clear structural etiology)
 - Associated w/ negative emotions, particularly suppression of anger
- Need for biopsychosocial tx



EMOTION DYSREGULATION – A MISSING LINK

- Emotional states (include cognitive label, sensation, action tendency)
 - Primary/adaptive lead to adaptive behavioral responses
 - Secondary/reactive inhibit or avoid one's needs
- Emotion Regulation = modifying emotional states

<u>Yarns et al., 2022</u>



EMOTION DYSREGULATION (AARON ET AL., 2020)

	Down-Regulate	Up-regulate	
Positive Emotions (love, pride, calm)			
Negative Emotions (anger, grief, guilt, fear)			1



EMOTION DYSREGULATION (AARON ET AL., 2020)

	Down-Regulate	Up-regulate
Positive Emotions (love, pride, calm)	Avoidance of intimacy, self-criticism	Celebration, self- compassion, mindfulness
Negative Emotions (anger, grief, guilt, fear)	Emotional suppression, experiential avoidance	Emotional awareness, emotional expression; dysregulated anxiety



EMOTION DYSREGULATION – A MISSING LINK

- Linked to increased pain sensitivity and longer symptom duration (<u>Lumley et al.</u>, 2011)
- Emotion regulation skills training reduces pain intensity (Norman-Nott et al., 2024)
- Watch for:
 - Alexithymia (difficulty identifying and describing one's emotions and a preference for externally oriented thinking) elevated among chronic pain adults (<u>Aaron et al., 2019</u>)
 - High distress but flat affect
 - History of psychosocial trauma or "perfect childhood"
 - Symptom flares with interpersonal conflict



WHAT IS EAET?

- Emotional Awareness and Expression Therapy (<u>Lumley & Schubiner, 2019</u>)
- A neuroscience-informed psychotherapy to increase emotional awareness, experience, and expression of emotions — especially anger, fear, and grief— to reduce chronic pain symptoms
 - Opening up and releasing emotions that are anxiety-provoking and avoided
- Developed by:
 - Dr. Mark Lumley (psychologist, Wayne State University)
 - Dr. Howard Schubiner (internist, mind-body medicine, author of Unlearn Your Pain)



EAET PRINCIPLES

- Pain can be generated and maintained by the brain (even in absence of tissue damage)
- Lack of awareness and suppressed emotions act as a chronic underlying stressor, perpetuating pain
 - I.e., emotions are dangerous and painful
- Healthy expression of emotions in a structured way can reduce neural threat signaling
 - I.e., emotions aren't dangerous nor painful
- Therapy involves opening up to emotions, releasing emotions, trauma confrontation, and neural retraining



EAET COMPARED TO OTHER PSYCHOLOGICAL APPROACHES

Approach	Primary Focus
CBT	Thoughts → Emotions → Behaviors
ACT	Acceptance & values-based action
EAET	Emotion awareness → Emotion expression → settling neural threat signaling

Common psychological treatments don't fully resolve pain sxs (<u>Lumley & Schubiner, 2019</u>)



INSIDE AN EAET SESSION: THE CORE COMPONENTS

Linking history and sxs

Emotional Awareness + Emotional Expression

Trauma Confrontation

Reinforcing

Nociplastic pain associated with post-traumatic stress disorder (PTSD) (Amir et al., 1997, Anda et al., 2010, Felitti et al., 1998, Varinen et al., 2017)



EAET RESEARCH

Study	Sample	Findings
Lumley et al., 2017	Adults w/ fibromyalgia	EAET ~ CBT > FM education
Thakur et al., 2017	Adults w/ IBS	EAET reduce IBS sx vs waistlist control, not relaxation
Maroti et al., 2022	Adults w/ somatic symptom disorder	Internet-EAET reduced somatic sx vs waitlist control
<u>Yarns et al., 2024</u>	Older adult veterans w/ chronic pain	EAET > CBT



OLDER ADULT VETERANS (YARNS ET AL., 2024)

Outcome	EAET	СВТ
≥30% pain severity reduction (post)	63%	17%
≥50% pain severity reduction (post)	35%	7%
Superior effects on depression, anxiety, PTSD	Yes	No
Lasting effects (6mo FU)	Yes	Sustained but lower rates
Treatment satisfaction	Higher	Lower
Especially effective for:	Comorbid with depression, anxiety, PTSD	Many chronic pain patients



LIMITATIONS

- Further clinical trials are needed
- Measurement of change in daily functioning
- Clarification of single vs multi session; individual vs group; in-person vs tele
- Diverse recruitment of samples
- Multi-modal (transtheoretical) principles toward healing



SUMMARY

- Given that chronic pain sxs are...
 - Highly comorbid w/ anxiety/depression sxs
 - Associated w/ emotion dysregulation (e.g., suppression, alexithymia, neg appraisal)
 - o Min. Reduced with cognitive, behavioral, mindfulness-based, and values-oriented tx
 - Reduced w/ opening up to and releasing avoided emotions via EAET
- Emotional awareness and expression may address both psychological and chronic pain symptoms



STARTING OUT

- "Your pain is real—and reversible."
- "When did this pain first start?"
- "Can you recall any event in your life where you felt emotional distress around the time the pain started?"
- "I've noticed that your pain seems to flare up around stressful events. Sometimes our pain can be a sign that there are unprocessed emotions we're carrying. Let's explore that a bit. Do you think there was something emotionally significant going on when your pain first started or began to worsen?"



SCREENING FOR EMOTIONAL CONTRIBUTORS

"Can you describe when your pain started? What was going on in your life at the time?"	Look for a major life event or significant stressor that could align with the onset of pain.
"Are there any emotions that you avoid thinking or talking about?"	Pay attention to emotional numbness or avoidance patterns.
"Have you ever felt that your pain is connected to feelings like anger, grief, or fear?"	Listen for the patient's willingness or resistance to talk about emotional pain.
"When your pain flares, do you notice any connection to stress, frustration, or relationship issues?"	Look for patterns of emotional reactivity that may amplify pain.
"How does your pain affect your relationships or social life?"	Emotional suppression or unresolved trauma may manifest in relational difficulties.



FIND AND ENCOURAGE THE EXPERIENCE OF ADAPTIVE EMOTIONS

- If the Pt's story involves being treated unfairly or unjustly
 - Look for unexpressed anger
- If the Pt's story involves losing a loved one or an opportunity
 - Look for unexpressed grief
- If the Pt's story involves important, close relationships
 - Look for unexpressed intimacy and closeness

What emotion is the Pt *not* expressing?

Yamin, J. B., et al. (2023). Experiential training of mental health graduate students in emotional processing skills: A randomized, controlled trial. *Psychotherapy*, 60(4), 512.



WHAT EMOTION IS THE PT NOT EXPRESSING?

- **Patient A:** "My boss gave the promotion I was perfect for to someone who's only been here six months. Now I've got to train them. It's just... *annoying*. I'm sure I'll get over it, but honestly, the whole system here is so disorganized and chaotic. It's really bad management, that's what it is."
- Patient B: "My best friend moved across the country for a job last week. We were roommates for five years, so I'm doing a lot of rearranging. I spent all weekend organizing the kitchen, clearing out their old stuff, and deep-cleaning the fridge. I'm focusing on getting everything practical in order, you know? It's just a huge amount of effort, honestly."
- Patient C: "My partner has been working double shifts for a month now, and they're exhausted. I've been doing all the cooking and housework just so they don't have to worry about it when they get home. It's not a big deal; it's just what you do. Honestly, the only part that's hard is remembering to put the bins out on Tuesday. I just want to make sure they're not stressed."



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 - Anger
- Patient B: "My best friend moved across the country for a job last week. We were roommates for five years, so I'm doing a lot of rearranging. I spent all weekend organizing the kitchen, clearing out their old stuff, and deep-cleaning the fridge. I'm focusing on getting everything practical in order, you know? It's just a huge amount of effort, honestly."
 - Grief
- Patient C: "My partner has been working double shifts for a month now, and they're exhausted. I've been doing all the cooking and housework just so they don't have to worry about it when they get home. It's not a big deal; it's just what you do. Honestly, the only part that's hard is remembering to put the bins out on Tuesday. I just want to make sure they're not stressed."
 - Intimacy/closeness



ADDRESSING PATIENT RESISTANCE

"This sounds like you think it's all in my head..."

- Validate: "I understand that your pain is real, and it affects your daily life."
- Acknowledge: "What I'm suggesting isn't that your pain isn't real—it's just that emotional factors can sometimes amplify pain and make it harder to manage."
- Reframe the Conversation: "Emotions aren't the cause of all pain, and they can become part of the pain process—just like physical stress can contribute to muscle tension and headaches. We're aiming to identify any emotional contributors, not to dismiss your pain."
- Normalize Emotional Exploration: "It's common for people to experience both emotional and physical pain, and emotional release can sometimes bring relief from physical symptoms."
- Explain the process: "The goal isn't to make you feel like your pain is in your head, but to help you understand that our emotions and our bodies are deeply connected."
- Normalize: "Many people find it surprising how much emotional stress can affect their physical well-being."



Which of the following signs may indicate that a patient's chronic pain has emotional contributors?

- A. Sudden onset of pain after an injury
- B. Lack of anatomical explanation for pain symptoms
- C. High levels of anger, shame, or emotional avoidance
- D. Both B and C



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Correct answer: D



EAET differs from CBT primarily in that it:

- A. Focuses on changing negative thought patterns
- B. Encourages avoidance of emotional triggers
- C. Promotes awareness and expression of emotions
- D. Uses operant conditioning to reduce pain behaviors



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Which of the following is an example of an EAET-informed strategy a clinician might use in a brief encounter?

- A. Asking patients to rate their pain on a scale from 1–10
- B. Providing a handout about exercise and stretching
- C. Exploring the connection between a stressful life event and pain onset
- D. Referring the patient for imaging to rule out structural issues



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SUMMARY

- Objective 1: Recognize the connection between emotional suppression and chronic pain.
- Objective 2: Understand the core principles and components of EAET.
- Objective 3: Apply at least one EAET-informed strategy in your clinical practice.

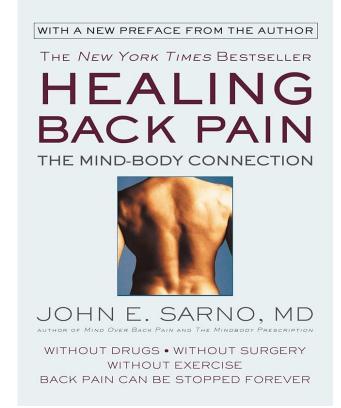


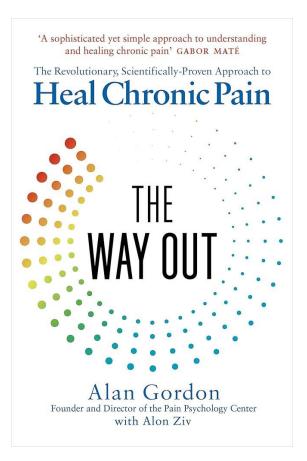
CALL TO ACTION

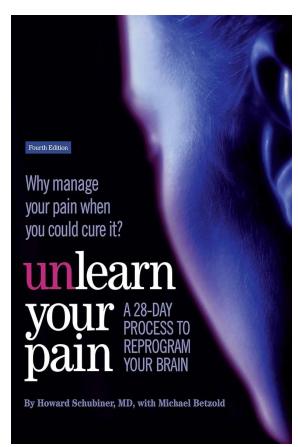
- PCPs: Ask one of your patients about the emotional triggers or stressors related to their chronic pain.
 - Script suggestion: "Sometimes emotional stress can make pain worse. Can you recall any life events or emotions that seem connected to your pain?"
- Psychotherapists: Try using guided emotional recall with a patient to explore the connection between their emotional history and pain.
 - Script suggestion: "Let's think about the first time you felt this pain. Were there any emotions or life events you were struggling with at that time?"
- Collaborate and work together

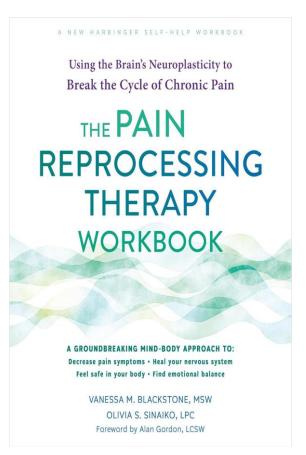


BOOKS











VIDEOS

- Introduction to Emotional Awareness and Expression Therapy with Howard Schubiner, at EAET Sweden.
- Group-based Emotional Awareness and Expression Therapy with Dr Brandon Yarns
- Pain Reprocessing Therapy How Pain
 Psychology Can Heal Chronic Pain
- https://www.apa.org/news/podcasts/sp eaking-of-psychology/treating-chronicpain



TRAINING

 Emotional Awareness and Expression Therapy for Chronic Pain - Dr. Howard Schubiner's Mind Body Medicine







LET'S CONNECT

- Joeljin@uw.edu
- Tell me what more would you like to learn?



