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Relieving Psychosomatic Pain and Negative Emotions Through Dehypnosis

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Abstract

Psychosomatic pain, often triggered by negative emotions such as fear and trauma, can profoundly affect both psychological and physical well-being. These emotions, whether negative or positive, can form pathological neural networks (PPNs) in the subconscious mind, reinforcing psychosomatic pain. Traditional therapeutic approaches such as cognitive behavioral therapy (CBT), extinction learning, regression hypnotherapy, and classical hypnosis have been commonly used to treat psychosomatic pain, often in combination with medication. While these methods can bring a sense of calm, they do not necessarily eradicate the underlying pain or emotions, and triggers may still activate the symptoms. To effectively eliminate psychosomatic pain and negative emotions, it is necessary to go beyond the state of relaxation achieved with conventional treatments and reach a state of "absolute nothingness." Mindchat therapy, a form of de-hypnosis, facilitates this by reshaping the neuropathology and dissolving the neural networks of harmful pathological, providing a more complete solution to psychosomatic pain and emotional distress. This article examines the neuropsychological link between negative emotions, PPNs, and psychosomatic pain, proposing de-hypnosis as an effective alternative.

Keywords: Psychosomatic pain, Chronic pain, Hypnotherapy, Negative emotions, De-hypnosis, Neuropathology

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Introduction

Psychosomatic disorders refer to conditions in which psychological stressors negatively affect physiological functioning, often leading to undiagnosed or misdiagnosed ailments. Although patients may report some relief, the alleviation is often incomplete and transient. Research indicates that approximately 80% of the global population experiences at least one symptom of psychosomatic pain or related conditions each month [1]. Psychosomatic pain is commonly equated with somatic pain and chronic pain, and this article discusses these conditions with a focus on the emotional underpinnings, particularly negative emotions linked to anxiety and depressive disorders, which frequently coexist with psychosomatic pain. These disorders are highly prevalent in individuals suffering from psychosomatic pain and contribute to poor functional outcomes worldwide, forming a bidirectional relationship [2].

Psychosomatic, somatic, and chronic pain are complex phenomena influenced by biological, neurological, psychological, and social factors. These factors contribute to the development of a pathological neural network (PNN), wherein both negative and positive emotions can be deeply embedded, fueling the cycle of pain. In essence, emotions, whether positive or negative, act as the driving force behind the persistence of a PNN [3].

Among the three pain types mentioned, psychosomatic pain is often the most difficult to diagnose, and traditional treatments may only provide partial relief or fail to address the root cause [1]. This is partly due to the lack of consensus within the scientific and medical community on a unified definition, the difficulty of establishing clear causality, and the challenge of

connecting somatic symptoms with psychological and neurological processes. Despite these challenges, this article emphasizes the bidirectional relationship between neuropathology and negative emotions and explains why Mindchat therapy represents an effective and modern approach to alleviating psychosomatic pain.

Many conventional therapies for psychosomatic pain attempt to guide patients to a state of calmness, but fail to fully address the underlying negative emotions and their connection to the pathological neural network. While patients may experience temporary relief, these treatments often serve only as short-term solutions rather than permanent cures. From a neurological standpoint, such methods neglect the PNN in that negative emotions are stored, meaning that when these emotions are re-triggered, the pain often resurfaces. Mindchat therapy, however, goes beyond simply achieving calmness. By targeting and dismantling the PNN, it prevents future reactivation, offering a more sustainable solution. Mindchat therapy recognizes that being calm is not the final goal and leverages this mental state to disrupt the self-sustaining cycle of PNNs, ultimately eliminating psychosomatic pain and its associated negative emotions.

This review begins by drawing on clinical data from Dr. Kurt Kroenke's study, "Patients Presenting with Somatic Complaints: Epidemiology, Psychiatric Comorbidity, and Management," to clarify and categorize psychosomatic pain. Dr. Kroenke's research not only strengthens the definition of psychosomatic pain used in this review but also highlights the significant comorbidity between psychosomatic pain and other health conditions. The study's findings reinforce the importance of considering the complex interplay between neurological, psychological, and social factors in the treatment of psychosomatic disorders—an aspect often overlooked in conventional therapies [1].

Next, we assess a range of therapeutic interventions aimed at managing psychosomatic, somatic, and chronic pain, identifying the shortcomings in their approaches. The review then delves into neurobiological research, examining how pathological neural networks (PNNs) contribute to the persistence of these pain conditions. Finally, we present Mindchat therapy as an innovative solution designed to address the root causes of psychosomatic pain by disrupting the self-sustaining PNNs responsible for the negative emotional states.

Materials and Methods

To collect the relevant data for this review, comprehensive searches were conducted across reputable databases including ResearchGate and PubMed. The research synthesis process involved reviewing peer-reviewed journals such as Southern Medical Journal, Encyclopedia Britannica, The American Journal of Medicine, The International Journal of Clinical and Experimental Hypnosis, The American Psychiatric Association, Critical Reviews in Neurobiology, Frontiers of Psychiatry, Neuroscience and Biobehavioral Reviews, Healthcare (Basel, Switzerland), and The International Journal of Methods in Psychiatric Research. Data from established health organizations, including Psychology Today, National Center for Biotechnology Information, WebMD, Centers for Disease Control and Prevention, Asthma and Allergy Foundation of America, National Health Council, Mayo Clinic, and National Center for PTSD, were also included. Key search terms like hypnotherapy, chronic pain, psychosomatic pain, neuropathology of psychosomatic pain, somatic pain, and negative emotions guided the data collection. The scope of the review was continually refined to align with the latest research findings regarding the neuropathology of psychosomatic pain.

Key terms

Psychosomatic, somatic, and chronic pain

Psychosomatic pain is frequently used to describe conditions where psychological factors have a significant impact on physical health, leading to pain or discomfort without a clear physical cause. Although the term is common in clinical settings, a standardized definition is lacking across various medical texts. For instance, classification systems like the International Classification of Diseases (ICD-10) and Diagnostic and Statistical Manual of Mental Disorders (DSM-V) offer symptom-based categorizations but do not directly address the underlying causes of psychosomatic conditions [4-6]. This limitation contributes to ongoing challenges in diagnosing and effectively treating psychosomatic disorders [7].

Somatic pain refers to physical sensations such as headaches, dizziness, or fatigue, and is often diagnosed in the context of mental health disorders. Evidence suggests that individuals experiencing somatic pain are at a higher risk of co-occurring mental health conditions, including depression and anxiety, particularly in those who also suffer from chronic physical diseases like cardiovascular conditions, neurological disorders, and diabetes. Studies indicate that a significant percentage of somatic symptoms seen in primary care settings (30-74%) remain medically unexplained [1].

Chronic pain is typically defined as persistent pain lasting more than three months, without a clear medical explanation. While pain is essential for warning against potential injury, chronic pain fails to serve a protective function and can be a result of a dysfunction in the body's mechanisms for processing nociceptive information. This pain begins when receptor cells under the skin and in organs transmit signals to the spinal cord, which then relay these pain signals to the brain [8-10]. The emotional impact of pain, particularly through fear and anxiety, can amplify its intensity. Over time, chronic pain can become self-

sustaining as it triggers a feedback loop, reinforcing itself through pathological neural networks (PNNs), further complicating treatment and recovery.

Chronic, somatic, and psychosomatic pain

Pain, in its most fundamental form, acts as a warning signal to prevent further injury. It typically manifests as discomfort, such as soreness or muscle stiffness, that occurs after trauma or injury. While this type of pain serves an important function in safeguarding the body, it can become problematic if it persists beyond the healing of the injury. When pain lasts for over three months and no physical injury is present to explain the discomfort, it transitions into what is known as chronic pain. Chronic pain often occurs when the body fails to suppress the ongoing flow of pain signals that are meant to subside after an injury. Instead, these signals continue to reach the brain, causing discomfort without an apparent external cause [10]. Fear and anxiety are common emotional responses to chronic pain, and these can intensify the pain experience, creating a vicious cycle. Over time, the pain may become more entrenched as the brain forms lasting neural connections that perpetuate this state, leading to what is known as a self-sustaining feedback loop of pathological neural networks (PNNs).

Psychosomatic pain, by contrast, is more elusive in terms of definition. Unlike somatic pain, which can often be traced to a physical origin, psychosomatic pain encompasses both physical and psychological components, making it difficult to classify and treat. Various medical classifications, including the International Classification of Diseases (ICD-10) and the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), categorize symptoms of psychosomatic pain but fail to adequately address its underlying causes. This lack of clarity about the mechanisms behind psychosomatic pain has led to challenges in providing a clear definition and effective treatment strategies [4, 5, 11]. This gap in understanding often results in inconsistent diagnoses and approaches to care, as psychosomatic pain remains a complex and often misunderstood condition [7].

Results and Discussion

Table 1 provides a broad, non-exhaustive list of various chronic, somatic, and psychosomatic pain conditions, along with descriptions to help contextualize their symptoms and potential treatment strategies [12].

Table 1. Chronic, somatic, and psychosomatic pain disorders with their descriptions [13-27]

Psychosomatic disorder	Symptoms/Description
Hypertension	High blood pressure (above 140/90 mmHg), severe headaches, vision problems, trouble breathing, irregular heart rhythms
Respiratory conditions: (1) Asthma (2) Chronic obstructive pulmonary disease (COPD) (3) Chronic bronchitis	Difficulty breathing, shortness of breath, persistent coughing, ongoing chest pain, excess mucus production
Gastrointestinal issues: (1) Irritable bowel syndrome (IBS) (2) Gastroesophageal reflux disease (GERD)	Gas, bloating, constipation, acid reflux, indigestion, abdominal discomfort
Migraine/Tension headaches	Intense throbbing or pulsing headache, sensitivity to light and sound, nausea, vomiting
Sexual dysfunction: (1) Erectile dysfunction (ED) (2) Frigidity	Difficulty in maintaining an erection or achieving orgasm
Atopic dermatitis	Itchy, dry skin, rashes, blisters
Post-traumatic stress disorder (PTSD)	Recurrent flashbacks or memories of trauma, avoidance behavior, mood or cognitive changes, difficulty recalling traumatic events, heightened arousal or reactivity
Fibromyalgia	Widespread pain, fatigue, memory or concentration difficulties
Stomach ulcers: (1) Peptic ulcers (2) Duodenal ulcers (3) Gastric ulcers	Sores in the esophagus, stomach, or small intestine, causing abdominal pain
Alexithymia	Difficulty in recognizing and expressing emotions, lack of motivation, unpredictable physical symptoms such as racing heart, difficulty breathing, headaches

The terms chronic, somatic, and psychosomatic pain are often used interchangeably in medical, clinical, and scientific contexts. While most doctors typically categorize medically unexplained physical pain as “chronic,” professionals in

psychology and neurology may refer to these conditions as somatic or psychosomatic [1]. The way these pain conditions are classified often depends on the practitioner's field of expertise. This article will use the term psychosomatic pain, recognizing that it may also include chronic and somatic pain.

Comorbidities in psychosomatic pain

Dr. Kroenke's research shows that 70-90% of individuals with depression or anxiety experience somatic symptoms. Furthermore, 50-75% of people with unexplained symptoms also suffer from depression, while 40-50% experience anxiety. His study highlights the strong connection between the number of somatic symptoms and the likelihood of coexisting mental health disorders like depression and anxiety. Although the specific number of somatic symptoms is not a direct indicator of a single condition, a higher count suggests a stronger probability of a psychological disorder being present. **Table 2** from Dr. Kroenke's research illustrates the relationship between somatic symptoms and the likelihood of depression or anxiety disorders in primary care settings [1].

Table 2. Relationship between somatic symptoms count and likelihood of a depressive or anxiety disorder in primary care patients

Number of somatic symptoms*	Study A (Kroenke) (n = 1000)			Study B (Kroenke) (n = 499)	
	N	Mood disorder (%)	Anxiety disorder (%)	N	Mood or anxiety disorder (%)
0-1	215	1%	2%	106	4%
2-3	225	7%	12%	131	18%
4-5	191	13%	23%	129	31%
6-8	230	30%	44%	96	52%
≥ 9	139	48%	60%	37	78%

* Number of symptoms that the patient reports being 'bothered a lot' by in the past month selected from the PRIME-MD checklist of 15 somatic symptoms

Dr. Kroenke's study reinforces the idea that negative emotions can both cause and be a consequence of psychosomatic pain, as they contribute to the creation and reinforcement of pathological neural networks (PNNs). These PNNs can become autonomous and bidirectional, and MindChat therapy suggests that positive emotions can also lead to pain.

Pathological neural networks (PNNs)

When a healthy person experiences pain, the stimulus that causes the pain (such as a movement or injury) triggers a response in the lateral nucleus of the amygdala (LA), which then activates the central nucleus of the amygdala (CE). The CE regulates fear expression through behavioral, autonomic, and endocrine responses. This mechanism is biologically important, as it helps the person avoid the original stimulus to prevent further injury, with the anticipation of fear being beneficial in this case [26].

The neuroanatomy of psychosomatic pain and negative emotions: the self-sustaining loop

Pain transitions into psychosomatic pain when an individual continues to experience discomfort even after the original stimulus is no longer present. For instance, if the pain originated from a particular arm movement, the individual might still feel pain, psychologically and physically, simply by anticipating or associating that movement with pain. Another example would be a person who was assaulted by someone with a mustache during childhood. Later in life, seeing a person with a mustache may trigger memories of the assault, activating the PNN even without any actual threat or harm.

At this stage, the unconditioned stimulus (US), which initially caused pain, transforms into a conditioned stimulus (CS). This can occur when an individual experiences the trigger, thinks about the trigger or anticipates the pain associated with it. Neurologically, the process of fear learning that forms the CS involves projections from the hippocampus, which processes contextual information, to the basal nucleus of the amygdala.

In essence, pain is a natural part of the healing process and involves a threat (the US) and hyperactivity in the amygdala. However, when the original threat is no longer present, the brain continues to perceive it as a threat, transforming it into a CS. This misperception leads to psychosomatic pain, as the brain associates the CS with pain even when no physical threat exists. This cycle reinforces the neural network, and the brain generalizes the pain response automatically, regardless of the absence of a real threat. The result is that fear of learning and negative emotions related to trauma fuel the PNN, making the pain a continuous loop.

Traditional therapeutic interventions: an inadequate approach

It becomes increasingly challenging to treat fear-based pain once the neurological response has become an automatic reaction. Many traditional therapies focus on extinction learning (EL), which involves exposing the individual to the CS in an attempt to reduce its emotional impact. EL aims to correct misinterpretations of the event and help the person detach from safety

behaviors associated with the pain. However, this approach often falls short because the brain is hardwired to resist altering these default responses.

Neuropathological process of extinction learning (el) and fear-learning [26]

The process of extinction learning (EL) unfolds alongside the fear-learning process, and it involves the following steps:

- Exposure to the conditioned stimulus (CS) triggers the ventromedial prefrontal cortex (vmPFC), which forms inhibitory connections (IC). These connections are then sent to the intercalated cell masses (ITC).
- The IC sends signals to the central nucleus of the amygdala (CE) to inhibit fear expression.
- The vmPFC also projects IC signals to the lateral amygdala (LA) to further regulate fear expression.
- The hippocampus sends projections to the vmPFC and LA to help modulate the extinction expression about context.

In this model, the primary distinction between fear learning and extinction learning lies in the involvement of the vmPFC and the decreased activity of the amygdala. While some therapies, such as cognitive behavioral therapy (CBT) and regression hypnotherapy, use extinction learning to help individuals process trauma and reduce fear responses, these methods may fail to address the underlying negative emotions that reinforce the associated pathological neural networks (PNNs). Consequently, even though extinction learning helps reduce the expression of fear, it doesn't necessarily eliminate the emotional associations that continue to drive the pain response.

The shortcomings of traditional therapeutic interventions

Many therapeutic interventions, including classical hypnosis, gestalt therapy, psychoanalysis, and CBT, focus on identifying and processing traumatic events. However, these methods often take significant time and effort to uncover multiple events contributing to a person's pain. The therapeutic process tends to become fragmented, only addressing a few emotions or states that cause discomfort without fully eliminating the PNN itself. In these treatments, the negative emotions tied to a traumatic event are often overlooked, meaning the PNN is not entirely dismantled. As a result, while individuals may feel relief in the short term, the underlying neural network remains intact, and pain can persist.

MindChat therapy: an innovative approach to healing

In contrast, MindChat therapy offers a more efficient approach to identifying and addressing all components of a PNN. It facilitates the identification of every emotional "engine" within the PNN, ensuring a more comprehensive treatment. MindChat therapy operates by eliminating the neural pathways associated with pain and trauma, addressing both the emotions and the anticipation of pain that reinforce the PNN.

Unlike traditional therapies that aim to reduce fear, MindChat therapy eliminates the pathway itself. It utilizes the calmness achieved through exposure to the CS during therapeutic sessions and treats this calmness as an emotional derivative tied to the PNN. This approach identifies and destroys the negative emotions within the PNN, which often act as self-protective mechanisms against full therapeutic intervention. In this way, MindChat therapy goes beyond mere symptom management and aims to disrupt the underlying structures that perpetuate psychosomatic pain.

Advantages of MindChat therapy

While many conventional therapies have limited efficacy (less than 50%), MindChat therapy demonstrates a significantly higher success rate, often exceeding 80% efficacy. Furthermore, MindChat therapy can be used independently without the need for multiple treatment modalities. The key is its ability to de-hypnotize the individual from the trance-like state created by the trauma, thereby disrupting the cycle of negative emotions → PNN → psychosomatic pain. The ultimate goal is to achieve a state of "nothingness", a breakthrough where the individual is no longer caught in the cycle of trauma-driven pain. Given its high efficacy and potential for application across a wide range of therapeutic fields, MindChat therapy is poised to revolutionize not only the practice of hypnosis and hypnotherapy but also broader fields such as medicine, psychology, and psychotherapy [28].

Conclusion

Traditional approaches to treating psychosomatic pain often involve medications or therapies aimed at alleviating symptoms. However, these treatments can lead to limited or temporary relief, or even fail to address the root cause of the pain, which is often tied to pathological neural networks (PNNs). Without targeting and eliminating the negative emotions and PNNs connected to the pain, the symptoms persist, continuing without a decrease in intensity, frequency, or duration.

Conventional therapies typically focus on achieving a state of calmness but often fall short of addressing the deeper underlying emotional factors driving the pain. In contrast, MindChat therapy offers a more effective solution by utilizing this calm state

to directly target and "delete" the engines of PNNs and their associated emotional states. This approach is crucial because PNNs can not only cause pain but also lead to a broad spectrum of other symptoms.
MindChat therapy introduces a novel method known as DeHypnosis, which is self-applied and does not require professional training to use. This method can be utilized by individuals as young as five years old, making it a versatile and accessible tool for self-therapy. As a result, MindChat therapy offers a promising alternative to traditional therapeutic interventions, potentially revolutionizing the way psychosomatic pain is treated.

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