

Title: Implicit Theories of Pain Predict Coping Styles and Pain Expressiveness

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Abstract: Chronic pain patients with a fixed implicit theory of pain showed greater nonverbal pain expressiveness during a pain-eliciting physiotherapy exercise, were less likely to take steps to actively cope with the pain, and felt more helpless compared to pain sufferers with a malleable implicit theory of pain.

Supporting Summary: What psychological mechanisms enable some pain sufferers to cope more effectively than others? It has long been demonstrated in achievement motivation that people's success in coping with challenges and setbacks depends to a large extent on their implicit theories of intelligence. Those individuals who hold an "entity theory" (i.e., that their intelligence is a relatively fixed and uncontrollable aspect of themselves) typically do poorly in the face of challenges and setbacks, often withdrawing effort and perseverating in failed strategies. In contrast, individuals who hold an "incremental theory" (i.e., that their intelligence is a relatively malleable and controllable feature of themselves) typically thrive under challenge and overcome setbacks, usually by escalating effort and changing strategies. The two "theories" of intelligence are "associated with two distinct frameworks or "meaning systems" (Hong et al., 1999) that can have important consequences for students who are facing a sustained challenge" (Blackwell, Trzesniewski, & Dweck, 2007, p. 247).

Similarly, recognizing that some individuals cope more effectively with pain than others do, we propose that people's implicit theories of pain shape their trajectory in coping with the challenges and setbacks of long-term pain. Some people experiencing chronic pain believe their pain is relatively unchangeable and is something over which they have little or no control. Others (with comparable subjective and objective pain levels) think of their pain as something relatively malleable and as something over which they have some control. In the present study, we examined the extent to which patients' coping styles, emotional reactions, and pain expressiveness during a pain-eliciting physiotherapy exercise were associated with a fixed or a malleable implicit theory of pain. Participants included 163 patients with back pain who completed a series of standardized questionnaires. Verbal (visual analogue scale) and nonverbal (facial grimacing) pain expressiveness were examined in response to the physiotherapy test. Chronic pain sufferers with a fixed implicit theory of pain were less likely to take steps to actively cope with the pain, felt more helpless, and showed greater nonverbal pain expressiveness compared to pain sufferers with a malleable implicit theory of pain. These differences suggest the potential for targeting implicit beliefs about pain in interventions that aim to improve outcomes for chronic pain sufferers.

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