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Perceived Control of Pain Contributes to Feeling Less Pain and Accurately Recalling Pain

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Introduction

Self-Efficacy is people's convictions in their own effectiveness

- Determines whether coping behavior and effort will be exerted during aversive experiences
- Higher self-efficacy is associated with decreased emotional arousal compared to lower self-efficacy

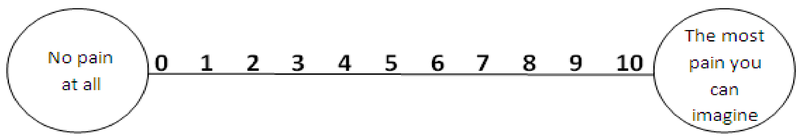
Accuracy of Pain Recall is central to effective diagnosis, treatment planning and research studies

- Underestimating pain after the experience may be beneficial for undergoing similar painful task (e.g., colonoscopy) while overestimating pain may be a precursor for poor treatment adherence

Purpose of Study: to examine the effect of self-efficacy on pain intensity ratings, recall of pain intensity two weeks after the painful experience, and accuracy in recalling pain

Method

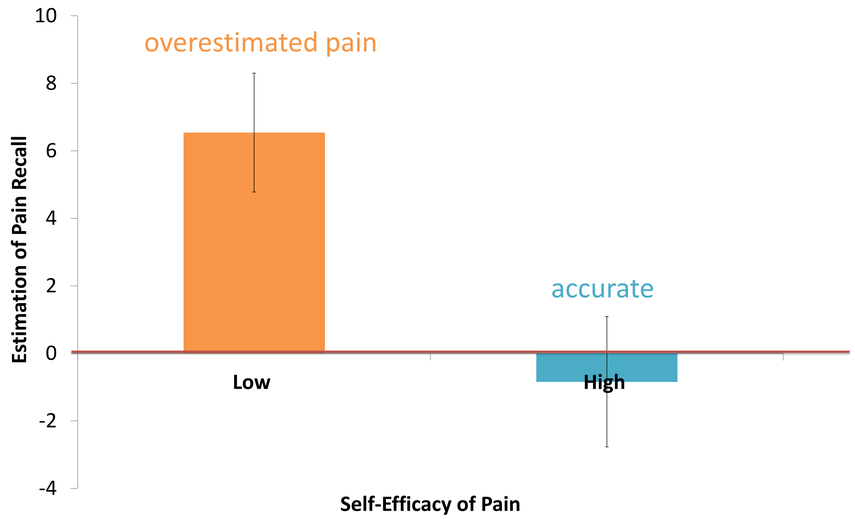
- N = 203 undergraduate participants (36% male)
- Participants underwent a pain procedure that caused acute ischemic muscle pain
- Rated pain every 30-s throughout pain task, rated overall pain intensity after the procedure and 2 weeks later



- Participants self-reported their self-efficacy for pain on a modified version of the General Self-Efficacy Scale (Scherer et al., 1982) (1-6 scale from never to always)
  - E.g., "when I know something will cause physical discomfort, I am certain that I can get through it"

Results

- Participants' self-efficacy for pain was associated with significantly lower pain ratings throughout the first two minutes of the pain task, $r(196) = -.16$, $p < .05$, lower overall pain intensity ratings immediately after the pain task, $r(201) = -.11$, $p = .11$, and significantly lower overall pain intensity ratings two weeks after the pain task, $r(127) = -.29$, $p < .001$
- An accuracy in pain recall variable was created by subtracting participants' overall pain intensity rating immediately after the task from their recall of pain intensity two weeks after the task
- Participants with low self-efficacy for pain tended to overestimate their pain two weeks after the task while participants with high self-efficacy for pain accurately recalled their pain, $t(127) = 2.83$, $p < .01$



Discussion

- Participants who had higher self-efficacy for pain reported less pain throughout the procedure and were accurate at recalling their pain compared to participants with lower self-efficacy
- Participants who had lower self-efficacy for pain overestimated their pain
- Having higher self-efficacy for pain is beneficial for withstanding painful stimuli (i.e., painful procedures) and resiliency after painful experiences
- Through teaching effective coping skills via self-efficacy, clinicians can not only alter patients' experiences at the time of pain (by reducing pain intensity) but also increase their accuracy in recalling the painful experience in the future, which has implications for future health behaviors

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