



# Pain Medication Attitudes Questionnaire and Conformity to Masculine Norms on Men's Risk of Abusing Opioids in Chronic Pain

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## Introduction

- Individuals with chronic pain are at an increased risk of abusing opioids compared to the general population (Voon et al., 2017).
- Men with chronic pain may be an at-risk population, with men being more likely to have opioid use disorder compared to women (American Psychiatric Association, 2013).
- Thus, identifying the risk of men abusing opioids who have chronic pain is crucial to mitigating the negative costs associated with their abuse.

## Theory and Research

- The fear avoidance model posits that the increased tendency to catastrophize painful experiences leads to fear about treatments (e.g., medications), often resulting in a chronic cycle of avoidance behaviors such as poor medication adherence (Vlaeyen & Linton, 2000; Leeuw et al., 2007).
- Positive associations among pain catastrophizing, negative pain medication attitudes, and poor medication adherence (e.g., Finan et al., 2018).
- Masculine norms have also been found to play a role, with men with high traditional gender role beliefs being more likely to consume greater amounts of prescription pain relievers (Daheim et al., 2019).

## Hypotheses

- A moderated mediation model, in which pain catastrophizing is positively associated with negative pain medication attitudes, and in turn, negative pain medication attitudes is positively associated with risk of abusing opioids in men with chronic pain.
- We expected conformity to masculine norms to moderate the model in the *b* and *c'* pathways, with men with high conformity to masculine norms strengthening the mediated relation compared to lower levels of conformity.
  - Holding age constant

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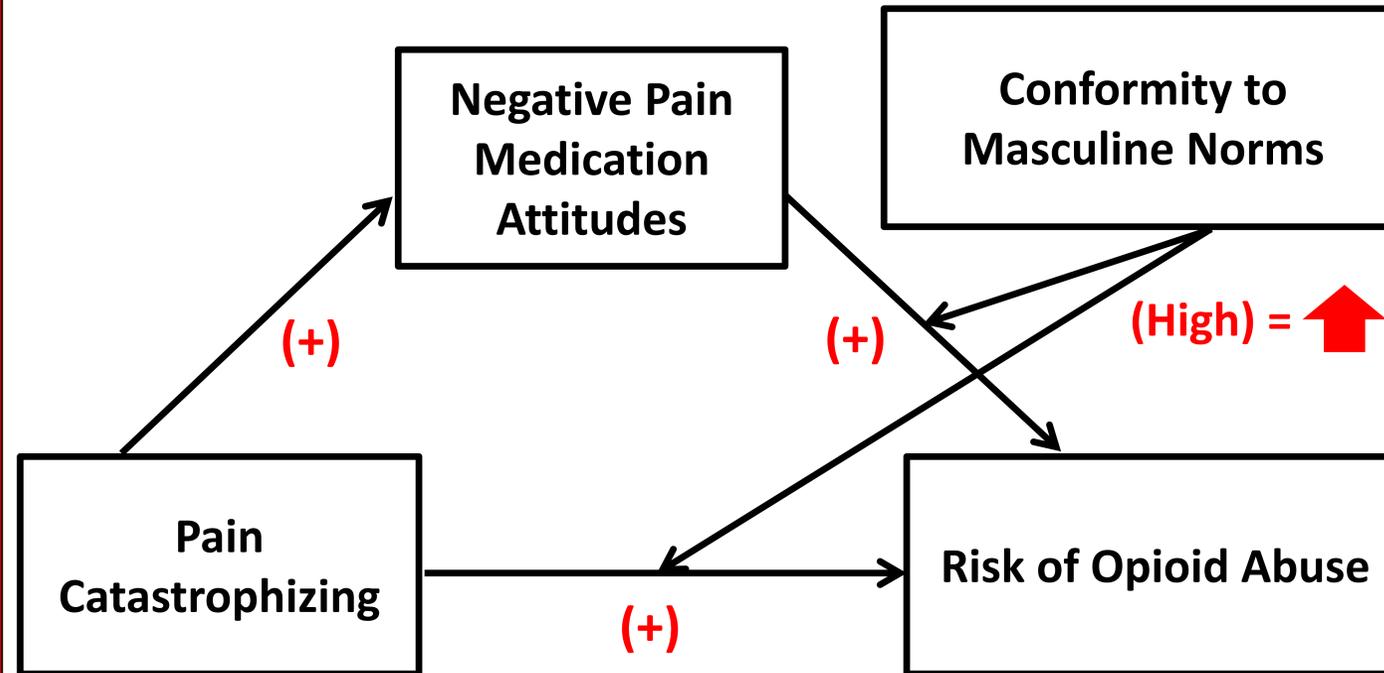


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## Main Takeaway!

**High** conformity to masculine norms contributed to an **increased** risk of opioid abuse in men with chronic pain compared to those with lower conformity to masculine norms.

## Moderated Mediation Model



**Mediation:** increased pain catastrophizing predicted increased negative attitudes about pain medications, and in turn, as negative pain medication attitudes increased risk of opioid abuse increased.

**Moderated Mediation:** men with higher levels of conformity to masculine norms strengthened the positive mediated relation, contributing an increased risk of opioid abuse compared to those with lower conformity

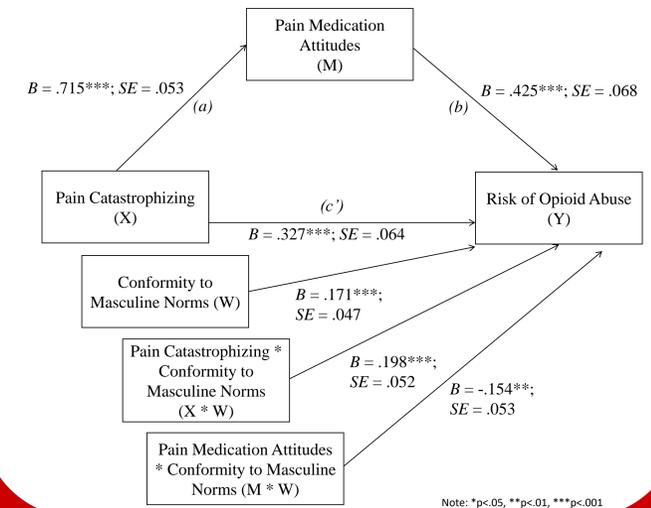
## Methods

- 229 men with chronic pain ( $M = 30.22$ ,  $SD = 8.13$ )
- 164 participants reported consuming opioids within the past month

## Measures:

- Pain Catastrophizing Scale (Sullivan et al., 1995)
- 14-item Medication Attitudes Questionnaire (Elander et al., 2017)
- 14-item Screener and Opioid Assessment for Patients with Pain (Akbik et al., 2006)
- 22-item Conformity to Masculine Norms Inventory (Mahalik, 2003)

## Results



## Discussion

- Findings suggest men's conformity to masculine norms contributes to their risk of abusing opioids during chronic pain.
- Interactions occurred in the domains of men's perceptions of pain (i.e., pain catastrophizing), consistent with previous research (e.g., Daheim et al., 2019), and their attitudes towards pain medications, which was a novel finding.
- Findings may help inform the identification of at-risk individuals and screening for prescribing opioids in men with chronic pain.