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## ABSTRACT

Using the self-regulatory model framework, the study objective was to examine the mediating role of psychological attributions for pain in the relationship between pain perception and help-seeking intentions in adults with chronic nonmalignant pain. A cross-sectional design included 240 individuals with chronic pain, recruited using Amazon's Mechanical Turk, who completed questionnaires assessing pain perception (Short-Form McGill Pain Questionnaire-2, Illness Representations (Revised Illness Perceptions Questionnaire), and help-seeking intentions (General Help-Seeking Questionnaire). Results of the bootstrapping method described by Preacher and Hayes (2008) revealed that psychological attributions significantly mediated the relationship between pain perception and help-seeking intentions. These results have implications for developing brief cognitive interventions to improve formal and informal help-seeking and earlier intervention among those with chronic pain.

## INTRODUCTION

Although chronic pain is a pervasive and costly problem, many affected individuals do not seek treatment. For example, a 2007 study found that only 25 to 30% of individuals with low back pain seek medical care<sup>1</sup>. Men, in particular, are more likely to delay medical evaluation until pain symptoms become severe<sup>2</sup>.

Untreated chronic pain is associated with reduced quality of life, depression, and increased disability<sup>3,4</sup>. Therefore, it is imperative to understand the factors that lead individuals with chronic pain to seek help. Yet few studies have examined the relationship between cognitive-affective variables, such as psychological attributions, and help-seeking in chronic pain populations. Guided by the Self-Regulation Model<sup>5</sup>, this study examined the mediating role of psychological attributions in the relationship between pain perception and help-seeking intentions in adults with chronic nonmalignant pain in the United States.

## RESULTS

Simple mediation analyses revealed the indirect effect of affective pain perception (e.g. pain as tiring-exhausting, sickening, punishing-cruel) on formal help-seeking intentions through psychological attributions ( $\beta = .02$ ; CI = .004 to .034; PM = .24), was significant, accounting for 24% of the total effect.

The indirect effects of intermittent pain perception (e.g. shooting, stabbing, sharp) on both formal ( $\beta = .02$ ; CI = .003 to .041; PM = .17) and combined ( $\beta = .02$ ; CI = .006 to .037; PM = .26) help-seeking intentions through psychological attributions were also significant, accounting for 17% and 26% of the total effect, respectively. Moreover, these indirect effects remained significant when controlling for respondents' demographic variables.

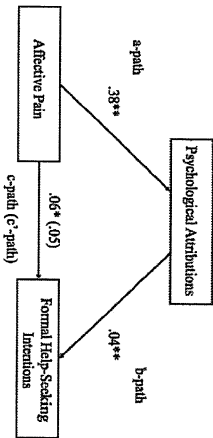


Figure 1. Mediation analysis investigating the role of psychological attributions in the relationship between affective pain and formal help-seeking intentions.  
\*  $p < 0.05$ . \*\*  $p < 0.01$ .

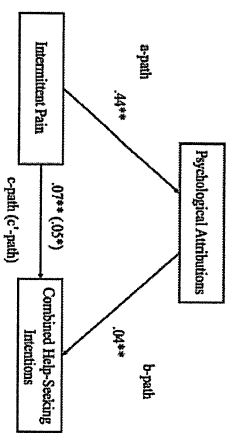


Figure 2. Mediation analysis investigating the role of psychological attributions in the relationship between intermittent pain and combined help-seeking intentions.  
\*  $p < 0.05$ . \*\*  $p < 0.01$ .

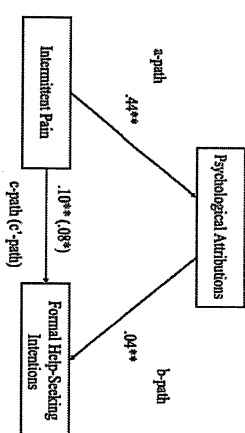


Figure 3. Mediation analysis investigating the role of psychological attributions in the relationship between intermittent pain and formal help-seeking intentions.  
\*  $p < 0.05$ . \*\*  $p < 0.01$ .

# Help-seeking in Chronic Pain: The Role of Psychological Attributions

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## METHOD

$N = 240$  U.S. adults with chronic nonmalignant pain recruited from Amazon Mechanical Turk  
• Mean age = 39.98 years (SD = 12.55); 56% female, 83% White/Caucasian, 78% employed

- 22 items measured affective, intermittent, continuous, and neuropathic pain intensity.
- Revised Illness Perceptions Questionnaire<sup>7</sup>
- Six items evaluated the strength of participants' psychological pain attributions.
- General Help-Seeking Questionnaire<sup>8</sup>
- Measured intentions to seek help from formal, informal, and combined sources of help.

**Analysis:** Simple mediation models were tested with Preacher and Hayes' (2008) bootstrapping procedure.

## CONCLUSIONS

Simple mediation analyses revealed the indirect effect of affective pain perception (e.g. pain as tiring-exhausting, sickening, punishing-cruel) on formal help-seeking intentions through psychological attributions ( $\beta = .02$ ; CI = .004 to .034; PM = .24), was significant, accounting for 24% of the total effect.

The indirect effects of intermittent pain perception (e.g. shooting, stabbing, sharp) on both formal ( $\beta = .02$ ; CI = .003 to .041; PM = .17) and combined ( $\beta = .02$ ; CI = .006 to .037; PM = .26) help-seeking intentions through psychological attributions were also significant, accounting for 17% and 26% of the total effect, respectively. Moreover, these indirect effects remained significant when controlling for respondents' demographic variables.

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The voluntary, fully informed consent of the subjects used in this research was obtained as required by 32 CFR 219 and 45CFR 216.62, 64140-409. The views expressed are those of the author(s) and do not reflect the official views or policy of the Department of Defense or its components.

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