

Maladaptive Schemas Predict Levels of Chronic Pain and Health Worries

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Abstract

Early Maladaptive Schemas (EMSs) may predict exacerbation or alleviation of symptomology in pain patients. Our research found specific EMSs correlated to current pain, chronic pain, and health concerns. The results suggest complex interactions between pain symptoms and EMSs that are vital to successful treatment in chronic pain patients.

Introduction

- Perception of illness can impact an individual's quality of life, mood, and disease progression (Graham et al., 2013).
- Biases in information processing have been found in chronic pain patients (Pincus & Morley, 2001; Read & Pincus, 2004).
- Similarly, researchers found Early Maladaptive Schemas (EMSs) were associated with increased experience of pain and health concerns in chronic pain patients (Rankin et al., 2021; Saariaho et al., 2011, 2012; Saariaho et al., 2015).
- Identification of specific EMSs can inform treatment inventions (Saariaho et al., 2015), but the specific EMSs underlying current and chronic pain and health worries are not known.
- Our research filled this gap.

Method: Participants

- N = 425 American adults (M age = 44.5 years, SD = 16.1)
- Gender identity: 51.1% female, 46.8% male, 0.7% transgender, 0.7% non-binary
- Race/ethnicity: 72.7% White, 12.5% African American or Black, 6.6% Asian or Asian-American, 4.5% Latinx, 3.3% mixed, 0.4% other

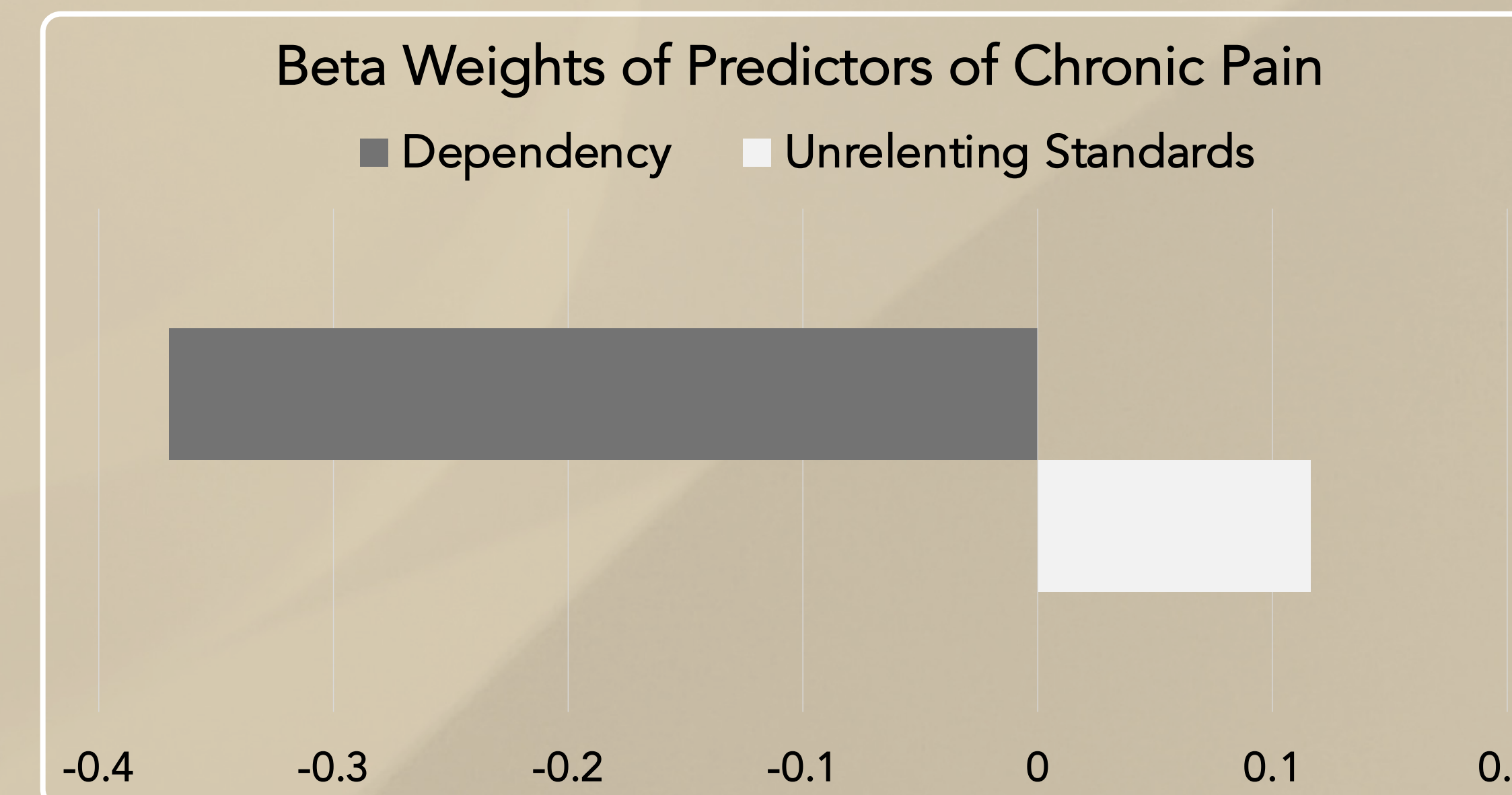
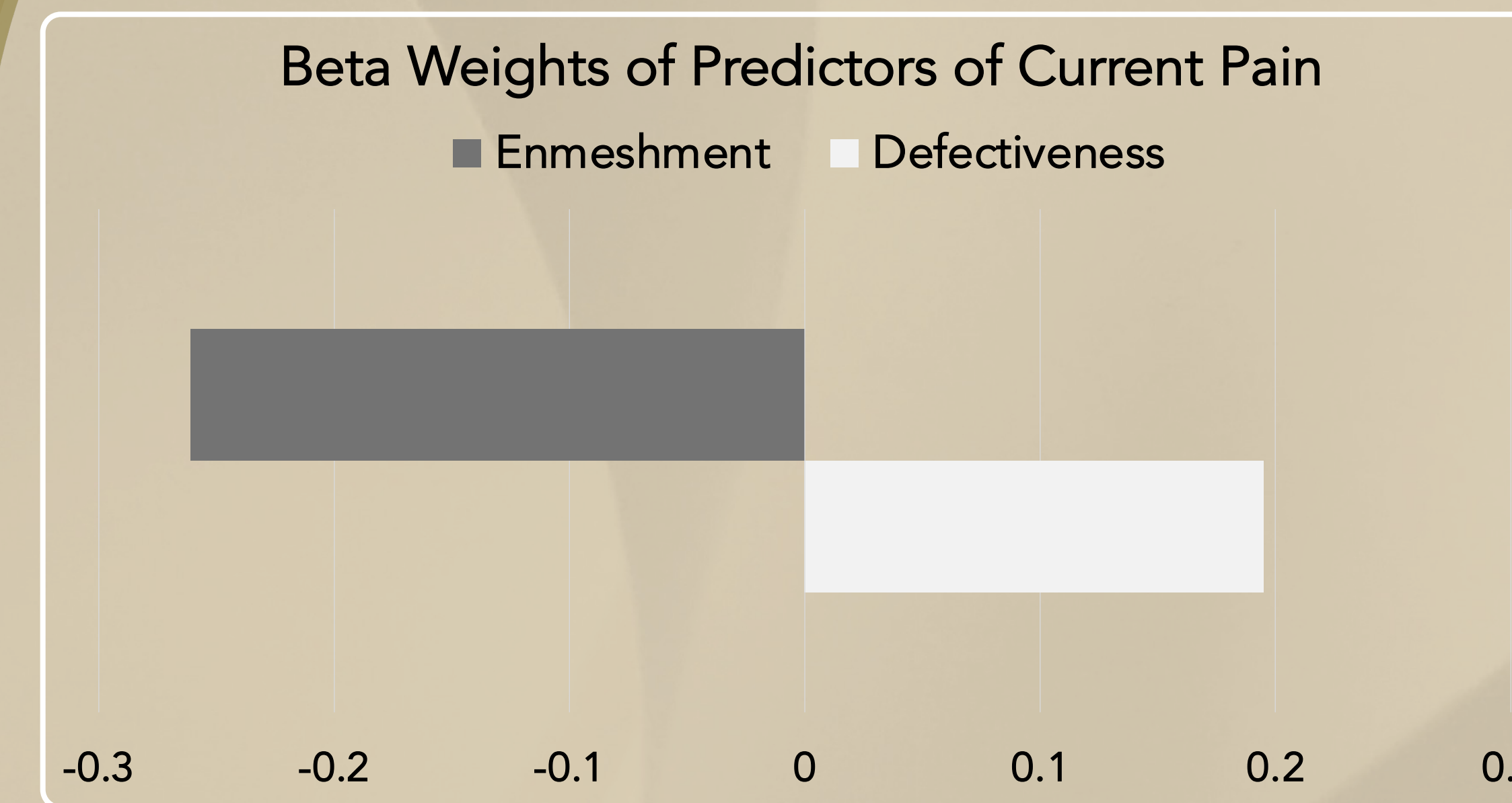
Method: Procedure

- Participants were recruited from Prolific and completed an anonymous online survey including:
 - Schema Questionnaire (Schmidt et al., 1995)
 - Pain S-E Questionnaire (Nicolas, 1989)
 - Comparative Pain Scale (Moyle, 2015)
 - Somatic Symptoms Experiences Questionnaire (Herzog et al., 2015)

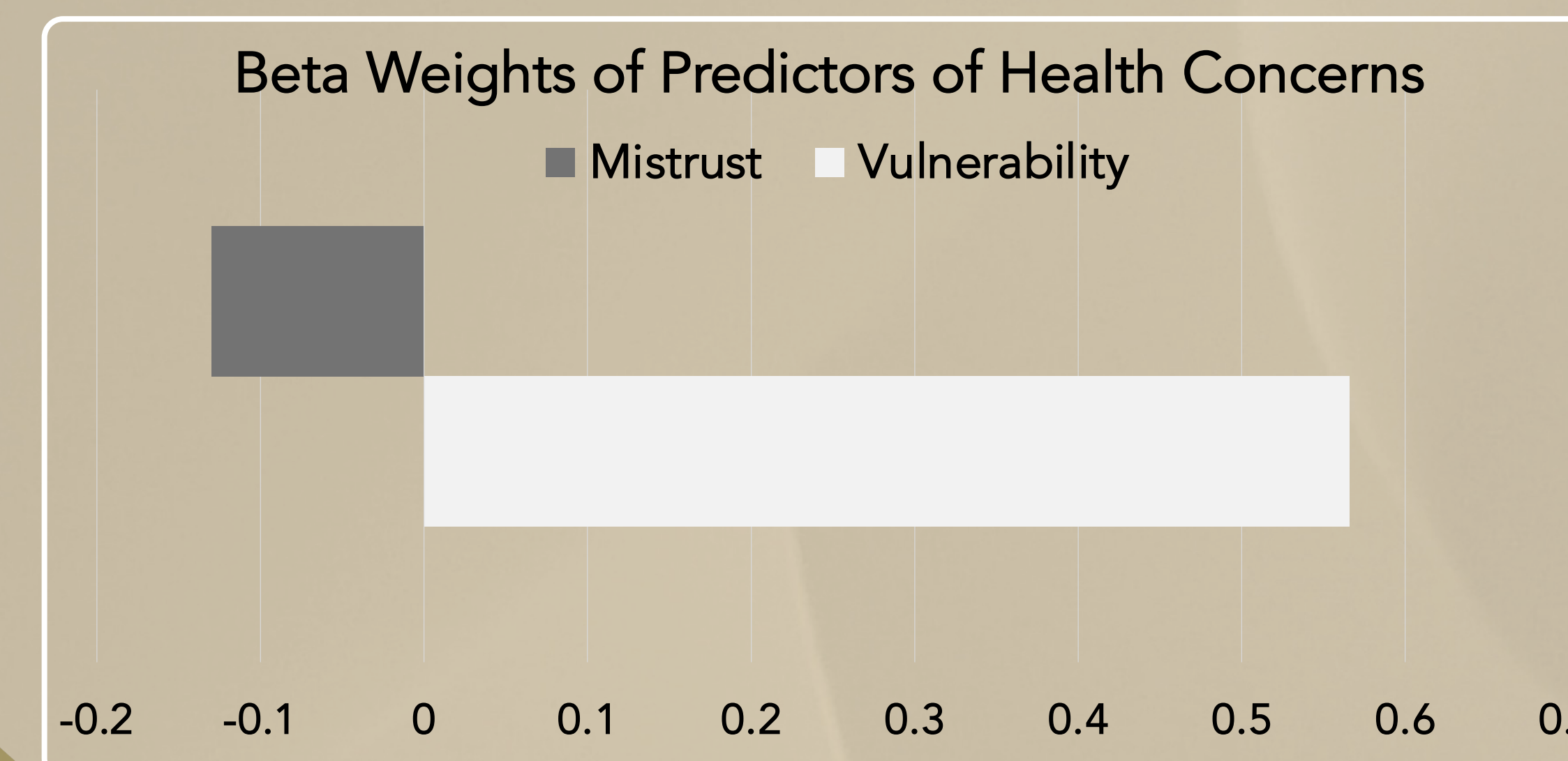
Results

- Regression was conducted with 13 EMSs as predictors and current pain level as DV. The regression was significant, $F(13, 411) = 7.03, p < .0001$, and explained 16% of the variance in current pain, $adj. R^2 = .16$.
- Defectiveness was the strongest risk factor for current pain (beta = .195, $p = .003$), whereas higher enmeshment was associated with less pain (beta = -.261, $p < .0001$).
- Regression with chronic pain as the DV was also significant, $F(13, 272) = 5.13, p < .0001$, $adj. R^2 = .16$.
- Unrelenting standards was the strongest risk factor for chronic pain (beta = .116, $p = .064$) and dependency predicted less chronic pain (beta = -.370, $p < .0001$).

Results



- Regression with health concerns as the DV was also significant, $F(13, 362) = 23.07, p < .0001$, $adj. R^2 = .43$.
- The vulnerability schema was the strongest risk factor for health concerns (beta = .566, $p < .0001$).
- The mistrust schema was associated with fewer health concerns (beta = -.130, $p = .036$).



Discussion

Consistent with expectations, individuals with current pain, chronic pain, and health concerns had specific EMSs that were associated with the exacerbation or alleviation of symptomology. The results suggest there are complex interactions between EMSs and pain and somatic symptoms that may be vital to assessment and treatment.

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