

Racism-Related Stress and Health Anxiety:
The Role of Institutional Discrimination in Emerging Adults with Pain

Kayla McCracken, MS, Jacquelyn Raftery-Helmer, PhD, Alison Stoner, PhD, & Susan T. Tran, PhD

Introduction

- Pain affects both physical and psychological well-being, including health anxiety.
- Racism-related stress, such as institutional discrimination, may exacerbate pain-related distress and health anxiety.
- Limited research explores how discrimination influences the pain-health anxiety relationship in emerging adulthood (EA), a developmental period marked by transitions.

Objectives

- Examine the relationship between pain and health anxiety, and explore the impact of discrimination on health anxiety.
- Investigate the role of discrimination distress in moderating the pain-health anxiety relationship, and highlight differences in discrimination’s impact across racial/ethnic groups.

Methods

Participants

- 790 undergraduate psychology students with pain from three universities.
- 80.6% Female, 19.9% Latinx, 7.2% Black/African American, 9.0% Asian American.

Measures

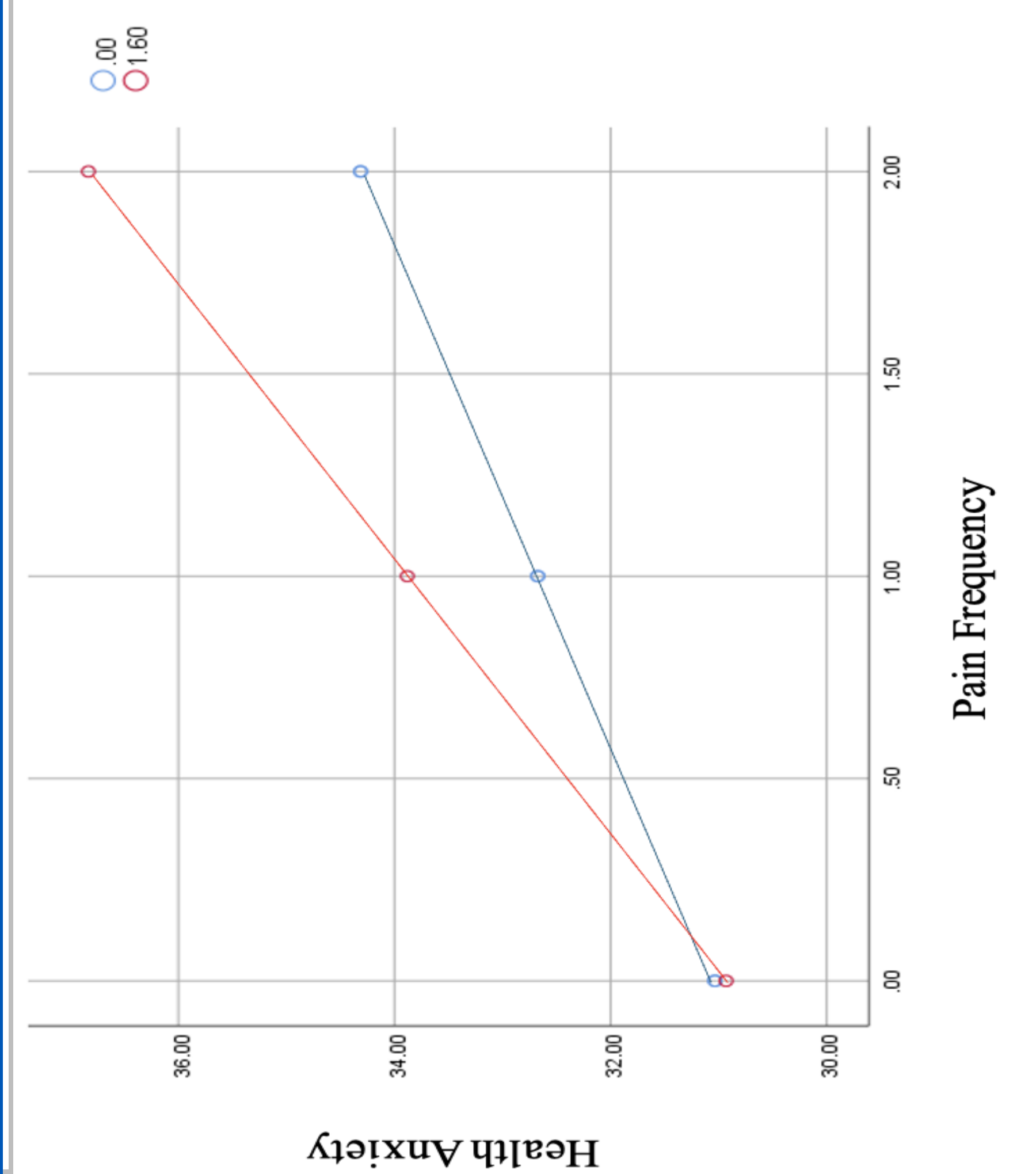
- Pain
 - Health Anxiety
 - Discrimination Distress
- Statistical Analysis
- Correlations, moderation analyses (PROCESS macro), and t-tests examined relationships between pain, health anxiety, and discrimination distress across racial/ethnic groups.

Table 1: Correlations Between Pain, Health Anxiety, and Discrimination

Variable	Usual Pain Intensity	Health Anxiety	Educational Discrimination n	Institutional Discrimination n	Overall Discrimination n
Usual Pain Intensity	-				
Health Anxiety	.235***	-			
Educational Discrimination	.131**	.092*	-		
Institutional Discrimination	.122**	.144***	-	-	
Overall Discrimination	.101*	.096**			-

Discrimination amplifies the impact of pain on health anxiety, especially for Latinx emerging adults, emphasizing the need for interventions targeting both pain and race-related stress.

Figure 1: Moderation Effect of Institutional Discrimination on Pain Frequency and Health Anxiety in Latinx Participants



Results

Correlations:

- Correlations for included variables are shown in *Table 1*.
- Higher usual pain intensity was significantly associated with health anxiety.
- Higher usual pain intensity was significantly associated with discrimination, including educational, institutional, and overall discrimination.
- Health anxiety was significantly associated with educational, institutional, and overall discrimination.

Moderation Analysis:

- For Latinx participants, institutional discrimination moderated the relationship between pain frequency and health anxiety ($F(3,148) = 10.33, p < .001; B = 1.01, p = .029$).
- No significant moderation effects for Black/African American ($p = .258$) or Asian American ($p = .057$) participants.
- Pain frequency predicted health anxiety in Asian American participants ($B = .330, p = .0341$).

Conclusions

- Pain frequency, intensity, and discrimination distress are associated with health anxiety.
- Institutional discrimination moderates the pain frequency–health anxiety relationship in Latinx participants, suggesting that discrimination exacerbates the negative impact of pain.
- Race-based stressors may amplify pain-related distress by increasing stress and uncertainty.

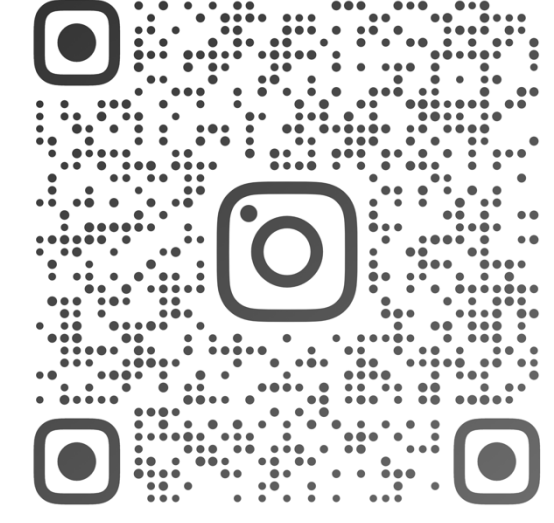
Implications

- Future interventions should address both pain management and the psychosocial effects of discrimination.
- Tailored interventions considering race-based stressors may improve overall well-being for marginalized populations.

Connect with me & the CHILL Lab:



kmccrac1@depaul.edu
X- @kmccracken_



Website

Instagram