



# Discrimination and Mental Health in Emerging Adults with Chronic Pain

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## Introduction

- Emerging adults with chronic pain face increased risks for mental health challenges, such as anxiety and depression (Twiddy et al., 2017).
- It is unknown how social stressors such as discrimination may exacerbate mental health symptoms.
- Research lacks focus on the intersection of discrimination, racial identity, and gender identity in mental health outcomes.

## Objectives

- Examine the relationship between discrimination, anxiety, depression, and pain levels in emerging adults with chronic pain
- Investigate the association between discrimination, mental health, and pain intensity
- Explore gender differences in mental health outcomes
- Assess racial differences in mental health outcomes
- Highlight the implications for inclusive mental health care

## Methods

### Participants

- 229 undergraduate psychology students with chronic pain.

### Reported demographics:

- Age:  $M = 21.43$
- Gender Identity: 64.2% Women, 20.1% Men, 9.0% Non Binary, 3.0% Other/Write-in, 3.7% Prefer not to say
- Race/Ethnicity: 36.6% White, 32.8% Black or African American, 23.1% Latinx, 14.9% Asian American or Pacific Islander, 4.5% Middle Eastern/North African, 20.1% Multiracial, 5.2% Other

### Measures:

- Pain: Pain Frequency, Usual Pain Level, Worst Pain Level
- Anxiety: Generalized Anxiety Disorder (GAD) Scale
- Depression: PROMIS Depression Scale
- Discrimination: Everyday Discrimination Scale

### Statistical Analysis:

- Correlations were conducted to examine the relationships between discrimination, anxiety, depression, and pain intensity across the sample of emerging adults with chronic pain.
- One-way ANOVAs were conducted to explore group differences in anxiety and depression across racial and gender identity groups.

*Discrimination is linked to worse mental health and pain outcomes, with gender-diverse emerging adults reporting significantly higher anxiety and depression.*

Figure 1: Gender Identity Differences In Anxiety And Depression

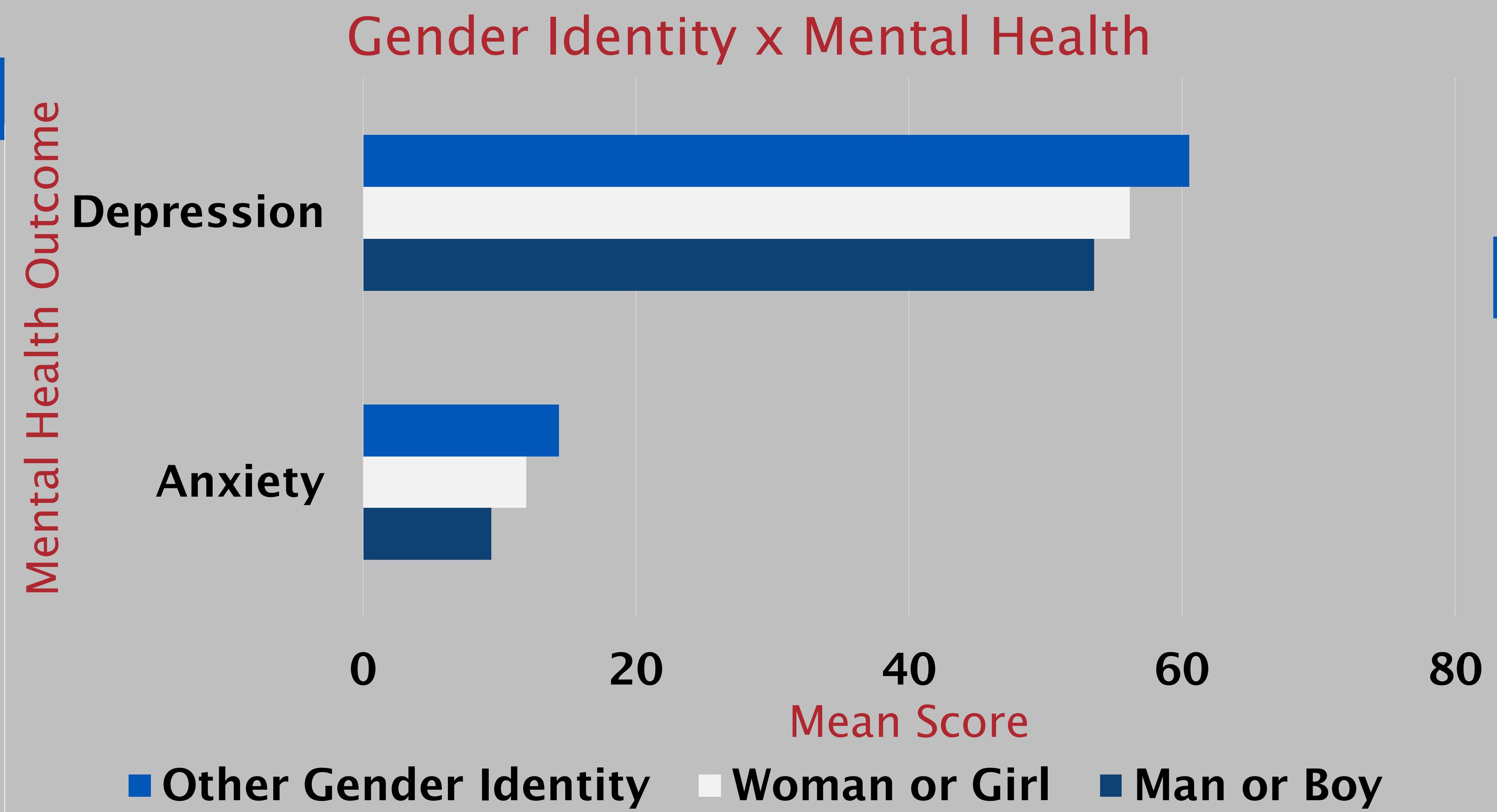


Table 1: Discrimination, Pain, & Mental Health

Variable Name	Discrimination	Anxiety	Depression	Usual Pain	Worst Pain
Discrimination	-				
Anxiety	.23**	-			
Depression	.18**	.62***	-		
Usual Pain	.17*	.34***	.30***	-	
Worst Pain	.16*	.32***	.26***	.91***	-

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

## Results

### Correlations:

- Within students with chronic pain, discrimination was significantly associated with anxiety and depression.
- See Table 1 for all correlation coefficients and significant values.

### One-Way ANOVA by Gender:

- Gender identity significantly influenced mental health outcomes:
  - Emerging adults identifying as "other gender identity" reported significantly higher anxiety ( $M = 14.35, SD = 5.70; F(2,226) = 4.90, p = .008$ ) compared to those identifying as "man or boy" ( $M = 9.43, SD = 5.57$ ).
  - Depression was also significantly higher in those identifying as "other gender identity" ( $M = 60.55, SD = 10.10; F(2,226) = 5.21, p = .006$ ) compared to those identifying as "man or boy" ( $M = 53.59, SD = 6.80$ ).

### One-Way ANOVA by Race Groups:

- No significant differences were found in anxiety or depression across racial groups.

## Conclusions

- Findings suggest discrimination may worsen mental health outcomes and intensify pain among emerging adults with chronic pain.
- Significant differences in anxiety and depression as they relate to gender identity highlight the importance of considering gender-specific mental health needs and outcomes.
- No significant racial differences in mental health outcomes, though African Americans and Latinx groups showed higher mean levels of anxiety and depression, respectively.

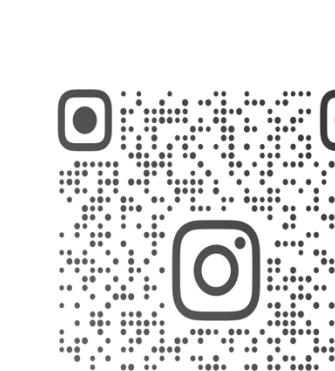
### Implications:

- Culturally sensitive and inclusive mental health care is essential for improving outcomes among diverse populations.
- Interventions targeting discrimination could help mitigate its negative impact on mental health.
- Gender-specific approaches may help address the unique mental health needs of individuals with diverse gender identities.

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