Examining the Influence of Cultural Stressors On Depression in Hispanic Adolescents

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Hispanic Stress Inventory-Adolescent Version
Background

- CDC finds that suicide attempts among Hispanic adolescents are significantly higher than their Caucasian and African American peers (CDC, 2006).

- Hispanic adolescents report greater sadness, depressive symptoms, suicidal ideation, and attempts than their non-Hispanic white peers (CDC, 2012; Nock et al., 2013; Zayas et al, 2005).

- Scholars have identified cultural based stressors, such as those that are associated with immigration, acculturation, and intergenerational conflict, as factors associated with depression.
Cultural (Hispanic) Stress

- Culturally specific stressors include reactions to anti-immigrant attitudes, familial separation related to immigrant status (McGuire & Martin, 2007), and the experience of negative public references toward their ethnic identity (Cervantes et al., 2011; Córdova & Cervantes, 2010).

- The stress associated with acculturation has been related to negative mental health outcomes (Rogler, 1994; U.S. DHHS, 2001; Vega, et al., 1993; Vega et al., 1998) and suicide attempts (Fortuna, et al., 2007; Zayas et al., 2005) in Hispanic adolescents.

- Hispanic Stress Inventory Adolescent Versions (HSIA) developed as a quantitative measure of stress event (Cervantes, et al. 2011). Factor Analysis identified 8 unique factors/domains.
Research Questions

1. How do scores on the 8 domains of cultural stress and depression symptoms differ for adolescents in clinical treatment compared to adolescents in non-clinical settings, controlling for age, gender, ethnicity, and parental employment?

2. What is the association between the 8 domains of cultural stress and depression scores?

3. Does group membership moderate the association between cultural stress and depression scores?

4. What are the unique contributions of each stress subscale to depression symptoms for youth in the sample?
Methods

• Sample:
  • Hispanic/Latino Adolescents, 11-19 years of age, with a valid score on Hispanic Stress Inventory –Adolescent Version (n=1187). 987 adolescents were in the non-clinical group and 204 were in the clinical group. Random classroom selection at 4 sites (LA, Miami, Boston, El Paso)

• Measures:
  • Hispanic Stress Inventory Adolescent Version (IV)
  • Child Depression Inventory2 (DV)
  • Covariates: age, gender, group membership, child ethnicity, parental nativity and parental employment

• Data Analysis:
  • Analysis of variance
  • Generalized Linear Models
RQ1: Differences in Stress and Depression by Group

![Graph showing differences in stress and depression by group. The x-axis represents different factors such as community gang, family economic, cultural and education, acculturation gap, family immigration, discrimination, immigration related, family drug, and child depression. The y-axis represents scores ranging from 0 to 20. The bars are differentiated by nonclinical (brown) and clinical (light blue) categories.](image-url)
RQ2: Association between Stress and Depression

Findings from the GLM model:

- The 8 HSI-A domains of stress were significant and positively associated with depression scores, controlling for the effects of gender and group membership.

Interpretation: Higher cultural stress scores were associated with higher depressive symptomology.
RQ2: Coefficients for GLM Model Regressed on Depression

<table>
<thead>
<tr>
<th>Domains of cultural stress</th>
<th>B (SE)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community and gang stress</td>
<td>.58 (.07)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Family economic stress</td>
<td>.42 (.04)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Cultural and education stress</td>
<td>.57 (.06)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Acculturation gap stress</td>
<td>.48 (.03)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Family immigration stress</td>
<td>.50 (.06)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Discrimination stress</td>
<td>1.1 (.10)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Immigration related stress</td>
<td>.42 (.07)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Family drug stress</td>
<td>.51 (.07)</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>
Research Questions 3 and 4

Testing the Moderating effects of group Membership on the Relation between Domains of Cultural Stress and Child Depression Symptoms
RQ3: Individual Models

- Significant interaction effects were found in three HSI-A domains, with a stronger effect for the clinical group, in:
  - community/gang
  - cultural/educational
  - family immigration stress

- Family economic, acculturation gap, family immigration, discrimination, and family drug stress were significantly related to depression without differences in the slopes.
# Gender and the Group*Stress Interaction

<table>
<thead>
<tr>
<th>Interaction effects with group</th>
<th>B (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community and gang stress</td>
<td>.30 (.14)*</td>
</tr>
<tr>
<td>Family economic stress</td>
<td>.09 (.07)</td>
</tr>
<tr>
<td>Cultural and education stress</td>
<td>.23 (.12)*</td>
</tr>
<tr>
<td>Acculturation gap stress</td>
<td>.03 (.09)</td>
</tr>
<tr>
<td>Family immigration stress</td>
<td>.36 (.14)*</td>
</tr>
<tr>
<td>Discrimination stress</td>
<td>.19 (.20)</td>
</tr>
<tr>
<td>Immigration related stress</td>
<td>.25 (.15)</td>
</tr>
<tr>
<td>Family drug stress</td>
<td>.21 (.27)</td>
</tr>
</tbody>
</table>
RQ4: What is the Unique Contribution?

How do each of the domains of stress contribute to depression symptoms above and beyond the other variables in the model?
Interaction effects of predicted CDI2 by Community Gang Stress
Interaction effects of predicted CDI2 by Acculturation Gap Stress
Implications for the Field

• Community gang stress is an important stressor for youth in the clinical group.
  • As part of treatment, we would want to tailor intervention/prevention strategies to decrease community gang stress among adolescents who are receiving clinical treatment.

• In the general population, we would want emphasize a prevention method that would decrease acculturation gap stress.
  • It is possible that acculturation gap stress, which not significantly relate to depression in the clinical group, is due to the other more serious stressors in this population.
Limitations

• The data presented in the study are not causal—youth in the clinical group who present with clinical problems, such as depressive symptoms, may have greater difficulty in coping with cultural stressors and therefore rate these stressors as more disruptive.

• We selected the clinical group from both school based counseling centers and mental health and substance abuse facilities. The sample was not random and, because of sample size, we could not look at within group differences by treatment setting or establish differences based on the presenting problem for treatment.