Disentangling the Temporal Relationship Between Body Image Dissatisfaction and Anxiety Symptoms in Adolescents

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BACKGROUND

- Adolescence is a high-risk period for the worsening of body image dissatisfaction and anxiety disorder symptoms.
- Cognitive behavioral models of eating disorders suggest that anxiety can be both a cause and consequence of body image dissatisfaction.
- Cross-sectional studies consistently indicate that body image dissatisfaction co-occurs with elevated anxiety disorder symptoms in clinical and non-clinical samples of adolescents.
- The relationship between body image dissatisfaction and anxiety scarcely has been examined in prospective studies.
- Elucidating the temporal precedence of body image dissatisfaction and facets of anxiety disorder symptoms has the potential to advance theory and intervention approaches.

OBJECTIVE

To examine the bidirectional, temporal associations between body image dissatisfaction and facets of anxiety disorder symptoms in adolescents.

METHODS

Participants:
- 9th – 12th grade high school students from seven public high schools in the Mid-Atlantic region of the United States.
- N = 1,038
- 53% female; Baseline Age: M = 16.1, SD = 0.8
- 51% Non-Hispanic White; 25% Black or African American; 15% Hispanic or Latino; 3% Asian; 6% other race/ethnicity

Procedure:
- Adolescents were recruited to participate in the study across three years, in the spring of 2007, 2008, and 2009.
- Paper-based self-report questionnaires were administered during school by trained research personnel at baseline (T1) and a one-year follow-up (T2).

RESULTS

Table 1. Standardized Parameter Estimates of Cross-Lagged Paths Among Anxiety Disorder Symptoms.

<table>
<thead>
<tr>
<th>Cross-Lagged Association</th>
<th>Beta</th>
<th>Cross-Lagged Association</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD → PD</td>
<td>0.08</td>
<td>SAD → SEP</td>
<td>-0.05</td>
</tr>
<tr>
<td>GAD → SAD</td>
<td>-0.02</td>
<td>SAD → SSA</td>
<td>-0.05</td>
</tr>
<tr>
<td>GAD → SEP</td>
<td>0.01</td>
<td>SEP → GAD</td>
<td>0.04</td>
</tr>
<tr>
<td>GAD → SSA</td>
<td>0.02</td>
<td>SEP → PD</td>
<td>0.09</td>
</tr>
<tr>
<td>PD → GAD</td>
<td>0.08</td>
<td>SEP → SAD</td>
<td>0.06</td>
</tr>
<tr>
<td>PD → SAD</td>
<td>0.02</td>
<td>SSA → SSA</td>
<td>0.05</td>
</tr>
<tr>
<td>PD → SEP</td>
<td>0.08</td>
<td>SSA → GAD</td>
<td>-0.08</td>
</tr>
<tr>
<td>PD → SSA</td>
<td>0.07</td>
<td>SSA → PD</td>
<td>0.01</td>
</tr>
<tr>
<td>SAD → GAD</td>
<td>0.06</td>
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</tr>
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</tr>
</tbody>
</table>

Note: Analyses adjusted for gender, age, race/ethnicity, high school grade level, parental education status, and BMI z-scores. p < .05 for all paths.

Abbreviations: GAD = generalized anxiety disorder; PD = panic disorder; SAD = social anxiety disorder; SEP = separation anxiety disorder; SSA = significant school avoidance.

CONCLUSIONS

- Findings suggest that body image dissatisfaction may be implicated in worsening symptoms of generalized anxiety disorder, panic disorder, and significant school avoidance.
- Anxiety symptoms did not predict subsequent body image dissatisfaction, suggesting that etiological theories of disordered eating involving anxiety may require alteration.
- Future studies should evaluate biopsychosocial mechanisms.

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