



Body Image Satisfaction and Anxiety Trajectories during Adolescence

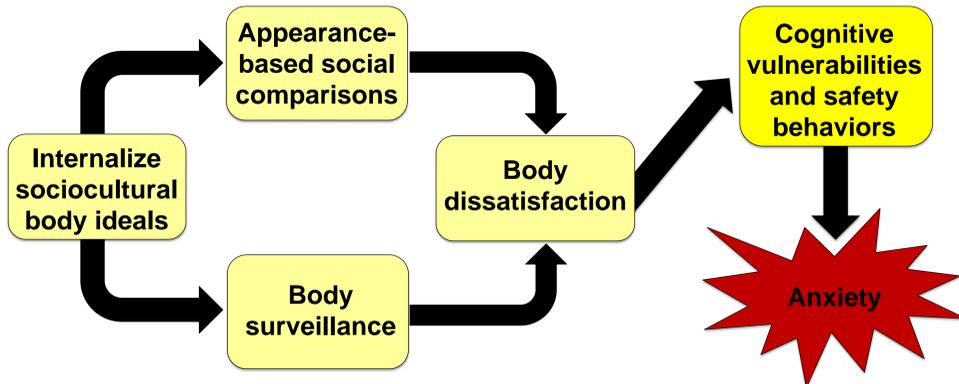


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BACKGROUND

- ❖ Despite considerable cross-sectional evidence linking body image satisfaction to anxiety disorder symptoms in adolescents, few studies have examined the temporal relationship between body image and anxiety.
- ❖ Sociocultural and comorbidity models of disordered eating propose that poor body image satisfaction leads to anxiety:



- ❖ Preliminary evidence suggests that higher body image dissatisfaction predicts greater increases in total anxiety in early adolescents, but the role of body image in specific facets of anxiety disorder symptom trajectories remains unknown.

OBJECTIVE

To examine the associations between baseline body image satisfaction and subsequent anxiety disorder symptom trajectories in a large, diverse community sample of adolescent girls and boys.

METHODS

Participants: 581 10th and 11th grade students recruited from seven public high schools in the Mid-Atlantic region of the U.S. (58% girls; 65% non-Hispanic White; Age: M = 16.1, SD = 0.8 yrs)

Procedure: Self-report questionnaires were administered during school in the spring of 2007 (T1), 2008 (T2), and 2009 (T3).

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To obtain a copy of this poster, please visit adolescentadjustmentproject.org.

METHODS

Measures:

Construct	Measure	Scales
Body Image Satisfaction	Self-Perception Profile for Adolescents (SPPA; Time 1)	Physical Appearance Self-Competence subscale ($\alpha = .87$)
Anxiety Disorder Symptoms	Screen for Child Anxiety Related Disorders (SCARED; Times 1-3; α 's = .72 - .94).	Generalized anxiety disorder (GAD) Panic disorder (PD) Social anxiety disorder (SAD) Separation anxiety disorder (SEP) Significant school avoidance (SSA)
Depressive Symptoms	Center for Epidemiological Studies Depression Scale for Children (CES-DC; Time 1)	Total score ($\alpha = .91$)
Body Composition	Self-reported height and body weight (Time 1)	Body mass index standard score adjusted for age and sex (BMI-z)

Analytic Plan:

 latent growth curve modeling

- ❖ Predictor: baseline body image satisfaction
- ❖ Dependent variables: intercept and slope factors of GAD, PD, SAD, SEP, and SSA symptom trajectories
- ❖ Covariates: baseline age, gender, race/ethnicity, parent education attainment, depressive symptoms, and BMI-z

RESULTS

Table 1. Unstandardized Parameter Estimates for Unconditional Latent Growth Curve Models of Anxiety Symptom Trajectories.

Parameter	GAD	PD	SAD	SEP	SSA
Intercept					
Mean	5.4** \pm 0.2	3.6** \pm 0.2	4.4** \pm 0.2	2.2** \pm 0.1	1.4** \pm 0.1
Variance	18.1** \pm 1.1	19.4** \pm 2.1	11.8** \pm 0.7	3.3** \pm 0.6	2.1** \pm 0.2
Linear Slope					
Mean	-0.2 \pm 0.1	-0.1 \pm 0.1	-0.3* \pm 0.1	-0.3** \pm 0.1	-0.2** \pm 0.0
Variance	3.0** \pm 0.6	4.9** \pm 1.2	1.9** \pm 0.4	-0.2 \pm 0.4	0.5** \pm 0.1
I-S Covariance	-8.0** \pm 0.6	-9.6** \pm 1.5	-5.2** \pm 0.4	-0.2 \pm 0.4	-0.8** \pm 0.1

Note: I = intercept; S = linear slope. Fit indices indicated that a linear slope function was a good fit for all anxiety disorder symptom trajectories (Chi-square tests $ps = .01-.66$; CFIs = .96-1.00; RMSEAS, RMSEA Upper 90% CIs, and SRMRs = .003-.07). * $p < .01$, ** $p < .001$

RESULTS

Table 2. Association Between Baseline Body Image Satisfaction and Anxiety Intercept Factor Scores.

	Intercept Factor Parameters	p value
GAD Symptoms	-0.24 \pm 0.04	< .001
PD Symptoms	-0.15 \pm 0.05	.01
SAD Symptoms	-0.26 \pm 0.04	< .001
SEP Symptoms	-0.03 \pm 0.03	.27
SSA Symptoms	-0.03 \pm 0.02	.04

Table 3. Association Between Baseline Body Image Satisfaction and Subsequent Anxiety Slope Factor Scores.

	Linear Slope Factor Parameters	p value
GAD Symptoms	0.06 \pm 0.04	.11
PD Symptoms	-0.06 \pm 0.04	.13
SAD Symptoms	0.10 \pm 0.03	.001
SEP Symptoms	0.01 \pm 0.02	.94
SSA Symptoms	-0.01 \pm 0.01	.42

Note: Fit indices indicated that conditional latent growth curve models were a good fit for all anxiety disorder symptom trajectories (Chi-square tests $ps = .01-.98$; CFIs = .96-1.00; RMSEAS, RMSEA Upper 90% CIs, and SRMRs = .002-.07). Unstandardized parameter estimates of growth factors are presented.

CONCLUSIONS

- ❖ Body image satisfaction was associated with lower concurrent symptoms of multiple anxiety disorder symptoms, and was uniquely predictive of decreases in SAD symptoms.
- ❖ Potential mechanisms for the body image-SAD relationship:
 - o Fears of negative evaluation and social appearance anxiety
 - o Cognitive biases toward weight- and shape-related stimuli
 - o Neuroendocrine dysregulation in potential threat response systems
- ❖ Body image-SAD relationship may be especially robust during adolescence due to increased salience of peers and post-pubertal changes in brain structure and function.
- ❖ Future research should evaluate these relationships in other developmental periods and elucidate mechanisms.