



Adolescent Overweight and Obesity Predicts Anxiety in Emerging Adulthood

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BACKGROUND

- ❖ Cross-sectional studies and longitudinal studies have previously found inconsistent relationships between weight status and psychological correlates and disorders in adolescence and emerging adulthood.
- ❖ Most longitudinal studies have researched whether overweight or obesity increases risk for depressive symptoms.
- ❖ There is a gap in the research where few studies have prospectively researched whether weight status in adolescence predicts anxiety outcomes in emerging adulthood.
- ❖ Psychosocial theories suggest stigmatization of weight in adolescents' peak time of social development can increase the risk of developing low self-esteem, body image, and anxiety symptomology.

OBJECTIVE

To investigate whether adolescents' weight status predicted anxiety outcomes during emerging adulthood.

METHODS

Participants:

- ❖ 9th – 12th grade high school students from seven public high schools in the Mid-Atlantic region of the United States.
- ❖ N = 240
- ❖ 53% female; Baseline Age: M = 16.1, SD = 0.8
- ❖ 51% Non-Hispanic White; 25% African American; 15% Hispanic/ Latino; 3% Asian; 6% "other"

Procedure:

- ❖ Adolescents were recruited to participate in the study across three years, in the spring of 2006, 2007, and 2008.
- ❖ Baseline paper-based self-report questionnaires were administered during school by trained research personnel (T1).
- ❖ Follow-up self-report questionnaires of anxiety symptoms were completed online in 2014 (T2).

METHODS

Measures:

Construct	Measure	Scales
Baseline Weight Status (T1)	Self-reported height (inches) and weight (pounds) was used to calculate body mass index (BMI) percentiles adjusted for gender and age	Non-overweight or obese: (1 st – 84 th BMI percentile) Overweight or Obese: (≥ 85 th BMI percentile)
Baseline Anxiety Symptoms (T1)	Screen for Child Anxiety Related Disorders (SCARED)	Total score (α = .91)
Follow-up Anxiety Symptoms (T2)	Beck Anxiety Inventory – Trait (BAI-T)	Total score (α = .96)
Follow-up Anxiety-Related Impairment (T2)	Overall Anxiety and Impairment Scale (OASIS)	Total score (α = .90) Presence of probable anxiety disorder (OASIS scores ≥ 8)

RESULTS

Table 1. Results of Linear Regression Depicting Baseline Overweight and Obese Status in Adolescence Predicting Follow-Up Total Anxiety Symptoms During Emerging Adulthood.

Baseline Predictor	B	SE	Beta
Constant	46.40***	8.23	--
Gender	0.87	1.03	0.06
Race/Ethnicity	0.56	0.99	0.04
Age	-0.98	0.51	-0.13
Total Anxiety Symptoms	-0.14***	0.04	-0.25
Overweight or Obesity	2.92**	1.07	0.20

Note: Gender coded as 1 = Girls, 0 = Boys. Race/Ethnicity coded as 1 = White, 0 = Non-White; Overweight or Obese coded 1 = Presence, 0 = Non-Overweight/Obese.

*** $p < .001$; ** $p < .01$; * $p < .05$

RESULTS

Table 2. Results of Linear Regression of Adolescent Overweight and Obese Status Predicting Follow-Up Anxiety-Related Impairment During Emerging Adulthood.

Baseline Predictor	B	SE	Beta
Constant	15.03***	4.57	--
Gender	0.39	0.56	0.05
Race/Ethnicity	-0.03	0.56	-0.01
Age	-0.25	0.28	-0.06
Total Anxiety Symptoms	-0.05*	0.02	-0.18
Overweight or Obesity	1.40*	0.59	0.18

Table 3. Results of Logistic Regression of Adolescent Overweight and Obese Status Predicting the Presence of a Probable Anxiety Disorder in Emerging Adulthood.

Baseline Predictor	Odds Ratio	95% CI
Constant	9.13	--
Gender	1.33	0.52 – 3.43
Race/Ethnicity	1.57	0.60 – 4.11
Age	0.99	0.61 – 1.59
Total Anxiety Symptoms	0.96*	0.93 – 0.99
Overweight or Obesity	3.84*	1.01 – 14.56

CONCLUSIONS

- ❖ Findings indicate that being overweight and obese in adolescence may exacerbate anxiety symptoms in emerging adulthood.
- ❖ The relationship between overweight or obesity and anxiety may be prevalent due to stigmatization and less social support from peers.

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