



Weight Status as a Predictor of Conduct Problems in a Community Sample of Adolescents

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Introduction and Methods

Background: Conduct disorder (CD) predicts the onset of obesity in youth, but the role of weight status in the etiology of CD symptoms remains unknown.

Objective: To examine whether weight status predicted the subsequent CD symptoms two years later in adolescents (15-17 years).

Participants:

- ❖ 416 10th and 11th grade students from public high schools in the U.S. Mid-Atlantic region.
- ❖ 53% female; baseline age: M = 16.2, SD = 0.7
- ❖ 57% Caucasian, 22% African American, 12% Hispanic, 3% Asian, 6% Other

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

Key Measures:

- ❖ **Weight Status:** Height and weight were used to calculate body mass index standard scores adjusted for age and sex (BMI-z) at T1.
 - Non-overweight (NW) = 1-84th BMI percentile
 - Overweight (OW) = 85-94th BMI percentile
 - Obese (OB) = 95th or greater BMI percentile
- ❖ **CD Symptoms:** Problem Behaviors Survey assessed the total number of current CD symptoms at T2 and a retrospective report of CD symptoms prior to age 15. Probable CD was defined as presence of 4+ CD symptoms.

Results

Figure/Table 1. Association Between Baseline BMI-z and Total CD Symptoms at the Two-Year Follow-Up.

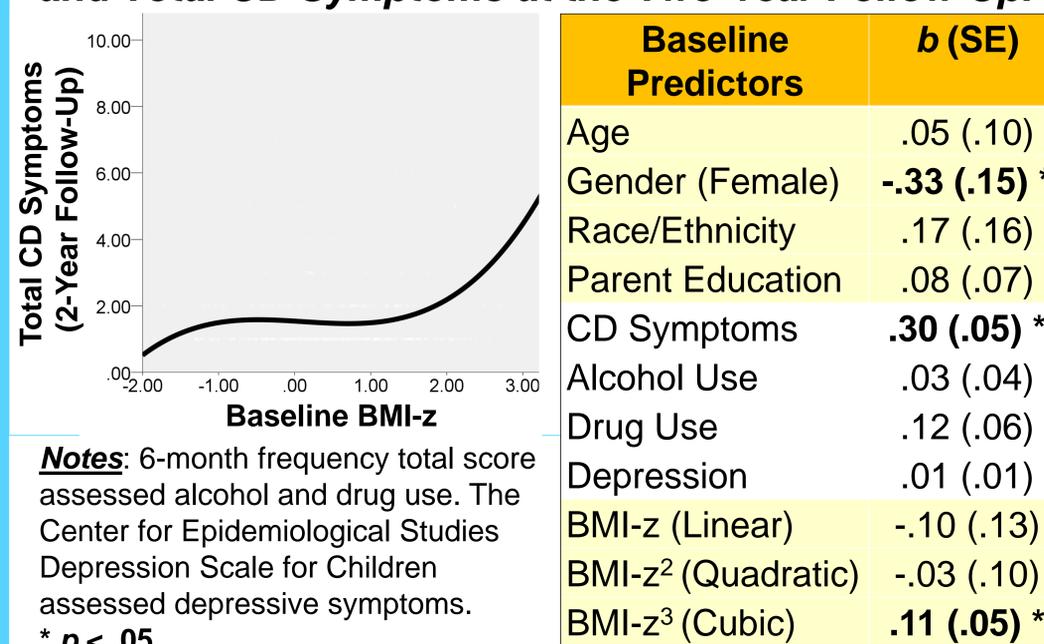
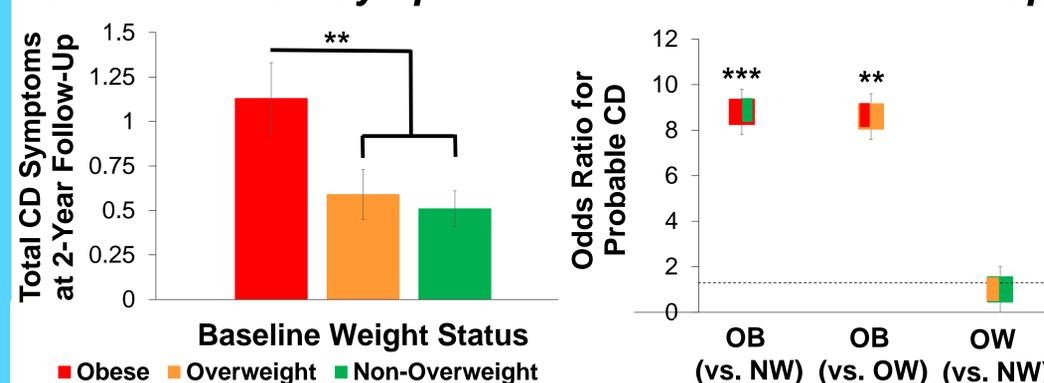


Figure 2. Association Between Baseline Weight Status and CD Symptoms at the Two-Year Follow-Up.



Conclusions

- ❖ Baseline weight status predicted subsequent CD symptoms in adolescents.
- ❖ A curvilinear relationship between BMI-z and follow-up CD symptoms was observed.
 - Minimal association from BMI-z ~ -1 to 1
 - Magnitude of positive association became exponentially greater at higher BMI-z scores
- ❖ Obese adolescents were ~8 times more likely to report probable CD at follow-up than overweight and non-overweight adolescents.
- ❖ Potential mechanisms include:
 - Dysregulated dopaminergic signaling
 - Changes in physiological stress responses
 - Weight-related social stress and stigma
 - Poor family functioning
 - Environmental adversity
- ❖ Future research should confirm findings with gold standard clinical measures and body composition assessments.
- ❖ Monitoring adolescents' weight status and addressing obesity with weight loss interventions may prove useful among adolescents presenting with CD symptoms.

Acknowledgements

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