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TITLE: Context matters: Socioeconomic disadvantage increases phenotypic risk and impacts the etiology of disordered eating in youth

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ABSTRACT:

Emerging evidence suggests food insecurity and other correlates of low socioeconomic status (SES) may increase disordered eating; however, few population-based studies have been conducted, and none have looked at the impact of SES on etiology. We hypothesized that stressors associated with socioeconomic disadvantage may potentiate latent genetic risk in vulnerable individuals and lead to more disordered eating (i.e., a diathesis-stress model), as has been observed for related phenotypes (e.g., depression). To investigate this possibility, we examined family SES as a potential moderator of the etiology of disordered eating in 10,788 male and female twins ages 8-18 from the Michigan State University Twin Registry. Parents rated the twins on nine items assessing core disordered eating symptoms (e.g., weight preoccupation, binge eating). Family SES was computed as a latent variable factor score from family income and mother and father's education level. Preliminary analyses at the phenotypic level indicated that lower family SES was associated with more disordered eating symptoms in both boys and girls

even after controlling for potential confounds (e.g., race, pubertal status). GxE twin models controlling for age, BMI percentile, and pubertal status suggested that lower family SES was associated with increased genetic influences on disordered eating in girls and increased environmental influences on disordered eating in boys. Contrary to stereotypes of eating disorders as illnesses of privilege, this study is the first to demonstrate the etiologic pathways through which socioeconomic disadvantage may potentiate risk for disordered eating in youth.

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