

Food Insecurity and Eating Disorder Pathology

For those of you who attended the [Binge Eating Disorder Association 2017](#) conference, you may have heard Dr. Carolyn Becker's keynote address presenting her research on eating disorders in low-income families with food insecurity. In her talk, she highlighted one of the problems with eating disorder research: that we are so myopic in our beliefs about who gets eating disorders--young, educated, middle and upper class girls and women-- that we tend to only study those populations. This is one of the reasons that I think her research, which I'll be highlighting in this month's summary, is so important.

Dr. Becker and her colleagues conducted a study to investigate eating disorder pathology in people living with food insecurity. Food insecurity (FI) is defined as inadequate access to food, both in terms of quantity and quality, secondary to lack of financial and other resources. In 2015, the United States Department of Agriculture (USDA) estimated that 15.8 million households in the US are FI. This was one of the first studies to examine eating disorders (ED) and FI.

The researchers hypothesized that people living with FI would experience higher rates of binge eating and dietary restriction. They did not expect to observe differences by gender or ethnicity or corresponding increases in compensatory behaviors. These hypotheses were informed in part by the landmark Minnesota Starvation Study by Ancel Keys (1950) (if you don't know about this study read [this](#) and [this](#)), which suggests that dietary restriction for any reason can increase rates of ED pathology. Other factors that informed their hypotheses included the chronic stress of living in poverty and the food environment that many urban low-income people live in of a combined "food desert" (census tracts in which the population is low income and lacks access to affordable and nutrition foods) and "food swamp" (urban areas dominated by inexpensive food retailers selling highly palatable highly processed foods).

Participants included 503 adults seeking food from food pantries who completed self-report questionnaires assessing food insecurity, demographics, ED pathology, dietary restraint, weight self-stigma, and worry. Researchers divided participants into 4 groups based on their scores on the food insecurity measure; not FI, household FI, individual FI, and child hunger FI. Since adults tend to prioritize feeding children in the household even if there isn't enough food for everyone, the child hunger group represents the most severe FI.

Results indicated that the child hunger group reported elevated ED pathology compared to the other groups. The child hunger group also reported increased weight stigma, dietary restraint, and worry relative to the other groups. There was a linear relationship between FI and ED pathology; as severity of FI increased, so did clinically significant ED symptoms. In the child hunger group, 17% of participants reported clinically significant ED symptoms. There were no differences based on gender or ethnicity. The child hunger group reported the highest levels of objective

binge eating, objective overeating, subjective binge eating, and night eating. Contrary to hypotheses, the child hunger group also had increased rates of compensatory behaviors including vomiting, laxative/diuretic use, skipping meals, and exercise.

The authors conclude that food insecurity is associated with increased risk for eating disorder symptoms. Unfortunately, this vulnerable population lacks access to ED treatment, which relies heavily on expert therapists with specialized training resulting in fewer providers and more expensive care. The authors encourage development of community-based interventions that could be administered by lay-leaders and make treatment more accessible to low-income FI populations. While this population lacks access to ED treatment, they are often targeted for obesity prevention messages, which can actually increase the risk for eating disorders and disordered eating. This study underscores the need for further research examining eating disorders in food insecure populations worldwide.

Reference: Becker CB, Middlemass K, Taylor B, Johnson C, Gomez F. Food insecurity and eating disorder pathology. *Int J Eat Disord.* 2017; 50: 1031-1040.