

A Qualitative Study to Compare Food-Insecure College Students' Eating Behaviors with and without Access to a Campus Food Pantry

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Abstract

Background: Food-insecure college students have an increased likelihood of developing disordered eating behaviors, possibly due to coping behaviors including restriction when food is scarce and bingeing when food is abundant. While more and more universities are adding on-campus food pantries, it is unclear how access to on-campus food pantries impacts eating behaviors and food insecurity.

Objectives: To explore 1) how the cycle of food abundance and scarcity impacts food-insecure college students' eating behaviors and 2) how access to a campus food pantry impacts this cycle.

Study Design, Settings, and Participants: Food-insecure, undergraduate students (n=40) from institutions around Illinois with food pantries (n=20) and without food pantries (n=20) who met inclusion criteria completed one-on-one semi-structured interviews via Zoom.

Outcome Measures and Analysis: Interviews were audio-recorded and transcribed verbatim. Investigators performed content analysis to identify and compare themes among participants with and without access to a campus food pantry.

Results: Students with and without access to a campus food pantry discussed similar experiences, including experiencing periods of food abundance and scarcity, and using a variety of food-related behaviors to cope with their food situation. Some students attending institutions with an on-campus food pantry were unaware that a pantry existed. Students from both types of institutions reported that although they did not use one, an on-campus pantry has the potential to increase food availability and improve eating habits; however, regardless if a pantry was on campus, students reported that shame and embarrassment would prevent them from using university resources.

Conclusion and Implications: Food-insecure college students may exhibit disordered eating behaviors to cope with their food situation. Furthermore, the existence of a campus food pantry alone is insufficient for addressing college food insecurity and the corresponding disordered eating behaviors.

Background & Objectives

Food insecurity impacts as many as 48% of college students¹ and has been linked to disordered eating.²⁻⁶ Students' methods of coping with their food situation may contribute to disordered eating. One hypothesis is that periods of food scarcity followed by food abundance, particularly when food assistance benefits refresh or when paychecks are dispersed, may lead to overeating/binge eating in times of abundance and restriction in times of food scarcity (Figure 1).^{7,8}

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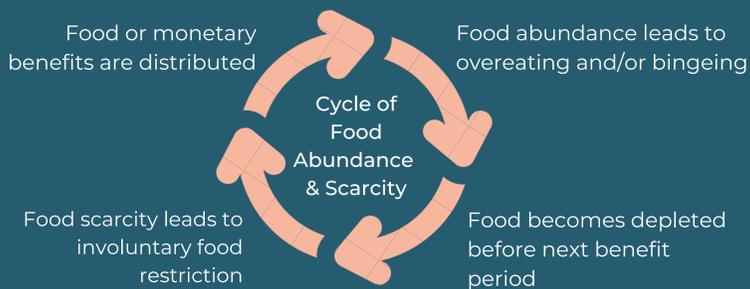


Figure 1. The cycle of food abundance and scarcity. After food benefits or paychecks are distributed, overeating or bingeing occurs. As food becomes depleted before the next benefit period, involuntary food restriction occurs.^{7,8}

Participant Recruitment

Purposive sampling and snowball sampling were used to recruit a total of 40 undergraduate students from Illinois universities with campus food pantries (n=20) and without campus food pantries (n=20).

Participants consented to study participation and confirmed eligibility via an online Qualtrics survey.

Eligibility Criteria: Undergraduate students between 18-24 years of age, U.S. Household Food Security Survey Module: Six-Item Short Form score between 2-6 (indicating low or very low food security), no prior eating disorder diagnosis or treatment, no children below the age of 18 for which they are the primary caregiver

Table 1. Theme Descriptions & Examples

| Theme | Description | Quote Example |
|---|---|---|
| Unique Challenges of College Environment | College-specific circumstances made eating challenging, including meal plans, cooking, and balancing or prioritizing personal and academic responsibilities | "It's difficult to do full time school and possibly a part time job and also try to figure out when you're going to eat and have clubs that you're involved in. It's difficult to find time to eat and then prioritize your own health over your academics." |
| Childhood Experiences | The impact of students' upbringing on their eating behaviors, ability to manage their food situation, and willingness to use free resources. | "So I think that's just the big thing is because of my family and the way I've been raised, I haven't been taught to reach out for things" |
| Impact of Food Insecurity | Effect of food insecurity on students' physical, mental, & emotional health and academic performance. | "Well the other day I had to leave one of my labs early because I really thought I was going to pass out because I hadn't eaten all day...I've had to leave classes because I was getting sick because I hadn't eaten. So that's tough." |
| Mental Energy | A fixation or preoccupation with managing one's food situation, which required substantial time and attention. Food scarcity created intense panic and anxiety & food abundance provided relief. | "I can't just go into a weekend without planning out where I'm going to eat or how I'm exactly going to spend and budget my money for food." |
| Spectrum of Resource Management | Variety of strategies to manage students' food situations, including: budgeting, purchasing shelf-stable or bulk foods, relying on support network, & engaging in unhealthy eating behaviors to conserve food. | "I mean me and my partner who live together, if we don't have enough money to eat, we would just drink an insane amount of water, like fill myself up with water so that I wouldn't be hungry. Or we would go to bed early so that I didn't have to eat dinner because I was asleep." |
| Structural Barriers | Obstacles to accessing food-related resources, including: not knowing of resources, rules and restrictions, limited hours, lack of transportation, cost-prohibitive campus meal plans & meal plans providing insufficient amounts or types of food. | "Well for the food card, there's a lot of hoops to jump through. We had to submit lots of different forms. They had to call and interview us to make sure we were poor enough or something. Only one of us got approved." |
| Hiding Hunger | Resources for food-insecure individuals were not used and viewed as stigmatizing, whereas receiving food from free food events and volunteer experiences that were available to everyone were more acceptable and non-stigmatizing. | "But unfortunately, it's different because if they say 'hey, we're handing out free food,' a million people jump on it. But if they say, 'grab free food from the food cabinet,' people are not going to want to because they don't want to feel like they need handouts." |

Data Collection & Analysis

Semi-structured, recorded interviews were conducted via Zoom. Students answered questions about their food situation, eating behaviors, and use of community and university resources.

Question Examples: How do your eating patterns change as your food availability changes? How do you think your food situation impacts your eating behaviors, if at all?

All interview recordings were transcribed verbatim. Interview participants received a small gift worth \$5 and one interview participant was randomly selected to win one \$50 Amazon gift card.

Data Analysis

- Descriptive statistics for USDA Food Security Scores and sociodemographic data were analyzed with SPSS. Differences in demographic characteristics were also compared based on food pantry status.
- We applied content analysis to the transcripts and compared themes among participants with and without access to a campus pantry.

Results

- Most participants (n=40) were white (70%), first-generation college students (58%), and identified as female (70%). The two groups of students did not significantly differ based on any sociodemographic characteristic or U.S. food insecurity scores.



- We found seven themes related to students' food situations (Table 1).
- There was minimal variation in the experiences of students from schools with on-campus food pantries and without campus food pantries:
 - Only students from non-pantry schools discussed using Link (SNAP) benefits.
 - Only students from schools with on-campus pantries described volunteering at the campus pantry or soup kitchen and receiving free food from these experiences.

Discussion & Conclusions



Consistent with previous research,⁹⁻¹¹ students coped with their food situation using a variety of strategies that may be considered disordered eating. Rather than binge eating, students reported feelings of relief and described eating healthier portions and more food overall in periods of food abundance.



Campus food pantries may provide important assistance to some students, though many students may experience significant barriers to using one.¹² In order to adequately address college food insecurity and any corresponding disordered eating behaviors, universities should consider implementing resources with less stigma. In contrast to resources specific to food-insecure individuals, students reported no stigma or shame about receiving free food from campus-wide food events or from volunteer experiences.

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