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Food insecurity among LGBTQIA+ college students in North Texas: Meaning, experiences, and recommendations for inclusive solutions

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Abstract

This ethnographic research explores the meaning and experiences of food insecurity among

LGBTQIA+ college students to understand how identity might play a role in those experiences. We offer research-informed recommendations that student-serving programs could implement to increase accessibility and inclusivity for LGBTQIA+ stu-

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dents to reduce food insecurity. The study was conducted at a large, public, Tier 1 research university in North Texas. We used purposive sampling and recruited participants through emails and class announcements. We conducted 22 in-depth, semi-structured interviews with students who identified as LGBTQIA+. LGBTQIA+ students do not initially associate their food insecurity with their LGBTQIA+ identity, and many of their experiences are similar to non-LGBTQIA+ students. However, ongoing homophobia, stigma, and discrimination against people who identify as LGBTQIA+ can add additional anxiety and challenges that influence their experiences in ways that are different from non-LGBTQIA+ students. LGBTQIA+ students are at greater risk of losing family support, are more likely to seek emotional support from peers, and have increased anxiety about responses to their identity, which can affect their willingness to seek resources. Our results indicate that food insecurity has an emotional, mental, and physical impact on students, which impacts their academic success. As universities strive to be more welcoming to LGBTQIA+ students, we recommend services that will build community, create safe spaces, and strengthen trust for students to have a positive college experience.

Keywords

Food Insecurity, Food Insecurity in College, LGBTQIA+, Qualitative, Ethnography

Introduction and Literature Review

Research on food insecurity among college students has increased significantly in recent years, drawing needed attention to this national crisis (Henry, 2017, 2020). The U.S. Department of Agriculture (USDA) defines food insecurity as having limited or uncertain access to healthy, nutritionally adequate, and safe food or the limited ability to acquire food in socially acceptable ways (USDA Economic Research Service, 2022). Other characteristics of food insecurity include reduced calorie intake, lack of variety in diet, hunger without eating, and reduced weight due to lack of calories (USDA Economic Research Service, 2022). The Hope Center for College, Community, and Justice (The Hope Center) conducts the

largest nationwide annual assessment of basic needs security among college students. In 2020, over 195,000 students from 130 two-year and 72 four-year colleges responded to the survey. The research reports that 38% of college students experienced food insecurity in the 30 days prior to the survey (The Hope Center, 2021a). Cross-sectional, multi-university studies report a range of 35%–50% of students being food insecure while attending college (Brotton & Goldrick-Rab, 2018; Brotton et al., 2018; Bruening et al., 2017; Crutchfield & Maguire, 2019; Martinez et al., 2018; Nazmi et al., 2018; University of California [UC] Global Food Initiative, 2017).

The crisis of college student food insecurity is evident from the disproportionately higher rate of food insecurity among college students (which according to the above study may be in the range of 35%–50%) than among households with characteristics, which range from the national average of 10.5% to 27.7% for households with children headed by a single woman and 28.6% for households with incomes below 185% of the poverty threshold (Coleman-Jensen et al., 2022). Interestingly, a recent analysis of the Current Population Survey by specific age groups shows that noncollege students of a similar age tend to experience the same or even higher levels of food insecurity as college students (Gunderson, 2020). This suggests that high rates of food insecurity might be more associated with age group than college status; nevertheless, college student food-insecurity rates are very high. As related to this study, Texas residents experience household food insecurity at higher rates than the national average. Texas is ranked eighth highest in the nation, with a food-insecurity rate of 13.3% (Coleman-Jensen et al., 2022). According to a recent study, Texas college students have a food-insecurity rate of 43% (The Hope Center, 2021b).

Although food insecurity in college is not a new phenomenon, research shows that the current prevalence rates are related to the existing profile of college students. According to the U.S. Government Accountability Office (GAO), the demographic profile of undergraduate college students is shifting. They are more likely to be older, first-generation, low-income, working, more

diverse (including LGBTQIA+¹), and have more family obligations to balance (GAO, 2018). Recent prevalence studies show that marginalized and underrepresented students experience higher rates of food insecurity, including students who are Black, disabled, housing-insecure, parents, recipients of SNAP benefits, LGBTQIA+, first-generation, and former foster youth (Freudenberg et al., 2011; Goldrick-Rab et al., 2018; GAO, 2018; Maroto et al., 2015; Silva et al., 2017; UC Global Food Initiative, 2017; Wilcox et al., 2021; Willis, 2019).

LGBTQIA+ Students

Recent research highlights the relationship between sexual orientation, gender identity, and food insecurity of college students (Collier et al., 2021; Crutchfield & Maguire, 2019; Diamond et al., 2020; UC Global Food Initiative, 2017). According to The Hope Center, 65% of students who identify as LGBTQIA+ experience some form of basic needs insecurity (food or housing) (The Hope Center, 2021a). Collier et al. (2021) found a relationship between students who self-identified as LGBTQIA+ and food insecurity. Additional research found that transgender and genderqueer students had a higher risk of food insecurity than cis-gender students (Diamond et al., 2020; Hasket et al., 2020; Keefe et al., 2020; Laska et al., 2021; Riddle et al., 2020). Although only a few studies specifically focused on LGBTQIA+ students and food insecurity, these studies align with the literature that shows a higher prevalence of food insecurity and financial stress in the LGBTQIA+ adult population than non-LGBTQIA+ adult population. The experience of the LGBTQIA+ community with food insecurity is well documented (Badgett et al., 2013; Brown et al., 2016; Collier et al., 2021; Gibb et al., 2021; Patterson et al., 2020; Testa & Jackson, 2021). However, more data are needed on the relationship between LGBTQIA+ students and food insecurity, particularly information highlighting the experiences of food insecurity

among this student population. According to The Hope Center (2021b), 68% of LGBTQIA+ students in Texas experience food insecurity, and the gap between their food needs (68%) and their use of support (33%) is 35 percentage points. Among non-LGBTQIA+ students, the gap was 28 percentage points. Furthermore, research shows that those who identify as LGBTQIA+ face many educational barriers (Goldberg, 2019; James et al., 2016; Meyer et al., 2017). Kirby and Linde (2020) show that resources supportive of health and well-being, such as nutrition and counseling resources, have been associated with academic success.

This manuscript details a qualitative, deep-dive ethnographic research project at the University of North Texas (UNT) with The UNT Pride Alliance and the office of the Dean of Students. The main goals were to investigate the experiences of food insecurity among LGBTQIA+ students, to understand how identity may play a role in those experiences, and to offer research-informed recommendations for increasing accessibility and inclusivity of programs for LGBTQIA+ students. UNT is a large, public Tier 1 research university in North Texas. It has a total enrollment of just over 44,000 (Simon et al., 2021). The student body is 60% BIPOC and 40% white (Simon et al., 2021). It is about 41% first-generation undergraduate students and is a Hispanic-Serving Institution (Simon et al., 2021). About 75% of UNT students receive financial aid and scholarships (Simon et al., 2021). UNT created The Pride Alliance in 2013 and “aims to be number one when it comes to offering services [to LGBTQIA+ students]” (Zapata, 2021, para. 2). The Pride Alliance is a gender and sexuality resource center through the Division of Inclusion, Diversity, Equity, and Access. The Dean of Students, a department within the Division of Student Affairs, serves as an advocate for all students and is dedicated to helping students achieve their academic and personal goals.

For the current study, our specific research questions included:

¹ Lesbian, gay, bisexual, trans/transsexual/transgender, queer/questioning, intersex, asexual, and members of other communities, including agender, demisexual, genderfluid, graysexual, nonbinary/genderqueer, pansexual/omnisexual, polyamorous, sapiosexual, and two-spirit. For this study, we use the acronym LGBTQIA+.

1. What are the experiences of food insecurity among LGBTQIA+ students?
2. What factors contribute to food insecurity among LGBTQIA+ students?
3. How do LGBTQIA+ students cope with food insecurity?
4. What are the barriers to using current solutions to reduce food insecurity?
5. What solutions to food insecurity would LGBTQIA+ students find most useful?

Applied Research Methods

The lead researcher for this project has researched food insecurity in college for more than seven years and led a class of graduate students in conducting this research in 2021. The course was Ethnographic and Qualitative Methods through the Department of Anthropology. Student researchers were graduate students from Anthropology, International Studies, Geography, Interior Design, Behavioral Analysis, and Information Sciences. The lead researcher identifies as a non-food-insecure, heterosexual, cis-gender female, and the student co-researchers have various identities and backgrounds.

We used an applied ethnographic and qualitative approach designed to capture the students' voices, the meanings they give to food insecurity, their perspectives, and their everyday practices of being food insecure and hungry while trying to complete their degree programs. Ethnography allows multiple data collection techniques to discover what people do and why they do it through their own words; it is designed for discovery, does not assume researcher objectivity, and recognizes that researchers play a role in interpreting the world around us (Gobo & Marciniak, 2016; Hammersley & Atkinson, 2010; LeCompte & Schensul, 2012; Wolcott, 1999). An ethnographic approach highlights the complex and holistic context in which human behavior occurs while searching for regularities that implicate cultural processes and cultural patterning of social activity (Wolcott, 1999). As noted by Murchison (2010),

in order to learn about the complex dimensions of society and culture in action, the ethnographer almost necessarily has to become

involved on a personal level to one degree or another. Some ethnographers have found that their most important insights have emerged when they have chosen, or circumstances have forced them to abandon their practiced, objective stance. The element of personal experience and social and cultural empathy can be very powerful for the ethnographer. (p. 85)

Specifically, *applied* ethnography is used to bring about change in communities or groups (LeCompte & Schensul, 2012).

The research population for this project was LGBTQIA+ UNT students who self-identified as food insecure. "UNT student" is defined as any student currently enrolled at UNT. The term includes campus residents, commuters, and online learners. The words "participants" and "students" are used interchangeably. Although the USDA has a survey tool to measure levels of food insecurity, our holistic, ethnographic approach relied on participants to self-identify and explain the meaning of food insecurity in their own words. The recruitment flyer, designed to create a purposive sample, included phrases such as "those who have experienced the crisis of hunger, who have worried about where their next meal will come from, who have worried about getting enough to eat, or who do not have enough money to eat." Researchers recruited participants through campuswide email and announcements from faculty directly to students in their classes. Potential participants contacted the lead researcher. The lead researcher verified that the student met the criteria for the study and then connected participants and researchers. This purposive sampling ensured that all the criteria for the research population were met (O'Reilly, 2009). Participants in this project received a US\$20 gift card to a grocery store as an incentive to participate and show appreciation for their time. The UNT Instructional Review Board approved this research.

Data collection consisted of 22 individual semi-structured interviews. Semi-structured interviews are primarily open-ended and are useful in exploratory research because, although researchers ask the same questions to each participant, they allow for flexibility through probing questions. The interviewer or interviewee can expand or enhance

the interview as needed (Bernard, 2017; Schensul & LeCompte, 2012; Wolcott, 1999). Semi-structured interviews are typically conducted in person to build rapport and trust between the researcher and the participant (Wolcott, 1999). However, because of the COVID-19 pandemic, all interviews took place over Zoom. This was a partial limitation. Some participants turned off their cameras, and we lost the face-to-face connection; however, many participants became less nervous and more open because their cameras were turned off. Although social isolation measures in response to the COVID-19 pandemic forced many ethnographers to turn to digital fieldwork, this methodological pivoting is not inherently negative. Technology served as a valuable tool for research and social connection prior to the pandemic and will continue to be an important way to communicate and engage with others (Howlett, 2022; Podjed, 2021). Interview topics related to food insecurity focused on experiences, timing, childhood, the impact on academic success, friendships, family members, LGBTQIA+ identity, coping strategies, solutions, barriers, communication, the UNT Food Pantry, resources external to UNT, and demographics. The demographic section was primarily open-ended, with a few binary questions.

The lead researcher combined the transcriptions in MAXDQA (a qualitative and mixed-methods software). Initial themes were deductive and derived from the research questions. Then, emergent subthemes were inductively identified to provide a nuanced understanding of participants' responses (LeCompte & Schensul, 2012). Demographic data were quantified, and the researchers used descriptive statistics to analyze the sample characteristics.

Results

Demographics

Table 1 shows the demographic data of our sample. Seventy-three percent of participants were traditional college-age students between 18–22 years old. Forty-one percent of participants were lower-division students (first- and second-year students), 32% were upper-division students (juniors and seniors), and 27% were graduate students. The sample

Table 1. Demographics of the Sample (N=22)

Demographics	Sample Frequency	Sample %
Age		
18–22 years	16	73
23–39 years	6	27
Division in college career		
Lower division students	9	41
Upper division students	7	32
Graduate students	6	27
Racial and ethnic identity		
White	13	59
Asian and Pacific Islander	4	18
Latinx	4	18
Black	1	5
Relationship status		
Not in relationship	16	73
In relationship	6	27
Living on- or off-campus		
Off-campus	19	86
On-campus	3	14
Roommates or living alone		
Roommates	17	77
Living alone	5	23
Experienced food insecurity during childhood		
Yes	15	68
No	7	32
Employment status		
Employed	15	68
Not employed	7	32
Family support of LGBTQIA+ identity		
Supportive	4	18
Not supportive	2	9
Haven't come out	2	9
"It's complicated"	14	64
Gender identity (not mutually exclusive)		
Female	9	41
Nonbinary	8	36
Male	3	14
Transgender	2	9
Bigender	1	5
Fluid	1	5
Sexual orientation (not mutually exclusive)		
Bisexual	5	23
Lesbian	5	23
Queer	4	18
Straight	3	14
Asexual	3	14
Pansexual	2	9
TBD	1	5

consisted of 59% white, 18% Asian and Pacific Islander (API), 18% Latinx, and 5% Black participants. Regarding the representation of the larger UNT population, UNT² student body is 42% white, 6.9% Asian and Pacific Islander, 24.8% Latinx, and 13% Black. Our sample was overrepresented by white and API students and underrepresented by Latinx and Black students. Seventy-three percent of participants were not in a relationship. Eighty-six percent of participants lived off-campus, and 77% had roommates. Sixty-eight percent of participants did not have dependents, yet 32% had pets under their care. Sixty-eight percent of participants were food insecure as children. We asked participants about their family support for their LGBTQIA+ identity. Eighteen percent said their family was supportive, 9% said their family was not supportive, 9% said they had not come out yet, and 64% indicated that family support was more complicated than a yes/no answer (see further discussion below). We asked participants to self-identify their gender identity. These categories are not mutually exclusive. Forty-one percent were female, 36% nonbinary, 14% male, 9% transgender, 5% bigender, and 5% gender fluid. Finally, we asked participants to self-identify their sexual orientation. These categories are not mutually exclusive. Twenty-three percent were bisexual, 23% lesbian, 18% queer, 14% straight, 14% asexual, 9% pansexual, and 5% said their sexual orientation was “to be determined.”

Meaning of Food Insecurity

As noted, researchers asked participants to explain the meaning of food insecurity in their own words. Sixty-three percent of participants reported that food insecurity amounted to more than just the state of not having regular food access, but rather the anxiety and sense of uncertainty that results from it. For example, one participant said, “For me, it’s just anxiety about having food or not having enough, or where I’m going to get food” (Sean,² 23-year-old Japanese trans male undergraduate living on campus). Forty-one percent reported some form of ceased family support, insufficient funds through work income, or using financial aid

for school supplies over food. Lastly, 31% reported barriers to food access: a lack of awareness of available resources on campus, transportation issues, or far-off living locations. For example, one participant noted, “For me, it just means struggling to get food in general while at school. You know, not being a student on campus anymore makes it much more difficult to get to the dining halls before they close while also making class on time” (Sarah, 20-year-old white queer female undergraduate living off-campus).

Key Factors for Food Insecurity

Food insecurity intersects with many other aspects of life, and students’ circumstances vary. Therefore, a factor that contributed to food insecurity for some students was the effect of food insecurity on others. Here we list several emergent themes to showcase overall experiences. These themes will be discussed in more detail with exemplary quotes to deepen the understanding of participants’ experiences.

- **Financial tipping points:** Many students experienced financial strain that led to the onset of food insecurity, such as losing scholarship support, receiving fewer loans, losing support from family, unemployment, and moving off-campus.
- **Childhood food insecurity:** The majority of participants (68%) experienced food insecurity during childhood. In addition, childhood food insecurity is a risk factor for college food insecurity.
- **Mental Health:** Forty-five percent of the participants described a professionally diagnosed mental health condition, and 82% indicated some anxiety or worrying. In addition, some participants noted that mental health struggles led to their unemployment, causing food insecurity, while others described food insecurity as driving their mental health struggles. A more detailed discussion about mental and physical health is below.
- **Family Support:** Forty-one percent of the

² All names are pseudonyms.

participants lost family support due to their identity as LGBTQIA+. At least three students have not come out to their families due to concerns about losing financial support.

- **Transportation:** Although owning a car (45% of the sample) provided access to resources such as supermarkets and food banks, it also meant more expenses and worry.
- **Meal Plan Accessibility:** Students with five-day meal plans described weekends as the most challenging time to find food. Food insecurity tended to be worse for students without meal plans between paychecks or semesters.
- **Employment:** Most participants were either working or looking for jobs. However, employment did not eliminate their struggles with food insecurity. Some described how the additional working time left them with less time for their academic work and buying or preparing meals. Work also often left participants with less energy, compounding these issues. In addition, for some participants, anxiety related to their gender identity affected their ability to seek work, and some reported facing discrimination due to their identity.

Coping with Food Insecurity

Students reported using various methods to cope with food insecurity while managing responsibilities related to school, work, and peer socialization. Many participants explained how childhood food insecurity prepared them for their current food insecurity. They described being resourceful at finding free food from food pantries, churches, organizations, or school events. For example, one participant said, “I’ve gone to AA meetings to bum off free cookies and coffee. ... I’ve seen posters for free lunches for going to some church sermons. I’ve gone to the MLK community center and gotten free cookies there. Just basically cockroaching to wherever food is” (Mike, 22-year-old white pansexual male junior living off-campus). Scott said, “I would scrounge for food anywhere I could. I did a study where I got paid thirty-five dollars to drink a

couple of shots at UNT, and then I paid for food with odd jobs and scrounged whatever change I could to get any food I could to survive the next day” (24-year-old white pansexual male junior living off-campus). Due to constraints on money and time, many participants resorted to fast food restaurants and ate the most affordable items on menus to manage their hunger while minimizing their spending. Other participants used distraction as a copy strategy. Skyler, a nonbinary, Caucasian, 39-year-old graduate student living off-campus, reported reading and playing video games to distract themselves from hunger. Others resorted to sleeping to ignore their hunger. Sarah said, “I eat sleep for dinner. I’m like, oh I’m hungry, but if I go to sleep now, I won’t have to worry too much about it” (20-year-old white bisexual female sophomore living off-campus).

Participants were often stressed about ensuring that they had something to eat every day. They planned out what and when to eat to have enough energy to manage their day-to-day responsibilities. Students referred to knowing how to make “poor kid meals” or “struggle meals” that enable them to stretch low-cost ingredients for several meals, such as Sarah, who added, “I can go to the store and buy like three ingredients, like a potato and the smallest eggs I can, and maybe tortillas and I can just make a meal out of it. I find myself being able to make meals out of anything.”

A few participants sold their personal items to obtain money for food. Adrian said, “I wish I had so many of the books and records and CDs that I’ve sold, like special things to me that people had given to me that are worth a lot. ... So, I’m like, ‘Okay, this is what I have to do’” (22-year-old white bigender graduate living off-campus).

Impacts on Mental and Physical Health

LGBTQIA+ students experienced stressors that impacted their mental and physical health, including food and financial insecurity, identity, past trauma, poor nutrition, and medical bills. Eighty-two percent of participants described mental health impacts from food insecurity, such as feelings of constant anxiety and stress, trying to manage their time for school, socializing with peers, and working enough hours to put food on the table. Brian said,

“As a college student, it’s hard to focus on everything that’s happening. You’ve got to work, and then in your social life. I guess if you try to make time for it and then make sure you take care of yourself physically and mentally” (22-year-old Black transgender undergraduate living off-campus). Similarly, Maris said, “Just being a full-time student and also working full-time leaves you with very little time to eat or to shop or to prepare food. Managing four classes and then a 40-hour workweek is very stressful” (21-year-old white queer junior living off-campus). Additionally, approximately half the participants shared their struggles with previously diagnosed mental health issues, such as bipolar disorder, posttraumatic stress disorder (PTSD), and depression. Karter explained how food insecurity worsens their mental health. “I feel like a lot of it is my mental health putting me here. I think sometimes that, along with food insecurity, can be so intertwined because it’s such a cycle. I’m depressed that I can’t provide [food]. I can’t afford counseling. I use a lot of energy trying to cope” (25-year-old white nonbinary graduate living off-campus). One-quarter of participants with mental health issues were unemployed, and some attributed their unemployment directly to their mental health. Ken said, “I recently got diagnosed as bipolar, so I realized that I just can’t do both [work and school] anymore” (23-year-old Asian trans male junior living off-campus).

Over 25% of participants reported traumatic experiences during their childhood, including interpersonal violence, suicide by a family member, homelessness, and parental substance abuse. For some, this led to ongoing mental health issues such as PTSD or depression. In turn, this has resulted in being less likely to utilize available resources. As explained by Casey, “I have PTSD symptoms from things that have happened in the past, but they’re sort of bleeding over into my fear of violence as a trans person Physically appearing in front of people, being perceived, is sort of the barrier” (25-year-old white queer male graduate student who lives off-campus).

Food insecurity also impacts students’ physical health. Many students described issues with being unable to obtain healthy food, such as lack of time or resources to shop or cook, lack of money for

healthy food, or just not having access to healthy food options. As previously mentioned, there are also physical symptoms associated with food insecurity besides hunger, such as low energy and the inability to focus. Taylor said, “it’s a weird cycle. If you eat cheap fast food, you’re like, oh, it’s only this much money, but then you don’t feel good. And, it’s not healthy food, so I think that is sort of included in the food insecurity is access to food that is good for you. One of my coping tactics is to eat food that’s cheap but bad for me” (22-year-old white nonbinary freshman living off-campus).

Some students also described medical issues from lack of nutrition, including one who described her hair falling out. Two transgender students described how the additional costs of hormone replacement therapy impacted their ability to pay for other expenses, such as food. Jules said, “I’m on hormone replacement therapy. So sometimes I feel like when I ask someone, like my mom, or when I’m just running low on money, I feel like I’m expensive because I’m paying for hormones. So, whenever I run out, that’s another \$30 that I have to spend, and I feel like if I weren’t the way I was, then I would have that \$30 for food, rent or for whatever” (19-year-old Latinx trans male sophomore living off-campus).

Academic Impacts

Eighty-two percent of participants reported that food insecurity had a negative impact on their academic success. All participants having difficulties with academics reported having less energy, lacking concentration, feeling tired, and not being able to study in general due to insufficient nutrition. In addition, working more hours to pay bills and expenses took a toll on their time management and mental health, negatively affecting their education. Sarah noted:

If you’re hungry and you’re trying to study or go to class, that’s going to make it ten times more difficult. Because you aren’t able to focus. You’re focusing on where is my next meal coming from, when am I going to eat. You’re focusing on your hunger, and you’re not focusing on school. You’re not focusing on studying. You’re not focusing on this test

that you're taking right now. You're focusing on what is dinner going to be or how am I going to get money to eat. (20-year-old white bisexual female sophomore living off-campus)

Furthermore, many of these students worked additional hours to pay bills and expenses. This affected their ability to manage their time, which increased their stress and mental health, and which they attribute to negatively impacting their education.

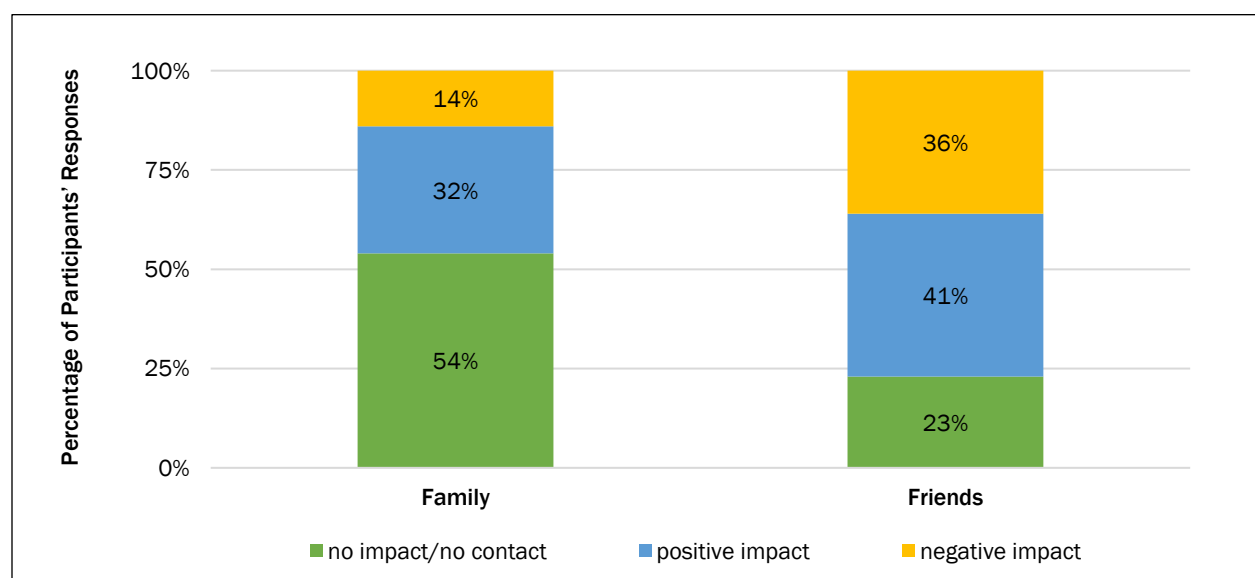
Support: Financial, Social, and Emotional

LGBTQIA+ students do not see their identity as an overt reason for their food insecurity. Still, identity is an additional risk factor for losing financial support from their families, particularly for transgender students. About 41% of the participants described having less family support due to their LGBTQIA+ identity, and at least three participants did not come out to their families because they might lose support. Of that 41%, 75% were trans, bigender, or nonbinary. For example, Adriana stated, "I can't contact my family for financial help, because they don't really like me" (21-year-old mixed ethnicity Latina bisexual junior living off-campus). About one-third of the participants who described less support from their families attributed this to their family's religious prefer-

ence. CJ explained how her parents tried to get notes from her psychiatrist, tracked her phone, and ultimately cut her off due to her sexual orientation. "It was very stressful and no small part to the fact that they are very, very conservative; very, very religious" (20-year-old white lesbian junior living off-campus). CJ noted that the Pride Alliance was assisting her with a dependency override because her parents claim her on their taxes, limiting the amount of aid for which she was eligible.

Food insecurity impacted social support for most of the students, both negatively and positively. Figure 1 shows food insecurity's differential impact on students' social support from family and friends. For support from both family and friends, the positive impact of discussing food insecurity with them is greater than the negative impact. Of the participants who discussed their food insecurity with their families, 32% noted that their family bonds were strengthened by receiving help with their food insecurity, compared to 14% who noted negative impacts. Negative impacts included family members thinking the students had done something wrong to cause their food insecurity. Similarly, of the participants who discussed their food insecurity with friends, 41% found that they bonded with their friends through finding support in dealing with the issue, compared to 36% who noted negative impacts. Participants explained that

Figure 1. Food Insecurity and Social Support from Family and Friends for LGBTQIA+ Students



spending time with friends often involves going out to eat. With concerns about money, many students reported either feeling left out or avoiding seeing their friends altogether. Many participants also avoided telling friends and family out of embarrassment or not wanting to worry them.

One strategy that LGBTQIA+ participants employed to cope with food insecurity was looking for emotional support. Overall, most of the participants (76%) sought emotional assistance. Most of those participants reached out to their peers—roommates, friends, or significant others—and not family. Twenty-nine percent sought professional help from a counselor or therapist. Pets were also a source of emotional support (19%). Despite most participants reaching out, 24% avoided seeking external emotional support from friends, family, or counselors. For example, one participant said, “I really don’t turn to anyone. I don’t have a support system. I just kind of keep it to myself” (Kristin, 25-year-old white bisexual female senior living off-campus). In addition, several participants avoided reaching out due to concerns about discrimination against their gender identity.

Campus Resources, Barriers, and Solutions

The UNT Food Pantry

Roughly 67% of participants have used the UNT Food Pantry. The usage ranged from once or twice only, a few times throughout the year, to weekly visits. None of the participants reported having an unsatisfactory experience with the campus food pantry. Among those who have used the food pantry, 67% reported having a completely satisfactory experience using the food pantry as an LGBTQIA+ student. They described the food pantry as a quick and easy process with a wide variety of food, supportive staff, and accessible and flexible hours. Many showed appreciation for the easy-to-make nonperishable items, long-lasting freezer bags, and inclusion of necessities like toothpaste, soap, shampoo, and menstrual products. Concerning their LGBTQIA+ identities, their overall experience at the food pantry felt welcoming and like a safe space. One participant noted, “UNT has been extremely accommodating for my identity” (Taylor, a 21-year-old API nonbinary jun-

ior living off-campus). We found no negative influence of the participants’ identities on their experiences using the UNT Food Pantry.

Barriers to using the UNT Food Pantry

Of the participants, 33% did not take advantage of the campus food pantry, even though they were aware of the resource. None of the participants felt that their non-use of the food pantry was related to their LGBTQIA+ identity. Instead, their non-use was due to many intersecting barriers such as mental health struggles, lack of transportation, time constraints, experience with unhelpful resources, concerns for anonymity, and lack of information.

Increasing access to the UNT Food Pantry

Participants made suggestions for increasing access to the UNT Food Pantry. Even though pantry users did not report any negative pantry experiences related to their LGBTQIA+ identity, a common concern for LGBTQIA+ students, in general, is the lack of anonymity around their private information, particularly for trans and nonbinary participants. When gathering data from LGBTQIA+ students, privacy is crucial due to their vulnerability as a marginalized group and the trauma surrounding unchanged legal documentation such as name and gender. Participants (pantry users and non-users) suggested that implementing preferred name forms, the option for nondisclosure, and emphasizing privacy in information distribution could create a safer and more comfortable place for LGBTQIA+ students at the campus food pantry.

Participants who had never used the campus food pantry shared stories of negative encounters with other campus resources, which led to an overall lack of trust. They expressed a desire for stronger relationships with staff members who provide support services on campus to feel more comfortable. For example, Maria noted, “If I’m going to be seeing these people weekly, it’s okay if they want to build a relationship with me and get to understand me as a student” (19-year-old Latinx bisexual female sophomore living off-campus).

Other UNT support services

We asked participants about other UNT support services they would like to see offered to relieve

food insecurity, and most of their suggestions would serve all food-insecure students. Students living off-campus suggested increased public transportation and public microwaves for warming up food from home. On-campus residents suggested an on-campus convenience store that sells inexpensive, healthy food. Other suggestions included a multitude of advertising techniques to raise awareness, including increasing signs around campus, universitywide emailing of available resources, attaching resources to students' MyUNT To-Do List on student accounts, syllabus statements, and workshops and food items in dorms.

Other suggestions included non-food-related ideas. For example, participants requested increased access to mental health services through counseling or mentorship. Students recognized that food insecurity is not solely about hunger and that it creates various other needs related to mental health issues and stress. Participants expressed the need for free mental health counseling to cope with these issues. For example, Michael said, "Giving us more resources to access mental health professionals could go a long way in helping with food insecurity. If we know how to deal with stress and anxiety, you know, if we have more coping mechanisms, I feel like this would go a long way to improving our overall health" (39-year-old white asexual nonbinary graduate student living off-campus).

Only 54% of the participants knew about the UNT Pride Alliance, a campus resource specifically for LGBTQIA+ students. Participants suggested increasing the visibility of the Pride Alliance, particularly by communicating that the resources are for all ages and class years. Participants also suggested a support group or group therapy to help LGBTQIA+ students with various questions or needs, even beyond food insecurity. By acting as a resource for students and providing information, Pride Alliance can introduce LGBTQIA+ students to additional resources on campus.

Non-UNT resources and stigma

Unlike going to the UNT Food Pantry, LGBTQIA+ students experienced discomfort and stigma using resources outside the university. The themes surrounding the stigma of food insecurity

were struggling with pride over need (32%), feelings of guilt and selfishness (27%), and the desire not to be a burden (23%). Participants also noted that these resources often require too much information from participants for them to utilize that resource. Forty-one percent of respondents were concerned about discrimination due to their identities when using outside food pantries. Of the 41% who were concerned about discrimination, 78% were trans or nonbinary. For example, Ava said, "there are times when I don't want to go get the help because I'm worried that they might ask me, you know, what do I identify as or that they're just going to give me like some sort of look of pity, and sometimes I don't want to deal with that" (25-year-old white bisexual trans female senior living off-campus). Cameron stated:

Some of them, you have to show proof of income; some of them, you don't. I mean, the UNT Food Pantry, you just say, "I need food," and they give you the food, but others also have programs that you have to sign up for, and you know, maybe volunteer a few hours at the pantry to get food. But there's no consistency between the programs, so I think that's why I just like to rely on the UNT Food Pantry because it's streamlined. It's easy to use, and I don't feel like I owe anybody anything by using the food pantry because I don't think you should feel like you owe anybody anything. (39-year-old white nonbinary graduate living off-campus)

LGBTQIA+ students want resources outside of UNT that are LGBTQIA+-friendly to reduce the chances of being discriminated against for their identity. Therefore, they are more likely to use a resource that promotes itself as LGBTQIA+ friendly. As one participant explained, "... they were a queer-affirming church, so that was the main reason I even felt comfortable going" (Brian, 39-year-old white nonbinary graduate living off-campus). The participants want to feel safe using outside resources they may have never used previously. Brian continued, "I wouldn't feel comfortable going in those spaces. I just wouldn't feel safe, especially if you have to fill out paperwork, and

you know, you put “He/They” on a form, and they’re like, ‘What?’ And so, it’s just better not to mess with it.”

Discussion

The LGBTQIA+ students in this study did not initially associate their food insecurity with their LGBTQIA+ identity. When asked about their experiences, they discussed tipping points of moving off-campus and reduced financial aid funding; anxiety around not knowing where their next meal will come from; financial stress despite working; stress of balancing living, work, school, and peers; childhood food insecurity; strategies for coping with food insecurity; and increased mental and physical health issues. These issues are similar to those of non-LGBTQIA+ college students experiencing food insecurity (Henry, 2017, 2020). However, LGBTQIA+ students have additional anxiety and challenges that influence their food-insecurity experiences in ways that are different from non-LGBTQIA+ students. These findings provide insights into several ways that both on-campus and off-campus food-security programs could be more inclusive of LGBTQIA+ students. Primarily, universities need gender and sexuality resource centers, like the UNT Pride Alliance, that invest in the success of LGBTQIA+ students by providing resources for the specific and unique needs of LGBTQIA+ students (Collier et al., 2021). These centers can play a pivotal role in providing the infrastructure necessary for the forthcoming recommendations.

Identifying as LGBTQIA+ can affect all elements of a student’s support system: financial, social, and emotional. LGBTQIA+ students are at risk of losing family support. This is particularly true for trans and nonbinary students, several of whom in this study hid their gender identity from their families for fear of losing financial support. Yet, LGBTQIA+ students are more likely than non-LGBTQIA+ students to seek emotional support from peers—roommates, friends, and significant others (Henry, 2017, 2020). Henry (2017, 2020) found that most food-insecure college students did not share their struggles with others. Among LGBTQIA+ students, we found that 76% sought emotional assistance from peers.

LGBTQIA+ students may have a stronger peer support group than non-LGBTQIA+ students, which could benefit this student population by providing additional support and information about resources. We recommend that gender and sexuality campus resource centers formalize peer support networks for LGBTQIA+ food-insecure students. Peer support networks can help channel information on resources, provide a buddy system for accessing resources, and create supportive reassurances that services are inclusive.

LGBTQIA+ students may have increased anxiety about society’s response to their identity, affecting their willingness to seek resources. For example, although LGBTQIA+ campus food pantry users did not have negative experiences at the pantry related to their identity, fear of negative experiences is a barrier for non-users unfamiliar with the process. We recommend that centers of university resources (food pantries and other resources) receive training on how to be more LGBTQIA+ welcoming and communicate their inclusiveness broadly. This could ease the fear and stigma experienced by LGBTQIA+ students, strengthen the relationships between LGBTQIA+ students and the resources on campus, and make safe places for students to seek resources. Gender and sexuality campus resource centers could reach out to identified LGBTQIA+ students to provide this information. Specifically, adding information to the food pantry website about the visit procedure, nondisclosure of information, and reassurance that it will be a private and positive experience may ease non-users’ anxiety about visiting a new service on campus. For off-campus resources, stigma and the fear of discrimination are also barriers to using these resources. Whereas non-LGBTQIA+ students frequently experience shame about utilizing non-campus resources (Henry, 2017, 2020), LGBTQIA+ students perceive an additional layer of discrimination because of their identity. The recommended peer support network could provide additional emotional support to ease this anxiety. We recommend that gender and sexuality campus resource centers build community partnerships with LGBTQIA+-friendly off-campus resources, create a list of these LGBTQIA+-friendly resources, and distribute this

list as widely as possible to all students—because peer support is important to all students. Students need additional reassurance that resources outside the university are intended for their needs as students and not solely the local community outside of the university.

Despite their challenges, participants' stories highlighted their resiliency in dealing with food insecurity by pushing ahead. As a result, they are motivated to stay in school to finish their degrees. As explained by Morgan, "We struggle with our gender identities and to validate our own humanity. But then [we need] to reach out, 'I need food, also I need help,' right? So, [we are also] trying to show that we're strong enough to stand on our own and fight for ourselves" (39-year-old white nonbinary male graduate student living off-campus). Additionally, we recommend providing support to facilitate access to mental health services on campus with the same assurance for a positive interaction for LGBTQIA+ students.

Recommendations for Future Research

Research on food insecurity among college students has increased significantly in the past seven years, and prevalence studies have identified LGBTQIA+ students as particularly vulnerable. Further research is needed on the specifics of this vulnerability, including (1) factors contributing to the high rate of food-insecure LGBTQIA+ students, (2) peer support networks for LGBTQIA+

students, (3) the reduction of identity-related anxiety in accessing resources, and (4) identifying additional resources for reducing food-insecurity rates.

Conclusions

The main goals of this research were to investigate the experiences of food insecurity among LGBTQIA+ students, to understand how identity may play a role in those experiences, and to offer research-informed recommendations that student-serving programs could implement to reduce food insecurity. Overall, this study indicates that including LGBTQIA+-specific resources in food access programs may alleviate students' anxiety and barriers to those programs, which may increase students' abilities to succeed in the classroom. Communication strategies need to include the widespread dissemination of information about resources and the inclusivity of those resources for LGBTQIA+ students. Peer support networks can build community, create safe spaces, and strengthen trust for students to have a positive college experience. University gender and sexuality resource centers can increase access to food services by (1) increasing services and programs specifically designed for LGBTQIA+ students, (2) partnering with LGBTQIA+-friendly campus and community partners to build a network of resources, and (3) facilitating trusted information and access to campus and non-campus resources.



References

- Badgett, M. V. L., Durson, L. E., & Schneebaum, A. (2013). *New patterns of poverty in the lesbian, gay, and bisexual community*. UCLA: The Williams Institute. <https://cloudfront.escholarship.org/dist/prd/content/qt8dq9d947/qt8dq9d947.pdf>
- Bernard, H. R. (2017). *Research methods in anthropology: Qualitative and quantitative approaches*. Rowman & Littlefield.
- Broton, K. M., & Goldrick-Rab, S. (2018). Going without: An exploration of food and housing insecurity among undergraduates. *Educational Researcher*, 47(2), 121–133. <https://doi.org/10.3102/0013189x17741303>
- Broton, K., Weaver, K., & Mai, M. (2018). Hunger in higher education: Experiences and correlates of food insecurity among Wisconsin undergraduates from low-income families. *Social Sciences*, 7(10), Article 179. <https://doi.org/10.3390/socsci7100179>
- Brown, T. N. T., Romero, A. P., & Gates, G. J. (2016). *Food insecurity and SNAP participation in the LGBT community*. The Williams Institute. <https://williamsinstitute.law.ucla.edu/wp-content/uploads/Food-Insecurity-and-SNAP-Participation-in-the-LGBT-Community.pdf>
- Bruening, M., Argo, K., Payne-Sturges, D., & Laska, M. N. (2017). The struggle is real: A systematic review of food insecurity on postsecondary education campuses. *Journal of the Academy of Nutrition and Dietetics*, 117(11), 1767–1791. <https://doi.org/10.1016/j.jand.2017.05.022>

- Coleman-Jensen, A., Rabbitt, M., Hashad, R., Hales, L., & Gregory, C. (2022). *Food security in the U.S.: Key statistics & graphics*. U.S. Department of Agriculture Economic Research Service. <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/key-statistics-graphics/>
- Collier, D. A., Fitzpatrick, D., Brehm, C., & Archer, E. (2021). Coming to college hungry. *Journal of Postsecondary Student Success*, 1(1), 106–135. https://doi.org/10.33009/fsop_ipss124641
- Crutchfield, R. M., & Maguire, J. (2019). *Study of student service access and basic needs*. The California State University, Basic Needs Initiative. https://www.calstate.edu/impact-of-the-csu/student-success/basic-needs-initiative/Documents/BasicNeedsStudy_Phase_3.pdf
- Diamond, K. K., Stebleton, M. J., & delMas, R. C. (2020). Exploring the relationship between food insecurity and mental health in an undergraduate student population. *Journal of Student Affairs Research and Practice*, 57(5), 546–560. <https://doi.org/10.1080/19496591.2019.1679158>
- Freudenberg, N., Manzo, L., Jones, H., Kwan, A., Tsui, E., & Gagnon, M. (2011). *Food insecurity at CUNY: Results from a survey of CUNY undergraduate students*. The Campaign for a Healthy CUNY, The City University of New York. <https://www.gc.cuny.edu/sites/default/files/2021-05/cunyfoodinsecurity.pdf>
- Gibb, J. K., Shokoohi, M., Salway, T., & Ross, L. E. (2021). Sexual orientation–based disparities in food security among adults in the United States: Results from the 2003–2016 NHANES. *The American Journal of Clinical Nutrition*, 114(6), 2006–2016. <https://doi.org/10.1093/ajcn/nqab290>
- Gobo, G., & Marciniak, L. (2016). What is ethnography? In D. Silverman (Ed.), *Qualitative research* (pp. 103–119). Sage.
- Goldberg, A. (2019). Transgender students in higher education. The Williams Institute. <https://williamsinstitute.law.ucla.edu/publications/trans-students-higher-education>
- Goldrick-Rab, S., Richardson, J., Schneider, J., Hernandez, A., & Cady, C. (2018). *Still hungry and homeless in college*. Wisconsin HOPE Lab. <https://ighhub.org/resource/still-hungry-and-homeless-college>
- Government Accountability Office [GAO]. (2018). *Better information could help eligible college students access federal food assistance benefits*. <https://www.gao.gov/assets/700/696254.pdf>
- Gundersen, C. (2020). Are college students more likely to be food insecure than nonstudents of similar ages? *Applied Economic Perspectives and Policy*, 43(4), 1476–1486. <https://doi.org/10.1002/aep.13110>
- Hammersley, M., & Atkinson, P. (2010). *Ethnography: Principles in practice*. Routledge.
- Haskett, M. E., Kotter-Grühn, D., & Majumder, S. (2020). Prevalence and correlates of food insecurity and homelessness among university students. *Journal of College Student Development*, 61(1), 109–114. <https://doi.org/10.1353/csd.2020.0007>
- Henry, L. (2017). Understanding food insecurity among college students: Experience, motivation, and local solutions. *Annals of Anthropological Practice*, 41(1), 6–19. <https://doi.org/10.1111/napa.12108>
- Henry, L. (2020). *Experiences of hunger and food insecurity in college*. Palgrave Macmillan. <https://doi.org/10.1007/978-3-030-31818-5>
- Hope Center for College, Community, and Justice, The. (2021a). *The HOPE Center Survey 2021: Basic needs insecurity during the ongoing pandemic*. <https://hope.temple.edu/sites/hope/files/media/document/HopeSurveyReport2021.pdf>
- Hope Center for College, Community, and Justice, The. (2021b). *#RealCollege 2021: Basic needs insecurity among Texas college students—A #RealCollegeTexas report*. https://hope.temple.edu/sites/hope/files/media/document/RC2020_RCTX.pdf
- Howlett, M. (2022). Looking at the ‘field’ through a Zoom lens: Methodological reflections on conducting online research during a global pandemic. *Qualitative Research*, 22(3), 387–402. <https://doi.org/10.1177/1468794120985691>
- James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The report of the 2015 U.S. Transgender Survey*. National Center for Transgender Equality. <https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf>
- Keefe, S., Garagiola-Bernier, A., Kiley, E., England, J., Schmitt, S. R., & Shore, M. (2020). Campus food insecurity: Bringing private institutions into conversations on basic needs. *Journal of Hunger & Environmental Nutrition*, 16(5), 628–642. <https://doi.org/10.1080/19320248.2020.1838984>

- Kirby, S. R., & Linde, J. A. (2020). Understanding the nutritional needs of transgender and gender-nonconforming students at a large public Midwestern University. *Transgender Health*, 5(1), 33–41.
<https://doi.org/10.1089/trgh.2019.0071>
- Laska, M. N., Lenk, K., Lust, K., McGuire, C. M., Porta, C. M., & Stebleton, M. (2021). Sociodemographic and health disparities among students screening positive for food insecurity: Findings from a Large College Health Surveillance System. *Preventive Medicine Reports*, 21, Article 101297. <https://doi.org/10.1016/j.pmedr.2020.101297>
- LeCompte, M. D., & Schensul, J. J. (2012). *Designing and conducting ethnographic research: An introduction*. Ethnographer's Toolkit, Volume 1, 2nd edition. AltaMira.
- Maroto, M. E., Snelling, A., & Linck, H. (2015). Food insecurity among community college students: Prevalence and association with grade point average. *Community College Journal of Research and Practice*, 39(6), 515–526.
<https://doi.org/10.1080/10668926.2013.850758>
- Martinez, S. M., Webb, K., Frongillo, E. A., & Ritchie, L. D. (2018). Food insecurity in California's public university system: What are the risk factors? *Journal of Hunger & Environmental Nutrition*, 13(1), 1–18.
<https://doi.org/10.1080/19320248.2017.1374901>
- Meyer, I. H., Brown, T. N. T., Herman, J. L., Reisner, S. L., & Bockting, W. O. (2017). Demographic characteristics and health status of transgender adults in select US regions: Behavioral Risk Factor Surveillance System, 2014. *American Journal of Public Health*, 107(4), 582–589. <https://doi.org/10.2105/ajph.2016.303648>
- Murchison, J. M. (2010). *Ethnography essentials: Designing, conducting, and presenting your research*. Jossey-Bass.
- Nazmi, A., Martinez, S., Byrd, A., Robinson, D., Bianco, S., Maguire, J., Crutchfield, R. M., Condrón, K., & Ritchie, L. (2018). A systematic review of food insecurity among US students in higher education. *Journal of Hunger & Environmental Nutrition*, 14(5), 725–740. <https://doi.org/10.1080/19320248.2018.1484316>
- O'Reilly, K. (2009). *Key concepts in ethnography*. Sage UK. <https://doi.org/10.4135/9781446268308>
- Patterson, J. G., Russomanno, J., & Jabson Tree, J. M. (2020). Sexual orientation disparities in food insecurity and food assistance use in U.S. adult women: National Health and Nutrition Examination Survey, 2005–2014. *BMC Public Health*, 20(1). <https://doi.org/10.1186/s12889-020-09261-9>
- Podjed, D. (2021). Renewal of ethnography in the time of the COVID-19 crisis. *Sociologija i prostor/Sociology & Space*, 59(1), 267–284. <https://doi.org/10.5673/sip.59.0.10>
- Riddle, E. S., Niles, M. T., & Nickerson, A. (2020). Prevalence and factors associated with food insecurity across an entire campus population. *PLOS ONE*, 15(8), Article e0237637. <https://doi.org/10.1371/journal.pone.0237637>
- Schensul, J. J., & LeCompte, M. D. (2012). *Essential ethnographic methods: A mixed methods approach*. Ethnographer's Toolkit, Volume 3, 2nd edition. AltaMira.
- Silva, M. R., Kleinert, W. L., Sheppard, A. V., Cantrell, K. A., Freeman-Coppadge, D. J., Tsoy, E., Roberts, T., & Pearrow, M. (2017). The relationship between food security, housing stability, and school performance among college students in an urban university. *Journal of College Student Retention: Research, Theory & Practice*, 19(3), 284–299.
<https://doi.org/10.1177/1521025115621918>
- Simon, J., Barton, M., West, C., & Fuentes, C. (2021). *2020-2021 fact book: Data, analytics, & institutional research*. The University of North Texas. https://institutionalresearch.unt.edu/sites/default/files/factbook_2020-2021-final.pdf
- Testa, A., & Jackson, D. B. (2021). Sexual orientation and food insecurity: Findings from the New York City Community Health Survey. *Public Health Nutrition*, 24(17), 5657–5662. <https://doi.org/10.1017/s1368980020005157>
- U.S. Department of Agriculture Economic Research Service. (2022). *Food security in the U.S.: Measurement*. <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/measurement/>
- University of California [UC] Global Food Initiative. (2017). *Global food initiative: Food and housing security at the University of California*. The University of California.
<http://www.ucop.edu/global-food-initiative/files/food-housing-security.pdf>
- Wilcox, M., Baker, C., Burish, E., Arnold, R., Cherry, M., & Moss, T. (2021). Inequitable hunger: Scope, effects, and perceptions of college student food insecurity. *Journal of Student Affairs Research and Practice*, 59(4), 385–400.
<https://doi.org/10.1080/19496591.2021.1960851>

- Willis, D. E. (2019). Feeding the student body: Unequal food insecurity among college students. *American Journal of Health Education*, 50(3), 167–175. <https://doi.org/10.1080/19325037.2019.1590261>
- Wolcott, H. F. (1999). *Ethnography: A way of seeing*. AltaMira.
- Zapata, L. (2021, May 20). How UNT is trying to be a welcoming place to LGBTQ+ students. *Spectrum News 1*. <https://spectrumlocalnews.com/tx/south-texas-el-paso/news/2021/05/20/how-unt-is-trying-to-be-a-welcoming-place-to-lgbtq--students-->