

Spring 2019

Perspectives on Addressing Food Insecurity on College Campuses, Through Administrators Eyes: Best Practices and Challenges

Tashanna Brown

Merrimack College, browntm@merrimack.edu

Follow this and additional works at: https://scholarworks.merrimack.edu/hsc_studentpub

Part of the [Community Health and Preventive Medicine Commons](#), and the [Public Health Education and Promotion Commons](#)

Recommended Citation

Brown, Tashanna, "Perspectives on Addressing Food Insecurity on College Campuses, Through Administrators Eyes: Best Practices and Challenges" (2019). *Health Sciences Student Work*. 22.
https://scholarworks.merrimack.edu/hsc_studentpub/22

This Capstone - Open Access is brought to you for free and open access by the Health Sciences at Merrimack ScholarWorks. It has been accepted for inclusion in Health Sciences Student Work by an authorized administrator of Merrimack ScholarWorks.

Perspectives on Addressing Food Insecurity on College Campuses, Through Administrators

Eyes: Best Practices and Challenges

Tashanna Brown, Eleanor Shonkoff

Merrimack College

Abstract

Food security is a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (Barrett, 2010). These foods also must meet dietary needs to help promote a healthy life (Barrett, 2010). Institutions such as Bunker Hill community college, California State University Long Beach, and multiple other colleges and Universities have taken steps to address food insecurity (FI) on campus. More information is required to determine how to address FI on campus. The purpose of the study is to contribute to describe approaches to addressing (FI) on college campuses and challenges administrators face in addressing those challenges. Participants were recruited from 2 and 4-year colleges. Participants were eligible if they were 18 years of age or older; enrolled in an undergraduate or graduate program; and had experience addressing food insecurity in their professional role. Snowball sampling methods were used for recruitment. Thematic analysis was conducted, this study was approved by the Institutional Review Board at Merrimack College. Six common themes emerged as a result of the study: 1) Current Methods of Addressing FI on Campus; 2) Prevalence Changes of FI on College Campuses and Factors that Influence Changes; 3) FI Prevalence: Assessment and Challenges; 4) FI Prevalence: Assessment and Challenges; 5) Challenges, Managing Challenges, and Reasons for Unsuccessful Plans for Addressing FI; and 6) Recommendations for Institutions Planning to Address FI. Administrators find that there is a rise in the number of students self-reporting, therefore there need to be an increase of accessible resources for those students. Administrators also understand the importance of research that should be done to determine if there is a need for additional programs to contribute to student success.

Keywords: Food Insecurity, College students, Administrators, Challenges, Solutions

Perspectives on addressing FI on College Campuses, Through Administrators Eyes: Best Practices and Challenges

At any time during the year 2017 the USDA estimated that the prevalence of households experiencing food security (FI) was 11.8% (USDA, 2018), which is a decrease from 2012, when 14.9% of Americans were struggling to obtain enough food (Coleman-Jensen et al., 2012). FI is the lack of physical (availability of food) or economic (affordability) access to sufficient, safe, and nutritious foods or the opportunity to eat at all (Barrett, 2010). These foods also must meet dietary needs to help promote a healthy life (Barrett, 2010). In 2017, 4.5% of U.S. households (5.8 million households) were classified as having very low food security (Cite this). FI screen without indicators which defines the levels are as follows: Very low security (at times during the year, eating patterns of one or more household members were disrupted and food intake reduced because the household lacked money and other resources for food); Low food security (households reduced the quality, variety, and desirability of their diets, but the quantity of food intake and normal eating patterns were not substantially disrupted); Marginal food security (Households had problems at times, or anxiety about, accessing adequate food, but the quality, variety, and quantity of their food intake were not substantially reduced); and High food security (Households had no problems, or anxiety about, consistently accessing adequate food) (USDA, 2019). (Cite this)

During 2017, 7.7% of U.S households Children were food insecure at sometimes during the year (2.9 million households), essentially unchanged from 8.0 percent in 2016 (USDA, 2017). Coleman-Jensen (2018) report that some households are disproportionately affected by food insecurity; 36.8% are single female households with children, 25.1% are African American

households, 26.2% are Hispanic households, and 34.5% are low income households living under 185% of the federal poverty line.

The national priority for the U.S. Department of Health and Human Services (2011) is to reduce food insecurity from 14.5% to 6% and also very low food insecurity eliminated in households with children by 2020 (Healthy People 2020, 2017). The government has responded to food insecurity in children since the mid-20th century by implementing low cost and free lunch programs in America's K-12 educational system, however no such program exists for college students in America (Maroto, 2015).

Prevalence of FI

In 2015, a random sample of more than 66,000 students across a survey was given to 8,932 undergraduate students at 10 campuses of University of California campuses reported 42% of students experience food insecurity, with 57% of those experiencing it for the first time (Martinez, 2016). Of the 42% of students who reported experiencing FI it was found that 12% of the students had high or marginal food security, 28% had low food security and 60% had very low food security.

The National Student Campaign against Hunger and Homelessness Organization, CUFBA, and Student governance surveyed 3,765 community college students and found that within the last 30 days 25% reported experiencing very low food security, compared to 20% at four-year schools (Dubick, 2016). These numbers are not surprising in that community colleges serve a wider range of non-traditional students and are often seen as a more affordable pathway to higher education (Dubick, 2016). Similarly, Maroto (2015) suggest that community college students may be experiencing higher levels of FI than the general population and four-year college student population (Maroto, 2015).

Maroto et. al (2015), assessed the relationship between FI (over the previous 12 months) and grade point average at two community colleges; both urban and suburban. They found of the 301 student volunteer participants who took the survey that 56% of the students that took the survey were food insecure. At the Urban community college 60% of the students were food insecure and at the suburban community college 53% of the students were food insecure. They also found that African American and Asian students were more likely to be food insecure than their Caucasian counterparts; and of the 301 students females were more likely to be food secure compared to males at 58% (Maroto, 2015).

Housing situations have also been evaluated and have been found to be associated with FI. It was found that of students who live alone 18% were food insecure, students with spouses/partners 39% were food insecure, or with roommates were 30% food insecure (Maroto, 2015). These relationships between food security and academic performance play a role in some students' academic success.

In the Wisconsin Hope Lab surveyed 8,333 students and study found that one in five students skip meals having to prioritize other costs. 34% of students that attend a 4-year institution are food insecure and 44% of students who attend a 2-year institution were food insecure. In 2018 the Wisconsin Hope lab found that in the North Shore and Merrimack Valley area 31% of students were food insecure, 30% of the students were housing insecure and attended a 2-year school, and 9% of participants were homeless at a 4-year university (Wisconsin Hope Lab, 2018).

Health effects of FI

Adults who are food insecure may be at an increased risk for a variety of negative health outcomes (Maroto, 2015) and health disparities between ethnicities including obesity (Holben

DH, 2006). Lower food security has been associated with higher probability of hypertension, coronary heart disease, hepatitis, stroke, cancer, asthma, diabetes, arthritis, chronic obstructive pulmonary disease, and kidney disease (Gregory, 2017).

Demographic characteristics have been linked to food security as well as housing security. The Wisconsin Hope Lab (2018) found that of sample size of 8,333 respondents (6.4% of the overall student population asked to participate) 44% of community college students and 33% of four-year college students report very low or low food security during the previous days. Results also show that students of black, Hispanic or both ethnicities were more likely to experience food insecurity at about 17-10 % more than their counterparts. Students who receive the Pell Grant are more less likely to experience food insecurity at 46% than students who do not receive the Pell Grant at 54%. Students who had ever lived in foster care reported high levels of food insecurity (66%) at community colleges and at universities (63%) (Wisconsin Hope Lab, 2018). Twenty-eight percent of 4-year college students with meal plans and 30% living on campus experienced food insecurity. Students who work are more likely to experience food insecurity at 55% of the students who work more than 40 hours; 42% of those students who work 6-20 hours, and 53% of those students who are looking for employment. When students work a lot of hours they cannot qualify for SNAP or other public benefit options (Wisconsin Hope Lab, 2018). Silva et al, used the 32-item survey to identify the housing and food needs of students attending a large and diverse urban campus and explore how these needs impact their academic success. They found that over the past year 27.4% of students have worried about having enough money for food, 26.9% of students have skipped meals due to a lack of money to buy food, and 27.3% of students express the inability to eat nutritious meals due to monetary struggles. In all,

6.4% of participants reported severe FI, saying they often or sometimes did not eat for a day or two because they did not have enough money for food (Silva et al, 2017).

Psychosocial effects of FI

Chemers et al. (2001) observed that students who experienced more stress tended to be less well-adjusted in that they experienced less satisfaction with academic progress and lower commitment to remain in school (Krumrei-Mancuso et.al., 2014). Researchers have found that food insecurity negatively impacts academic performance, mental and social health, dietary choices and overall health status among adolescents and young adults (Kleinman et al., 1998). One study found that Students who had meal plans experienced lower rates of food insecurity but pointed out that it was not necessarily because students' needs were addressed (Goldrick-rab, 2018).

Academic effects of FI

FI has not been significantly associated with GPA (Maroto, 2015; Payne-Sturges, 2018). Though results have not found the relationship to be significant they did find that students in the highest GPA category (3.5–4.0) were compared to students in a lower GPA category (2.0–2.49), there was a significant relationship between food insecurity and student GPA for the students in the sample. This has not always been the case in that they also found that becoming food secure would have a positive effect on students' GPA (Maroto, 2015).

Research by Payne-Sturges (2017), found that of 237 students who participated in a survey 15% were food insecure. They also found that of the students who reported being food insecure, reported experiencing disruptions in academic work as a result of depression symptoms. Students experiencing housing and food insecurity have been found to be at greater risk of not completing their studies (Silva,2017; Payne-Sturges, 2018).

In the impact report by Swipe out hunger it was reported that 53% of the students missed class, 54% missed a study session, 37% missed a club meeting, 55% did not want to join an extracurricular activity, 55% do not buy required materials, 25% dropped a class and 81% did not perform as well as they could have in academics. (Impact report, 2018).

Methods

This study was conducted at Merrimack college. Participants were eligible if they were 18 years of age or older; administrators of an undergraduate or graduate program; and who have experience addressing food insecurity in their professional role. There was no specific gender, age, or experience range. Administrative volunteers were recruited through snowball sampling. An email for recruitment was developed and send out to each administrator. Verbal informed consent was obtained from all participants prior to the interview (see Appendix A for more information). This methodology was approved by Merrimack College's Institutional Review Board. A list of questions was created that would examine the challenges administrators face regarding addressing food insecurity on campuses. Interviews were conducted between February 2019 and May 2019. The interviews lasted approximately 25 to 30 minutes and were conducted via. phone.

Results

Participant characteristics

There was a total of 3 participants; one Dean of students and two Assistant Dean of Students. They had an average of 4 years of addressing FI. They were involved in addressing FI through their professional role as shown in Table B 1.

Summary of responses and emerging themes

The answers participants gave fell into six themes of best practices and challenges pertaining to addressing FI on campus: 1) Current Methods of Addressing FI on Campus (Table B 2), 2) Changes in FI Prevalence on College Campuses and Factors that Influence Changes (Table B 3), 3)FI Prevalence: Assessment and Challenges (Table B4), 4) FI Prevalence: Assessment and Challenges (Table B5),5) Challenges, Managing Challenges, and Reasons for Unsuccessful plans for Addressing FI (Table B6), 6) Recommendations for Institutions Planning to Address FI (Table B 7).

Current Methods of Addressing FI on Campus

Participants discuss practices at their current institution and how they were able to establish these practices. Donation programs; a program in which students donate extra meal swipes to a bank in which students in need can come utilize if they report the need; sustainable food pantries which provide anonymous access to foods and necessities; referral programs where faculty and staff work together in noticing the signs and symptoms of FI and report their concerns to student affairs; and partnerships with campus (e.g., upper administration, facilities,) and non-campus members (e.g., local thrift stores, and food banks).

Changes in Prevalence of FI on College Campuses and Factors that Influence Changes

Not all participants report knowing prevalence of FI on campus. It was reported that FI is a newly discovered issue from the past 5 years, on college campuses therefore a lack of data exists. One participant report that the prevalence of students reporting FI is increasing over the last five years. Many factors have been reported as reasons for the changes in the prevalence in FI. These include students being first generation; students' previous living conditions (e.g., foster care, low income housing); an increase in racial/ethnic minorities; academic demands; Psychosocial differences (e.g.,); low income students and the increased cost of attendance; and stigma. Stigma associated with FI may influence students not to come forward because they are afraid of what others may think. This factor may influence the true number of students affected by FI. "It increases every month when we first started the students probably were about 10 to 12 students that we were serving a semester. Now, we have about 160 students a week"- Interviewee #. The increased use of a pantry may raise questions "Do all of these students really need this service?" If so, "Should we be doing something about it?"

FI Prevalence: Assessment and Challenges

Conducting a survey of FI prevalence on campus was reported as helpful from institutions who have conducted one as a part of a larger study. Information was used to present to the board of trustees at one institution to demonstrate the actual need that is not being addressed on campus. Reasons for why a survey was not conducted included, the survey needed to be reviewed, and to determine that there is not a conflict with other surveys on campus, and also that the idea of doing the survey has not come up. "We don't know about who we don't know about and so how do we reach those students"- Interviewee #1. Students who are affected by FI may not come forward or even taken the survey when offered.

Challenges, Managing Challenges, and Reasons for Unsuccessful plans for Addressing FI

Participants expressed that there is a lack of data with respect to students experiencing FI on campus. Plans have been unsuccessful due to lack of sustainability for the long term, and no use for collected items and finding a place for useful items. Cost of attendance is increasing posing a challenge to low income and non-traditional students. Participants reported unsuccessful plans of addressing FI including, not having enough space for programs, supplies and services. It has been reported that educating the on and off-campus community on signs and symptoms associated with FI needs to be more of a priority. In order to deal with these challenges' schools reported working with students who came forward; fundraising efforts and continuing donation efforts are needed to maintain sustainable projects; having a strong community that is social justice oriented; and creating a task force of administrators for idea generating. "It's a vicious cycle right and even for us institutions we can't just give out free housing and we can give out free meal plans that's not how it works so we have to think creatively and really come together a community and really figure how were going to address it."- Interviewee #2

Resources and differences between available resources

Local resources such as local food banks have been utilized in stocking shelves, and local thrift shops have been used for clothing. On-campus resources such as campus Facilities have been used to give recommendations on space utilization for pantries; off-campus resources have been used for neighborhood donation projects to aid in stocking shelves on campus. Resources such as NASPA (National Association of Student Personnel Administrators) have been used as a blueprint for programs on campus. Programs are unaware of the funding options and differences between public and private institutions. Participants expressed that educating communities about

the problems of FI on campus may encourage people to volunteer. It is also helpful to have a strong community network that can mobilize to help address student needs.

Recommendations for Institutions Planning to Address FI

Participants gave recommendations to schools trying to address FI to gain collaborations or alliances with upper administration, facilities department and community partners; become involved with organizations and conversations with other institutions addressing FI; outreach to the community to recognize the signs and symptoms of FI; Lastly, they recommend to keep up with current information and data regarding FI trend and best practices to determine the students' needs and if students needs are being addressed.

Discussion

In the present study administrators discussed the challenges and best practices of addressing FI on their campuses. These discussions reflect, support and build on the current research of FI on college campuses. Six different themes result showing the best practices and challenges for administrators. These themes show that there is a lack of data/research to determine the needs of students but there are other ways of addressing student needs.

Previous surveys and interviews of student experiences have been done to determine what the students' needs are and if there is truly a need for making changes to programs that are already in place. Though FI in secondary education is a fairly new topic of research, there is data that has shown a significant number of students experience FI (Martinez, 2016; Wisconsin Hope Lab, 2018; Dubick, 2016; Maroto, 2015).

As reported in interview though there is little research to support that the prevalence of students experiencing FI is increasing, the number of self-reporting students and programs to support these students are increasing. FI is a public health issue and without proper action can only get worse.

Given this information there are questions "Is there really a need to address FI at every school?" and "If there is a need are the students' needs being met by the resources that are available?". These questions cannot be accurately answered without assessment or measurement. Understanding the challenges that administration face and the best practices that have been in place simultaneously with those challenges, plans can be created based on need and the culture of the institution.

Recommendations

Surveying

These findings suggest that surveys have been reported as a helpful tool to show upper administration that there is a problem that needs to be addressed. These surveys can also be used to see improvement in programs that have been implemented. Studies that have conducted surveys can better assess the needs of students. Though there is a lack of data the results of the present study show that there are more students self-reporting that they are need of food resources, and also that there is in increase in FI prevalence on campuses who have conducted surveys. This information is important for retaining students and graduation rates. If students have to choose between eating and paying for a class, they may choose to pay for a class and go without eating. In recent studies data has shown that students do not have adequate emergency resources or support following unanticipated income shocks or expenses, which may increase the risk of FI (Gaines, 2014).

Sustainable programs

The study results show that programs such as donation programs, food pantries, community partnerships for other resources such as clothing have been extremely important in aiding students who have come forward looking for help. Donation programs have been able to help hundreds of students have a meal when they otherwise couldn't. Food pantries that are sustained by community efforts and local food banks. Programs had their own swipe programs, or a quarterly food drive could help to maintain pantries. In recent literature it was recommended that college administrators should consider on-campus resources, such as food pantries or dining card discounts, designed to address food insecurity among students as part of their strategic

initiatives to promote student success (Maroto, 2015). Though these programs have not been discussed as a recommendation during interview they have been shown to make an impact for students.

Food support

Research by Glik (2017) that evaluated student experiences, perceptions and concerns related to FI, results suggested that there is opportunity for the university to address student FI through providing food literacy training, food preparation and budgeting strategies (Glik et al., 2017). The Glik study is similar in that previous research shows that people with high or moderate levels of cooking, food preparation and financial skills are less likely to experience FI (Groton et al., 2009). In our study more on campus resources have emerged such as donation programs and food pantries. Food programs such as cooking programs and financial budgeting can be given on campuses that have resources such as the Campus Kitchens Project or other nutrition related volunteer programs. The Campus Kitchens Project is a non-profit student-lead organization located on high school and college school campuses. The Campus kitchens project recovers food that otherwise would have been wasted, as well as other beyond the meal programs; nutrition education and Supplemental Nutrition Assistance Program (SNAP) outreach. These partnerships can be made with kitchen staff to determine if they would be able to facilitate such programs as well.

Administrator's role

Results show that administrators play a vital role in aiding the students' experience in higher education as shown in Table. They provide support to the student and open doors for resources that they did not know existed previously. It may be that the faculty or staff member

open doors for the student to utilize those services as well. They are the facilitators in building rapport with these vulnerable students. Facilitators must be aware of the signs and symptoms of FI; students who sleep in class because they are living out of their car and do not get much sleep or are students who frequently ask for a granola bar.

With regards to funding, administrators report that funding is not the largest issue when it comes to programs because of donation programs, schools now being social justice oriented. The problem is costs as seen in (Table B 5) as well as other challenges. Cost of attendance is constantly rising, and students are not able to keep up with these rising costs. FI is a threat to student success on college campuses in the United States, with potential to impact academics, wellness and behavior- all factors that have a bearing on student retention and graduation rates (Cady, 2014). In order to fully support students not only academically but socially, administrators must consider recommendations of keeping up with literature and research, creating sustainable programs and food support programs for the overall wellbeing of our future leaders.

This study limitations include the small sample size. We had 3 participants that were recruited by snowball sampling. There are few studies that discuss ways of addressing FI on college and university campuses which is due partly to lack of data on the related issue.

Conclusion and Future Study (1 page)

From this paper it has been found that most college and university administrators find best practices for addressing FI to be creating programs, collaborating with upper administration and forming on and off campus partnerships. Institutions have been able to address the FI through the resources they have available and the ones that they have created in lieu of increasing demand for help. These increasing demands and stresses that are put on our students should be matched with resources available through the college in which they spend a substantial amount of money on. The lack of information obtained to assess the student's needs; we do not know about who we do not know about. We do believe that further research needs to be done to determine more specific challenges between the two types of institutions; Private and Public. This would help to create plans tailored to the school's culture and needs. Further research also needs to be done to determine the effects financially, psychosocially and academically on student success. As the growing rate of non-traditional students continues to increase it is important to maintain these resources and continue to raise awareness of the increasing prevalence's of FI and the effects academically, psychosocially and also related to health outcomes. These needs can be determined through a needs assessment or a survey which can be (taken) from the USDA, U.S. Adult Food Security Survey Module.

References

- Barrett, C. B. (2010). Measuring food insecurity. *Science*, 327(5967), 825-828.
- Broton, K. M., Weaver, K. E., and Mai, M. "Hunger in Higher Education Experiences" *Social Sciences*. (2018)
- Cady, C. L. (2014). Food insecurity as a student issue. *Journal of College and Character*, 15(4),265-272.
- Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A., & Singh, A. (2018). Household food security in the United States in 2016—A report summary from the Economic Research Service of the United States Department of Agriculture. September 2017. Retrieved June, 11.
- College and University Food Bank Alliance (CUFBA). n.d. Available online: www.cufba.org (accessed on 12 December 2018).
- Dubick, J., Mathews, B., & Cady, C. (2016). Hunger.
- Furbank, L., (2016). Ten Organizations Fighting Food Insecurity on College Campuses. Hunter College New York City Food Policy Center. Retrieved from <https://www.nycfoodpolicy.org/food-insecurity-on-college-campuses/>
- Gaines, A., Robb, C. A., Knol, L. L., & Sickler, S. (2014). Examining the role of financial factors, resources and skills in predicting food security status among college students. *International Journal of Consumer Studies*, 38(4), 374-384.
- Glik, D., & Martinez, S. (2017). College students identify university support for basic needs and life skills as key ingredient in addressing food insecurity on campus. *California Agriculture*, 71(3), 130-138.

Gorton, D., Bullen, C. R., & Mhurchu, C. N. (2010). Environmental influences on food security in high-income countries. *Nutrition reviews*, 68(1), 1-29.

Gregory, C. A., & Coleman-Jensen, A. (2017). Food insecurity, chronic disease, and health among working-age adults.

Healthy People 2020., Food Insecurity. Retrieved from

<https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/food-insecurity#3>.

Holben DH, Pheley AM (2006) Diabetes risk and obesity in food-insecure households in rural Appalachian Ohio [Internet]. *Prev Chronic Dis*;3(3). Available from:

http://www.cdc.gov/pcd/issues/2006/jul/05_0127.htm

Hughes, R., Serebryanikova, I., Donaldson, K., & Leveritt, M. (2011). Student food insecurity: The skeleton in the university closet. *Nutrition & dietetics*, 68(1), 27-32.

Kleinman, R. E., Murphy, J. M., Little, M., Pagano, M., Wehler, C. A., Regal, K., & Jellinek, M. S. (1998). Hunger in children in the United States: potential behavioral and emotional correlates. *Pediatrics*, 101(1), e3-e3.

Krumrei-Mancuso, E. J., Newton, F. B., Kim, E., & Wilcox, D. (2013). Psychosocial factors predicting first-year college student success. *Journal of College Student Development*, 54(3), 247-266.

Langhout, R. D., Drake, P., & Rosselli, F. (2009). Classism in the university setting: Examining student antecedents and outcomes. *Journal of Diversity in Higher Education*, 2(3), 166.

Larson, N. I., & Story, M. T. (2011). Food insecurity and weight status among US children and families: a review of the literature. *American journal of preventive medicine*, 40(2), 166-173.

- Lower-Basch, E., & Lee, H. (2014). SNAP policy brief: College student eligibility. Retrieved from CLASP http://www.clasp.org/resources-and-publications/publication-1/SNAP_College-Student-Eligibility.pdf.
- Martinez, S. M. (2016). Student food access and security study. Nutrition Policy Institute.
- 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.
- Meza, A., Altman, E., Martinez, S., & Leung, C. W. (2018). "It's a Feeling That One Is Not Worth Food": A Qualitative Study Exploring the Psychosocial Experience and Academic Consequences of Food Insecurity Among College Students. *Journal of the Academy of Nutrition and Dietetics*.
- Michigan State University. (2018). About the Food Bank. Retrieved from <http://foodbank.msu.edu/>
- Oregon State University. (2018). HSRC Food Pantry. Retrieved from <https://studentlife.oregonstate.edu/hsrc/food-security/hsrc-food-pantry>
- Payne-Sturges, D. C., Tjaden, A., Caldeira, K. M., Vincent, K. B., & Arria, A. M. (2018). Student hunger on campus: food insecurity among college students and implications for academic institutions. *American Journal of Health Promotion*, 32(2), 349-354.
- Silva, M. R., Kleinert, W. L., Sheppard, A. V., Cantrell, K. A., Freeman-Coppadge, D. J., Tsoy, E., ... & 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.

Sloane, w. (2017). Food Is a Basic Need: Dealing with Hunger on College Campuses - Higher Education Today. [online] Higher Education Today. Available at:

<https://www.higheredtoday.org/2017/05/31/dealing-with-hunger-on-college-campuses/>
[Accessed 18 Dec. 2018].

USDA. (2018, September 5). Frequency of Food Insecurity. Retrieved December 17, 2018, from

<https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/frequency-of-food-insecurity/>

Wisconsin Hope Lab. (2018). Basic Needs Insecurity in Massachusetts Public Colleges and

Universities. Retrieved from <https://hope4college.com/wp-content/uploads/2018/10/StillHungryMA-4-1.html>

2018 Impact Report. (n.d.). Retrieved December 5, 2018, from

<https://www.swipehunger.org/impactreportmenu>

Appendix A

Verbal Consent Form

Hi, My name is Tashanna Brown and I am conducting this study for my capstone project for my Master's degree in Health and Wellness Management at Merrimack College. Thank you for taking the time today. This may take 2-3 minutes.

Before we begin, I just need to confirm your eligibility:

Confirm eligibility

Are you 18 years or older?

o [IF NO] Unfortunately, you have to be 18 or older. Thanks for your time.

Are you or have you ever been a part of planning to address food insecurity on a college or university campus?

o [IF NO] Unfortunately, we're only looking for persons with a history of addressing food insecurity on a college or university campus. Thank you for your time.

[IF YES] Great, let me tell you about the study.

Introduction and Purpose of the Study:

You are being asked to be in a research study to determine common best practices in addressing food insecurity and identifying any suggestions for future schools to follow. You were selected as a possible participant because you have participated in addressing food insecurity at your institution. The purpose of the study is to contribute to our understanding of approaches to addressing FI on college campuses and challenges administrators face in addressing those challenges. Ultimately, this research may be *published as part of a journal on food insecurity in college campuses*.

If you agree to be in this study, you will be asked to complete an interview over the phone for 20-30 minutes. This will only be one interview with no repeat sessions.

Risks:

There are no reasonable foreseeable (or expected) risks.

Benefits

The benefits of participation are to aid in the research for plans on how to address food insecurity on college campuses to better the student's college experience.

Confidentiality

The records of this study will be kept strictly confidential. Research records will be kept in a locked file, and/or all electronic information will be coded and secured using a password

protected file. We will not include any identifiable information in any report we may publish that would make it possible to identify you.

Payments or Compensation

There will be no payments or compensations given.

Right to Refuse or Withdraw

The decision to participate in this study is entirely up to you. You may refuse to take part in the study *at any time* without affecting your relationship with the investigators of this study, Merrimack College or your employer. Your decision will not result in any loss or benefits to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw completely from the interview or survey at any point during the process; additionally, you have the right to request that the interviewer not use any of your interview material.

Right to Ask Questions and Report Concerns

You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact me, Tashanna Brown at browntm@merrimack.edu or by telephone at 781-913-0483, or you may contact my supervisor Eleanor Shonkoff at shonkoffe@merrimack.edu. If you like, a summary of the results of the study will be sent to you. If you have any other concerns about your rights as a research participant that have not been answered by the investigators, you may contact the Chair of the Merrimack Institutional Review Board at (978) 837-5280 or by email at irb@merrimack.edu. If you have any problems or concerns that occur as a result of your participation, you can report them to the Chair of the IRB at the contact information above.

Informed Consent

Do you understand the information you have been given? Would you like to participate in this study?

If yes - "Great. Thank you. I will send you a copy of this consent information, so you have the contact information."

Is it okay for me to record this interview?

If no -- "I understand. Thank you for your time."

Appendix B

Table B 1. *Demographics of Interviewees*

Participants	Demographics
Roles	Dean of Students, Assistant Dean of Students (N=3)
Average years addressing FI	(X=4)
Involvement	Through their professional role

Note. Summary of demographic information of interviewees including current role, years spent addressing FI and how they initially got involved in addressing FI

Table B 2. *Current Methods of Addressing FI on Campus*

Common responses
<ul style="list-style-type: none"> • Donations- Swipe programs with the dining hall where students donate extra meal plans; Other programs at the institution that were having events (e.g., career center); Food, and other items donated (e.g., personal hygiene products, feminine hygiene products, deodorant, tooth brushes) • Food pantries- in remote locations (provide anonymous access to foods and necessities to all students and even faculty and staff) • Referral Programs-Faculty and staff report if they notice a student that is in need; Student self-referral • Creating strong partnerships with the campus and non-campus members (e.g., campus dining hall, campus facility department, local thrift shops, local neighbors in the community)

Note. Emerging themes regarding common practices found between the three interviewees

Table B 3. *Prevalence Changes of FI on College Campuses*

Theme	Common responses
Prevalence, Change over time, and Reasons for Change	<ul style="list-style-type: none"> • Not all schools knew prevalence; one had conducted their own prevalence survey; one had been part of a larger study in which prevalence was estimated for a large number of schools • Those who knew prevalence indicated increases in FI over the past 5 years • FI on college campus is a relatively new issue
Factors that Influence the Change in Student Demographics	<ul style="list-style-type: none"> • Changing student demographics- first generation; previously in DCF; increase in racial/ethnic minority students • Academic stressors-academic demands, finances, time pressures, and health concerns • Psychosocial differences-mental health issues such as depression and anxiety; which has severely effects on a large number of students

Note. Prevalence of FI on campuses and influences of change in prevalence. This table also represents the factors that contribute to the change in prevalence of FI on campus

Table B 4. *FI Prevalence: Assessment and Challenges*

Common responses
<ul style="list-style-type: none"> • Prevalence information was helpful and thorough. (e.g., inform Board of trustees of need) • If a survey was done it was through the Hope-lab which used the USDA household security survey • Surveys have to be reviewed, and to make sure that there is not a conflict with other surveys on campus

Note. Challenges with assessing FI prevalence and Methods used to determine FI prevalence found between the three interviewees.

Table B 5. *Challenges, Managing Challenges, and Reasons for Unsuccessful plans for Addressing FI*

Theme	Common responses
Most significant challenges with respect to addressing FI	<ul style="list-style-type: none"> • There is a lack of data to determine campus needs • Costs • Having the space to expand the for more supplies to provide better services for those in need • Educate the community on FI and the signs and symptoms associated with FI
Managing challenges with respect to FI	<ul style="list-style-type: none"> • Work with students who come forward; pay attention to our students; recognize the signs and symptoms of FI • Fundraising efforts and continuing donation efforts during off months • Having a good community support who is generous and Social justice oriented • Create a task force made up of administrators, staff and faculty for problem solving and idea generating
Reasons for unsuccessful efforts	<ul style="list-style-type: none"> • Tried to set up a pantry but it failed due to improper planning for sustainability • Collected unused supplies from dorms at the end of the semester and finding storage for them (e.g., old textbooks)

Note. Challenges when addressing FI on college campuses

Table B 6. *Resources Available*

Theme	
Familiarity with resources available	<ul style="list-style-type: none"> • With local food banks to aid in stocking our shelves; local thrift shops for clothing • Using the resources on-campus (e.g., dining hall, campus facilities); off-campus (e.g., neighborhood projects, other institutions) • Literature (e.g., National Association of Student Personnel Administrators)
Perceived differences in resources available at private and public institutions	<ul style="list-style-type: none"> • Programs are unaware of the funding options other institutions have • If you have a good community of support behind you who are aware of what you are doing, people are more likely to donate and support your cause

Note. Describing similar themes between familiarity of resources available and differences between private and public institutions

Table B 7. *Recommendations for Institutions Planning to Address FI*

Responses
<ul style="list-style-type: none"> • Gain collaborations or alliances with the upper administration of the school, with the facilities department, and community partners • Get involved with organization and conversations with other institutions addressing FI to discuss best practices and frustration. Retention is important in the success of an institution so discuss the importance of retention and student success • Keep up with current information so you see where the need is and if the need is being addressed • Outreach to the community and faculty and staff on the signs and symptoms of FI and how to report when you identify a student who may be in need

Note. Recommendations to institutions planning to address FI including administrative inclusion, outreach to the community and involvement.