

5-2024

Addressing Food Insecurity Among College Students

Serena Plares
California State University, Monterey Bay

Follow this and additional works at: https://digitalcommons.csumb.edu/caps_thes_all

Recommended Citation

Plares, Serena, "Addressing Food Insecurity Among College Students" (2024). *Capstone Projects and Master's Theses*. 1763.

https://digitalcommons.csumb.edu/caps_thes_all/1763

This Capstone Project (Open Access) is brought to you for free and open access by Digital Commons @ CSUMB. It has been accepted for inclusion in Capstone Projects and Master's Theses by an authorized administrator of Digital Commons @ CSUMB. For more information, please contact digitalcommons@csumb.edu.

Food Insecurity Among College Students and Assistance at CSUMB

Serena Plares

A Capstone Project for the Bachelor of Science in Human Development and Family Science

Food Insecurity and Assistance at CSUMB

Introduction

In this capstone project, the focal topic was food insecurity and food assistance with the target population being college students attending California State University Monterey Bay. This demographic includes a diverse group of young adults from various socioeconomic backgrounds and cultures. Food insecurity is rampant across our country, county, and college campuses. It impacts families and individuals of all backgrounds and there is a need for knowledge pertaining to this topic and affordable, nutritious food access and resources. One in three children and one in four adults are affected by food scarcity in Monterey County and thirty-four percent of county residents cannot afford food consistently (Food Bank Monterey County, 2023). Due to alarming rates of food insecurity in our community, there is a need for a workshop that provides information between already existing resources and those who are facing food insecurity. Due to this need, I developed a one-time workshop that not only educates college students regarding this topic but also empowers and equips them to seek the resources available to them. The first part of the workshop focuses on destigmatizing food pantries and addresses misconceptions and negative attitudes toward food insecurity. The second part of the workshop provides essential information as to why food security is important for student success. The last part of the workshop provides information about food pantries in the county and what days resources are available. The location was at a meeting house near the CSUMB campus and the participants will be in their twenties.

Needs Statement

Food insecurity is the lack or uncertainty of access to food or one's next meal (Feeding America, 2024). Although America is one of the richest countries in the world, food insecurity in America impacts millions of individuals. To zero in on this nationwide problem, we can look to the state of California for alarming statistics. Despite, producing half of the nation's fruits and vegetables California has approximately 8.8 million residents facing food insecurity (California Association of Food Banks, 2023). As previously mentioned, Monterey County specifically has one of the highest rates in America, with one in three children and one in four adults impacted by lack of consistent food (Food Bank Monterey County, 2023). Thus for this project, I addressed the issue of food insecurity specifically among college students by shedding light on this problem and aiming to find solutions. The target population is Monterey County college students who are facing a growing issue of food insecurity. Despite the common perception that higher education ensures stability, many students are struggling to obtain nutritious affordable food. College students are a uniquely sensitive population due to high living costs, expensive tuition, rising rent and housing prices, and unemployment. The issue of food insecurity is a tremendous barrier to the success and well-being of students. This literature review will aim to address the challenges related to food insecurity among college students and explore solutions.

Food insecurity among college students in California is rising dramatically and it is impacting students across all institutions. The California Student Aid Commission conducted a survey using the USDA six-item food security model in May of 2023 to which 29,000 California college students responded. The study found that 66% of the college students in California who responded were found to be food insecure (California Student Aid Commission, 2023). Although

the study is shocking in and of itself with this high rate, the worst part is that the same survey was conducted in 2019 and the rate of food insecurity then was 39% (California Student Aid Commission, 2023). In just a matter of four years, the number went from 39% to 66% of food insecure students in California. In this study, some factors that were attributed to this sharp increase were the rising prices of housing since the pandemic and the rising prices of food. California State University Monterey Bay, where this project will take place, was last surveyed in 2020 by Student Basic Needs and was found to have 50% of its students facing food insecurity (Student Basic Needs, 2020). Across the state, more than half the students are facing food insecurity and at the focus campus for this project, it could be assumed that for every two students you meet one of them will be food insecure, so what are the implications of having starving students?

Without food one simply can not live; but between starvation and security, there are other implications that go unspoken for students who are facing food insecurity. A study by Patton-Lopez et al. (2014) surveyed 354 students attending a midsized university in Oregon to explore the rates of food insecurity and the impact on students. To obtain the data the students were given a survey that used the US Department of Agriculture Household Food Security Survey Module: 6-Item Short Form. The study found that over 59% of the students were food insecure in the past year due to factors such as their food money having to be allocated towards tuition, housing, textbooks, and healthcare. Having poor health was associated with this. Of the students who were food insecure, the results had major implications for students' overall health and student GPA. In the survey, the students were asked to rate their health and there was an association between food insecurity and poor health which will be examined more in depth later in this paper. The study also revealed having good academic performance was inversely

associated with food insecurity. To further investigate academic performance a study by Maroto et al. (2015) looked more in-depth at the association between food insecurity and grade point average. This study sampled 301 students from two different community colleges in Maryland. One was located in a low-income urban area and the other in an affluent suburban area. Between the two schools, overall 56% of the students were found to be food insecure and the results concluded that food insecure students were more likely to have a low GPA (2.0-2.49) than food secure students with higher GPA (3.5-4.0). Between these two studies, it is evident that food insecurity is impacting college students alike across the country and it yields to no one. Lack of accessible and affordable food reasonably correlates to poor health and academic outcomes and this is not to be taken lightly on a college campus. With all this in mind, if the goal is to empower and equip students while at university then it is of utmost importance to guide students to food resources in the area.

Mental health and obesity are major points of crisis in America today and food insecurity finds itself intermingled with these struggles amongst college students. To further examine the issue of food insecurity and the impact it has on student well-being, a study by Bruening et al. (2016) examined the prevalence of food insecurity and its associations with health outcomes among college freshmen. This study used a diverse sample of 209 college freshmen at a Southwestern University and was conducted via survey. The results were analyzed by trained staff and found that 37% of the students reported inconsistent access to food. The findings were statistically significant to suggest that food-insecure students had 3 times higher odds of struggling with depression and anxiety than their counterparts. The study noted the short and long-term impacts of food insecurity associations to binge eating, lower work productivity, and poor dietary control. Although this study was done in a different region than Monterey, it is still

important to consider the implications of this study for our students at CSUMB who have high rates of food insecurity.

With the rising rates of food insecurity among college students, a study by Martinez et al. (2019) looked at the relationship between body mass index, overall health, and food insecurity of students across the ten University of California campuses. The study randomly sampled students to participate in a survey and asked questions pertaining to food security, fruit and vegetable intake, sleep, physical activity, weight and height, and self-perceived health. The outcomes of this study revealed that food insecurity was related to poor health in three ways. One is food insecurity correlated to less sleep which is associated with higher BMI and poor health. Another finding was those food insecure had lower rates of physical activity. Lastly, the study found that those food insecure had less intake of fruits and vegetables which is related to poor health. This builds on the study previously mentioned out of Oregon that found its students who were food insecure to have higher rates of poor health outcomes. Now knowing the impacts of food insecurity on students it is important to dive into the attitudes surrounding food insecurity.

A barrier to individuals receiving help can be misconceptions and beliefs held about a certain topic. When it comes to food insecurity and food being a basic need, it is important to debunk the misconceptions in order for students to seek help from already existing resources. A study done at the University of Florida sought to find answers as to why hungry college students were not seeking help. The study looked at barriers and predictors of using on-campus food pantries. The study done by Zein et al. (2018) surveyed 899 students attending the University of Florida asking questions about food pantry awareness and use. The study found that although 70% of the students were aware of the food pantry only 38% of the food-insecure students used the pantry. The four main barriers to the utilization of the food pantry reported by students were

social stigma, insufficient information, self-identity, and inconvenient hours. This study helps to shed light on the need to have open dialogs and conversations about food insecurity on college campuses. It further showed the high rate of food insecurity and highlighted that there is assistance, but it is not even being utilized by half of the food-insecure students due to factors such as social stigmas. Even with the solution of food pantries, hungry students will continue to be hungry if we are not destigmatizing food pantries and encouraging students that this is a system-wide problem and they are not the only ones struggling.

A common misconception about food insecurity is that it only affects homeless individuals or extremely low-income individuals. The reality is that food insecurity impacts a much broader population of individuals and no one is exempt from potentially facing this rampant problem. Research such as the study previously mentioned by Bruening et al. (2016) challenges this misconception that food insecurity only poses a threat to homeless or low-income individuals. The population in this study was a group of diverse urban college students and emphasized the importance of acknowledging the range of individuals who faced this issue in a setting similar to Monterey. The last misconception that is widely brought up is that those who go to food pantries are lazy or have failed in a sense. Goldrick-Rab et al. (2019) assessed food insecurity among 33,000 students across 24 states and 70 campuses. The mass study had major implications for debunking negative stigmas and the findings revealed that students facing food insecurity were often reluctant to seek help due to shame from societal misconceptions. The study found that one-third of the college students experiencing food insecurity were both working and receiving financial assistance. These findings point to a larger issue at hand rather than laziness or personal failure. If one-third of students are working and receiving financial aid and still not able to have food security this is not due to personal shortcomings, but a

system-wide failure. After we are able to address and educate students that there is no shame in receiving help and there is help available we can look towards solutions.

In the midst of significantly high food insecurity rates, assistance in Monterey County is available. Food pantries free of charge provide nutritional and accessible food for those struggling to obtain these resources. The effectiveness and need for these assistance programs for students is a crucial step in the right direction. A study done by Adamovic et al. (2020) surveyed 339 students from a university in the western United States and sought to collect data on prevalence and solutions. The study used the USDA U.S. Six-Item Short Food Security Survey and found that 54% of those who responded to the survey were food insecure. This study aimed to see the student perspective on solutions to food insecurity. There were three solutions that the majority of the respondents recommended, the first being educational initiatives such as outreach programs noting that students don't want to reach out when struggling, so being reached out to would help. The second was on-campus assistance programs and knowledge surrounding this and the last was off-campus assistance programs. With all of this in mind, the last important study to turn to emphasizes the effectiveness of food pantries. This study by Martinez et al. (2020) surveyed 1,855 students who self-identified as food pantry users across the 10-campus UC system. The students were asked how many times they used the food pantry in the past month, to rate their general health, number of days getting enough sleep, and depressive symptoms before and after food pantry access. The results were statistically significant to indicate food pantry use was directly related to an increase in adequate sleep, a decrease in depressive symptoms, and an increase in general health. Here at CSUMB, we have on-campus assistance at Basic Needs which is the same food pantry system that this study analyzed in the UC system. The Monterey Food Bank also has a website where you can "find food" and it will

tell you the organizations that have food assistance and what days they are operating. In Marina the library offers food assistance every first Monday of the month, the Holy Assembly Missionary Baptist Church offers food every third Saturday of the month, and Seaside High School offers food every Wednesday. These resources are available and ready to assist those in need. By using these services, the overall quality of life for CSUMB students will be improved.

Despite all the agriculture in the area, Monterey is known as a food desert and with the rising price of tuition, limited financial resources, and the housing crisis on campus, food insecurity is not a joke. Food insecurity damages overall performance and for students to reach out for support it is vital to encourage resources such as food pantries. My project covers three areas of food insecurity: one section on misconceptions about food pantries and food insecurity, one section on food insecurity and its relation to student success, and assistance of food pantries in the area. There is a need more than ever to bring light on this topic and show the students they are not alone and this workshop will hopefully validate the need and provide support.

Theory

Abraham Maslow was an American psychologist who put forth the theory regarding the hierarchy of needs. Maslow's Hierarchy of Needs is a theory that explores five categories of needs in a pyramid structure. The needs from bottom to top need to be met in order to move up the pyramid from the most basic needs to more complex ones. The five levels are physiological, safety, love/belonging, esteem, and self-actualization. The first level of psychological needs includes basic human needs such as food, water, and shelter; and without these basic needs being met one cannot move onto the next level. Maslow argued that needs motivate behavior so in this

case, the psychological need for food needs to be met in order to motivate positive behavior. The claim by Maslow is that if this first level, which is of utmost importance to the human body, is not met then the individual will not seek growth in the areas of safety, love and belonging, esteem, and self-actualization (Maslow, 1998).

This theory applies specifically to my participant group in all domains. Maslow's theory is applicable across emotional, physiological, developmental, and biological domains considering all the levels of needs. The first level of physiological needs involving food is what applies to this project. Using this framework provided by Maslow in order for the individual to motivate themselves into other behaviors of growth from one level to the next the first level needs to be met and so on. These college-age students who are food insecure are not having their basic needs met, so based on this theory they will not be motivated to grow in safety, belonging, esteem, and self-actualization. Once this need is met then in theory the students will be able to operate and grow in development. An example of this growth and development for college students is in academic potential. This theory is applicable to food insecurity and my project because research showed those students who were food insecure had worse rates of student GPA compared to their food-secure counterparts. The lack of food security on the entry level of the pyramid is in theory hindering their growth potential for love, belonging, and self-actualization which are all key parts of development in college students.

Consideration of Diversity

As previously mentioned, the project took place with college students from California State University Monterey Bay. The campus itself is said to be 36% low-income and 50% food

insecure (Student Basic Needs, 2020). The campus diversity is a mixture of all cultures with the majority being Latino and White. When looking at the enrollment of the student body 50% are Hispanic or Latino, 26% White, and the next largest group is 7% Asian (DATAUSA, 2024). My participants are college students so I geared my project on food insecurity towards college students. The participants for the workshop were all female and ranging in age from 18-25. The majority of them were low-income and they were from all cultures and ethnicities with the majority again being White and Latina.

When doing this project I aimed to make the workshop inclusive in all aspects. Culturally I knew that the participants would be majority White and Latina, so I made sure to include the student body statistics of those struggling with food insecurity. I made sure to not single out any culture struggling with food insecurity and rather, I pointed out that food insecurity yields to no one. I explained the factors that did impact food insecurity were things such as tuition, housing costs, and the rising price of food. When it came to being inclusive of the participants being all females, I did have them share their experiences with one another. Besides that, I could not share resources that were exclusively targeted towards females. My resources were for all individuals and the lack of males in my project was a limitation. Lastly, socioeconomic status was the biggest diversity characteristic and it was a delicate topic. The plan I followed for talking about this topic was to create a shared sense of struggle. The study I shared with the group pointed to the high rates of food insecurity explaining that so many people are struggling with this and it is a systemwide failure.

Learning Outcomes

The one-time workshop equips college students with the resources and knowledge to fight food insecurity. The three learning outcomes were the following:

1. CSUMB students will be able to identify two common misconceptions associated with food pantries.
2. CSUMB students will be able to identify two areas of student success that are impacted by food insecurity.
3. CSUMB students will be able to locate two resources in Monterey County that will provide free nutritious food.

Method

Participants

This capstone project was conducted at a meeting house in Seaside, California. There were 9 participants present and they were all recruited due to their standing as college students in the county. I am in a Bible study with these students and I asked them if they were willing to participate in a workshop regarding food insecurity among college students which they all opted to attend. The group was all female college students ranging from 18-24 years old with a mix of cultural diversity. They all reported low income and attendance at California State University Monterey Bay.

Procedures and Materials

For my capstone project, I did a one-time workshop. Once everyone was gathered I started the workshop. First, I introduced myself and explained what a capstone project was in case they did not know. I explained that the topic was food insecurity and that I would be presenting three different lessons regarding food insecurity. I had my PowerPoint pulled up, so I dove into the content and let them know there would be an assessment at the end.

First, I wanted students to be able to identify misconceptions about food assistance. I started by sharing general statistics about food insecurity and gave them an open-ended question to make the environment comfortable. I asked a question to my participants about what kind of food was at food pantries, and if they had ever gone to a food pantry. One of my participants said she always thought it was just canned food and didn't go because she thought there was nothing good. I let them discuss with one another a little about their experience and attitudes towards food assistance and food insecurity themselves. I had slides that explained the implications of misconceptions about food insecurity and the barriers when it comes to students going to food pantries. I went over the slides to explain how these misconceptions are not true and shed light on the truth and what literature showed pertaining to food insecurity and assistance. I gave first-hand experience outside the slides about my own experience of working at a food pantry and conversing with different students on campus about food insecurity. Before moving on to the next lesson I gave them time to discuss.

Next, I wanted the participants to learn about food insecurity and the impact it has on student success. I let them know that we would be moving on to the next lesson and showed them literature about mental health and student health being impacted by food insecurity. We talked about things such as BMI, sleep quality, depressive symptoms, and student GPAs. After this, I

gave them time to converse with one another again about their thoughts and feelings based on what they just learned.

Lastly, I discussed resources for addressing food insecurity. I gave them literature that showed the advantages of getting assistance. I showed them a slide that outlined different days that different places in the county had food assistance so they felt empowered to get assistance. I told them there were no requirements and the different services these sites offered. It was good to end on a positive note and the participants took pictures of the sites. I ended the workshop by giving the assessment which was three parts that covered each of the lessons. It was a one-time workshop so they did the assessment in one sitting. They saw the questions on the PowerPoint slide and responded on their sheet of paper. The results will be discussed more in-depth in that section.

The Results

The content part of the workshop lasted about forty-five minutes and the assessment followed immediately after. I passed out paper and pen to all nine participants. I had three different questions for them to answer. They were given time for each question and were asked to write their response on the paper without talking to others, and I let them know I would be collecting it at the end.

Learning outcome 1 was that the students would be able to identify two common misconceptions associated with food pantries. To assess their understanding of this learning outcome I asked the students to write two negative beliefs, stigmas, or misconceptions that are associated with getting assistance. Based on the question, “What are two negative beliefs,

stigmas, or misconceptions about food pantries?” all 9 participants were able to correctly identify two. Some examples were, “Only homeless people need food pantries, I’m being lazy that’s why I can’t afford food, and the food at food pantries isn’t nutritious or helpful.” Seeing that all 9 of the participants were able to identify two misconceptions, I considered the learning outcome fully met.

Learning outcome 2 was that the students would be able to identify two areas of student success that are impacted by food insecurity. To assess this, I asked the students to write down two areas of student success that are impacted by food insecurity. Based on the question, “What are two areas of student success that are impacted by food insecurity?” 100% of the participants were able to correctly identify two areas. All nine participants were able to give answers such as, “mental health, grade point average, and physical health” as responses. Therefore, learning outcome 2 was fully met.

Learning outcome 3 was that students would be able to locate two resources in Monterey County that would provide free nutritious food. To assess this part of the lesson I asked the participants to write two places where they could receive assistance in the area if they were in need of food. Based on the question, “What are two food pantries in the county that you can use as assistance?” 5 out of the 9 participants were able to correctly identify two. The other 4 participants were able to correctly identify one food pantry in the area. Due to only 56% of the participants being able to identify two and the other 44% identifying one I considered this learning outcome to be partially met.

Discussion

The main focus of my capstone project was to bring awareness of food insecurity on my college campus and attempt to inform students on this subject and empower them to seek help and not feel alone in this struggle. I wanted to get the conversation started around this enormous issue that is hindering so many individuals and take steps in the right direction to lower the alarming rates of food insecurity. The project was successful in many ways and the learning outcomes reflect this. The three learning outcomes all correlated to sections of the lesson that I felt were most important. After the workshop and the assessment, it was found learning outcomes 1 and 2 were both fully met and passed by all participants, and learning outcome three was partially met. Beyond the learning outcomes, I felt as though the project was extremely successful in opening up the conversation. I've found that every time I have had a conversation with someone about my project it creates a space where they share their experiences and thoughts around food insecurity. The conversations of the participants corroborated the research about the high rates of food insecurity among college students and the negative beliefs, stigmas, or misconceptions associated with this (Zein et al., 2018). The project worked well with the participants because there was a sense of them being able to relate to the struggle, share their experiences, and learn new things from the workshop. They all found the workshop to be very interesting and engaging due to the relevance of the topic.

There were a few limitations when it came to the project itself. I found that the biggest challenge was the participants all felt very strongly or had a lot to say about this topic, so at times it was hard to stop the conversations about their personal experiences to continue the lessons. Besides this, the only other limitation was when it came to learning outcome 3 and this being

partially met. This learning outcome asked them to identify two food pantries in the county and only 56% of the participants were able to identify two. I believe that the disconnect with this learning outcome was that they took pictures of the sites that had assistance, but when I was assessing them I asked if they could write the two places from memory not using other resources. This was limiting because most of them took the photo with the expectation of using that as a guide in the future rather than having the places known in their memory.

In the future, I hope to expand my area of influence by sharing this information with a much larger group. I felt as though the project was very powerful for the nine people I did present it to and I believe that's just the tip of the iceberg. I would want to present this workshop in classes and community centers in the county because it is such a prevalent problem facing all ages and backgrounds. In the future, I hope that this is a topic all college campuses are having spaces and conversations about and it starts with us students bringing awareness.

References

Adamovic, E., Newton, P., & House, V. (2022). Food insecurity on a college campus: Prevalence, determinants, and solutions. *Journal of American College Health, 70*(1), 58–64.

<https://doi.org/10.1080/07448481.2020.1725019>

Bruening, M., van Woerden, I., Todd, M., Brennhofer, S., & Laska, M. (2016). Factors related to the high rates of food insecurity among diverse, urban college freshmen. *Journal of the Academy of Nutrition and Dietetics, 116*(9), 1450-1457.

Bay, CSUM (2020). *Basic needs*. California State University Monterey Bay.

<https://csumb.edu/basicneeds/background/>

California Association of Food Banks. (2023).

<https://www.cafoodbanks.org/hunger-data-reports/#:~:text=CA%20food%20insecurity%20rate%3A%20~23,t%20tell%20the%20full%20story>.

California State University-Monterey Bay. Data USA. (2024).

https://datausa.io/profile/university/california-state-university-monterey-bay#enrollment_race

El Zein, A., Mathews, A. E., House, L., & Shelnett, K. P. (2018). Why are hungry college students not seeking help? Predictors of and barriers to using an on-campus food pantry.

Nutrients, 10(9), 1163-. <https://doi.org/10.3390/nu10091163>

Feeding America. (2024).

<https://www.feedingamerica.org/hunger-in-america/food-insecurity#:~:text=Food%20ins>

ecurity%20is%20an%20official,children%2C%20experience%20food%20insecurity%20
annually.

Find food. Food Bank for Monterey County. (2023).

<https://foodbankformontereycounty.org/food-assistance/>

Food and Housing Survey. California Student Aid Commission. (2018).

<https://www.csac.ca.gov/food-and-housing-survey>

Goldrick-Rab, S., Richardson, J., Hernandez, A., & Cady, C. (2019). Still hungry and homeless in college. *The Hope Center for College, Community, and Justice*.

Maroto, M. E., Snelling, A. M., & Linck, H. F. (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.

Martinez, S. M., Grandner, M. A., Nazmi, A., Canedo, E. R., & Ritchie, L. D. (2019). Pathways from food insecurity to health outcomes among California University Students. *Nutrients*, 11(6), 1419. <https://doi.org/10.3390/nu11061419>

Martinez, S., Kalaydjian, S., Ritchie, L., Nazmi, A., & Prather, A. (2020). 0238 Campus Food Pantry Assistance is Related to Better Physical And Mental Health Through Adequate Sleep Among College Students in a Public University System. *Sleep (New York, N.Y.)*, 43(Supplement_1), A91–A92. <https://doi.org/10.1093/sleep/zsaa056.236>

Maslow, A. H. (Abraham H., Stephens, D. C. (Deborah C., Heil, Gary., & Maslow, A. H.

(Abraham H. (1998). *Maslow on management / Abraham H. Maslow with Deborah C. Stephens and Gary Heil*. John Wiley.

Patton-Lopez, M. M., Lopez-Cevallos, D., Cancel-Tirado, D. I., & Vazquez, L. (2014).

Prevalence and correlates of food insecurity among students attending a midsize rural university in Oregon. *Journal of Nutrition Education and Behavior*, 46(3), 209-214.