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University of Arkansas  
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Agricultural Business

## Assessing Food Insecurity Across First-Generation College Students and Non-First-Generation College Students at the University of Arkansas Fayetteville

First-generation college students (FGCS) are experiencing food insecurity, with few resources to alleviate this burden. Compared to non-FGCS, FGCS may face additional challenges that contribute to food insecurity. First-generation college students are more likely to work part-time or full-time jobs to help pay for college expenses. This can leave them with less time to cook and prepare healthy meals. First-generation students are more likely to live in areas with limited access to affordable and healthy food. First-generation college students may experience more stress than non-FGCS, due to the pressure to be the first in the family to succeed academically at the college level, the financial burden of college, and the challenges of adjusting to a new environment. This stress can lead to unhealthy eating habits and food insecurity.

The consequences of food insecurity for first-generation college students can be significant. Food insecurity can lead to poor academic performance, health problems, and mental health issues. It can also make it more difficult for students to graduate from college.

Colleges and universities can play an important role in helping to address food insecurity among first-generation college students. First-generation students have voiced a need for help in accessing healthy food options while attending the University of Arkansas Fayetteville (UAF). This will advance these FGCS in their studies, involvement, and help them do their best to succeed on this campus. The purpose of my study is twofold, to 1) identify needs of FGCS college students as related to food insecurity; and 2) determine if their needs are different from those of other undergraduate college students. My hope is that this information will contribute to the development of new programs or new best practices to help connect FGCS will resources to alleviate hunger.

My project will have two phases. Phase one will involve collecting data through a survey while phase two will focus on analyzing the results, with a specific focus on examining if differences exist in responses between first-generation and non-first-generation students. First, I will develop a mixed methods survey, asking both qualitative and quantitative elements. Second, I will administer the survey electronically through Qualtrics beginning in January. Third, with data collection completed, I will conduct the following analyses. I will run descriptive statistics for the quantitative responses including some of the demographics, food insecurity questions, and resources used. I will use t-tests and chi square tests to test for differences in responses between FGCS and non-FGCS. Fourth, I will prepare a written report and presentation for campus officials.

I expect to find that first-generation students believe there are a lack of resources relevant to their needs related to food insecurity. However, I am currently unsure as to whether or not there is truly a lack of resources available or a lack of understanding how best to access them. I am also unsure as to whether FGCS and non-FGCS share similar opinions on availability and use of resources. I hope my resource can clarify this for campus so action can be taken to create new resources or promote existing resources to students in an efficient manner.

## **Introduction**

### **Problem Statement**

First-generation college students are experiencing food insecurity, with little to no resources to alleviate this burden (Wilkins, 2018). These college students may not be aware of all that is offered on college campuses because they do not have the assistance that non-first-generation students have (Falcon, 2015). The University of Arkansas Fayetteville (UAF) has 32,140 students enrolled (University of Arkansas News, 2023) and about 6,100 of those are first-generation students (Flanagin, 2022). First-generation students have voiced a need for a program that offers them resources to access healthy food options while attending the UAF. This will advance these students in their studies, involvement, and help them do their best to succeed on this campus (Wilcox, 2022).

### **Purpose of the Study**

The purpose of this study is twofold, to 1) identify needs of first-generation undergraduate college students as related to food insecurity; and 2) determine if their needs are different from those of other undergraduate college students.

## **Literature Review**

Food insecurity is a leading public health concern, yet it is understudied amongst postsecondary students (Wilcox, 2022). Food insecurity in the United States is more prevalent among college students than it is among the general population (Broton & Goldrick-Rab, 2018).

Food insecurity is more prevalent among college students for many reasons (Broton & Goldrick-Rab, 2018). Factors such as not qualifying for the Supplemental Nutrition Assistance Program (SNAP), financial burdens in college, and poor financial budgeting are some of the

reasons students experience food insecurity. The price of college has grown substantially over the past several decades, which can lead to housing insecurity, that further impacts the food insecurity (Broton & Goldrick-Rab, 2018). When being challenged with the task of paying rent/mortgage and the utility bill, students often start struggling to pay for food (Broton & Goldrick-Rab, 2018; Richards, 2022; Wilkins 2018). There are many barriers that keep college students from being able to access federal funding that is available, such as not having the knowledge and time to apply, being dependents within a family, and being required to repay the majority of financial aid (Adamovic, 2022). As a result, college students have reported cutting the size of meals or skipping meals altogether because there was not enough money for food (Broton & Goldrick-Rab, 2018).

Food insecurity not only has to do with food, but also impacts cognitive, social, and emotional development (Adamovic, 2022). As a result, college food insecurity can lead to poorer general health and mental health (Wilson et al., 2022). It also can lead to poor emotional development, depressive symptoms and suicidal ideation (Adamovic, 2022). These emotions and effects can greatly impact the student as they are trying to advance their education. Students who experience food insecurity increase the risk of struggling in school. Food insecure students are less likely to achieve over a 3.5 GPA (Cady, 2018).

There are select resources that help students at some institutions, such as pantries. However, students won't always access a pantry for various reasons including: believing others need the food more than they do, feeling embarrassed to ask for help, and not having a time schedule that aligns with food pantry hours (McArthur, 2020). Moreover, first-generation college students have less assistance and guidance than traditional students, and are more likely to work and face food insecurity (Wilkins, 2018; Walworth et al., 2022; Wilson et al., 2022).

The studies reviewed in this section show that college students struggle with food insecurity across the country, especially first-generation college students (Walworth et al., 2022; Wilson et al., 2022). Without the proper assistance, first-generation college students will continue to struggle when trying to obtain a higher education (Wilkins, 2018). There are ways to combat food insecurity on college campuses, and when that is clearly identified and resolved, students will begin to thrive with their education, and within their cognitive, social, and emotional development (Adamovic, 2022).

The following research questions will guide this project: 1) What reasons do college students cite for limited access to food/experiencing food insecurity? 2) What solutions do college students think are needed to help alleviate food insecurity on campus? 3) Are these reasons and solutions different for first-generation students as compared to other college students?

## **Methods**

This project will have two phases. Phase one will involve collecting data through a survey while phase two will focus on analyzing the results, with a specific focus on examining if differences exist in responses between first-generation and non-first-generation students.

First this Fall, I will develop a mixed methods survey (one that employs qualitative and quantitative elements (Johnson, 2007)). This survey will include both open and closed ended questions. The survey will be comprised of five sections. In the first section I will ask students if they experienced food insecurity and how often, and any negative physical and mental health or academic impacts they experienced due to food insecurity. The second section will focus on their knowledge and use of campus resources that can provide some assistance with food insecurity. The third section will focus on what students believe the campus can do to alleviate food insecurity

for students. The fourth section will explore whether UAF students believe that first-generation students are more susceptible to food insecurity and why/why not. In the final section I will ask for demographic information (year in school, gender, whether or not they are first-generation, etc.) about the respondent. I will seek IRB approval this fall so I can begin data collection in Spring.

Second, I will administer the survey electronically through Qualtrics beginning in January. The targeted survey population is all undergraduate students attending UAF. I will promote my survey through flyers placed on campus, through emails sent to undergraduate students, through presentations with groups affiliated with first-generation students on campus, and in classes.

Third, with data collection completed in early February I will begin my analysis. I will run descriptive statistics for the quantitative responses including some of the demographics, food insecurity questions, and resources used. I will also be looking at common themes in responses to the qualitative questions, particularly around reasons for food insecurity, and resources that students are seeking. With the help of my mentor, I will use statistical software to test whether there are significant differences in quantitative responses between first-generation students and others regarding their experiences with, reasons for, and solutions to, food insecurity.

Fourth, by the end of March I will conclude my analysis and begin writing up results in a report for campus. This report will explain all of the results in detail. Along with the report, I will develop a short voice over PowerPoint that explains the highlights of the study, emphasizing any differences found between first-generation and non-first-generation students and any innovative potential solutions recommended by respondents. In late April, I will share the report with important groups on campus such as the UAF Arkansas Associated Student Government, the Dean of Students, and the Volunteer Action Center so that actions may be taken based on study results to help students.

### Expected Results

I expect to find that first-generation students believe there are a lack of resources relevant to their needs related to food insecurity. However, I am currently unsure as to whether or not it is only first-generation students who could benefit from new resources. If new resources are needed, as a first-generation student myself, I can envision some examples such as: 1) a resource created for students to have access to fresh foods, 2) tips on how to apply and qualify for SNAP benefits, and 3) financial planning workshops to alleviate both food insecurity and other first-generation student issues will be wanted on the University of Arkansas campus.

Offering this insight will hopefully bridge the gap between first-generation college students and the resources that are offered on the University of Arkansas campus to help alleviate food insecurity and other problems first-generation students are wanting to solve. My hope is that all students will take advantage of new resources (or better use existing ones) so that we can alleviate food insecurity on the UAF campus completely.

### Timeline

Month	Data Collection	Data Analysis	Write up of Recommendations	Presentation of Recommendations
January	X			
February	X	X	X	
March		X	X	
April			X	X

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