

Identifying Food Insecure Students and Constraints for SNAP/CalFresh Participation at California State University, Chico

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Abstract

Food insecurity presents an ongoing problem for college students across the country. Students who are food insecure are more likely to experience lower levels of cognitive function, higher levels of mental health distress, and consequently, achieve lower levels of academic performance which may delay time to graduation. This study identified the prevalence of food insecurity and CalFresh participation among 707 surveyed respondents enrolled as students at California State University, Chico. The study revealed three significant findings: 1) 46% of respondents suffered from low to very low food security, a more than three-fold higher proportion than the rate for the U.S. population; 2) only 20% of CalFresh eligible respondents were enrolled in the CalFresh nutrition assistance program; and 3) CalFresh eligibility requirements failed to capture the majority of respondents who reported significant food insecurity. Best practices for student success indicate implementation of outreach and enrollment programs to increase participation in CalFresh for food insecure students.

Rationale

Food insecurity is a term used to describe households with limited access to adequate amounts of culturally and nutritionally acceptable foods and is an issue that affected an average of 17.4 million Americans or 14% of the population at some time during 2014¹. Food insecurity can be seen at higher rates depending on age, race, geographic location and many other factors and is a growing concern among college students in the United States. Specifically, studies indicate food insecurity among students is consistently higher than the national average with rates between 21% and 59%^{2,3,4,5}. This is not surprising considering the rising costs of tuition, costs of living, and the limited time students have to work and study. Student success and graduation rates are dependent on many variables and one of the greatest predictors of this success is having basic needs met. Food insecurity has been shown to have a negative impact on academic success as well as students' health and wellbeing^{2,6}.

In California, eligibility is determined by a household's income falling at or below 200% of the Federal Poverty Level. However, for students there are additional requirements that must be met¹⁰. Of these additional requirements, the student work rule which requires students to work in a paying job for an average of 20 hours per week or a total of 80 hours per month often makes it difficult for students in need of assistance to access these benefits^{7,8}. There are some exemptions to the student work rule which would allow a student to be eligible without working 20 hours per week. Examples of these exemptions include being eligible for Work Study and anticipating working, and having a child under the age of 6⁸.

Purpose

The primary objective was to identify the frequency with which students are both food insecure and ineligible for CalFresh to better understand the relationship between food security status and CalFresh eligibility.

Methods

This cross-sectional study was conducted on the California State University, Chico campus. Data was collected from May through June of 2016. Students enrolled in the Spring 2016 semester and over the age of 18 were included in the study; their emails were obtained by the CSU, Chico Office of the Registrar (n=15,631)⁹. A total of 5,493 students were randomly selected to

participate and were recruited online through an email invitation to participate in the CSU, Chico Food Security Survey through Survey Monkey. The study was approved by the CSU, Chico Human Subjects Review Committee.

Quantitative data was collected using the electronically provided CSU, Chico Food Security Survey which contained, in part, the validated 6-item USDA Food Security Survey Module¹⁰. The dependent variable, food security status, was categorized into the following levels: Food Secure, either High Food Security (HFS) or Marginal Food Security (MFS); or Food Insecure, either Low Food Security (LFS) or Very Low Food Security (VLFS). LFS is defined as reports of reduced quality, variety, or desirability of diet, but little or no indication of reduced food intake; whereas VLFS is defined as reports of multiple indications of disrupted eating patterns and reduced food intake^{1, 10}.

The instrument was assessed for face validity and reviewed by a group of multi-disciplinary colleagues for professional feedback. It was also tested for internal validity by a group of university students who were excluded from the main study.

Findings

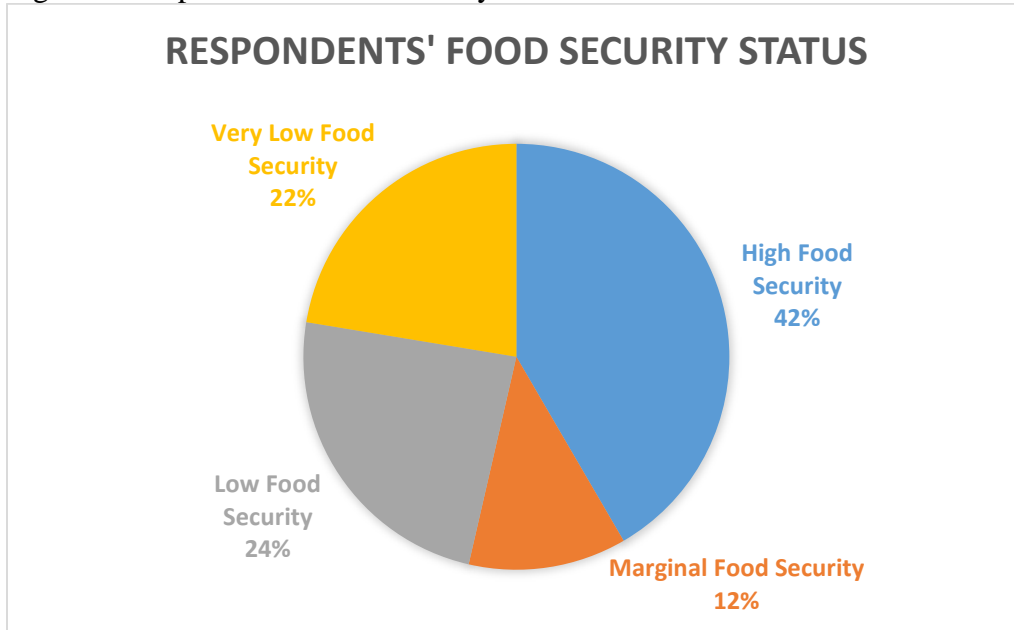
Several major themes emerged from the data that indicated a pattern of low levels of food security among the respondents, with particular groups more at risk of low food security than other groups.

The survey received 707 complete responses. Respondents reported diverse racial and ethnic backgrounds and a cross section of class level. Fifty-five percent of the respondents identified as White, non-Hispanic; 22% as Hispanic; 7% as Asian; 2% as African American; 1% as Native American; and 13% as other or preferring not to state their race. The most represented class level was junior, equivalent to the third year of undergraduate education. Thirty-two percent of respondents reported junior level status, 25% as senior status, 17% as freshman status, 14% as sophomore status, 8% as graduate level status (post-bachelor degree), and 1% were an unknown class level.

The majority of respondents reported living off-campus with roommates. Fifty-four percent of respondents lived off campus with roommates, while 15% lived in campus housing, 14% lived off campus with a spouse or children, 9% lived off campus alone, and 8% lived with parents or other family. Less than 1% of respondents lived in Greek housing or were in unstable housing situations.

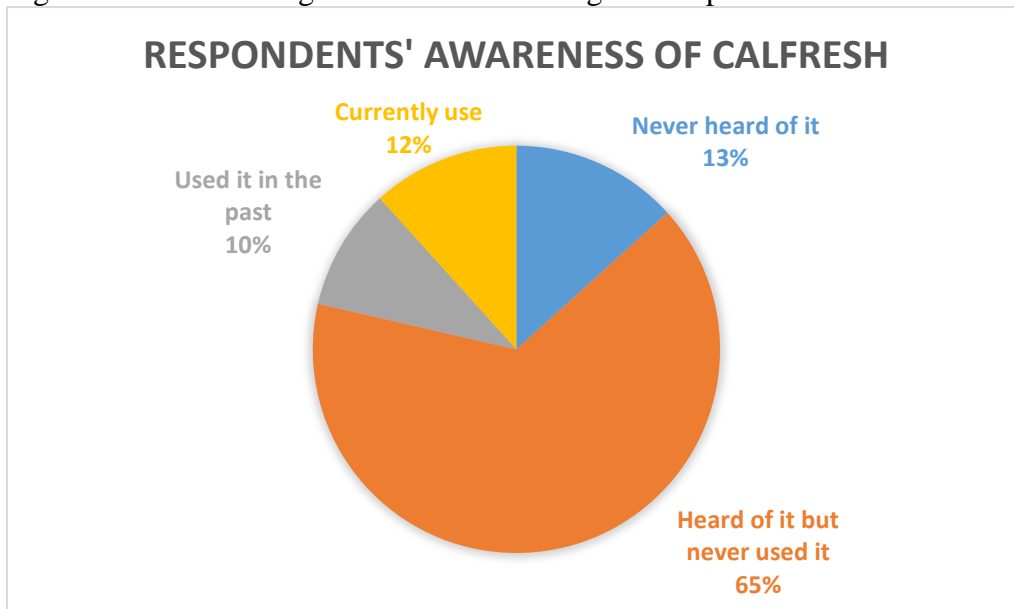
Patterns of food security varied widely among the respondents. While 54% of the respondents reported that they had high to marginal food security, 46% of respondents reported low to very low food security. These findings point to a more than three-fold higher proportion of the student population as food insecure (46%) compared to the U.S. population (14%)¹.

Figure 1. Respondents' Food Security Status in the Previous 12 Months



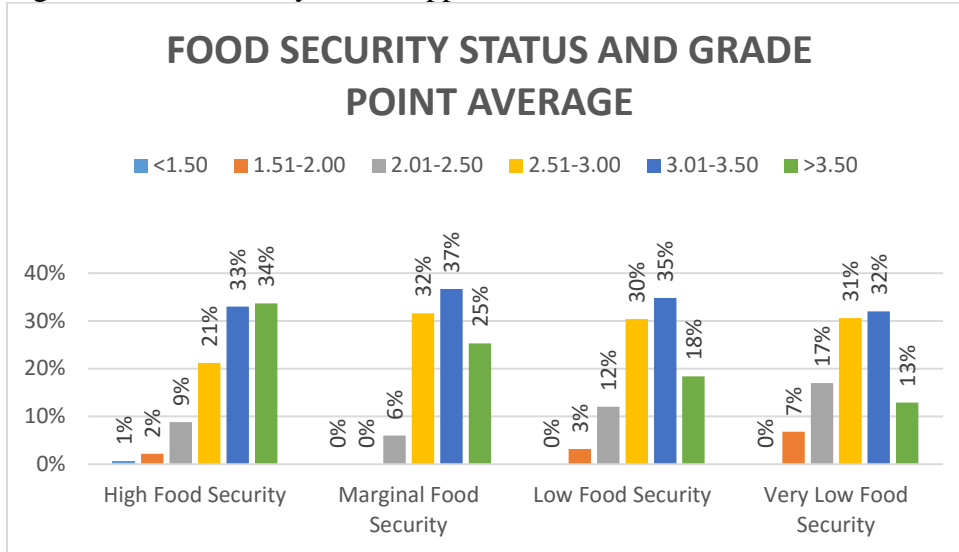
Despite 46% of the respondents reporting low to very low food security based on USDA criteria, and 47% of respondents assessed as eligible for CalFresh enrollment based on CalFresh enrollment criteria, only 12% of all respondents were enrolled in CalFresh benefits at the time of the survey.

Figure 2. CalFresh Program Awareness among All Respondents



The findings shown in Figures 1 and 2 are particularly troubling given the implications for student success and the relationships between food security and grade point average in this population. Of particular concern is the finding shown in Figure 3 that those who report the lowest grade point averages have the highest levels of food insecurity.

Figure 3. Food Security Status Appears to be Associated with School Performance



Although there was no significant difference in the food security of respondents reporting GPAs between 3.0 and 3.5 across the groups, the rate of High Food Security students with a GPA of 3.5 or above (34%) is more than 2.5 times greater than the rate of Very Low Food Security students with a GPA of 3.5 or above (13%). At the opposite range of the GPA spectrum in the 2.01 to 2.5 range, the relationship between GPA and food security was inverse to that in the >3.5 category. In this 2.01 to 2.5 GPA range, 9% of respondents reported High Food Security while 17% reported Very Low Food Security. Perhaps most troubling from these findings, 7% of respondents who reported Very Low Food Security reported a GPA between 1.51 and 2.00. These findings suggest a direct relationship between performance in school and food security, such that higher levels of food security are associated with better school performance.

The CSU, Chico findings are consistent with previous studies of food security and academic performance at the college level^{11, 12, 13} demonstrating that students with lower levels of food security tend to achieve lower levels of academic performance. Collectively, these studies support the conclusion that food insecurity negatively affects student grades and, concomitantly, progress toward a four-year college degree¹¹.

Delayed graduation is a continuing concern for universities nationwide, and for the student population, due to the additional cost to colleges to educate students beyond four years¹⁴. This is particularly important today as federal funding budgeted to universities has decreased since 2007¹⁴ yet states such as California have imposed tuition freezes at public universities. For students, delayed graduation increases the overall cost of tuition, fees, and other costs associated with college and translates to lost wages for every year of delayed entry into the workforce¹⁵.

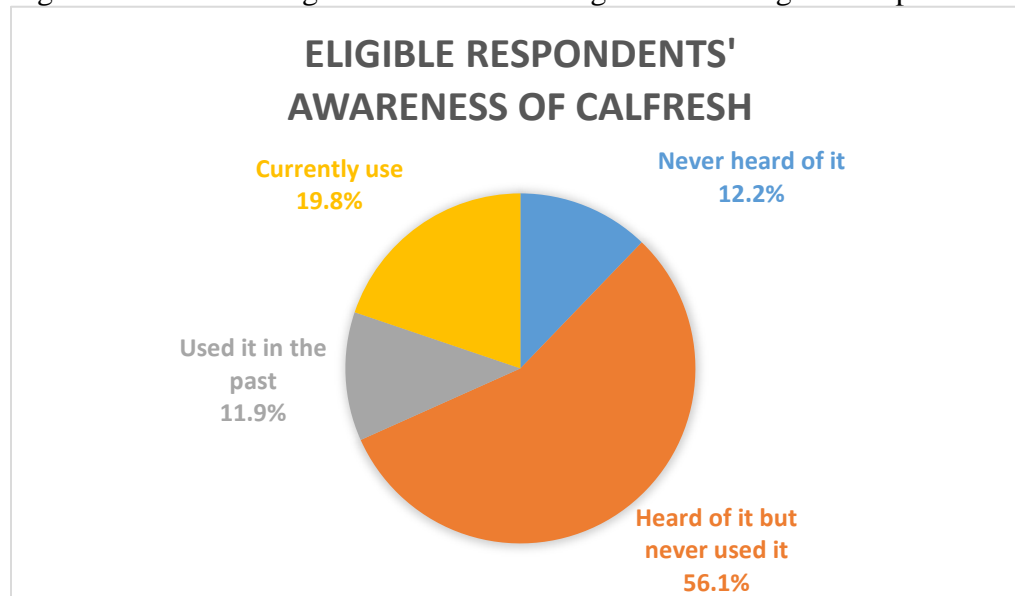
Despite the mental and physical health issues regarding low food security and the associated cost of delayed graduation, this study found a disconnect among the numbers of respondents reporting food security based on USDA criteria, the number of respondents who were eligible for CalFresh nutrition assistance benefits and the number of respondents who reported that they

were enrolled in the CalFresh program. While 47% of all respondents were found to be eligible for CalFresh benefits based on income and employment status, only 12% of all respondents were currently enrolled. And, fewer than 20% (19.8%) of those 47% of all respondents who were assessed as CalFresh eligible, were current participants in the CalFresh program.

In addition, there was a significant lack of consistency in the identification of students who were food insecure using USDA criteria compared to students assessed as eligible for CalFresh benefits. Of all 707 respondents, only 29% were identified as both food insecure and CalFresh eligible despite the finding that 46% of respondents self-reported as food insecure. Two additional findings help to explain this disconnect among food security status, CalFresh eligibility and CalFresh enrollment. First, not all participants who identified as Low to Very Low Food Secure qualified for CalFresh benefits due to income, work or Work Study requirements or other requirements for the program. For reasons not elucidated by this study, common economic eligibility indicators such as Pell Grant and Work Study eligibility do not capture a significant proportion of food insecure students. Secondly, respondents who were eligible for CalFresh were either not aware of the program or were aware, but failed to enroll in the program.

As shown in Figure 4, only 19.8% of those 47% of all respondents assessed to be eligible for CalFresh based on income and employment status were currently enrolled in CalFresh.

Figure 4. CalFresh Program Awareness among CalFresh Eligible Respondents



Discussion and Implications

The finding that 80% of CalFresh eligible respondents are not enrolled in this nutrition assistance program suggests that there are personal and structural barriers that need to be identified and addressed in order to increase CalFresh enrollment among the university student population. Future research should focus on assessing those students who are successfully enrolled in CalFresh to develop best practices to aid those students who are eligible, but not enrolled. Best practices to be developed should include knowledge of how students become aware of CalFresh,

where they are most likely to access food assistance benefits and how to reduce stigma associated with enrollment. This study focused only on students enrolled at California State University, Chico; however, it is reasonable to presume that there are many other CSU campus students in need as well.

In partnership with the CSU Office of the Chancellor, CSU, Chico's Center for Healthy Communities became the lead contractor for the first university system-wide effort to conduct CalFresh Outreach with students on CSU campuses. The CalFresh Outreach contract will assist 11 campuses to develop resources to increase awareness about this important nutrition assistance program, help eligible students apply for CalFresh, and partner with local county social service offices to identify and reduce barriers associated with student enrollment. The 11 participating campuses include Cal Poly, San Luis Obispo, Cal State LA, CSU Chico, CSU Dominguez Hills, CSU East Bay, CSU Long Beach, CSU Northridge, CSU San Bernardino, Fresno State, Humboldt State, and Sacramento State. This funding will help CSU students acquire the nutrition they need to support academic performance and four year graduation rates, as well as decrease stress associated with the high cost of attending college.

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