

The Elephant in the Room: Understanding the Dilemma Surrounding Food Security Among College Students

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BACKGROUND

Food insecurity is defined as the limited or uncertain access to safe, nutritionally adequate, and acceptable foods that can be obtained in socially acceptable ways (What is food insecurity, (n.d)). Through various studies, it has been found that food insecurity among college students is a greater problem than it is in the general population. Among college students, trends report that the prevalence of food insecurity among college students ranges from 14-59 percent of students being food insecure at some point during their college career. Food insecurity is a prevailing issue amongst California State University, San Bernardino students (CSUSB).

Objective

Gain further insight into the socioeconomic and demographic factors that constitute the CSUSB food challenged student population.

Materials and Methods

We utilized a mixed-method cross-sectional study design sampling 611 study participants. Participants were CSUSB students ages 18 and older. To develop the mixed methods survey, researchers used A Knowledge, Attitude and Practices (KAP) survey model and developed questions specifically related to food insecurity and the demographics associated with it. Data collection involved the following three processes: administering a pre-survey, showing a Public Service Announcement (PSA) video, and administering a post-survey to assess the participant's knowledge of the topic. Income and variables of interest were coded to combine responses. Significance frequencies of Pearson Chi-Square and Fisher's Exact Test were used to develop the relationship between socioeconomic factors. All statistical analyses were conducted using SPSS version 24 with a p-value of less than 0.05, denoting significance.

Acknowledgment

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RESULTS

611 study participants were recruited. Participants were CSUSB students 18 years and older 67.1% were female, 67% were Hispanic or Latino, and 77.3% earned an annual income of Less Than \$20,000. Other demographic details such as county of residency, on campus housing, and education level are presented in (Table 1).

Table 1. Demographic Characteristics

DEMOGRAPHIC CHARACTERISTICS					
All Participants	Sample Size		Valid Percent		
		611		100.00%	
Race/Ethnicity			Education Level		
Hispanic or Latino	446	67.00%	Freshman	104	17.00%
African American	26	4.30%	Sophomore	117	19.10%
Asian	46	7.50%	Junior	214	35.00%
White	61	10.00%	Senior	176	28.80%
Other	30	4.90%			
On Campus Housing			County Residency		
Yes	54	8.80%	San Bernardino	394	64.50%
			Riverside	188	30.80%
			Orange	14	2.3%
			Los Angeles	13	2.1%
No	557	91.20%			

Nearly one quarter of CSUSB participants reported thinking they are food insecure (21.1%)

Table 2 College students who believe they are food insecure.

Based on your answers, do you think you are food insecure?		
	Frequency	Percent
Yes	129	21.1%
No	480	78.6%

RESULTS CONTINUED

College students living on campus reported losing weight because there wasn't enough money for food (25.9%) compared to students who live off campus. (P-value 0.0085)

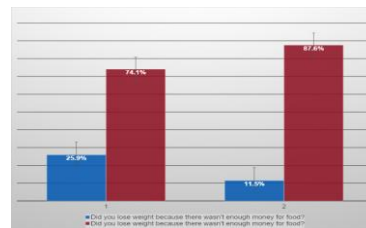


Figure 1 Students living on campus and losing weight because there wasn't enough money for food .

Among college participants, a significant proportion of students who live on campus reported reducing the size of their meals because there wasn't enough money for food compared to college students who do not live on campus .

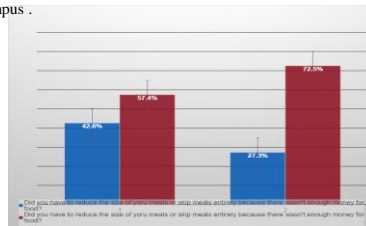


Figure 2 College students living on campus and reducing the size of their meals because there wasn't enough money for food.

CONCLUSION

San Bernardino's population is known to have higher rates of food insecurity (12%) (Raymundo, 2017). Since most of CSUSB students are SB residents (64.5%), it is important to assess the demographics and socioeconomic factors associated with food insecurity.

CONCLUSION CONTINUED

Our project showed that participants who reside on campus self-reported an increase in reducing or skipping meals due to a lack of monetary funds (Figure 2).

Similarly, many participants who resided on campus significantly reported losing weight because there was not enough money for food (25.9%). In part, this may be due to student's independence during their college experience. Furthermore, due to a decline in financial aid funding, many college students report having a difficult time affording housing, books, supplies, and food. (Andrews,2018)

Raymundo (2017) found that 40.5% of the San Bernardino County population was under the Federal Poverty Level and 12% were food insecure. Almost one quarter of CSUSB students reported being food insecure (21.1%). These findings should increase the urgency to investigate the extent of food insecurity among college students since the Chancellor's Office found that the 23 California State University campuses faced 41.6% of food insecurity (California State University Office of the Chancellor, 2018). Since 67.1% of our sample was female, we are concerned that pregnant women or women who may become pregnant may be at higher risk of undernutrition due to food insecurity.

Limitations and Future Direction

Due to COVID-19, research data collection was cut short. At least 50 more participants were needed to have an accurate representation of the entire CSUSB student body. Future researchers can target a larger proportion of students for a more accurate representation of food insecurity among CSUSB students. Our study implicated several opportunities for future research regarding food security among CSUSB students. The PSA can be utilized at the beginning of every school year to remind CSUSB students about the resources they have here on campus.

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