Appendix F

California State University, San Marcos

Quantitative Methods
The Phase 2 survey was distributed to all students (n=13,144) via email at California State University, San Marcos (CSUSM) between 10/31-11/21/2016 and 7.8% of students participated (n=1,023). Students received an initial email invitation to complete the survey along with two weekly email reminders. Students were able to enter their names in a raffle to win one of two $40 Target gift cards. A campus point person, identified by a campus administrator, worked with the research team to recruit students and administer the survey electronically via campus email address. The marketing team through the CSU Office of the Chancellor created marketing materials (e.g., press release, flyer, social media template posts) for the campus point person to disseminate in order to encourage student participation.

Comparison of Demographics of Survey Participants to Overall Campus Student Population
Overall, CSUSM sample characteristics slightly varied from the demographics of the CSUSM student body. Student responses disaggregated by racial and ethnic groups were similar in the sample and CSUSM population, with the exception percentages of White participants who were 45.7% of the sample and 29.3% in the student population. Asian/Pacific Islander participants were 16.0% of the sample and 10.1% of the student population. Full time students were represented higher in the sample (89.2%) than the student body (83.1%). Part time students were represented lower in the sample (10.7%), but higher in the student population (16.9%). There were a higher representation of non-first generation college students (59.5%) than first generation students (40.5%) in the sample. The largest difference was regarding gender, where women students were 79.1% of the sample, but 61% student body. Women often have much higher response rates then men on surveys (Sax, Gilmartin, & Bryant, 2003; Underwood, Kim, & Matier, 2000). The mean age was slightly higher in the sample (x=23.3 years) when compared with the student body (x=22.0 years).

Table 1

CSU, San Marcos Sample and CSU, San Marcos student population demographics compared

Demographics	CSU, San Marcos Study Sample n=1,023	CSU, San Marcos 2016-2017 Academic Year n = 13,144
Race		
Asian/Other Pacific Islander	16.0%	10.1%
Black/African American	3.6%	3.2%
White	45.7%	29.3%
Ethnicity		
Hispanic	44.1%	41.3%
Non-Hispanic	55.9%	-
Gender		
Male	19.8%	39.0%
Female	79.1%	61.0%
Transgender	0.3%	-
Do not identify as any of the above	0.4%	-
Class Standing		
Freshman	18.5%	25.2%
Sophomore	15.4%	14.5%
Junior	30.0%	24.1%
Senior	29.8%	31.8%
Graduate Student	6.3%	4.4%
PT/FT Status		
Full time	89.2%	83.1%
Part time	10.7%	16.9%
First Generation Student		
Yes	40.5%	30.3%
No	59.5%	-
Age		
Range	18-60	Under 17-Over 65
Mean	23.3	22
Median	21	-

Overall Campus Food Security and Homelessness

Overall, 42.2% of CSUSM students reported food insecurity, of those 19.8% experienced low food security and 22.4% very low food security, conversely 38.2% reported high food security and 19.6% reported marginal food security. Overall, 13.4% of CSUSM students reported being homeless one or more times in the last 12 months based on the combined HUD and DOE definitions.

Academic Achievement

As a general trend, students who experienced food insecurity in the last 30 days and/or homelessness in the last 12 months had lower GPAs and higher academic concerns than students who reported being food secure and/or housing stable [See Tables 2-5]. GPA was based on self-report. Academic Concerns is a variable created from the Presenting Problems Scale using a continuous variable from 1-5 based on current level of stress, where the score goes up with greater concern. Items relate to concerns about grades, motivation, time and stress management, and concentration among others.

Table 2

Mean GPA by Food Security

	GPA
High Food Security	3.38
Marginal Food Security	3.23
Low Food Security	3.24
Very Low Food Security	3.17

Table 3

Mean GPA by Homelessness

	GPA
Not Homeless within Last 12 Months	3.29
Homeless within Last 12 Months	3.2

Table 4

Mean Academic concerns by Food Security

	Mean Academic Concerns
High Food Security	2.47
Marginal Food Security	2.78
Low Food Security	2.99
Very Low Food Security	3.25

Table 5

Mean Academic Concerns Homelessness

	Mean Academic Concerns
Not Homeless within Last 12 Months	2.75
Homeless within Last 12 Months	3.16

Physical Health & Activity

There were also heavy tolls on students' physical health and daily activity as well. Students who experienced food insecurity in the last 30 days and/or homelessness in the last 12 months as a pattern scored more adversely on physical health indicators. In the past 30 days, students experienced far more days with inactivity and physical health issues, such as physical illness and injury, than their secure peers [See Tables 6-9].

Table 6

Poor Health Days by Food Security

	Mean Poor Health Days
High Food Security	2.49
Marginal Food Security	2.87
Low Food Security	2.97
Very Low Food Security	5.83

Table 7

Poor Health Days by Homelessness

	Mean Poor Health Days
Not Homeless within Last 12 Months	3.13
Homeless within Last 12 Months	5.23

Table 8

Mean Inactive Days by Food Security

	Mean Inactive Days
High Food Security	2.82
Marginal Food Security	4.11
Low Food Security	4.34
Very Low Food Security	7.06

Table 9

Mean Inactive Days by Homelessness

	Mean Inactive Days
Not Homeless within Last 12 Months	3.93
Homeless within Last 12 Months	6.93

Mental Health

Students' access to basic needs appeared to relate to their mental health and this was demonstrated in reports of higher levels of personal concerns and more poor mental health days in the last 30 days with food insecurity or homelessness [See Tables 10-13]. Personal concerns is a variable created from the Presenting Problems Scale using a continuous variable from 1-5 based on current level of stress, where the score goes up with greater concern. Items relate to concerns about anxiety, fear, physical health problems (i.e., headaches, stomach pains, etc.), sleeping problems, fatigue, and suicidal feelings, among others.

Table 10
Mean Personal Concerns by Food Security

	Mean Personal Concerns
High Food Security	1.86
Marginal Food Security	2.03
Low Food Security	2.2
Very Low Food Security	2.5

Table 11
Mean Personal Concerns by Homelessness

	Mean Personal Concerns
Not Homeless within Last 12 Months	2.05
Homeless within Last 12 Months	2.41

Table 12
Mean Poor Mental Health Days by Food Security

	Mean Poor Mental Health Days
High Food Security	6.05
Marginal Food Security	8.3
Low Food Security	10.01
Very Low Food Security	13.62

Patterns of campus-based resource use
There was a gap in the number of students qualified for CalFresh based on federal income criteria combined with California student exemptions (21%) and those who used it at the time of the survey (3.1%). However, many students who took the survey had heard about CalFresh, but never used it (49%) [See Table 14]. Campus food pantries are another important emergency food resource for students. When combining the number of students who had used the campus food pantry at the time of data collection with those who had in the past, 4.3% students had utilized this service [See Table 15]. Increasing marketing and engagement around accessibility and use of CalFresh and the food pantry are recommended.

Table 14

Overall CalFresh Eligibility vs Use

	n	%
CalFresh Eligible	215	21
Not CalFresh Eligible	808	79
CalFresh Patterns of Use		
Never heard of it	416	41.7
Heard of it but never used it	489	49
Used it in the past	62	6.2
Currently use it	31	3.1

Note. In 'CalFresh Patterns of Use" students may have selected more than one item.

Table 15

Overall Percentages of Participants Using On-Campus Food Pantry

	n	%
Never heard of it/Not offered at my campus	810	80.8
Heard of it but never used it	150	15
Used it in the past	34	3.4
Currently use it	9	0.9

Note. Students may have selected more than one item.