

# Connecting Community College Students to SNAP Benefits: Lessons Learned from a Pilot Outreach Intervention in California

## WEB APPENDICES

March 2022

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## Appendix A. Intervention & Survey Design

### STUDY ELIGIBILITY

In the fall of 2021, The Hope Center for College, Community, and Justice partnered with Compton College to evaluate the impact of sending students text messages (or “nudges”) about CalFresh, California’s Supplemental Nutrition Assistance Program (SNAP). Students were eligible for the study if they met the following criteria:

- Enrolled in the fall of 2021;
- 18 years or older;
- Not enrolled in a dual-enrollment program;
- Enrolled in a certificate or degree-program for at least two semesters (as early as fall 2019); and
- Either received a Pell Grant or Cal Grant, were eligible for work study, had an Expected Family Contribution of \$0, received emergency aid (e.g., CARES funding), OR did not submit a Free Application for Federal Student Aid (FAFSA).<sup>1</sup>

### RANDOMIZATION

In early September 2021, 1,539 students who met the eligibility criteria were randomly assigned to one of three approximately equal-sized groups:

- **No outreach (n=539):** Students in this group did not receive any text messages. They served as the comparison group. While students in the no outreach group did not receive the nudge text messaging, they were still able to apply for CalFresh and use this benefit.
- **Information-only (n=500):** Students in this group received informational text messages about signing up for CalFresh benefits.
- **Attuned, or stigma-reducing (n=500):** Students in this group received texts that contained the same information about CalFresh sign-up, but they included additional language to help students recognize that non-tuition supports like CalFresh are positive, useful, and geared toward helping students focus on degree completion.

During randomization, the groups were checked for equivalency across the following student characteristics: gender, age, full-time status, filed a FAFSA, and race/ethnicity (Table A-1). Outreach and no outreach groups were determined to be equivalent according to the What Works Clearinghouse standards.<sup>2</sup> We shared the results of the randomized study assignment with our Compton partners.

Students in the study, on average, were in their mid-twenties and disproportionately female (Table A-1). Fifty-seven percent of study participants were Latinx, 29% were Black, and 14% identified with another race or ethnicity. In addition, about half of all students in the study filed

a FAFSA or received a Cal Grant. About one in four students received a Pell Grant and about three in ten students were enrolled full-time. Overall, differences between study groups (outreach vs. no outreach) were small.

**TABLE A-1 | BACKGROUND CHARACTERISTICS OF THE FULL STUDY SAMPLE, BY STUDY ASSIGNMENT**

	Total Sample (N=1,539)	Outreach Groups Info Only (N=500)    Attuned (N=500)		Both Outreach Groups (N=1,000)	No Outreach Group (N=539)
Age (mean)	27	27	27	27	27
<b>Gender Identity</b>					
Female (%)	64	64	63	63	65
Male (%)	35	35	37	37	33
<b>Race and Ethnicity</b>					
Latinx (%)	57	57	58	57	57
Black (%)	29	29	27	28	31
Another race (%)	14	14	15	15	12
<b>Financial Aid Status</b>					
Filed FAFSA (%)	46	46	46	46	46
Has Cal Grant (%)	48	48	48	48	47
Has Pell Grant (%)	26	26	24	24	29
<b>Enrollment Status</b>					
Full-time (%)	31	31	30	31	31

Source | Compton College administrative records

Notes | For race, the category labeled as "another race" was used to aggregate racial and ethnic groups with small sample sizes. Pell Grant recipients may have also applied for and received a Cal Grant. Full-time students were enrolled in 12 or more units in the fall.

## SCHEDULE OF INTERVENTION

The intervention, text messaging to encourage CalFresh signup, took place between September 14<sup>th</sup> and October 4<sup>th</sup>, 2021. Four text messages were sent to study participants in the outreach groups via Compton's one-way text messaging platform. The first and third texts were sent at 10am local (Pacific) time, and the second and fourth texts were sent at 12pm local (Pacific) time.

- Text 1: Tuesday, September 14, 2021
- Text 2: Monday, September 27, 2021
- Text 3: Thursday, September 30, 2021

- Text 4: Monday, October 4, 2021

### SAMPLE NUDGES

Information-Only	Attuned
<p>Hey [student name], this is Lauren with Compton College. If you are struggling to pay for groceries, CalFresh assistance can help. Click here to learn more: <a href="https://students.getcalfresh.org/">https://students.getcalfresh.org/</a></p>	<p>Hey [student name], this is Lauren with Compton College. We know many students are having trouble paying for groceries. If you are, CalFresh assistance can help. We want to support you, so you can focus on studying and work toward your goals. Click here to learn more: <a href="https://students.getcalfresh.org/">https://students.getcalfresh.org/</a></p>

### SURVEY ELIGIBILITY

From the total study sample of 1,539 students, 500 students (166 in the no outreach group, 167 in the info-only group, and 167 in the attuned group) were randomly selected to receive invitations to participate in a follow-up survey. Students from the no outreach, information-only, and attuned groups had an equal chance of receiving invitations to the survey.

### SCHEDULE OF SURVEY REMINDERS

Students in the survey sub-sample were sent invitations to take the survey via text message and email from October 7th to October 29th, 2021. In total, students received four text message invitations to the survey and two email invitations to the survey. The Hope Center provided the email and text message invitation language as shown in Appendix B. To increase survey participation, students were offered a chance to receive a \$100 gift card.

Upon sending the first text message, Compton identified 32 students (16 in the information-only group, along with 16 in the attuned group) who did not receive texts. The Hope Center randomly identified 32 students who met the eligibility criteria to replace these students in the study. Background characteristics for the final study sample are available in Table A-1.

The survey was developed by The Hope Center and hosted on Compton College's Qualtrics platform. Upon opening the survey, students were presented with a consent form in compliance with Institutional Review Board standards. To take the survey, the student had to click continue as a record of consent and complete a minimum of the first page of the survey.

Two weeks into the survey fielding, Compton College received feedback from students that the link to the survey was not working in the text message invitations. Due to this feedback, the deadline for taking the survey was extended from October 21st to October 29th, and Compton

sent two email messages invitations to the survey. Originally, the survey was only to be advertised via text message.

## SAMPLE SURVEY RECRUITMENT MESSAGING

### SAMPLE SURVEY RECRUITMENT TEXT MESSAGING

Hey, this is [STAFF FIRST NAME] with Compton College. Life is a lot right now and Compton College needs help figuring out how best to support you. This survey is the place to share your thoughts. Please take it now! Click here: [SURVEY LINK]

Everything you say is confidential, and the survey will take no more than 20 minutes. In appreciation, you can win a \$100 gift card.

### SAMPLE SURVEY RECRUITMENT EMAIL

Dear [STUDENT FIRST NAME],

Let's get real. Life is a lot right now. You're the expert when it comes to what's happening with you. Compton College wants to know how best to support you.

Tell us your thoughts in this survey, which will take no more than 20 minutes. In appreciation, you can win a \$100 gift card.

Click here to take the survey:  
[SURVEY LINK]

If the link is not working, copy and paste it into your web browser.

Please be honest—everything you say is confidential.

We have partnered with The Hope Center for College, Community, and Justice at Temple University to administer this survey. If you have questions, send a note to The Hope Center at hopesrvy@temple.edu.

Thanks in advance,

[STAFF FIRST NAME AND EMAIL SIGNATURE]

## SURVEY PARTICIPANTS

About 10% of the 500 students invited to the survey responded (i.e., 49 out of 500 students). Mirroring patterns seen in other college surveys, female students were disproportionately more likely than their male counterparts to respond to our survey (while female students accounted for 64% of the study sample, they were 83% of the survey sample; Table A-2).<sup>3</sup> In addition, students who filed a FAFSA, received a Cal Grant or Pell Grant, and who were enrolled at a full-time status are overrepresented in our survey sample in comparison to our full study sample.

**TABLE A-2 | BACKGROUND CHARACTERISTICS OF THE SURVEY SAMPLE, BY STUDY ASSIGNMENT**

	Total Survey Sample (N=49)	Outreach Groups		Both Outreach Groups (N=35)	No Outreach Group (N=14)
		Info Only (N=20)	Attuned (N=15)		
Age (mean)	27	30	29	29	27
<b>Gender Identity</b>					
Female (%)	83	83	84	82	85
Male (%)	17	17	16	18	15
<b>Race and Ethnicity</b>					
Latinx (%)	53	53	48	50	62
Black (%)	34	34	40	38	23
Another race (%)	13	13	12	12	15
<b>Financial Aid Status</b>					
Filed FAFSA (%)	66	66	74	68	62
Has Cal Grant (%)	66	66	74	68	62
Has Pell Grant (%)	36	36	28	26	62
<b>Enrollment Status</b>					
Full-time (%)	43	43	37	38	54

Source | Compton College administrative records

Notes | For race, the category labeled as "another race" was used to aggregate racial and ethnic groups with small sample sizes. Pell Grant recipients may have also applied for and received a Cal Grant. Full-time students enrolled in 12 or more units in the fall.

## Appendix B. Focus Group & Meeting Design

### FOCUS GROUP WITH STUDENTS

On June 16, 2021, The Hope Center conducted an hour-long focus group with nine students enrolled at three community colleges in California: Irvine Valley College, Long Beach City College, and Mount San Antonio College. The purpose of the focus group was to determine (1) how students learned about CalFresh, and (2) what challenges they experienced when applying for CalFresh. The focus group was facilitated by two Hope Center staff via Zoom.

To recruit focus group participants, The Hope Center asked colleges in the #RealCollege California Coalition to advertise the focus group to their students. Students who were interested in the opportunity were directed to email The Hope Center. The first 19 students who emailed Hope received additional details and a calendar invitation with the Zoom link. Students who participated received a \$15 gift card in gratitude for their participation. Of the 19 students who received the focus group details, 9 students attended and participated in the focus group.

## MEETING WITH COMMUNITY PARTNERS

On June 16, 2021, The Hope Center facilitated an hour-long meeting with California-based organizations that are working to increase college students' awareness of CalFresh. The purpose of the gathering was to convene influencers to (1) learn about current CalFresh outreach initiatives, along with challenges and barriers to that outreach, and (2) identify potential opportunities and actions to increase students' access to and utilization of CalFresh.

The meeting was facilitated by two Hope Center staff, and eight staff from the following organizations attended:

- California Community College Chancellor's Office
- Swipe Out Hunger
- GetCalFresh
- Rise
- John Burton Advocates for Youth
- California Community College Ambassador Program
- Los Angeles Regional Food Bank
- Foundation for California Community Colleges

## Appendix C. Survey Measure of Food Insecurity

### FOOD SECURITY

To assess food *security* in the fall of 2020, we used questions from the 18-item Household Food Security Survey Module (shown below) from the U.S. Department of Agriculture (USDA). It is important to note that while we mainly discuss *insecurity*, the standard is to measure the level of *security*, referring to those with low or very low security as “food insecure.”

## Food Security Module

### Adult Stage 1

1. "In the last 30 days, I worried whether my food would run out before I got money to buy more." (Often true, Sometimes true, Never true)
2. "In the last 30 days, the food that I bought just didn't last, and I didn't have money to get more." (Often true, Sometimes true, Never true)
3. "In the last 30 days, I couldn't afford to eat balanced meals." (Often true, Sometimes true, Never true)

*If the respondent answers "often true" or "sometimes true" to any of the three questions in Adult Stage 1, then proceed to Adult Stage 2.*

### Adult Stage 2

4. "In the last 30 days, did you ever cut the size of your meals or skip meals because there wasn't enough money for food?" (Yes/No)
5. *[If yes to question 4, ask]* "In the last 30 days, how many days did this happen?" (Once, Twice, Three times, Four times, Five times, More than five times)
6. "In the last 30 days, did you ever eat less than you felt you should because there wasn't enough money for food?" (Yes/No)
7. "In the last 30 days, were you ever hungry but didn't eat because there wasn't enough money for food?" (Yes/No)
8. "In the last 30 days, did you lose weight because there wasn't enough money for food?" (Yes/No)

*If the respondent answers "yes" to any of the questions in Adult Stage 2, then proceed to Adult Stage 3.*

### Adult Stage 3

9. "In the last 30 days, did you ever not eat for a whole day because there wasn't enough money for food?" (Yes/No)
10. *[If yes to question 9, ask]* "In the last 30 days, how many days did this happen?" (Once, Twice, Three times, Four times, Five times, More than five times)

*If the respondent has indicated that children under 18 are present in the household, then proceed to Child Stage 1.*

### Child Stage 1

11. "In the last 30 days, I relied on only a few kinds of low-cost food to feed my children because I was running out of money to buy food." (Often true, Sometimes true, Never true)
12. "In the last 30 days, I couldn't feed my children a balanced meal, because I couldn't afford that." (Often true, Sometimes true, Never true)
13. "In the last 30 days, my child was not eating enough because I just couldn't afford enough food." (Often true, Sometimes true, Never true)

*If the respondent answers "often true" or "sometimes true" to any of the three questions in Child Stage 1, then proceed to Child Stage 2.*

Child Stage 2

14. “In the last 30 days, did you ever cut the size of your children’s meals because there wasn’t enough money for food?” (Yes/No)
15. “In the last 30 days, did your children ever skip meals because there wasn’t enough money for food?” (Yes/No)
16. [If yes to question 15, ask] “In the last 30 days, how often did this happen?” (1, 2, 3, 4, 5, 6, 7, 8 or more times)
17. “In the last 30 days, were your children ever hungry but you just couldn’t afford more food?” (Yes/No)
18. “In the last 30 days, did any of your children ever not eat for a whole day because there wasn’t enough money for food?” (Yes/No)

To calculate a raw score for food security, we counted the number of questions to which a student answered affirmatively.

- a. “Often true” and “sometimes true” were counted as affirmative answers.
- b. Answers of “Three times” or more were counted as a “yes.” We translated the raw score into food security levels as follows:

Food security level	Raw Score	
	18-item (children present)	18-item (no children present)
High	0	0
Marginal	1–2	1–2
Low	3–7	3–5
Very Low	8–18	6–10

## Appendix D. Detailed Tables from Analyses Referenced in the Practitioner Brief

**TABLE D-1 | REASONS WHY STUDENTS DID NOT USE CAMPUS-BASED RESOURCES (FIGURE 1)**

	%	N
I did not know they existed or were available	77	23
I do not think I am eligible	67	20
I do not know how to apply	67	20
Other people need those programs more than I do	50	15
I do not need these programs	37	11

I am embarrassed to apply	33	10
I had difficulty completing the application	20	6
People like me do not use programs like that	7	2
Other	5	1

Source | 2021 Compton College CalFresh Pilot Outreach Study - Survey

Notes | N = 30. Students were asked to respond 'yes' or 'no' to the above list of reasons if they used only one or two campus-based resources. All students who participated in the survey reported using at least one campus resource. See Table D-3 for full list of campus-based resources.

**TABLE D-2 | PERCENT OF STUDENTS EXPERIENCING FOOD INSECURITY AND PERCENT RECEIVING CALFRESH (FIGURE 2, PART 1)**

	Experienced Food Insecurity		Received CalFresh Benefits	
	%	N	%	N
Overall	43	21	35	16
<b>Gender Identity</b>				
Female	46	18	35	13
Male	38	3	29	2
<b>Race and Ethnicity</b>				
Latinx	36	9	29	7
Black	44	7	50	7
Another race	83	5	17	1
<b>Financial Aid Status</b>				
Filed FAFSA	45	14	45	13
Has Cal Grant	45	14	45	13
Has Pell Grant	65	11	44	7
<b>Enrollment Status</b>				
Full-time student	45	9	35	6

Source | Compton College administrative records and 2021 Compton College CalFresh Pilot Outreach Study - Survey

Notes | This table displays students' experiences of food insecurity (N = 49) and rates of CalFresh use among students in the survey (N = 46). For race, the category labeled as "another race" was used to aggregate racial and ethnic groups with small sample sizes. Pell Grant recipients may have also applied for and received a Cal Grant. Full-time students enrolled in 12 or more units in the fall. For more details on how the measure of food insecurity was created, refer to the web appendices.

**TABLE D-3 | PERCENT OF STUDENTS USING OF FOOD-BASED RESOURCES ON CAMPUS (FIGURE 2, PART 2)**

	%	N
Counseling services	61	28
Laptops from Compton College	26	12

Wi-Fi Hotspots from Compton College	22	10
Used any food-based resource	28	13
Food pantry and/or local food bank	17	8
Emergency aid delivered on the Edquity app	17	8
Meals from Everytable	15	7
Meal vouchers from Ubereats	15	7
Produce (fruits and vegetables) from Sunrise Produce	6	3
Compton College scholarships	4	2
Rent assistance from Compton College and the Coalition of Responsible Development	4	2

Source | 2021 Compton College CalFresh Pilot Outreach Study - Survey  
 Notes | N = 47. Students were asked if they had ever used any of the above campus-based resources. All students who participated in the survey reported using at least one campus resource.

**TABLE D-4 | STUDENTS WHO REMEMBER RECEIVING TEXT ABOUT CALFRESH, BY STUDY ASSIGNMENT (PAGE 4)**

	Overall		Outreach Groups		No Outreach Group	
	%	N	%	N	%	N
Remembered receiving text about CalFresh	62	28	78	25	23	3
Compton College is supportive of students like me	56	27	62	21	43	6

Source | 2021 Compton College CalFresh Pilot Outreach Study - Survey  
 Notes | Students were asked if they remembered receiving a text about CalFresh (N = 45). For the item on Compton College's support (N = 48), students were asked to rate their feelings on a five-point Likert scale (Not at all, Slightly, Moderately, Very, and Extremely). This item is defined by students who felt 'Very' or 'Extremely' supported by Compton College.

**TABLE D-5 | HOW STUDENTS NOT RECEIVING CALFRESH LEARNED ABOUT IT**

	%	N
Student has heard of CalFresh	83	25
<b>If yes, how did you learn about it?</b>		
From another person	52	13
From a text from Compton College	48	12
From a postcard or another source	8	2

Source | 2021 Compton College CalFresh Pilot Outreach Study - Survey  
 Notes | For students who were not receiving CalFresh benefits (N = 30), we asked them to share whether they had heard of the benefit. Among those who had heard of CalFresh (N = 25), we asked them to share how they learned about it. Some students may have reported multiple sources for how they heard about CalFresh. Students were listed as having heard about CalFresh from a person if the source of information came from a

friend or family member, a classmate, or Compton College faculty or staff. We did not disaggregate the results by study group due to small sample sizes.

**TABLE D-6 | STUDENT SENSE OF BELONGING, BY BACKGROUND CHARACTERISTICS**

	Overall		Black		Latinx		Parenting Student	
	%	N	%	N	%	N	%	N
I feel like I belong	66	31	79	11	60	15	80	16
I fit in well	70	33	64	9	76	19	70	14
I feel like an outsider	11	5	7	1	12	3	0	0
I feel comfortable	74	35	79	11	72	18	85	17
Compton College is supportive of students like me	56	27	67	10	48	12	65	13

Source | 2021 Compton College CalFresh Pilot Outreach Study - Survey

Notes | Data are from a survey of study participants who were asked various questions on how they felt about their experience at Compton College (Overall, N = 47; Black, n = 14; Latinx, n = 25; Parenting Students, n = 20).<sup>4</sup> For questions about students’ feelings towards Compton College, students were asked to rate their feelings on a five-point Likert scale (Strongly Disagree to Strongly Agree). Reported percentages represent students who 'Agree' or 'Strongly Agree' with each item. For the question on whether students felt Compton College had a supportive environment, students were asked to rate their feelings on a five-point Likert scale (Not at all, Slightly, Moderately, Very, and Extremely). Reported percentages for this item reflect students who felt 'Very' or 'Extremely' supported by Compton College.

**TABLE D-7 | STUDENT PERCEPTIONS OF TEXT MESSAGING (PAGE 5)**

Feeling about messages (Attuned in comparison to Information Only)	Students who Experienced				
	Overall	Food Insecurity	Black Students	Latinx Students	Parenting Students
Respected	n/a	n/a	n/a	n/a	n/a
Empowered	+	+	n/a	+	+
Motivated	n/a	n/a	n/a	n/a	n/a
Understood	n/a	n/a	n/a	n/a	n/a
Cared for	n/a	n/a	n/a	n/a	n/a
Supported	n/a	n/a	n/a	n/a	n/a
Connected to Compton College	n/a	n/a	n/a	n/a	n/a
Disconnected to Compton College	n/a	n/a	n/a	n/a	n/a

Source | 2021 Compton College CalFresh Pilot Outreach Study - Survey

Notes | Overall N = 44; Experienced food insecurity, n = 44; Black, n = 13; Latinx, n = 23; Parenting Students, n = 20. Data come from survey of student perceptions of different text nudges styles. All students were shown samples of the information-only and attuned text messages about CalFresh. After each text, students were asked about how the messaging made them feel in relation to Compton College. Students were asked to rate

their feelings on a five-point Likert scale (Not at all, Slightly, Moderately, Very, and Extremely). Answers above with n/a indicate that perceptions of the two messaging styles did not differ at a  $p < 0.10$  significance level. A plus symbol indicates that students rated the attuned messaging higher than the information-only messaging at  $p < 0.10$ .

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<sup>1</sup> Originally, we intended to include only students who submitted a FAFSA in the study. However, we expanded the study to include students who did not submit a FAFSA to obtain a sample large enough for this study as many of these students are likely eligible for federal financial aid and possibly SNAP benefits (TICAS, 2010). Moreover, according to California Community Colleges Chancellor's Data Mart, less than 5% of students in the Compton Community College district were non-U.S. citizens in the fall of 2021.

<sup>2</sup> We adhered to the What Works Clearinghouse Standards Handbook (version 4.1).

<sup>3</sup> Baker-Smith, C., Coca, V., Goldrick-Rab, S., Looker, E., Richardson, B. & Williams, T. (2020, February). #RealCollege 2020: Five years of evidence on campus basic needs insecurity. The Hope Center for College, Community, and Justice; National Student Clearinghouse Research Center. (2020, January). Current term enrollment estimates - Fall 2020.

<sup>4</sup> The racial category "another race" was excluded from the analyses due to small sample sizes.