
 APPENDIX 1: DETAILED STATISTICAL RESULTS

Note 1—Food Insecurity for Institutional Types

Community colleges (mean = 2.10, s.d. = 2.11)

Public four-year institutions (mean = 1.71, s.d. = 1.85)

Private four-year institutions (mean = 1.43, s.d. = 1.74).

These levels are all significantly different from one another as tested with analysis of variance (ANOVA), $F_{2,1700} = 12.12$, $p < 0.001$. Pairwise comparisons using Sidak's correction for experiment-wide error with groups of different sizes were also significantly different with all $p < 0.05$.

Note 2—Food Insecurity and Urban/Rural Location

The results showed significantly higher food insecurity among students studying at rural institutions than at suburban or urban institutions ($F_{2,1700} = 8.702$, $p < 0.001$). Suburban and urban institutions were not significantly different ($t = 1.37$, $p = 0.431$).

Note 3—Age and Food Insecurity

Older students had significantly higher food insecurity than younger students tested with linear regression, $FI = 1.215 + 0.289 * Age$, $F_{1,1696} = 44.209$, $p < 0.001$. Age was measured with ordinal categories: 18–22 (72.5 percent of the respondents), 23–30 (15.1 percent), 31–39 (5.1 percent), 40–49 (3.9 percent), 50–59 (2.2 percent), 60–69 (0.8 percent), and 70+ (0.1 percent). (Those under 18 were not included in analysis and constituted less than 1 percent of responses). Due to the limited range of values for both variables, this analysis was also subjected to ordinal regression. The model was still significant (Chi-square = 34.76, d.f. = 1, $p < 0.001$) with older students having higher food insecurity than younger students.

Note 4—Food Insecurity and Other Student Characteristics

Group comparisons showing significant differences:

- BIPOC students higher FI than White students ($t_{1696} = 5.007$, $p < 0.001$)
- LGBTQIA identifying students higher food insecurity than non-LGBTQIA students ($t_{306,715} = 6.399$, $p < 0.001$)
- Trans* students higher FI than cisgender (ANOVA $F_{2,1693} = 25.486$, $p < 0.001$).

These are illustrated in Figures 1–3.

FIGURE 1: Food Insecurity and Race/Ethnicity

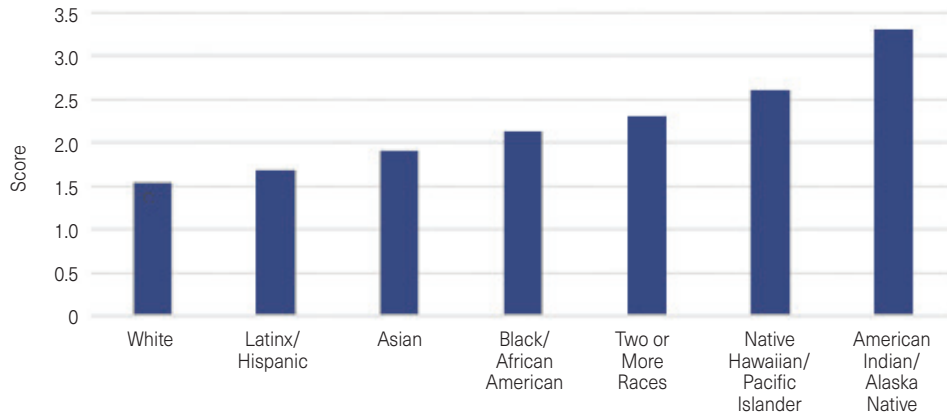


FIGURE 2: Food Insecurity and LGBTQIA Status

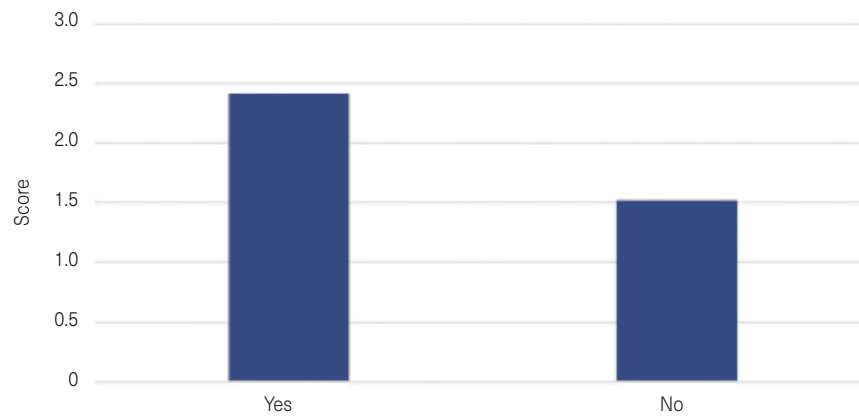
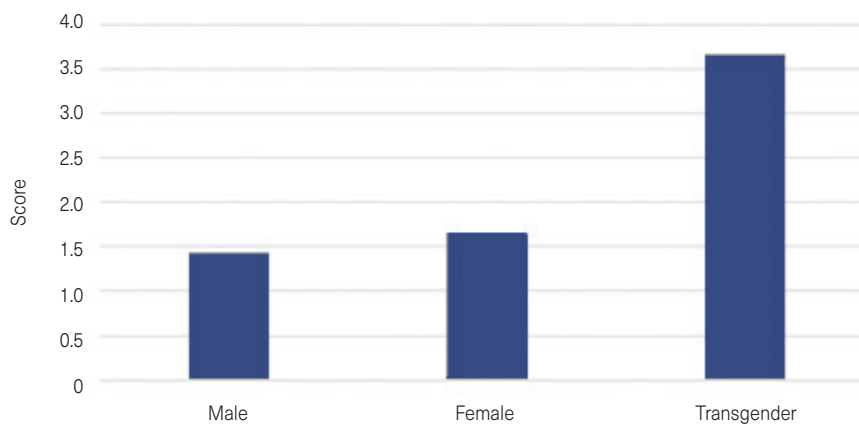


FIGURE 3: Food Insecurity and Gender



Note 5—Food Insecurity and Household Configuration.

Children in the home associated with significantly higher food insecurity ($t_{305,742} = 5.518, p < 0.001$). Single students had significantly lower food insecurity than groups Married/With Domestic Partner ($p < 0.001$) or Divorced/Separated ($p < 0.01$).

Note 6—Food Insecurity and Meal Plans

Analysis of differences between the groups was significant (ANOVA, $F_3, 1685 = 38.753, p < 0.001$). Post-hoc pairwise comparisons show that all groups are significantly different except for those with partial plans and those with no plan by choice.

Note 7—Food Insecurity and School Withdrawal

TABLE 4. Severe Food Insecurity and School Withdrawal, By Institution Type

Type of institution N = 1685	Incidence of not eating for 1–2 days	Percentage by institutional type	Percentage who withdrew from school
Public four year N = 788	Never	85	5.1
	Sometimes	11	18.9
	Often	4	29.0
Community college N = 229	Never	83	5.3
	Sometimes	12	35.7
	Often	5	25.0
Private four year N = 668	Never	90	1.7
	Sometimes	8	11.3
	Often	2	0.0

Overall food insecurity is significantly related to dropping out of school:

- Those with moderate food insecurity (Chi-square = 92.52, d.f. = 1, $p < 0.001$)
- Those who had not eaten for one or two days (Chi-square 39.11, d.f. = 1, $p < 0.001$).