

Supplemental Table: Comparison of missing and non-missing cases on analytic variables

Variable	Incomplete (N = 78,166) N (%)	Complete (N = 534,176) N (%)	p-value
Substance use in past 30 days			
Tobacco/vape, mean (SD)	1.332 (1.036)	1.134 (0.055)	<0.001
Cannabis, mean (SD)	1.573 (1.420)	1.264 (1.262)	<0.001
Co-use, mean (SD)	1.412 (1.152)	1.199 (0.678)	<0.001
Retail environment policy strength			
Tobacco/vape z-score, mean (SD)	0.476 (0.979)	0.311 (1.096)	<0.001
Cannabis z-score, mean (SD)	-0.191 (0.828)	0.033 (0.923)	<0.001
City-level covariates			
% under 18 years of age, mean (SD)	22.83 (3.91)	23.57 (4.25)	<0.001
% non-White, mean (SD)	63.71 (16.92)	59.57 (21.06)	<0.001
Mean household income by \$10,000, mean (SD)	10.71 (3.48)	10.92 (4.07)	<0.001
School-level covariates			
No. students enrolled, mean (SD)	1,401 (760)	1,570 (850)	<0.001
% FRPM eligibility, mean (SD)	57.8 (25.4)	52.6 (26.5)	<0.001
Individual-level covariates			
School climate z-score, mean (SD)	-0.190 (1.044)	0.051 (0.972)	<0.001
Grade level, n (%)			
Middle school	21,697 (32.2%)	194,256 (36.4%)	<0.001
High school	45,726 (67.8%)	339,920 (63.6%)	
Sex, n (%)			
Male	27,182 (34.8%)	258,281 (48.4%)	<0.001
Female	23,469 (30.0%)	262,982 (49.2%)	
Missing	27,515 (35.2%)	12,913 (2.42%)	
Race/ethnicity, n (%)			
Non-Latino White	11,856 (15.2%)	119,735 (22.4%)	<0.001
Non-Latino Asian	7,166 (9.2%)	63,873 (12.0%)	
Non-Latino Black	3,792 (4.9%)	18,198 (3.4%)	
Latino (White)	3,653 (4.7%)	37,823 (7.1%)	
Mixed race	25,854 (33.1%)	215,216 (40.3%)	
Other	4,699 (6.0%)	33,829 (6.3%)	
Missing	21,426 (27.1%)	45,502 (8.5%)	
Primary language at home, n (%)			
English	35,142 (60.8%)	341,843 (64.0%)	<0.001
Other than English	22,623 (39.2%)	192,333 (36.0%)	
Alternative housing, n (%)			
No	50,631 (87.3%)	482,658 (90.4%)	<0.001
Yes	7,349 (12.7%)	51,518 (9.6%)	
Depression, n (%)			
Non, past 12 months	28,427 (36.4%)	358,148 (67.1%)	<0.001
Yes, past 12 months	15,364 (19.7%)	158,751 (29.6%)	
Missing	34,375 (44.0%)	17,277 (3.2%)	

Notes: Continuous variables are summarized using mean and standard deviation (SD) and compared between complete vs. incomplete observations via t-test, and categorical variables are summarized using frequencies and proportions and compared via Chi-squared test. Due to large sample sizes, all group

differences are statistically significant. However, most are not meaningfully different, except that those with missing data have higher average usage of tobacco/vape and marijuana.