

Supplement to:

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# Supplemental Materials

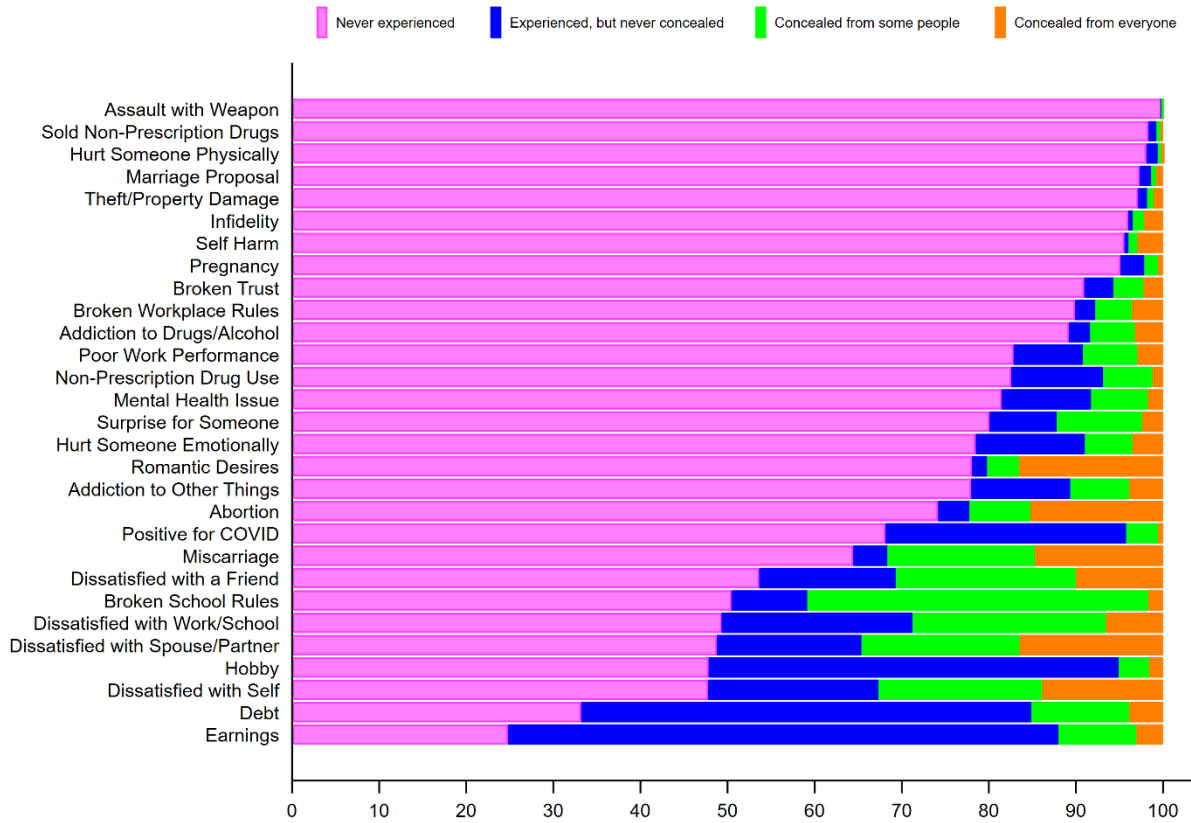
## Every Forest Has Its Shadow: The Demographics of Concealment in the United States

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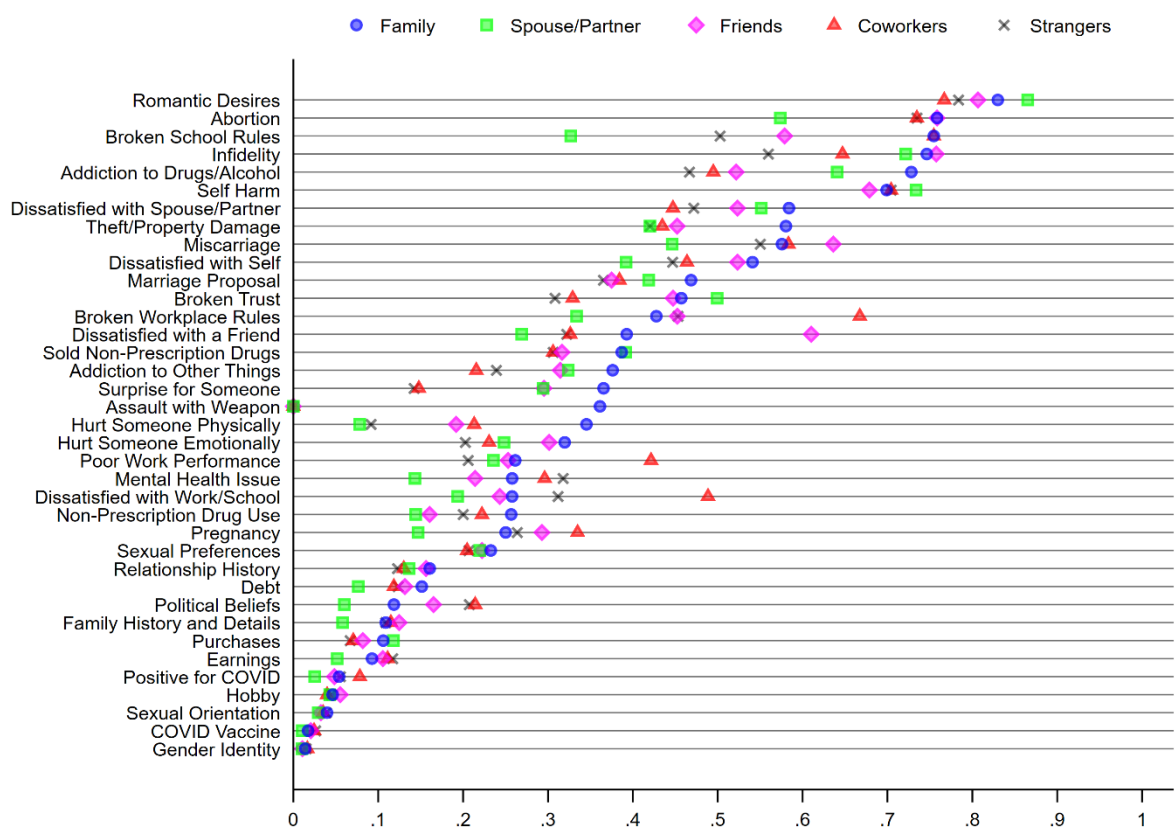
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# 1 Robustness Checks and Alternative Model Specifications



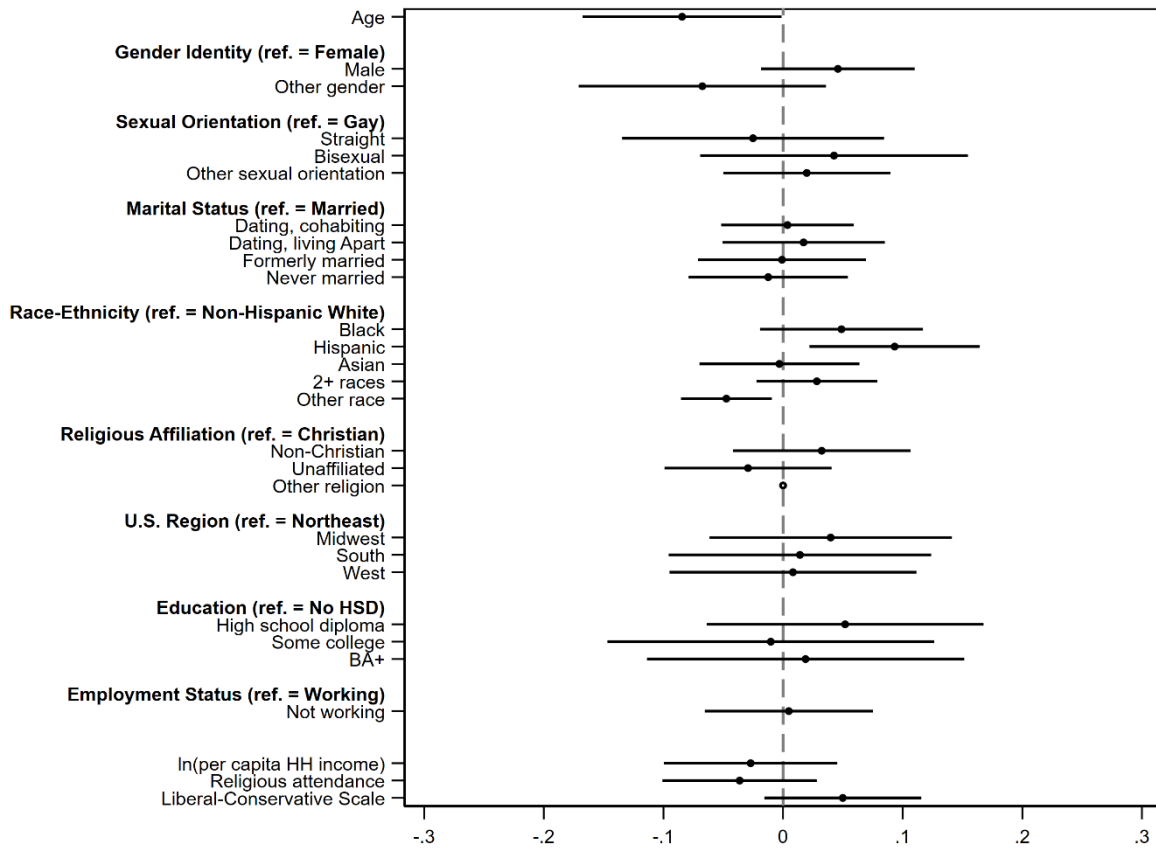
**Figure S1.** Percentage of Respondents Who Conceal Attitudes and Behaviors (Subsample Selection)

*Notes:* Estimates adjusted with post-stratification survey weights. “Never experienced” means that the respondent did not experience the attitude or behavior in the past 12 months. This figure includes all 29 attitudes and behaviors that respondents could have experienced or held in the past 12 months, and excludes the 8 characteristics that we assume each respondent has, namely Relationship History, Purchases, Gender Identity, Sexual Orientation, Sexual Preferences, Political Beliefs, Family History and Details, and COVID Vaccine. In this figure, we restrict attitudes and behaviors to respondents who have selected into particular areas (e.g., restrict the percentage of respondents who conceal Romantic Desires and Infidelity to the subsample of respondents who are married or dating). We do this for the following attitudes and behaviors: Addiction to Drugs/Alcohol, Romantic Desires, Dissatisfied with Spouse/Partner, Infidelity, Broken School Rules, Broken Workplace Rules, Dissatisfied with Work/School, Poor Work Performance, Miscarriage, and Abortion.

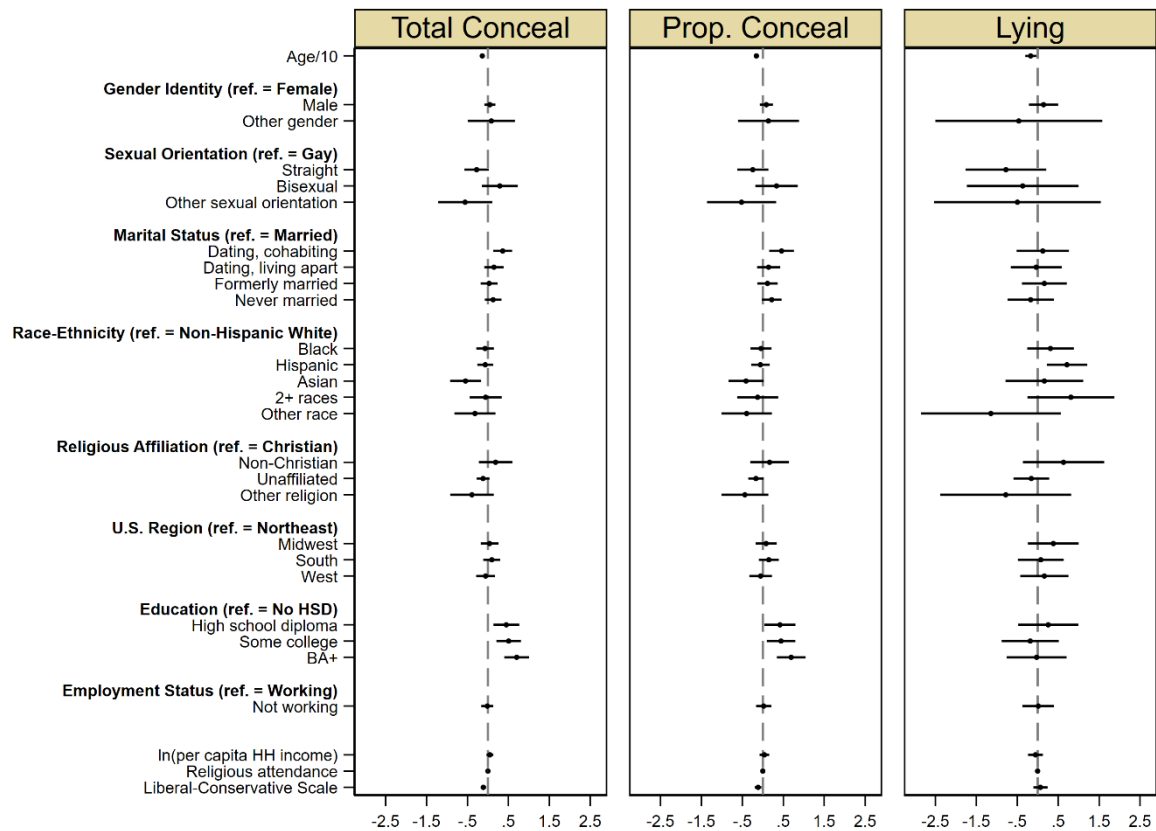


**Figure S2.** Proportion of Respondents Who Conceal a Topic from Family (Blue), Spouse or Partner (Green), Friends (Magenta), Coworkers or Clients (Red), and Strangers (Black), Among Those Who Have an Attitude, Behavior, or Characteristic (Subsample of Married or Dating Respondents)

*Notes:* Estimates adjusted with post-stratification survey weights. In this figure, we restrict the analysis to respondents who are married or dating. This figure includes all 37 attitudes, behaviors, and characteristics from the self-report concealment survey.

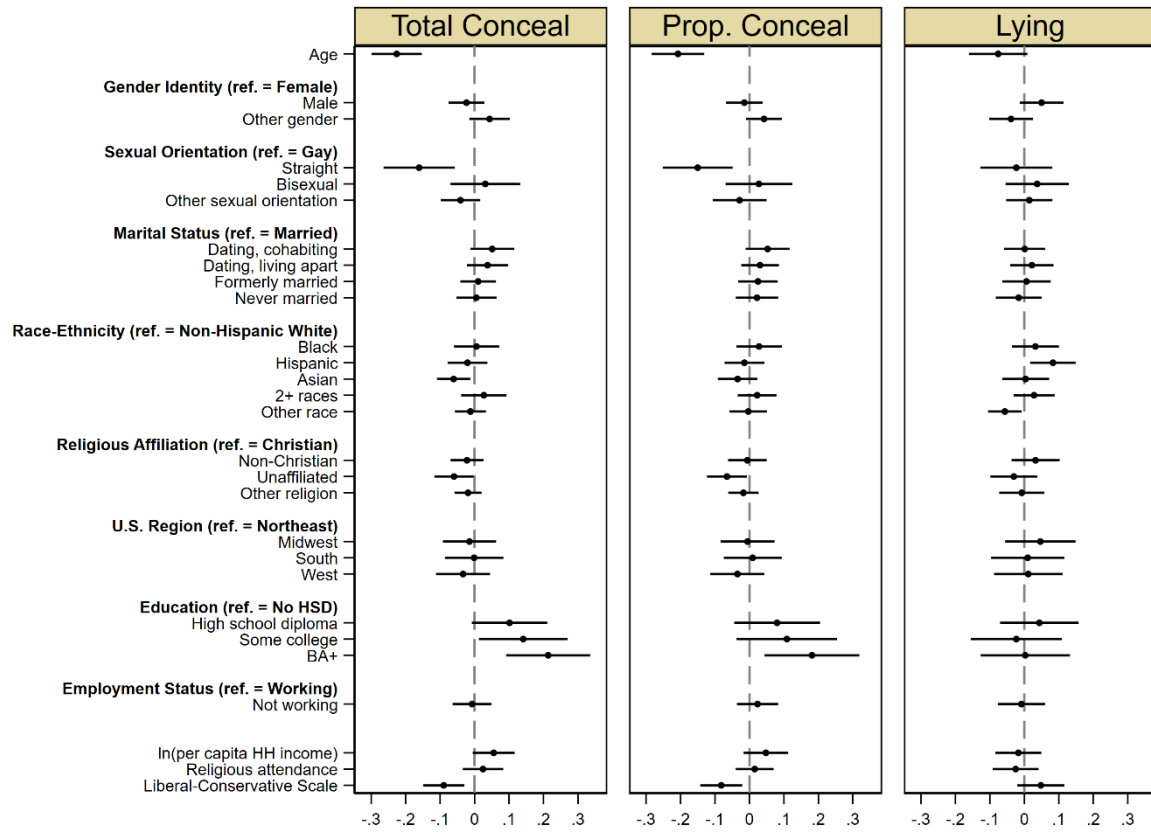


**Figure S3.** Linear Regression Model Regressing Lying on Demographic Variables with Response Propensity Weights Adjusting for Post-Experiment Unit Non-Response  
*Notes:* Unstandardized coefficients and 95% confidence intervals reported. The model is estimated with maximum likelihood for missing data, robust standard errors, and response propensity weights adjusting for post-experiment unit non-response ( $N = 1,066$ ). The model controls for metropolitan area, internet access at home, home ownership, home type, household telephone service, ln(survey duration), and survey device. Response propensity weights created as a function of demographics, controls, and proportion conceal. Data for this model comes from the sender-receiver game.



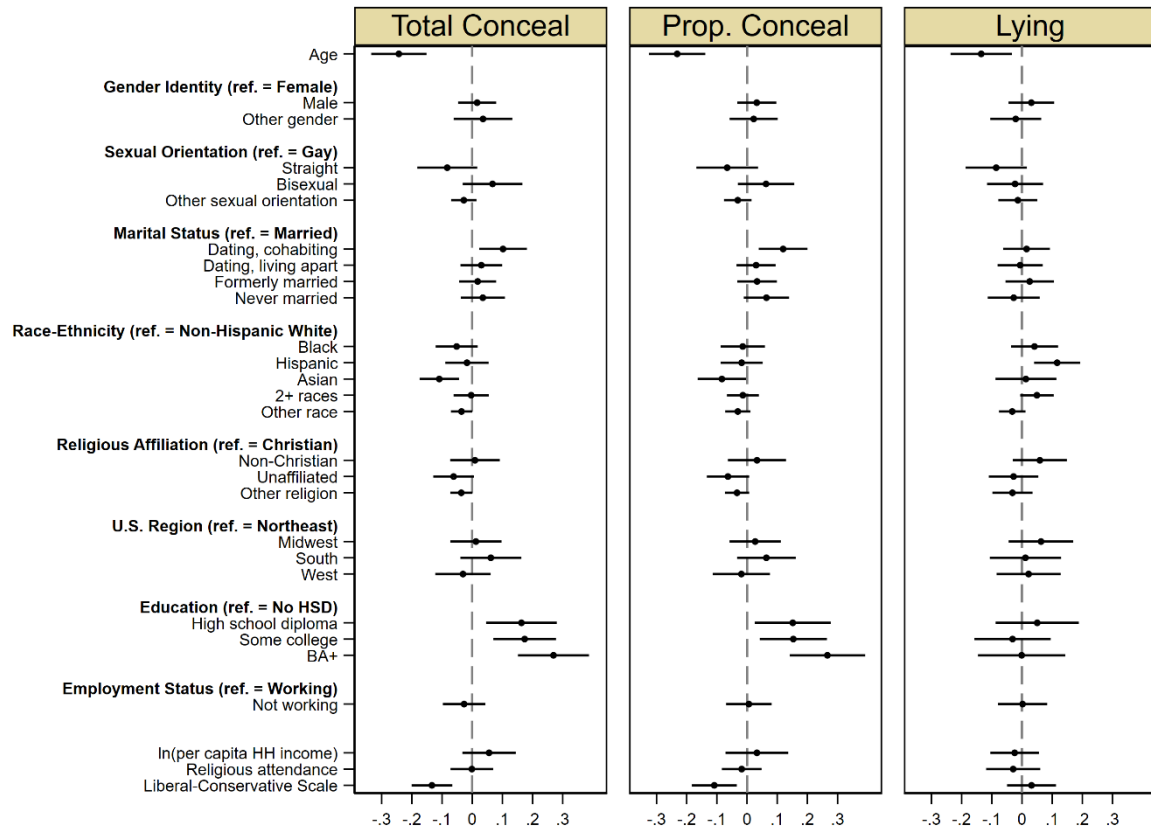
**Figure S4.** Negative Binomial, Fractional, and Logit Models Regressing Total Conceal, Proportion Conceal, and Lying on Demographic Variables

*Notes:* Log-odds and 95% confidence intervals are reported. Total Conceal is a count of topics concealed in the past 12 months; Prop. Conceal is a proportion of topics concealed in the past 12 months, conditional on having an attitude, behavior, or characteristic; and Lying is a binary measure of lying in the sender-receiver game. Total Conceal and Prop. Conceal are constructed using all 37 attitudes, behaviors, and characteristics from the self-report concealment survey. Model 1 (Total Conceal) is a negative binomial regression model estimated with listwise deletion, robust standard errors, and post-stratification survey weights ( $N = 1,258$ ). Model 2 (Prop. Conceal) is a fractional regression model estimated with listwise deletion, robust standard errors, and post-stratification survey weights ( $N = 1,258$ ). Model 3 (Lying) is a logistic regression model estimated with listwise deletion, robust standard errors, and post-stratification survey weights ( $N = 941$ ). All models control for metropolitan area, internet access at home, home ownership, home type, household telephone service, ln(survey duration), and survey device. Model 3 (Lying) also controls for the experimental treatments.



**Figure S5.** Linear Regression Models Regressing Total Conceal, Proportion Conceal, and Lying on Demographic Variables without Post-Stratification Survey Weights

*Notes:* Standardized coefficients and 95% confidence intervals are reported for model 1 (Total Conceal) and Model 2 (Prop. Conceal); unstandardized coefficients and 95% confidence intervals are reported for Model 3 (Lying). Total Conceal is a count of topics concealed in the past 12 months; Prop. Conceal is a proportion of topics concealed in the past 12 months, conditional on having an attitude, behavior, or characteristic; and Lying is a binary measure of lying in the sender-receiver game. Total Conceal and Prop. Conceal are constructed using all 37 attitudes, behaviors, and characteristics from the self-report concealment survey. All models estimated with maximum likelihood for missing data and robust standard errors ( $N = 1,281$ ). All models control for metropolitan area, internet access at home, home ownership, home type, household telephone service,  $\ln(\text{survey duration})$ , and survey device. Model 3 (Lying) also controls for the experimental treatments.



**Figure S6.** Linear Regression Models Regressing Total Conceal, Proportion Conceal, and Lying on Demographic Variables using Listwise Deletion

*Notes:* Standardized coefficients and 95% confidence intervals are reported for model 1 (Total Conceal) and Model 2 (Prop. Conceal); unstandardized coefficients and 95% confidence intervals are reported for Model 3 (Lying). Total Conceal is a count of topics concealed in the past 12 months; Prop. Conceal is a proportion of topics concealed in the past 12 months, conditional on having an attitude, behavior, or characteristic; and Lying is a binary measure of lying in the sender-receiver game. Total Conceal and Prop. Conceal are constructed using all 37 attitudes, behaviors, and characteristics from the self-report concealment survey. All models estimated with listwise deletion, robust standard errors, and post-stratification survey weights (Model 1 and Model 2:  $N = 1,258$ ; Model 3:  $N = 950$ ). All models control for metropolitan area, internet access at home, home ownership, home type, household telephone service,  $\ln$ (survey duration), and survey device. Model 3 (Lying) also controls for the experimental treatments.



**Table S1.** Comparison of Unweighted and Weighted Sample Characteristics to Population Benchmark (Concealment Survey Sample)

	Unweighted	Weighted	Benchmark	Difference
<b>Age</b>				
18 - 34	28.6	28.7	28.7	0
35 - 49	23.4	24.5	24.5	0
50 - 64	25	24.8	24.8	0
65 Plus	23	22	22	0
<b>Race-Ethnicity</b>				
Non-Hispanic White	59.6	62	62	0
Non-Hispanic Black	14.3	12.1	12.1	0
Hispanic	18.7	17.2	17.2	0
Non-Hispanic Asian and Pacific Islander	3.6	6.4	6.5	0.1
Non-Hispanic Others	3.7	2.4	2.2	0.2
<b>Education Status</b>				
Less than high school	4.7	9.1	9.1	0
High school diploma or equivalent	20.5	29.4	29.4	0
Some college or Associate's degree	45.4	26.3	26.3	0
Bachelor's degree	17.6	20.6	22.4	-1.8
Graduate degree	11.8	14.6	12.8	1.8
<b>Sex</b>				
Male	47.3	48.6	48.6	0
Female	52.7	51.4	51.4	0

*Note* : Survey sample ( $N = 1,281$ ). The "difference" column refers to the numerical difference between weighted and benchmark values. Benchmark values were drawn from the Current Population Survey. Weighted Cumulative Response Rate is 4.6%.

**Table S2. Linear Regression Models Regressing each Attitude, Behavior, and Characteristic on Demographic Variables**

	Non-Prescription Drug Use	Addiction to Drugs/Alcohol	Addiction to Other Things	Theft/Property Damage	Assault with Weapon	Sold Non-Prescription Drugs	Hurt Someone Emotionally	Hurt Someone Physically	Self Harm	Mental Health Issue	Broken Trust	Romantic Desires	Disatisfied with Spouse/Partner	Infidelity	Relationship History	Disatisfied with a Friend	Disatisfied with Self	Broken School Rules	Broken Workplace Rules	Disatisfied with Work/School	Poor Work Performance	Earnings	Diet	Purchases	Gender Identity	Sexual Orientation	Sexual Preferences	Pregnancy	Miscarriage	Abortion	Political Beliefs	Family History and Details	Positive for COVID	COVID Vaccine	Surprise for Someone	Marriage Proposal	Hobby	
Age	+																																					
<b>Gender Identity (ref. = Female)</b>																																						
Male																																						
Other gender																																						
<b>Sexual Orientation (ref. = Gay)</b>																																						
Straight																																						
Bisexual																																						
Other sexual orientation																																						
<b>Marital Status (ref. = Married)</b>																																						
Dating, cohabiting																																						
Dating, living apart																																						
Formerly married																																						
Never married																																						
<b>Race-Ethnicity (ref. Non-Hispanic White)</b>																																						
Black																																						
Hispanic																																						
Asian																																						
2+ races																																						
Other race																																						
<b>Religious Affiliation (ref. = Christian)</b>																																						
Non-Christian																																						
Unaffiliated																																						
Other religion																																						
<b>U.S. Region (ref. = Northeast)</b>																																						
Midwest																																						
South																																						
West																																						
<b>Education (ref. = No HSD)</b>																																						
High school diploma																																						
Some college																																						
BA+																																						
<b>Employment Status (ref. = Working)</b>																																						
Not working																																						
In/per capita HH income																																						
Religious attendance																																						
<b>Liberal/Conservative Scale</b>																																						
N	235	74	263	34	6	23	234	23	52	236	102	190	436	42	1195	555	626	25	77	362	113	896	846	1213	1223	1220	1190	56	17	9	1194	1194	398	1223	247	36	640	
Statistical Convergence?	Y	Y	Y	N	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	N	Y	

Notes: LRMs with robust standard errors and post-stratification survey weights. Red "+" squares indicate a statistically significant positive relationship at the  $p < .05$  level, while blue "-" squares indicates a statistically significant negative relationship at the  $p < .05$  level.



