



Social Smoking and COVID-19 Infection

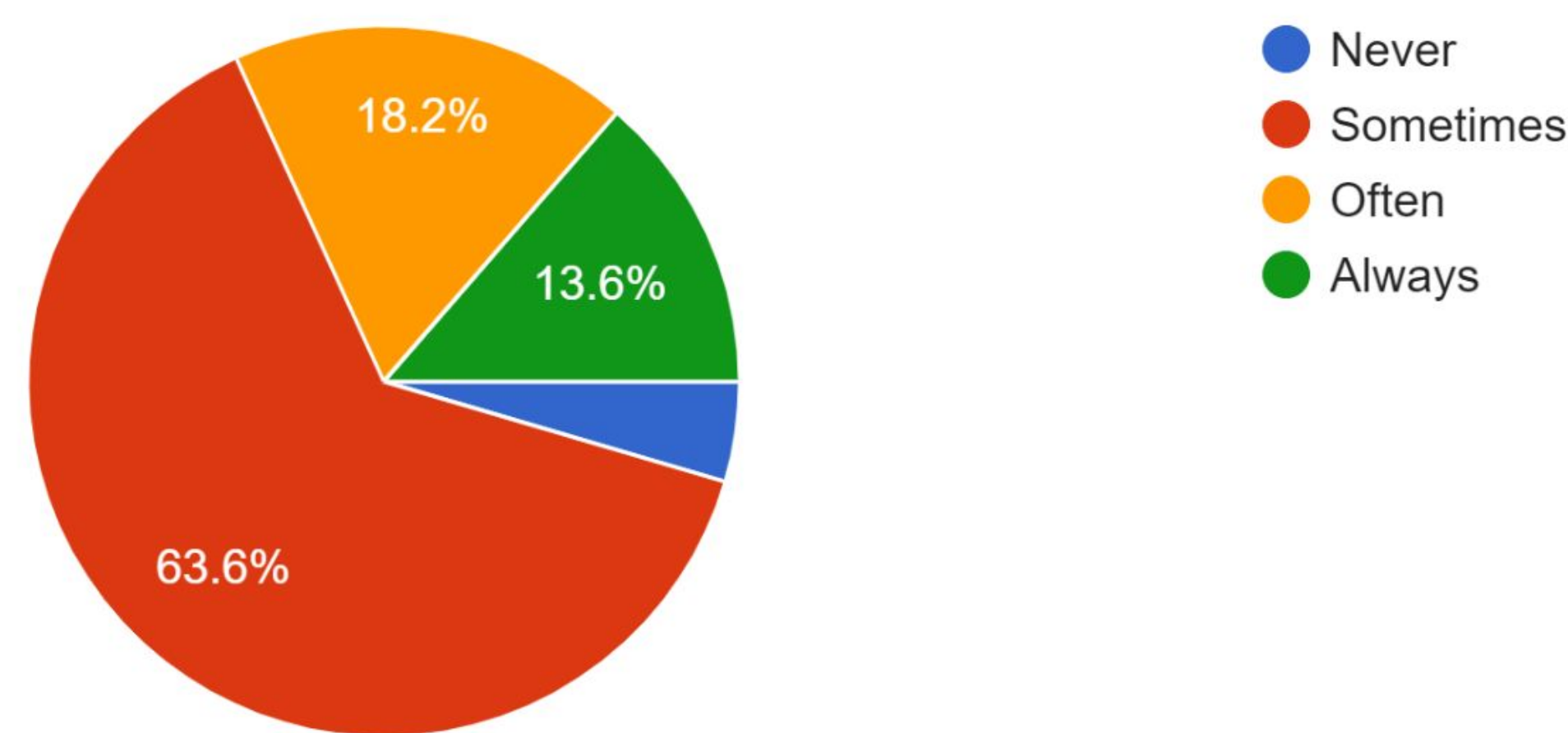
Objective

- The objective is to determine the relationship between social smoking and COVID-19 infection.

Background

- Previous research shows that smoking marijuana or nicotine can damage and interfere with lung processes leading to increased risk of infection.^{1,2}
- Literature also shows that adolescents are continuing to socially smoke despite the pandemic and the regulations, mandates, and recommendations by public health officials that followed it.³
- Unable to find any research looking at the association between social smoking and COVID-19 infection, we believe our study is the first of its kind.

How often do you smoke in a social setting? (e.g. bars, clubs, with friends, etc.)
22 responses



Gender (%)	
Male	22.2%
Female	69.4%
Non-Binary	8.3%
Race (%)	
Asian/ Pacific Isl	44.4%
Asian/ Pacific Isl /Prefer not to say	2.8%
Asian/Pacific Isl /White or Caucasian	8.3%
Black/ African Am	0%
Hispanic/ Latino	27.8%
Native Am/Alaska Nat	0%
White/ Caucasian	16.7%

Methods

- Undergraduate students attending the University of California San Diego were asked to complete an anonymous survey that asked about demographics, drug use, smoking habits (any substance), social smoking habits, and personal COVID-19 history.

- Links to the survey were shared to the FMPH 194 capstone cohort and shared on social media sites like twitter, snapchat, etc.

- A Spearman Rho's test was performed on SPSS to determine if there is a correlation between social smoking and COVID-19 infection.

Do you smoke in a social setting? (e.g. bars, clubs, with friends, etc.) *

Yes

No

How often do you smoke in a social setting? (e.g. bars, clubs, with friends, etc.)

Never

Sometimes

Often

Always

How many times have you received a POSITIVE COVID-19 PCR/antigen test result since the pandemic began in 2020? (If never, enter "0") *

Short answer text

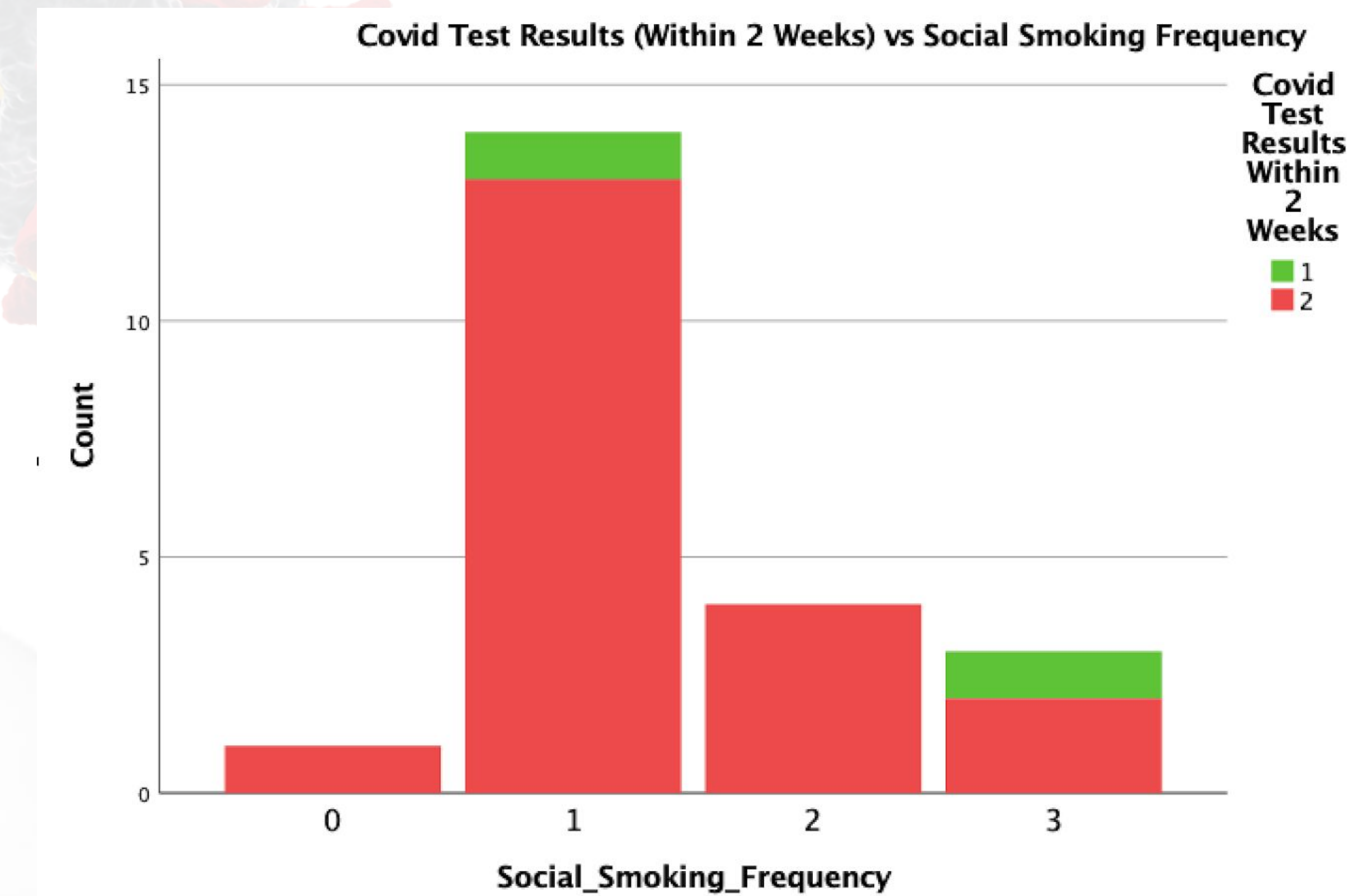
If so, did you receive any positive results within 2 weeks of socially smoking? *

Yes

No

Results

- A total of 36 respondents from UCSD were recorded for the survey, 22 of which indicated smoking a substance (cigarettes, marijuana, e-cigarettes/vapes).
- Of the sample size of 22 students that smoke, 21 students (95%) indicated some form of social smoking.
- 75% of the respondents never received a positive COVID-19 test (antigen and/or PCR), 19.4% received one, and 5.6% received two.
- Of those that smoke, 9.1% received a positive COVID-19 result within two weeks of social smoking and 90.9% did not.
- Students participating in social smoking were not more likely to receive positive COVID-19 test results ($r=.40$).
- The results of our study suggest no relationship between social smoking and positive COVID-19 test results.



22 participants met the criteria. 0 = Never; 1 = Sometimes; 2 = Often; 3 = Always
Green = Positive COVID-19 Test; Red = No Positive COVID-19 Test

Conclusions

- No correlation was found between social smoking and positive COVID-19 test results
- Our study participants were mainly UCSD students who had never tested positive for COVID-19
- Most had never received a positive COVID-19 test within 2 weeks of social smoking behavior
- Further studies are required with larger samples sizes and broader target populations to make definite conclusions on the connection between social smoking behaviors and COVID-19

References

- Xie J, Zhong R, Wang W, Chen O, Zou Y. COVID-19 and Smoking: What Evidence Needs Our Attention? *Frontiers in Physiology*. 2021;12. doi:10.3389/fphys.2021.603850
- Canadian Centre on Substance Use and Addiction. COVID-19 and Cannabis Smoking: 4 Things You Should Know [Infographic]. *Ccsa.ca*. Published 2020. Accessed May 19, 2022. <https://www.ccsa.ca/covid-19-and-cannabis-smoking-4-things-you-should-know-infographic>
- Dumas TM, Ellis W, Litt DM. What Does Adolescent Substance Use Look Like During the COVID-19 Pandemic? Examining Changes in Frequency, Social Contexts, and Pandemic-Related Predictors. *Journal of Adolescent Health*. 2020;67(3):354-361. doi:10.1016/j.jadohealth.2020.06.018