

Social media use and alcohol consumption in U.S. adults at the start of the COVID-19 pandemic

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Background

During the early months of the COVID-19 pandemic, there was a convergence of worrisome behaviors.

- There was a spike in U.S. wine and spirit sales (1).
- A study among a Chinese population showed that increased social media exposure was correlated with increased anxiety and depression (2).
- Concern was raised that the sudden isolation of millions would be associated with increased alcohol use (3).



Literally every family on lockdown rn after being stuck together for weeks on end with all the alcohol... 😂😂



#covid19 #quarant #housebound #sta



2:05 PM · Apr 5, 2020 from Vancouver, British Columbia · Twitter for iPhone

Retweeted



quarantine is just drinki
time for alcohol

1:30 PM · Apr 11, 2020 · Twitter for iPhone

562 Retweets 48 Quote Tweets



I see a lot of cute tweets about how much fun alcohol consumption is during quarantine. Remember some of us already have a fatal disease when it comes to drinking/drugs. For us to drink is to die and isolation makes it that much harder to be granted our daily reprieve. Thanks.

9:51 AM · Apr 1, 2020 · Twitter for iPhone

493 Retweets 43 Quote Tweets 5K Likes



Tonight's #cocktail is the classic gold rush.

2 oz Bourbon

3/4 oz fresh lemon juice

honey simple syrup

essing and I want y'all to know
ether and THINGS WILL GET
ugs and alcohol will only make
ve those for when we're out of
up and self care instead ❤️

iPhone

13 Retweets 98 Likes



12:10 PM · Apr 6, 2020 · Twitter for iPhone



VCU Social Work

Hypotheses

- Social media users will consume more alcohol during the COVID-19 pandemic, and
- The positive relationship between social media use and alcohol consumption will be exacerbated for individuals who work/ study from home.

Methods

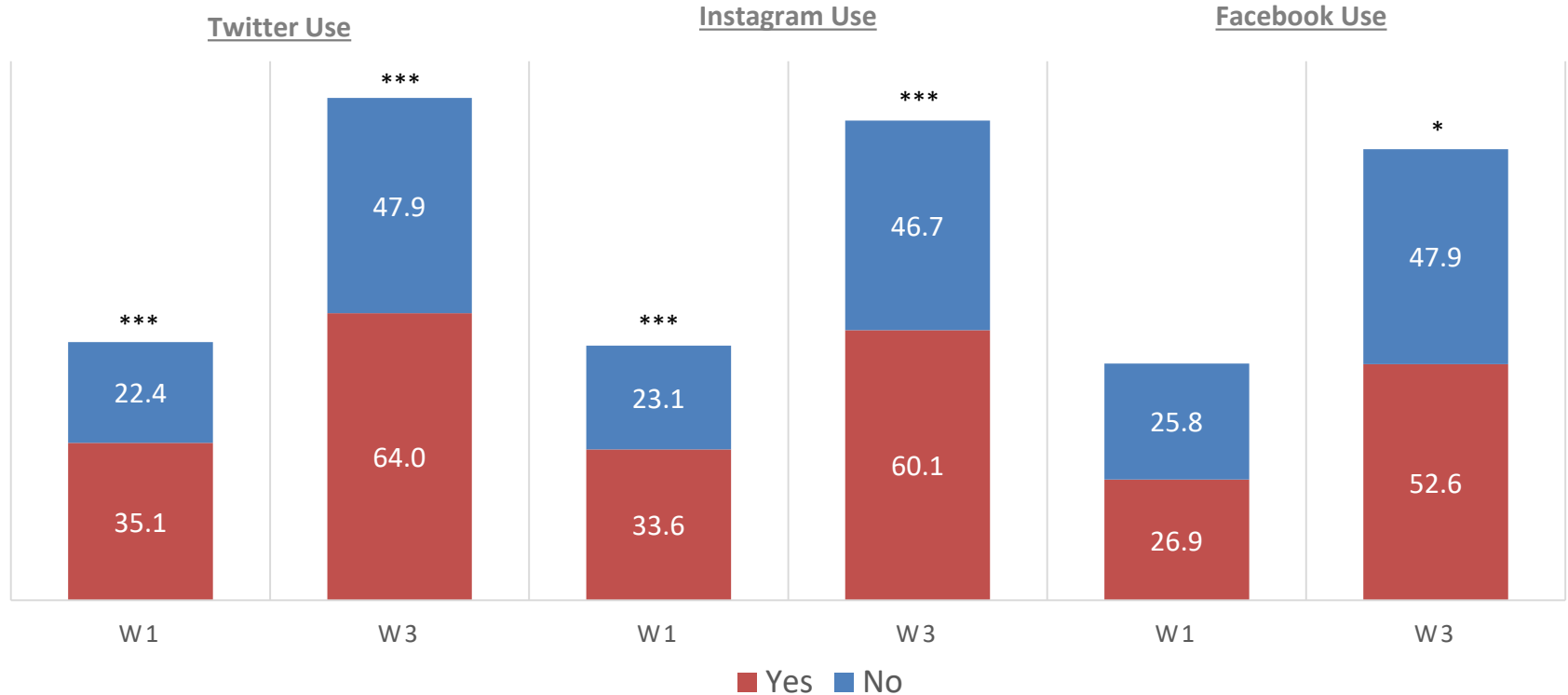
- Sample: Respondents completing a W1 (March 10 – 31) & W3 (April 15 – 30) survey, $N = 5874$.
- Key variables:
 - Twitter, Instagram, Facebook use (0 no, 1 yes) at W1
 - Average minutes spent on social media at W1
 - No. of days (0 – 7) consuming alcohol at W1 & W3
 - Working/ studying from home (0 no, 1 yes) at W1 & W3
- Analyses: Stata's SVY command

Sample Characteristics

	TOTAL	Did not use Twitter	Used Twitter	<i>p</i>	Did not use Instagram	Used Instagram	<i>p</i>	Did not use Facebook	Used Facebook	<i>p</i>
Sex (% Female)	50.91	51.27	49.52		44.12	65.11	***	40.08	56.04	***
Age (%)				***			***			***
18-29 years	12.20	9.77	22.23		6.38	24.34		8.48	13.99	
30-44 years	32.11	22.37	29.58		19.57	32.53		24.73	35.61	
45-64 years	34.86	15.07	18.18		14.80	17.53		37.62	33.49	
65 years or older	20.82	17.81	14.92		19.28	13.02		29.18	16.90	
Race/ethnicity (%)				***			***			***
Asian ^a	5.25	5.08	5.97		4.47	6.89		6.81	4.53	
Black ^a	11.53	12.16	8.73		12.43	9.53		14.34	10.16	
Hispanic / Latino	15.35	14.2	20.14		12.47	21.37		16.44	14.87	
White ^a	64.44	65.61	59.8		67.78	57.59		59.61	66.72	
Other groups ^a	3.43	2.95	5.36		2.85	4.62		2.80	3.73	
Education (%)				***			***			**
Less than high school	8.45	9.34	4.72		9.87	5.43		10.19	7.54	
High school/ GED	28.93	30.95	20.65		31.65	23.30		31.27	27.82	
Some college	27.96	28.20	26.96		27.11	29.74		25.24	29.27	
Bachelor's degree +	34.66	31.51	47.67		31.37	41.53		33.30	35.37	
Currently employed (% Yes)	60.77	58.31	70.89	***	55.61	71.51	***	53.35	64.30	***
Marital status (%)				***			***			***
Married	56.72	57.11	55.25		58.66	52.77		57.60	56.42	
Previously married ^b	19.26	20.78	13.14		21.73	14.22		20.15	18.78	
Never married	24.01	22.11	31.61		19.61	33.01		22.25	24.81	
Household members, M (SE)	1.78 (.028)	1.73 (.031)	2.03 (.068)	***	1.66 (.033)	2.05 (.052)	***	1.57 (.048)	1.89 (.034)	***

Notes: *M* = mean; *SE* = standard error; **p* < .05; ***p* < .01; ****p* < .001; GED = general educational diploma; ^anon-Hispanic; ^bseparated/ divorced/ widowed

Worked/ Studied from Home

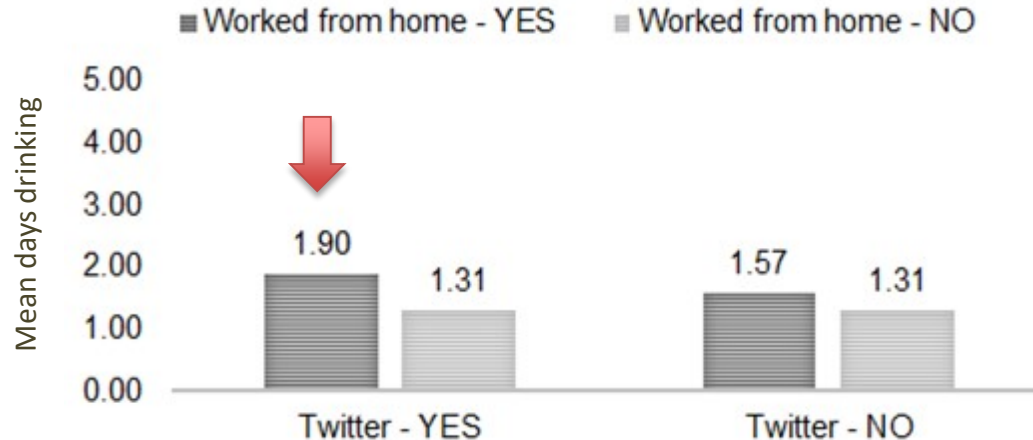


OLS Regression: W3 Alcohol Consumption

	<u>Model 1</u>	<u>Model 2^a</u>	<u>Model 3^b</u>
	<i>B (SE)</i>	<i>B (SE)</i>	<i>B (SE)</i>
Twitter user (%)	.198 (.104)	.153 (.072)*	.081 (.071)
Instagram user (%)	.256 (.091)**	.093 (.062)	.138 (.064)*
Facebook user (%)	-.091 (.094)	-.079 (.059)	-.130 (.058)*
Quartiles of minutes spent on social media	-.147 (.039)***	-.034 (.026)	-.005 (.026)
Worked / studied from home @ W1	-.105 (.093)	-.103 (.065)	-.080 (.066)
Worked / studied from home @ W3	.363 (.080)***	.230 (.055)***	.181 (.056)**

*Notes: *p < .05; **p < .01; ***p < .001; coefficients are unstandardized; ^amodel adjusted for W1 alcohol use; ^bmodel adjusted for W1 alcohol use + sociodemographics*

Twitter Use by Working from Home



($B = .268$, $SE = .132$ and $p = 0.043$)

Main Takeaways

- The relationship between alcohol use at W3 and social media use changed depending on the variables in the model.
 - MORE FREQUENT USE
 - For Instagram users, was at least partially attributed to W1 drinking
 - For Twitter users, partially attributed to their sociodemographic characteristics (e.g., bachelor's +).
 - Facebook use was either not associated with drinking or LESS FREQUENT USE
 - It was unexpected that those reporting more time on social media at W1 drank LESS alcohol at W3, although this relationship appears to also be partially attributed to frequency of drinking at W1.

Takeaways -2-

- Having worked/ studied from home at W3, but not at W1, was associated with greater alcohol use.
- The combination of working/ studying from home at W3 and being on Twitter was associated with drinking MORE days a week.
 - This interaction was not statistically significant for Instagram or Facebook users.
- *Limitation:* no drinking quantity variable in early wave surveys

References

1. National Institute on Alcohol Abuse and Alcoholism. Alcohol sales during the COVID-19 pandemic [Internet]. National Institute on Alcohol Abuse and Alcoholism. 2020 [Cited 2020 Aug 4]. Available from: <https://pubs.niaaa.nih.gov/publications/surveillance-covid-19/COVSALES.htm>
2. Gao J, Zheng P, Jia Y, Chen H, Mao Y, Chen S, et al. Mental health problems and social media exposure during COVID-19 outbreak. PLoS One. 2020 Apr 16;15(4): e0231924
3. Clay JM, Parker MO. Alcohol use and misuse during the COVID-19 pandemic: a potential public health crisis? Lancet Public Health. 2020;5(5): e259