



ADULTS EXPERIENCING COVID-19-RELATED STRESS DRINK MORE

ELYSE R. GROSSMAN, JD, PhD

ALCOHOL POLICY 19

SEPTEMBER 14, 2022; 4:30PM – 6:00PM

**AS REQUIRED BY THE ALCOHOL POLICY 19 CONFERENCE,
I HAVE SIGNED A DISCLOSURE STATEMENT AND NOTE
FOLLOWING CONFLICT(S) OF INTEREST:**

NONE



Evidence to Action: Building a Framework for Change
September 14-16, 2022 Arlington, VA



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Why Do We Care About Alcohol?

What is the Relation Between Stress & Alcohol?

Alcohol-Related-Changes During COVID-19

Impact of COVID-19 on Alcohol Consumption

Moving Forward From Here

WHY DO WE CARE ABOUT ALCOHOL?



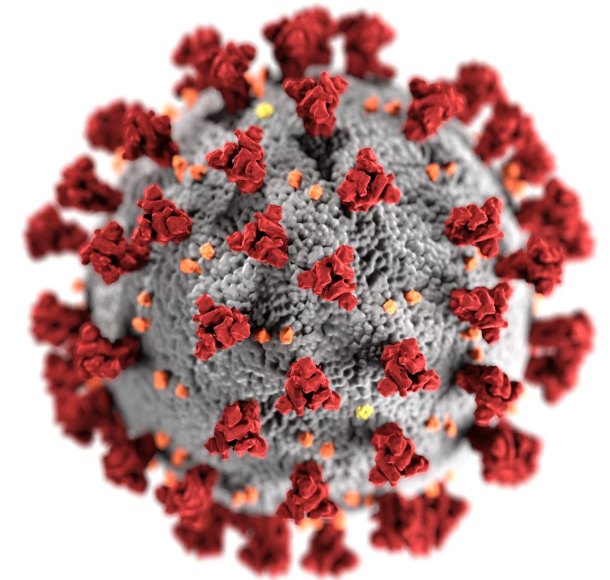
Excessive Alcohol Consumption is a Serious Public Health Problem!



- It is risky.
- It is deadly.
- It is costly.

Alcohol Use & COVID-19

- Persons with an alcohol-use disorder have increased susceptibility to respiratory pathogens and lung injury, including 2x – 4x greater risk of acute respiratory distress syndrome (ARDS), a key cause of death in COVID-19



World Health Organization (WHO)

“Alcohol consumption is associated with a range of communicable and noncommunicable diseases and mental health disorders, which can make a person more vulnerable to COVID-19. In particular, alcohol compromises the body’s immune system and increases the risk of adverse health outcomes. Therefore, people should minimize their alcohol consumption at any time, and particularly during the COVID-19 pandemic.”

Pre-COVID-19 Rates of Consumption

- Participants in 2018 consumed alcohol on an average of 4.8 days and 12 drinks over the past 30 days
- 32% reported binge drinking
- 4% reported extreme binge drinking



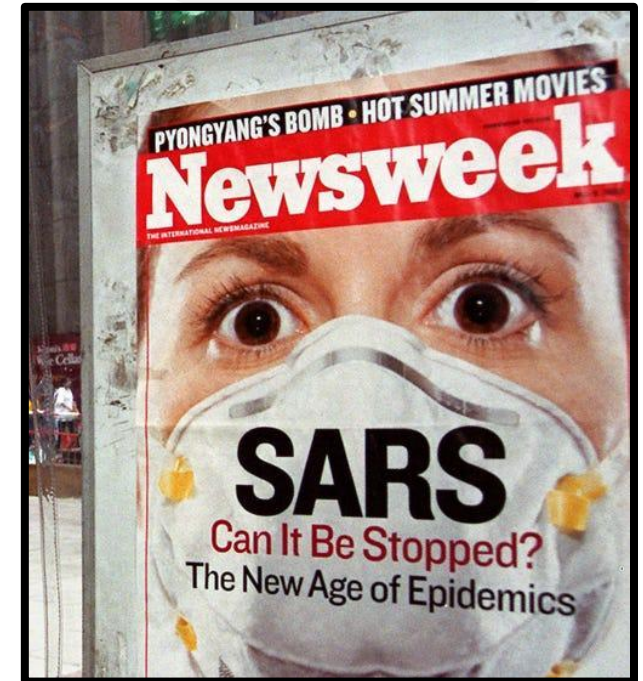
WHAT IS THE RELATION BETWEEN STRESS & ALCOHOL?



What Have We Learned From Prior Events?

Terrorist
Attacks

Sicknesses or
Pandemics



Natural Disasters

Previous Research on Stress & Alcohol

1. Terrorist Attacks:

- Adults in NYC reported increased alcohol use and binge drinking 2 years after 2001 attack on the World Trade Centers (Boscarino et al., 2011)

2. Sicknesses or Pandemics:

- People in China who were quarantined or worked in high-risk locations during the 2003 SARS epidemic reported using alcohol as a coping mechanism which was significantly associated with alcohol abuse/dependence symptoms after the outbreak (Wu et al., 2008)

Previous Research on Stress & Alcohol, cont.

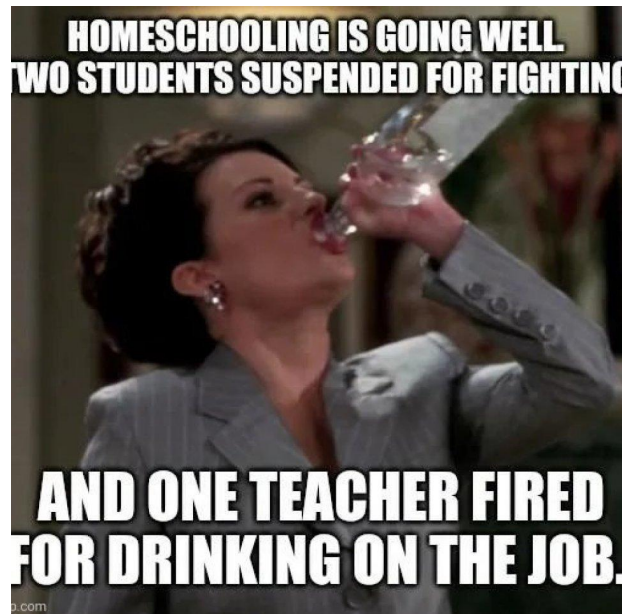
3. Natural Disasters:

- Swiss adults that were affected by the tsunami disaster in the Indian Ocean in 2004 also reported increased substance use (Vetter et al., 2008)
- Adults who survived Hurricane Katrina in 2005 reported consuming alcohol and experiencing alcohol-related problems at a substantially higher rate than expected based on pre-Hurricane prevalence data (Flory et al., 2009)

ALCOHOL-RELATED CHANGES DURING COVID-19



I hope they give us a two week notice before sending us back into the world. I think we all need time to become ourselves again. And by "ourselves" I mean lose 10 pounds, cut our hair and get used to not drinking at 9 am.



**Half of us are gonna come
out of this quarantine as
amazing cooks and the
other half are going to
become alcoholics.
There is no in between.**

Americans buying more alcohol during the coronavirus pandemic, but craft brewers are struggling

CORONAVIRUS

Alcohol trend? Sales soaring for light beers amid COVID-19 pandemic

This is how America drinks now
Delivery orders are up. So is cheap wine.
By Rebecca Jennings | @rebxxxxa | Apr 15, 2020, 7:50am EDT

Changing Alcohol Laws

Many states changed laws to allow...

- Home delivery
- Curbside delivery
- Sale of drinks-to-go

This led to regulating the...

- Quantity of purchases
- Food requirements with sale of alcohol
- Types of containers
- Seals on containers
- Delivery drivers (e.g., age, training)
- Licensing requirements

IMPACT OF COVID-19 ON ALCOHOL CONSUMPTION



Article Alcohol Consumption during the COVID-19 Pandemic: A Cross-Sectional Survey of US Adults

Elyse R. Grossman ^{1,2,*}, Sara E. Benjamin-Neelon ¹ and Susan Sonnenschein ³

¹ Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD 21205, USA; sara.neelon@jhu.edu
² Advancement Strategy Consulting, LLC, Columbia, MD 21046, USA
³ Psychology Department, University of Maryland, Baltimore County, Baltimore, MD 21250, USA; sonnensc@umbc.edu

* Correspondence: egrossman@jhu.edu; Tel: +1-301-758-0409



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Abstract: Emerging but limited evidence suggests that alcohol consumption has increased during the COVID-19 pandemic. This study assessed: (1) whether drinking behaviors changed during the pandemic; and, (2) how those changes were impacted by COVID-19 stress and alcohol consumption. We conducted a cross-sectional online survey with a convenience sample of U.S. adults over 21 years in May 2020. We conducted adjusted linear regressions to assess COVID-19 stress and alcohol consumption. Participants reported consuming 26.8 alcohol drinks on 12.2 of the past 30 days. One-third of participants (34.1%) reported binge drinking and 7.0% reported extreme binge drinking. Participants who experienced COVID-19-related stress (versus not) reported consuming more drinks ($\beta = 4.7$; CI (0.2, 9.1); $p = 0.040$) and a greater number of days drinking ($\beta = 2.4$; CI (0.6, 4.1); $p = 0.007$). Additionally, 60% reported increased drinking but 13% reported decreased drinking, compared to pre-COVID-19. Reasons for increased drinking included stress (45.7%), increased alcohol availability (34.4%), and boredom (30.1%). Participants who reported being stressed by the pandemic consumed more drinks over a greater number of days, which raises concerns from both an individual and public health perspective.

Keywords: coronavirus; binge drinking; pandemic; adults; public health

1. Introduction

Pandemics such as COVID-19 can cause many medical, psychological, and sociological problems [1], including increased alcohol consumption and related harms from such consumption [2]. Alcohol is a harmful substance [3], and is, in fact, currently the fourth leading preventable cause of death in the U.S. [4]. Excessive drinking has also been associated with increased violence [5], crime [6], poverty [7], sexually transmitted diseases [8], and other significant public health harms. Research shows that those experiencing periods of economic or psychological stress, they often misuse [9]. When individuals experience symptoms of alcohol abuse and alcohol dependence [2]. For example, researchers found that individuals in China who were quarantined or worked in high-risk locations during the 2003 SARS epidemic had "increased alcohol abuse/dependence symptoms" three years after the outbreak. Similarly, adults in New York City with posttraumatic stress disorder two years after the 2001 attacks on the World Trade Center also reported increased alcohol use and binge drinking [10].

www.mdpi.com/journal/ijerph

Int. J. Environ. Res. Public Health 2020, 17, 9189; doi:10.3390/ijerph17249189

6/22/2021

THE CONVERSATION

Parents with children forced to do school at home are drinking more



Parents with children forced to do school at home are drinking more

July 29, 2020 3:11pm EDT

More people turn to alcohol in the wake of disasters, research has found. [Facebook](#) [Twitter](#) [LinkedIn](#)

Authors



Susan Sonnenschein
Professor, Applied Developmental
Psychology, University of Maryland,
Baltimore County



Elyse R. Grossman
PhD Fellow, Department of Health,
Behavior and Society, Johns Hopkins
University

The Research Brief is a short take about interesting academic work.

The big idea

We found that parents who are stressed by having to help their children with distance learning during the COVID-19 pandemic drink seven more drinks per month than parents who do not report feeling stressed by distance learning. These stressed parents are also twice as likely to report binge drinking at least once over the prior month than parents who are not stressed, according to our results. **Binge drinking**, which varies by gender, is when women consume at least four, or men have at least five alcoholic beverages (which includes beer, wine, or liquor) within a couple hours of each other.

We learned this from our online survey, which 361 parents with children under 18 years old currently living with them completed in May 2020. Seventy-eight percent of the parents had children who did distance learning in the Spring of 2020. Of those, 66% reported that the experience caused them stress because they were not sure how to help.

<https://theconversation.com/parents-with-children-forced-to-do-school-at-home-are-drinking-more-143164>

Relevant Research Questions

1. What were the **rates of US adult alcohol consumption** during the early months of the COVID-19 pandemic?
2. Are US adults who were **more impacted** by the COVID-19 pandemic **reporting more alcohol consumption** compared with those who were less impacted?
3. Are US parents who were **stressed** by having to **help their children with distance learning** during COVID-19 **reporting more alcohol consumption** than parents who were not stressed by this?

Collecting Data

- **The Survey**: 61 online questions (29 demographic questions, 18 related to alcohol consumption, 14 related to stress or lifestyle changes during COVID-19)
- **Distribution of Survey**: Recruited participants from across US through social media posts and emails sent via group listservs in May 2020
- **Participants**: 998 people from across the US who were 21 years of age or older accessed survey; 838 remained in final sample

Primary Exposure Variable

- Derived from survey question asking:

“How much is/did COVID-19 (Coronavirus) impact your day-to-day life?”

- We collapsed responses into 2 groups:
 1. Less Impact (“Not at all”; “A little”; or “Much”)
 2. More Impact (“Very much”; “Extremely”)

Outcome Measures

1. The # of days in the past 30 days on which alcohol was consumed
2. The total # of drinks consumed over the past 30 days
 - Calculated by multiplying the first outcome by the average quantity of drinks consumed per day
3. Whether participants had engaged in binge drinking
 - Defined as having 4+ (for females) or 5+ (for males) drinks in one sitting at least once over the past 30 days
4. Whether participants had engaged in extreme binge drinking
 - Defined as being drinking 10+ times over the past 30 days

Additional Variables

- Participants were also asked:

“Has your drinking changed due to COVID-19?”

- There were three answer choices:

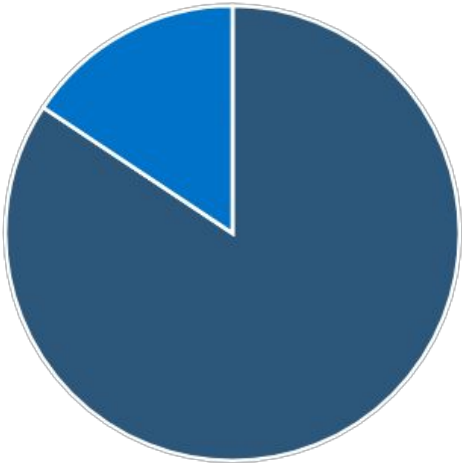
1. Not at all
2. My drinking has decreased
3. My drinking has increased

- For those who answered #2 or #3, they were asked why they thought their drinking had decreased or increased

Demographics

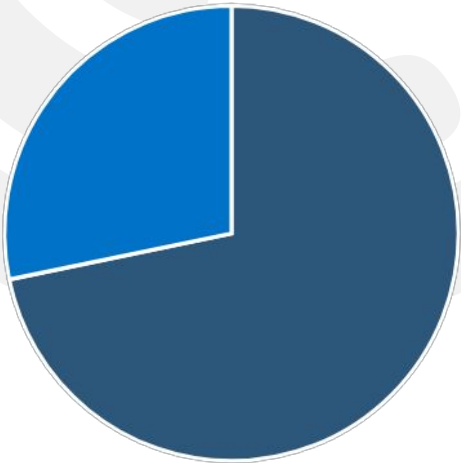
GENDER

- Females
- Males



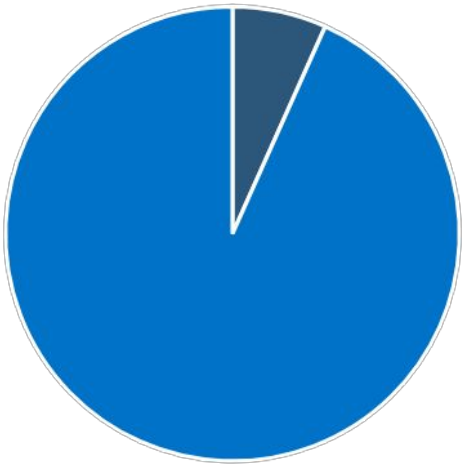
RACE

- White
- Other Race



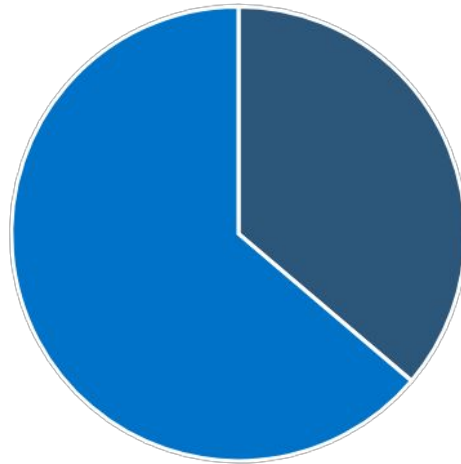
ETHNICITY

- Hispanic
- Not Hispanic

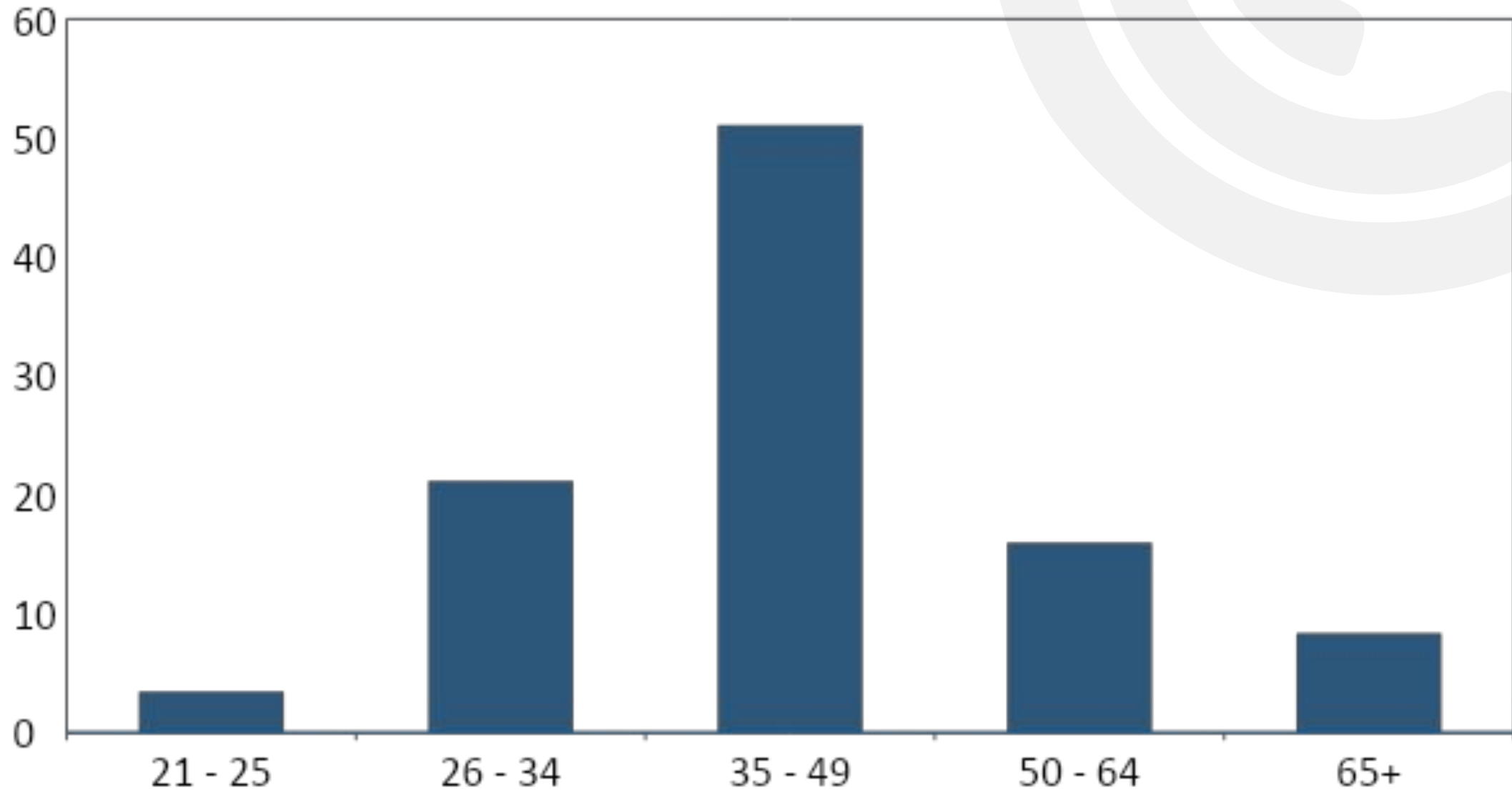


PARENTS

- Has Kids
- No Kids



Demographics – Age of Participants



Results – Rates of Consumption

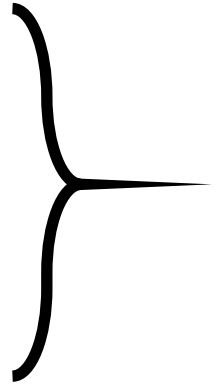
- Participants during COVID-19 consumed alcohol on an average of 12 days and 27 drinks over the past 30 days
- 34% reported binge drinking
- 7% reported extreme binge drinking



Results – Drinking Patterns

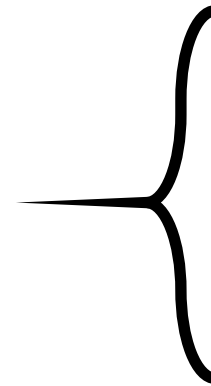


60%

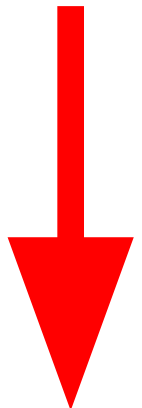


- Increased stress
- Increased availability of alcohol
- Boredom

- Diminished alcohol availability
- Less free time
- Less money



13%



Results – Impact of Stress

- Participants who experienced “very much” or “extreme” stress due to COVID-19 consumed significantly more alcohol than participants who did not report these high levels of stress

- Top concerns during COVID-19 included:
 - Having to socially distance (77%)
 - Having to spend less time with family members and friends (60%)
 - Schools and daycares being closed (47%)



Results – Impact of Stress on Parents

- Parents who were stressed by having to help their children with distance learning during COVID-19 report drinking more
- These stressed parents were also 2x more likely to report binge drinking than parents who were not stressed



<https://theconversation.com/parents-with-children-forced-to-do-school-at-home-are-drinking-more-143164>

Limitations

- ❑ Convenience sample
- ❑ Snowball sampling method
- ❑ Differences in those who completed survey vs. those who did not
- ❑ Self-reported data
- ❑ Did not include participants' geographic locations

Conclusions

As demonstrated in previous research, and now proven true by the COVID-19 pandemic:

When adults experience greater
sociological / economical / financial stress,
they consume more alcohol

MOVING FORWARD FROM HERE



Future Research

□ Future studies are needed that:

- Continue to examine rates of alcohol consumption now it has been 2-3 years since the pandemic began and we could expect to see an even greater impact
- Delve into policy differences by state and the impact of these changing policies on alcohol consumption
- Assess the rate of underage alcohol consumption during COVID-19
- Examine how stress has changed throughout the pandemic and the relation between that and both adult and underage alcohol consumption

Relevant Resources



Published Articles

- Grossman, E.R., Benjamin-Neelon, S.E., & Sonnenschein, S. (2020). Alcohol consumption during the COVID-19 pandemic: A cross-sectional survey of US adults. *International Journal of Environmental Research and Public Health*, 17(24): 9189. <https://www.mdpi.com/1660-4601/17/24/9189>
- Grossman, E.R., Benjamin-Neelon, S.E., & Sonnenschein, S. (2022). Alcohol consumption and alcohol home delivery laws during the COVID-19 pandemic. *Substance Abuse*, 43(1): 1141-1146. DOI: [10.1080/08897077.2022.2060432](https://doi.org/10.1080/08897077.2022.2060432)



Websites

- National Survey on Drug Use and Health (NSDUH) Data: <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>



THANK YOU!

ELYSE R. GROSSMAN, JD, PhD



GROSSMAN.ELYSE@GMAIL.COM