

Chapman University

Chapman University Digital Commons

Student Scholar Symposium Abstracts and
Posters

Center for Undergraduate Excellence

Fall 12-1-2021

COVID-19 Safety Guideline Compliance by Gender Identity

Emma Rothleutner

Chapman University, rothleutner@chapman.edu

Follow this and additional works at: https://digitalcommons.chapman.edu/cusrd_abstracts



Part of the [Public Health Commons](#)

Recommended Citation

Rothleutner, Emma, "COVID-19 Safety Guideline Compliance by Gender Identity" (2021). *Student Scholar Symposium Abstracts and Posters*. 479.

https://digitalcommons.chapman.edu/cusrd_abstracts/479

This Poster is brought to you for free and open access by the Center for Undergraduate Excellence at Chapman University Digital Commons. It has been accepted for inclusion in Student Scholar Symposium Abstracts and Posters by an authorized administrator of Chapman University Digital Commons. For more information, please contact laughtin@chapman.edu.



COVID-19 Safety Guideline Compliance by Gender Identity

Emma Rothleutner

Chapman University, Crean College of Health and Behavioral Sciences

Acknowledgments: Dr. Jason Douglas, Dr. David Frederick



BACKGROUND

COVID-19

- In US 52.6% of females, and 47.4% of males are fully vaccinated (CDC 2021).
- Women had higher infection rates, but men had higher hospitalizations (Gomez et al. 2021)

COVID-19 Policies & Guidelines

- Wear a face mask/covering
- Dining outdoors at restaurants/restriction on indoor capacity
- Stay-at-home orders
- Maintain 6 feet of social distance
- General preventing protocol: avoiding large crowds, handwashing, minimize close social contact

Health Habit Tendencies

- Women more conscious of nutrition, lower smoker rates (Chang et al. 2019).
- Men generally more active than women (Azevedo et al. 2007).
- Women are 33% more likely to visit doctor & have annual checkup (CDC 2006).
- Women have greater concern about COVID-19 and believe they have greater susceptibility compared to men, especially if they have low economic status or poor health (Galasso et al. 2020).

Hypothesis: Individuals who identify as a women will generally be more compliant to COVID-19 guidelines when compared to men.

METHODOLOGY

- **Data collection:** Chapman University National COVID-19 and Mental Health Study team surveyed US adults (n= 3965) (Frederick 2021).
- **Data:** Gender identification (independent) and guideline compliance (dependent)
- **Analyses:** T-tests were performed comparing individuals who identified as a woman or a man and their compliance to various COVID-19 guidelines

RESULTS

	n			
Men	2383			
Women	2830			
Policy	Men mean	Men std. dev	Woman mean	Woman std. dev
Masks	4.19	1.06	4.50	0.94
Gatherings w/ masks	2.58	1.44	2.37	1.49
Gatherings w/o masks	2.10	1.30	1.73	1.13
Outdoor dining	2.22	1.32	1.84	1.18
Indoor dining	2.18	1.31	1.88	1.18
Social distancing	3.85	1.12	4.01	1.10
Masks with people outside household	3.95	1.16	4.01	1.13
General protocol	4.01	1.08	4.26	1.02

Table 1: Descriptive statistics from T-tests

- Woman wore a face covering more frequently than men assuming non-equal variances ([t = -11.01], 95% CI = [-0.36, -0.25])
- Men attended gatherings with masks ([t = 5.04], 95% CI = [0.13, 0.29] assuming equal variances and attended gatherings without masks ([t = 10.83], 95% CI = [0.30, 0.44]) more frequently than women assuming non-equal variances.
- Men dined outdoors ([t = 11.09, 95% CI = [0.32, 0.45]) and indoors ([t = 8.44], 95% CI = [0.22, 0.36]) more frequently than women assuming non-equal variance.
- Women maintained six feet of social distance ([t = -5.08], 95% CI = [-0.21, -0.09]) and wore masks ([t = -6.39], 95% CI = [-0.27, -0.14]) when interacting with people outside of the household more frequently than men assuming equal variances.
- Generally, women followed prevention protocols (masks, social distancing, conscientious hand washing, avoiding crowds, minimizing close social contact) more frequently than men ([t = -8.60], 95% CI = [-0.31, -0.19]) assuming equal variances.

CONCLUSION

- Individuals who identified as a women tended to adhere to COVID-19 more strictly when it came to masks, interacting with people outside of the household, and general prevention protocols, while men participated in gatherings and dining more frequently
- Women generally are more health conscious & engage in behaviors that promote good health which was shown as they took stricter measures against COVID-19
- Public health interventions targeted towards gender may be beneficial as individuals tend to have different perceptions of health and behaviors when they identity as a different gender from someone else

REFERENCES

Azevedo, M.R., Araújo, C.L.P., Reichert, F.F. *et al.* (2008). Gender differences in leisure-time physical activity. *Int J Public Health* **52**, <https://doi.org/10.1007/s00038-006-5062-1>

Chang, S. H., Chang, Y. Y., & Wu, L. Y. (2019). Gender differences in lifestyle and risk factors of metabolic syndrome: Do women have better health habits than men?. *Journal of clinical nursing*, *28*(11-12), 2225–2234. <https://doi.org/10.1111/jocn.14824>

Centers for Disease Control and Prevention. (2006). *NCHS pressroom - 2001 news release - women visit doctor more often than men*. Centers for Disease Control and Prevention. <https://www.cdc.gov/nchs/pressroom/01news/newstudy.htm>.

Center for Disease Control and Prevention. (2021). COVID-19 Vaccination Demographic Data. <https://covid.cdc.gov/covid-data-tracker/#vaccination-demographic>

Frederick, D. (2021). Chapman University National COVID-19 and Mental Health Study.

Galasso, V., Pons, V., Profeta, P., Becher, M., Brouard, S., & Foucault, M. (2020). *Gender differences in covid-19 attitudes and behavior: Panel evidence from eight countries*. PNAS <https://www.pnas.org/content/117/44/27285>.

Gomez JMD., Du-Fay-de-Lavallaz JM., Fugar S., Sarau A., Simmons JA., Clark B., Sanghani RM., Aggarwal NT., Williams KA., Doukky R., Santos, A. (2021). Sex Differences in COVID-19 Hospitalization and Mortality. *Journal of Women's Health*. *30*(5) 646-653. <http://doi.org/10.1089/jwh.2020.8948>