

Online Appendix for: The impact of public health messaging and personal experience on the acceptance of mask wearing during the COVID-19 pandemic

February 9, 2021

Appendix A: Supplemental Tables

Table 1: Balance Tests

	Male	White	Black	Hisp	Mature	Rich	College	Trump	Concerned	Gov Reaction	Heath Cond.
T1	0.0350 (0.0263)	-0.00496 (0.0230)	-0.00138 (0.0181)	-0.00665 (0.0202)	0.00886 (0.0142)	-0.0111 (0.0264)	-0.0265 (0.0242)	0.0366 (0.0794)	0.00897 (0.0265)	-0.0634 (0.105)	0.0136 (0.0265)
T2	-0.00605 (0.0265)	0.00370 (0.0229)	-0.00563 (0.0180)	-0.00466 (0.0203)	0.00111 (0.0139)	0.0154 (0.0264)	-0.0374 (0.0244)	-0.0162 (0.0814)	0.0320 (0.0266)	-0.150 (0.105)	0.0194 (0.0266)
T3	0.00573 (0.0264)	-0.0168 (0.0232)	0.0146 (0.0185)	-0.00210 (0.0203)	0.00611 (0.0140)	0.0141 (0.0264)	-0.0313 (0.0243)	-0.123 (0.0794)	0.0570** (0.0265)	-0.171 (0.106)	0.0373 (0.0265)
Constant	0.548*** (0.0185)	0.751*** (0.0160)	0.135*** (0.0127)	0.179*** (0.0142)	0.0728*** (0.00964)	0.543*** (0.0185)	0.716*** (0.0167)	2.784*** (0.0565)	0.475*** (0.0185)	3.725*** (0.0740)	0.484*** (0.0185)
R^2	0.00100	0.000313	0.000487	0.0000444	0.000185	0.000473	0.000975	0.00155	0.00196	0.00122	0.000723
N	2813	2813	2813	2813	2813	2813	2813	2813	2813	2813	2813

Note: This table reports the results of unconditionally regressing each of the outcome variables listed in the column headings on the three treatment indicators. T1, T2, and T3 refer to the three messaging treatments. T1 refers to the CDC Treatment, in which President Trump recites CDC recommendations regarding the use of face masks or cloth face coverings. T2 refers to the Voluntary Treatment, in which President Trump additionally emphasizes the voluntary nature of wearing a mask. T3 refers to the Refusal Treatment, in which President Trump additionally emphasizes that he will not wear a mask.

Table 2: Average Treatment Effects: Probit

	Mask Self Support	Mask Others Support	Mandate Support
T	0.194** (0.0897)	0.228** (0.105)	0.0398 (0.0838)
T2	-0.0412 (0.0942)	-0.00325 (0.115)	-0.0917 (0.0856)
T3	0.00216 (0.0940)	-0.0967 (0.114)	-0.00558 (0.0865)
Constant	0.711*** (0.185)	0.424** (0.195)	0.308* (0.165)
T+T2	0.153* (0.0915)	0.225** (0.107)	-0.0519 (0.0835)
T+T3	0.196** (0.0917)	0.132 (0.105)	0.0342 (0.0846)
Pseudo R^2	0.212	0.271	0.240
N	2813	2813	2813

Note: Treatment effects are conditioned observed subject heterogeneity including race, education, income, age, gender, experience with COVID-19, health conditions, and stated level of concern regarding COVID-19. Each of the three outcome variables are binary and equal to unity for people who i) say they are likely to wear a mask in the near future, ii) support other people wearing masks, or iii) support a government mandate to wear masks in public, respectively. T indicates a subjects was exposed to any one of the three video treatments. T2 indicates a subjects was exposed to the *Voluntary* treatment. T3 indicates a subject was exposed to the *Refusal* treatment.

Table 3: Average Experiential Effects: Probit

	Mask	Mask Others	Mandate
Known Death	-0.000722 (0.0824)	-0.186* (0.0983)	-0.0536 (0.0732)
Known Pos Test	0.297*** (0.0717)	0.499*** (0.0848)	0.360*** (0.0652)
Pos Test	-0.396** (0.193)	-0.445* (0.243)	-0.0859 (0.195)
Test	0.0845 (0.110)	0.344** (0.138)	0.244** (0.102)
Constant	1.031*** (0.134)	0.940*** (0.146)	0.808*** (0.122)
Known(Death + Pos Test)	0.296*** (0.0766)	0.313*** (0.0857)	0.306*** (0.0692)
Test + Pos Test	-0.312* (0.169)	-0.100 (0.210)	0.158 (0.173)
Pseudo R^2	0.044	0.073	0.049
N	2813	2813	2813

Note: Experiential effects are conditioned on observed subject heterogeneity including race, education, income, age, gender, experience with COVID-19, and health conditions. Each of the three outcome variables are binary and equal to unity for people who i) say they are likely to wear a mask in the near future, ii) support other people wearing masks, iii) or support a government mandate to wear masks in public, respectively.

Appendix B: Survey Instrument

facemasks - redux

Start of Block: Informed Consent

Q1.1 Welcome and thank you for participating. **STUDY:** By proceeding, you have volunteered to participate in a research study conducted by the University of Alaska Anchorage Department of Economics. The UAA Principal Investigators are Alexander James and James Murphy. The purpose of the research project is to understand factors that influence your choices related to protection from COVID-19. You will be asked to complete a survey that includes some basic questions about yourself and about your choices.

VOLUNTARY NATURE OF PARTICIPATION: Your participation in this study is voluntary. You may stop at any time and you do not have to answer any questions you don't want to. Nothing will happen to you if you choose not to answer any questions or if you decide not to participate.

PAYMENT: You will be paid \$0.50 for completing this survey. **TIME:** This survey should take no more than about 5 minutes to complete.

RISKS: There are no foreseeable risks or discomforts.

BENEFITS: There are no direct personal benefits for participation other than the cash payment you receive.

PARTICIPATION: You must be 18 or over and reside in the USA to participate. Your participation is voluntary, and you may withdraw from the study at any time and for any reason. There are no costs to you or any other party.

CONFIDENTIALITY: All of the information we obtain from you will be kept anonymous and confidential.

CONTACT: If you have any questions about the research you can reach Alexander James at ajames27@alaska.edu or James Murphy at jjmurphy2@alaska.edu. If you have any questions about your rights as a research participant, please contact the UAA Research Compliance office at 907-786-1099.

CONSENT: If you agree to participate in this survey, are at least 18 years of age, and reside in the USA, please click the next button. Otherwise, please close your browser window.

End of Block: Informed Consent

Start of Block: Warm up questions

Q2.1 The COVID-19 pandemic is an ongoing outbreak of the coronavirus disease or COVID-19. There are many discussions and debates about how to respond to the pandemic. In your view, how would you describe the U.S. federal government's response to the COVID-19 pandemic?

- Extreme overreaction (21)
 - Moderate overreaction (22)
 - Slight overreaction (23)
 - About right (24)
 - Slight underreaction (25)
 - Moderate underreaction (26)
 - Extreme underreaction (27)
-

Q2.2 To what extent are you concerned about you or your family contracting COVID-19?

- A great deal (16)
- A lot (17)
- A moderate amount (18)
- A little (19)
- None at all (20)

End of Block: Warm up questions

Start of Block: T0. Baseline

Start of Block: T2. Trump Positive Info #2

Q4.1 Timing

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

Q4.2

Please watch the following video and click "next" when you are done. The "next" button will appear after you have watched the video. Please pay careful attention because you will be asked to answer a question regarding this video on the next page.

Page Break

Q4.3 How would you describe the video you just watched?

- It strongly encouraged the use of face masks to limit the spread of COVID-19 (1)
- It somewhat encouraged the use of face masks to limit the spread of COVID-19 (2)
- It neither encouraged or discouraged the use of face masks to limit the spread of COVID-19 (3)
- It somewhat discouraged the use of face masks to limit the spread of COVID-19 (4)
- It strongly discouraged the use of face masks to limit the spread of COVID-19 (5)

End of Block: T2. Trump Positive Info #2

Start of Block: T3. Trump Negative Info #1

Q5.1 Timing

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

Q5.2 Please watch the following video and click "NEXT" when you are done. The "NEXT" button will appear after you have watched the video. Please pay careful attention because you will be asked to answer a question regarding this video on the next page.

Page Break

Q5.3 How would you describe the video you just watched?

- It strongly encouraged the use of face masks to limit the spread of COVID-19 (1)
- It somewhat encouraged the use of face masks to limit the spread of COVID-19 (2)
- It neither encouraged or discouraged the use of face masks to limit the spread of COVID-19 (3)
- It somewhat discouraged the use of face masks to limit the spread of COVID-19 (4)
- It strongly discouraged the use of face masks to limit the spread of COVID-19 (5)

End of Block: T3. Trump Negative Info #1

Start of Block: T4. Trump Negative Info #2

Q6.1 Timing

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

Q6.2

Please watch the following video and click "NEXT" when you are done. The "NEXT" button will appear after you have watched the video. Please pay careful attention because you will be asked to answer a question regarding this video on the next page.

Page Break

Q6.3 How would you describe the video you just watched?

- It strongly encouraged the use of face masks to limit the spread of COVID-19 (1)
- It somewhat encouraged the use of face masks to limit the spread of COVID-19 (2)
- It neither encouraged or discouraged the use of face masks to limit the spread of COVID-19 (3)
- It somewhat discouraged the use of face masks to limit the spread of COVID-19 (4)
- It strongly discouraged the use of face masks to limit the spread of COVID-19 (5)

End of Block: T4. Trump Negative Info #2

Start of Block: Behavior questions

Q7.1 This week, suppose you will need to attend a public setting where social distancing is difficult to maintain. What is the likelihood that you will wear a mask or other mouth and nose covering?

- Definitely will (13)
- Probably will (14)
- Might or might not (15)
- Probably will not (16)
- Definitely will not (17)

Page Break

Q7.2 To what extent do you agree that people should wear a mask or other mouth and nose covering to help prevent the spread of COVID-19?

- Strongly agree (14)
 - Agree (15)
 - Somewhat agree (16)
 - Neither agree nor disagree (17)
 - Somewhat disagree (18)
 - Disagree (19)
 - Strongly disagree (20)
-

Q7.3 When a vaccine is approved, what is the likelihood you will get the vaccine within the first year?

- Definitely will (11)
 - Probably will (12)
 - Might or might not (13)
 - Probably will not (14)
 - Definitely will not (15)
-

Q7.4 To what extent do you think the government should mandate people to wear a face mask in public settings in which social distancing is not possible?

- Strongly supportive of a mandate (1)
- Supportive of a mandate (2)
- Neither supportive or unsupportive of a mandate (3)
- Unsupportive of a mandate (4)
- Strongly unsupportive of a mandate (5)

End of Block: Behavior questions

Start of Block: Covid-19 Experience

Q8.1 How has the COVID-19 pandemic affected your financial security?

- A great deal (11)
 - A lot (12)
 - A moderate amount (13)
 - A little (14)
 - Not at all (15)
-

Q8.2 Do you or anyone in your care have any underlying health conditions that increase the risks associated with COVID-19?

- Yes (28)
 - No (29)
-

Q8.3 Which of the following are true regarding your experience with COVID-19? (Click all that apply)

- I know someone who has tested positive for COVID-19 (1)
- I know someone who knows someone that tested positive for COVID-19 (2)
- I know someone who has died from COVID-19 (3)
- I know someone who knows someone who has died from COVID-19 (4)
- I have been tested for COVID-19, and my test result was positive (5)
- I have been tested for COVID-19, and my test result was negative (6)
- I have been tested for COVID-19, but I have not received results yet (7)
- None of the above apply (9)

End of Block: Covid-19 Experience

Start of Block: Politics

Q9.1 Thinking about your general approach to issues, do you consider yourself to be liberal, moderate, or conservative?

- Very conservative (1)
 - Conservative (2)
 - Moderate (3)
 - Liberal (4)
 - Very liberal (5)
-

Q9.2 Do you approve of Donald Trump's performance as president?

- Strongly approve (1)
- Approve (19)
- Neither approve nor disapprove (20)
- Disapprove (21)
- Strongly disapprove (22)

End of Block: Politics

Start of Block: Demographics

Q10.1 Choose one or more races that you consider yourself to be:

- White (1)
 - Black or African American (2)
 - American Indian or Alaska Native (3)
 - Asian (4)
 - Native Hawaiian or Pacific Islander (5)
 - Other (6)
-

Q10.2 Are you Spanish, Hispanic, or Latino or none of these?

- Yes (1)
 - None of these (2)
-

Q10.3 In which state do you currently reside?

▼ Alabama (1) ... I do not reside in the USA (54)



Q10.4 What is your ZIP code?

Q10.5 What is your age?

- 18 - 24 (1)
- 25 - 29 (3)
- 30 - 39 (4)
- 40 - 49 (5)
- 50 - 59 (6)
- 60 - 69 (7)
- 70 - 79 (10)
- 80 or older (11)



Q10.6 What is your gender?

- Male (1)
- Female (2)
- Other (3) _____

Q10.7 What is the highest level of school you have completed or the highest degree you have received?

- Less than high school degree (1)
 - High school graduate (high school diploma or equivalent including GED) (2)
 - Some college but no degree (3)
 - Associate degree in college (2-year) (4)
 - Bachelor's degree in college (4-year) (5)
 - Master's degree (6)
 - Doctoral degree (7)
 - Professional degree (JD, MD) (8)
-

Q10.8 Information about income is very important to understand, please give your best guess. Please indicate the answer that includes your entire household income last year (in 2019) before taxes.

- Less than \$10,000 (1)
- \$10,000 to \$14,999 (2)
- \$15,000 to \$24,999 (3)
- \$25,000 to \$34,999 (4)
- \$35,000 to \$49,999 (5)
- \$50,000 to \$74,999 (6)
- \$75,000 to \$99,999 (7)
- \$100,000 to \$149,999 (8)
- \$150,000 to \$199,999 (9)
- \$200,000 or more (10)

End of Block: Demographics

Start of Block: Access Code

Q11.1 Access code for Amazon's Mechanical Turk: 294814

End of Block: Access Code

Table 4: Average Experiential Effects: State FE

	Mask	Mask Others	Mandate
Known Death	-0.00308 (0.0169)	-0.0220 (0.0140)	-0.0189 (0.0197)
Known Pos Test	0.0697*** (0.0161)	0.0803*** (0.0133)	0.103*** (0.0187)
Pos Test	-0.0796* (0.0422)	-0.0606* (0.0348)	-0.0167 (0.0491)
Test	0.0246 (0.0232)	0.0465** (0.0191)	0.0639** (0.0270)
Health Cond	0.0409*** (0.0138)	0.0446*** (0.0114)	0.0552*** (0.0160)
Age	0.00115 (0.00495)	0.00146 (0.00408)	-0.00156 (0.00575)
Rich	0.0165 (0.0137)	0.0253** (0.0113)	0.0179 (0.0159)
Coll	0.0475*** (0.0151)	0.0490*** (0.0125)	0.0371** (0.0175)
Male	-0.0171 (0.0133)	-0.00126 (0.0110)	0.00425 (0.0155)
White	-0.0820*** (0.0213)	-0.0452** (0.0176)	-0.134*** (0.0248)
Black	0.00989 (0.0271)	0.00701 (0.0224)	-0.0374 (0.0315)
Hisp	-0.0236 (0.0184)	-0.00388 (0.0152)	0.00553 (0.0214)
Constant	0.820*** (0.0283)	0.818*** (0.0234)	0.759*** (0.0329)
Known (Pos Test + Death)	0.0666*** (0.0171)	0.0583*** (0.0141)	0.0840*** (0.0198)
Test + Pos Test	-0.0550 (0.0374)	-0.0141 (0.0308)	0.0472 (0.0435)
R^2	0.0621	0.0758	0.0834
N	2813	2813	2813

Note: Known Death and Known Pos Test are unity for people who know someone, or know someone who knows someone who has died from, or tested positive for, COVID-19, respectively. Pos Test is unity for people who have tested positive for COVID-19 and Test is unity for people who have either tested positive or negative for COVID-19. See summary statistics for descriptions of covariates and dependent variables. Robust standard errors are given below coefficient estimates in parentheses. State fixed effects are included in each regression.

Table 5: Average Experiential Effects (Conditioned on Treatment)

	Mask Self	Mask Others	Mandate
Known Death	0.00301 (0.0153)	-0.0190 (0.0116)	-0.0106 (0.0184)
Known Pos Test	0.0681*** (0.0161)	0.0799*** (0.0130)	0.105*** (0.0188)
Pos Test	-0.0799* (0.0444)	-0.0516* (0.0301)	-0.0267 (0.0430)
Test	0.0185 (0.0217)	0.0425*** (0.0149)	0.0649*** (0.0245)
Treatment	0.0429** (0.0189)	0.0389** (0.0156)	0.0213 (0.0217)
T2	-0.00349 (0.0183)	-0.00343 (0.0147)	-0.0195 (0.0219)
T3	0.0113 (0.0177)	-0.00225 (0.0145)	0.0137 (0.0212)
Health Cond	0.0402*** (0.0134)	0.0439*** (0.0110)	0.0547*** (0.0159)
Age	0.000500 (0.00503)	0.000212 (0.00400)	-0.00266 (0.00583)
Rich	0.0170 (0.0134)	0.0246** (0.0112)	0.0198 (0.0158)
Coll	0.0477*** (0.0155)	0.0474*** (0.0136)	0.0431** (0.0179)
Male	-0.0151 (0.0132)	-0.000712 (0.0110)	0.00699 (0.0155)
White	-0.0865*** (0.0176)	-0.0498*** (0.0151)	-0.142*** (0.0202)
Black	0.00298 (0.0205)	-0.00127 (0.0174)	-0.0459* (0.0250)
Hisp	-0.0259 (0.0179)	-0.00330 (0.0138)	0.0125 (0.0196)
Constant	0.792*** (0.0284)	0.800*** (0.0244)	0.744*** (0.0329)
Known (Pos Test + Death)	0.0711 0.0166	0.0609 0.0140	0.0945 0.0198
Test + Pos Test	-0.0614 0.0408	-0.00918 0.0280	0.0383 0.0380
R^2	0.0388	0.0475	0.0511
N	2813	2813	2813

Note: Known Death and Known Pos Test are unity for people who know someone, or know someone who knows someone who has died from, or tested positive for, COVID-19, respectively. Pos Test is unity for people who have tested positive for COVID-19 and Test is unity for people who have either tested positive or negative for COVID-19. Results are not conditioned on stated concern with COVID-19. See summary statistics for descriptions of covariates and dependent variables. Robust standard errors are given below coefficient estimates in parentheses.