Masculine Norms and Infectious Disease: The Case of COVID-19

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June 26, 2020

Forthcoming at Politics and Gender

Abstract

During the novel coronavirus pandemic of 2019-2020 early data suggested that men were slightly more likely to contract COVID-19 than women, less likely to seek medical attention for the disease, and far more likely to die as a result of COVID-19. While several studies have explored this gender gap, none have attempted to isolate the psychological processes underpinning this phenomenon. In this research note, I suggest that belief in masculine norms partly explains these differences. Using data from a large (n=100,689) survey of American adults conducted between March and June by the Democracy Fund + UCLA (Nationscape), I find that sexist beliefs, a component of masculine norms, are consistently the strongest predictor of coronavirus-related emotions, behaviors, policy attitudes, and ultimately contracting COVID-19. This study highlights how gender ideology can impact health and impede government public health efforts.

Word Count: 1958

In late May 2020, when the United States had just surpassed 500,000 confirmed COVID-19 cases and nearing 100,000 deaths, President Trump refused to don a mask during a visit to a mask factory in Michigan. The president claimed that he didn't want to give the press the "pleasure of seeing it." He later mocked Democratic presidential candidate Joe Biden for wearing a mask. Trump's refusal to "look weak" highlights how attitudes about masculinity could impede efforts by public health officials to stem the spread of infectious disease.

The vast majority of political science research on the coronavirus pandemic thus far has examined the role of partisan identity. Several researchers have argued that partisanship is among the most significant and consistent factors differentiating health behaviors and policy attitudes (Gadarian et al. 2020; Allcott et al. 2020; Pickup and Stecula 2020). Focus on elites and partisan identity, however, ignores the role that commitments to masculine norms, which cut across predispositions and demographics, can play in shaping health behaviors and preferences.

Building off research in public health and political science, I argue that masculine norms can play understudied but crucial roles in shaping health behaviors and preferences during the coronavirus pandemic, particularly at a time when messages from elites reinforce the link between perceived these attitudes and health behaviors.

Using a large national survey of over 100,000 respondents fielded between March and June 2020 by Democracy Fund and UCLA, I explore the correlates of pandemic-related outcomes. I find that sexism, a component of masculine belief systems, predicts lower levels of concern about the coronavirus, lower levels of engagement in precautionary behaviors, lower levels of support for state and local pandemic policies, and ultimately higher levels of COVID-19 sickness. Sexism is among the strongest correlates of these outcomes, stronger even than partisanship, ideology, gender, and education.

1 Gendered Personalities and Public Health Behaviors

Public health researchers have long explored how gender shapes public health outcomes. Men have higher levels of negative emotional states, are less likely to seek out physical or mental health services, and are more likely to engage in risky behaviors and exhibit poorer physical and mental health outcomes (see Courtenay 2000 for an overview).

Underlying these gaps is a social construction of gender roles, behaviors, and performance (Kimmel 1995). In many countries, the socially dominant conception of traditional gender norms idealize men as independent, self-reliant, and tough and women as protective and weak (Martin 1995). Belief in these gender norms is reflected in destructive health behaviors like denial of weakness and vulnerability, dismissal of need for help, hiding of disability or illness to avoid seeming feminine or weak (Yousaf et al. 2015; Courtenay 2000; Levant et al. 2009; Charmaz 1995), and support for a variety of related political outcomes (McDermott 2016).[1]

More importantly these health behaviors also serve to sustain and reproduce structures of power (Pyke 1996). As with President Trump's refusal to wear a face mask in public and his criticism of Joe Biden for doing so, health behaviors can demonstrate masculine ideals that serve to reinforce the systematic subordination of women or "weak" men and preserve hierarchies of authority (McDermott 2016).

Importantly, because gendered ideology is socialized, it can be adopted by women and potentially be reflected in women's health behaviors as well. Sloan, Conner, and Gough (2015) find that aspects of masculinity predict worse health behavior for both men and women. As such, this study hypothesizes that gendered ideology, as measured by sexist beliefs that reaffirm men's position in social hierarchies, will be predictive of lower levels of concern about the coronavirus pandemic, less engagement in precautionary behavior, less support for pandemic policies, and finally higher levels of illness regardless of one's gender, race, or partisan identity.

[1] For more on the role of gendered personalities and sexism in American politics, see Appendix A.

2 Data and Methods

To test these expectations, this study uses national repeated cross-sectional survey data from Nationscape, an ongoing weekly online survey (n=6,250/week) conducted by Democracy Fund and UCLA. I include all waves that asked questions about COVID-19 (March 19, 2020-June 4, 2020), rendering a total sample of N=100,689. This survey contains multiple questions that tap into COVID-19 concern, behaviors, policy preferences, and self-reported sickness.[2]

The independent variable in my analyses is an additive index measuring sexist attitudes. The scale is comprised of four questions tapping into several components of sexism including a belief in the biological superiority of men over women—old fashioned sexism (Swim et al. 1995)—as well as beliefs that gender hierarchies should be maintained (the measure has been rescaled to range between 0 and 1; mean=0.32, sd=0.18).

The dependent variables are a items measuring: (1) coronavirus concern (4=very concerned); (2) self-reported precautionary behaviors (1=yes); (3) attitudes toward pandemic-related policies (4=strongly agree); and (4) contracting COVID-19 (1=yes).

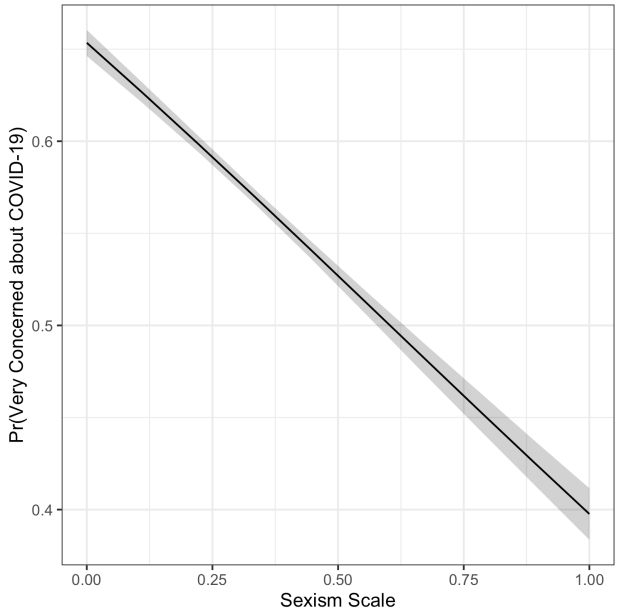
I regress each outcome on the sexism index and control for a host of standard confounders including education (1=college), partisanship (7=strong Republican), ideology (5=very conservative), race (white=1), old fashioned racism (4=strongly agree), gender (1=female), age, political interest (4=most of the time), household income, population density (logged zipcode population), employment (1=unemployed). All regressions use survey weights and include fixed effects for survey wave. For additional information on question wording, descriptives, and scales see Appendix B.

[2]For more information on the Nationscape Survey, see Appendix B.

3 Analysis

I begin by using an ordered probit regression to examine whether those high in sexism report being more concerned about the coronavirus than those lower in sexism, all else equal. In Figure 1, I plot the predicted probability of reporting being "very concerned" moving from lowest to highest values of sexism and holding all other variables at their means. Those high in sexism are 26 percentage points less likely to report being "very concerned" than those low in sexism. This association is stronger than that of partisanship, ideology, race, education, or gender, and only matched by magnitude of the relationship between age and concern.

Figure 1: Sexism and Concern

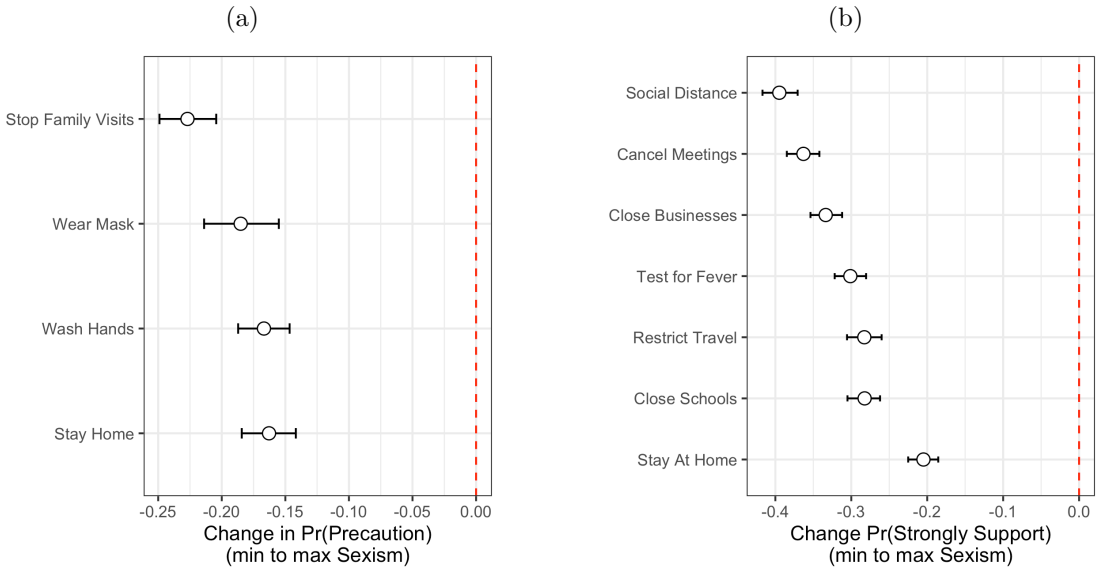


Note: Simulated probability of being "very concerned" about coronavirus. 95% confidence intervals. Full regression table in Appendix C.

Next, we might assume that this lack of concern among those high in sexism would be reflected in both a lower levels of precautionary behavior and in lower support for policies targeted at impeding the spread of the coronavirus. In Figure 2 Panel A I present the change in the probability of engaging in four different behaviors: (a) stopping visiting family and friends; (b) wearing a mask while outdoors; (c) washing hands more than usual; and (d)

self-quarantining at home moving the sexism scale from its observed minimum to maximum holding all other variables at their means. Consistent with expectations, those highest in sexism were between 17 and 23 percentage points less likely to engage in these precautionary behaviors. The same holds for policy support. In Panel B, I show that those highest in sexism are between 21 and 39 percentage points less likely to strongly support these state and local policies than those lowest in sexism, all else equal.

Figure 2: Sexism, Precautions, and Policy Attitudes

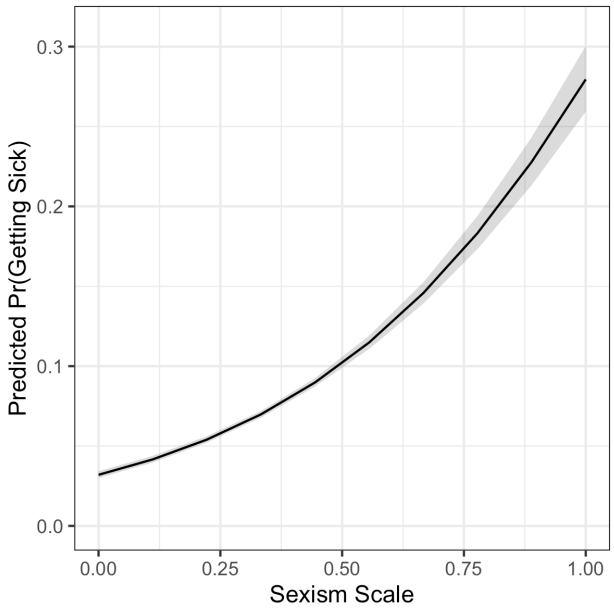


Note: Change in probability of (a) engaging in precautionary behavior or (b) strongly supporting state and local policies. 95% confidence intervals. Full regression table in Appendix C.

Finally, if those highest in sexism are less likely to be concerned about the coronavirus and less likely to take precautions, it is likely that they would also be more likely to contract COVID-19. In Figure 3 I plot the predicted probability that a respondent indicates that they have or may have gotten sick with the coronavirus. On average, about 3.2% of those lowest on the sexism scale report having gotten sick while 28% of those highest on the sexism scale say the same.[3]

[3]I show in Appendix C that these findings hold with male/female, white/non-white, and Democratic and Republican split samples as well as controlling for approval of President Trump.

Figure 3: Sexism and Contracting COVID-19



Note: Simulated probability of reporting having contracted COVID-19. 95% confidence intervals. Full regression table in Appendix C.

4 Conclusion and Discussion

When it comes to public health directives from government officials during an infectious disease pandemic, it's clear that predispositions like partisanship could shape individual responses. Few have yet focused on the role that gender ideology can play in shaping behavior, particularly at a time when the U.S. President openly modeled these norms.

In this research letter I use a large national survey of American adults to estimate the relationship between sexist attitudes and emotional, behavioral, and attitudinal responses to the coronavirus pandemic. I find that sexist individuals are less likely to be worried about the coronavirus, less likely to engage in behaviors to protect themselves and others, less likely to support state and local government policies that aim to stem the spread of the disease, and finally, are more likely to get sick themselves. Together these findings suggest that messaging around public health measures need to overcome barriers around the perceived "masculinity" of behaviors, as Representative Nancy Pelosi recently modeled

during an interview with CNBC, when she remarked that "real men wear masks."

While this study finds that sexist attitudes are strongly correlated with coronavirus behaviors and attitudes, it does little to dig into the proposed mechanism underlying this relationship—specifically gendered personality. Future work could use developed measures like the Bem Sex Role Inventory to explore this relationship. Further, future work could leverage survey experiments to assess the role that elite messages or behaviors play in shaping perceptions of health behaviors as masculine or feminine and how those perceptions spill over into mass attitudes and behaviors.

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Online Appendix for "Masculine Norms and Infectious Disease: The Case of COVID-19"

A Sexism in American Politics

Sexism is uniquely important during the coronavirus pandemic for another reason: President Donald Trump. Scholars have shown that sexism has been playing an increasingly central role in American politics. Sexism conditioned reactions to Donald Trump's campaign attacks on Hillary Clinton (Cassese and Holman 2019; Schaffner et al. 2018), was correlated with support for Trump over Clinton (Valentino et al. 2018; Schaffner et al. 2018; Sides et al. 2018) among both white men and women (Cassese and Barnes 2019; Frasure-Yokley 2018; Bracic et al. 2019), and has continued to exert influence in other down ballot elections like the 2018 U.S. midterms (Schaffner 2020). Similarly, gendered personalities are correlated with a variety of political outcomes like identification with and support for the Republican Party, levels of political engagement and interest in politics, and stronger beliefs in traditional gender roles in political and social life (McDermott 2016). It is likely, then, that Trump's brash display of machismo, by going without wearing a mask, taps into an already heightened association among politically aware individuals between masculinity norms, Trump, and the Republican Party.

B Questions, Descriptive Statistics, and Scale Construction

B.1 Nationscape Data

Nationscape is a large, weekly online survey conducted by Lucid for the Democracy Fund and researchers at UCLA that was designed to collect weekly snapshots of the American electorate throughout the 2019-2020 primary and general elections (Tausanovitch and Vavreck 2020). This cross-section survey is in the field every day of the week and includes weekly collections of N∼6,250 responses. While the sample is opt-in, a representativeness assessment of the data finds that the samples are comparable to those collected by well-known pollsters like Pew and YouGov (Tausanovitch et al. 2019). More information on the survey can be found at https://www.voterstudygroup.org/nationscape.

B.2 IV: Sexism Scale

Respondents indicated whether they agreed or disagreed (5-pt Likert) with the following statements. The first two are part of an established old-fashioned sexism battery (Swim et al. 1995) and the last two, which tap into perceptions of attitudes toward gendered social hierarchies, were created by researchers at Democracy Fund Voter Study Group for their panel study.

- "I would be more comfortable having a man as a boss than a woman" (reversed, mean=2.82)

- "Women are just as capable of thinking logically as men" (mean=1.66)
- "Increased opportunities for women have significantly improved the quality of life in the United States" (mean=2.03)
- "Women who complain about harassment often cause more problems than they solve" (reversed, mean=2.70)

Responses for each range from 1=strongly disagree to 5=strongly disagree. While these measures do not directly measure adherence to masculine norms, sexism is a central component of the masculinity belief system and is highly correlated with conforming to masculine norms (Smiler 2006). Questions were added together into a sexism scale (α=0.56) that was re-scaled to range between 0 and 1 (mean=0.32, sd=0.18).

B.3 DV: Behaviors, Attitudes, and Sickness

The dependent variables are a series of items measuring: (1) concern about coronavirus; (2) self-reported precautionary behaviors; (3) attitudes toward pandemic-related state and local policies; and (4) whether the respondent had or has contracted COVID-19. Full question wording below:

Concern

- "How concerned are you about coronavirus here in the United States?" (1=Very concerned; 2=Somewhat concerned; 3=Not very concerned; 4=Not at all concerned; mean=1.57)

Precautionary Behavior

Have you done any of the following things in response to the spread of coronavirus?

- *Wash Hands* "Washed your hands more often than you typically do?" (1=Yes; 0=No; mean=0.92)
- *Wear Mask* "Worn a mask when going out in public?" (1=Yes; 0=No; mean=0.84)
- *Stop Family Visits* "Stopped visiting family or friends?" (1=Yes; 0=No; mean=0.81)
- *Stay Home* "Not left my home for a prolonged period of time?" (1=Yes; 0=No; mean=0.78)

State and Local Policies

"As you may know, some state and local governments have taken certain actions in response to the coronavirus and are considering other actions. Do you support or oppose the following actions?"

- *Cancel Meetings* "Cancel all meetings or gatherings of more than 10 people, like sports events, concerts, conferences, etc" (1=Strongly support; 2=Somewhat support; 3=Somewhat oppose; 4=Strongly oppose; 5=Don't know (recoded as NA); mean=1.65)

- *Close Businesses* "Close certain businesses where larger numbers of people gather, like theaters, bars, restaurants, etc." (1=Strongly support; 2=Somewhat support; 3=Somewhat oppose; 4=Strongly oppose; 5=Don't know (recoded as NA); mean=1.67)

- *Close Schools* "Close schools and universities" (1=Strongly support; 2=Somewhat support; 3=Somewhat oppose; 4=Strongly oppose; 5=Don't know (recoded as NA); mean=1.69)

- *Restrict Travel* "Restrict travel by plane, train, or bus" (1=Strongly support; 2=Somewhat support; 3=Somewhat oppose; 4=Strongly oppose; 5=Don't know (recoded as NA); mean=1.68)

- *Stay at Home* "Restrict all non-essential travel outside the home" (1=Strongly support; 2=Somewhat support; 3=Somewhat oppose; 4=Strongly oppose; 5=Don't know (recoded as NA); mean=1.92)

- *Social Distance* "Encourage people to stay in their homes and avoid socializing with others" (1=Strongly support; 2=Somewhat support; 3=Somewhat oppose; 4=Strongly oppose; 5=Don't know (recoded as NA); mean=1.57)

- *Test for Fever* "Test people for a fever before letting them enter public buildings" (1=Strongly support; 2=Somewhat support; 3=Somewhat oppose; 4=Strongly oppose; 5=Don't know (recoded as NA); mean=1.67)

Sick with COVID-19

Have any of the following people been sick with coronavirus?

- *Sick* "You" (1=Yes/Maybe; 0=No; mean=0.087)

Control Variables

- *College* (1=Bachelor's Degree or greater; mean=0.30)

- *Partisanship* (1=Strong Democrat; 2=Weak Democrat; 3=Lean Democrat; 4=Independent; 5=Lean Republican; 6=Weak Republican; 7=Strong Republicans; mean=3.90)

- *Ideology* (1=Very liberal; 2=Liberal; 3=Moderate/Not Sure; 4=Conservative; 5=Very Conservative; mean=3.04)

- *Gender* (1=Female; 0=Other; mean=0.52)

- *Age* (Continuous; mean=47.46)

- *Race* (1=Non-Hispanic White; 0=Other; mean=0.66)
- *Old-Fashioned Racism* (Additive index of two old-fashioned racism questions below scaled between 0 and 1. mean=0.34)
  - "I prefer that my close relatives marry spouses from their same race" (Strongly agree=5; Somewhat agree=4; Neither agree nor disagree=3; Somewhat disagree=2; Strongly disagree=1)
  - "I think it's alright for blacks and whites to date each other" (Strongly agree=1; Somewhat agree=2; Neither agree nor disagree=3; Somewhat disagree=4; Strongly disagree=5)
- *Interest* (1=Most of the time; 2=Some of the time; 3=Only now and then; 4=Hardly at all; mean=1.83)
- *Household Income* (1=Less than $14,999 to 24=$250,000 and above; mean=12.89)
- *Unemployed* (1=Yes; 0=No; mean=0.10)
- *Logged Population* (mean=12.66)

C Regression Tables

Table 1: Concern

	Dependent variable:
	Coronavirus Concern
Sexism	-0.655^{***}
	(0.026)
College	0.097^{***}
	(0.010)
Democrat	0.304^{***}
	(0.012)
Republican	-0.071^{***}
	(0.012)
Conservative (5-pt Ideology)	-0.158^{***}
	(0.005)
Female	0.184^{***}
	(0.008)
Age	0.010^{***}
	(0.0002)
White	-0.197^{***}
	(0.009)
Racism	0.262^{***}
	(0.018)
Political Interest	-0.203^{***}
	(0.005)
Household Income	0.002^{**}
	(0.001)
Unemployed	-0.005
	(0.014)
Logged Population	0.030^{***}
	(0.002)
Wave FEs	Yes
Observations	90,722
Note:	*p<0.1; **p<0.05; ***p<0.01

Ordered probit regression coefficients. Standard errors in parentheses. Two-tailed t-tests. All models use survey weights.

Table 2: Precautions

	Dependent variable:			
	Wash Hands	Stop Family Visits	Stay Home	Wear Mask
	(1)	(2)	(3)	(4)
Sexism	−1.870***	−1.397***	−0.906***	−1.338***
	(0.085)	(0.061)	(0.056)	(0.096)
College	0.152***	0.308***	0.219***	0.285***
	(0.035)	(0.025)	(0.022)	(0.039)
Democrat	0.428***	0.305***	0.208***	0.602***
	(0.039)	(0.029)	(0.027)	(0.044)
Republican	0.142***	−0.013	−0.018	0.127***
	(0.038)	(0.029)	(0.027)	(0.042)
Conservative (5-pt Ideology)	−0.041***	0.010	−0.065***	−0.135***
	(0.015)	(0.011)	(0.010)	(0.017)
Female	0.220***	0.533***	0.381***	0.196***
	(0.028)	(0.020)	(0.018)	(0.031)
Age	0.009***	0.006***	0.001	0.016***
	(0.001)	(0.001)	(0.001)	(0.001)
White	−0.053*	−0.040*	−0.064***	−0.255***
	(0.031)	(0.022)	(0.021)	(0.036)
Racism	0.096	−0.236***	−0.079**	−0.415***
	(0.060)	(0.043)	(0.039)	(0.066)
Political Interest	−0.262***	−0.205***	−0.199***	−0.183***
	(0.015)	(0.011)	(0.010)	(0.017)
Household Income	0.002	0.019***	0.007***	0.015***
	(0.002)	(0.001)	(0.001)	(0.002)
Unemployed	−0.087**	−0.138***	0.131***	−0.334***
	(0.043)	(0.031)	(0.031)	(0.047)
Logged Population	0.097***	0.081***	0.070***	0.193***
	(0.008)	(0.006)	(0.005)	(0.009)
Intercept	1.812***	0.009	0.501***	−0.613***
	(0.143)	(0.101)	(0.094)	(0.157)
Wave FEs	Yes	Yes	Yes	Yes
Observations	77,427	77,254	77,339	37,626
Log Likelihood	−19,226.680	−32,413.390	−37,393.480	−13,858.210
Akaike Inf. Crit.	38,499.360	64,872.770	74,832.960	27,752.410
Note:				*p<0.1; **p<0.05; ***p<0.01

Logistic regression coefficients. Standard errors in parentheses. Two-tailed t-tests. All models use survey weights.

Table 3: Policy Support

	Dependent variable:						
	Cancel Meet	Close Business	Close School	Restrict Travel	Stay At Home	Social Distance	Test for Fever
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Sexism	−0.945***	−0.862***	−0.723***	−0.726***	−0.533***	−1.040***	−0.776***
	(0.029)	(0.028)	(0.028)	(0.032)	(0.027)	(0.032)	(0.028)
College	0.038***	0.034***	−0.008	−0.021*	0.055***	0.031**	0.020*
	(0.011)	(0.010)	(0.010)	(0.012)	(0.010)	(0.012)	(0.010)
Democrat	0.182***	0.198***	0.139***	0.111***	0.161***	0.206***	0.135***
	(0.014)	(0.014)	(0.014)	(0.016)	(0.013)	(0.016)	(0.014)
Republican	−0.157***	−0.142***	−0.179***	−0.088***	−0.120***	−0.108***	−0.059***
	(0.014)	(0.014)	(0.014)	(0.016)	(0.014)	(0.016)	(0.014)
Conservative (5-pt Ideology)	−0.133***	−0.127***	−0.117***	−0.088***	−0.106***	−0.099***	−0.059***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.005)
Female	0.199***	0.178***	0.161***	0.195***	0.170***	0.203***	0.162***
	(0.009)	(0.009)	(0.009)	(0.010)	(0.009)	(0.010)	(0.009)
Age	0.008***	0.006***	0.006***	0.004***	0.003***	0.006***	0.008***
	(0.0003)	(0.0003)	(0.0003)	(0.0003)	(0.0003)	(0.0003)	(0.0003)
White	−0.100***	−0.089***	−0.089***	−0.040***	−0.205***	−0.071***	−0.136***
	(0.010)	(0.010)	(0.010)	(0.011)	(0.010)	(0.012)	(0.010)
Racism	0.045**	0.097***	0.025	0.101***	0.181***	−0.027	0.089***
	(0.020)	(0.020)	(0.020)	(0.022)	(0.019)	(0.022)	(0.020)
Political Interest	−0.050***	−0.061***	−0.046***	−0.013**	−0.045***	−0.058***	−0.088***
	(0.005)	(0.005)	(0.005)	(0.006)	(0.005)	(0.006)	(0.005)
Household Income	0.002***	0.002**	0.0002	−0.0003	0.002***	0.005***	0.002***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Unemployed	−0.049***	−0.012	0.019	−0.038**	−0.060***	−0.057***	−0.041***
	(0.015)	(0.015)	(0.015)	(0.017)	(0.015)	(0.017)	(0.015)
Logged Population	0.021***	0.017***	0.008***	−0.002	0.031***	0.013***	0.009***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Wave FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	71,842	71,817	71,666	56,837	71,532	57,653	70,758
Note:							*p<0.1; **p<0.05; ***p<0.01

Ordered probit regression coefficients. Standard errors in parentheses. Two-tailed t-tests. All models use survey weights.

Table 4: Contracting COVID-19

	Dependent variable:
	You Got Sick
Sexism	2.460^{***}
	(0.076)
College	0.157^{***}
	(0.028)
Democrat	0.074^{*}
	(0.039)
Republican	0.200^{***}
	(0.039)
Conservative (5-pt Ideology)	-0.304^{***}
	(0.012)
Female	-0.142^{***}
	(0.025)
Age	-0.032^{***}
	(0.001)
White	-0.109^{***}
	(0.027)
Racism	0.830^{***}
	(0.055)
Political Interest	-0.249^{***}
	(0.015)
Household Income	0.021^{***}
	(0.002)
Unemployed	0.075^{*}
	(0.041)
Logged Population	0.027^{***}
	(0.007)
Intercept	-1.473^{***}
	(0.127)
Wave FEs	Yes
Observations	93,724
Log Likelihood	−23,373.630
Akaike Inf. Crit.	46,793.260
Note:	*p<0.1; **p<0.05; ***p<0.01

Logistic regression coefficients. Standard errors in parentheses. Two-tailed t-tests. All models use survey weights.

Table 5: Models by Gender

	Dependent variable:							
	Concern		Wash Hands		Cancel Meetings		You Sick	
	ordered probit		*logistic*		*ordered probit*		*logistic*	
	F	M	F	M	F	M	F	M
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sexism	−0.728***	−0.647***	−2.084***	−1.752***	−0.959***	−0.985***	2.226***	2.592***
	(0.037)	(0.036)	(0.126)	(0.117)	(0.042)	(0.040)	(0.114)	(0.104)
College	0.031**	0.158***	0.085*	0.206***	−0.026*	0.103***	−0.042	0.324***
	(0.013)	(0.014)	(0.049)	(0.049)	(0.015)	(0.015)	(0.042)	(0.038)
Democrat	0.224***	0.386***	0.280***	0.564***	0.163***	0.209***	0.020	0.123**
	(0.017)	(0.017)	(0.058)	(0.054)	(0.020)	(0.020)	(0.056)	(0.054)
Republican	−0.186***	0.035**	−0.034	0.284***	−0.176***	−0.135***	0.151***	0.229***
	(0.017)	(0.017)	(0.058)	(0.051)	(0.020)	(0.020)	(0.058)	(0.054)
Conservative (5-pt Ideology)	−0.132***	−0.173***	0.011	−0.073***	−0.136***	−0.128***	−0.259***	−0.315***
	(0.007)	(0.006)	(0.024)	(0.020)	(0.008)	(0.007)	(0.021)	(0.016)
Age	0.012***	0.008***	0.009***	0.008***	0.010***	0.006***	−0.029***	−0.034***
	(0.0004)	(0.0003)	(0.001)	(0.001)	(0.0004)	(0.0004)	(0.001)	(0.001)
White	−0.229***	−0.170***	−0.00003	−0.112**	−0.137***	−0.064***	−0.083**	−0.173***
	(0.013)	(0.014)	(0.045)	(0.044)	(0.015)	(0.015)	(0.040)	(0.037)
Racism	0.169***	0.346***	−0.045	0.199**	−0.033	0.124***	0.413***	1.182***
	(0.025)	(0.026)	(0.088)	(0.083)	(0.028)	(0.028)	(0.082)	(0.076)
Political Interest	−0.208***	−0.196***	−0.266***	−0.262***	−0.034***	−0.067***	−0.205***	−0.287***
	(0.007)	(0.007)	(0.022)	(0.020)	(0.008)	(0.008)	(0.022)	(0.021)
Household Income	−0.001	0.004***	−0.006**	0.008***	0.001	0.003**	0.019***	0.022***
	(0.001)	(0.001)	(0.003)	(0.003)	(0.001)	(0.001)	(0.003)	(0.003)
Unemployed	0.036*	−0.035*	0.062	−0.178***	0.009	−0.093***	0.023	0.148***
	(0.020)	(0.019)	(0.069)	(0.056)	(0.022)	(0.021)	(0.062)	(0.054)
Logged Population	0.021***	0.036***	0.103***	0.089***	0.024***	0.018***	0.033***	0.021**
	(0.003)	(0.004)	(0.012)	(0.011)	(0.004)	(0.004)	(0.011)	(0.010)
Constant			2.164***	1.751***			−1.707***	−1.563***
			(0.211)	(0.192)			(0.186)	(0.170)
Wave FEs	Y	Y	Y	Y	Y	Y	Y	Y
Observations	47,490	43,232	41,679	35,748	37,913	33,930	50,737	42,987
Log Likelihood			−9,209.862	−9,967.498			−10,959.660	−12,328.090
Akaike Inf. Crit.			18,463.720	19,978.990			21,959.310	24,696.180
Note:								*p<0.1; **p<0.05; ***p<0.01

Regression type noted above columns. Standard errors in parentheses. Two-tailed t-tests. All models use survey weights.

Table 6: Models by Race

	Dependent variable:							
	Concern		Wash Hands		Cancel Meetings		You Sick	
	ordered probit		*logistic*		*ordered probit*		*logistic*	
	W	NW	W	NW	W	NW	W	NW
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sexism	−0.548***	−0.829***	−1.476***	−2.564***	−0.773***	−1.247***	2.222***	2.739***
	(0.031)	(0.045)	(0.105)	(0.151)	(0.035)	(0.050)	(0.098)	(0.124)
College	0.075***	0.139***	0.173***	0.122*	0.026**	0.056***	0.222***	−0.020
	(0.011)	(0.018)	(0.041)	(0.064)	(0.012)	(0.020)	(0.034)	(0.050)
Democrat	0.329***	0.265***	0.426***	0.455***	0.263***	0.084***	−0.103**	0.272***
	(0.016)	(0.019)	(0.051)	(0.062)	(0.018)	(0.023)	(0.052)	(0.059)
Republican	−0.061***	−0.073***	0.181***	0.096	−0.127***	−0.152***	0.109**	0.324***
	(0.015)	(0.022)	(0.047)	(0.069)	(0.017)	(0.026)	(0.050)	(0.065)
Conservative (5-pt Ideology)	−0.189***	−0.095***	−0.124***	0.087***	−0.168***	−0.059***	−0.301***	−0.270***
	(0.006)	(0.008)	(0.019)	(0.026)	(0.006)	(0.009)	(0.015)	(0.021)
Age	0.010***	0.009***	0.011***	0.004**	0.007***	0.009***	−0.038***	−0.020***
	(0.0003)	(0.0005)	(0.001)	(0.002)	(0.0003)	(0.001)	(0.001)	(0.001)
Female	0.178***	0.197***	0.262***	0.159***	0.190***	0.226***	−0.128***	−0.172***
	(0.010)	(0.015)	(0.034)	(0.049)	(0.011)	(0.016)	(0.033)	(0.040)
Racism	0.314***	0.141***	0.225***	−0.267**	0.174***	−0.243***	0.583***	1.477***
	(0.021)	(0.034)	(0.072)	(0.116)	(0.024)	(0.038)	(0.070)	(0.095)
Political Interest	−0.210***	−0.190***	−0.253***	−0.286***	−0.052***	−0.049***	−0.347***	−0.122***
	(0.006)	(0.008)	(0.018)	(0.026)	(0.007)	(0.010)	(0.021)	(0.024)
Household Income	0.002***	0.001	0.012***	−0.012***	0.0004	0.005***	0.021***	0.020***
	(0.001)	(0.001)	(0.003)	(0.004)	(0.001)	(0.001)	(0.002)	(0.003)
Unemployed	−0.065***	0.073***	−0.210***	0.139*	−0.081***	−0.002	0.137**	−0.015
	(0.018)	(0.022)	(0.053)	(0.074)	(0.020)	(0.025)	(0.054)	(0.061)
Logged Population	0.034***	0.020***	0.076***	0.123***	0.023***	0.018***	0.043***	−0.006
	(0.003)	(0.004)	(0.010)	(0.014)	(0.003)	(0.005)	(0.010)	(0.012)
Constant			1.757***	1.958***			−1.127***	−2.370***
			(0.171)	(0.244)			(0.156)	(0.202)
Wave FEs	Y	Y	Y	Y	Y	Y	Y	Y
Observations	60,345	30,377	53,063	24,364	48,176	23,667	64,656	29,068
Log Likelihood			−12,966.410	−6,124.547			−14,621.550	−8,550.023
Akaike Inf. Crit.			25,976.810	12,293.090			29,283.090	17,140.040
Note:								*p<0.1; **p<0.05; ***p<0.01

Regression type noted above columns. Standard errors in parentheses. Two-tailed t-tests. All models use survey weights.

Table 7: Models by Party

	Dependent variable:							
	Concern		Wash Hands		Cancel Meetings		You Sick	
	ordered probit		*logistic*		*ordered probit*		*logistic*	
	D	R	D	R	D	R	D	R
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sexism	−0.553***	−0.651***	−1.773***	−1.766***	−1.179***	−0.676***	2.858***	2.174***
	(0.043)	(0.038)	(0.153)	(0.124)	(0.047)	(0.042)	(0.115)	(0.119)
College	0.040***	0.173***	−0.027	0.350***	−0.004	0.094***	0.125***	0.189***
	(0.015)	(0.014)	(0.058)	(0.051)	(0.017)	(0.015)	(0.042)	(0.044)
White	−0.178***	−0.204***	−0.029	0.001	−0.041***	−0.162***	−0.139***	−0.130***
	(0.014)	(0.016)	(0.051)	(0.053)	(0.015)	(0.018)	(0.038)	(0.047)
Conservative (5-pt Ideology)	−0.066***	−0.233***	0.126***	−0.148***	−0.069***	−0.147***	−0.357***	−0.310***
	(0.008)	(0.007)	(0.027)	(0.022)	(0.008)	(0.007)	(0.020)	(0.017)
Age	0.011***	0.008***	0.008***	0.011***	0.010***	0.005***	−0.028***	−0.038***
	(0.0004)	(0.0004)	(0.001)	(0.001)	(0.0004)	(0.0004)	(0.001)	(0.001)
Female	0.173***	0.142***	0.125**	0.154***	0.179***	0.185***	−0.105***	−0.152***
	(0.014)	(0.012)	(0.050)	(0.042)	(0.015)	(0.014)	(0.038)	(0.040)
Racism	0.199***	0.411***	−0.319***	0.268***	−0.191***	0.283***	1.150***	0.780***
	(0.032)	(0.025)	(0.115)	(0.085)	(0.035)	(0.028)	(0.087)	(0.083)
Political Interest	−0.304***	−0.139***	−0.342***	−0.186***	−0.121***	0.006	−0.244***	−0.344***
	(0.008)	(0.008)	(0.027)	(0.024)	(0.009)	(0.009)	(0.024)	(0.027)
Household Income	0.004***	0.001	0.001	0.0005	0.005***	0.0004	0.026***	0.026***
	(0.001)	(0.001)	(0.004)	(0.003)	(0.001)	(0.001)	(0.003)	(0.003)
Unemployed	0.045**	−0.048**	−0.260***	−0.052	−0.019	−0.053**	0.133**	−0.029
	(0.022)	(0.023)	(0.073)	(0.072)	(0.023)	(0.026)	(0.060)	(0.073)
Logged Population	0.021***	0.040***	0.088***	0.096***	0.018***	0.025***	0.022**	0.015
	(0.004)	(0.004)	(0.014)	(0.012)	(0.004)	(0.004)	(0.011)	(0.012)
Constant			2.271***	2.036***			−1.732***	−0.707***
			(0.236)	(0.218)			(0.178)	(0.198)
Wave FEs	Y	Y	Y	Y	Y	Y	Y	Y
Observations	39,856	36,236	33,746	32,662	32,202	29,097	40,771	39,479
Log Likelihood			−6,523.399	−8,447.620			−10,301.510	−9,133.533
Akaike Inf. Crit.			13,088.800	16,937.240			20,641.030	18,305.060
Note:								*p<0.1; **p<0.05; ***p<0.01

Regression type noted above columns. Standard errors in parentheses. Two-tailed t-tests. All models use survey weights.

Table 8: Models Controlling for Trump Approval

	Dependent variable:			
	Concern	Wash Hands	Cancel Meetings	You Sick
	ordered probit	*logistic*	*ordered probit*	*logistic*
	(1)	(2)	(3)	(4)
Sexism	−0.537***	−1.694***	−0.842***	2.044***
	(0.026)	(0.089)	(0.030)	(0.080)
College	0.089***	0.150***	0.028**	0.142***
	(0.010)	(0.036)	(0.011)	(0.029)
White	−0.187***	−0.048	−0.080***	−0.151***
	(0.010)	(0.033)	(0.011)	(0.028)
Democrat	0.227***	0.346***	0.135***	0.291***
	(0.013)	(0.043)	(0.015)	(0.043)
Republican	0.013	0.267***	−0.040***	−0.083*
	(0.014)	(0.043)	(0.016)	(0.044)
Conservative (5-pt Ideology)	−0.141***	−0.026*	−0.116***	−0.320***
	(0.005)	(0.015)	(0.005)	(0.012)
Age	0.009***	0.007***	0.007***	−0.030***
	(0.0003)	(0.001)	(0.0003)	(0.001)
Female	0.167***	0.192***	0.188***	−0.104***
	(0.008)	(0.029)	(0.009)	(0.026)
Racism	0.328***	0.204***	0.100***	0.643***
	(0.018)	(0.063)	(0.020)	(0.057)
Political Interest	−0.206***	−0.284***	−0.061***	−0.227***
	(0.005)	(0.016)	(0.006)	(0.017)
Household Income	0.002**	0.002	0.002***	0.022***
	(0.001)	(0.002)	(0.001)	(0.002)
Unemployed	−0.020	−0.105**	−0.055***	0.088**
	(0.014)	(0.045)	(0.016)	(0.043)
Logged Population	0.028***	0.091***	0.019***	0.032***
	(0.003)	(0.009)	(0.003)	(0.008)
Pres Approval	−0.120***	−0.155***	−0.124***	0.377***
	(0.005)	(0.016)	(0.005)	(0.014)
Constant		2.248***		−2.347***
		(0.153)		(0.135)
Wave FEs	Y	Y	Y	Y
Observations	86,679	74,560	69,616	90,290
Log Likelihood		−17,883.930		−21,690.700
Akaike Inf. Crit.		35,815.860		43,425.390
Note:				*p<0.1; **p<0.05; ***p<0.01

Regression type noted above columns. Standard errors in parentheses. Two-tailed t-tests. All models use survey weights.

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