Supplementary Materials

**Table 1S.** Zero-order correlations of all personality factors.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | H | E | X | A | C | O | F1 | F2 | F3 | F4 | NV | NG | M1 | M2 | M3 |
| H | (.73) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| E | .04 | (.75) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| X | .09\*\* | -.22\*\* | (.80) |  |  |  |  |  |  |  |  |  |  |  |  |
| A | .34\*\* | -.08\*\* | .25\*\* | (.75) |  |  |  |  |  |  |  |  |  |  |  |
| C | .32\*\* | -.04 | .33\*\* | .18\*\* | (.76) |  |  |  |  |  |  |  |  |  |  |
| O | .08\*\* | .01 | .28\*\* | .09\*\* | .25\*\* | (.78) |  |  |  |  |  |  |  |  |  |
| F1 | -.52\*\* | -.11\*\* | -.15\*\* | -.34\*\* | -.29\*\* | -.06\* | (.82) |  |  |  |  |  |  |  |  |
| F2 | -.47\*\* | -.20\*\* | -.20\*\* | -.39\*\* | -.31\*\* | -.10\*\* | .76\*\* | (.77) |  |  |  |  |  |  |  |
| F3 | -.44\*\* | -.11\*\* | -.09\*\* | -.34\*\* | -.33\*\* | .03 | .66\*\* | .70\*\* | (.80) |  |  |  |  |  |  |
| F4 | -.39\*\* | -.11\*\* | -.08\*\* | -.17\*\* | -.34\*\* | -.08\*\* | .60\*\* | .61\*\* | .58\*\* | (.81) |  |  |  |  |  |
| NV | -.34\*\* | .26\*\* | -.47\*\* | -.36\*\* | -.32\*\* | -.04 | .39\*\* | .39\*\* | .40\*\* | .28\*\* | (.90) |  |  |  |  |
| NG | -.41\*\* | -.16\*\* | .28\*\* | -.18\*\* | -.02 | .05\* | .29\*\* | .29\*\* | .29\*\* | .22\*\* | .25\*\* | (.92) |  |  |  |
| M1 | -.63\*\* | -.19\*\* | -.22\*\* | -.51\*\* | -.32\*\* | -.16\*\* | .57\*\* | .62\*\* | .46\*\* | .38\*\* | .37\*\* | .39\*\* | (.84) |  |  |
| M2 | .01 | -.39\*\* | .74\*\* | .18\*\* | .46\*\* | .22\*\* | -.08\*\* | -.11\*\* | -.07\*\* | -.11\*\* | -.47\*\* | .37\*\* | -.08\*\* | (.87) |  |
| M3 | .28\*\* | .02 | .15\*\* | .18\*\* | .71\*\* | .12\*\* | -.22\*\* | -.25\*\* | -.37\*\* | -.29\*\* | -.26\*\* | -.10\*\* | -.30\*\* | .30\*\* | (.74) |

*Notes.* Values in brackets represent Cronbach’s alpha coefficients. H = Honesty-Humility; E = Emotionality; X = Extraversion; A = Agreeableness; C = Conscientiousness; O = Openness; FI = SRP Interpersonal Manipulation; F2 = SRP Callous Affect; F3 = SRP Lifestyle; F4 = Antisocial; NV = Narcissistic Vulnerability Scale; NGS = Narcissistic Grandiosity Scale; M1 = FFMI Antagonism; M2 = FFMI Agency; M3 = FFMI Planfulness.

\**p* < .05. \*\**p* < .01 (2-tailed).

**Table 2S.** Summary of the rotated factor loadings for three items assessing social compliance at the height of the coronavirus (COVID-19) pandemic.

|  |  |
| --- | --- |
| Items | Factor loadings |
| Composite 1: Social compliance |  |
| Visit someone’s home (reverse) | **.902** |
| Have guest in your home (reverse) | **.909** |
| Gather outdoors with others (reverse) | **.863** |

**Table 3S.** Summary of the rotated factor loadings for five items assessing support for government policies at the height of the coronavirus (COVID-19) pandemic.

|  |  |
| --- | --- |
| Items | Factor loadings |
| Composite 1: Support for policies |  |
| Closing daycares, schools, etc. | **.809** |
| Closing bars and restaurants | **.847** |
| Closing parks and playgrounds | **.722** |
| Forbidding public gatherings | **.858** |
| Forbidding non-necessary travel | **.791** |

**Table 4S.** Descriptive information for every control variable, personality inventory, and outcome variable from Part 1.

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **N** | **M (*SD*) / %** | **Min; Max** |
| **Control variables** |  |  |  |
| Age | 1725 | 49.0 (16.6) | 19; 80 |
| Sex | 1717 |  |  |
| Male |  | 49.5 |  |
| Female |  | 50.0 |  |
| Non-binary |  | 0.5 |  |
| Education | 1725 |  |  |
| Elementary school |  | 1.5 |  |
| Secondary/high school |  | 27.2 |  |
| Technical, community college |  | 27.3 |  |
| Bachelor’s degree |  | 31.0 |  |
| Master’s degree |  | 9.3 |  |
| Professional degree/doctorate |  | 3.7 |  |
| Employment status | 1724 |  |  |
| Full-time |  | 44.3 |  |
| Part-time |  | 13.1 |  |
| Retired |  | 26.1 |  |
| Unemployed |  | 12.8 |  |
| Student |  | 3.7 |  |
| Household income | 1723 |  |  |
| Less than $25,000 |  | 14.2 |  |
| $25,000-$49,999 |  | 21.4 |  |
| $50,000-$74,999 |  | 21.1 |  |
| $75,000-$99,999 |  | 11.1 |  |
| $100,000-$124,999 |  | 10.2 |  |
| $125,000-$149,999 |  | 7.0 |  |
| $150,000-$174,999 |  | 4.2 |  |
| $175,000-$199,999 |  | 3.9 |  |
| $200,000 or more |  | 6.9 |  |
| Internal political efficacy | 1724 | 3.0 (1.2) | 0; 5 |
| External political efficacy | 1725 | 3.4 (1.1) | 0; 5 |
| Interest in politics | 1723 | 5.6 (2.9) | 0; 10 |
| Party identification | 1724 |  |  |
| Liberal |  | 38.4 |  |
| Conservative |  | 26.6 |  |
| New Democrat |  | 11.3 |  |
| Bloc Québécois |  | 1.3 |  |
| Green Party |  | 4.2 |  |
| None of These |  | 15.7 |  |
| Other |  | 2.5 |  |
| Political knowledge test score | 1725 | 3.3 (1.5) | 0; 5 |
| Left/right placement | 1723 | 4.8 (2.2) | 0; 10 |
| **Personality variables** |  |  |  |
| Honesty-humility | 1723 | 66.3 (15.3) | 7.5; 100.0 |
| Emotionality | 1723 | 54.5 (15.2) | 0.0; 100.0 |
| Extraversion | 1722 | 55.2 (16.1) | 0.0; 100.0 |
| Agreeableness | 1719 | 57.6 (14.1) | 7.5; 100.0 |
| Conscientiousness | 1722 | 67.9 (13.6) | 10.0; 100.0 |
| Openness | 1721 | 59.4 (16.6) | 2.5; 100.0 |
| Psychopathy: Interpersonal | 1721 | 16.6 (16.7) | 0.0; 89.3 |
| Psychopathy: Affective | 1722 | 19.1 (16.3) | 0.0; 85.7 |
| Psychopathy: Lifestyle | 1720 | 20.6 (17.0) | 0.0; 96.4 |
| Psychopathy: Antisocial | 1720 | 8.6 (12.7) | 0.0; 84.4 |
| Mach: Antagonism | 1716 | 35.0 (12.7) | 1.2; 78.8 |
| Mach: Agency | 1712 | 58.9 (13.8) | 8.3; 96.9 |
| Mach: Planfulness | 1722 | 67.1 (15.5) | 3.1; 100.0 |
| Narcissism: Vulnerable | 1721 | 27.5 (18.8) | 0.0; 87.9 |
| Narcissism: Grandiose | 1721 | 32.1 (21.4) | 0.0; 100.0 |
| **Outcomes** |  |  |  |
| Compliance with social distance | 1704 | 88.9 (18.1) | 0; 100 |
| Support for COVID policies | 1720 | 84.1 (24.5) | 0; 100 |

*Note.* Personality variables have been standardized.

**Table 5S.** Summary of the rotated factor loadings for three items assessing social compliance at the height of the coronavirus (COVID-19) pandemic in Part 2: Personality and Public Health Messaging

|  |  |
| --- | --- |
| Items | Factor loadings |
| Composite: Social compliance |  |
| Visit someone’s home (reverse) | **.936** |
| Have guest in your home (reverse) | **.946** |
| Gather outdoors with others (reverse) | **.891** |

**Supplemental analyses to Part 2 – Marginal effects**

Within the HEXACO, while we do not see significant interaction terms other than for emotionality, we do find that there are a number of marginally significant marginal effects for general personality traits under certain condition assignments. That is, while we cannot say with statistical certainty whether the effects of personality vary between conditions, we can see that in certain conditions personality exerts a significant marginal effect while it fails to do so in others. We have graphed the marginal effects of personality in the control and treated conditions in Figure S1 below. Specifically, agreeableness exerts no effect on compliance in the control condition (β=0.04, p<0.48), but for those who received one of the specific information treatments, agreeableness led to greater compliance (β=0.07, p<0.09). Similarly, there is no effect for openness to experience in the control condition (β=0.05, p<0.35) but a marginally significant effect for those who received a treatment (β=0.06, p<0.09). These results suggest that the HEXACO personality traits may influence receptiveness to certain types of public health messages (in this case, messages with specific information about case counts and deaths). However, we encourage caution when interpreting these results, as the lack of a significant interaction term makes it impossible to disentangle whether the effect of personality varies across experimental conditions. Indeed, looking at the figure, we see that the effect for agreeableness and openness to experience could be a function of statistical imprecision in the control group. Further study is needed to fully understand the nature of these results.

**Figure 1S.** Marginal effects of personality in the treated and control conditions

Diagram, engineering drawing

Description automatically generated

If we turn to the Dark Triad, we again see some support for the idea that the effect of personality on public health compliance may be conditional on the content of public health messaging. Considering marginal effects, the interpersonal (manipulation) facet of psychopathy predicts lower levels of compliance when the messaging has specific pandemic information (β=-0.15, p<0.01) but not when the information is presented more generally (β=-0.08, p<0.28). Importantly, while the point predictions with agreeableness and openness to experience were relatively close, here we see that the predicted marginal effect for the interpersonal facet in the treatment condition is nearly twice the size of the predicted marginal effect in the control condition. The reverse pattern appears for the antisocial facet. Here, the antisocial facet has a marginally significant, positive marginal effect on compliance in the control condition (β=0.13, p<0.10) but not in the more specific treatment conditions (β=0.05, p<0.41). Again, in contrast to the HEXACO, the difference in the size of the marginal effects is quite large for the antisocial facet. While we find no effects for narcissism, we do see some effects when we examine Machiavellianism. In particular, if we look at the antagonism subscale of the FFMI, we see that, in the control condition there is a marginally significant, positive marginal effect (β=0.11, p<0.10), while the effect reverses direction and is no longer significant in the treatment condition (β=-0.04, p<0.34).

**Question Wording**

In what year were you born? \_\_\_\_

What is your sex?

* Male
* Female
* Gender non-binary

What is the highest level of education that you have completed?

* Completed elementary school
* Completed secondary/high school
* Completed technical, community college
* Bachelor’s degree
* Master’s degree
* Professional degree or doctorate

What is your employment status?

* Working full-time
* Working part-time
* Retired
* Unemployed
* Student

We don't need the exact amount; which best describes your household income?

* Less than $25,000
* $25,000-$49,999
* $50,000-$74,999
* $75,000-$99,999
* $100,000-$124,999
* $125,000-$149,999
* $150,000-$174,999
* $175,000-$199,999
* $200,000 or more

Please rate the degree to which you agree with the following statements.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
| Sometimes, politics and government seem so complicated that a person like me can’t really understand what’s going on |  |  |  |  |  |
| I don't think that the federal government cares much what people like me think |  |  |  |  |  |

How interested are you in politics generally?

0 1 2 3 4 5 6 7 8 9 10

No Interest at All A Great Deal of Interest

In federal politics, do you usually think of yourself as a:

* Liberal
* Conservative
* New Democrat
* Bloc Québécois
* Green Party
* None of These
* Other

Next are some questions about government. Many people don’t know the answers to these questions, so if there are some you don’t know, just skip the question or answer “I don’t know.”

* Who is the Premier of your Province? \_\_\_\_
* Who is the federal Minister of Finance?
* Who is the Governor-General?
* Who is the leader of the Official Opposition?
* How many seats are there in the Federal House of Commons

In politics, people sometimes talk of left and right. Where would you place yourself on the scale below?

0 1 2 3 4 5 6 7 8 9 10

Left Right

Next, we would like to ask some questions about the coronavirus (COVID-19) pandemic. Thinking back to when the coronavirus (COVID-19) lockdown was in full effect, how frequently did you engage in the following activities on a scale from 0 to 100 where 0 is never and 100 is frequently?

* Visit someone else’s home
* Have guests in your home?
* Gather outdoors with people who did not live with you?
* Wear a mask when in public (i.e., a grocery store)?
* Self-quarantine for 14-days after travelling or experiencing symptoms?
* Stay at home as much as practically possible

Again, thinking back to when the coronavirus (COVID-19) lockdown was in full effect, to what extent did you support the following governmental initiatives on a scale from 0 to 100 where 0 is not at all supportive and 100 is completely supportive.

* Closing daycares, schools, and universities
* Closing bars and restaurants for dine in service
* Closing parks and playgrounds
* Forbidding public gatherings where many people are gathered at one place (i.e., large sporting, religious, and cultural events)
* Forbidding non-necessary travel

**Split sample COVID compliance experiment. Randomly assign into one of three conditions**

**[Condition 1]** Health officials widely expect the coronavirus pandemic to follow a similar pattern to previous pandemics, with a “second wave” of infections occurring in the fall. This wave is expected to be similar in size or larger than the first wave of infections. If this second wave occurs, how likely are you to engage in the following actions (where 0 is extremely unlikely and 100 is extremely likely)?

**[Condition 2]** Health officials widely expect the coronavirus pandemic to follow a similar pattern to previous pandemics, with a “second wave” of infections occurring in the fall. This wave is expected to be similar in size or larger than the first wave of infections. The Public Health Agency of Canada expects the second wave to produce another 30,000 to 40,000 infections, with nearly 1,000 additional deaths in Canada. If this second wave occurs, how likely are you to engage in the following actions (where 0 is extremely unlikely and 100 is extremely likely)?

**[Condition 3]** Health officials widely expect the coronavirus pandemic to follow a similar pattern to previous pandemics, with a “second wave” of infections occurring in the fall. This wave is expected to be similar in size or larger than the first wave of infections. The World Health Organization expects the second wave to produce another six to seven million infections, with nearly 400,000 additional deaths worldwide. If this second wave occurs, how likely are you to engage in the following actions (where 0 is extremely unlikely and 100 is extremely likely)?

* Visit someone else’s home
* Have guests in your home
* Gather outdoors with people who do not live with you
* Wear a mask when in public (i.e., a grocery store)
* Self-quarantine for 14-days after travelling or experiencing symptoms
* Stay at home as much as practically possible