COVID-19 Scientific Advisory Group
Rapid Evidence Report

Topic: Attitudes and Adherence to COVID-19 Guidelines

1. **What factors impact attitudes toward or adherence to COVID-19 public health guidelines, including hand hygiene, wearing of face coverings, and physical distancing?**

2. **What interventions can create more positive attitudes toward following public health guidelines with the goal of increasing guideline adherence?**

Context

- COVID-19 case numbers are trending upward in Alberta.
- Albertans demonstrate lower COVID-19 public health guideline compliance compared to populations in some other Canadian jurisdictions (see Underschultz et al. 2020 for comparison to Ontario).
- These questions stem from the desire of medical and public health leaders within Alberta to enhance adherence to public health guidelines through interventions such as public messaging and social marketing.
- Writers and reviewers are aware that attitudes are only one of many factors known to impact individual health behavior. These questions focus on attitudes as they are linked to behavior and may be amenable to change through public messaging campaigns marketing.
- It is assumed that marketing acts to change attitudes.
- Findings of this review could be useful for promotion of an eventual COVID-19 vaccine.

Key Messages from the Evidence Summary

- Studies consistently show higher adherence to COVID-19 guidelines among people who (i) trust government or authorities; (ii) perceive the threat of the virus to be greater; (iii) have a greater knowledge of the pandemic, (iv) who are older; and (v) who identify as a woman.
- Accessing information through traditional news media (print; television; radio) is associated with greater guideline adherence, while use of social media is associated with a higher likelihood of endorsing conspiracy beliefs, factual misperceptions and lesser degrees of guideline adherence.
- Limited evidence suggests that distinct population groups may require distinct messaging to promote guideline adherence.
- No strategies for promoting adherence to public health COVID-19 guidelines have been robustly proven in the published scientific literature. The most promising strategies appear to be communications to increase knowledge about the pandemic and perceived threat of the virus. Moralistic messaging (e.g. linking physical distancing to being a good person/citizen) could produce problematic consequences such as ostracization of individuals who do not adhere to public health guidelines.
- As evidence on changing attitudes and behaviours related to COVID-19 is still emerging, medical and public health leaders may benefit from reviewing literature on attitude and behaviour change in other, more widely studied health and societal contexts (e.g., climate change, waste reduction, vaccination or smoking cessation) where theories and frameworks have been established.

Committee Discussion

The committee did reach consensus on the recommendations. The committee felt that although evidence was limited, there is utility in summarizing the literature that has been published in this area and suggested expansion of this section in the review. Other comments and considerations from the committee included an interest in public health messaging which is logically tailored to reach specific populations. The committee also noted the importance of engaging community members/partners in developing messaging, and that reported literature provides no information about approaches for important groups within Alberta such as First Nations, which is identified as a research gap. Ongoing assessment of public information needs, attitudes and barriers to guideline compliance was felt to be important.

Recommendations

1. Public health messaging should aim to improve general knowledge of the COVID-19 pandemic, and in particular, focus on (i) the threat posed by the virus and (ii) the efficacy of public health guidelines to mitigate risk.

Rationale: Those with limited knowledge of the pandemic, those who felt that COVID-19 posed a low risk, and those who were unconvinced of the efficacy of public health guidelines were more likely to exhibit consistently poor adherence.

2. Public health messaging should be designed to target groups of individuals at higher risk of non-adherence with COVID-19 guidelines. Broadly, this group currently includes men, younger people, those who identify as politically conservative, and those who are prone to lower levels of trust in government or science.

Rationale: Certain groups have been found to be at higher risk of non-adherence than others. Those listed above had the most consistently poor adherence and the most negative attitudes about public health guidelines.

3. Public health content should be designed for distribution on multiple platforms, including social media and traditional media (including television, radio, and via web-based sources). Messaging might incorporate encouragement to critically assess the accuracy of information before disseminating it on social media platforms.

Rationale: Multiple studies found that social media users were less likely to be adherent to public health guidelines, highlighting an opportunity for improvement. Traditional television, radio and newspaper, web-based traditional media, and social media channels were noted to be important media sources for conveying public health messaging.

4. Government and public health officials should attempt to create an environment that enables adherence with public health guidelines by identifying and encouraging measures to address systemic and structural barriers to adherence guidelines (i.e. mask distribution, supportive work/school environments, etc.)

Rationale: Although this was not an explicit focus of the review, several studies reported that individuals' capacity to comply with public health guidelines was one of the major driving factors in determining adherence levels. Decades of behavioural science research stresses the importance of addressing all the determinants of behaviour, rather than education/attitudes alone.

5. Rather than relying on the relatively nascent literature specific to COVID-19, in crafting public health messaging, officials should work with behavioral scientists and experts in communication sciences and should seek guidance from a number of sources, including but not limited to resources such as:

    a. The broader social psychology literature and established frameworks for influencing behaviour change (e.g. the Behavior Change Wheel [Michie, Stralen and West 2011]).
    b. Other related public health campaigns which have more rigorous evidence (i.e. hand hygiene).
    c. Local community and public engagement activities that focus on groups of particular interest, whose voices may be underrepresented in broad population-level surveys.
    d. Their own jurisdictional data collection on public perceptions, which should: (i) be rigorously designed and follow guidelines for the appropriate conduct of survey-based research [Kelley et al 2003, Eysenbach 2004], and (ii) consider applying the recently released methodology presented by the World Health Organization specifically for conducting iterative behavioural insights research on COVID-19 [WHO 2020a,b].

Rationale: Evidence supporting specific messaging and content to enable behaviour change COVID-19 is very limited. However, a robust field of literature exists in sociology and psychology regarding behaviour change in multiple health and social contexts. This evidence would likely provide more helpful conclusions than the sparse literature currently available related to COVID-19. Given the highly context-dependent nature of behavioural research, the generalizability/transferability of the findings presented in this review is questionable. There is a need for locally relevant high-quality research to further inform public health action.

Strength of Evidence

Evidence regarding attitudes and adherence to public health guidelines related to COVID-19, and interventions to support increased adherence, comes almost entirely from survey studies which use convenience samples. Of the studies reviewed, 14 relied on convenience samples, 14 relied on stratified convenience samples, 1 stratified its convenience sample after data collection and only 1 sampled systematically (see **Appendix, Table A-3 for details**). Some studies report measures of effect size (frequently without information on statistical significance), while others present only correlation or regression coefficients. A further weakness of the literature is that factors impacting guidelines and outcomes assessed are inconsistently defined and reported from study to study.

No literature on important population groups in Alberta such as First Nations or religious groups living in communal settings were identified at any stage of the review.

Limitations of this review

For survey studies to be valid, a major consideration is the representativeness of the sample. We have not formally assessed the representativeness of the sampling in the included studies. The volume of materials relevant to this review and diversity of approaches/concepts employed constrained the ability to perform a systematic quality appraisal in the required timeframe, though studies deemed of low quality after initial review were not included. Purely descriptive studies, commentaries, and convenience-sample studies with small numbers of participants (n=<1000) were excluded. The 1000 participant threshold was chosen to reduce the number of included sources to a number that could be managed in the rapid review timeframe, while excluding small studies. Excluding all convenience-sample studies would have resulted in an empty review. The quality of statistical analysis reported within studies was not assessed (e.g. properly controlling for collinearity).

As described in the Appendix, only articles from North America, Europe, Australia and New Zealand were included in this review in order to derive information from jurisdictions that are somewhat similar to Alberta. Data extraction was completed by only one person for each article and was not systematically checked.

Factors reported in only one or two studies are not included in this review (but appear in Appendix **Table A-4**).

Attitudes are only one factor impacting behaviour (other factors, such as capability and opportunities, are much more extrinsic in nature); however, factors impacting attitudes and behaviour are not distinguished in this review.

Many studies distinguish factors impacting different behaviors (e.g., factors impacting hand washing may differ from factors impacting mask wearing or physical distancing). This nuance is not presented in this review.

Some studies report that adherence to guidelines was related to intrinsic psychological characteristics of individuals, such as narcissism, impulsiveness and agreeableness. Other articles focused on characteristics of societies such as relative individualism or collectivism. This review does not focus on such psychological traits and societal characteristics as these are potentially less modifiable than other factors, from a public health perspective.

Summary of Evidence

1. What factors impact attitudes toward or adherence to COVID-19 public health guidelines, including hand hygiene, wearing of face coverings, and physical distancing?

Table 1 lists factors impacting attitudes toward COVID-19 guidelines and adherence to those guidelines, and the strength of evidence available in the literature. Factors were grouped thematically by the writer and data extractors.

Table 1. Factors identified in primary sources.

Factor	Number of Studies	Strength of Association*	Consistency of Association**	Explanation
Trust or confidence in government or authorities (including response to COVID-19)	14	Moderate	Moderate	Greater trust in government or authority predicts greater compliance. One study reported no statistical relationship.
Age	13	Weak	Moderate	Some sign of a link between older age and more compliance. Three studies report no statistical relationship.
Sex or gender	13	Moderate	Moderate	Studies show a link between being female and compliance. Three studies show no significant effects.
Education	11	Weak	High	Some indication of a link between higher education and more compliance. Four studies report no significant results.
Perceiving COVID-19 as a threat	9	Weak	Strong	Studies show a link perceiving COVID-19 as a risk to self or others and more compliance. All studies found significant results on at least some measures.
Knowledge about pandemic or public health guidelines	8	Weak	Moderate	Being knowledgeable or feeling informed was related to greater compliance. One study showed no significant effect.
Politics	6	Not reported in any study	Moderate	Consistent reports of greater political conservativism being linked to less

Factor	Number of Studies	Strength of Association*	Consistency of Association**	Explanation
				compliance. One study found no significant results.
Socio-economic status	6	Weak	Moderate	Some sign of a link between higher income and more compliance. Two studies report no statistical relationship.
Belief in conspiracy theories	5	High (one study)	Strong	Believing conspiracy theories about COVID-19 is associated with less compliance for most behaviors.
Primary media source	5	Weak	Strong	Using traditional media is linked to more compliance while social media is linked to less compliance.
Trust in others	5	Mixed	Not Consistent	Trusting others had mixed effects on guideline compliance.
Race or ethnicity	4	Mixed	Not Consistent	Compliance not associated with particular racial groups across studies.
Capacity to comply	4	Moderate (one study)	Strong	Ability to follow guidelines (e.g. working from home, avoiding large events, space in home to isolate when ill) is linked to compliance.
Perceived effectiveness of protective behaviors recommended in public health guidelines	4	Moderate	Strong	Perceiving protective behaviors as effective linked to more compliance.
Trust in science, scientists or medicine	4	Moderate	Moderate	One study found no significant results on most measures.

NOTES:

*Cutoffs for measures of association are derived from Chen, Cohen & Chen (2010) and are reconciled with the potential clinical importance by the following terms and cutoff points: (not significant (n.s.)), weak strength associations Cohen's d <0.2 or OR <1.68 (inverse >0.59) or HR/RR >1.5) moderate strength associations (Cohen's d >0.21-<.79; OR 1.68-3.47 (inverse >0.28-<0.58); HR/RR 1.5-2.5); and high strength associations (Cohen's d >0.8 ; OR>3.47 (inverse <0.28) or HR/RR >2.5). When directions of effect vary the association has been reported as mixed. When effect size is not reported only direction is noted. When statistical significance is not reported the result is not included in assessing strength of association.

**Consistency of association is determined as follows: High consistency (>80% of relevant studies show an association of similar strength in the same direction); moderate consistency (>50% relevant studies show an association in the same direction); low consistency (50% of relevant studies show no effect); not consistent (directions of effect vary)

Extracted data is organized by factor in the **Appendix, Table 4.** Two identified factors which need further contextual explanation are discussed below.

Political Polarization

Two Canadian studies linked political affiliation to COVID-19 attitudes and behaviours. Pickup et al. (2020) conducted a large survey of almost 10,000 Canadians and weighted results to match Canada's demographics.

They report that supporters of the Liberal Party are more likely to be 'very concerned' about the virus (46%) than those who support the Conservative Party (39%), Bloc Quebecois (33%), and People's Party of Canada (PPC) (29%). Supporters of the Liberal, Green, and New Democratic Parties were slightly more likely to report making behavior changes (making 63% of recommended changes, on average) than supporters of the Conservative Party (59% of changes), PPC (51%), and Bloc Quebecois (60%).

Pennycook et al. (2020), in a pre-print survey based on a convenience sample of 644 Canadians and representative US and UK surveys (1,975 total respondents), report that those who identify as conservative (calculated as the "mean of social and economic liberal-conservatism") believe more misperceptions, perceive lower COVID-19 risks, and make fewer behavior changes than those who identify as moderates or liberals. However, the authors caution that their data also showed that "accurate beliefs about COVID-19 were broadly associated with the quality of one's reasoning [ability] regardless of political polarization."

The Role of Media

A nationally representative Canadian survey (n=2,022) by Bridgman et al. (2020) reports that misperceptions about the virus were associated with lower adherence to public health guidelines even when controlling for other attitudes and demographic factors. They report that exposure to traditional news media is associated with more accurate knowledge and better adherence to social distancing guidelines than exposure to social media sources. Exposure to social media is associated with a decrease in accuracy of knowledge and lower adherence to social distancing. Importantly, "association between social media exposure and social distancing non-compliance is eliminated when accounting for effect of misperceptions, providing evidence that social media is associated with non-compliance through increasing misperceptions about the virus."

A UK study by Allington et al. (2020), relied on three surveys, of which the smallest had 949 convenience-sampled participants. Authors report a "strong positive relationship between use of social media platforms as sources of knowledge about COVID-19 and holding one or more conspiracy beliefs." The study also reports "positive relationship between use of legacy [traditional] media as a source of knowledge about COVID-19 and following [public health guidelines]; however, this effect was small and of borderline significance."

A pre-print German survey of 1,575 members of the public and 128 experts by Rothmund et al. (2020) reports that consuming public television was strongly associated with the development of "science-consistent evaluations" of information and guideline adherence in the general population. However, this study does not report statistical significance.

Seeking information online from sources other than social media may be associated with increased adherence. A survey conducted in the United States (n= 1,449) reports that "Those who primarily get their news from radio or social media report slightly less social distancing, while those who primarily get their news from websites tend to report more." (Pederson and Favero 2020).

2. What interventions can create more positive attitudes toward following guidelines with the goal of improving guideline adherence?

Almost all the recommendations for promoting guidelines adherence from the literature are speculative. Very few interventional studies or quasi-experimental studies have been published to date. Authors generally offer logical suggestions based on findings rather than evidence from tested interventions to change attitudes or behaviours.

Emphasizing the perceived threat of the pandemic (Folmer et al. 2020; De Neys et al. 2020) may be a means of promoting adherence to public health guidelines. This approach is supported by Folmer et al.'s (2020) Dutch survey of 2,005 participants and De Neys et al.'s (2020) international survey of 1657. Promoting knowledge of the pandemic and public health guidelines is also a logical strategy given that eight studies found associations between knowledge and compliance (see **Appendix, Table 4** for details).

As evidence on changing attitudes and behaviors related to COVID-19 is still emerging, medical and public health leaders may benefit from reviewing evidence on attitude and behaviour change from more widely studied health and societal contexts (e.g., climate change, waste reduction, vaccination or smoking cessation) where theories and frameworks have been established.

Details on information sources, recommended messaging, and messaging targeted to specific subpopulations is summarized below from included studies.

Sources of Information

Yousuf et al. (2020) conducted an uncontrolled experimental study using convenience samples (n=16,072 [diagnostic survey] and n=17,189 [post-campaign survey]) in the Netherlands. They report that a targeted video campaign featuring a 22-year-old male social influencer, and newspaper article with infographics, improved handwashing practices by 27%. The campaign was based on social norm theory and aimed at influencing how the public believes people generally do behave and should behave.

Content of Messaging

Pennycook et al. (2020) argue that “nudging people to slow down and deliberate before making judgments about accuracy [of information] or sharing on social media could be an effective strategy in the fight against misinformation” about COVID-19.

Everett et al. (2020) report an experimental study using a stratified convenience sample (n= 1,032). They found that messages stressing duty to wash one’s hands (i.e., we are obliged to wash our hands for the sake of others) were more impactful than messages stressing that hand washing is virtuous (i.e., hand washing helps you be your best self). Significant effects of message type were not observed for physical distancing behaviours.

A survey from Mexico of 1,022 people found that “Individuals exposed to more accurate reporting of deaths were more likely to adopt mitigating behaviours sooner and comply with social distancing guidelines than those exposed to ‘lagged’ data” (Gutierrez et al. 2020).

De Neys et al. (2020) found that physical distancing behaviour is linked to perceived threat of the virus. They therefore argue that moral messaging may unproductively shame individuals and that efforts to increase the perceived threat of the virus may be a more effective strategy to induce adherence to guidelines.

Messaging Targeted to Specific Subpopulations

Rothmund et al. (2020), in the preprint mentioned above, differentiate between those who do not follow public health guidelines because they overestimate their knowledge of COVID-19 and those who rate their knowledge on the topic as low. The authors suggest that this latter group is a more promising target for interventions intended to promote guideline adherence.

Research Gaps

This review highlighted the fact that the literature in this area is of relatively low quality. There is a considerably high risk of bias in many of the studies, often due to concerns about non-rigorous methods of sampling as well as collinearity and residual confounding. In general, the literature would be strengthened by closer ties to theoretical understandings of behavioural determinants from psychology and sociology. A number of important areas remain relatively underexplored, including: the impact/role of regulations such as mandatory masking laws and other practical measures; impact of tailoring specific messaging to particular subgroups of the population; as well as factors influencing particular groups of local interest (e.g. Hutterite populations, First Nations Peoples, those experiencing homelessness).

Evolving Evidence

Eleven of the included studies are preprints. It is likely that some of these studies will not be accepted for publication. Other studies will continue to emerge.

Date question received by advisory group: July 29, 2020

Date report submitted to committee: September 10, 2020

Date of first assessment: September 17, 2020

(If applicable) Date of re-assessment:

Authorship and Committee Members

This report was written by Patrick McLane with assistance from Lyne Bourassa, Alexandra Bennett, Carla Vetland, Kristal Turner, Zoe Collins, Marysia Stasiewicz, and Armghan Ahmad. It was scientifically reviewed by David Campbell, Tavis Campbell, Pamela Roach, Rob Oxoby, and Lynora Saxinger. The full Scientific Advisory Group was involved in discussion and revisions of the document: Braden Manns (co-chair), Lynora Saxinger (co-chair), John Conly, Alexander Doroshenko, Shelley Duggan, Nelson Lee, Elizabeth MacKay, Andrew McRae, Melissa Potestio, James Talbot, Jeremy Slobodan, Brandie Walker, and Nathan Zelyas.

COVID-19 Scientific Advisory Group
Rapid Evidence Report

Appendix

List of Abbreviations

AHS: Alberta Health Services

COVID-19: Coronavirus Disease-2019

SAG: Scientific Advisory Group

KRS: Knowledge Resource Services

Methods

Literature Search

A literature search was conducted by Rachel Zhao from Knowledge Resources Services (KRS) within the Knowledge Management Department of Alberta Health Services. KRS included VID MEDLINE, PubMed, CINAHL, LitCovid, TRIP PRO, WHO Global research on coronavirus (database), COVID-19 Primer, National Collaborating Centre for Methods and Tools, medRxiv & bioRxiv, Google and Google Scholar. The Ovid MedLine search is reproduced here as an example:

Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) 1946 to August 06, 2020

#	Searches	Results
1	exp Coronavirus/ or Coronavirus Infections/ or coronaviru*.mp. or corona viru*.mp. or ncov*.mp. or n-cov*.mp. or novel cov*.mp. or COVID-19.mp. or COVID19.mp. or COVID-2019.mp. or COVID2019.mp. or SARS-CoV-2.mp. or SARSCoV-2.mp. or SARSCoV2.mp. or SARSCoV19.mp. or SARS-Cov-19.mp. or SARSCov-19.mp. or SARSCoV2019.mp. or SARS-Cov-2019.mp. or SARSCov-2019.mp. or severe acute respiratory syndrome coronaviru*.mp. or severe acute respiratory syndrome cov 2.mp. or 2019 ncov.mp. or 2019ncov.mp.	56271
2	health behavior/ or health risk behaviors/ or risk reduction behavior/ or social distance/	64947
3	hygiene/ or hand hygiene/	17501
4	Masks/	4452
5	guideline/	16280
6	(behavior* or behaviour* or risk reduction behavior* or risk reduction behaviour* or health behavior* or health behaviour* or health related behavior* or health related behaviour* or health risk behavior* or health risk behaviour* or adher* or complian* or comply* or complied or hygiene or social distancing or physical distancing or non-pharmaceutical intervention* or mask* or stay at home or public health guideline* or public health order* or public health measure*).kf,tw.	1541337
7	or/2-6	1595507
8	attitude/ or attitude to health/ or health knowledge, attitudes, practice/ or "treatment adherence and compliance"/ or patient compliance/	286544
9	health education/ or consumer health information/ or health literacy/ or patient education as topic/	151226
10	health promotion/ or social networking/ or online social networking/	77283
11	mass media/ or radio/ or television/ or social media/	33142

12	news/	202149
13	"marketing of health services"/ or social marketing/	17064
14	(attitude or complian* or adher* or health education or consumer health information or health literacy or patient education or health promotion or social network* or mass media or radio or television or social media or news or social marketing or ideology).kf,tw.	560370
15	or/8-14	1124344
16	1 and 7 and 15	673
17	limit 16 to (english language and yr="2020 -Current")	579

222 articles were returned by the librarian after an initial relevance screening. Articles were initially screened by title and abstract against inclusion criteria 1 and 2, and exclusion criteria 1-5 (Table A-1). Data from 100 articles was extracted by a team of 4, and 30 articles were excluded for not fitting criteria. Extraction criteria were then refined to include standardized information on study designs, sample sizes and sampling methods. Data on 70 articles were then extracted by a team of 3 using the new extraction form. Exclusion criteria 6-8 were developed based on results. 30 articles were retained for inclusion. A new extraction form was developed to capture the Factors, Outcomes, Comparisons, Mediating/Moderating Variables, Results, Control Variables and Statistical Significance reported in each article.

Data extraction was completed by only one person for each article and was not systematically checked.

Table A-1. Inclusion and exclusion criteria for results of the literature search

Inclusion Criteria	Exclusion Criteria
1. Academic and grey literature sources on attitudes toward following or adherence to COVID-19 public health guidelines. 2. Studies of interventions intended to improve attitudes toward or adherence to COVID-19 public health guidelines.	1. Articles from a region other than North America, Europe, Australia or New Zealand. Except where these studies are international in scope. 2. Articles not available in English. 3. Articles measuring adherence to guidelines but not commenting on factors that impact attitudes or adherence. 4. Study protocols. 5. Opinion pieces. 6. Review articles. 7. Purely descriptive studies. 8. Studies relying on convenience samples of <1,000 where weighting or resampling was not done. (The 1,000 participant threshold is arbitrary. Excluding all convenience sample studies would have resulted in an empty review).

Critical Evaluation of the Evidence

Potential articles were evaluated on three criteria: 1) Peer reviewed or from a reputable source; 2) Clear research question or issue; 3) Whether the presented data/evidence is appropriate to address the research question. Preprints and non peer-reviewed literature (such as commentaries and letters from credible journals) are not excluded out of hand due to the novelty of COVID-19 and the speed with which new evidence is available.

Table A-2 is a narrative summary of the body of evidence included in this review. The categories and format were adapted from the Oxford Centre for Evidence-Based Medicine, the Cochrane Library, and the AGREE Trust (Urwin, Gavinder & Graziadio, 2020; Viswanathan et al, 2012; Wynants et al., 2020; Brouwers et al., 2010).

Table 2. Narrative overview of the literature included in this review.

	Description
Volume	30 studies are included. 2 were experimental, one was a media and 27 were cross-sectional or longitudinal surveys.
Quality	11 of the included studies were preprints. Article quality has not been otherwise assessed. For survey studies, a major consideration is the representativeness of the sample. Where studies have not relied on a randomized sample, or engaged in other techniques to account for sampling error, results are at high risk of bias. Most studies are point-in-time studies, and do not account for change in drivers of attitudes and behaviours over time. A factor that prompted adherence to guidelines in March may not have the same impact in September.
Applicability	"Western" countries have been included to collect information that is more likely to be applicable to Alberta. Included countries vary greatly in their popular cultures and social norms. Consequential diversity may also be found between regions within Canada.
Consistency	Strengths of associations summarized in this review range from low to strong depending on the factor under consideration. Varied strategies are recommended for efforts to improve adherence to guidelines.

Methods References

Brouwers, M. C., Kho, M. E., Browman, G. P., Burgers, J. S., Cluzeau, F., Feder, G., Fervers, B., Graham, I. D., Grimshaw, J., Hanna, S. E., Littlejohns, P., Makarski, J., Zitzelsberger, L., & AGREE Next Steps Consortium (2010). AGREE II: advancing guideline development, reporting and evaluation in health care. CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne, 182(18), E839–E842. Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3001530/

Chen, H., Cohen, P., & Chen, S. (2010). How big is a big odds ratio? Interpreting the strengths of odds ratios in epidemiological studies. Communications in Statistics—simulation and Computation®, 39(4), 860-864.

Urwin, S; Gavinder K, Graziadio S. (2020). What prognostic clinical risk prediction scores for COVID-19 are currently available for use in the community setting? Centre for Evidence-Based Medicine. Retrieved from: https://www.cebm.net/covid-19/what-prognostic-clinical-risk-prediction-scores-for-covid-19-are-currently-available-for-use-in-the-community-setting/

Viswanathan, M., Ansari, M. T., Berkman, N. D., Chang, S., Hartling, L., McPheeters, M., ... & Treadwell, J. R. (2012). Assessing the risk of bias of individual studies in systematic reviews of health care interventions.

In Methods guide for effectiveness and comparative effectiveness reviews [Internet]. Agency for Healthcare Research and Quality (US). Retrieved from: https://www.ncbi.nlm.nih.gov/books/NBK91433/

Wynants, L., Van Calster, B., Bonten, M. M., Collins, G. S., Debray, T. P., De Vos, M., ... & Schuit, E. (2020). Prediction models for diagnosis and prognosis of covid-19 infection: systematic review and critical appraisal. BMJ, 369. Retrieved from https://www.bmj.com/content/369/bmj.m1328.long

References Included in Review

Al-Hasan, A., Yim, D., & Khuntia, J. (2020). Citizens' adherence to COVID-19 mitigation recommendations by the government: A three-country comparative evaluation using online cross-sectional survey data. *Journal of Medical Internet Research*, *22(8):e20634.* DOI: *10.2196/20634*

Allington, D., Duffy, B., Wessely, S., Dhavan, N., & Rubin, J. (2020). Health-protective behaviour, social media usage and conspiracy belief during the COVID-19 public health emergency. *Psychological Medicine*, *1-7*. https://doi.org/10.1017/S003329172000224X

Banai, I. P., Banai, B., & Mikloušić, I. Beliefs in COVID-19 conspiracy theories predict lower level of compliance with the preventive measures both directly and indirectly by lowering trust in government medical officials. *PsyArXiv Preprints*. DOI: 10.31234/osf.io/yevq7

Bridgman, A., Merkley, E., Loewen, P. J., Owen, T., Ruths, D., Teichmann, L., & Zhilin, O. (2020). The causes and consequences of covid-19 misperceptions: Understanding the role of news and social media. *The Harvard Kennedy School Misinformation Review, 1(3),* 1-18. https://doi.org/10.37016/mr-2020-028

Brodeur, A., Grigoryeva, I., & Kattan, L. (2020). Stay-At-Home Orders, Social Distancing and Trust. *Global Labor Organization, GLO Discussion Paper,* 553. http://hdl.handle.net/10419/217491

Clements, J. M. (2020). Knowledge and behaviors toward COVID-19 among US residents during the early days of the pandemic: Cross-sectional online questionnaire. *JMIR Public Health and Surveillance*, *6*(2), e19161. DOI: 10.2196/19161

De La Vega, R., Barquín, R. R., Boros, S., & Szabo, A. (2020). Could Attitudes Toward COVID-19 in Spain Render Men More Vulnerable Than Women?. *Global Public Health,* https://doi.org/10.1080/17441692.2020.1791212

De Neys, W., Raoelison, M., Boissin, E., Voudouri, A., Bago, B., & Białek, M. (2020). Moral outrage and social distancing: Bad or badly informed citizens? https://psyarxiv.com/j9h76/download?format=pdf

Doogan, C., Buntine, W., Linger, H., & Brunt, S. Public Attitudes Towards COVID-19 Non-pharmaceutical Interventions: A Comparison of Six Countries. *Journal of Medical Internet Research.* DOI: 10.2196/preprints.21419

Everett, J. A., Colombatto, C., Chituc, V., Brady, W. J., & Crockett, M. (2020). The effectiveness of moral messages on public health behavioral intentions during the COVID-19 pandemic. *PsyArXiv Preprints*. https://psyarxiv.com/9yqs8/

Eysenbach, G. (2004). Improving the quality of Web surveys: the Checklist for Reporting Results of Internet E-Surveys (CHERRIES) [published correction appears in doi:10.2196/jmir.2042]. *J Med Internet Res*. 2doi:10.2196/jmir.6.3.e34

Folmer, C. R., Kuiper, M., Olthuis, E., Kooistra, E. B., de Bruijn, A. L., Brownlee, M., Fine, A., & van Rooij, B. Compliance in the 1.5 meter society: Longitudinal analysis of citizens' adherence to COVID-19 mitigation measures in a representative sample in the Netherlands. DOI: 10.31234/osf.io/dr9q3

Freeman, D., Waite, F., Rosebrock, L., Petit, A., Causier, C., East, A., Jenner, L., Teale, A.-L., Carr, L., Mulhall, S., Bold, E., & Lambe, S. (2020). Coronavirus conspiracy beliefs, mistrust, and compliance with government guidelines in England. *Psychological Medicine*, 1–13. https://doi-org.ahs.idm.oclc.org/10.1017/S0033291720001890

Goldberg, M.H., Gustafson, A., Maibach, E.W., Ballew, M. T., Bergquist, P., Kotcher, J.E., Marlon, J.R., Rosenthal, S.A., & Leiserowitz, A. (2020). Mask-wearing increases after a government recommendation: A natural experiment in the US during the COVID-19 pandemic. *Frontiers in Communication: Health Communication, June 17, 2020*. https://doi.org/10.3389/fcomm.2020.00044.

Gutierrez, E., Rubli, A., & Tavares, T. (2020). Information and Behavioral Responses during a Pandemic: Evidence from Delays in Covid-19 Death Reports. *SSRN*, Article 3645317.

Im, H., & Chen, C. (2020). Social distancing around the globe: Cultural correlates of reduced mobility. https://psyarxiv.com/b2s37/download?format=pdf

Jørgensen, F., Bor, A., & Petersen, M. B. (2020). Compliance without fear: Individual-level protective hehavior during the first wave of the COVID-19 pandemic. https://doi.org/10.31234/osf.io/uzwgf

Kantor, B. N., & Kantor, J. (2020). Nonpharmaceutical interventions for pandemic COVID-19: A cross-sectional investigation of US general public beliefs, attitudes, and actions. *medRxiv*, Article 20078618. https://doi.org/10.1101/2020.04.26.20078618

Kelley, K., Clark, B., Brown, V., & Sitzia, J. (2003). Good practice in the conduct and reporting of survey research. International Journal for Quality in Health Care, https://doi.org/10.1093/intqhc/mzg031

Knotek II, E.S., Schoenle, R.S., Dietrich, A.M., Muller, G.F., Myrseth, K.R., & Weber, M. (2020). "Consumers and COVID-19: Survey results on mask-wearing behaviors and beliefs." *Economic Commentary* (2020). https://www.clevelandfed.org/newsroom-and-events/publications/economic-commentary/2020-economic-commentaries/ec-202020-survey-results-on-mask-wearing-behaviors-and-beliefs.aspx

Kuiper, M. E., de Bruijn, A. L., Folmer, R.C., Olthuis, E., Brownlee, M., Kooistra, E. B., Fine, A., & van Rooij, B. (2020). The intelligent lockdown: Compliance with COVID-19 mitigation measures in the Netherlands. *SSRN,* Article 3598215.

Michie, S., van Stralen, M.M. & West, R. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. Implementation Sci 6, 42 (2011). https://doi.org/10.1186/1748-5908-6-42.

Nivette, A., Ribeaud, D., Murray, A. L., Steinhoff, A., Bechtiger, L., Hepp, U., Shanahan, L., & Eisner, M. (2020). Non-compliance with COVID-19-related public health measures among young adults: Insights from a longitudinal cohort study. https://doi.org/10.31235/osf.io/8edbj

Ölcer, S., Yilmaz-Aslan, Y., & Brzoska, P. (2020). Lay perspectives on social distancing and other official recommendations and regulations in the time of COVID-19: a qualitative study of social media posts. *BMC Public Health,* Article 963. https://doi.org/10.1186/s12889-020-09079-5

Oosterhoff, B., & Palmer, C. A. (2020). Attitudes and psychological factors associated with news monitoring, social distancing, disinfecting, and hoarding behaviors among US adolescents during the coronavirus disease 2019 pandemic. *JAMA pediatrics*. DOI: 10.1001/jamapediatrics.2020.1876

Oosterhoff, B., Palmer, C. A., Wilson, J., & Shook, N. (2020). Adolescents' motivations to engage in social distancing during the COVID-19 pandemic: Associations with mental and social health. *Journal of Adolescent Health*, *67*(2), 179-185. https://doi.org/10.1016/j.jadohealth.2020.05.004

Pedersen, M. J., & Favero, N. (2020). Social Distancing During the COVID-19 Pandemic: Who Are the Present and Future Non-compliers?. *Public Administration Review.* https://doi.org/10.1111/puar.13240

Pennycook, G., McPhetres, J., Bence B., Rand, D.G. (2020). COVID-19in Canada, the U.K., and the U.S.A.: A novel test of political polarization and motivated reasoning. PsyArxiv preprints. https://psyarxiv.com/zhjkp/

Pickup, M., Stecula, D., & van der Linden, C. (2020). Novel coronavirus, old partisanship: COVID-19 attitudes and behaviors in the United States and Canada. *Canadian Journal of Political Science/Revue canadienne de science politique*, 1-8. DOI: 10.1017/S0008423920000463

Rothmund, T., Farkhari, F., Azevedo, F., & Ziemer, C. T. (2020). Scientific trust, risk assessment, and conspiracy beliefs about COVID-19-Four patterns of consensus and disagreement between scientific experts and the German public. http://dx.doi.org/10.31234/OSF.IO/P36W9

Seale, H., Heywood, A. E., Leask, J., Sheel, M., Thomas, S., Durrheim, D. N., Bolsewicz, K., & Kaur, R. (2020). COVID-19 is rapidly changing: Examining public perceptions and behaviors in response to this evolving pandemic. *PLOS One.* https://doi.org/10.1371/journal.pone.0235112

Soest, T. von, Pedersen, W., Bakken, A., & Sletten, M. A. (2020). Compliance with infection control rules among adolescents in Oslo during the COVID-19 pandemic. *Tidsskrift for Den Norske Laegeforening : Tidsskrift for Praktisk Medicin, Ny Raekke*, *140*(10). https://doi-org.ahs.idm.oclc.org/10.4045/tidsskr.20.0449

Thomas, R., Greenwood, H., Michaleff, Z. A., Abukmail, E., Hoffmann, T., McCaffery, K. J., Hardiman, L., & Glasziou, P. (2020). Examining Australian's beliefs, misconceptions, and sources of information for COVID-19: A national online survey. *medRxiv*. https://doi.org/10.1101/2020.07.27.20163204

Tso, R. V., & Cowling, B. J. (2020). Importance of face masks for COVID-19–a call for effective public education. *Clinical Infectious Diseases*. ciaa593, https://doi.org/10.1093/cid/ciaa593

Underschultz, J. G., Barber, P., Richard, D., & Hillier, T. (2020). What drives resistance to public health measures in Canada's COVID-19 pandemic? A rapid assessment of knowledge, attitudes, and practices. *The Lancet.* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3605193

Wolff, W., Martarelli, C., Schüler, J., & Bieleke, M. (2020). High boredom proneness and low trait self-control impair adherence to social distancing guidelines during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health, 17, 5420.* https://doi.org/10.3390/ijerph17155420

World Health Organization. (2020a). Risk Communication and Community Engagement (RCCE) Action Plan Guidance COVID-19 Preparedness and Response. https://www.who.int/publications/i/item/risk-communication-and-community-engagement-(rcce)-action-plan-guidance

World Health Organization (2020b). Survey Tool and Guidance: Rapid, simple, flexible behavioural insights on COVID-19. https://www.euro.who.int/__data/assets/pdf_file/0007/436705/COVID-19-survey-tool-and-guidance.pdf?ua=1

Yousuf, H., Corbin, J., Sweep, G., Hofstra, M., Scherder, E., van Gorp, E., Zwetsloot, P.P., Zhao, J., van Rossum, B., Jiang, T., Lindemans, J.W., Narula, J., & Hofstra, L. (2020). Association of a public health campaign about coronavirus disease 2019 promoted by news media and a social influencer with self-reported personal hygiene and physical distancing in the Netherlands. *JAMA Network Open*, *3*(7), e2014323-e2014323. doi:10.1001/jamanetworkopen.2020.14323

Zickfeld J, Schubert T, Herting AK, Grahe J, Faasse K. (2020). Predictors of Health-protective Behavior and Changes over Time During the Outbreak of the COVID-19 Pandemic in Norway. Available online: Psyarxiv.com.

Table A-3. Included primary sources

Reference	Jurisdiction	Study Design	Population	Sample Size	Additional Sample Sizes	Sampling Method	Peer Reviewed (Y/N)	Pre Print (Y/N)
Al-Hasan A, Yim D, Khuntia J. Citizens' adherence to COVID-19 mitigation recommendations by the government: A three-country comparative evaluation using online cross-sectional survey data.	International	Correlational - cross-sectional survey	482 Participants from the US, Kuwait, and South Korea	482 (US 207; Kuwait 181; South Korea 94)	NA	Stratified convenience sample - representative (global survey-deploying firm recruited respondents using age, gender, ethnicity, and geographic region-based strata and quota matching processes)	Y	N
Allington D, Duffy B, Wessely S, Dhavan N, Rubin J. Health-protective behaviour, social media usage and conspiracy belief during the COVID-19 public health emergency.	United Kingdom	Correlational - cross-sectional survey	Data collected from 3–7 April 2020 for Study 1 (18y.o. or older, N=949), 1–3 April 2020 for Study 2 (N=2250) and 20–22 May 2020 for Study 3(N=2254) (16-75y.o. for studies 2 and 3)	949 (study 1)	2,250 (study 2); 2,254 (study 3)	Convenience sample (study 1); Stratified random samples - representative (studies 2 & 3). Study 1 - recruitment in partnership with CitizenMe, invitations sent to all adult UK panel members. Study 2 & 3 - recruitment in partnership with Ipsos-MORI (member of British Polling Council) to a stratified random sample of UK adulted aged 16-75 with quotas to achieve national representativeness with regard to age within gender, region, working status, social grade and education)	Y	N
Banai IP, Banai B, Mikloušić I. Beliefs in COVID-19 conspiracy theories predict lower level of compliance with the preventive measures both directly and	Croatia	Correlational - cross-sectional survey	n=1882, 18y.o. or older Data collected between May 15-26	1,882	NA	Convenience sample (direct social media promotion)	N	Y

Reference	Jurisdiction	Study Design	Population	Sample Size	Additional Sample Sizes	Sampling Method	Peer Reviewed (Y/N)	Pre Print (Y/N)
indirectly by lowering trust in government medical officials.								
Bridgman A, Merkley E, Loewen PJ, Owen T, Ruths D, Teichmann L, et al. The causes and consequences of covid-19 misperceptions: Understanding the role of news and social media.	Canada	Correlational - cross-sectional survey (Regression), Qualitative	Canadian adults	2,022	2.5 million tweets and 8857 news articles	Stratified convenience sample - representative	Y	N
Brodeur A, Grigoryeva I, Kattan L. Stay-At-Home Orders, Social Distancing and Trust.	United States	Correlational - cross-sectional survey (Regression)	5355 people living in the U.S. who own a cell phone (for Mobility data) A sample of 436 counties across the US for GSS data.	1,139	Data from 436 US counties	Mobility data: Convenience sample (mobile phone users with appropriate settings enabled); General Social Survey: Random, stratified, multi-stage strategy according to Kalsbeek (2016).	N	Y
Clements JM. Knowledge and Behaviors Toward COVID-19 Among US Residents During the Early Days of the Pandemic: Cross-Sectional Online Questionnaire.	United States	Correlational - cross-sectional survey	The cross-sectional online survey of 1034 US residents aged 18 years or older was conducted on March 17, 2020. This cross-sectional study recruited a convenience sample of respondents from Amazon Mechanical Turk (MTurk)	1,034	NA	Convenience sample (recruited through Amazon Mechanical Turk's [Mturk] online platform that pay remote workers to complete small tasks)	Y	N
de la Vega R, Ruíz-Barquín R, Boros S, Szabo A. Could attitudes toward COVID-19 in Spain render men more vulnerable than women?	Spain	Correlational - cross-sectional survey	64 Spaniards at a shopping centre in Madrid, and 640 online	64 (study 1 - shopping centre)	640 (study 2 - online)	Systematic sampling (study 1 - every 3rd person at shopping centre) & Convenience sample (study 2 - direct social media recruitment)	N	Y
De Neys W, Raoelison M, Boissin E, Voudouri A, Bago B, Białek M.	International	Correlational - cross-	1,657 respondents	1,657	NA	Convenience sample (direct recruitment through social	N	Y

Reference	Jurisdiction	Study Design	Population	Sample Size	Additional Sample Sizes	Sampling Method	Peer Reviewed (Y/N)	Pre Print (Y/N)
Moral outrage and social distancing: bad or badly informed citizens?		sectional survey	Survey ran between April 2-10, 2020			media, bulletin boards and email lists)		
Doogan C, Buntine W, Linger H, Brunt S. Public Attitudes Towards COVID-19 Non-pharmaceutical Interventions: A Comparison of Six Countries.	International	Correlational - media analysis; Qualitative	Collected 2.5 million tweets related to COVID-19 across 6 countries between January 1-April 30, 2020. 787,691 tweets were deemed fit for analysis	777,869 tweets, 6 countries	N/A	Convenience sample (Publically available tweets)	N	Y
Everett, J.A.A, Colombatto, C., Chituc, V., Brady, W.J., Crockett, M.J. The effectiveness of moral messages on public health behavioural intentions during the COVID-19 pandemic	United States	Experimental* - 2 x 4 between-subjects design	N=1,032 US residents Data collected March 15-16, 2020	1,032	NA	Post-stratified convenience sample - representative (recruited representative US sample for age, sex and race/ethnicity)	N	Y
Folmer CR, Kuiper M, Olthuis E, Kooistra EB, de Bruijn AL, Brownlee M, et al. Compliance in the 1.5 Meter Society: Longitudinal Analysis of Citizens' Adherence to COVID-19 Mitigation Measures in a Representative Sample in the Netherlands.	Netherlands	Correlational - successive independent sample survey	Survey conducted between May 8-14, 2020 (n=984) and May 22-26, 2020 (n=1,021)	984 (May 8-14)	1,021 (May 22-26)	Stratified convenience sample - representative (recruited by the Dutch online research panel Motivation for a representative sample)	N	Y
Freeman D, Waite F, Rosebrock L, Petit A, Causier C, East A, et al. Coronavirus conspiracy beliefs, mistrust, and compliance with government guidelines in England.	United Kingdom	Correlational - cross-sectional survey	2,501 Adults in England May 4-11, 2020	2501	N/A	Stratified convenience sample - representative (survey managed by Lucid; multiple survey suppliers advertised the survey on social media, news, websites, etc.)	Y	N

Reference	Jurisdiction	Study Design	Population	Sample Size	Additional Sample Sizes	Sampling Method	Peer Reviewed (Y/N)	Pre Print (Y/N)
Goldberg MH, Gustafson A, Maibach EW, Ballew MT, Bergquist P, Kotcher JE, et al. Mask-Wearing Increased After a Government Recommendation: A Natural Experiment in the U.S. During the COVID-19 Pandemic.	United States	Correlational - cross-sectional survey	4,493 participants recruited by Climate Nexus Polling (April 3-7, 2020). Quotas were set to meet census parameters for sex, race, age, education, income and geographic region Final N=3,933 (18+ and living in the USA)	3,933 (Apr3-1,740; Apr4-1,745; Apr6-154; Apr7-2)	NA	Stratified convenience sample - representative (national sample recruited by Climate Nexus Polling that utilized several market research panels in the US to meet quotas matched to census parameters for sex, race, age, education, income, and geographic region. Sampling weights used to account for any small deviations from census parameters)	Y	N
Gutierrez E, Rubli A, Tavares T. Information and Behavioral Responses during a Pandemic: Evidence from Delays in Covid-19 Death Reports.	Mexico	Experimental* - cross-sectional survey	1,022 individuals living in Mexico (78% living in Mexico City). Made up of generally young, educated, higher-income individuals, and thus not representative of Mexico's larger population.	1,022 (date reported condition 508; occurrence data condition 514)	NA	Convenience sample (recruited via email and social media)	N	Y
Im H, Chen C. Social Distancing Around the Globe: Cultural Correlates of Reduced Mobility.	International	Correlational* - prospective longitudinal survey (Piece-wise multilevel modelling)	February 15, 2020 to June 7, 2020 (N = 14,022) across 123 countries Three time periods; (1) from February 15, 2020 to the day before the first day of each country's 100th case, (2) first day of each country's 100th case to 30 days after, and (3) from	14,022 mobility observations; 123 countries	N/A	Convenience sample (social distancing data collected from users who turned on mobile device's location history settings)	N	Y

Reference	Jurisdiction	Study Design	Population	Sample Size	Additional Sample Sizes	Sampling Method	Peer Reviewed (Y/N)	Pre Print (Y/N)
			the 31st day after the 100th case to June 07, 2020.					
Jørgensen FJ, Bor A, Petersen MB. Compliance Without Fear: Individual-Level Protective Behavior During the First Wave of the COVID-19 Pandemic.	Multiple European countries & the United States	Correlational - prospective longitudinal cohort survey & cross-sectional survey	March 19-May 26, 2020 26, 508 participants from Denmark, France, Germany, Hungary, Italy, Sweden, the United Kingdom (UK), and the United States of America (USA).	26,508 (sample 1 - cross-sectional sample with one observation)	10,569 (sample 2 - longitudinal panel sample with two observations)	Stratified convenience samples - representative (survey firm quota sampled panel respondents to match population margins for each country resulting in a cross-sectional sample [one assessment] and a panel sample [two assessments])	N	Y
Kantor BN, Kantor J. Nonpharmaceutical interventions for pandemic COVID-19: A cross-sectional investigation of US general public beliefs, attitudes, and actions.	United States	Correlational - cross-sectional survey	1,005 respondents from the US general population, mean age 45 (SD16) 48.8% male (n=494)	1,005	NA	Stratified convenience sample*- representative (survey distributed to a representative US sample stratified by age, sex and race)	N	Y
Knotek II E, Schoenle R, Dietrich A, Müller G, Myrseth KOR, Weber M. Consumers and COVID-19: Survey Results on Mask-Wearing Behaviors and Beliefs.	United States	Correlational - cross-sectional surveys	US residents, 18+ years old and fluent in English N= 1,141 respondents across USA between July 3-7, 2020	1,141	NA	Stratified convenience sample - representative (quota sampling by Qualtrics Research Services to obtain nationally representative US sample)	N	N
Kuiper ME, de Bruijn AL, Reinders Folmer C, Olthuis E, Brownlee M, Kooistra EB, et al. The intelligent lockdown: Compliance with COVID-19 mitigation measures in the Netherlands.	Netherlands	Correlational - cross-sectional survey	Survey conducted between April 7-14 n= 568 Had to be English speaking and over 18y.o.	568	NA	Stratified convenience sample - representative (recruited through the online platform Prolific Academic for representative sample and were redirected to Qualtrics)	N	Y

Reference	Jurisdiction	Study Design	Population	Sample Size	Additional Sample Sizes	Sampling Method	Peer Reviewed (Y/N)	Pre Print (Y/N)
Nivette A, Ribeaud D, Murray AL, Steinhoff A, Bechtiger L, Hepp U, et al. Non-compliance with COVID-19-related public health measures among young adults: Insights from a longitudinal cohort study.	Switzerland	Correlational - prospective longitudinal cohort survey	n=737 22 Year olds who had been involved previously in the study Collected from April 8-15, 2020	737	NA	Stratified random sample (oversampling disadvantaged schools)	N	Y
Pedersen MJ, Favero N. Social Distancing During the COVID-19 Pandemic: Who Are the Present and Future Non-compliers?	United States	Correlational - cross-sectional survey	1,449 US Residents collected on April 3, 2020	1,449	NA	Convenience sample (paid US survey respondents through crowdworking platform)	Y	N
Pennycook G, McPhetres J, Bago B, Rand D. Predictors of attitudes and misperceptions about COVID-19 in Canada, the UK, and the USA.	Canada, United States, United Kingdom	Correlational - cross-sectional survey		1,975 (US 689; UK 642; Canada 644)	NA	Convenience sample (Canada); Stratified convenience sample - representative (quota-sampling in US and UK)	N	Y
Pickup M, Stecula D, van der Linden C. Novel Coronavirus, Old Partisanship: COVID-19 Attitudes and Behaviours in the United States and Canada.	Canada and the United States	Correlational - cross sectional survey	1,009 American surveyed through Lucid on March 31, 2020 (weight = Hispanic or not, white or not, educational attainment) 9889 Canadians surveyed between March 20 and April 7, 2020 (weight on age group, sex, educational attainment, and vote recall in 2019 federal election and region)	US: 1,009, Canada: 9,889	N/A	Quota samples (US: Survey disseminated via Lucid, weights benchmarked on Hispanic or not, white or not, educational attainment; Canada: Survey disseminated via Vox Pop Labs, weights based on age group, sex, highest level of educational attainment, vote recall in the 2019 Canadian federal election, and region.)	Y	N
Rothmund T, Farkhari F, Azevedo F, Ziemer C-T. Scientific Trust, Risk Assessment, and Conspiracy	Germany	Correlational - cross-	1,575 individuals living in Germany	1,575 (general	128 (experts)	Stratified convenience sample - representative (quota sample from general public in	N	Y

Reference	Jurisdiction	Study Design	Population	Sample Size	Additional Sample Sizes	Sampling Method	Peer Reviewed (Y/N)	Pre Print (Y/N)
Beliefs about COVID-19-Four Patterns of Consensus and Disagreement between Scientific Experts and the German Public.		sectional survey		public sample)		Germany); Convenience sample (email recruitment to all virologists and epidemiologists listed on University and University hospital websites in Germany)		
Seale H, Heywood AE, Leask J, Sheel M, Thomas S, Durrheim DN, et al. COVID-19 is rapidly changing: Examining public perceptions and behaviors in response to this evolving pandemic.	Australia	Correlational - cross-sectional survey (Regression)	A national cross-sectional online survey of 1,420 Australian adults (18 years and older) was undertaken between the 18 and 24 March 2020.	1420	N/A	Stratified convenience sample - representative (Online research company Quality Online Research recruited until a representative sample of the Australian population was obtained)	N	Y
Soest T von, Pedersen W, Bakken A, Sletten MA. Compliance with infection control rules among adolescents in Oslo during the COVID-19 pandemic.	Norway	Correlational - cross-sectional survey	12,686 students participated between April 23- May 8, 2020	8,116 (COVID survey)	13,790 (2018); 19,799 (2020-Pre-COVID)	Convenience sample (all students at lower secondary level in Oslo were invited to participate)	Y	N
Underschultz JG, Barber P, Richard D, Hillier T. What Drives Resistance to Public Health Measures in Canada's COVID-19 Pandemic? A Rapid Assessment of Knowledge, Attitudes, and Practices.	Canada	Correlational - cross-sectional survey	1,593 Canadians (16+ years old and able to speak English) Collected April 6-26, 2020 Alberta (n=997) and Ontario (n=434) were targeted	1,593	NA	Convenience sample (social media and website promotion targeting Alberta and Ontario residents)	N	Y
Wolff W, Martarelli CS, Schüler J, Bieleke M. High boredom proneness and low trait self-control impair adherence to social	United States	Correlational - cross-sectional survey	Sample recruited on April 9 & 10 via Amazon's Mechanical Turk US residents (oversampled the state of New York- 38.2%); 21+	895	NA	Stratified convenience sample (oversampled participants from NY - recruited US citizens through Amazon's website Mechanical Turk)	N	Y

Reference	Jurisdiction	Study Design	Population	Sample Size	Additional Sample Sizes	Sampling Method	Peer Reviewed (Y/N)	Pre Print (Y/N)
distancing guidelines during the COVID-19 pandemic.			years old 895 completed questionnaires					
Yousuf H, Corbin J, Sweep G, Hofstra M, Scherder E, van Gorp E, et al. Association of a Public Health Campaign About Coronavirus Disease 2019 Promoted by News Media and a Social Influencer With Self-reported Personal Hygiene and Physical Distancing in the Netherlands.	Netherlands	Quasi-experimental* - pretest-posttest survey design	A diagnostic survey was distributed by a large national newspaper (De Telegraaf) and a popular social influencer (Govert Sweep) on March 17, 2020, and was completed by 16 072 participants.	16,072 (diagnostic survey)	17,189 (postcampaign survey)	Convenience samples (diagnostic and postcampaign surveys recruited respondents through the national Netherlands' newspaper, De Telegraaf, and used the reach of a Dutch social influencer, Gover Sweep	Y	N
Zickfeld J, Schubert T, Herting AK, Grahe J, Faasse K. Predictors of Health-protective Behavior and Changes over Time During the Outbreak of the COVID-19 Pandemic in Norway.	Norway	Correlational - cross-sectional (Regression)	Norwegian adults	8,676	N/A	Convenience sample (survey advertised social media and sent through email lists)	N	Y

Table A-4. Data extracted from studies
Colour Coding: Red = Not Significant. Yellow = Low Association. Orange = Moderate Association. Green = Strong Association.
Grey differentiates different studies within the same category.

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
Age					
Seale, H., Heywood, A. E., Leask, J., Sheel, M., Thomas, S., Durrheim, D. N., et al.	Age ≥ 50	Carrying out ≥ 1 hygiene-related behaviours	Ref: Ages 18-49	OR (95% confidence interval) of 0.9 (0.7 - 1.2)	p≥0.05
		Carrying out ≥ 1 avoidance (distancing) behaviours	Ref: Ages 18-49	OR (95% confidence interval) of 1.0 (0.7 - 1.6)	p<0.05
Banai, I. P., Banai, B., & Mikloušić, I.	Age (tested direct effects of age on compliance)	Compliance with official COVID guidelines (how often they acted in accordance with prevention guidelines using a 5-point scale)	NA	Older more likely to comply - β = 0.07, B = 0.003, SE = 0.001, 95% CI (0.0003, 0.006)	p < 0.001
Soest, T. von, Pedersen, W., Bakken, A., & Sletten, M. A.	9th grade students	High compliance with infection control rules (four items on 5-point scale)	8th grade students	Adjusted OR (95% CI) of 1.00 (0.88-1.13) (Model 2)	Not reported
	10th grade students	High compliance with infection control rules	8th grade students	Adjusted OR (95% CI) of 0.94 (0.84-1.06) (Model 2)	Not reported
	Upper secondary, 1st year	High compliance with infection control rules	8th grade students	Adjusted OR (95% CI) of 1.01 (0.89-1.16) (Model 2)	Not reported
	Upper secondary, 2nd year	High compliance with infection control rules	8th grade students	Adjusted OR (95% CI) of 1.29 (1.11-1.50) (Model 2)	Not reported
	Upper secondary, 3rd year	High compliance with infection control rules	8th grade students	Adjusted OR (95% CI) of 1.56 (1.33-1.84) (Model 2)	Not reported
Rothmund, T., Farkhari, F., Azevedo, F., & Ziemer, C. T.	Young	Deniers latent class (Class D)	Rest of sample	Cohens d (confidence interval) = -0.25 (-0.44;-0.06)	Not reported
	Old	Cautious latent class (Class C)	Rest of sample	Cohens d (confidence interval) = 0.19 (0.05;0.32)	Not reported
Pedersen, M. J., & Favero, N.	Age 25-44	Willingness to social distance (scale)	Age <24	OLS regression coefficient -0.84 (1.17) (model 3)	p>.10
	Age 45+	Willingness to social distance (scale)	Age <24	OLS regression coefficient 1.58 (1.19) (model 3)	p>.10

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
Jørgensen, F., Bor, A., & Petersen, M. B.	Elderly (56+?)	Protective behaviour compliance (cross-sectional sample - 8 items combined into a 0-1 index where higher scores indicate greater protective behaviours)	NA	β age = 0.12	p<.0001
Underschultz, J. G., Barber, P., Richard, D., & Hillier, T.	16-29 years	Resistance to public messaging (endorsing selected of the following risky behaviours)	50+	OR (95% CI) 1.6 (1.2-2.3)	p=.015
Knotek II, E.S., Schoenle, R.S., Dietrich, A.M., Muller, G.F., Myrseth, K.R., & Weber, M.	Age	Likelihood of wearing a mask if required by local authorities	NA	Older more likely to wear mask - β (SE) = 0.031 (0.004)	p<.01
Everett, J. A., Colombatto, C., Chituc, V., Brady, W. J., & Crockett, M.	Age	Handwashing intention (self)	NA	Positive relationship	p<.01
		Avoid public gatherings intention	NA	Positive relationship	p<.01
		Avoid social contact intention	NA	Positive relationship	p<.01
		Wash hands intention (reminding others)	NA	Positive relationship	p<.01
		Avoid public gatherings intention (reminding others)	NA	Positive relationship	p<.01
		Avoid social contact intention (reminding others)	NA	Positive relationship	p<.01
		Cancel holiday (reminding others)	NA	Positive relationship	p<.01
Pickup, M., Stecula, D., & van der Linden, C.	Age	Proportion of engagement in all protective behaviours	NA	n.s.	p>.05
Yousuf, H., Corbin, J., Sweep, G., Hofstra, M., Scherder, E., van Gorp, E., et al.	Age (Older, "Increasing")	Handwashing all required areas (e,g., fingers, under nails, wrists) in the past 48 hours	Younger	Adjusted OR (95% CI): 1.02 (1.02-1.02)	p<0.001
		Handwashing duration (e.g., 20 or more seconds) in the past 48 hours	Younger	Adjusted OR (95% CI): 1.01 (1.01-1.01)	p<0.001
		Face touching in the past 48 hours	Younger	Adjusted OR (95% CI): 1.01 (1.00-1.01)	p<0.001
		Spent time with 1-5 people outside one's household in the past 48 hours	Younger	Adjusted OR (95% CI): 0.98 (0.98-0.98)	p<0.001

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Spent time with more than 5 people outside one's household in the past 48 hours	Younger	Adjusted OR (95% CI): 0.97 (0.97-0.98)	p<0.001
		Gone to a public place with more than 20 people present in the past 48 hours	Younger	Adjusted OR (95% CI): 0.98 (0.98-0.98)	p<0.001
		Physical distance from others if household member was showing symptoms	Younger	Adjusted OR (95% CI): 1.02 (1.02-1.02)	p<0.001
		Physical distance from others if participant was showing symptoms	Younger	Adjusted OR (95% CI): 1.02 (1.01-1.02)	p<0.001
Zickfeld J, Schubert T, Herting AK, Grahe J, & Faasse K.	Age	Overall Health/Communal Protective Behaviours (Summed score)	NA	β (95% CI) = -0.012 (-0.17, -0.06)	p<0.001
		Hygienic behaviour	NA	β (95% CI) = 0.01 (-0.04, 0.05)	p>0.001
		Physical distancing behaviour	NA	β (95% CI) = -0.13 (-0.18, -0.08)	p<0.001
De Neys, W., Raoelison, M., Boissin, E., Voudouri, A., Bago, B., & Białek, M.	Age	Current adherence to social distancing	NA	Spearman correlation: r_s =0.14	p<0.001
		Current moral condemnation of social distancing violations	NA	Spearman correlation: r_s =0.21	p<0.001
		Past adherence to social distancing	NA	Spearman correlation: r_s =0.16	p<0.001
		Past moral condemnation of social distancing violations	NA	Spearman correlation: r_s =0.17	p<0.001
Capacity to Comply					
Practial Capacity					
Kuiper, M. E., de Bruijn, A. L., Folmer, R.C., Olthuis, E., Brownlee, M., Kooistra, E. B., et al.	Practical capacity to comply	Compliance (composite measure)	NA	b (SE)=.19 (.03)	p<.001
Folmer, C. R., Kuiper, M., Olthuis, E., Kooistra, E. B., de Bruijn, A. L., Brownlee, M., et al.	Practical capacity to comply	Compliance (composite measure)	NA	b (SE)=.42 (.04)	p < .001
Seale, H., Heywood, A. E., Leask, J., Sheel, M., Thomas, S., Durrheim, D. N., et al.	High ability to adopt social distancing strategies	Carrying out ≥ 1 hygiene-related behaviours:	Low ability to adopt social distancing strategies	Adjusted OR (95% confidence interval) of 3.6 (1.6 - 7.0)	p<0.05

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Carrying out ≥ 1 avoidance (distancing) behaviours	Low ability to adopt social distancing strategies	Adjusted OR (95% confidence interval) of 5.0 (1.5 - 9.3 or 13.6)	p<0.05
Costs of Compliance					
Folmer, C. R., Kuiper, M., Olthuis, E., Kooistra, E. B., de Bruijn, A. L., Brownlee, M., et al.C	Costs of compliance	Compliance	NA	b (SE)=0.5(.02)	p < .05
Conspiracy Beliefs					
Banai, I. P., Banai, B., & Mikloušić, I.	Conspiracy beliefs	Compliance with official COVID guidelines	NA	β = -0.31, B = -0.21, SE = 0.02, 95% CI (-0.25, -0.17)	p < 0.001
		Compliance with official COVID guidelines	NA	β = -0.15, B = -0.10, SE = 0.01, 95% CI (-0.12, -0.09)	p < 0.001
		Compliance with official COVID guidelines	NA	β = -0.02, B = -0.01, SE = 0.01, 95% CI (-0.03, 0.01)	p>0.01
Pennycook, G., McPhetres, J., Bence B., & Rand, D.G.	Misperceptions about COVID-19 (Canada)	Intentions to change behavior in response to COVID-19	NA	r =-.255	p<.01
Allington, D., Duffy, B., Wessely, S., Dhavan, N., & Rubin, J.	Any conspiracy belief	Hand washing more often, for 20s	No conspiracy beliefs	OR (95% CI) = 0.45 (0.31-0.64)	p<.001
		Staying 2m away from other people outside your home	No conspiracy beliefs	OR (95% CI) = 0.23 (0.12-0.41)	p<.001
		Not going out with possible COVID symptoms	No conspiracy beliefs	OR (95% CI) = 0.18 (0.10-0.30)	p<.001
		Not having friends and family visit in your home	No conspiracy beliefs	OR (95% CI) = 0.44 (0.32-0.58)	p<.001
		Engagement in 4 health protective behaviours	No conspiracy beliefs	OR (95% CI) = 0.37 (0.29-0.47)	p<.001
Rothmund, T., Farkhari, F., Azevedo, F., & Ziemer, C. T.	Mainstream latent class	Belief in COVID-19 Conspiracies	Rest of sample	Cohens d =-0.53	Not reported
	Doubters latent class	Belief in COVID-19 Conspiracies	Rest of sample	Cohens d =-0.77	Not reported
	Cautious latent class	Belief in COVID-19 Conspiracies	Rest of sample	Cohens d =-0.53	Not reported

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
	Deniers Latent class	Belief in COVID-19 Conspiracies	Rest of sample	Cohens d =-1.21	Not reported
Freeman, D., Waite, F., Rosebrock, L., Petit, A., Causier, C., East, A., et al.	Specific coronavirus conspiracy beliefs	Total endorsement score for official explanations	NA	Pearson correlation: -0.101	p<0.001
		Overall, how often participants followed government guidance about coronavirus	NA	Pearson correlation: -0.32	p<0.001
		How much will participants follow future guidance from the government	NA	Pearson correlation: -0.34	p<0.001
		Staying home and only leaving house for essential journeys,	NA	Pearson correlation: -0.44	p<0.001
		Not meeting with people outside their household, even friends of family	NA	Pearson correlation: -0.39	p<0.001
		No more than one form of exercise a day outside, alone, or with members of household	NA	Pearson correlation: -0.38	p<0.001
		If participants go out, staying 2m apart from other people at all times	NA	Pearson correlation: -0.42	p<0.001
		Wash hands with soap and water often, for at least 20s	NA	Pearson correlation: -0.38	p<0.001
		Not going to work unless participants absolutely have to	NA	Pearson correlation: -0.38	p<0.001
		Take a diagnostic test if offered	NA	Pearson correlation: 0.33	p<0.001
		Take a COVID-19 antibody test if offered	NA	Pearson correlation: 0.36	p<0.001
		Accept a COVID-19 vaccine if offered	NA	Pearson correlation: 0.35	p<0.001
		Try to stop family and friends from getting the vaccine	NA	Pearson correlation: -0.47	p<0.001
		Download and use a contact tracing app	NA	Pearson correlation: 0.11	p<0.001
		If advised by the government, wear a facemask outside	NA	Pearson correlation: 0.23	p<0.001
	General coronavirus conspiracy beliefs	Total endorsement score for official explanations	NA	Pearson correlation: -0.21	p<0.001

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Overall, how often participants followed government guidance about coronavirus	NA	Pearson correlation: -0.27	p<0.001
		How much will participants follow future guidance	NA	Pearson correlation: -0.31	p<0.001
		Staying home and only leaving house for essential journeys	NA	Pearson correlation: -0.35	p<0.001
		Not meeting with people outside their household, even friends of family	NA	Pearson correlation: -0.32	p<0.001
		No more than one form of exercise a day outside, alone, or with members of household	NA	Pearson correlation: -0.32	p<0.001
		If participants go out, staying 2m apart from other people at all times	NA	Pearson correlation: -0.32	p<0.001
		Wash hands with soap and water often, for at least 20s	NA	Pearson correlation: -0.27	p<0.001
		Not going to work unless participants absolutely have to	NA	Pearson correlation: -0.31	p<0.001
		Take a diagnostic test if offered	NA	Pearson correlation: 0.29	p<0.001
		Take a COVID-19 antibody test if offered	NA	Pearson correlation: 0.34	p<0.001
		Accept a COVID-19 vaccine if offered	NA	Pearson correlation: 0.37	p<0.001
		Try to stop family and friends from getting the vaccine	NA	Pearson correlation: -0.42	p<0.001
		Download and use a contact tracing app	NA	Pearson correlation: 0.15	p<0.001
		If advised by the government, wear a facemask outside	NA	Pearson correlation: 0.21	p<0.001
COVID-Related Attitudes and Beliefs					
Pedersen, M. J., & Favero, N.	COVID-related attitude and belief (keep economy going despite deaths)	Willingness to social distance	NA	OLS regression coefficient -9.69 (3.03) (model 3)	p<.01
	COVID-related attitude and belief (close nonessential	Willingness to social distance	NA	OLS regression coefficient 18.11 (2.61) (model 3)	p<.01

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
	businesses for at least two weeks)				
		Social distancing anticipated duration	NA	OLS regression coefficient 11.25 (3.77) (model 7)	p<.01
Kantor, B. N., & Kantor, J.	Belief that NPIs reduce risk	NPI adherence	NA	OR (95% CI) = 3.06 (1.25-7.48) (univariate logistic analysis)	p=.014
	Belief that NPIs are not difficult to perform	NPI adherence	NA	OR (95% CI) = 1.79 (1.38-2.31) (univariate logistic analysis)	p<.0001
Knotek II, E.S., Schoenle, R.S., Dietrich, A.M., Muller, G.F., Myrseth, K.R., & Weber, M.	Belief that wearing a mask helps reduce the spread of COVID	Likelihood of wearing a mask if required by local authorities	Belief that wearing a mask does not reduce the spread of COVID	β (SE) = 1.421 (0.287)	p<.01
Zickfeld J, Schubert T, Herting AK, Grahe J, & Faasse K.	Perceived effectiveness of behaviour	Overall Health/Communal Protective Behaviours	NA	β (95% CI) = 0.11 (0.07, 0.15)	p<0.001
		Hygienic behaviour	NA	NA	NA
		Physical distancing behaviour	NA	β (95% CI) = 0.09 (0.05, 0.13)	p<0.001
COVID-19-Related Experiences (e.g., tested, diagnosed, etc.)					
Zickfeld J, Schubert T, Herting AK, Grahe J, & Faasse K.	COVID-19 symptom presence in the past two weeks (self)	Overall Health/Communal Protective Behaviours	NA	β (95% CI) = 0.07 (0.02, 0.11)	p>0.001
		Hygienic behaviour	NA	NA	NA
		Physical distancing behaviour	NA	β (95% CI) = 0.09 (0.04, 0.13)	p<0.001
	COVID-19 symptom presence in the past two weeks (friends/family)	n.s: Overall Health/Communal Protective Behaviours; Hygienic behaviour; Physical distancing behaviour	NA	β = n.s in any measure	p>0.001
	Visited a high-transmission area in the past two weeks	n.s: Overall Health/Communal Protective Behaviours; Hygienic behaviour; Physical distancing behaviour	NA	β = n.s in any measure	p>0.001
	Close contact with someone infected with COVID-19	n.s: Overall Health/Communal Protective Behaviours; Hygienic behaviour; Physical distancing behaviour	NA	β = n.s in any measure	p>0.001

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
Deviancy					
Nivette, A., Ribeaud, D., Murray, A. L., Steinhoff, A., Bechtiger, L., Hepp, U., et al.	Deviant peer association (assessed two years prior - age 20)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.11 (1.02 - 1.20)	p=.019
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.33 (1.15 - 1.54)	p<.001
	Deviant behaviour (assessed two years prior - age 20)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.09 (1.03 - 1.15)	p=.002
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.15 (1.06 - 1.25)	p<.001
Education					
Nivette, A., Ribeaud, D., Murray, A. L., Steinhoff, A., Bechtiger, L., Hepp, U., et al.	Secondary school A	Hygiene behaviour non-compliance	Gymnasium (highest, college-track education level)	Adjusted OR (95% CI) of 0.76 (0.64-0.91)	p<.001
		Social distancing behaviour non-compliance	Gymnasium (highest, college-track education level)	Adjusted OR (95% CI) of 1.42 (0.98-2.05)	p=.060
	Secondary school B/C (lower non-college track, typically leading to “blue collar” apprenticeships)	Hygiene behaviour non-compliance	Gymnasium (highest, college-track education level)	Adjusted OR (95% CI) of 0.63 (0.49-0.82)	p<.001
		Social distancing behaviour non-compliance	Gymnasium (highest, college-track education level)	Adjusted OR (95% CI) of 1.93 (1.26-2.98)	p<.001
	Special needs education	Hygiene behaviour non-compliance	Gymnasium (highest, college-track education level)	Adjusted OR (95% CI) of 0.86 (0.35-2.14)	p=.750
		Social distancing behaviour non-compliance	Gymnasium (highest, college-track education level)	Adjusted OR (95% CI) of 1.45 (0.34-6.21)	p=.620
Seale, H., Heywood, A. E., Leask, J., Sheel, M., Thomas, S., Durrheim, D. N., et al.	Education level	Carrying out ≥ 1 hygiene-related behaviours	NA	OR (95% confidence interval) = n.s. in any comparison	p≥0.05
		Carrying out ≥ 1 avoidance (distancing) behaviour	NA	OR (95% confidence interval) = n.s. in any comparison	p≥0.05

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
Banai, I. P., Banai, B., & Mikloušić, I.	Highest education level	Compliance with official COVID guidelines	NA	β = 0.01, B = 0.008, SE = 0.012, 95% CI (-0.01, 0.01)	p > 0.05
Soest, T. von, Pedersen, W., Bakken, A., & Sletten, M. A.	High grades - academic achievement (adolescence)	High compliance with infection control rules	Low grades - academic achievement (adolescence)	Adjusted OR (95% CI) of 1.21 (1.08-1.36) (Model 2)	Not reported
Everett, J. A., Colombatto, C., Chituc, V., Brady, W. J., & Crockett, M. T	Education	Wash hands intention (self)	NA	Negative relationship	p<.05
		Avoid social contact intention (self)	NA	Negative relationship	p<.05
		Intention to share messaging on social media (self)	NA	Negative relationship	p<.05
Clements, J. M.	Graduate/professional degree	Spent more money on cleaning supplies, personal hygiene products, or food than normal	High school/general equivalency diploma	OR (95% confidence interval) of 2.11 (1.22-3.65)	p<0.05
		Participant reported going to any place with more than 50 people in attendance	High school/general equivalency diploma	OR (95% confidence interval) of 1.67 (1.46-4.87)	p<0.05
		Wore mask	High school/general equivalency diploma	OR (95% confidence interval) of 7.41 (3.07-17.9)	p<0.05
Rothmund, T., Farkhari, F., Azevedo, F., & Ziemer, C. T.	Low Education	Doubters latent class	NA	OR (confidence interval) of 1.58 (1.21-2.05)	Not reported
	High Education	Cautious latent class	NA	OR (confidence interval) of 1.41 (1.09-1.91)	Not reported
	Low Education	Deniers latent class	NA	OR (confidence interval) of 1.80 (1.21-2.70)	Not reported
Pickup, M., Stecula, D., & van der Linden, C.	University education	Proportion of engagement in all protective behaviours	High school or below	β(SE)= 0.029 (0.008) (I believe it's standardized but might not be)	p<.01
Yousuf, H., Corbin, J., Sweep, G., Hofstra, M., Scherder, E., van Gorp, E., et al.	Education level ("Higher")	Handwashing all required areas	Lower	Adjusted OR (95% CI): 1.03 (0.96-1.11)	p=.43
		Handwashing duration	Lower	Adjusted OR (95% CI): 1.09 (1.01-1.17)	p=.03

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Face touching in the past 48 hours	Lower	Adjusted OR (95% CI): 1.16 (1.08-1.24)	p<0.001
		Spent time with 1-5 people outside one's household in the past 48 hours	Lower	Adjusted OR (95% CI): 1.02 (0.94-1.09)	p=.67
		Spent time with more than 5 people outside one's household in the past 48 hours	Lower	Adjusted OR (95% CI): 0.81 (0.72-0.92)	p<0.001
		Gone to a public place with more than 20 people present in the past 48 hours (excluding necessary grocery shopping)	Lower	Adjusted OR (95% CI): 1.03 (0.96-1.12)	p=.41
		Physical distance from others if household member was showing symptoms	Lower	Adjusted OR (95% CI): 1.04 (0.97-1.11)	p=.31
		Physical distance from others if participant was showing symptoms	Lower	Adjusted OR (95% CI): 1.17 (1.09-1.25	p<0.001
Zickfeld J, Schubert T, Herting AK, Grahe J, & Faasse K.	Education level	n.s: Overall Health/Communal Protective Behaviours; Hygienic behaviour; Physical distancing behaviour	NA	β = n.s in any measure	p>0.001
De Neys, W., Raoelison, M., Boissin, E., Voudouri, A., Bago, B., & Białek, M.	Education level	Current adherence to social distancing	NA	Spearman correlation: rs =0.04	p>0.5
		Current moral condemnation of social distancing violations	NA	Spearman correlation: rs =-0.02	p>0.5
		Past adherence to social distancing	NA	Spearman correlation: rs =0.01	p>0.5
		Past moral condemnation of social distancing violations	NA	Spearman correlation: rs =0.02	p>0.5
Employment Status					
Seale, H., Heywood, A. E., Leask, J., Sheel, M., Thomas, S., Durrheim, D. N., et al.	Not working	Carrying out ≥ 1 hygiene-related behaviours:	Working part/full time	OR (95% confidence interval) of 1.2 (0.9 - 1.6)	p≥0.05
		Carrying out ≥ 1 avoidance (distancing) behaviours	Working part/full time	OR (95% confidence interval) of 0.7 (0.5 - 1.2)	p≥0.05
Pedersen, M. J., & Favero, N.	Essential worker	Willingness to social distance	Non-essential worker	OLS regression coefficient -2.97 (1.09) (model 3)	p<.01

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
	Unsure if essential worker	Social distancing anticipated duration	Non-essential worker	OLS regression coefficient -4.29 (1.95) (model 7)	p<.05
Underschultz, J. G., Barber, P., Richard, D., & Hillier, T.	Student as occupation	Resistance to public messaging	Non-student	OR (95% CI) = 1.3 (1.0-1.6)	p=.046
Kantor, B. N., & Kantor, J.	Full-time employment	NPI adherence	NA	OR 1.35, 95% CI (1.02-1.78) (univariate logistic analysis)	p=.035
Everett, J. A., Colombatto, C., Chituc, V., Brady, W. J., & Crockett, M.	Employment status	Any self or other preventative behaviour	NA	No significant relationship	n.s.
Household structure					
Seale, H., Heywood, A. E., Leask, J., Sheel, M., Thomas, S., Durrheim, D. N., et al.	Children in household attending childcare/school	Carrying out ≥ 1 hygiene-related behaviours	Not attending childcare/school or no children	OR (95% confidence interval) of 1.2 (0.8 - 1.9)	p≥0.05
		Carrying out ≥ 1 avoidance (distancing) behaviours	Not attending childcare/school or no children	OR (95% confidence interval) of 1.4 (0.8 - 2.5)	p≥0.05
Underschultz, J. G., Barber, P., Richard, D., & Hillier, T.	Living alone	Resistance to public messaging (	Co-habitant(s)	OR (95% CI) 1.4= (1.0-1.9)	p=.029
Zickfeld J, Schubert T, Herting AK, Grahe J, & Faasse K.	Household size (# of members)	Overall Health/Communal Protective Behaviours	NA	β (95% CI) = 0.11 (0.06, 0.16)	p<0.001
		Hygienic behaviour	NA	β (95% CI) = 0.06 (0.02, 0.11)	p>0.001
		Physical distancing behaviour	NA	β (95% CI) = 0.13 (0.08, 0.18)	p<0.001
	# Children in household	Overall Health/Communal Protective Behaviours	NA	β (95% CI) = 0.12 (0.06, 0.19)	p<0.001
		Hygienic behaviour	NA	β (95% CI) = -0.03 (-0.08, 0.02)	p>0.001
		Physical distancing behaviour	NA	β (95% CI) = 0.14 (0.08, 0.20)	p<0.001
Health Status					
Seale, H., Heywood, A. E., Leask, J., Sheel, M., Thomas, S., Durrheim, D. N., et al.	Have private health insurance	Carrying out ≥ 1 hygiene-related behaviours	No private insurance	OR (95% confidence interval) of 1.2 (0.9 - 1.7)	p≥0.05

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Carrying out ≥ 1 avoidance (distancing) behaviours	No private insurance	OR (95% confidence interval) of 1.2 (0.8 - 1.9)	p≥0.05
	Moderate health status	Carrying out ≥ 1 hygiene-related behaviours	Good/Very good health rating	OR (95% confidence interval) of 0.6 (0.4 - 1.1)	p≥0.05
		Carrying out ≥ 1 avoidance (distancing) behaviours	Good/Very good health rating	OR (95% confidence interval) of 1.1 (0.5 - 2.7)	p≥0.05
	Very Poor/ Poor health status	Carrying out ≥ 1 hygiene-related behaviours:	Good/Very good health rating	OR (95% confidence interval) of 0.7 (0.5 - 1.0)	p≥0.05
		Carrying out ≥ 1 avoidance (distancing) behaviours	Good/Very good health rating	OR (95% confidence interval) of 0.8 (0.5 - 1.3)	p≥0.05
	Chronic health conditions present	Carrying out ≥ 1 hygiene-related behaviours:	No chronic health conditions	OR (95% confidence interval) of 1.5 (0.7 - 3.3)	p≥0.05
		Carrying out ≥ 1 avoidance (distancing) behaviour	No chronic health conditions	OR (95% confidence interval) of 1.2 (0.4 - 3.2)	p≥0.05
Zickfeld J, Schubert T, Herting AK, Grahe J, & Faasse K.	Perceived health status	n.s: Overall Health/Communal Protective Behaviours; Hygienic behaviour; Physical distancing behaviour	NA	β = n.s in any measure	p>0.001
	Flu vaccine in the past year	n.s: Overall Health/Communal Protective Behaviours; Hygienic behaviour; Physical distancing behaviour	NA	β = n.s in any measure	p>0.001
Knowledge of Pandemic					
COVID knowledge					
Zickfeld J, Schubert T, Herting AK, Grahe J, & Faasse K.	Knowledge score (A sum score constructed from participants' correct answers out of 31 items)	n.s: Overall Health/Communal Protective Behaviours; Hygienic behaviour; Physical distancing behaviour	NA	β = n.s in any measure	p>0.001
Bridgman, A., Merkley, E., Loewen, P. J., Owen, T., Ruths, D., Teichmann, L., et al.	Misperceptions about COVID-19	Social distancing compliance	NA	OLS regression coefficient: -0.39 (SE: 0.03)	p<0.01
		Social distancing compliance	NA	OLS regression coefficient: -0.34 (SE: 0.04)	p<0.01

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
Al-Hasan, A., Yim, D., & Khuntia, J.	Knowledge (The extent to which one is aware or knowledgeable about COVID-19 and relevant situations)	self-adherence (Individual's intention to adhere to social distancing/sheltering recommendations)	NA	b (SE)=0.121 (0.049)	p=0.02
	Knowledge (The extent to which one is aware or knowledgeable about COVID-19 and relevant situations)	Other-adherence (Whether others will adhere to social distancing/sheltering recommendations, as perceived by the individual)	NA	b (SE)=–0.155 (0.050)	p=0.001
Kuiper, M. E., de Bruijn, A. L., Folmer, R.C., Olthuis, E., Brownlee, M., Kooistra, E. B., et al.	Knowledge of current measures	Compliance	NA	b (SE)=.13 (.02)	p<.001
Information Seeking					
Nivette, A., Ribeaud, D., Murray, A. L., Steinhoff, A., Bechtiger, L., Hepp, U., et al.	Low information seeking	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.10 (1.07-1.17)	p=.002
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.21 (1.09-1.34)	p<.001
Pedersen, M. J., & Favero, N.	COVID news consumption (how closely have you been following news about coronavirus [0-1])	Willingness to social distance	NA	OLS regression coefficient 8.56 (2.51) (model 3)	p<.01
Efficacy of COVID Knowledge					
Jørgensen FJ, Bor A, Petersen MB.	Knowledge efficacy ("I am certain i can follow official advice to distance myself from others if I want to")	Protective behaviour compliance	NA	β knowledge efficacy = 0.14	p<.0001
Underschultz, J. G., Barber, P., Richard, D., & Hillier, T.	Feeling uninformed about COVID	Resistance to public messaging	Feeling informed	OR (95% CI)= 1.2 (1.1-1.3)	p=.0057
Media					
Media Source and Exposure					
Pedersen, M. J., & Favero, N.	Information source: magazine	Social distancing anticipated duration	NA	OLS regression coefficient 6.94 (3.42) (model 7)	p<.05

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
	Information source: television	Social distancing anticipated duration	NA	OLS regression coefficient -4.94 (1.42) (model 7)	p<.01
	Information source: radio	Social distancing anticipated duration	NA	OLS regression coefficient -2.84 (1.33) (model 7)	p<.05
Kantor, B. N., & Kantor, J.	Belief that media was not exaggerating severity of pandemic	NPI adherence	NA	OR (95% CI) = 1.44 (1.09-1.91) (univariate logistic analysis)	p=.012
Allington, D., Duffy, B., Wessely, S., Dhavan, N., & Rubin, J.	Frequency of checking social media for COVID information	Avoiding social encounters outside the home	NA	(N1=2045, N2=145)= 126702, 95%CI(0.38-0.47)	p=.003
		Not going out with possible COVID symptoms	NA	(N1=2092,N2=86)= 78185, 95%CI (0.37-0.49)	p=.034
	Information source: social media platforms (YouTube, Facebook, WhatsApp, Twitter)	Engagement in all 4 health protective behaviours	NA	Log-Odds (95% CI) = -0.39 (-0.19 - -0.29)	p<.001
	Information source: legacy media (TV and radio broadcasters, newspapers and magazines)	Engagement in all 4 health protective behaviours	NA	Log-Odds (95% CI) = 0.17 (0.08-0.26)	p<.001
Al-Hasan, A., Yim, D., & Khuntia, J.	Health information source general	self-adherence (Individual's intention to adhere to social distancing/sheltering recommendations)	NA	b (SE)=0.309 (0.105)	p=.003
	Health information source general	Other-adherence	NA	b (SE)=0.537 (0.401)	p=.03
	Social media general (The intensity of general social media sources that the individual uses to gather or collect information about COVID-19 situation)	Other-adherence (Whether others will adhere to social distancing/sheltering recommendations, as perceived by the individual)	NA	b (SE)=0.254 (0.068)	p<.001
Zickfeld J, Schubert T, Herting AK, Grahe J, & Faasse K.	Exposure to media about COVID-19	Overall Health/Communal Protective Behaviours	NA	β (95% CI) = 0.07 (0.03, 0.11)	p<0.001

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Hygienic behaviour	NA	β (95% CI) = 0.09 (0.06, 0.12)	p<0.001
		Physical distancing behaviour	NA	β (95% CI) = 0.04 (0.01, 0.08)	p>0.001
	Amount of media sources	n.s: Overall Health/Communal Protective Behaviours; Hygienic behaviour; Physical distancing behaviour	NA	β = n.s in any measure	p>0.001
Bridgman, A., Merkley, E., Loewen, P. J., Owen, T., Ruths, D., Teichmann, L., et al.	Social media exposure	Social distancing compliance	NA	OLS regression coefficient: -0.12 (SE: 0.03)	p<0.01
		Social distancing compliance	NA	OLS regression coefficient: -0.04 (SE: 0.03)	p>0.1
		Social distancing compliance	NA	OLS regression coefficient: -0.03 (SE: 0.03)	p>0.1
	News media exposure	Social distancing compliance	NA	OLS regression coefficient: 0.28 (SE: 0.03)	p<0.01
		Social distancing compliance	NA	OLS regression coefficient: 0.23 (SE: 0.03)	p<0.01
		Social distancing compliance	NA	OLS regression coefficient: 0.20 (SE: 0.03)	p<0.01
Media Attention Over Time					
Doogan, C., Buntine, W., Linger, H., & Brunt, S.	Daily number of COVID-19 cases (from Jan 2, 2020 to April 30, 2020, 121 days) - Canada	Daily number of tweets related to COVID-19 Non-Pharmaceutical Interventions (e.g., distancing) (daily frequency)	NA	Pearson correlation: 0.299	p<0.001
	Daily number of COVID-19 cases (from Jan 2, 2020 to April 30, 2020, 121 days) - United States	Daily number of tweets related to COVID-19 Non-Pharmaceutical Interventions (e.g., distancing) (daily frequency)	NA	Pearson correlation: 0.375	p<0.001
Perceived Threat					
COVID Threat	(some overlap with emotional affect sub-category)				

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
Nivette, A., Ribeaud, D., Murray, A. L., Steinhoff, A., Bechtiger, L., Hepp, U., et al.	Family risk of infection (family member had a pre-existing condition that increases their risk or seriousness of infection) (assessed at age 22 - concurrent variable)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 0.85 (0.64-1.12)	p=.496
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 0.75 (0.48-1.17)	p=.205
	Self risk of infection	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 0.95 (0.80-1.11)	p=.245
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 0.74 (0.56-0.97)	p=.027
	COVID-19 moral disengagement (four items) - attitudes that underestimate or dismiss the risk of infection.	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.46 (1.23-1.72)	p<.001
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 3.04 (2.43-3.81)	p<.001
Seale, H., Heywood, A. E., Leask, J., Sheel, M., Thomas, S., Durrheim, D. N., et al.	High perceived severity of COVID-19 if infected	Carrying out ≥ 1 hygiene-related behaviours:	Low perceived severity of COVID-19 pandemic	Adjusted OR (95% confidence interval) of 1.4 (1.1 - 2.3)	p<0.05
		Carrying out ≥ 1 avoidance (distancing) behaviours	Low perceived severity of COVID-19 pandemic	Adjusted OR (95% confidence interval) of 1.5 (0.7 - 3.2)	p≥0.05
	High level of concern if self-isolated	Carrying out ≥ 1 hygiene-related behaviours	Low level of concern if self-isolated	Adjusted OR (95% confidence interval) of 2.4 (1.1 - 4.0)	p<0.05
		Carrying out ≥ 1 avoidance (distancing) behaviours	Low level of concern if self-isolated	Adjusted OR (95% confidence interval) of 1.8 (1.1 - 3.0)	p<0.05
	Intermediate level of risk of catching COVID-19	Carrying out ≥ 1 hygiene-related behaviour	Very low/low level of risk of catching COVID-19	Adjusted OR (95% confidence interval) of 1.6 (1.1 - 2.0)	p<0.05
		Carrying out ≥ 1 avoidance (distancing) behaviours	Very low/low level of risk of catching COVID-19	Adjusted OR (95% confidence interval) of 1.1 (0.6 - 1.7)	p≥0.05

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
	High/Very high level of risk of catching COVID-19	Carrying out ≥ 1 hygiene-related behaviours	Very low/low level of risk of catching COVID-19	Adjusted OR (95% confidence interval) of 2.0 (1.2 - 3.5)	p<0.05
		Carrying out ≥ 1 avoidance (distancing) behaviours	Very low/low level of risk of catching COVID-19	Adjusted OR (95% confidence interval) of 1.7 (0.8 - 3.4)	p≥0.05
	Serious/Extreme perceived impact of COVID-19 on health	Carrying out ≥ 1 hygiene-related behaviours	No/Somewhat perceived impact of COVID-19 on health (if infected)	Adjusted OR (95% confidence interval) of 1.6 (0.6 - 1.5)	p≥0.05
		Carrying out ≥ 1 avoidance (distancing) behaviours	No/Somewhat perceived impact of COVID-19 on health (if infected)	Adjusted OR (95% confidence interval) of 1.6 (0.9 - 2.9)	p≥0.05
De La Vega, R., Barquín, R. R., Boros, S., & Szabo, A.	Knowing someone at risk	Need of staying at home to prevent the spread of COVID-19	NA	β = -.370, t(63) = 3.46	p=.001
	Knowing someone infected (Y/N)	Need of staying at home to prevent the spread of COVID-19	NA	β = .280, t(63) = 2.61	p=.012
Pennycook, G., McPhetres, J., Bence B., & Rand, D.G.	Risk perceptions about COVID-19 (Canada)	Intentions to change behavior in response to COVID-19	NA	r = .500	p<.01
Kuiper, M. E., de Bruijn, A. L., Folmer, R.C., Olthuis, E., Brownlee, M., Kooistra, E. B., et al.	Perceived Threat	Compliance	NA	b (SE)=.17 (.03)	p<.001
Folmer, C. R., Kuiper, M., Olthuis, E., Kooistra, E. B., de Bruijn, A. L., Brownlee, M., et al.	Perceived health threat	Compliance with COVID-19 measures	NA	b (SE)=0.10(.02)	p < .001
Zickfeld J, Schubert T, Herting AK, Grahe J, & Faasse K.	Skepticism about warnings	Overall Health/Communal Protective Behaviours	NA	β (95% CI) = -0.09 (-0.13, -0.05)	p<0.001
		Hygienic behaviour	NA	β (95% CI) = -0.10 (-0.13, -0.06)	p<0.001
		Physical distancing behaviour	NA	β (95% CI) = -0.07(-0.11, -0.03)	p<0.001
	Concern about the COVID-19 outbreak	Overall Health/Communal Protective Behaviours	NA	β (95% CI) = 0.07 (0.02, 0.13)	p>0.001
		Hygienic behaviour	NA	β (95% CI) = 0.10 (0.06, 0.15)	p<0.001
		Physical distancing behaviour	NA	β (95% CI) = 0.06 (0.01, 0.11)	p>0.001

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
	Perceived severity (for self)	n.s: Overall Health/Communal Protective Behaviours; Hygienic behaviour; Physical distancing behaviour	NA	β = n.s in any measure	p>0.001
	Perceived severity (for friends/family)	n.s: Overall Health/Communal Protective Behaviours; Hygienic behaviour; Physical distancing behaviour	NA	β = n.s in any measure	p>0.001
	Perceived likelihood of infection with COVID-19	n.s: Overall Health/Communal Protective Behaviours; Hygienic behaviour; Physical distancing behaviour	NA	β = n.s in any measure	p>0.001
De Neys, W., Raoelison, M., Boissin, E., Voudouri, A., Bago, B., & Białek, M.	Current perceived personal risk	Current moral condemnation of social distancing violations	NA	Spearman correlation: r_s =0.27	p<0.001
		Current adherence to social distancing	NA	Spearman correlation: r_s =0.24	p<0.001
	Current perceived risk to others	Current moral condemnation of social distancing violations	NA	Spearman correlation: r_s =0.24	p<0.001
		Current adherence to social distancing	NA	Spearman correlation: r_s =0.23	p<0.001
	Past perceived risk to self	Past moral condemnation of social distancing violations	NA	Spearman correlation: r_s =0.46	p<0.001
		Past adherence to social distancing	NA	Spearman correlation: r_s =0.43	p<0.001
	Past perceived risk to others	Past moral condemnation of social distancing violations	NA	Spearman correlation: r_s =0.40	p<0.001
		Past adherence to social distancing	NA	Spearman correlation: r_s =0.39	p<0.001
Pedersen, M. J., & Favero, N.	COVID-19 pandemic is the single biggest threat to society in our time	Willingness to social distance	NA	OLS regression coefficient 4.67 (2.10) (model 3)	p<.05
Politics					
Jørgensen, F., Bor, A., & Petersen, M. B.	Voting left-wing parties	Protective behaviour compliance	NA	β left = 0.01	p=0.021
Pennycook, G., McPhetres, J., Bence B., & Rand, D.G.	US Conservatism (political partisanship)	Misperceptions about COVID-19	NA	β (95% CI) = 0.34 (0.24-0.38)	p<.001

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Risk perceptions about COVID-19	NA	β (95% CI) = -0.36 (-0.43- -0.28)	p<.001
		Intentions to change behavior in response to COVID-19	NA	β (95% CI) = -0.15 (-0.23- -0.08)	p<.001
		Perceived quality national leadership response	NA	β (95% CI) = 0.68 (0.62-0.74)	p<.001
	US Conservatism (political partisanship)	Misperceptions about COVID-19	NA	β (95% CI) = 0.24 (0.17-0.30)	p<.001
		Risk perceptions about COVID-19	NA	β (95% CI) = -0.36 (-0.43- -0.29)	p<.001
		Intentions to change behavior in response to COVID-19	NA	β (95% CI) = -0.17 (-0.24- -0.09)	p<.001
		Perceived quality national leadership response	NA	β (95% CI) = 0.68 (0.62-0.73)	p<.001
	UK Conservatism (political partisanship)	Misperceptions about COVID-19	US	β (95% CI) = -0.17 (-0.28 - -0.07)	p<.01
		Risk perceptions about COVID-19	US	β (95% CI) = 0.34 (0.23-0.44)	p<.001
		Intentions to change behavior in response to COVID-19	US	β (95% CI) = 0.22 (0.11-0.33)	p<.001
		Perceived quality national leadership response	US	β (95% CI) = -0.25 (-0.34 - -0.15)	p<.001
	UK Conservatism (political partisanship)	Perceived quality national leadership response	US	β (95% CI) = 0.44 (0.37-0.51)	p<.001
	Canada Conservatism (political partisanship)	Perceived quality national leadership response	US	β (95% CI) = -1.03 (-1.12 - -0.94)	p<.001
		Intentions to change behavior in response to COVID-19	NA	r =-.171	p<.01
	Canada Conservatism (political partisanship)	Misperceptions about COVID-19	US	β (95% CI) = 0.23 (0.16-0.30)	p<.001
		Risk perceptions about COVID-19	US	β (95% CI) = -0.26 (-0.33 - -0.18)	p<.001

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Intentions to change behavior in response to COVID-19	US	β (95% CI) = -0.18 (-0.25 - -0.10)	p<.001
		Perceived quality national leadership response	US	β (95% CI) = -0.35 (-0.42 - -0.28)	p<.001
Everett, J. A. A., Colombatto, C., Chituc, V., Brady, W. J., & Crockett, M. J.	Political conservatism	Intention to wash hands	NA	Negative relationship	p<.01
		Avoid public gatherings intention (self)	NA	Negative relationship	p<.01
		Avoid social contact intention (self)	NA	Negative relationship	p<.01
		Intention to share messaging on social media (self)	NA	Negative relationship	p<.01
		Avoid social contact intention (others)	NA	Negative relationship	p<.05
		Cancel holiday (others)	NA	Negative relationship	p<.01
Pickup, M., Stecula, D., & van der Linden, C.	Bloc partisanship	Proportion of engagement in all protective behaviours	Liberal partisanship	β(SE)= -0.021 (0.010)	p<.05
	Conservative partisanship	Proportion of engagement in all protective behaviours	Liberal partisanship	β(SE)= -0.039 (0.009)	p<.01
	PPC partisanship	Proportion of engagement in all protective behaviours	Liberal partisanship	β(SE)= -0.107 (0.028)	p<.01
Brodeur, A., Grigoryeva, I., & Kattan, L.	Democrats ("strong democrat" or "not very strong democrat") (Pre-lockdown)	Non-essential visits within 10 days (before and after) of lockdown orders	NA	Coefficient (Difference in Differences(DID)): -0.003 (SE 0.047)	p=>0.1
		Non-essential visits within 10 days (before and after) of lockdown orders	NA	Coefficient (DID): 0.068 (SE 0.036)	p<0.1
	County Governor political affiliation (Democrat vs. Republican)	No significant results (non-essential visits or travel distance)	NA		p=>0.1

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
Bridgman, A., Merkley, E., Loewen, P. J., Owen, T., Ruths, D., Teichmann, L., et al.	Ideology (agreement with five political statements)	Social distancing compliance	NA	OLS regression coefficient: -0.00 (SE: 0.02)	p>0.1
Prevalence & Existing Policies					
Knotek, I. I. E., Schoenle, R., Dietrich, A., Müller, G., Myrseth, K. O. R., & Weber, M.	Mandatory masking in place	Likelihood of wearing a mask if required by local authorities	Not mandatory masking in place	β (SE) = 0.290 (0.133)	p<.05
	Reported commonality of COVID-19	Likelihood of wearing a mask if required by local authorities	COVID-19 not common in area	β (SE) = 0.006 (0.002)	p<.05
Provincial Residence					
Underschultz, J. G., Barber, P., Richard, D., & Hillier, T.	Alberta residents	Resistance to public messaging	Ontario residents	OR (95% CI)= 1.6 (1.3-2.1)	p<.001
		More likely to endorse meeting up with non-household member	Ontario residents	OR (95% CI)= 2.0 (1.5-2.7)	p<.001
	Ontario residents	More likely to wear masks in public	Alberta residents	OR(95% CI)= 2.1 (1.7-2.7)	p<.001
Public Health Communication Strategy					
Yousuf, H., Corbin, J., Sweep, G., Hofstra, M., Scherder, E., van Gorp, E., et al.	Exposure to an evidence-based Youtube video discussing handwashing instructions, and rationale for physical distancing and avoiding face touching (Public health campaign - Group 2)	Handwashing all required areas in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 1.07 (0.82-1.38)	p=.63
		Handwashing duration (e.g., 20 or more seconds) in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 1.23 (0.96-1.59)	p=.10
		Face touching in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 0.87 (0.69-1.09)	p=.21
		Spent time with 1-5 people outside one's household in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 0.91 (0.71-1.16)	p=.45

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Spent time with more than 5 people outside one's household in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 0.87 (0.58-1.25)	p=.46
		Gone to a public place with more than 20 people present in the past 48 hours (excluding necessary grocery shopping)	No exposure to the public health campaigns	Adjusted OR (95% CI): 0.78 (0.59-1.01)	p=.06
		Physical distance from others if household member was showing symptoms	No exposure to the public health campaigns	Adjusted OR (95% CI): 1.00 (0.80-1.25)	p>.99
		Physical distance from others if participant was showing symptoms	No exposure to the public health campaigns	Adjusted OR (95% CI): 0.62 (0.50-0.78)	p<0.001
	Exposure to newspaper article with infographic survey results of the Dutch public's gaps in preventative behaviours (Public health campaign - Group 3)	Handwashing all required areas in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 1.31 (1.22-1.40)	p<0.001
		Handwashing duration (e.g., 20 or more seconds) in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 1.27 (1.19-1.36)	p<0.001
		Face touching in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 1.29 (1.22-1.38)	p<0.001
		Spent time with 1-5 people outside one's household in the past 48	No exposure to the public health campaigns	Adjusted OR (95% CI): 0.87 (0.81-0.93)	p<0.001
		Spent time with more than 5 people outside one's household in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 0.85 (0.76-0.96)	p=.006
		Gone to a public place with more than 20 people present in the past 48 hours (excluding necessary grocery shopping)	No exposure to the public health campaigns	Adjusted OR (95% CI): 0.88 (0.82-0.94)	p<0.001
		Physical distance from others if household member was showing symptoms	No exposure to the public health campaigns	Adjusted OR (95% CI): 1.15 (1.09-1.23)	p<0.001
		Physical distance from others if participant was showing symptoms	No exposure to the public health campaigns	Adjusted OR (95% CI): 1.10 (1.03-1.17)	p=.006
	Exposure to both the newspaper article with infographic results	Handwashing all required areas in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 2.14 (1.83-2.50)	p<0.001

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
	and the evidence-based Youtube video (Public health campaign - Group 4)				
		Handwashing duration (e.g., 20 or more seconds) in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 1.86 (1.59-2.16)	p<0.001
		Face touching in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 1.49 (1.30-1.71)	p<0.001
		Spent time with 1-5 people outside one's household in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 0.81 (0.70-0.95)	p<0.001
		Spent time with more than 5 people outside one's household in the past 48 hours	No exposure to the public health campaigns	Adjusted OR (95% CI): 1.19 (0.93-1.50)	p=.16
		Gone to a public place with more than 20 people present in the past 48 hours (excluding necessary grocery shopping)	No exposure to the public health campaigns	Adjusted OR (95% CI): 0.80 (0.68-0.94)	p=.008
		Physical distance from others if household member was showing symptoms	No exposure to the public health campaigns	Adjusted OR (95% CI): 1.10 (0.96-1.26)	p=.18
		Physical distance from others if participant was showing symptoms	No exposure to the public health campaigns	Adjusted OR (95% CI): 0.79 (0.69-0.91)	p=.001
Gutierrez, E., Rubli, A., & Tavares, T.	Information by date occurred: cumulative death count by actual date of death from the onset of the epidemic up to 12 days before fielding the survey (Study condition 2)	Risk of contagion (One week): Perceived risk of attending a gathering of 100 people one week after the survey	Lagged information: cumulative death count by date reported	Coeffcient: 0.0334 (SE: 0.019)	p<0.1
		Risk of contagion (One week, Low Prior): Perceived risk of from low prior subsample (reported COVID-19 cases <50,000)	Lagged information: cumulative death count by date reported	Coeffcient: 0.0698 (SE: 0.027)	p<0.05
		Risk of contagion (One week, High Prior): Perceived risk from high prior subsample (reported COVID-19 cases >50,000)	Lagged information: cumulative death count by date reported	Coefficient: -0.0043 (SE: 0.026)	p>0.1

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Risk of contagion (4 weeks): Perceived risk four weeks after the survey	Lagged information: cumulative death count by date reported	Coefficient: 0.0331 (SE: 0.026)	p>0.1
		Risk of contagion (4 weeks, Low prior): Perceived risk four weeks after the survey from low prior subsample (reported COVID-19 cases <50,000)	Lagged information: cumulative death count by date reported	Coefficient: 0.0737 (SE: 0.039)	p<0.1
		Risk of contagion (4 weeks, High prior): Perceived risk four weeks after the survey from high prior subsample (reported COVID-19 cases >50,000)	Lagged information: cumulative death count by date reported	Coefficient: 0.0047 (SE: 0.035)	p>0.1
		Social distancing (One week): in the week following the survey	Lagged information: cumulative death count by date reported	Coefficient: 0.0004 (SE: 0.012)	p>0.1
		Social distancing (One week; Low Prior): in the week following the survey from low prior subsample (reported COVID-19 cases <50,000)	Lagged information: cumulative death count by date reported	Coefficient: -0.0326 (SE: 0.017)	p<0.1
		Social distancing (One week; High prior): in the week following the survey from high prior subsample (reported COVID-19 cases >50,000)	Lagged information: cumulative death count by date reported	Coefficient: 0.0298 (SE: 0.017)	p<0.1
		Social distancing (4 weeks): fours week following the survey	Lagged information: cumulative death count by date reported	Coefficient: -0.0553 (SE: 0.025)	p<0.05
		Social distancing (4 weeks; Low Prior): four weeks following the survey from low prior subsample (reported COVID-19 cases <50,000)	Lagged information: cumulative death count by date reported	Coefficient: -0.0893 (SE: 0.036)	p<0.05

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Social distancing (4 weeks; High prior): four weeks following the survey from high prior subsample ((reported COVID-19 cases >50,000)	Lagged information: cumulative death count by date reported	Coefficient: -0.0243 (SE: 0.035)	p>0.1
Race or Ethnicity					
Seale, H., Heywood, A. E., Leask, J., Sheel, M., Thomas, S., Durrheim, D. N., et al.	Aboriginal/ Torres Strait Islander (ATSI)	Carrying out ≥ 1 hygiene-related behaviours	Not ATSI	OR (95% confidence interval) of 1.0 (0.5 - 2.2)	p≥0.05
		Carrying out ≥ 1 avoidance (distancing) behaviours	Not ATSI	OR (95% confidence interval) of 0.8 (0.3 - 2.1)	p≥0.05
Pedersen, M. J., & Favero, N.	Black	Willingness to social distance	White	OLS regression coefficient -3.74 (1.78) (model 3)	p<.05
Everett, J. A. A., Colombatto, C., Chituc, V., Brady, W. J., & Crockett, M. J.	White	Avoid social contact intention (self)	NA	Negative relationship	p<.01
		Intention to share messaging on social media (self)	NA	Negative relationship	p<.01
		Wash hands intention (others)	NA	Negative relationship	p<.05
		Avoid public gatherings intention (others)	NA	Negative relationship	p<.05
		Avoid social contact intention (others)	NA	Negative relationship	p<.01
		Cancel holiday (others)	NA	Negative relationship	p<.01
Clements, J. M.	Black/African American	Participant reported wearing a mask when leaving home in the last 5 days	White	OR (95% confidence interval) of 2.48 (1.52-4.07)	p<0.05
Scientific Literacy					
Bridgman, A., Merkley, E., Loewen, P. J., Owen, T., Ruths, D., Teichmann, L., et al.	Science Literacy	Social distancing compliance	NA	OLS regression coefficient: 0.01 (SE: 0.02)	p>0.1
Pseudoscientific Beliefs					
Banai, I. P., Banai, B., & Mikloušić, I.	Pseudoscientific beliefs	Compliance with official COVID-19 guidelines	NA	β = -0.02, B = -0.02, SE = 0.02, 95% CI (-0.05, 0.01)	p > 0.05

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
Bridgman, A., Merkley, E., Loewen, P. J., Owen, T., Ruths, D., Teichmann, L., et al.	Pseudoscience beliefs	Social distancing compliance	NA	OLS regression coefficient: -0.01 (SE: 0.03)	p>0.1
Cognitive sophistication					
Pennycook, G., McPhetres, J., Bago, B., & Rand, D.	US cognitive sophistication (scientific knowledge, analytic and reflective thinking, numeracy and "general receptivity to bullshit")	Misperceptions about COVID-19	NA	β (95% CI) = -0.42 (-0.48 - -0.35)	p<.001
	UK cognitive sophistication (scientific knowledge, analytic and reflective thinking, numeracy and "general receptivity to bullshit")	Misperceptions about COVID-19	US	β (95% CI) = -0.39 (-0.47 - -0.32)	p<.001
		Risk perceptions about COVID-19	US	β (95% CI) = -0.11 (-0.19 - -0.03)	p<.01
		Intentions to change behavior in response to COVID-19	US	β (95% CI) = -0.09 (-0.17 - -0.01)	p<.05
	Canada cognitive sophistication (scientific knowledge, analytic and reflective thinking, numeracy and "general receptivity to bullshit")	Misperceptions about COVID-19	US	β (95% CI) = -0.31 (-0.38 - -0.24)	p<.001
Sex or Gender					
Nivette, A., Ribeaud, D., Murray, A. L., Steinhoff, A., Bechtiger, L., Hepp, U., et al.	Males	Hygiene behaviour non-compliance	Females	Adjusted OR (95% CI) of 1.36 (1.16-1.6)	p<.001
		Social distancing behaviour non-compliance	Females	Adjusted OR (95% CI) of 1.73 (1.33-2.24)	p<.001
Seale, H., Heywood, A. E., Leask, J., Sheel, M., Thomas, S., Durrheim, D. N., et al.	Female	Carrying out ≥ 1 hygiene-related behaviours	Male	OR (95% confidence interval) of 1.5 (1.1 - 2.1)	p<0.05

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Carrying out ≥ 1 avoidance (distancing) behaviours	Male	OR (95% confidence interval) of 0.7 (0.5 - 1.0)	p≥0.05
Banai, I. P., Banai, B., & Mikloušić, I.	Female	Compliance with official COVID guidelines	Male	β = 0.26, B = 0.38, SE = 0.03, 95% CI (0.32, 0.43)	p < 0.001
Soest, T. von, Pedersen, W., Bakken, A., & Sletten, M. A.	Boy	High compliance with infection control rules	Girl	Adjusted OR (95% CI) of 1.53 (1.41-1.66) (Model 2)	Not reported
Pedersen, M. J., & Favero, N.	Female	Willingness to social distance	Male	OLS regression coefficient 2.91 (0.78) (model 3)	p<.01
Jørgensen, F. J., Bor, A., & Petersen, M. B.	Women	Protective behaviour compliance	Men	β female = 0.05	p<.0001
Underschultz, J. G., Barber, P., Richard, D., & Hillier, T.	Male	Resistance to public messaging	Female	OR (95% CI) = 1.4 (1.1-1.7)	p=.0071
Allington, D., Duffy, B., Wessely, S., Dhavan, N., & Rubin, J.	Women (study 2)	Engagement in all 5 health protective behaviours	Men	OR (95% CI) = 2.08 (1.65-2.62)	p<.001
	Women (study 3)	Engagement in 4 health protective behaviours	Men	OR (95% CI) = 1.82 (1.49-2.22)	p<.001
		Engagement in 4 health protective behaviours	Men	Log-Odds (95% CI) = 0.11 (0.07-0.16)	p<.001
Everett, J. A. A., Colombatto, C., Chituc, V., Brady, W. J., & Crockett, M. J.	Male	Wash hands intention (self)	NA	Negative relationship	p<.01
		Avoid public gatherings intention (self)	NA	Negative relationship	p<.05
		Avoid social contact intention (self)	NA	Negative relationship	p<.05
Pickup, M., Stecula, D., & van der Linden, C.	Gender	Proportion of engagement in all protective behaviours	Do not indicate reference	β(SE)= 0.047 (0.006)	p<.01
Yousuf, H., Corbin, J., Sweep, G., Hofstra, M., Scherder, E., van Gorp, E., et al.	Male	Handwashing all required areas in the past 48 hours	Female	Adjusted OR (95% CI): 0.60 (0.56-0.64)	p<0.001
		Handwashing duration (e.g., 20 or more seconds) in the past 48 hours	Female	Adjusted OR (95% CI): 0.75 (0.70-0.79)	p<0.001

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Face touching in the past 48 hours	Female	Adjusted OR (95% CI): 0.63 (0.60-0.67)	p<0.001
		Spent time with 1-5 people outside one's household in the past 48 hours	Female	Adjusted OR (95% CI): 1.13 (1.07-1.20)	p<0.001
		Spent time with more than 5 people outside one's household in the past 48 hours	Female	Adjusted OR (95% CI): 1.39 (1.25-1.54)	p<0.001
		Gone to a public place with more than 20 people present in the past 48 hours (excluding necessary grocery shopping)	Female	Adjusted OR (95% CI): 1.00 (0.94-1.07)	p=.94
		Physical distance from others if household member was showing symptoms	Female	Adjusted OR (95% CI): 0.85 (0.80-0.89)	p<0.001
		Physical distance from others if participant was showing symptoms	Female	Adjusted OR (95% CI): 0.83 (0.78-0.88)	p<0.001
Zickfeld, J., Schubert, T., Herting, A. K., Grahe, J., & Faasse, K.	Gender	n.s: Overall Health/Communal Protective Behaviours; Hygienic behaviour; Physical distancing behaviour	NA	β = n.s in any measure	p>0.001
De Neys, W., Raoelison, M., Boissin, E., Voudouri, A., Bago, B., & Białek, M.	Male	Current adherence to social distancing	Female	Spearman correlation: r_s =-0.12	p<0.001
		Current moral condemnation of social distancing violations	Female	Spearman correlation: r_s =-0.08	p<0.01
		Past adherence to social distancing	Female	Spearman correlation: r_s =-0.10	p<0.001
		Past moral condemnation of social distancing violations	Female	Spearman correlation: r_s =-0.05	p<0.05
Social/Cultural Norms					
Nivette, A., Ribeaud, D., Murray, A. L., Steinhoff, A., Bechtiger, L., Hepp, U., et al.	Attitude about broader social non-compliance (i.e. social norms) - perceptions about others' behaviour. (assessed at age 22 - concurrent variable)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 0.95 (0.82-1.09)	p=.478

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.22 (0.99-1.50)	p=.062
Folmer, C. R., Kuiper, M., Olthuis, E., Kooistra, E. B., de Bruijn, A. L., Brownlee, M., et al.	Descriptive social norms	Compliance with COVID-19 measures	NA	b (SE)=0.06(.02)	p < .05
Im, H., & Chen, C.	Collectivism	Social distancing composite score - Time 1 (First day countries passed their 100th case)	NA	Bivariate correlation: 0.541	p<0.001
		Social distancing composite score - Time 2 (30 days after countries passed their 100th case)	NA	Bivariate correlation: 0.236	p<0.05
		Social distancing composite score - Time 3 (31st day countries passed 100 cases to June 7, 2020)	NA	Bivariate correlation: 0.364	p<0.001
	Collectivism (segments)	Social distancing composite score - Time 1 (Feb 15, 2020 to first day countries passed their 100th case)	NA	Piecewise regression (5 segments) : β2 = 0.15; β3 = 0.14; β4 = 0.17; β5 = 0.17; β6 = 0.17	β2: p<0.01; β3: p<0.05; β4: p>0.05; β5: p<0.01; β6: p<0.01
		Social distancing composite score - Time 2 (first day countries passed 100th case to 30 days after)	NA	Piecewise regression (5 segments) : β2 = 0.06; β3 = 0.06; β4 = 0.06; β5 = 0.06; β6 = 0.06	β2:p>0.05; β3: p>0.05 β4: p<0.01; β5: p>0.05; β6: p>0.05
		Social distancing composite score - Time 3 (31st day countries passed 100 cases to June 7, 2020)	NA	Piecewise regression (5 segments) : β2 = 0.08; β3 = 0.08; β4 = 0.08; β5 = 0.07; β6 = 0.08	β2:p>0.05; β3: p>0.05 β4: p>0.05;

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
					β5: p>0.05; β6: p>0.05
	Collectivism x Time (Interaction)	Social distancing composite score - Time 1 (Feb 15, 2020 to first day countries passed their 100th case)	NA	Collectivism x Time (Time period 1) β: 0.06	p<0.05
		Social distancing composite score - Time 2 (first day countrys passed 100th case to 30 days after)	NA	Collectivism x Time (Time period 2) β: -0.17	p<0.001
		Social distancing composite score- Time 3 (31st day countries passed 100 cases to June 7, 2020)	NA	Collectivism x Time (Time period 3) β: 0.10	p<0.001
	Uncertainty avoidance	Social distancing composite score - Time 1 (First day countries passed their 100th case)	NA	Bivariate correlation: 0.168	p>0.05
		Social distancing composite score - Time 2 (30 days after countries passed their 100th case)	NA	Bivariate correlation: 0.245	p<0.05
		Social distancing composite score - Time 3 (31st day countries passed 100 cases to June 7, 2020)	NA	Bivariate correlation: -0.058	p>0.05
	Uncertainty avoidance (segments)	Social distancing composite score - Time 1 (Feb 15, 2020 to first day countries passed their 100th case)	NA	Piecewise regression (5 segments) : β2 = -0.21; β3 = -0.17; β4 = -0.21; β5 = -0.20; β6 = -0.20	β2: p<0.001 β3: p<0.001 β4: p<0.001 β5: p<0.001 β6: p<0.001
		Social distancing composite score - Time 2 (first day countries passed 100th case to 30 days after)	NA	Piecewise regression (5 segments) : β2 = 0.05; β3 = 0.05; β4 = 0.05; β5 = 0.05; β6 = 0.05	β2:p>0.05; β3: p>0.05 β4: p>0.05 β5: p>0.05; β6: p>0.05
		Social distancing composite score - Time 3 (31st day countries passed 100 cases to June 7, 2020)	NA	Piecewise regression (5 segments) : β2 = -0.12; β3 = -	β2:p>0.05; β3: p>0.05 β4: p>0.05;

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
				0.12; β4 = -0.11; β5 = -0.12; β6 = -0.12	β5: p>0.05; β6: p>0.05
	Uncertainty avoidance x Time (Interaction)	Social distancing composite score - Time 1 (Feb 15, 2020 to first day countries passed their 100th case)	NA	Uncertainty avoidance x Time (Time period 1) β: 0.12	p<0.001
		Social distancing composite score - Time 2 (first day countries passed 100th case to 30 days after)	NA	Uncertainty avoidance x Time (Time period 2) β: -0.00	p>0.05
		Social distancing composite score - Time 3 (31st day countries passed 100 cases to June 7, 2020)	NA	Uncertainty avoidance x Time (Time period 3) β: -0.02	p<0.05
	Cultural tightness	Social distancing composite score - Time 1 (Feb 15, 2020 to first day countries passed their 100th case)	NA	Bivariate correlation: 0.384	p<0.05
		Social distancing composite score - Time 2 (first day countries passed 100th case to 30 days after)	NA	Bivariate correlation: -0.014	p>0.05
		Social distancing composite score - Time 3 (31st day countries passed 100 cases to June 7, 2020)	NA	Bivariate correlation: 0.069	p>0.05
	Cultural tightness (segments)	Social distancing composite score - Time 1 (Feb 15, 2020 to first day countries passed their 100th case)	NA	Piecewise regression (5 segments) : β2 = 0.03; β3 = 0.03; β4 = 0.04; β5 = 0.06; β6 = 0.03	β2:p>0.05; β3: p>0.05 β4: p>0.05 β5: p<0.05; β6: p>0.05
		Social distancing composite score - Time 2 (first day countries passed 100th case to 30 days after)	NA	Piecewise regression (5 segments) : β2 = -0.15; β3 = -0.15; β4 = -0.15; β5 = -0.14; β6 = -0.15	β2:p>0.05; β3: p>0.05 β4: p>0.05 β5: p>0.05; β6: p>0.05

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Social distancing composite score - Time 3 (31st day countries passed 100 cases to June 7, 2020)	NA	Piecewise regression (5 segments) : β2 = -0.20; β3 = -0.20; β4 = -0.21; β5 = -0.20; β6 = -0.20	β2:p>0.05; β3: p>0.05 β4: p>0.05 β5: p<0.01; β6: p>0.05
	Cultural tightness x Time (Interaction)	Social distancing composite score - Time 1 (Feb 15, 2020 to first day countries passed their 100th case)	NA	Cultural tightness x Time (Time period 1) β: 0.14	p<0.001
		Social distancing composite score - Time 2 (first day countries passed 100th case to 30 days after)	NA	Cultural tightness x Time (Time period 2) β: -0.17	p<0.001
		Social distancing composite score - Time 3 (31st day countries passed 100 cases to June 7, 2020)	NA	Cultural tightness x Time (Time period 3) β: 0.08	p<0.001
Everett, J. A., Colombatto, C., Chituc, V., Brady, W. J., & Crockett, M.	Deontological moral messaging	Wash hands intention (self)	Virtue moral messaging	t(1007)=2.35	p=.09
		Intention to share messaging on social media (self)	Virtue moral messaging	t(1006)=2.82	p=.02
		Intention to share messaging on social media (self)	Non-moral control	t(1006)=3.16	p=.01
		Wash hands intention (others)	Virtue moral messaging	t(1024)=2.65	p=.04
		Avoid social contact intention (others)	Non-moral control	t(1024)=2.36	p=.09
	Virtue moral messaging	Personal responsibility for mitigating spread	Non-moral control	t(1007)=2.57	p=.05
	Higher impartial beneficence - Utilitarian moral messaging	Wash hands intention (self)	NA	β = .15, t (1007) = 4.10	p<.01
		Avoid public gatherings intention (self)	NA	β = .26, t (1007) = 5.85	p<.01
		Avoid social contact intention (self)	NA	β = .39, t (1007) = 7.17	p<.01
		Intention to share messaging on social media (self)	NA	β = .54, t (1007) = 9.84	p<.01
		Wash hands intention (others)	NA	β = .14, t (1007) = 3.67	p<.01

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Avoid public gatherings intention (others)	NA	β = .21, t (1007) = 5.32	p<.01
		Avoid social contact intention (others)	NA	β = .31, t (1007) =7.06	p<.01
		Cancel holiday (others)	NA	β = .13, t (1007) = 2.71	p<.01
		Morality perceptions of messenger	NA	β = .24, t (1007) = 7.40	p<.01
		Trustworthiness perceptions of messenger	NA	β = .26, t (1007) = 7.28	p<.01
		Others' control in whether they stay home and isolate	NA	β = .18, t (1007) = 4.58	p<.01
		Personal responsibility for mitigating spread	NA	β =.35, t (1007) = 8.53	p<.01
		Others' responsibility for spread when they don't stay home and isolate	NA	β = .33, t (1007) = 7.02	p<.01
Social Networks					
Family					
Nivette, A., Ribeaud, D., Murray, A. L., Steinhoff, A., Bechtiger, L., Hepp, U., et al.	Low parental involvement (assessed five years prior - age 17)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.18 (1.03-1.34)	p=.014
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.19 (0.95-1.49)	p=.129
	Low parental monitoring (assessed five years prior - age 17)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.09 (0.92-1.29)	p=.318
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.47 (1.13-1.89)	p=.003
School					
Nivette, A., Ribeaud, D., Murray, A. L., Steinhoff, A., Bechtiger, L., Hepp, U., et al.	Low teacher-student bond (assessed five years prior - age 17)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 0.98 (0.85-1.14)	p=.841
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.23 (0.95-1.60)	p=.121

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
	Low school commitment (assessed five years prior - age 17)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.08 (0.93-1.26)	p=.297
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.19 (0.93-1.52)	p=.161
Quality of Social Networks					
Nivette, A., Ribeaud, D., Murray, A. L., Steinhoff, A., Bechtiger, L., Hepp, U., et al.	Low social support (assessed two years prior - age 20)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.12 (1.00-1.27)	p=.055
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.10 (0.90-1.34)	p=.364
	Social exclusion (assessed two years prior - age 20)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.10 (0.96-1.25)	p=.167
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.09 (0.87-1.36)	p=.470
	Active social lifestyle (assessed two years prior - age 20)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 0.90 (0.74-1.08)	p=.256
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.34 (1.00-1.80)	p=.047
Socio-economic status					
Nivette, A., Ribeaud, D., Murray, A. L., Steinhoff, A., Bechtiger, L., Hepp, U., et al.	Q4 SES quartile (Q1 [low], Q2, Q3, and Q4 [high]) (assessed at age 15, seven years prior)	Hygiene behaviour non-compliance	Q1 quartile (low)	Adjusted OR (95% CI) of 1.63 (1.23-2.18)	p<.001
		Social distancing behaviour non-compliance	Q1 quartile (low)	Adjusted OR (95% CI) of 1.15 (0.72-1.84)	p=.570
Soest, T. von, Pedersen, W., Bakken, A., & Sletten, M. A.	High SES	High compliance with infection control rules	Low SES	Adjusted OR (95% CI) of 1.21 (1.08-1.36) (Model 2)	Not reported
Jørgensen, F., Bor, A., & Petersen, M. B.	Higher income (do not define)	Protective behaviour compliance	NA	β income = 0.04	p<.0001
Everett, J. A., Colombatto, C., Chituc, V., Brady, W. J., & Crockett, M.	Income	Any self or other preventative behaviour	NA	No significant relationship	n.s.

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
Pickup, M., Stecula, D., & van der Linden, C.	Income 100K+	Proportion of engagement in all protective behaviours	Income 0-50K	β(SE)= 0.037 (0.007)	p<.01
Im, H., & Chen, C.	Human development (society's advancements and developments in health, education, and economy)	Social distancing composite score - Time 1 (first day countries passed their 100th case)	NA	Bivariate correlation: -0.323	p<0.001
		Social distancing composite score - Time 2 (30 days after countries passed their 100th case)	NA	Bivariate correlation: 0.048	p>0.05
		Social distancing composite score - Time 3 (31st day countries passed 100 cases to June 7, 2020)	NA	Bivariate correlation: -0.207	p<0.05
Religiosity					
Kantor, B. N., & Kantor, J.	Religiosity	NPI adherence	NA	OR (95% CI) = 1.85 (1.42-2.39) (univariate logistic analysis)	p<.0001
Brodeur, A., Grigoryeva, I., & Kattan, L.	Religious (Pre-lockdown)	n.s. for all variables: Non-essential visits or travel distance	NA	n.s	p=>0.1
	Religious x After lockdown orders	n.s. for all variables: Non-essential visits or travel distance	NA	n.s	p=>0.1
Trust					
Trust in Gov. or Law					
Nivette, A., Ribeaud, D., Murray, A. L., Steinhoff, A., Bechtiger, L., Hepp, U., et al.	Legal cynicism (assessed two years prior - age 20)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.20 (1.05-1.38)	p=.009
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.46 (1.18-1.80)	p=.001
	Low police legitimacy (assessed two years prior - age 20)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.05 (0.93-1.18)	p=.009
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.40 (1.17-1.68)	p<.001

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
	Low trust in government (assessed at age 22 - concurrent variable)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.03 (0.89-1.18)	p=.717
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.90 (1.57-2.32)	p<.001
Seale, H., Heywood, A. E., Leask, J., Sheel, M., Thomas, S., Durrheim, D. N., et al.	High trust in government authorities	Carrying out ≥ 1 hygiene-related behaviours	Low trust in government authorities	Adjusted OR (95% confidence interval) of 2.7 (1.4 - 5.1)	p<0.05
		Carrying out ≥ 1 avoidance (distancing) behaviours	Low trust in government authorities	Adjusted OR (95% confidence interval) of 6.0 (2.6 - 11.0)	p<0.05
Banai, I. P., Banai, B., & Mikloušić, I.	Trust in Croatia's government officials	Compliance with official COVID guidelines	NA	β= 0.33, B = 0.23, SE = 0.02, 95% CI (0.19, 0.26)	p < 0.001
Soest, T. von, Pedersen, W., Bakken, A., & Sletten, M. A.	Trust in the Prime Minister and the government	High compliance with infection control rules	Low trust in the Prime Minister and the government	Adjusted OR (95% CI) of 1.22 (1.08-1.37) (model 3)	Not reported
	Trust in the health authorities	High compliance with infection control rules	Low trust in the health authorities	Adjusted OR (95% CI) of 1.11 (0.94-1.32) (model 3)	Not reported
Jørgensen, F., Bor, A., & Petersen, M. B.	Institutional trust	Protective behaviour compliance	NA	β = institutional trust = 0.02	p=.005
Goldberg, M.H., Gustafson, A., Maibach, E.W., Ballew, M. T., Bergquist, P., Kotcher, J. E., et al.	High trust in infectious disease experts	Increase in mask wearing	Low trust in infectious disease experts	(b = .07, SE = .03), 95% CI[.01, .14]	p = .023
Al-Hasan, A., Yim, D., & Khuntia, J.	Reopen agreement (The perception that the government does not have the right to decide when to reopen businesses)	Other-adherence (Whether others will adhere to social distancing/sheltering recommendations, as perceived by the individual)	NA	b(SE)=0.174 (0.050)	p=.001
Zickfeld J, Schubert T, Herting AK, Grahe J, & Faasse K.	Confidence in authorities	n.s: Overall Health/Communal Protective Behaviours; Hygienic behaviour; Physical distancing behaviour	NA	β = n.s in any measure	p>0.001
Brodeur, A., Grigoryeva, I., & Kattan, L.	Trust in Congress (Pre-lockdown orders)	Non-essential visits within 10 days	NA	Coeffcient (DID): -0.054 (SE 0.046)	p=>0.1

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
		Travel distance within 10 days	NA	Coeffcient (DID): 0.061 (SE 0.021)	p<0.01
	Trust in Congress x After lockdown orders	n.s. for all variables: Non-essential visits or travel distance	NA	n.s	p=>0.1
	Trust in Federal Government (Pre-lockdown orders)	n.s. for all variables: Non-essential visits or travel distance	NA	n.s	p=>0.1
	Trust in Federal Government x After lockdown orders	n.s. for all variables: Non-essential visits or travel distance	NA	n.s	p=>0.1
Folmer, C. R., Kuiper, M., Olthuis, E., Kooistra, E. B., de Bruijn, A. L., Brownlee, M., et al.	Normative obligation to obey the law	Compliance with COVID-19 measures	NA	b (SE)=0.19 (.04)	p < .001
	Personal rule orientation	Compliance with COVID-19 measures	NA	b (SE)=.08 (.02)	p < .01
Soest, T. von, Pedersen, W., Bakken, A., & Sletten, M. A.	Rules are too strict	High compliance with infection control rules	Rules are exactly as strict as they need to be	Adjusted OR (95% CI) of 0.43 (0.37-0.49) (model 3)	Not reported
	Rules should be even stricter	High compliance with infection control rules	Rules are exactly as strict as they need to be	Adjusted OR (95% CI) of 1.67 (1.47-1.91) (model 3)	Not reported
Pennycook, G., McPhetres, J., Bence B., & Rand, D.G.	Perceived quality national leadership response (Canada)	Intentions to change behavior in response to COVID-19	NA	r = .110	p<.01
Folmer, C. R., Kuiper, M., Olthuis, E., Kooistra, E. B., de Bruijn, A. L., Brownlee, M., et al.	Authority response (asked to which extent participants believed the authorities to have	Compliance with COVID-19 measures	NA	b (SE)=-0.5(.02)	p < .01

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
	been i) “consistent”, and ii) “adequate”)				
Al-Hasan, A., Yim, D., & Khuntia, J.	(The perception that the government’s response to COVID-19 situation is effective	self-adherence (Individual’s intention to adhere to social distancing/sheltering recommendations)	NA	b (SE)=1.108 (0.097)	p<.001
	Response	Other-adherence	NA	b (SE)=0.636 (0.076)	p<.001
Trust in Others					
Nivette, A., Ribeaud, D., Murray, A. L., Steinhoff, A., Bechtiger, L., Hepp, U., et al.	low generalized trust (assessed two years prior - age 20)	Hygiene behaviour non-compliance	NA	Adjusted OR (95% CI) of 0.90 (0.80-1.01)	p=.074
		Social distancing behaviour non-compliance	NA	Adjusted OR (95% CI) of 1.37 (1.12-1.68)	p=.002
Soest, T. von, Pedersen, W., Bakken, A., & Sletten, M. A.	Trust that people will abide by the rules that have been introduced	High compliance with infection control rules	Low trust that people will abide by the rules that have been introduced	Adjusted OR (95% CI) of 1.58 (1.45-1.72) (model 3)	Not reported
Jørgensen FJ, Bor A, Petersen MB..	Interpersonal trust (Do you think that most people by and large are to be trusted, or that you cannot be too careful when it comes to other people?)	Protective behaviour compliance	NA	β interpersonal trust = -0.04	p<.0001
		Protective behaviour compliance	NA	β interpersonal trust x high worry = -0.05	p<.0001
Im, H., & Chen, C.	Societal trust	Social distancing composite score - Time 1	NA	Bivariate correlation: -0.605	p<0.001
		Social distancing composite score - Time 2	NA	Bivariate correlation: -0.445	p<0.001
		Social distancing composite score – Time 3	NA	Bivariate correlation: -0.353	p<0.001
	Societal trust (segments)	Social distancing composite score - Time 1	NA	Piecewise regression (5 segments) : β2 = -0.05; β3 = -	β2:p>0.05; β3: p>0.05 β4: p>0.05

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
				0.05; β4 = -0.06; β5 = -0.05; β6 = -0.07	β5: p>0.05; β6: p>0.05
		Social distancing composite score - Time 2	NA	Piecewise regression (5 segments) : β2 = -0.38; β3 = -0.38; β4 = -0.38; β5 = -0.38; β6 = -0.38	β2: p<0.001 β3: p<0.001 β4: p<0.001 β5: p<0.001 β6: p<0.001
		Social distancing composite score - Time 3	NA	Piecewise regression (5 segments) : β2 = -0.38; β3 = -0.38; β4 = -0.38; β5 = -0.39; β6 = -0.38	β2: p<0.01 β3: p<0.01 β4: p<0.01 β5: p<0.01 β6: p<0.01
	Societal trust x Time (Interaction)	Social distancing composite score	NA	Societal trust x Time (Time period 1) β: -0.12	p<0.001
		Social distancing composite score	NA	Societal trust x Time (Time period 2) β: 0.06	p<0.001
		Social distancing composite score	NA	Societal trust x Time (Time period 3) β: -0.03	p<0.05
Brodeur, A., Grigoryeva, I., & Kattan, L.	Trust in people (Pre-lockdown order put in place by government) (As measured by respondents' indication of whether *most people can be trusted or that you can't be too careful in dealing with people,* on the American GSS)	n.s. for all variables: Non-essential visits or travel distance	NA	n.s	p=>0.1
	Trust in people x After lockdown orders	Non-essential visits within 10 days	NA	Coeffcient (DID): -0.160 (SE 0.069)	p<0.05
Trust in Press (media)					
Pennycook, G., McPhetres, J., Bence B., & Rand, D.G.	Trust in news source: National Post (Canada)	Intentions to change behavior in response to COVID-19	NA	r = .080	p<.05

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
	Trust in news source: Toronto Star (Canada)	Intentions to change behavior in response to COVID-19	NA	r = .108	p<.01
	Trust in news source: CBC (Canada)	Intentions to change behavior in response to COVID-19	NA	r = .196	p<.01
	Trust in news source: Globe and Mail (Canada)	Intentions to change behavior in response to COVID-19	NA	r = .149	p<.01
	Trust in news source: CTV News (Canada)	Intentions to change behavior in response to COVID-19	NA	r = .135	p<.01
	Trust in news source: Global News (Canada)	Intentions to change behavior in response to COVID-19	NA	r = .128	p<.01
Brodeur, A., Grigoryeva, I., & Kattan, L.	Trust in Press (Pre-lockdown orders put in place by government)	n.s. for all variables: Non-essential visits or travel distance	NA	n.s	p=>0.1
	Trust in Press x After lockdown orders	Non-essential visits within 10 days	NA	Coeffcient (DID): -0.116 (SE 0.050)	p<0.01
		Travel distance within 10 days)	NA	Coeffcient (DID): -0.063 (SE 0.039)	p=>0.1
Trust in Science					
Seale, H., Heywood, A. E., Leask, J., Sheel, M., Thomas, S., Durrheim, D. N., et al.	High belief in the effectiveness of social mitigation strategies	Carrying out ≥ 1 hygiene-related behaviours	Low belief in the effectiveness of social mitigation strategies	Adjusted OR (95% confidence interval) of 3.2 (1.4 - 7.2)	p<0.05
		Carrying out ≥ 1 avoidance (distancing) behaviours	Low belief in the effectiveness of social mitigation strategies	Adjusted OR (95% confidence interval) of 4.0 (1.3 - 12.7)	p<0.05
Pennycook, G., McPhetres, J., Bence B., & Rand, D.G.	Trust in scientists (Canada)	Intentions to change behavior in response to COVID-19	NA	r = .136	p<.01
	Trust in medical experts (Canada)	Intentions to change behavior in response to COVID-19	NA	r = .151	p<.01
	Trust in the CDC (Canada)	Intentions to change behavior in response to COVID-19	NA	r = .115	p<.01
	Trust in medical doctors (Canada)	Intentions to change behavior in response to COVID-	NA	r = .119	p<.01

Reference	Factor	Outcome	Comparison	Result	Statistical Significance
Bridgman, A., Merkley, E., Loewen, P. J., Owen, T., Ruths, D., Teichmann, L., et al.	Anti-intellectualism	Social distancing compliance	NA	OLS regression coefficient: -0.09 (SE: 0.03)	p<0.01
Brodeur, A., Grigoryeva, I., & Kattan, L.	Trust in Medicine (Pre-lockdown orders)	n.s. for all variables: Non-essential visits or travel distance	NA	n.s	p=>0.1
	Trust in Medicine x After lockdown orders	n.s. for all variables: Non-essential visits or travel distance	NA	n.s	p=>0.1
	Trust in Science (Pre-lockdown orders)	Non-essential visits within 10 days	NA	Coeffcient (DID): -0.053 (SE 0.046)	p=>0.1
		Travel distance within 10 days	NA	Coeffcient (DID): -0.046 (SE 0.027)	p<0.1
	Trust in Science x After lockdown orders	n.s. for all variables: Non-essential visits or travel distance	NA	n.s	p=>0.1