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Trust in government regarding COVID-19 and its associations with preventive health behaviour and prosocial behaviour during the pandemic: A cross-sectional and longitudinal study

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Abstract

Background: The effective implementation of government policies and measures for controlling the COVID-19 pandemic requires compliance from the public. This study aimed to examine cross-sectional and longitudinal associations of trust in government regarding COVID-19 control with the adoption of recommended health behaviours and prosocial behaviours, and potential determinants of trust in government during the pandemic. Methods: This study analysed data from the PsyCorona Survey, an international project on COVID-19 that included 23,733 participants from 23 countries (representative in age and gender distributions by country) at baseline survey and 7785 participants who also completed follow-up surveys. Specification curve analysis was used to examine concurrent associations between trust in government and self-reported behaviours. We further used structural equation model to explore potential determinants of trust in government. Multilevel linear regressions were used to examine associations between baseline trust and longitudinal behavioural changes. Results: Higher trust in government regarding COVID-19 control was significantly associated with higher adoption of health behaviours (handwashing, avoiding crowded space, self-quarantine) and prosocial behaviours in specification curve analyses (median standardised $\beta = 0.173$ and 0.229 , $p < 0.001$). Government perceived as well organised, disseminating clear messages and knowledge on COVID-19, and perceived fairness were positively associated with trust in government (standardised $\beta = 0.358$, 0.230 , 0.056 , and 0.249 , $p < 0.01$). Higher trust at baseline survey was significantly associated with lower rate of decline in health behaviours over time (p for interaction = 0.001). Conclusions: These results highlighted the importance of trust in government in the control of COVID-19. © 2021 Cambridge University Press. All rights reserved.

References

- Alsan, M., Wanamaker, M.
Tuskegee and the Health of Black Men
(2018) *Quarterly Journal of Economics*, 133 (1), pp. 407-455.
doi: <https://doi.org/10.1093/qje/qjx029>
- Anderson, R.M., Heesterbeek, H., Klinkenberg, D., Hollingsworth, T.D.
How will country-based mitigation measures influence the course of the COVID-19 epidemic?
(2020) *Lancet*, 395, pp. 931-934.
doi: [https://doi.org/10.1016/S0140-6736\(20\)30567-5](https://doi.org/10.1016/S0140-6736(20)30567-5)
- Bargain, O., Aminjonov, U.
Trust and compliance to public health policies in times of COVID-19
(2020) *Journal of Public Economics*, 192, p. 104316.
doi: <https://doi.org/10.1016/j.jpubeco.2020.104316>
- Bingenheimer, J.B., Raudenbush, S.W.
Statistical and substantive inferences in public health: Issues in the application of multilevel models

(2004) *Annual Review of Public Health*, 25, pp. 53-77.

doi: <https://doi.org/10.1146/annurev.publhealth.25.050503.153925>

- Blair, R.A., Morse, B.S., Tsai, L.L.
Public health and public trust: Survey evidence from the Ebola Virus Disease epidemic in Liberia
(2017) *Social Science & Medicine*, 172, pp. 89-97.
doi: <https://doi.org/10.1016/j.socscimed.2016.11.016>

- Bouckaert, G., Van De Walle, S.
Comparing measures of citizen trust and user satisfaction as indicators of 'good governance': Difficulties in linking trust and satisfaction indicators
(2003) *International Review of Administrative Sciences*, 69 (3), pp. 329-343.
doi: <https://doi.org/10.1177/00208523030693003>

- Chanley, V.A., Rudolph, T.J., Rahn, W.M.
The origins and consequences of public trust in government - A time series analysis
(2000) *Public Opinion Quarterly*, 64 (3), pp. 239-256.
doi: <https://doi.org/10.1086/317987>

- Christensen, T., L greid, P.
Trust in Government: The Relative Importance of Service Satisfaction, Political Factors, and Demography
(2005) *Public Performance & Management Review*, 28 (4), pp. 487-511.
Retrieved from <http://www.jstor.org/stable/3381308>

- Devine, D., Gaskell, J., Jennings, W., Stoker, G.
Trust and the Coronavirus Pandemic: What are the Consequences of and for Trust? An Early Review of the Literature
(2020) *Political Studies Review*, pp. 1-12.
doi: <https://doi.org/10.1177/1478929920948684>

- Freeman, D., Waite, F., Rosebrock, L., Petit, A., Causier, C., East, A., Lambe, S.
Coronavirus conspiracy beliefs, mistrust, and compliance with government guidelines in England
(2020) *Psychological Medicine*, pp. 1-13.
doi: <https://doi.org/10.1017/S0033291720001890>

- Fukuyama, F.
(1995) *Trust: The Social Virtues and the Creation of Prosperity*,
New York, NY: Free Press.

- Garry, J., Ford, R., Johns, R.
Coronavirus conspiracy beliefs, mistrust, and compliance: Taking measurement seriously
(2020) *Psychological Medicine*, pp. 1-11.
doi: <https://doi.org/10.1017/S0033291720005164>

- Goldstein, D.A.N., Wiedemann, J.
Who Do You Trust? The Consequences of Political and Social Trust for Public Responsiveness to COVID-19 Orders
(2020) *SSRN Electronic Journal*,
doi: <http://dx.doi.org/10.2139/ssrn.3580547>

- Goold, S.D.
Trust, distrust and trustworthiness - Lessons from the field
(2002) *Journal of General Internal Medicine*, 17 (1), pp. 79-81.
doi: <https://doi.org/10.1046/j.1525-1497.2002.11132.x>
- Gyorffy, D.
Governance in a low-trust environment: The difficulties of fiscal adjustment in Hungary
(2006) *Europe-Asia Studies*, 58 (2), pp. 239-259.
doi: <https://doi.org/10.1080/09668130500481410>
- Hetherington, M.J.
The political relevance of political trust
(1998) *American Political Science Review*, 92 (4), pp. 791-808.
doi: <https://doi.org/10.2307/2586304>
- Hetherington, M.J., Husser, J.A.
How Trust Matters: The Changing Political Relevance of Political Trust
(2012) *American Journal of Political Science*, 56 (2), pp. 312-325.
doi: <https://doi.org/10.1111/j.1540-5907.2011.00548.x>
- Lau, L.S., Samari, G., Moresky, R.T., Casey, S.E., Kachur, S.P., Roberts, L.F., Zard, M.
COVID-19 in humanitarian settings and lessons learned from past epidemics
(2020) *Nature Medicine*, 26 (5), pp. 647-648.
doi: <https://doi.org/10.1038/s41591-020-0851-2>
- Lim, V.W., Lim, R.L., Tan, Y.R., Soh, A.S., Tan, M.X., Othman, N.B., Chen, M.I.
Government trust, perceptions of COVID-19 and behaviour change: Cohort surveys, Singapore
(2021) *Bulletin of the World Health Organization*, 99 (2), pp. 92-101.
doi: <https://doi.org/10.2471/BLT.20.269142>
- Lloyd-Sherlock, P., Ebrahim, S., Geffen, L., McKee, M.
Bearing the brunt of covid-19: Older people in low and middle income countries
(2020) *BMJ*, 368, p. m1052.
doi: <https://doi.org/10.1136/bmj.m1052>
- Lorah, J.
Effect size measures for multilevel models: Definition, interpretation, and TIMSS example
(2018) *Large-scale Assessments in Education*, 6, p. 8.
doi: <https://doi.org/10.1186/s40536-018-0061-2>
- Meredith, L.S., Eisenman, D.P., Rhodes, H., Ryan, G., Long, A.
Trust influences response to public health messages during a bioterrorist event
(2007) *Journal of Health Communication*, 12 (3), pp. 217-232.
doi: <https://doi.org/10.1080/10810730701265978>
- Miller, A.H., Borrelli, S.A.
Confidence in Government during the 1980s
(1991) *American Politics Quarterly*, 19 (2), pp. 147-173.
doi: <https://doi.org/10.1177/1532673x9101900201>

- Mohseni, M., Lindstrom, M.
Social capital, trust in the health-care system and self-rated health: The role of access to health care in a population-based study
(2007) *Social Science & Medicine*, 64 (7), pp. 1373-1383.
doi: <https://doi.org/10.1016/j.socscimed.2006.11.023>
- Murphy, K.
The role of trust in nurturing compliance: A study of accused tax avoiders
(2004) *Law and Human Behavior*, 28 (2), pp. 187-209.
doi: <https://doi.org/10.1023/B:LAHU.0000022322.94776.ca>
- Norris, P.
Social capital and the news media
(2002) *Harvard International Journal of Press-Politics*, 7 (1), pp. 3-8.
doi: <https://doi.org/10.1177/108118002129172601>
- (2017) *Trust and Public Policy: How Better Governance Can Help Rebuild Public Trust*, OECD, OECD Publishing.
- Olsen, A.L., Hjorth, F.
(2020) *Willingness to Distance in the COVID-19*,
- O'Malley, A.S., Sheppard, V.B., Schwartz, M., Mandelblatt, J.
The role of trust in use of preventive services among low-income African-American women
(2004) *Preventive Medicine*, 38 (6), pp. 777-785.
doi: <https://doi.org/10.1016/j.ypmed.2004.01.018>
- O'Malley, P., Rainford, J., Thompson, A.
Transparency during public health emergencies: From rhetoric to reality
(2009) *Bulletin of the World Health Organization*, 87 (8), pp. 614-618.
doi: <https://doi.org/10.2471/Blt.08.056689>
- Orben, A., Przybylski, A.K.
The association between adolescent well-being and digital technology use
(2019) *Nature Human Behaviour*, 3 (2), pp. 173-182.
doi: <https://doi.org/10.1038/s41562-018-0506-1>
- Rodriguez, H., Donner, W.R., Trainor, J.E.
Handbook of Disaster Research
(2018), New York, NY: Springer International Publishing.
- Rubin, G.J., Amlot, R., Page, L., Wessely, S.
Public perceptions, anxiety, and behaviour change in relation to the swine flu outbreak: Cross sectional telephone survey
(2009) *BMJ*, 339, p. b2651.
doi: <https://doi.org/10.1136/bmj.b2651>
- Rudolph, T.J., Evans, J.
Political trust, ideology, and public support for government spending
(2005) *American Journal of Political Science*, 49 (3), pp. 660-671.
doi: <https://doi.org/10.1111/j.1540-5907.2005.00148.x>

- Salali, G., Uysal, M.
COVID-19 vaccine hesitancy is associated with beliefs on the origin of the novel coronavirus in the UK and Turkey
(2020) *Psychological Medicine*, pp. 1-3.
doi: <https://doi.org/10.1017/S0033291720004067>
- Salmon, D.A., Dudley, M.Z., Glanz, J.M., Omer, S.B.
Vaccine Hesitancy Causes, Consequences, and a Call to Action
(2015) *American Journal of Preventive Medicine*, 49 (6), pp. S391-S398.
doi: <https://doi.org/10.1016/j.amepre.2015.06.009>
- Schmelz, K.
Enforcement may crowd out voluntary support for COVID-19 policies, especially where trust in government is weak and in a liberal society
(2021) *Proceedings of the National Academy of Sciences of the United States of America*, 118 (1).
doi: <https://doi.org/10.1073/pnas.2016385118>
- Scholz, J.T., Lubell, M.
Trust and taxpaying: Testing the heuristic approach to collective action
(1998) *American Journal of Political Science*, 42 (2), pp. 398-417.
doi: <https://doi.org/10.2307/2991764>
- Simonsohn, U., Simmons, J.P., Nelson, L.D.
Specification Curve: Descriptive and Inferential Statistics on All Reasonable Specifications
(2015) *SSRN Electronic Journal*,
doi: <https://doi.org/10.2139/ssrn.2694998>
- Taniguchi, H., Marshall, G.A.
Trust, political orientation, and environmental behavior
(2018) *Environmental Politics*, 27 (3), pp. 385-410.
doi: <https://doi.org/10.1080/09644016.2018.1425275>
- Uslaner, E.M.
(2018) *The Oxford Handbook of Social and Political Trust*,
Oxford: Oxford University Press.
- Van Bavel, J.J., Baicker, K., Boggio, P.S., Capraro, V., Cichocka, A., Cikara, M., Willer, R.
Using social and behavioural science to support COVID-19 pandemic response
(2020) *Nature Human Behaviour*, 4, pp. 460-471.
doi: <https://doi.org/10.1038/s41562-020-0884-z>
- Verger, P., Bocquier, A., Vergelys, C., Ward, J., Peretti-Watel, P.
Flu vaccination among patients with diabetes: Motives, perceptions, trust, and risk culture - A qualitative survey
(2018) *BMC Public Health*, 18, p. 569.
doi: <https://doi.org/10.1186/s12889-018-5441-6>
- Vinck, P., Pham, P.N., Bindu, K.K., Bedford, J., Nilles, E.J.
Institutional trust and misinformation in the response to the 2018-19 Ebola outbreak in North Kivu, DR Congo: A population-based survey
(2019) *Lancet Infectious Diseases*, 19 (5), pp. 529-536.
doi: [https://doi.org/10.1016/S1473-3099\(19\)30063-5](https://doi.org/10.1016/S1473-3099(19)30063-5)

- Welch, E.W., Hinnant, C.C., Moon, M.J.
Linking citizen satisfaction with e-government and trust in government
(2005) *Journal of Public Administration Research and Theory*, 15 (3), pp. 371-391.
doi: <https://doi.org/10.1093/jopart/mui02l>
- (2020) *World Bank Country and Lending Groups*,
World Bank
- Health Organization, W.
(2020) *Coronavirus Disease (COVID-19) Advice for the Public*,
- Worthy, B.
More Open but Not More Trusted? The Effect of the Freedom of Information Act 2000 on the United Kingdom Central Government
(2010) *Governance-an International Journal of Policy Administration and Institutions*, 23 (4), pp. 561-582.
doi: <https://doi.org/10.1111/j.1468-0491.2010.01498.x>
- Zmerli, S., Van Der Meer, T.W.
(2017) *Handbook on Political Trust*,
Edward Elgar

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