

TIS Archive

In this page TIS collected a number of contributions that aimed at reflecting the eclectic range of forms that public information had taken in the coronavirus debate, while keeping as its focus of interest the question of how science can be trusted in this debate, and in view of serving what purposes).

In these times of global crisis trust in science is more than ever an urgent, as well as a hard-won matter, especially in the midst of the overwhelming amount of science-related Covid information we are all exposed to on a daily basis.

In one of the articles included below it is pointed out that by looking at the one hundred days since the outburst of the epidemics an interesting mismatch can be detected between the number (indeed vast) of scientific articles on the new coronavirus and the types of publications. A large majority did not follow the traditional routes of journal submission, peer review etc. They rather appeared in the form of comments, interviews, blog and newspaper contributions, and the like. This is not to say that only traditional routes are trustworthy beyond doubt, but it certainly makes the task of separating out what is reliable and what is not, or less so, more diffuse and more dependent on conditions and circumstances which require specific attention and in depth critical appraisal.

Interviews and social media

- Ellen Peters et al. "[Americans still trust doctors and scientists during a public health crisis](#)"
- Emma Bloomfield, "[How to talk to someone you believe is misinformed about the coronavirus](#)"
- Xin Xu, "[The hunt for a coronavirus cure is showing how science can change for the better](#)"
- Marcus Munafo, "[What you need to know about how coronavirus is changing science](#)"
- Thomas Strandberg, "[Coronavirus: US and UK governments losing public trust](#)"
- Isaac Chotiner, "[How to Talk to Coronavirus Skeptics](#)"
- Naomi Oreskes, "[Distrusting Science: How We Got This Pandemic](#)"
- Sharon Brody and Derek J. Anderson, "[Science, Politics, And The Coronavirus: A Tragedy of Denial](#)"
- Matt Bennett, "[Following the science: trust, experts, and COVID-19](#)"
- Maarten Boudry, "[A strange paradox: the better we manage to contain the coronavirus pandemic, the less we will learn from it](#)"
- Vittorio Bufacchi, "[Why we trust experts in times of crisis \[ITA\]](#)"

- Justin Weinberg, [Thinking Rationally About Coronavirus COVID-19 \(guest post by Alex Broadbent\)](#)
- Michel Dubois, [Could Covid-19 Affect Public Trust in Science?](#)
- Edgar Morin, ["Uncertainty is Intrinsic to the Human Condition"](#)
- United Nation, [COVID-19 response demands better use of science and technology](#)
- Valentino Cillo, Domitilla Magni, [In Science and Knowledge We Trust: l'impatto della ricerca scientifica ai tempi del Covid-19 \[ITA\]](#)
- Fabrizio Bianchi, Pietro Greco, ["Le pubblicazioni scientifiche su Covid-19 tra urgenza e necessità"](#)
- Fabrizio Bianchi et al., ["Covid sfida la scienza ad aprirsi alla società e alla complessità" \[ITA\]](#)
- [Coronavirus \(COVID-19\) - Cochrane resources and news](#)
- [Campbell response to Covid-19 pandemic](#)

Academic papers

- Konstantinos Tsamakis et al. ["COVID-19: religion and the rise of trust in science"](#)
- Felipe Demetri, ["Biopolitics and Coronavirus, or don't forget Foucault \(2020\)"](#)
- Tony Augustine, ["Kerala was not built in a day!"](#)
- [EJAIB Vol. 30 \(4\) May 2020](#)
- Dominic Wilkinson, ["ICU triage in an impending crisis: uncertainty, pre-emption and preparation"](#)
- Ezekiel J. Emmanuel, ["Fair Allocation of Scarce Medical Resources in the Time of Covid-19"](#)
- Nir Eyal et al. ["Ethical Comparators in Coronavirus Vaccine Trials"](#)
- Joshua Parker and Ben Davies, ["The Perfect Protocol? Ethics Guidelines in a Pandemic"](#)
- Klement Rainer and Prasanta Bandyopadhyay. ["The epistemology of the SARS-CoV-2 test"](#). [Preprint]
- David Solla, ["Hydroxychloroquine for the treatment of COVID-19: an approach based on the philosophy of science and heuristics"](#)
- Pellegrini G. (2020), ["Coronavirus and public communication: the role of experts and decision-makers in the view of the public"](#) [online pdf]
- Pellegrini G. and Rubin A. (2020), ["Italian Yearbook on Science Technology and Society"](#)

Academic debates and the complexity of the hydroxychloroquine controversy 869 K

Josquin Debaz, Yves Gingras, Jérôme Lamy, Arnaud Saint-Martin, Émilien Schultz et Jeremy K. Ward

Epidemic modeling in complex realities 1.09 M
Vittoria Colizza, Marc Barthélemy, Alain Barrat, Alessandro Vespignani

Statistics

An overwhelming part of the debate about the coronavirus pandemic has been led by statistics. What do these numbers mean? What picture do they help building up? Can they be trusted, and are there reasons for distrusting them? Here below is a selection of primary and secondary sources on the formulation and use of statistics in this ongoing debate.

[WHO Coronavirus Disease \(COVID-19\) Dashboard](#)

[WHO Africa Coronavirus \(COVID-19\)](#)

[European Commission Eurostat Help Frequently asked questions COVID-19](#)

[ISTAT DURING THE COVID-19 EMERGENCY](#)

[Office for National Statistics](#)

Comments

- ["Coronavirus statistics: what can we trust and what should we ignore?"](#)
- ["Coronavirus Pandemic \(COVID-19 , Research and Statistics"](#) by Max Roser, Hannah Ritchie, Esteban Ortiz-Ospina and Joe Hasell, *Our World in Data*
- ["Coronavirus: What the COVID-19 statistics tell us - and what they don't"](#) by Ed Conway, Economics editor Skynews
- ["Global coronavirus death toll could be 60% higher than reported"](#) by John Burn-Murdoch, Valentina Romei, Chris Giles

General Media

- John Dupré, ["Following the science" in the COVID-19 pandemi](#)
- Erman Sozudogru, ["Coronavirus: how values drive decisions in science, not data"](#)
- Jacob Stengenga, ["Fast Science and the Philosophy of Science"](#)
- John Horgan, ["The Coronavirus and Right-Wing Postmodernism"](#)
- Mari Lilleslatten, ["The coronavirus pandemic strengthens state authority"](#)
- Eric Schliesser and Erik Winsberg, ["Climate and coronavirus: the science is not the same"](#)

Covid-19 forum

Here are three questions we believe can contribute to focus the debate on Covid-19 on issues of public relevance. Each question entails a dimension of trust.

Below we provide some frameworks for addressing the questions.

Posing some questions

1. Evaluating and communicating risks in the Covid-19 debate: How do technocracy and populism feed into politics?
2. Taking part in the Covid-19 debate: What must laypeople understand about science to allow them to form sound opinion on science related issues
3. Dealing with emotions in the Covid-19 debate: What language should experts adopt in a time of crisis to maintain or regain trust in science?

Framing some issues

1. Populism and technocracy are often presented as opposite ideas of governance in our democracies. Technocracy is widely characterized as giving a privileged place to science, in view of building and supporting a general vision of 'evidence-based policy'. Populists seek for 'alternative' facts and long for a science made 'in the name of the people'. However, the current crisis has shown that this characterization is far too simplistic. Science demonstrated its limits in answering the vast range of public health queries that suddenly emerged. Public health problems are clearly entangled with a wide array of considerations that strongly demand equally extended forms of expertise (economic, sociological, psychological, political, ethical, etc). In the light of all this, purely technocratic methods of governance prove insufficient to lead political decisions on their own. However, a science made 'in the name of the people' should be able to be critical both of its achievements and of the idea of 'people' in the name of which these achievements are pursued. If we want to rebuild some form of public trust in science, and in the role of scientific experts in our societies, there are a number of dimensions in the **production** and **use** of scientific knowledge that should be explicitly acknowledged and openly discussed. The first among them concerns the evaluation of the risks and uncertainties inherent to science. How should a discussion that is both competent and open take place? How should risks be evaluated and communicated in such a way that they become an asset for, not a hindrance to, policy making and public decision making? How can experts convincingly convey a sense of balance between what is known and what is uncertain?

2. The current crisis has, once again, brought to the fore the importance of scientific knowledge in our lives, both private and public. Debates about public health measures, or the effectiveness of anti-covid-19 treatments, have fast spread from the realm of technical expertise to the general public or better, to different publics with different degrees of expertise, values, interests and political agendas. Producing a shared and publicly understood scientific knowledge that could be of use in formulating policy decisions goes hand in hand with the construction of a public sphere able to address and discuss science-related issues in an informed and rational way. This requires, among other things, that ordinary citizens master **some elements** of science. But what does this 'mastering' involve ? and what should it refer to - the very content of science? the epistemic underpinnings of science as a collective endeavor? the main methods used to justify scientific assertions? the ability to recognize the line of divide between lay citizens and experts? And once such a line is drawn, how can an appropriate and effective relation between citizens and experts (including political experts) be built? Does trust play a part, and what part does it play?
3. Trust in science clearly relies on epistemic conditions (how can we judge that and when a piece of scientific information or result is reliable). Trust also entails an ethical dimension (how honest, responsible and in good faith a scientist is in communicating a result) and a political one (how scientific advice reliably translates into policy recommendations). However, we should not forget or overlook also its emotional or affective dimension. The current crisis aptly demonstrates that the trust we are willing to grant to scientific experts, as well as to political decisions based on their advice, might be heavily affected or altered by people's reactions, sometimes over-reactions, to public advice and messages, by how much they are perceived – rightly or wrongly – as an interference on individual rights and freedom, by their potential to increase anxiety and fears towards the presumed reality of certain risks, or the foreseeable damage of adopting certain codes of conduct. How can experts (scientific, social, political) take carefully into account the emotional dimension of trust? How much is emotion conducive of plain distrust ? What kinds of interventions are likely to succeed in undoing distrust, once we acknowledge that regaining trust is not only a matter of providing the injured party with information about why they should trust?

Reflecting on the questions

PISE/TIS discussion group 2020-21

A group of 14 undergraduates from 'Philosophy, International and Economic Studies' at Ca' Foscari met online during the academic year 2020-2021 to discuss issues and ideas at the interface between trust and covid-19 science.