



United Nations Educational, Scientific and Cultural Organization (UNESCO)

Topic 3: The crisis of public and social distrust in the scientific community

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1. Definition of key terms

- **Scientific Mistrust:** Scepticism or doubt about the reliability, integrity, or impartiality of scientific research or scientists.
- **Public Perception:** How society views and understands science, scientific institutions, and scientists.
- **Misinformation/Disinformation:** False or misleading information that can erode trust and spread misunderstandings about science.
- **Polarization:** Division in public opinion on scientific issues, often along political or ideological lines.
- **Anti-Science Sentiment:** Opposition to or rejection of scientific consensus, methods, or findings.
- **Credibility Gap:** A perceived disconnect between scientific claims and public beliefs or expectations.
- **Transparency:** The openness and accountability of scientific processes, methodologies, and findings.
- **Ethical Breaches:** Instances of fraud, bias, or misconduct in scientific research that contribute to public mistrust.
- **Consensus Gap:** The difference between the scientific community’s consensus and the public’s beliefs.
- **Science Communication:** Efforts to explain, interpret, and disseminate scientific knowledge to the public in an accessible and engaging manner.

2. Introduction

The crisis of public and social distrust in the scientific community is a complex and multifaceted issue that poses significant challenges to modern society. Despite the transformative role of science in advancing human knowledge and addressing critical global problems, scepticism and mistrust toward scientific institutions and experts have grown in various parts of the world. This crisis is driven by a range of factors, including the rapid spread of misinformation, the perceived alignment of science with political or corporate interests, and the general complexity of modern scientific research, which can make it difficult for the public to fully understand its implications.

High-profile controversies, such as debates over vaccines, climate change, and genetically modified organisms, highlight the widening divide between scientific consensus and public opinion. This lack of trust undermines the credibility of science and hinders societies from making informed decisions on pressing issues, from public health crises to environmental sustainability. Addressing this crisis is crucial to ensuring that science can continue to serve its vital role in improving lives and solving global challenges.

3. Background information

Distrust in the scientific community occurs when people lose confidence in scientists or their work, perceiving science as unreliable, dishonest, or influenced by external factors. Science has historically played a crucial role in advancing society by creating new technologies, developing cures for diseases, and addressing large-scale problems such as global warming. However, in recent years, scepticism and mistrust toward science have become more widespread.

For instance, during the COVID-19 pandemic, some people refused to believe in the importance of vaccines or wearing masks, even when scientists provided clear evidence of their efficacy in promoting public safety. Similarly, despite overwhelming evidence that climate change is real and largely caused by human activity, many individuals remain sceptical about its seriousness.

Several factors contribute to this growing mistrust. One major driver is **social media**, which rapidly disseminates false information, making it easy for misinformation to reach and influence large audiences. Another factor is the complexity of scientific concepts. When scientific findings are communicated in overly technical or inaccessible language, it can confuse the public and lead to doubt.

Additionally, some people believe that science is influenced by political agendas or corporate interests. For example, oil companies have historically funded campaigns to downplay the reality of climate change to protect their profits. **Educational disparities** also play a significant role. In areas with poor access to education, people may lack a fundamental understanding of scientific principles or be exposed to inaccurate information.

The consequences of scientific distrust are far-reaching. When people refuse to accept climate change, they are less likely to support solutions like transitioning to clean energy. Similarly, vaccine hesitancy during the COVID-19 pandemic allowed diseases to spread more easily, putting entire communities at risk. Scientific mistrust slows societal progress and makes addressing global challenges more difficult.

To combat this issue, it is essential to improve public understanding of science, enhance transparency in scientific processes, and build trust through effective communication. Restoring

faith in science is not only critical for addressing today's challenges but also for ensuring a healthier and more sustainable future for all.

4. Major countries involved

The crisis of public and social distrust in the scientific community is a global issue, but some countries have been particularly active in discussions due to sociopolitical factors, misinformation, political interference, and social media proliferation, all contributing to a perception of science as influenced by corporate or government interests.

United States: Distrust in the USA is fuelled by political polarization, especially around topics like climate change, vaccination, and COVID-19. Misinformation and disinformation campaigns are particularly rampant on social media, exacerbating disputes over funding and the perceived influence of corporate interests on scientific research. These factors continue to foster vaccine hesitancy and resistance to climate change policies.

United Kingdom: Distrust in the UK centres around issues such as genetically modified organisms (GMOs) and vaccinations. Additional controversies arise from government responses to COVID-19 and reliance on scientific advisors, leading to delays in public health campaigns and confusion regarding scientific messaging.

Brazil: In Brazil, political interference in environmental science, particularly regarding deforestation and climate policies in the Amazon, fuels distrust in the scientific community. Misinformation surrounding COVID-19 vaccines and treatments during the pandemic further erodes international credibility in environmental management.

Russia: Government-sponsored disinformation campaigns sometimes undermine global scientific consensus, contributing to widespread distrust in Western-produced vaccines like Pfizer or Moderna during COVID-19. This has significantly reduced public trust in science both domestically and internationally.

India: Religious and cultural factors affecting acceptance of scientific principles, such as evolution or vaccination, are significant in India. Misinformation spread via social media platforms exacerbates vaccine hesitancy and delays efforts to address public health and environmental crises.

China: State control over scientific information has led to scepticism of government-released data, particularly noticeable during the early stages of COVID-19. Distrust from international communities regarding transparency in scientific research and ethics has hindered global collaboration in sensitive scientific areas such as virology.

France: Vaccine hesitancy in France is fuelled by historical distrust of pharmaceutical companies and government policies, contributing to resistance against genetically modified organisms and biotechnologies. Slow adoption of public health measures, coupled with misinformation, political interference, and social media proliferation, further entrenches the perception of science being influenced by corporate or government interests.

5. UN involvement

The United Nations acknowledges the widespread distrust in science and actively works to address it. Through agencies like UNESCO, the UN creates educational programs to enhance public understanding of science. For instance, UNESCO's Science Education Program aims to provide accurate scientific information, particularly in regions with limited educational resources. Initiatives like the Decade of Ocean Science for Sustainable Development (2021–2030) demonstrate how studying the ocean can contribute to solving global challenges such as climate change and food security. The UN Environment Program combats misinformation about climate change through reports like the Emissions Gap Report, while the World Health Organization (WHO) collaborates with social media platforms to combat false health information during health emergencies like COVID-19. These efforts not only promote confidence in science but also facilitate international cooperation on pressing issues.

6. Useful links

- <https://worldscienceforum.org/news/building-trust-in-science-requires-open-science-says-lidia-brito-assistant-director-general-of-unesco-110162>
- <https://en.unesco.org/inclusivepolicylab/analytics/trust-science-crisis-expertise>