

Research requires trust. However, there are indications that distrust is undermining its credibility – especially in the wake of the coronavirus pandemic. So, what's happening to science's reputation?

an we still trust each other? Or are many public areas too often shrouded in suspicion? Do we actually live in an age of distrust, as some claim, an age in which suspicion and accusation are all around, in which evil intentions and sinister interests are suspected behind many things? This picture may be exaggerated. But there are some indications of a climate in which institutions that rely on trust, such as science, are in fact struggling. For the German Federal Institute for Risk Assessment (BfR), this is a topic that is worth dealing with and on which it seeks scientific exchange.1

If public institutions cannot be believed, then this impacts science in particular. Distrust of their findings can lead to politicians no longer using the best available knowledge as a basis for decision-making, says Professor Dr Dr Andreas Hensel, President of the BfR. As a result, scientific and technical innovations are dispensed with. "Innovations are rejected in Germany, welcomed elsewhere," criticizes Hensel. Science, like other social institutions, is accused of self-interest, dishonesty and corruptibility. The loss of trust weighs heavily, since the foundation for the work of institutions such as the BfR is impartiality and independence.

SCIENCE PROVES ITSELF IN A CRISIS

On the other hand, the coronavirus pandemic has shown that a large segment of the population did trust publicly funded research. This is confirmed by the Science Barometer, a regular survey by "Wissenschaft im Dialog", an organisation that represents Germany's major research institutions. In 2017, every second respondent stated that they "completely" or "somewhat" trust science and research. In April 2020, when the topic of the "coronavirus" began to dominate public discourse, this figure shot to a proud 73 % and then later levelled off at around 60 %.

"Impartiality and independence are the basis for institutions like the BfR."

PROFESSOR DR DR ANDREAS HENSEL, BER PRESIDENT

As the Science Barometer shows, the audience is particularly receptive of publicly funded research institutions such as state universities. Research within business and industry is met with greater distrust. According to this survey, trust in media and politics is even lower. A reason for distrusting scientists is that they are often said to be dependent on their sponsors – although with a decreasing tendency at the beginning of the coronavirus pandemic, as Ricarda Ziegler reports in "Wissenschaft im Dialog" (see interview on page 30).

IN AN EMERGENCY, WE RALLY AROUND THE FLAG

When it comes to its generally positive relationship to science, Germany is not unique among western industrial nations. "Trust will carry us through the crisis," was the optimistic statement of Norwegian Prime Minister Erna Solberg during the pandemic. And indeed, the country came through comparatively well. Norway is a "high-

FOUR KINDS OF TRUST

according to Professor Michael Siegrist, FTH Zurich

Interpersonal trust – based on direct personal contact between people

Confidence – refers to the perceived reliability of objects and products (car brand, washing machine, energy system)

Social trust – concerns trustworthy people or institutions (e.g., politicians or authorities)

General trust – tendency to trust strangers, according to Siegrist the "lubricating oil of society"

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trust society," says Lisbet Fjæran from the University of Stavanger. In fact, approval of the state's coronavirus management rose briefly to 91 % in Norway during the first half of 2020. The "rally round the flag" effect known from political science certainly contributed to this – in times of crisis, people pull together and submit to authority, at least temporarily.

Fjæran contradicts the thesis of the "post-trust society", in which state institutions are exposed to the permanent suspicion of the population. Her ideal is a citizen who, instead of obeying blindly, "trusts critically". He or she is generally positive about the state, but maintains a critical distance when it comes to how effective and independent its institutions are. For its part, the state must be willing to rely on the public's ability to manage risk and uncertainty. Trust is not a one-way street.

TRUST - OPIUM FOR THE PEOPLE?

For Professor Michael Siegrist from ETH Zurich, trust is neither good nor bad in itself. The psychologist, a member of the Scientific Advisory Board of the BfR, not only sees the good "lubricating oil" function of trust (see box on the previous page) but also its downside: Trust can become "the opium of the people", lulling them into a false sense of security and leading to poor political decisions. "During the coronavirus pandemic, less blind trust and more critical questioning might have led to better decisions," says Siegrist.

For him, the coronavirus showed that self-responsibility should play a greater role in dealing with risks. Or, to reverse the famous quote from Vladimir Ilyich Lenin, the founder of the Soviet Union: control is good, trust is better. —

More information



BfR YouTube channel @bfr_bund "Videos of the BfR Knowledge Dialogue" (in German)

"Germany tends

Surveys do not confirm that Germans are generally hostile towards research, says political scientist Ricarda Ziegler from "Wissenschaft im Dialog".

Ms Ziegler, it is said that science is having a difficult time here in Germany. You have been conducting an annual public opinion survey since 2014 with the "Science Barometer" to determine how much support research enjoys. Can you confirm the assumption that Germany has anti-scientific views?

The results have been quite stable over the years for many issues. More than 50 percent indicate that they have a great or very great interest in scientific topics. The benefits of science and research are also rated positively. From 2017 to 2019, half of the respondents said they trust science and research. This figure rose to 73 percent at the start of the coronavirus pandemic. These figures tend to reject the assumption of Germany being hostile towards science.

How does Germany compare to other countries?

According to Eurobarometer, a regular opinion survey conducted on behalf of the European Commission, Germany is in the midfield or even upper midfield. In spring 2021, 33 percent of the respondents in the EU average were very interested in new scientific discoveries and technical developments. In Germany, the figure was 40 percent. Across the EU, 86 percent see the influence of science and research as rather or very positive; this figure is 88 percent in the Federal Republic. In the EU, a quarter of people say they do not

not to be hostile towards science"



"A large part of the population expects science-based politics."

RICARDA ZIEGLER,
"WISSENSCHAFT IM DIALOG"

benefit from scientific developments; in Germany, only 15 percent say this.

Research and technology are evaluated differently by the population. On the one hand, people fear green genetic engineering while on the other hand enthusiastically welcoming every new mobile phone model. Nuclear energy is first condemned, then championed. How can such contradictions be explained? Or are they not contradictions at all?

These views have only partly to do with a general position towards science and research. They overlap to some extent, reflecting other facets of a personality as well. You may ask yourself: how do certain research results affect my everyday life? How do they align with my values? What experiences have I had so far with new developments through research and technology? It doesn't necessarily have to be a contradiction if I embrace a technical development in one area and see it rather critically in another.

What about the relationship between science and politics? How close should they be?

The Science Barometer also provides information on this. It shows that a large part of the population expects science-based politics. Researchers should be involved in political decision-making processes and, according to half of the respondents in the 2021 Science Barometer, also recommend decisions. However, many researchers would say: that's not our job. I think we should be aware of these expectations for public communication with regard to science, even if we are unable to meet them. It also has to be clear where science can provide answers and where scientific policy advice ends. —

More information



Wissenschaft im Dialog "Science Barometer"