

No publication bias found in climate change research

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Rarely do we encounter a scientific fact that stirs public controversy and distrust in science as much as climate change. However, the theory is built on honest reporting of facts. This emerges from a new study from Lund University in Sweden.

The study in question investigates whether there is a so-called publication bias within climate research, i.e. a statistically skewed distribution of the way various types of findings are presented in research journals. "Our study is a very large review of the publication record within [climate change](#)", says Johan Hollander, who is a researcher at Lund University's Faculty of Science in Sweden. The conclusion is that [climate researchers](#) do not conceal uncomfortable facts which could potentially disprove climate change.

Together with colleagues from Sweden and Canada (Christian Harlos and Tim C. Edgell), Hollander investigated 120 research articles published in the field of climate research between 1997 and 2013. Hollander's study contains a statistical analysis of a total of 1154 experiments reported in the investigated articles. But, as mentioned, he did not find any omission of results that could challenge the theory of climate change.

However, Hollander and his team did find widespread selective reporting, which is likely common across many fields of science: large, statistically significant results were typically reported up front, whereas smaller and nonsignificant results were more often found in the technical

results sections of papers.

"It was gratifying to see that the scientific method is robust. It is important to show that we can trust the results of climate research, even if more work is needed about how those results are reported", says Johan Hollander.

Within the research community, there is a consensus on [global climate change](#), whereas there are still many climate deniers among politicians and in some sections of the general public, according to Johan Hollander. After the so-called Climategate scandal in 2009, the legitimacy of climate change science came into question. Climate researchers were accused of fabricating results to fund a self-serving research enterprise.

"It is a major problem if politicians and other decision-makers don't trust science, or don't understand how scientists communicate their results. This can lead to important decisions not being taken, or being given lower priority", says Johan Hollander.

More information: Christian Harlos et al, No evidence of publication bias in climate change science, *Climatic Change* (2016). [DOI: 10.1007/s10584-016-1880-1](#)

Provided by Lund University

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