Psychology provides insight into why people doubt climate change

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Many people don't believe in global warming because everyday life may have trained them to doubt it, according to a new University of NSW study that brings together climate science and cognitive psychology.

As the physical science underpinning human-induced climate change has grown more and more solid, more people have been growing sceptical of it, according to the paper The Psychology of Global Warming, published in the Bulletin of the American Meteorological Society. "Simply presenting the facts and figures about global warming has failed to convince large portions of the general public, journalists and policy makers about the scale of the problem and the urgency of required action," the paper says.

"From a psychologist's perspective, this is not surprising."

Two Sydney researchers, psychology lecturer Ben Newell and climate scientist Professor Andy Pitman, identified different classes of perfectly normal psychological phenomena that can tend to turn people into so-called climate "deniers". The first concerns "sampling issues" - the idea that people normally try to refer to real-life examples to draw conclusions and may be heavily influenced by recent media coverage.

"For example, if you read or hear opinions from climate change sceptics about 50 per cent of the time then this could lead to a bias in the perception of the balance of evidence in your mind - that is, that the science is only about 50 per cent certain," Dr Newell said.

People are also heavily influenced by "framing issues" - dealing with how information is presented to them. The figure 0.2 means the same as 20 out of 100, but the latter proportion makes the information seem much more concrete.

People construct mental models which they use to judge new information, and these models are usually built only on a few fragments of information, the study said.

It used the analogy of most people's understanding of the link between cancer and smoking, which is not completely understood by most researchers yet widely accepted by the general public. "By contrast, understanding how and why an increase in atmospheric carbon dioxide leads to warming and how and what we do as individuals and communities affects the composition of the atmosphere is much harder," Dr Newell said.

The authors drew on dozens of studies into people's reactions to news about climate change, some of which suggest that certain types of people are more likely to find the evidence for human-induced climate change less convincing than others.