

# 'Belief in science' increases in stressful situations

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A faith in the explanatory and revealing power of science increases in the face of stress or anxiety, a study by Oxford University psychologists suggests.

The researchers argue that a 'belief in science' may help non-religious people deal with adversity by offering comfort and reassurance, as has been reported previously for religious belief.

'We found that being in a more stressful or anxiety-inducing situation increased participants' "belief in science",' says Dr Miguel Farias, who led the study in the Department of [Experimental Psychology](#) at Oxford University. 'This belief in science we looked at says nothing of the [legitimacy](#) of science itself. Rather we were interested in the values individuals hold about science.'

He explains: 'While most people accept science as a reliable source of knowledge about the world, some may hold science as a superior method for gathering knowledge, the only way to explain the world, or as having some unique and fundamental value in itself. This is a view of science that some [atheists](#) endorse.'

As well as stressing that investigating a belief in science carries no judgement on the value of science as a method, the researchers point out that drawing a parallel between the psychological benefits of [religious faith](#) and belief in science doesn't necessarily mean that scientific practice and religion are also similar in their basis.

Instead, the researchers suggest that their findings may highlight a basic human motivation to believe.

'It's not just believing in God that is important for gaining these [psychological benefits](#), it is belief in general,' says Dr Farias. 'It may be that we as humans are just prone to have belief, and even atheists will hold non-supernatural beliefs that are reassuring and comforting.'

The researchers report their findings in the *Journal of Experimental Social Psychology*.

There is evidence from previous studies that suggests religious belief helps individuals cope with stress and anxiety. The Oxford University group wondered if this was specific to [religious belief](#), or was a more general function of holding belief.

The researchers developed a scale measuring a 'belief in science' in which people are asked how much they agree or disagree with a series of 10 statements, including:

- 'Science tells us everything there is to know about what reality consists of.'
- 'All the tasks human beings face are soluble by science.'
- 'The scientific method is the only reliable path to knowledge.'

This scale was used first with a group of 100 rowers, of whom 52 were about to compete in a rowing regatta and the other 48 were about to do a normal training session. Those about to row in competition would be expected to be at a higher stress level.

Those who were competing in the regatta returned scores showing greater belief in science than those in the training group. The difference was statistically significant.

Both groups of rowers reported a low degree of commitment to religion and as expected, those rowers about to compete did say they were experiencing more stress.

In a second experiment, a different set of 60 people were randomly assigned to two groups. One group was asked to write about the feelings aroused by thinking about their own death, while the other was asked to write about dental pain. A number of studies have used an exercise on thinking about your own death to induce a certain amount of 'existential anxiety'.

The participants who had been asked to think about their own death scored higher in the belief in science scale.

The researchers say their findings are consistent with the idea that belief in science increases when secular individuals are placed in threatening situations. They go on to suggest that a belief in science may help non-religious people deal with adverse conditions.

Dr Farias acknowledges however that they have only shown this in one direction – that stress or anxiety increases belief in science. They suggest other experiments should be done to examine whether affirming a belief in [science](#) might then reduce subsequent experience of stress or anxiety.

**More information:** The paper 'Scientific faith: Belief in science increases in the face of stress and anxiety' is published in the *Journal of Experimental Social Psychology* [www.sciencedirect.com/science/ ...  
ii/S0022103113001042](http://www.sciencedirect.com/science/.../S0022103113001042)

Provided by Oxford University

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