

The Demographics of Belief

In a 2009 Harris Poll of 2,303 adult Americans, people are asked to indicate for each category below if you believe in it or not. The results were revealing:

- God 82%
- Miracles 76%
- Heaven 75%
- Jesus is God or the Son of God 73%
- Angels 72%
- Survival of the soul after death 71%
- The resurrection of Jesus Christ 70%
- Hell 61%
- The virgin birth 61%
- The devil 60%
- Darwin's Theory of Evolution 45%
- Ghosts 42%
- Creationism 40%
- UFOs 32%
- Astrology 26%
- Witches 23%
- And Reincarnation 20%

More people believe in angels and the devil than believe in the theory of evolution. That's disturbing. And yet, such results do not surprise me as they match findings in similar surveys conducted over the past several decades, including internationally.

For example, in a 2006 Readers Digest survey of 1,006 adult Britons 43 percent of respondents said that they can read other people's thoughts or have their thoughts read. More than half said that they thought they've had a dream or premonition of an event that then occurred, more than two-thirds said they could feel when someone was looking at them. 26 per cent said they had sensed when a loved-one was ill or in trouble, and 62 per cent said that they could tell who was calling before they picked up the phone. A fifth said they had seen a ghost and nearly a third said they believed that near-death experiences are evidence for an afterlife.

Although the specific percentages of belief in the supernatural and the paranormal across countries and decades vary slightly, the numbers remain fairly consistent. A majority of people hold some form of paranormal or supernatural belief.

Alarmed by such figures, and concerned about the dismal state of science education and its role in fostering belief in the paranormal, the National Science Foundation conducted its own extensive survey of beliefs in both the paranormal and pseudoscience, concluding (quote) "such beliefs may sometimes be fueled by the media's miscommunication of science and the scientific process."

I too would like to lay the blame at the feet of the media, because the fix then seems straightforward—just improve how we communicate science. But that's too easy and it isn't

even supported by the NSF's own data. Although belief in ESP decreased from 65% among high school graduates to 60% among college graduates, and belief in magnetic therapy dropped from 71% among high school grads to 55% among college grads, that still leaves more than half of educated people fully endorsing such claims! And for embracing alternative medicine, a former pseudo science, the percentages actually increased, from 89% for high school grads to 92% for college grads.

Part of the problem may be that 70% of Americans still do not understand the scientific process, defined in the NSF study as grasping probability, the experimental method, and hypothesis testing. So one solution here is teaching how science works in addition to what science knows.

A 2002 article in Skeptic magazine entitled "Science Education is No Guarantee of Skepticism," presented the results of a study that found no correlation between science knowledge (facts about the world) and paranormal beliefs: (quote) "Students that scored well on these [science knowledge] tests were no more or less skeptical of pseudoscientific claims than students that scored very poorly", the authors concluded. "Apparently, the students were not able to apply their scientific knowledge to evaluate these pseudoscientific claims. We suggest that this inability stems in part from the way that science is traditionally presented to students: Students are taught what to think but not how to think." (close quote) The scientific method is a teachable concept, as evidenced in the previously referenced NSF study, which found that 53% of Americans with a high level of science education (nine or more high school and college science and math courses) understand the scientific process, compared to 38% with a middle level of science education, and 17% with a low level of science education. So maybe the key to attenuating superstition and belief in the supernatural is in teaching how science works, not just what science has discovered. The problem, however, is deeper still and related to the fact that the majority of our most deeply held beliefs are immune to attack by direct educational tools, especially for those who are not ready to hear contradictory evidence.

Belief change comes from a combination of personal psychological readiness and a deeper social and cultural shift in the underlying zeitgeist, which is affected in part by education, but is more the product of larger and harder-to-define political, economic, religious, and social changes.