

Poll: Big Bang a big question for most Americans

April 21 2014, by Jennifer Agiesta

Few Americans question that smoking causes cancer. But they have more skepticism than confidence in global warming, the age of the Earth and evolution and have the most trouble believing a Big Bang created the universe 13.8 billion years ago, an Associated Press-GfK poll found.

Rather than quizzing scientific knowledge, the survey asked people to rate their confidence in several statements about science and medicine.

On some, there's broad acceptance. Just 4 percent doubt that smoking causes cancer, 6 percent question whether mental illness is a medical condition that affects the brain and 8 percent are skeptical there's a genetic code inside our cells. More—15 percent—have doubts about the safety and efficacy of childhood vaccines.

About 4 in 10 say they are not too confident or outright disbelieve that the Earth is warming, mostly a result of man-made heat-trapping gases, that the Earth is 4.5 billion years old or that life on Earth evolved through a process of natural selection, though most were at least somewhat confident in each of those concepts. But a narrow majority—51 percent—questions the Big Bang theory.

Those results depress and upset some of America's top scientists, including several Nobel Prize winners, who vouched for the science in the statements tested, calling them settled scientific facts.

"Science ignorance is pervasive in our society, and these attitudes are

reinforced when some of our leaders are openly antagonistic to established facts," said 2013 Nobel Prize in medicine winner Randy Schekman of the University of California, Berkeley.

The poll highlights "the iron triangle of science, religion and politics," said Anthony Leiserowitz, director of the Yale Project on Climate Change Communication.

And scientists know they've got the shakiest leg in the triangle.

To the public, "most often, values and beliefs trump science" when they conflict, said Alan Leshner, chief executive of the world's largest scientific society, the American Association for the Advancement of Science.

Political values were closely tied to views on science in the poll, with Democrats more apt than Republicans to express confidence in evolution, the Big Bang, the age of the Earth and [climate change](#).

Religious values are similarly important.

Confidence in evolution, the Big Bang, the age of the Earth and climate change decline sharply as faith in a supreme being rises, according to the poll. Likewise, those who regularly attend religious services or are evangelical Christians express much greater doubts about scientific concepts they may see as contradictory to their faith.

"When you are putting up facts against faith, facts can't argue against faith," said 2012 Nobel Prize winning biochemistry professor Robert Lefkowitz of Duke University. "It makes sense now that science would have made no headway, because faith is untestable."

But evolution, the age of the Earth and the Big Bang are all compatible

with God, except to Bible literalists, said Francisco Ayala, a former priest and professor of biology, philosophy and logic at the University of California, Irvine.

Darrel Falk, a biology professor at Point Loma Nazarene University and an evangelical Christian, agreed, adding: "The story of the cosmos and the Big Bang of creation is not inconsistent with the message of Genesis 1, and there is much profound biblical scholarship to demonstrate this."

Beyond religious belief, views on science may be tied to what we see with our own eyes. The closer an issue is to our bodies and the less complicated, the easier it is for people to believe, said John Staudenmaier, a Jesuit priest and historian of technology at the University of Detroit Mercy.

The AP-GfK Poll was conducted March 20-24, 2014, using KnowledgePanel, GfK's probability-based online panel designed to be representative of the U.S. population. It involved online interviews with 1,012 adults and has a margin of sampling error of plus or minus 3.4 percentage points for all respondents.

Respondents were first selected randomly using phone or mail survey methods and were later interviewed online. People selected for KnowledgePanel who didn't otherwise have access to the Internet were provided with the ability to access the Internet at no cost to them.

More information: AP-GfK Poll: www.ap-gfkipoll.com

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