

Scientists May Not Be Very Religious, but Science May Not Be to Blame

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Did God make scientists? Most of them don't think so.

The first systematic analysis in decades to examine the religious beliefs and practices of elite academics in the sciences supports the notion that science professors at top universities are less religious than the general population, but attributes this to a number of variables that have little to do with their study of science.

The 2005-07 study, "Religion Among Academic Scientists" (RAAS) was conducted by Elaine Howard Ecklund, assistant professor of sociology in the College of Arts and Sciences at the University at Buffalo and principal investigator.

The study is based on a survey of 1,646 academic scientists at 21 elite research universities and in-depth interviews with 271 of them.

The survey sample consisted of academics in seven different natural and social science disciplines: physics, chemistry, biology, sociology, economics, political science, psychology and sub-fields like molecular biology, biochemistry, social psychology and neuroscience. The rate of response to the survey was nearly 75 percent, which Ecklund says is extremely high for a faculty survey.

The first article based the study, co-authored by Christopher Scheitle of Penn State, appears in the current issue of the journal *Social Problems* (Vol. 54, No. 2).

"Our study data do not strongly support the idea that scientists simply drop their religious identities upon professional training, due to an inherent conflict between science and faith, or to institutional pressure to conform," Ecklund says.

"It is important to understand this," she adds, "because we face religio-scientific controversies over stem-cell research and evolution, for instance, and increased debate about the role of religion in both national politics and in the public policies that influence science.

"In order to have the meaningful dialogue between scientists and the general population important to the advancement of science," Ecklund says, "we need comprehensive information about the religious beliefs and practices of scientists themselves. Although academic scientists at elite universities teach and train future leaders of American universities, media, primary and secondary education, medicine and government, there actually has been little systematic study of their religious beliefs and identities."

For comparison with the general population, in the Social Problems article Ecklund and Scheitle employed data from the 1998 and 2004 rounds of the General Social Survey (GSS), a national survey by the National Opinion Research Center at the University of Chicago, which regularly collects data on demographic characteristics and attitudes of U.S. residents.

The RAAS survey asked questions on religious identity, belief and practice, which were replicated from the GSS, and other questions on spiritual practices, ethics and the intersection of religion and science in the respondent's discipline, some of which were replicated from other national surveys. In addition there was a series of inquiries about academic rank, publications and demographic information.

The authors then examined how natural and social scientists differ from the general public and how they differ from one another in terms of religiosity. They also considered some of the sources of these differences.

They concluded that academics in the natural and social sciences at elite research universities are significantly less religious than the general population. Almost 52 percent of scientists surveyed identified themselves as having no current religious affiliation compared with only 14 percent of the general population.

And while nearly 14 percent of the U.S. population who responded to the GSS describe themselves as "evangelical" or "fundamentalist," less than 2 percent of the RAAS population identifies with either label.

The only traditional religious identity category where the RAAS population has a much higher proportion of religious adherents than the general population is among those who identify as Jewish -- 15 percent compared to 2 percent of the general population.

Among scientists, as in the general population, being raised in a home in which religion and religious practice were valued is the most important predictor of present religiosity among the subjects.

Ecklund and Scheitle concluded that the assumption that becoming a scientist necessarily leads to loss of religion is untenable.

Ecklund says, "It appears that those from non-religious backgrounds disproportionately self-select into scientific professions. This may reflect the fact that there is tension between the religious tenets of some groups and the theories and methods of particular sciences and it contributes to the large number of non-religious scientists."

Foreign-born scientists are more likely to say "there is little truth in religion" and less likely to attend religious services, according to the authors. But being foreign-born had no significant impact on the odds of believing in God. This is interesting, they say, in light of the high percentage (25 percent) of foreign-born scientists among those surveyed.

The oft-discussed distinction between natural and social scientists with regard to religious belief is inconsistent and weak, Ecklund says.

"This is interesting," she adds, "because most of the scholarly literature on faculty attitudes toward religiosity addresses the field-specific differences between natural and social scientists and many scholars hold that social scientists are significantly less religious than natural scientists."

Results from the study also show that the more children in a scientist's household, the more likely he or she is to adhere to a religion.

In the general population women are more likely than men to be religious, but in the RAAS population, however, gender was not a significant predictor of religiosity.

Although data from the GSS reveal that older individuals express higher levels of religious belief and practice compared to younger individuals, this does not seem to be the case among academic scientists.

RAAS data reveal that younger scientists are more likely to believe in God than older scientists, and more likely to report attending religious services over the past year. "If this holds throughout the career life-course for this cohort of academic scientists," Ecklund says, "it could indicate an overall shift in attitudes toward religion among those in the academy."

Source: University at Buffalo

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