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Religion among Scientists in International Context: A New Study of Scientists in Eight Regions

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Abstract

Scientists have long been associated with religion's decline around the world. But little data permit analysis of the religiosity of scientists or their perceptions of the science-faith interface. Here we present the first ever survey data from biologists and physicists in eight regions around the world—France, Hong Kong, India, Italy, Taiwan, Turkey, the United Kingdom, and the United States, countries and regions selected because they exhibit differing degrees of religiosity, varying levels of scientific infrastructure, and unique relationships between religious and state institutions (N = 9,422). The data collection includes biologists and physicists at all career stages from elite and non-elite universities and research institutes. We uncovered that in most of the national contexts studied, scientists are indeed more secular—in terms of beliefs and practices—than those in their respective general populations, although in four of the regional contexts, over half of scientists see themselves as religious. And surprisingly, scientists do not think science is in conflict with religion. Instead, most see religion and science as operating in separate spheres.

Keywords

science, religion, secularization, international comparative research

Introduction

Around the world, religion and science have an uncertain relationship. Some scientists, such as biologist and author Richard Dawkins, call it a conflict (Dawkins 1996, 2006), while others, including National Institutes of Health Director Francis Collins (Collins 2006), insist the two are compatible. Although not new, debates about the relationship between science and religion have recently taken center stage, often influencing the transmission and public acceptance of science (Coleman and Carlin 1996; Curry 2009; O'Brien and Noy 2015). In the United States (US), these debates have taken shape in the controversies surrounding issues such as human embryonic stem cell research and the teaching of evolution in public schools (Binder 2007; Johnson, Scheitle, and Ecklund 2016). Debates over how evolution is taught have similarly emerged in Asia, where, for example, faculty at the University of Hong Kong were in an uproar over a proposed guideline from Hong Kong's Education Bureau to encourage inclusion of intelligent design in the public school system (Cyranoski 2009). The European Union has witnessed resurgence in religious opposition to scientific research, and public leaders in the United Kingdom (UK) worry that a recent influx of Muslim immigrants may pose unique religiously based challenges to science (Curry 2009). Debates about science and religion are under the glare of a global spotlight.

Scientists themselves are part of these conversations. And the answer to the question of what scientists think about religion has implications for how we should understand the globalization of science. For instance, comparing scientists across nations to each other and to their respective national populations could help us understand the local and the global nature of science. Do scientists from national contexts with

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very different approaches to religion still think the rationalism and supposed secularity of science will overtake the truth claims of religion? Or are they—especially when it comes to matters of personal religious identity—more similar to those in their local national contexts? Is a global science taking over the world of religion? Or are there even ways that religious communities and scientific communities can work together for the common good around the globe?

The prevailing argument is that science and religion are in conflict because they represent different ways of understanding the world. Religion is based on what cannot be seen, on faith. Science, by contrast, is based on empirically based observations of the natural world. Another prevalent idea is secularization, some forms of which argue that science—as the basis of cognitive rationality—contributes to the decline of religion around the world both in the lives of individual scientists as well as in the societies where scientific progress has occurred. Existing theories about religion and its interface would therefore lead one to expect that scientists are nonreligious and, moreover, that they champion a conflict between science and religion (Ecklund 2010; Ecklund and Scheitle 2007; Ecklund, Park, and Veilz 2008; Leuba 1916).

While previous research on the religious beliefs and practices of scientists in the US offers one perspective on the religiosity of scientists and their perceptions of the interface between faith and science (Ecklund and Scheitle 2007), there are many reasons we should expect global differences. Regional contexts vary widely in religious composition and state policies toward religion, with European countries such as France and the UK exhibiting vastly lower levels of religiosity than the US. Other regions, like India, are characterized by much higher levels of religiosity. Science infrastructures also vary across regional contexts, particularly in terms of geographic concentration of research and development (R&D) expenditures. In 2013, for example, gross domestic expenditures on R&D were $457 billion in the US, $55 billion in France, $40 billion in the UK, $27 billion in Italy, $26 billion in Taiwan, $24 billion in India, and $13 billion in Turkey (National Science Board 2016). Regional differences in science infrastructure are highly consequential to the intersection of science and religion because of their connection to immigration. Countries at the core of the global science infrastructure, for example, are likely to experience an influx of scientists from peripheral countries in search of economic opportunity, meaning universities and institutes in a highly secular country that has economic resources, such as the UK or France, may nevertheless be characterized by considerable religious diversity.

The Religion among Scientists in International Context (RASIC) study examined biologists and physicists in eight regional contexts—France, Hong Kong, India, Italy, Taiwan, Turkey, the UK, and the US. Scientists surveyed differed according to career stage, including graduate students, postdoctoral researchers, and all ranks of professors and scientists with appointments in elite and non-elite universities and research institutes. Because the status of Taiwan as a country is politically contested and the Hong Kong Special Administrative Region is a region of the People's Republic of China, we employ the term *regional context* with reference to all of the cases for the sake of parsimony. We examine how these scientists understand religion, how their religiosity compares to that of their local general population, and what implications such findings have for different versions of the connection between science and secularity.

Methods

The study included both a survey of 22,525 scientists and in-depth interviews with 609 of these scientists. The selection of these eight regions as cases was based primarily on the variation in religiosity of the general population and variation in level of science infrastructure, both of which could have an impact on how scientists understand their own religiosity and how they see the connection between science and religion. In addition to these factors, we compared scientists in national contexts that have variation in state policies toward religion, which could potentially shape the science-faith interface for scientists. France, for example, is characterized by assertive secularism, in which the state plays an active role in excluding religion from the public sphere (Kuru 2009). The constitution of India also emphasizes secularism, but there, secularism denotes equal treatment of all religions by the state. In-depth interviews confirmed that these and other state policies toward religion do indeed influence how scientists approach religion in the workplace, a theme we will take up in future publications.

Here we delimit our focus to the survey data. The sampling for the eight-region survey occurred over a two-year period between 2011 and 2012 in distinct stages. In the first stage, we constructed a sampling frame of biology and physics organizations (universities and research institutes) and stratified them by discipline (biology and physics) as well as elite or non-elite status across the eight regional contexts. The organizations were identified by examining the affiliations of authors on articles published between 2001 and 2011 that we randomly sampled through the Thomas Reuter Web of Science (WOS) database for each discipline. Since the WOS is a database that contains articles of over 12,000 scientific journals, we assume that research-intensive organizations are well represented in WOS journals. WOS also includes, however, many less research-intensive organizations, allowing our sampling frame of organizations ample variance in terms of research activity, representing a significant strength of this study. In addition, WOS provides non-university organizations that house research-active biologists and physicists, another benefit that existing rankings fail to offer.

The WOS process identified 1,905 organizations (1,079 biology and 826 physics). We then stratified by whether the organization could be considered elite or not. In making this classification, we relied on a triangulation process comprising research productivity (the number of times an organization appears as the affiliation of an author in a WOS journal

article), insider opinions (evaluations by scientists from each region in the study), and in-country ranking systems. From this stratified sampling frame, we then selected 662 organizations—102 elite biology organizations, 146 non-elite biology organizations, 112 elite physics organizations, and 220 non-elite physics organizations. It was necessary to oversample some categories in order to get a large enough N because of small department sizes. France was the only region in which our sampling strategy could not be applied because joint labs between French universities and the Centre Nationale de la Recherche Scientifique made scientists' listed affiliations on publications unreliable. Therefore, using the CNRS online directory, we randomly selected CNRS laboratories in physics and the biological sciences, which resulted in 36 biology organizations and 42 physics organizations. Because we do not use the WOS in France, we are unable to assign these organizations to elite and non-elite stratum.

We then used departmental websites to construct a sampling frame of individuals within the selected departments. We stratified this frame by rank and gender. For rank, we separated identified individuals into three categories: (1) scientists in training (graduate students), (2) junior scientists who have finished their training (postdoctoral fellows, assistant professors, or equivalent rank in each nation), and (3) advanced scientists (associate and full professors or equivalent rank in each nation). Sampling weights were applied to return the distributions to that of the sampling frame.

The survey itself was fielded by two different survey firms: GfK NOP and Abt SRBI. All communication, including advance contact and the survey instrument, was offered in the native language of each region and English. Each selected scientist was sent a pre-notification letter. In some national contexts (US, UK, others), a pre-incentive was also sent (in other national contexts, such as Turkey, an incentive was considered culturally inappropriate and in India and Hong Kong a post-incentive was sent). This was followed by an email invitation to each potential respondent with a unique link to complete the survey online. Nonresponders were then sent email reminders and—if they still did not respond—were phoned by the survey firm. In the end, we received 9,422 completed responses (see Table 1). Using the American Association for Public Opinion Research's definition Number 3 for response rates,[1] our survey obtained an overall response rate of 42 percent and in-country response rates ranging between 39 percent in Turkey and Taiwan and 57 percent in the US and Italy.[2] In the analyses we present here, we limit each nation's sample to the cases that had valid, nonmissing responses on all of the questions that we examine.

Table 1. Response Rates among Scientists across Eight Regions.

	Respondents (N)	Response Rate (Percentage)
France	779	46
Hong Kong	326	40
India	1763	44
Italy	1411	57
Taiwan	892	39
Turkey	684	39
United Kingdom	1,581	50
United States	1,986	57
Total	9,422	42

Results

Scientists' Demographics and Religiosity

A global perspective on demographics among physicists and biologists in each regional context demonstrates two noteworthy patterns (see Table 2). First, in all regional contexts, representation of women in biology and physics is persistently low. Only in Turkey and Italy do female scientists exceed one-third of the population. Second, in four of these regional contexts, more than one-third of scientists are foreign-born. The proportion of women in a discipline and the proportion of scientists who are foreign-born are both potentially important to the religious composition of science. Women are often more religious than men (Sullins 2006), which implies that a higher representation of women in science may have implications for the religiosity of scientists overall *if* gender and religion intersect among scientists the same way they do in the general population. The proportion of foreign-born scientists is potentially important to the religious characteristic of science because foreign-born scientists may bring new religious traditions or increase the proportion of minority traditions within particular regional contexts.

There are also striking patterns found when examining the religious characteristics of physicists and biologists across these regional contexts. In four of the regional contexts, over 50 percent of scientists have a religious affiliation (Italy, India, Turkey, and Taiwan). The percentage of scientists who identify with a religious tradition is highest in India, where 94 percent of scientists are affiliated with traditions such as Hinduism, Islam, and Sikhism (although primarily Hinduism), and lowest in France, where only 30 percent of scientists are affiliated with a religious tradition (predominantly Catholicism).

Yet, belonging does not necessarily translate into believing and practicing (Davie 1994); the high proportion of scientists who are religiously affiliated in some contexts can, under certain conditions, be seen simply as cultural tradition without personal meaning or be seen as the residue of religious socialization during adolescence. Notably, in all regional contexts except Hong Kong and Taiwan, a higher proportion of scientists identified with religion as a child than currently identify with a religious tradition. It is possible that the pattern seen in Hong Kong and Taiwan is as a result of religious investment in primary and secondary educational structures that provide religious socialization for the wealthy in addition to enabling

Table 2. Demographic and Religious Comparisons of Scientists across Eight Regions (Percentages).

	France	Hong Kong	India	Italy	Taiwan	Turkey	United Kingdom	United States
Female	30	26	34	38	32	40	38	32
Born out of nation	26	58	1	13	4	5	45	42
Currently married or living as married	81	56	59	63	61	70	61	67
Has two or more children	55	24	24	30	35	30	25	26
Identifies with some religious affiliation	30	31	94	65	58	84	37	39
Identified with some religious affiliation at age 16	53	20	98	84	48	90	55	60
Claims to be at least slightly a religious person[a]	16	39	59	52	54	57	27	30
Reports praying once a day or more	3	11	48	17	13	54	9	11
Reports attending religious services weekly	3	13	26	17	12	33	8	11
I know God exists, no doubts[b]	5	17	26	16	20	61	9	10
N	645	276	1,606	1,262	776	431	1,531	1,779

[a]Includes the response categories "a very religious person," "a moderately religious person," and "a slightly religious person." Those who said that they "don't know" were included in the denominator.
[b]In India, Taiwan, and Hong Kong, respondents were asked separate questions for whether they believe in one or many gods and for their level of confidence in their belief in god\gods if they have such a belief. We combine these questions to parallel the question asked in the other nations.

the pursuit of higher education and careers in science. While religious affiliation tends to be higher than levels of belief and practice, nontrivial proportions of scientists around the world believe in God or a god as well as practice their tradition regularly. Nearly 10 percent of scientists in the US and UK—two countries at the core of the global science infrastructure—have "no doubt" that God exists, relative to one-quarter of scientists in India and two-thirds of scientists in Turkey. And a substantial proportion of scientists across these regional contexts pray and attend religious services regularly. Overall, a majority of scientists (more than half) in India, Italy, Taiwan, and Turkey identify as at least "slightly religious," while such scientists are in the minority in France, Hong Kong, the US, and the UK. Whether one examines religious beliefs, practices, or identities, according to the religious characteristics of scientists, it is difficult to conclude that science and religion are intrinsically in conflict.

Scientists in Comparison to the Public

Comparing scientists to local religious populations in terms of weekly attendance at religious services reveals a striking pattern (Figure 1). Those who attend religious services at least once a week are in the minority across all regional contexts (true among scientists and the general populations). But in India, Hong Kong, and Taiwan, when comparing scientists to the local population, a higher proportion of scientists participate regularly in religious services. In Turkey, scientists and the general population are similar in religious attendance. At the other end of this spectrum, in France, the UK, and the US, the proportion of the general population who attends religious services regularly is at least two times larger than that among scientists. The gap is widest in the US, where 33 percent of the population attends services regularly, compared to 11 percent of scientists.

However, in most regional contexts, fewer scientists regularly attend than never attend religious services. Lack of attendance, however, is far from ubiquitous, and there are important differences among regions. The majority of scientists in the US (60 percent), UK (66 percent), and France (81 percent) are nonattenders; only a small fraction of French scientists attend services once a week or more (3.2 percent). Nonattending scientists are in the minority in some nations, however, such as Turkey (40 percent) and Italy (44 percent).

Figure 2 shows the proportion of scientists and the population in each region who consider themselves slightly, moderately, or very religious. Looking exclusively at scientists across regional contexts, we see that the highest proportion of religious scientists is found in Italy, Taiwan, Turkey, and India, where more than half of scientists identify as at least "slightly religious." In all of these cases but Taiwan, however, religious identification is lower among scientists relative to the general population. In Taiwan, and especially Hong Kong, religious identification is much higher among scientists compared to the broader population, a pattern echoing the scientist-population comparison of participation in religious services in these contexts. France, the UK, and the US appear to have the group of scientists who are least religious, with 30 percent of US scientists, 27 percent of UK scientists, and only 16 percent of French scientists saying they are religious to any extent. Once again, the scientist-population comparisons are vastly different in these contexts relative to other regional contexts surveyed. Finally, given that the proportion of Indian scientists who attend religious services regularly is consistent with the Indian population (Figure 1), it is noteworthy that in terms of religious identification, Indian scientists are much less likely to identify as religious than the general public.

We also asked survey participants to self-identify as "religious" or "spiritual" when relevant. More than 50 percent of

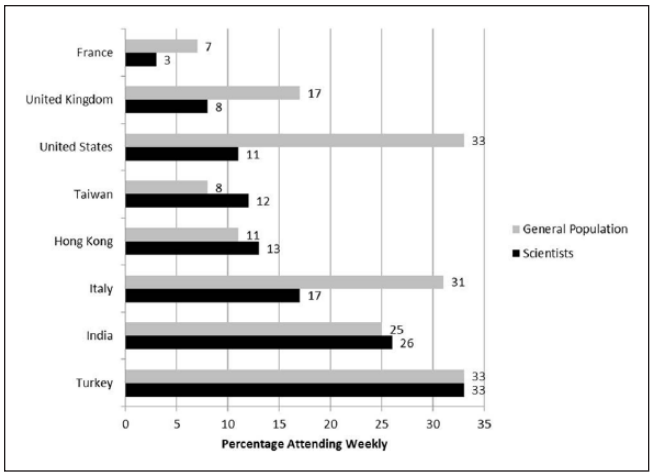

Figure 1. Percentage of biologists and physicists by region attending religious services weekly compared to population.
Note: UK, France, and Italy general population percentages come from the 2005–2009 World Values Survey. The remaining nations' percentages come from the 2010–2014 World Values Survey.

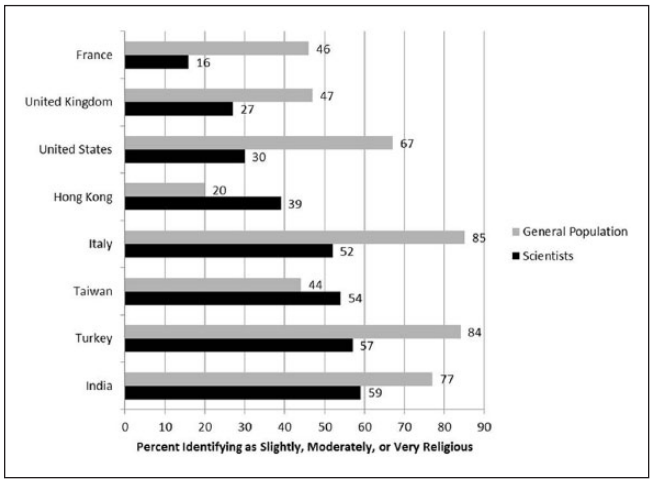

Figure 2. Percentage of scientists by region identifying as religious compared to population.
Note: UK, France, and Italy general population percentages come from the 2005–2009 World Values Survey. The remaining nations' percentages come from the 2010–2014 World Values Survey.

scientists in the US, UK, and France consider themselves "neither religious nor spiritual," with French scientists scoring highest on this measure. India and Turkey show the highest prevalence of scientists who consider themselves "religious, but not spiritual." Taiwan is the only regional context in which the most common identification among scientists is "spiritual, but not religious."

Scientists' Perceptions of the Science-Faith Interface

We also asked scientists how they view the science-faith interface (Table 3). Scientists were specifically asked, "For me personally, my understanding of science and religion can be described as a relationship of . . . " and then presented with the following options: "Conflict; I consider myself to be on the side of religion," "Conflict; I consider myself to be on the side of science," "Conflict; I am unsure which side I am on," Independence; they refer to different aspects of reality," "Collaboration; each can be used to help support the other," and "Don't know." In contrast to the pervasive conflict narrative, which assumes that science and religion are intrinsically in tension with one another, it is striking that a substantial majority of physicists and biologists in the eight regional contexts studied do not adhere to this view. The conflict thesis would posit that most scientists would characterize the science-religion relationship as one of conflict and take the side of science, yet the UK and the US are the only nations where support for this view approaches one-third of scientists. The prevailing view of the relationship between science and religion is one of independence—the notion that science and religion refer to different spheres of reality, perhaps best illustrated by Stephen Jay Gould's (1997) conception of science and religion as "nonoverlapping magisteria," a perspective that each is an autonomous domain of authority—one dealing with empirical observation of the natural world and the other with meaning—whose boundaries should not overlap.

Another perspective on how scientists view the relationship between science and religion can be derived from scientists' perceptions of how exposure to science influences their views on religion (Table 3). No more than one-fifth of scientists in any region affirmed the position that science has made them "much less religious." The perceived impact of science on religion is lowest in Taiwan (6 percent) and highest in the US (22 percent). To place this pattern in context, recall that apart from Hong Kong, typically half—but often a considerably higher proportion—of scientists in each national context identified with a religion at age 16 (Table 2), an age at which adolescents are often first exposed to science.

Conclusion

Science and religion are global. Over $1.6 trillion was spent on R&D in 2013, with more than 50 countries contributing $500 million in expenditures (National Science Board 2016). And more than 5.8 billion of the world's 7 billion people claim some religious affiliation (Hackett and Grim 2012). Yet science and religion—which are present in most societies in some form—are often seen as opposing forces. To date, we have had little empirical insight into global intersections of science and religion apart from historical treatments (Brooke and Numbers 2011), leaving a large gap in our contemporary understanding of science and religion.

Together, the eight regional contexts examined in this study offer a new perspective on the science-religion interface that cannot be revealed by studying any one region alone. We deliberately focused on France, Hong Kong,

Table 3. Scientists' Views on Religion and Science across Eight Nations (Percentages).

	France	Hong Kong	India	Italy	Taiwan	Turkey	United States	United Kingdom
Relationship between religion and science[a]								
Conflict: Side of religion	0	0	1	0	0	2	0	0
Conflict: Side of science	27	17	18	21	9	24	29	35
Conflict: Not sure which side	0	1	1	0	1	0	0	0
Independence	58	44	44	58	62	35	51	47
Collaboration	7	24	29	15	21	33	12	12
Don't know	8	14	7	5	7	7	7	7
Science has made me much less religious	18	12	20	18	6	16	22	19
N	645	276	1,606	1,262	776	431	1,779	1,531

[a]May not total to 100 percent due to rounding.

India, Italy, Taiwan, Turkey, the United Kingdom, and the United States because each exhibits distinctive religious characteristics and contributes a unique perspective on the science-religion relationship.

The results make several key contributions. First, we show that the perception of intrinsic conflict between science and religion, which is conveyed publicly in most of these regional contexts, is only minimally reflective of the perceptions that scientists themselves—often thought to be leading the charge of secularization—have of the science-faith interface. This is not to say that scientists should not be concerned about debates over the teaching of evolution, for example. But when asked directly about the relationship between science and religion, the majority of scientists surveyed did not adhere to the "conflict view." A narrow focus on debates related to human embryonic stem cells and the teaching of evolution may therefore be a poor proxy for how scientists themselves think about the science-faith interface and thus, a potential detriment to public perceptions of science among religious communities. While conflict narratives in public discourse are not necessarily consistent with the predominance of the independence view among scientists, there are two important dimensions of the science-faith interface to note. First, conflict is more pronounced in Western regions. The conflict view is the second most prevalent perspective in the US, the UK, France, Italy, and Turkey, with more than 20 percent of scientists in each of these nations embracing this view. Coupled with the heightened prevalence of the collaboration view in India, Hong Kong, and Taiwan, this suggests that religious tradition and regional context play an important role in the science-faith interface.

Second, for scientists who view the relationship between science and religion as one of independence, it remains possible that this view may not entail a perception of absolute compatibility between the two spheres. In a nationally representative survey of US adults, for example, Hill (2014) finds that although one-third of the US population sees no overlap between science and religion, members of this group are more likely to acknowledge that science and religion can conflict "sometimes" and less likely to agree that they are compatible. In-depth interviews with US scientists are in line with this finding: Scientists may *primarily* view the two spheres as independent but acknowledge particular circumstances under which conflict arises (Ecklund 2010; Ecklund and Park 2009).

Third, the results offer an important perspective on notions of societal and individual secularization. If scientists—as a key source of and likely to be proponents of cognitive rationality in society—are at the vanguard of secularization, then one would presumably expect low levels of religiosity among scientists and vast differences in religiosity between scientists and their respective national contexts. Yet, more than half of scientists in four of the regions examined identify as at least "slightly religious." And a strong group of scientists in all cases (ranging from a significant minority to the majority) in all of the regional contexts but France claim belief in God without doubts. Furthermore, comparisons of religiosity between scientists in a particular context and a given general public reveal that differences are not as wide as secularization theory might suggest. Such comparisons in Turkey, India, Hong Kong, and Taiwan demonstrate that scientists can be similar to and even more religious than a given general public, a finding that complicates how we should think about secularization dynamics in a context where a non-Western religion is the majority. Data on scientists' perceptions of the impact of scientific knowledge on their own religious views further underscore the notion that science is not necessarily secularizing at the individual level. The important distinction between individual and societal secularization, however, must be recognized. Religious scientists can still be carriers of secularization in society by perpetuating through public debate and popular discourse the exclusive cultural authority of science. Religious scientists may equally foster secularization societally by asserting and maintaining the professional autonomy of science, separating science completely from religious authority. Yet, it is important to acknowledge that at the individual level and from the perspective of scientists' themselves, science does not appear to have a secularizing effect on scientists.

Knowledge of similarities and differences between scientists and general publics also has practical implications for public understanding of science and policies designed to address it. Possibilities for conflict in the public sphere should presumably be heightened in contexts where differences between scientists and the public are widest (e.g., US, Italy) and lowest where scientist and general public differences are narrow (e.g., India, Turkey). In countries where differences are vast, the public may erroneously assume that—because scientists are so different—low levels of religiosity among scientists translate into rejection of and hostility to religion (Roberts and Turner 2002). Such a perspective, however, would be unfounded. In the US, for example, where 67 percent of the general population compared to 30 percent of scientists identify as religious, only one-third of scientists view the science-religion relationship as one of conflict. The goal of promoting public understanding of science would thus potentially benefit from interactions that foster communication among scientific and religious communities, which may help dispel misunderstandings on both sides.

These results have further implications for how we think about the globalization of science. Scientists—at least in their views of the relationship between science and religion—do appear to be part of an enterprise that is more global than local. Considering the diversity of religious characteristics that exist across the regional contexts examined here—highly religious versus highly secular nations, for instance, or the predominance of Western versus non-Western religions—it is remarkable that attitudes toward the science-faith interface are generally the same across these religiously distinctive regional contexts. In each case studied, only a minority of scientists view the relationship as one of conflict on the side of science (never more than one-third of scientists in a given regional context).

If we assume that nonreligious scientists are somehow inclined to embrace the conflict view, a view that is sometimes asserted in the public sphere, we are left with the question of why most scientists actually embrace a compatibility perspective. There are at least two explanations, both of which can be tied to a "contact hypothesis," which posits that intergroup prejudice can be reduced by having frequent contact between diverse groups for the sake of a common objective (Allport 1954). First, the global nature of science fosters transnational flows of religion across the science infrastructure as scientists leave their home countries in search of graduate and postdoctoral training, permanent appointments, and collaboration, bringing with them their religious traditions. For example, while France tends to be a highly secular context with little religious diversity, within the science community, one in four biologists and physicists working in France was born outside France. Working alongside scientists who are religiously different but nevertheless share the same interest of advancing knowledge may help quell any assumptions among nonreligious scientists that there is an intrinsic conflict between being religious and being a scientist. A second explanation is rooted in early exposure to religion among scientists. With the exception of Hong Kong, more than half of scientists in each regional context (and often considerably higher proportions) identified with some religious affiliation at age 16. While many scientists abandon their religious affiliations, early exposure to religion could facilitate reconciliation of ideas portrayed as conflicting in the public sphere.

While the compatibility view for the relationship between religion and science seems to be an attribute of the global scientific community, the RASIC study uncovered several distinct regionally specific patterns. In India, Italy, Taiwan, and Turkey, most scientists are both affiliated with a religious tradition and identify as personally religious. In the other regional contexts, having a religious identity and affiliation places a scientist in the minority. Even within minority patterns, there is great variation across regions. Most scientists do not participate in religious services on a weekly basis. Yet, 1 in 4 Turkish scientists and 1 in 3 Indian scientists participate on a weekly basis, while only 1 in 10 scientists in the UK, US, Taiwan, and Hong Kong do. One would be hard pressed to find a scientist in a religious organization in France. Analysis of religious variation within and between regional contexts will be crucial to future research on the science-faith interface.

We see at least several productive paths forward for future research on the global context of science and religion. While the survey data presented here enable generalizations about the religious beliefs and practices of scientists around the world, they raise questions about how religion comes up in the day-to-day lives of scientists, questions best addressed by qualitative research. It would be important to examine the circumstances in which religion comes up and potentially influences the work of both religious and nonreligious scientists because this issue is tied to broader conversations about discrimination and diversity in science. In addition, researchers should focus on examining how scientists' perceptions of religion influence applications of science in different spheres of public life. This domain of inquiry could generate valuable insights related to ethics in science and the social values of scientists. Finally, the global landscapes of both science and religion are vast and diverse. We have expanded understanding of how scientists approach religion to eight specific regional contexts. It would be fruitful for researchers to consider other regional contexts where science and religion intersect, such as South America, the Middle East, and Africa. There are pockets of excellence, and research is expanding in these regions (Al-Shobakky 2010; Catanzaro et al. 2014; Editorial 2014). Given the religious diversity found in each region, it is possible that the science-faith interface there—and in other regional contexts—would look quite different than what we have observed here.

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Notes

1. See http://www.aapor.org/AAPOR_Main/media/publications/Standard-Definitions20169theditionfinal.pdf.
2. Overall, the differences between those who responded and those who did not respond to the survey are small. In Hong Kong, India, and Taiwan, men were more likely than women to respond to the survey. In terms of discipline, Taiwanese physicists were more likely to respond relative to biologists, while in Italy, biologists were more likely to respond compared to physicists. There are few statistically significant differences in response rates by elite status, except in Turkey, where elites were more likely to respond, and in Taiwan, where elites were less likely to respond. Despite the statistical significance of these differences, the actual size of the differences is not particularly large. For example, in Italy, physicists represented 50 percent of the sample but only 46 percent of the respondents. In sum, when there are statistically significant differences, they tend to consist of ±5 percent differences between the respondents and the sample. Overall, then, the survey respondents largely mirror the targeted population.

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