Science and Religion

Exploring the Spectrum: A Multi-Country Study on Public Perceptions of Evolution, Religion and Science

The University of Birmingham

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#### Method

This report presents findings of a study conducted by YouGov on behalf of the University of Birmingham in May and June 2023 which explored perceptions of evolution, religion, science and the relationships between them. The research builds on a study that members of the University of Birmingham research team previously conducted with YouGov in 2017 and expands the scope from two to seven countries across the globe.

The survey was conducted in Argentina (n=2,040), Australia (n=2,000), Canada (n=2,027), Germany (n=2,051), Spain (n=2,006), the UK (n=2,133) and the USA (n=2,000). All samples were sourced from YouGov's proprietary online research panels in each country. YouGov uses an active sampling method, drawing a sub-sample from each panel that is representative of the country's population by socio-demographics. The fieldwork is managed using a quota sampling approach and the data is weighted by a series of relevant demographic variables to ensure that it is representative of each country's population.

The findings throughout the report are presented in the form of percentages, and all differences highlighted between subgroups are statistically significant at an alpha level of 0.05 unless otherwise indicated. In some instances, apparent differences between figures may not be considered 'statistically significant' due to sample sizes. Where percentages do not sum up to 100, this is due to rounding.





## **Executive Summary**

This research confirms and builds upon the findings of our 2017 study (see: State of the Nation section), which indicated that for the majority of people religious/spiritual beliefs and an acceptance of evolutionary science are not necessarily in opposition, and that often a process of social projection of conflict exists around religious/spiritual attitudes to evolution.

Overall, we found that in all countries studied the majority of participants surveyed were aware of the concept of evolutionary science, although we found that self-reported knowledge of evolutionary science was much lower. There are high levels of agreement with the statement "evolutionary processes can explain how all organisms, including humans, have developed and continue to develop". This is the case across all countries surveyed, with between seven or eight in ten agreeing with this statement.

Naturalistic evolution is the most common view supported in all countries we surveyed, apart from the USA where god-guided evolution was the most common view. This represents a break with previous studies, which have found creationism to be the most common view in the USA (e.g. Gallup, 2019). Creationism was a minority view in all countries in this study.

A higher proportion of people, be they religious/spiritual or non-religious/spiritual, find evolutionary science easy to accept with regards to their personal beliefs, than find it difficult.

When asked about the beliefs of others, we find that the most common view is to think that a member of the general public or a non-religious person would find evolutionary science easy to accept. This reflects the views of both the general public and non-religious individuals regarding their self-reported ease in accepting evolutionary science.

However, across all countries we find that the majority believe a member of the public who is religious would find evolutionary science difficult to accept in reference to their own personal beliefs. This represents a mismatch between what religious people believe themselves, and what people think religious people believe regarding evolutionary science. We found a similar process of social projection in our 2017 study of UK and Canada, and our new data not only further supports these findings but also suggests this process operates internationally, at least across the seven nations included in this study.

With regards to participants' perceptions of media representations of the relationship between evolutionary science and religion, we find the most common view across all countries is that





people believe the media represents the relationship between evolutionary science and religion as being more in conflict than individuals' themselves believe it to be.

In line with how people answer when asked to think about science more broadly, when asked specifically about evolutionary science it is more common for people to see it as important than unimportant to their sense of who they are and how they view the world.





### State of the Nation

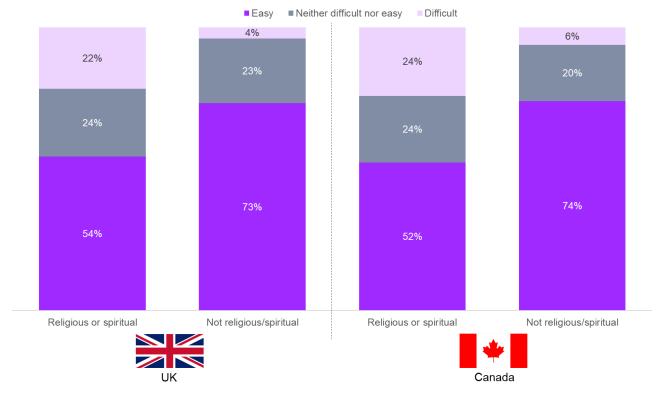
When this research was first conducted in the UK and Canada in 2017, results indicated that religious/spiritual belief and acceptance of evolutionary science were not necessarily opposing schools of thought. Both religious and non-religious people were more likely than not to find it easy to accept evolutionary science in relation to their own beliefs. Six years on, examining perceptions in these same countries in 2023 reveals that on the whole this remains unchanged.

In 2017, three in five (64%) UK adults said they found it easy to accept evolutionary science in reference to their own personal beliefs, and in 2023 the proportion selecting this answer remains the same. Notably, among those who identify as religious or spiritual, it remains that the majority (54%) find it easy to accept a belief in evolutionary science. This compares with 73% of non-religious/spiritual people and is consistent with the split of 53% versus 75% recorded in 2017.

A very similar story can be seen in Canada in 2023, where a slight majority (52%) of people who identify as religious or spiritual say they find it easy to accept evolutionary science in reference to their beliefs, compared with a somewhat larger proportion of non-religious/spiritual people (74%). Therefore, while non-religious/spiritual people are more likely than religious/spiritual to report ease in accepting evolutionary science, across both groups in the UK and Canada the majority find evolutionary science easy to accept.



Figure 1. In your daily life, how difficult or easy do you find it to accept evolutionary science in reference to your own personal beliefs or views? (Please select one option) (2023)



Base: Religious or spiritual / Not religious or spiritual. Canada (n=968 / n=1,059), UK (n=1,026 / n=1,107).

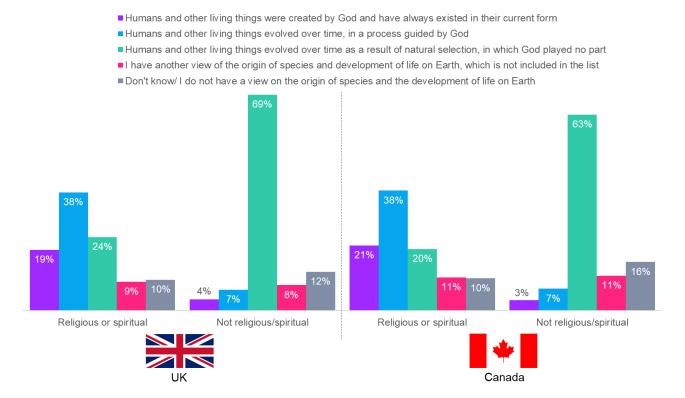
The 2017 research also found that it was relatively uncommon for the UK and Canadian public to support a 'creationist' position, even among those who identified as religious or spiritual. These findings are replicated in the current study. In 2023, 12% of the general public in the UK and Canada selected the statement 'Humans and other living things were created by God and have always existed in their current form' from a list of scenarios. These proportions are similar to the figures recorded in 2017 (9% in the UK; 15% in Canada). In 2023, the most common scenario supported overall in both the UK and Canada is that 'humans and other living things evolved over time as a result of natural selection, in which God played no part' (46% in the UK; 42% in Canada).

In both countries, the proportion who endorse the 'creationist' perspective does rise to roughly one in five (19% in the UK; 21% in Canada) among those who identify as religious or spiritual, but conversely in both countries roughly one in five (24% in the UK; 20% in Canada) support the view that 'humans and other living things evolved over time as a result of natural selection, in which god played no part'. Religious or spiritual respondents more commonly subscribe to the view that 'humans and other living things evolved over time, in a process guided by God' (38% in both).





Figure 2. People have different views about the origin of species and development of life on Earth. Which of the following statements comes closest to your view about the origin and development of life on Earth? (2023)



Base: Religious or spiritual / Not religious or spiritual. Canada (n=968 / n=1,059), UK (n=1,026 / n=1,107).

Six years ago, the results of this research in the UK and Canada revealed that despite a strong consensus among the public that evolution explains human development, there was less conviction when it came to evolution being able to explain human consciousness and the origin of human beings. Findings also suggested that although religious or spiritual identity can have an amplifying effect on individuals' doubts about evolutionary science-based explanations of human origins and consciousness, these doubts were also an underlying trend in non-religious and non-spiritual groups.

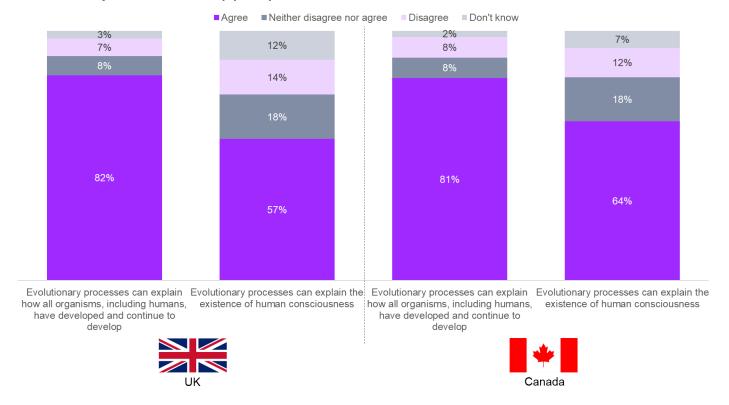
In 2017, the vast majority of the UK and Canadian public overall agreed that 'evolution is a natural process that explains how all organisms, including humans, have developed and continue to develop' (84% in the UK; 75% in Canada). However, sizeable minorities also agreed that 'animals evolve over time but evolutionary science cannot explain the origin of human beings' (28% in the UK; 38% in Canada) and 'evolutionary processes cannot explain the existence of human consciousness' (44% in the UK; 46% in Canada).





The questions asked in 2023 have slightly different wording, but a similar narrative emerges. In 2023, the vast majority of people in both countries agree that 'evolutionary processes can explain how all organisms, including humans, have developed and continue to develop' (82% in the UK; 81% in Canada). However, a smaller majority agree that 'evolutionary processes can explain the existence of human consciousness' (57% in the UK; 64% in Canada), leaving around one in four expressing neutrality or uncertainty (29% in the UK; 25% in Canada).

Figure 3. For each of the following statements about evolution and evolutionary science, please indicate the extent to which you personally disagree or agree. (Please select one option in each row) (2023)



Base: All in each country. Canada (n=2,027), UK (n=2,133).

Looking specifically at the views of non-religious/spiritual people in the UK, in 2023 63% agree that 'evolutionary processes can explain the existence of human consciousness', meaning roughly four in ten (37%) feel uncertain or disagree. As seen in 2017 in the UK, a higher proportion of those who identify as religious or spiritual have doubts about evolutionary processes explaining human consciousness, with half (50%) agreeing with this statement in 2023. The findings are similar in Canada in 2023, where 69% of non-religious/spiritual adults agree with the statement compared with 58% of those who identify as religious or spiritual. Again, these results highlight that looking beyond scientific explanations for existential questions about human consciousness and origins is not unique to religious or spiritual groups in both the UK and Canada.





In 2023, the scope of the study was expanded to also explore these views and attitudes in Argentina, Australia, Germany, Spain and the USA. For example, the current study reveals that the general public in Spain (77%) report the greatest level of ease with accepting evolutionary science in reference to their own personal beliefs, while adults in the USA (54%) and Germany (56%) are least likely to feel this is easy to do. This report will delve into public perceptions of evolution, science, and religion across each of the seven countries in the current study.





### Public perceptions of evolution

There is high awareness of evolutionary science as a concept across the countries surveyed, although self-reported knowledge of evolutionary science is much lower. The majority in all countries surveyed find evolution easy to accept with regards to their personal beliefs. This ease in acceptance of evolution is the most common view for those who are both non-religious/spiritual or religious/spiritual. Further, in all countries surveyed 'creationism' is a minority position.

Overall, awareness of evolutionary science is high, with nine in ten in each country saying they have heard about it. Reported knowledge is much lower, with around two to three in ten in most of the countries surveyed saying that they know a lot or a fair amount about evolutionary science – this is highest in Spain (49%) and the USA (37%), and lowest in Germany and the UK (both 22%).

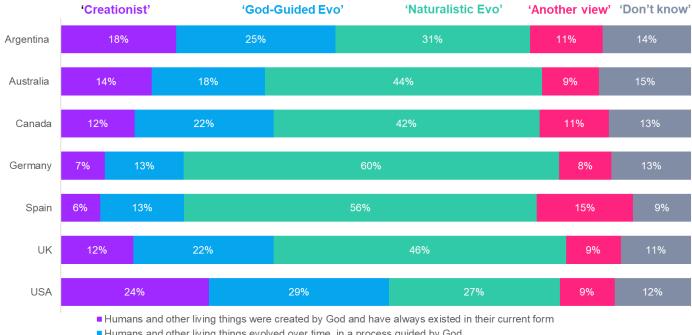
Reported knowledge of evolutionary science is linked to age in many of the countries surveyed, with younger people more likely to say that they know a lot or a fair amount about it, which could be linked to closeness to school age where evolution is often taught in the curriculum, or reflect the changing prioritisation of evolutionary science on curricula over time in some countries. For example, in the UK, 18-24-year-olds report higher knowledge than those aged 65+ (39% vs. 13%), with the same pattern seen in the USA (53% vs. 33%). That considered, in Spain where reported knowledge is highest, the difference by age is much less pronounced (56% of 18-24-year-olds vs. 48% of those aged 65+).

A common way to assess public perceptions of human origins is to present several scenarios to the public and ask which comes closest to their personal view. Our question also allowed respondents to say they did not know or that they had another view on the origin and development of life, beyond the standard options (Figure 4.). As mentioned in the previous section, the research found that it was a minority position for the public in each country to support a 'creationist' position, even among those who identified as religious or spiritual. Based on this measure, levels of creationism were highest in the USA (24%) and Argentina (18%), and lowest in Spain (6%) and Germany (7%). Across all countries of study, naturalistic evolution was the most popular position, apart from the USA where God-guided evolution was the most selected view. Furthermore, across all countries in this study, God-guided evolution was a more popular position than creationism.





Figure 4. People have different views about the origin of species and development of life on Earth. Which of the following statements comes closest to your view about the origin and development of life on Earth?



- Humans and other living things evolved over time, in a process guided by God
- Humans and other living things evolved over time as a result of natural selection, in which God played no part
- I have another view of the origin of species and development of life on Earth, which is not included in the list
- Don't know/ I do not have a view on the origin of species and the development of life on Earth

One of the issues with the traditional way of measuring perceptions of evolutionary sciences as shown in the above question, is that it is focused on God and therefore is primed to make people think about monotheistic faith traditions and respondents' own religious/non-religious identity. Therefore, beyond these overarching scenarios, in this survey people were shown a number of other statements about evolution and evolutionary science (Figure 5. displays the results of a number of these across each country). There are high levels of agreement with the statement "evolutionary processes can explain how all organisms, including humans, have developed and continue to develop". This is the case across all countries surveyed, with around seven or eight in ten agreeing.





There are also high levels of agreement that both animals and humans have evolved from earlier forms of life (again with around seven or eight in ten agreeing). For example, in the UK, 85% agree that animals have evolved from earlier forms of life and 83% say this when thinking about humans. As we can see, this more nuanced rewording of the standard question (Figure 5.) results in a higher level of support for evolutionary explanations. For example, in the USA we see that 71% support the statement "evolutionary processes can explain how all organisms, including humans, have developed and continue to develop" compared to the 56% who explicitly support the "God-guided evolution" or "Naturalistic evolution" options in the question outlined above (Figure 4.). This highlights the ways in which question wording in surveys about evolutionary science can impact individuals' responses. This is important to note as it can serve to overinflate the reported levels of outright rejection of evolutionary science. The reality is far more complex with a wide spectrum of views, particularly in relation to humans, being held across both religious, spiritual, and non-religious respondents.

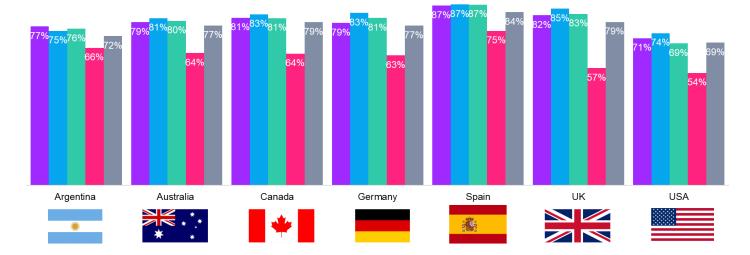
Again, we can see that across most countries agreement still varies depending on religious or spiritual belief. For example, 89% of those in the UK who do not identify as religious or spiritual agree that evolutionary processes can explain how all organisms developed, compared with 76% of those who identify as religious or spiritual. There is a similar pattern in Australia (85% vs. 72%), Canada (87% vs. 74%), Germany (80% vs. 75%) and the USA (82% vs. 65%). However, in Argentina and Spain agreement is consistent between those who identify as religious and those who do not.





Figure 5. For each of the following statements about evolution and evolutionary science, please indicate the extent to which you personally disagree or agree. (Please select one option in each row) – Agreement to statements shown in chart

- Evolutionary processes can explain how all organisms, including humans, have developed and continue to develop
- Animals, as we know them today, have evolved from earlier forms of life
- Humans, as we know them today, have evolved from earlier forms of life
- Evolutionary processes can explain the existence of human consciousness
- Evolutionary processes can explain how the human brain developed

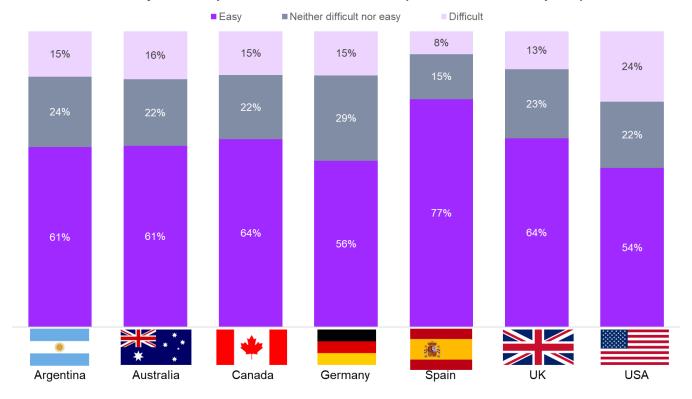


Even given this complexity and wide spectrum of views, most say they find it easy to accept evolutionary science in reference to their own personal beliefs or views. This is the case across all countries, though is highest in Spain (77%). The proportion disagreeing with this is highest in the USA (24%), though it is worth noting that even here the majority nonetheless find it easy to accept evolutionary science (54%).





Figure 6. In your daily life, how difficult or easy do you find it to accept evolutionary science in reference to your own personal beliefs or views? (Please select one option)

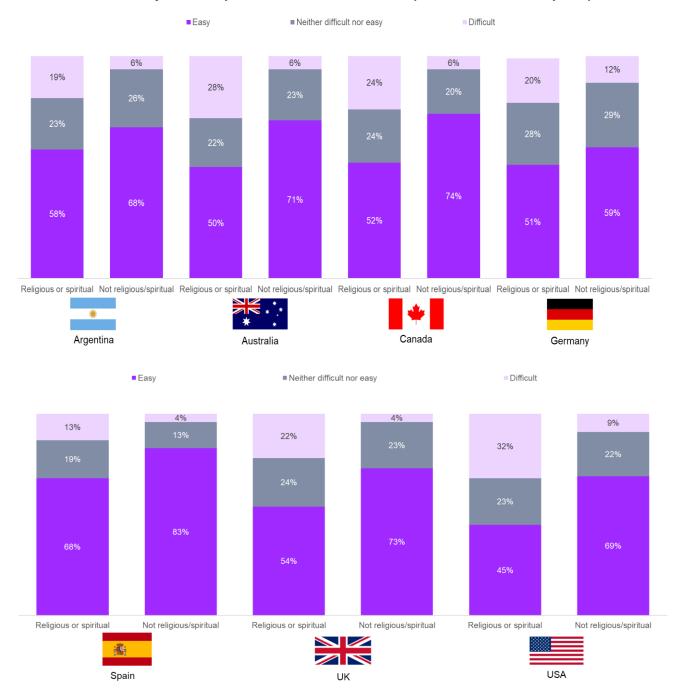


Across all countries, those identifying as religious or spiritual are more likely than those who are non-religious/spiritual to report difficulty in accepting evolutionary science. For example, in the UK, 22% of those identifying as religious or spiritual say they find it difficult, much higher than the proportion who identify as non-religious/spiritual (4%). In Germany, the gap between these two groups is lower, with 20% of religious/spiritual and 12% of non-religious/spiritual reporting difficulty. Overall, however, the majority of religious/spiritual people in all-but-one country say they find it easy to accept evolutionary science in reference to their personal beliefs (Figure 7). The outlier to this is the USA, where the number of religious or spiritual people who find evolutionary science easy to accept is 45%.





Figure 7. In your daily life, how difficult or easy do you find it to accept evolutionary science in reference to your own personal beliefs or views? (Please select one option)



Base: Religious or spiritual / Not religious or spiritual. Argentina (n=1,140 / n=600), Australia (n=929 / n=1,071), Canada (n=968 / n=1,059), Germany (n=681 / n=1,370), Spain (n=828 / n=1,178), UK (n=1,026 / n=1,107), US (n=1,296 / n=704).





### The importance of (non-)religion, science and evolution in social identity

It is more common for people to feel that their religious, spiritual or non-religious position is important, rather than unimportant, with regards to their sense of self and how they view the world; the exception to this trend is Germany.

When asked specifically about evolutionary science, across all countries it is more common for people to see it as important rather than unimportant to their sense of who they are and how they view the world. These findings mirror perceptions of the importance of science more broadly.

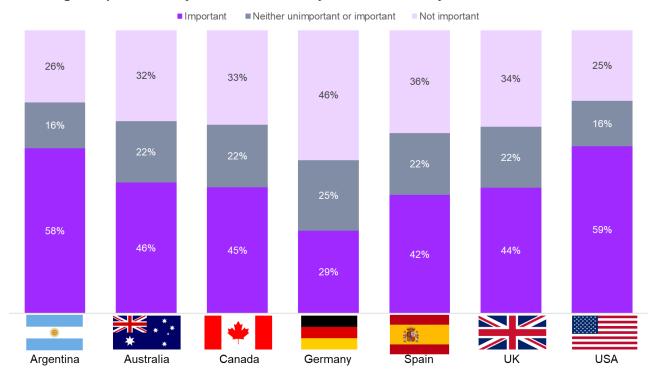
It is more common for people to view religious, spiritual or non-religious beliefs as important rather than unimportant with regards to who they are and how they view the world. This is the case in all the countries surveyed, with the exception of Germany, which is the country with the smallest proportion identifying as religious or spiritual. Those in the USA (59%) and Argentina (58%) are most likely to view their religious, spiritual or non-religious beliefs as important to who they are and how they view the world.

Those who identify as religious or spiritual are more likely to say that their religious, spiritual or non-religious beliefs are important (with regards to who they are and how they view the world) than those who are not. For example, in the UK, overall people are slightly more likely to cite their religious, spiritual or non-religious beliefs as important (44%) rather than unimportant (34%). Among those who identify as religious or spiritual, the proportion saying their position is important rises to seven in ten (71%), while the proportion among those who do not identify in this way is just 18%. Countries with a higher proportion of people who identify as being religious or spiritual are more likely to view their religious, spiritual or non-religious beliefs as important. This is highest in the USA (59%) and Argentina (58%), and lowest in Germany (29%).





Figure 8. In your daily life, how unimportant or important is your religious, spiritual or non-religious position to your sense of who you are and how you view the world?

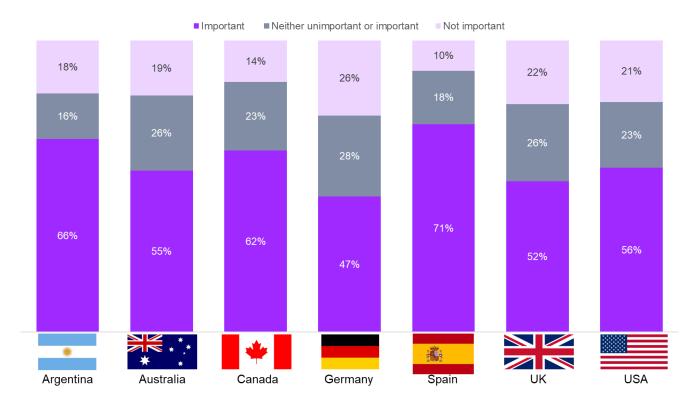


Most people see science as important to their sense of who they are and how they view the world. People in Spain are also most likely to view it as important to their sense of self and their views of the world, with seven in ten (71%) reporting this. Perceived importance is also high in Argentina (66%). Those in Germany are the least likely to view science as important to their sense of self and how they view the world (47%).





Figure 9. In your daily life, how unimportant or important is science to your sense of who you are and how you view the world?

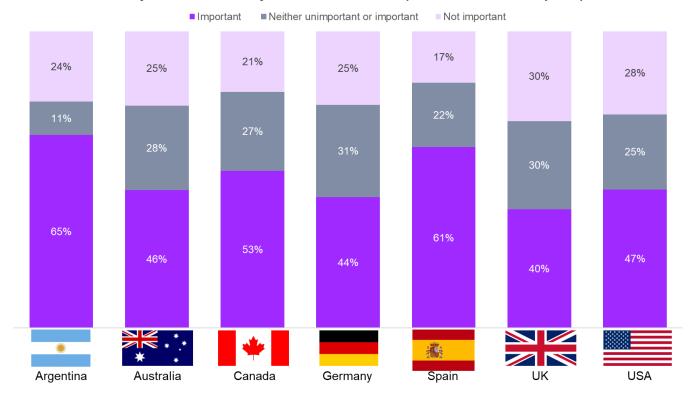


The perceived importance of science in each country does not vary much between those who identify as religious or spiritual and those who do not. Instead, there are much starker differences when the importance of science is broken down by education level, with those educated to a higher level more likely to see science as important to their sense of who they are and how they view the world. In the UK, those with a university degree are more likely to report seeing science as important in this way than those educated to lower secondary level or below (62% vs. 34%). This same pattern is seen across the other countries surveyed.





Figure 10. In your daily life, how important or unimportant is evolutionary science to your sense of who you are and how you view the world? (Please select one option)



Similar to when thinking about science more broadly, perceptions of evolutionary science do not vary much by whether someone identifies as having religious or spiritual beliefs or not; comparable proportions of those who identify as religious or spiritual and those who do not say it is important. For example, in the UK, two in five (40%) of those who identify as religious or spiritual say that evolutionary science is important to their sense of self and how they view the world, and the same proportion (40%) of those who identify as non-religious/spiritual also agree.





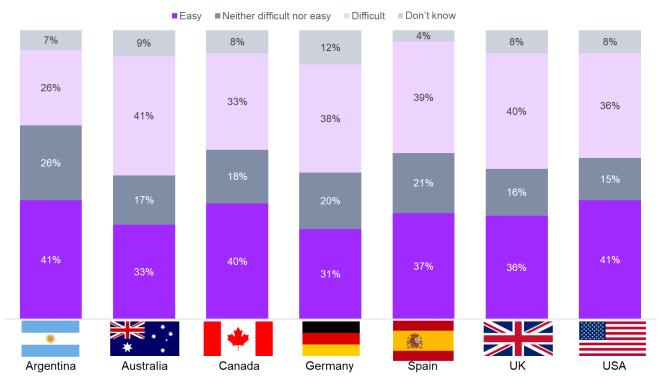
#### Social projection, science, religion, and evolution

While it is more common for religious/spiritual individuals to report ease in accepting evolutionary science in reference to their own personal beliefs, across all countries of study we find the widespread misperception that religious individuals would find it difficult to accept evolution.

Further, there is a common perception that the media represents religion and evolution as being in more conflict than people themselves perceive.

Public opinion is split when thinking about whether it would be possible to believe in a God or higher power and still hold the view that life developed due to evolutionary science. In the majority of countries, similar proportions say this would be easy and difficult. For example, looking at the UK, 36% say they would find this easy while 40% would find this difficult. The largest difference in perception is in Argentina, where a higher proportion say they think it would be easy (41%) than difficult (26%). Interestingly, in the USA, a higher proportion report this would be easy (41%) than difficult (36%). Across all countries surveyed, those who identify as being religious or spiritual are more likely to say that it would be easy to hold both views – believing in God or a higher power and evolution.

Figure 11. To what extent do you think it would be possible to believe in a God or higher power and still hold the view that life on earth, including human life, developed over millions of years as a result of evolutionary processes (Please select one option)



Base: All in each country. Argentina (n=2,040), Australia (n=2,000), Canada (n=2,027), Germany (n=2,051), Spain (n=2,006), UK (n=2,133) and USA (n=2,000).





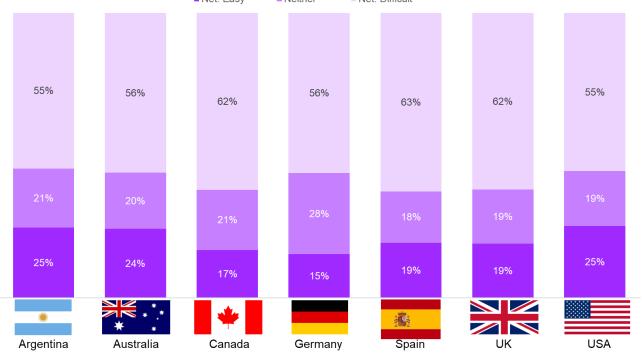
Respondents were also asked whether they think that people with varying religious, spiritual or non-religious identities would find it easy or difficult to accept evolutionary science in reference to their own beliefs or views. Overall, people are most likely to say that a religious member of the public would find it difficult to accept evolutionary science, followed by someone who is spiritual. In contrast, people tend to perceive that someone who is atheist or not religious/spiritual would find it easier to accept this. We found a similar process of social projection, whereby one social group was projecting a position or viewpoint that they may not necessarily hold onto another social group, in our 2017 study of UK and Canada, and our new data suggest this process is at play internationally.

For example, in the UK, three in five (62%) people think that a member of the public who is religious would find it difficult to accept evolutionary science, followed by close to four in ten (38%) who say this about someone who is spiritual. By contrast, only around one in ten say that someone who is atheist (11%) or not religious/spiritual would find this difficult to accept.

Figure 12. How difficult or easy do you think the following people would find it to accept evolutionary science, in reference to THEIR own personal beliefs or views? (Please select one option in each row)... A member of the public who is religious

Net: Easy

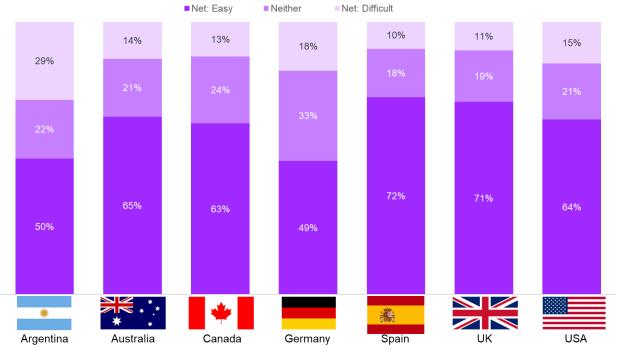
Net: Difficult



Base: All in each country. Argentina (n=2,040), Australia (n=2,000), Canada (n=2,027), Germany (n=2,051), Spain (n=2,006), UK (n=2,133) and USA (n=2,000).



Figure 13. How difficult or easy do you think the following people would find it to accept evolutionary science, in reference to THEIR own personal beliefs or views? (Please select one option in each row)... A member of the public who is an atheist



Looking at the UK, comparable proportions of those who identify as religious or spiritual and those who identify as atheist, think that someone who is atheist would find evolutionary science easy to accept (70% and 72% respectively). This is also the case when thinking about someone who is not religious or spiritual (67% and 70% respectively), while those who identify as being religious or spiritual are slightly more likely to say that someone who is also religious would find evolutionary science easy to accept (24% vs. 14% of those who do not identify in this way). This is in keeping with earlier findings in this report and may be tied to the lived experience of those identifying as religious/spiritual.

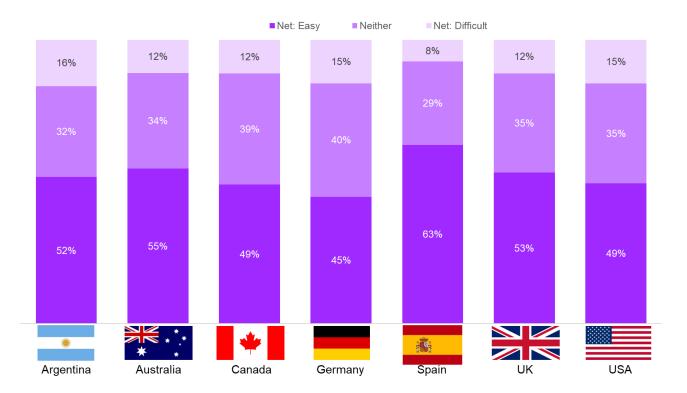
The same patterns exist when participants were asked to think specifically about scientists with varying religious or spiritual beliefs, and whether they would find it easy or difficult to accept evolutionary science in reference to their own beliefs or views. However, the differences in perception are less pronounced when thinking specifically about scientists than more generally about the wider public.





For example, in the UK, one in four (27%) say that a scientist who is religious would find it difficult to accept evolutionary science, much lower than the proportion saying this when thinking about someone religious in the general public (62%). This is also the case for a scientist who is spiritual (17% vs. 38% for someone spiritual in the general public).

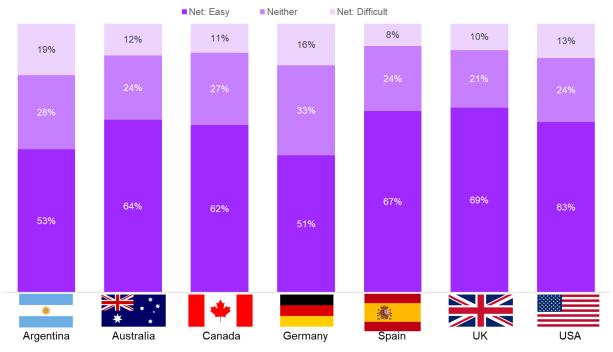
Figure 14. How difficult or easy do you think the following people would find it to accept evolutionary science, in reference to THEIR own personal beliefs or views? (Please select one option in each row)... A member of the general public



Base: All in each country. Argentina (n=2,040), Australia (n=2,000), Canada (n=2,027), Germany (n=2,051), Spain (n=2,006), UK (n=2,133) and USA (n=2,000).



Figure 15. How difficult or easy do you think the following people would find it to accept evolutionary science, in reference to THEIR own personal beliefs or views? (Please select one option in each row)... A member of the public who is not religious or spiritual



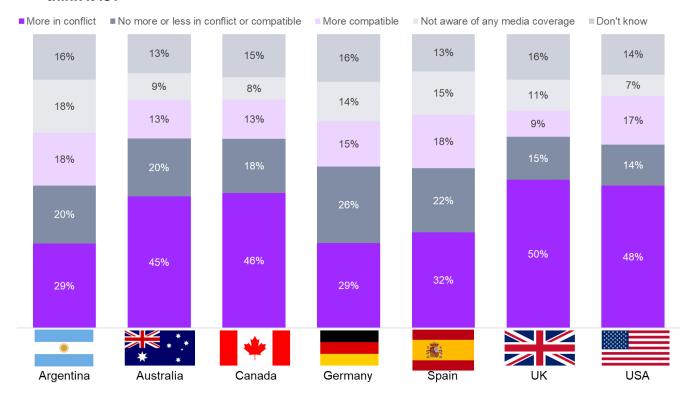
There is a common perception that the media represents the relationship between evolutionary science and religion as being more in conflict than individuals themselves think.

While there are variations in perceptions, across all countries studied the most common answer was that the media represents the relationship between evolutionary science and religion as being more in conflict than individuals themselves believe. Those in the UK (50%), the USA (48%), Canada (46%) and Australia (45%) are most likely to perceive the media as representing this relationship as more in conflict. Smaller proportions report this in Spain (32%), Argentina (29%) and Germany (29%), though this is still the most commonly held view. Across the board, the proportion saying that the media representation of the relationship is compatible is much lower. This is highest in Argentina and Spain (both 18%) and lowest in the UK (9%).





Figure 16. Do you think that the media represent the relationship between evolutionary science and religious positions as being more in conflict, or more compatible than you think it is?







# Religion, Science, and Society

#### Perceptions of the impacts of science and religion for society

Thinking about the impact of religion on society, people are more likely to agree than disagree that religion often has more negative than positive consequences for society. This differs from science, where people are more likely to see it as a force for good in society.

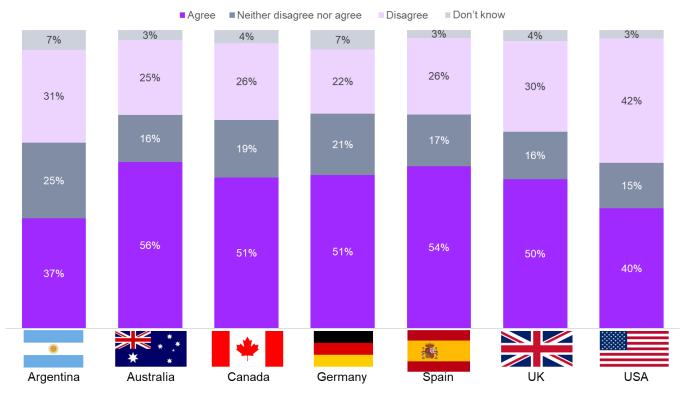
It is more common for both those who identify as religious/spiritual and non-religious/spiritual to think science has a positive rather than negative impact on society. However, the reverse is true for religion, with that view primarily expressed by those who do not identify as spiritual or religious.

In all countries, apart from the USA, it is more common to view religion as having more negative consequences for society than positive consequences. In the UK, half (50%) agree that religion has more negative consequences than positive, compared to only 13% when thinking about science. The perception that religion often has more negative consequences than positive is driven by people who do not identify as religious or spiritual (e.g. 68% report this in the UK vs. 32% who identify as religious/spiritual).

Following on from earlier trends, perceptions in the USA are slightly different, with slightly more people disagreeing (42%) than agreeing (40%) with the statement – thus slightly more people in the USA believe religion to have more positive consequences for society.



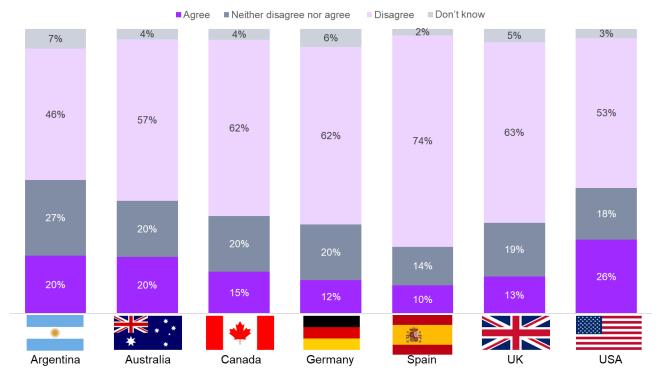
Figure 17. We are interested in your perspective regarding the impacts of religion on society. Please indicate the extent to which you personally disagree or agree with the following statement. I think that religion often has more negative consequences for society than positive consequences



In all but one of the countries surveyed, the majority disagree with the statement "I think that science often has more negative consequences for society than positive consequences", and this differs from religion which is overall perceived more negatively. For example, in the UK, the majority (63%) see religion as having more negative consequences, while only 13% agree science often has more negative consequences for society. Those in Spain are the most likely to support that there are positive impacts of science on society, with three in four (74%) disagreeing that science has more negative than positive impacts. Meanwhile, those in Argentina are the least likely to say this, dropping to 46% who disagree with the statement; though it is worth noting this is still higher than the proportion agreeing (20%).



Figure 18. We are interested in your perspective regarding the impacts of science on society. Please indicate the extent to which you personally disagree or agree with the following statement. I think that science often has more negative consequences for society than positive consequences



Across all of the countries surveyed, those who do not identify as religious or spiritual are slightly more likely to acknowledge science as having a positive impact. Taking the UK public as an example, 69% of those who do not identify as religious or spiritual disagree that science has more negative than positive impacts on society compared to 58% of those who identify as religious/spiritual. However, among both groups in the UK, the majority view the consequences of science for society as positive. Across all countries, among both religious/spiritual and non-religious/spiritual groups, it is more common to view the consequences of science for society as positive than negative.

The perceptions of science's consequences for society differ by education level. In this instance, those educated to higher levels are more likely to associate science with having a positive impact on society. In the UK, 72% of those with a university degree disagree with the statement, compared to 53% of those educated to lower secondary level or below.





#### Trust in information sources

Across the countries surveyed, the perceived reliability of information sources varies across academic disciplines. While the majority perceive experts in biology, medicine, chemistry, engineering and evolutionary science to be reliable, experts in political sciences, theology and philosophy are ranked considerably lower.

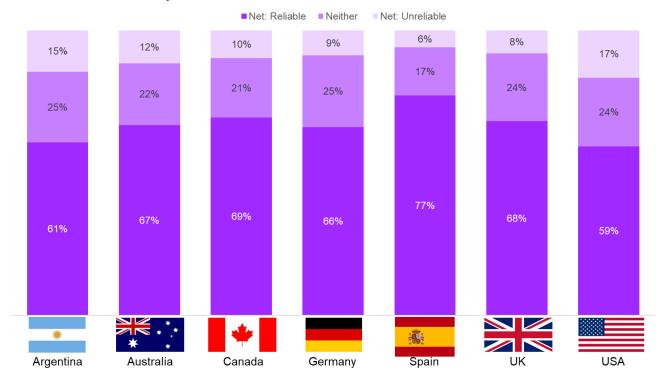
While this pattern remains consistent across each of the countries surveyed with what might be considered traditional sciences ranking highest in reliability, there are differences between countries. For example, those in the UK and Spain are the most likely to perceive experts in more traditional scientific or applied research disciplines to be reliable, with 90% of those in Spain and 85% of those in the UK seeing experts in biology as reliable, slightly higher than in other countries surveyed.

There is a similar picture when looking at evolutionary science, with those in Spain (77%) and Canada (69%) being most likely to perceive these experts as reliable compared to those in Argentina (61%) and the USA (59%). Those who identify as religious or spiritual are also less likely to identify experts in evolutionary science as reliable; for example, in the UK roughly three quarters (73%) of those who are not religious perceive them to be reliable, compared to three in five (63%) of those who are religious. That said, it is still the majority across both religious/spiritual and non-religious/spiritual groups who perceive experts in evolutionary science to be reliable.





Figure 19. How unreliable or reliable do you perceive experts in the following disciplines to be? – Evolutionary science

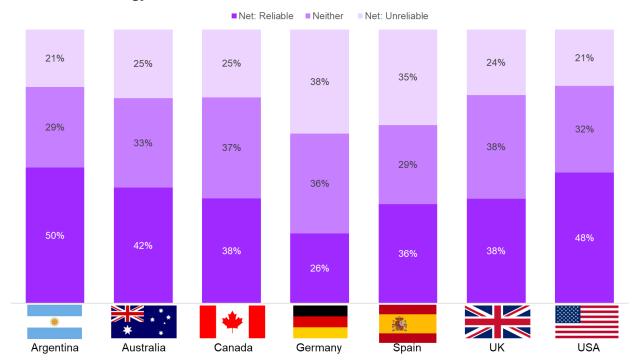


Argentina (50%), the USA (48%) and Australia (42%) display a higher likelihood to perceive experts of theology as reliable compared to all other countries, with Germany (26%) reporting the lowest likelihood. This is likely tied to these countries' higher likelihood of identifying as religious or spiritual; for example, in the UK half (50%) of those who are religious perceive experts in theology to be reliable, compared to around a quarter (27%) of those who are not religious.





Figure 20. How unreliable or reliable do you perceive experts in the following disciplines to be? - Theology



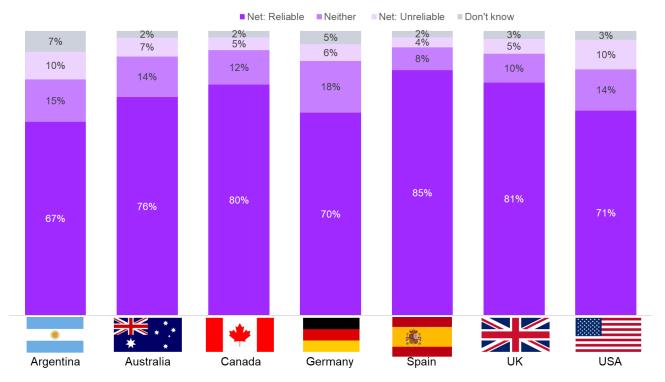
There are some variations when breaking down this data by demographic factors, for example, those on a higher income are more likely to perceive the traditional scientific disciplines as reliable, including evolutionary science. This is potentially reflective of those on a higher income being less likely to identify as religious or spiritual in each country, apart from in Germany where there is no difference by income and religious identity. Similarly, those with a lower education level are less likely to perceive experts in evolutionary science as reliable across all countries; for example, within the UK 57% perceive them to be reliable compared to three in four (75%) of those with a university degree or above. However, this is due to a higher proportion of those with a lower education level choosing the option 'They are neither reliable nor unreliable', as opposed to selecting that they are 'unreliable'.

Perceived reliability of the spokespeople across various information sources shows a similar picture to perceptions of the reliability of disciplines, with medical practitioners perceived as most likely to be reliable across each country. Similar to perceived reliability of the scientific disciplines, Spain (88%), the UK (81%) and Canada (81%) are most likely to perceive medical practitioners as reliable, while those in the USA (75%), Argentina (75%) and Germany (74%) are least likely to do so. There is a similar pattern for the perceived reliability of scientists and academics.





Figure 21. Now thinking generally about your perceptions of different sources of information, how unreliable or reliable do you perceive the following sources of information to be? - Scientists

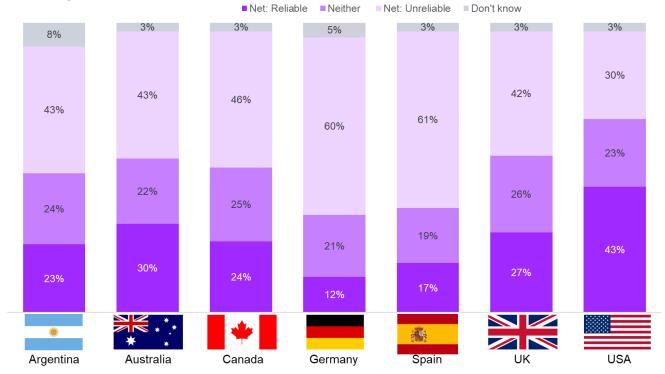


People in the USA (43%), Australia (30%) and the UK (27%) are most likely to perceive religious leaders or figures as reliable sources of information, while those in Argentina (23%) are less likely to perceive them as reliable despite Argentinian respondents being more likely to perceive experts of theology as reliable and having a higher likelihood of identifying as religious. People in Germany (12%) are the least likely to view religious leaders or figures as reliable, reflecting their lower perceptions of reliability towards theology and lower likelihood to identify as religious.





Figure 22. Now thinking generally about your perceptions of different sources of information, how unreliable or reliable do you perceive the following sources of information to be? – Religious leaders



When looking at differences by age, those aged 18-24 are more likely to perceive religious leaders as reliable in the UK (39% vs. 23% of those aged 65+). Further, there is a similar pattern among young people in Australia (38% of 18-24s vs. 28% of those aged 65+), Germany (19% 18-24s vs. 4% of those aged 65+) and the USA (53% of 18-24s vs. 38% of those aged 65+). However, this can partly be explained by younger age groups being more trusting of the sources of information in general across the board, as they are more likely to perceive academics and government officials as reliable in all countries listed.

Those who identify as religious or spiritual are also more likely to perceive religious leaders as reliable across each country; for example, in the UK four in ten (42%) who are religious or spiritual perceive them as reliable, compared to one in eight (12%) who are not religious nor spiritual.