Appendix A: Scaling and regression analysis

Nationalist, anti-immigrant and anti-minority views (NIM) scale and regression analysis

Dependent Variable (NIM score)

The NIM scale includes 22 individual questions that can be broadly classified into three groups — three questions on nationalism, seven questions on immigration and 12 questions probing views of religious minorities.

Because some topics contribute more questions to the scale than others, individual questions are weighted such that each topic area contributes equally to the NIM. For example, the NIM includes three questions on nationalism and 12 questions on religious minorities; to correct for this discrepancy, each question on nationalism was weighted up, while each question probing attitudes toward religious minorities was weighted down. Total scores are scaled from 0 to 10.

Each question is dichotomized as follows. Scores increase by the amount noted below if a respondent says …

Nationalism (each worth 1.11 points)
Cronbach's alpha = 0.61
Ordinal coefficient alpha = 0.72

1. It is very/somewhat important to have been born in [COUNTRY] to be truly [NATIONALITY] (e.g., to have been born in France to be truly French).

2. It is very/somewhat important to have [NATIONALITY] family background to be truly [NATIONALITY] (e.g., to have French family background to be truly French).

3. I completely/mostly agree with the statement, "Our people are not perfect, but our culture is superior to others."

Immigration (each worth 0.48 points)
Cronbach's alpha = 0.84
Ordinal coefficient alpha = 0.94

1. The number of immigrants to [COUNTRY] should be reduced.

2. Immigrants from Eastern Europe, such as those from Poland, are *not* hardworking.

3. Immigrants from the Middle East, such as those from Syria, are *not* hardworking.

4. Immigrants from Africa, such as those from Nigeria, are *not* hardworking.

5. Immigrants from Eastern Europe, such as those from Poland, are *not* honest.

6. Immigrants from the Middle East, such as those from Syria, are *not* honest.

7. Immigrants from Africa, such as those from Nigeria, are *not* honest.

Religious minorities (each worth 0.28 points)
Cronbach's alpha = 0.80
Ordinal coefficient alpha = 0.92

1. I am *not* willing, or don't know (or declined to answer) if I'm willing, to accept Muslims as neighbors.[1]

2. I am *not* willing, or don't know (or declined to answer) if I'm willing, to accept Muslims as family members.

3. I am *not* willing, or don't know (or declined to answer) if I'm willing, to accept Jews as neighbors.

4. I am *not* willing, or don't know (or declined to answer) if I'm willing, to accept Jews as family members.

5. I completely/mostly agree with the statement, "In their hearts, Muslims want to impose their religious law on everyone else in [COUNTRY]."

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[1] Further analysis of the data shows that those who do not give a clear response are more similar in their characteristics to those who say they are not willing than those who say they are willing.

6. I completely/mostly agree with the statement, "Due to the number of Muslims here, I feel like a stranger in my own country."

7. I completely/mostly agree with the statement, "Jews always overstate how much they have suffered."

8. I completely/mostly agree with the statement, "Jews always pursue their own interests and not the interest of the country they live in."

9. Islam has teachings that promote violence.

10. All/most/many Muslims in the country support violent extremist groups

11. Muslim women who live in the country should not be allowed to wear *any* religious clothing.

12. Islam is fundamentally incompatible with the country's culture and values.

For all 22 questions
Cronbach's alpha = 0.88
Ordinal coefficient alpha = 0.95

For logistic regression analysis, the NIM score was dichotomized as follows:

NIM score of 0 to 5 = 0.

NIM score of 5.01 to 10 = 1.

Independent variables

1. Age (1 = ages 18-34; 0 = 35+/don't know/refused)
2. Education (1 = College educated or more; 0 = Less educated/don't know/refused)
3. Gender (1 = Men; 0 = Women)
4. Religious affiliation and observance:
   a. Defined using church attendance: Each of the following categories was coded as a dummy variable.
      i. Christians who attend church monthly or more

    ii.   Christians who attend church no more than a few times a year

    iii.   Other religion/don't know/refused

    iv.   Religiously unaffiliated adults (used as the reference category)

   b. Defined using an index of religious commitment. (See details on creation of religious commitment index in Chapter 3 and results of the NIM regression using the religious commitment index on page 162.) Each of the following categories was coded as a dummy variable.

    i.   Highly committed Christians

    ii.   Christians with moderate levels of commitment

    iii.   Christians with low levels of commitment

    iv.   Other religion/don't know/refused

    v.   Religiously unaffiliated adults (used as the reference category)

5. Political ideology: Recoded from seven-point scale.[2] Each of the following categories was coded as a dummy variable:

    i.   Left (0 to 2 on a seven-point scale; used as the reference category)

    ii.   Center (3 on a seven-point scale)

    iii.   Right (4 to 6 on a seven-point scale)

    iv.   Don't know/refused

6. Satisfaction with the direction of the country today (1 = Satisfied with the way things are going in this country; 0 = Dissatisfied/don't know/refused).

7. Evaluation of personal economic situation as good (1 = Describes their personal economic situation as very or somewhat good; 0 = Describes their personal economic situation as somewhat or very bad/don't know/refused).

8. Self-assessed knowledge about the Muslim religion and its practices (1 = Knows a great deal/some; 0 = Does not know very much/nothing at all/don't know/refused).

9. Self-assessed knowledge about the Jewish religion and its practices (1 = Knows a great deal/Some; 0 = Does not know very much/nothing at all/don't know/refused).

10. Personally knows a Muslim (1 = Yes, know someone who is Muslim; 0 = No, do not know someone who is Muslim/don't know/refused).

11. Personally knows a Jewish person (1 = Yes, know someone who is Jewish; 0 = No, do not know someone who is Jewish/don't know/refused).

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[2] As an experiment, the survey asked two different questions on political ideology: half the sample in France, Germany and the UK received a political ideology scale ranging from 0 to 6; the other half received a scale ranging from 1 to 7. The responses to the two scales showed minor differences, but for the purposes of this analysis the scale ranging from 1 to 7 was similarly grouped into left (1 to 3), center (4) and right (5 to 7).

12. All their close friends belong to their religion (1 = All their friends have the same religion as them; 0 = Most/some of them/hardly any of them/none of them/don't know/refused).

13. The country in which the interview was conducted in also was factored into the analysis. (Each country was coded as a dummy variable; UK was used as the reference category.)

Multicollinearity

Multicollinearity occurs when independent variables in a multiple regression model are highly correlated with one another, such that it is difficult to disentangle the independent effects of each item on a dependent variable. While there is correlation between variables included in these models, after running multiple tests, multicollinearity is not a significant concern for the model.

Alternative regressions

While this report shows results based on logistic regression models, we also tested the results using alternative regression techniques including:

- Ordinary least squares and Poisson regression on the unweighted 22-point NIM scale and on the weighted 10-point NIM scale.

- Ordered logistic regression for three variations of the weighted 10-point NIM scale: high, medium, and low NIM scores set at the 25-25-50 percentiles, 25-50-25 percentiles, and 33-33-33 percentiles.

- Nested modeling to account for country differences.

Key findings of the report are largely consistent across these models.

Religious commitment

This report frequently shows results based on religious services attendance. Christians who say they attend religious services monthly or more are categorized as church-attending, while those who attend no more than a few times a year are categorized as non-practicing.

In addition, statistical models presented in the study were tested using a more robust religious commitment scale/index combining four standard measures of religious engagement: belief in God, frequency of prayer and religious service attendance, and how important the respondent says religion is to their life.

Each of the four measures of religious engagement is recoded into three categories as follows:

1. Religious services attendance, aside from wedding and funerals (1 = More than once a week/once a week/once or twice a month; 0 = A few times a year/don't know/refused; -1 = Seldom/never,).

2. Religion's importance in the respondent's life (1 = Very important; 0 = Somewhat important/don't know/refused; -1 = Not too/not at all important).

3. Belief in God (1 = Absolutely certain belief in God; 0 = Fairly certain belief in God/not too certain/not at all certain/don't know/refused; -1 = Does not believe in God). Note that Muslims were not asked about belief in God – Muslim respondents are coded in the middle category for this question.

4. Frequency of prayer (1 = More than once a day/once a day; 0 = Occasionally/don't know/refused; -1 = Seldom/never).

Cronbach's alpha = 0.86

Ordinal coefficient alpha = 0.914.

Each respondent's religious commitment value was added and then subdivided into three categories: Low (-4 to -2), medium (-1 to 1), and high religious commitment (2 to 4). Excluding belief in God or adjusting the cut-point for religious service attendance (from monthly to weekly) made little difference to the overall distribution of the scale or its relationship to relevant dependent variables.

NIM regressions using religious commitment scale

The logistic regression model calculating predicted probability for scoring above 5 on the NIM scale was also tested using the religious commitment index. The results were nearly identical to the model that used church attendance as a proxy for religious commitment:

Change in predicted probability for scoring above 5 on the NIM scale using the religious commitment index as the dependent variable

Independent Variables	Change in predicted probability
Right-wing political ideology (vs. left)	+35
Christians with moderate levels of commitment (vs. unaffiliated)	+16
Christians with low levels of commitment (vs. unaffiliated)	+14
Highly committed Christians (vs. unaffiliated)	+12
Don't know/refused political ideology (vs. left)	+12
Political ideology at the center (vs. left)	+10
Male	+7
All friends belong to same religion as the respondent	+6
Familiar with Islam	+4
Young (ages 18 to 34)	-3
Familiar with Judaism	-5
Personal economic situation good	-5
Know a Jewish person	-7
Satisfied with country direction	-7
College educated (vs. less education)	-15
Other/don't know/refused religious identity	-16
Know a Muslim	-19

Note: The number shown is the difference in predicted probability of scoring above 5 on the 10-point Nationalist, anti-Immigrant and anti-Minority (NIM) scale, after controlling for other factors. Individual effects of each country are taken into account. Roughly 1,800 respondents across all 15 countries did not provide a political ideology.
Source: Survey conducted April-August 2017 in 15 countries. See Methodology for details.
"Being Christian in Western Europe"

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Attitudes toward religion scale/spirituality scale

The survey asked respondents if they agree or disagree with a battery of four statements about religion and four about spirituality. Responses are recoded such that negative views toward religion or spirituality are coded as -1, positive views as +1, and don't know or refused responses are coded as 0.

Attitudes toward religion

Cronbach's alpha = 0.65

Ordinal coefficient alpha = 0.77

1. Religion gives meaning and purpose to my life (1 = Completely/mostly agree; -1 = Mostly/completely disagree; 0 = Don't know/refused).

2. Religion helps me choose between right and wrong (1 = Completely/mostly agree; -1 = Mostly/completely disagree; 0 = Don't know/refused).

3. Overall, religion causes more harm than good (-1 = Completely/Mostly agree; 1 = Mostly/completely disagree; 0 = Don't know/refused).

4. Science makes religion unnecessary in my life (-1 = Completely/mostly agree; 1 = Mostly/completely disagree; 0 = Don't know/refused).

Spirituality

Cronbach's alpha = 0.65

Ordinal coefficient alpha = 0.78

1. I have a soul as well as a physical body (1 = Completely/mostly agree; -1 = Mostly/completely disagree, 0 = Don't know/refused).

2. I feel a connection to something that cannot be seen or measured scientifically (1 = Completely/mostly agree; -1 = Mostly/completely disagree, 0 = Don't know/refused).

3. When people die, that is the end; there is no life after death (-1 = Completely/mostly agree; 1 = Mostly/completely disagree; 0 = Don't know/refused).

4. There are no spiritual forces in the universe, only the laws of nature (-1 = Completely/mostly agree; 1 = Mostly/completely disagree; 0 = Don't know/refused).

An additive scale for each set of statements resulted in two nine-point scales, which were then subdivided into negative views toward religion/rejecting of spirituality (-4 to -2), mixed views

toward religion/spirituality (-1 to 1), and positive views toward religion/embracing of spirituality (2 to 4).

Eastern, New Age or folk beliefs and practices scale

Cronbach's Alpha = 0.66

Ordinal coefficient alpha = 0.80

The survey also asked about a variety of beliefs and practices that are often associated with Eastern, New Age or folk religions. These include:

1. Belief in the "evil eye", the idea that certain people can cast curses or spells that cause bad things to happen to someone (1 = Yes; 0 = No/don't know/refused).

2. Belief in reincarnation, that people will be reborn in this world again and again (1 = Yes; 0 = No/don't know/refused).

3. Belief in fate, the idea that the course of your life is largely or wholly preordained (1 = Yes; 0 = No/don't know/refused).

4. Belief in spiritual energy located in physical things, such as mountains, trees or crystals (1 = Yes; 0 = No/don't know/refused).

5. Belief in yoga, not just as exercise, but as a spiritual practice (1 = Yes; 0 = No/don't know/refused).

6. Belief in astrology, the idea that the position of the stars and planets can affect people's lives (1 = Yes; 0 = No/don't know/refused).

7. Meditate (1 = Yes; 0 = No/don't know/refused).

8. Consult the horoscope, tarot cards or see a fortune teller (1 = Yes; 0 = No/don't know/refused).

Individual items were added to a nine-point scale and then subdivided into high (scores of 6, 7, 8), moderate (3, 4, 5), and low (0, 1, 2) levels of engagement with alternative beliefs and practices.