Young people: are they less religious than older people and are they less religious than they used to be?

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From a western perspective, we tend to assume that older people are more religious than younger people, and that people in general are less religious than they used to be. This study aims to give a considerably wider view of these questions by looking at comparable data from countries around the world. The recent waves of the World Values Survey (WVS) covered 84 countries in all between 1995 and 2004, with several African and Muslim countries being included for the first time. Trends of religiosity of young people over time were examined for 61 countries which were covered in at least two rounds of the WVS and/or the European Social Survey (ESS) waves of 2002, 2004 and 2006 (Jowell et al, 2003, 2005, 2007).

Why focus on young people?

It is a truism that the young people of an organisation today are the leaders and members of tomorrow. We might extrapolate that if religion holds little appeal to the young people of today then we could expect overall religious attendance to shrink in the future. Consequently, current participation rates of young people can give an indication of the health and outlook of a religion (or any other organisation or movement).

There is also a technical reason for focussing on a single age band when looking at changing attendance rates. The structure of any population is changing: in developed countries the population pyramid is no longer a pyramid but a distribution with a middle aged bulge – the legacy of the Baby Boom generation. As this population continues to age, the pyramid will become inverted in the coming decades. What are the implications of this when looking at religious participation? If religious attendance becomes more likely with increasing age (an effect described by Argue, Johnson and White, 1999 and hypothesised by Barro and McCleary, 2003), then one would expect increasing overall religiosity in an ageing society. A better indicator of the evolving appeal of religion to a society is to look at a single age group, therefore.

In this study "young people" are defined as those under 30 at the time they were interviewed. In both the WVS and ESS, respondents had to be over 15 and for many countries the minimum age limit was 18.

What is the definition of religious?

Previous surveys and studies have looked at a number of different measures of an individual's level of religiosity, eg. ascribing to a particular faith or denomination; belief in God or a higher power; frequency of private prayer; influence of religious beliefs on daily life; and frequency of attendance at religious services. Argue et al (1999), who looked at a number of these found a high, though not perfect, correlation between the different measures.

This study looks at a single measure of religiosity - attendance at religious services. Both the WVS and the ESS questioned respondents on how often they attended religious services with possible answers categorised from more than once a week to never (see Appendix 1 for the exact wording and answer options of the WVS and ESS). This study then made a dichotomised respondents as either "Attenders" if they said they attended religious services at least once a month, or "Non-attenders" if they attended less frequently.

The WVS, in its original form as the European Values Survey, was designed from a traditional Christian perspective, and the questions, such as "How often do you attend religious services?" reflect that background. Attending a formal "service" is considered an indicator of religious involvement. The practices of other faiths and the less formal Christian meetings of today were not considered when the original questionnaire was designed. With subsequent waves of the WVS – and then subsequent surveys such as the ESS – it was considered simpler for comparative purposes to keep the original wording than modify it.

It is important to note that this study does not differentiate between religions: regular attendance at a religious service of whatever faith or denomination categorisers a respondent as an "Attender".

It is also important to note that the comparisons made in this paper look at self-reported attendance patterns. It is to be expected that respondents may give answers that they consider the interviewer would consider "correct". For this reason, in countries where high attendance is the norm, actual attendance may be over-reported; in contrast, in countries where attendance is rare or discouraged (China perhaps), actual attendance may be under-reported.

How do attendance rates in this study compare with other studies?

Other studies of church attendance have attempted to count the number of people attending church services on a particular Sunday (eg. Brierley, 2000). This study, in contrast, looks at self-reported attendance at any religious service, of whatever faith, with a frequency of at least once a month. It is not surprising that the proportion of "Attenders" found in this survey is higher than that seen in Brierley's survey. He found in the English Church Attendance Survey that less than 8% of the British population attended a church service on a particular Sunday in 1998. In contrast, the WVS data for Great Britain in 1999 gave nearly 19% of the population being attenders with a frequency of at least once a month. Of the British WVS sample in 1999, 14.5% of all respondents claimed to attend Christian services (Protestant, Roman Catholic, Free church, non-denominational church and Orthodox) at least monthly and 10.5% at least weekly. It would, therefore, appear that just looking at the Christian sub-sample, self-reported attendance rates in Britain are higher than those found by attempting to count people actually in church. Of the WVS attenders who practice non-Christian religions, over half are classified as "other" religions (a surprisingly high proportion), with the rest split roughly equally between Muslim, Hindu, Buddhist and Jewish faiths.

Young people (under age 30) in particular will tend to be irregular, even if relatively committed, attenders. They will often be occupied, on any particular Sunday, with

other distractions (eg. working, travelling, caring for small children). It is therefore considered that self-reported attendance better reflects the commitment level of this age group, whereas a head count may under-estimate it.

Data sources

Individual level data from two different multi-country social surveys were used in this study. The World Values Survey, which started as the European Values Survey in 1981, was the primary source of information. In its two most recent waves (most of which were completed in 1995-1997 and 1999-2001), a total of 84 countries were surveyed. These included, for the first time, several African, Asian, ex-communist and Muslim countries. In the wave of 1990, several South American and other Asian countries were included and their trends can now be seen.

The sample sizes of the WVS are not large; for example a total of 1000 individuals were interviewed in China, 2002 in India and 1200 in the United States in the latest wave, but of these only 194, 543 and 316 fell into the under-30 category respectively. Although these are probably representative of the population structure of each country, the numbers involved are rather small when determining proportions of attenders within those categories.

Data from 26 countries is available for at least one wave of the ESS, and all but one of these (Cyprus) previously participated in the WVS. The ESS sample sizes are a little larger than the WVS, generally being around 2000, and the under-30s number around 400-500. See Appendix 2 for an assessment of confidence limits for different observed attendance rates for the sample sizes typical of the WVS and ESS.

Both the WVS and ESS attempt to interview a representative random sample of the population of the countries in question. Individual-level weights are assigned to balance for the different individual's characteristics: these were applied in the regression analyses. At each wave of the WVS and ESS a new random sample is selected: these are repeated cross-sectional studies, not longitudinal surveys using the same respondents in each wave. Therefore, if we see that, for example, 30% of responders are attenders in one year and 30% are a decade later, we cannot know whether these are the same people who have stayed attenders over the whole period, or whether attrition has been balanced by new attenders.

Are young people less religious than older people?

This question can be expressed in two different forms. The first is: at a particular point in time and in a specific country, are older people more religious than younger people? The second is slightly different: do people in general become more religious as they get older?

With the data sets available we can look at both of these questions. Firstly the proportion of older respondents (aged 50 and over) who are regular attenders is compared to the proportion of young respondents (under 30s) who are attenders. The most recent WVS data available for 84 countries worldwide was used for this comparison.

The second question on whether people increase their level of religiosity over time because of their increasing age is investigated in three ways. Firstly a regression analysis was carried out to determine the observed increase in religiosity by age across eight western European countries in the 3 WVS waves and third ESS wave. Secondly trends in religious attendance for different cohort bands ("generations") were plotted graphically. Thirdly, to try to tease out the different influences of cohort and age, a multi-factor analysis was carried out for a small set (7-10) of western European countries.

Worldwide comparison of religiosity with age

When we look at the proportion of people who regularly attend religious services, we find a huge variation between countries, from almost none to almost universal involvement. Table 1 ranks the surveyed countries by the following three criteria: percent of young people (15-29) who were attenders; percent of older people (50+) who were attenders; and the ratio of attendance rates of old people versus young people.

To answer the question as to whether young people are less religious than older people, we see that although this is generally the case (in 76 out of 84 countries), the pattern is not universal. The countries where attendance rates for young people are higher for young people than old are Georgia (where the ratio is almost 2 to 1!), Armenia, Zimbabwe, Bosnia-Herzegovina, Uganda, Bulgaria, Philippines and Nigeria.

To attempt to make some generalisations according to attendance levels and the ratio of old to young attenders, certain country groupings were made, mostly on a geographical basis, although predominantly Muslim countries were also grouped together.

From Table 1 we see that there are two country groupings where attendance rates of the young are roughly equal to or even exceed those of older people - the African and Balkan countries. The African countries surveyed (Zimbabwe, Uganda, Nigeria, Tanzania and South Africa) are all categorised by high attendance rates of both young and old people – between 67 and 95%. The Balkan countries (Bosnia-Herzegovina, Croatia, Serbia, Montenegro, Macedonia and Albania) are another group where attendance rates were similar across all ages, although the absolute levels were much lower than in the African countries. Some other ex-communist countries of eastern Europe and ex-USSR – but not all – also have low differentials between young and old attendance rates, though again the actual rates vary widely. Georgia and Armenia have considerably higher attendance rates for the young than old. Estonia is at the opposite extreme, being much more like its Scandinavian neighbours, where the rate for young people (less than 5%) is about a quarter that for older people. For many of the old eastern bloc countries the majority religion is Christian Orthodox.

The countries of western Europe, and especially the Scandinavian (traditionally Protestant) countries, have high age differentials in attendance rates. The Catholic countries of Malta, Northern Ireland and Portugal, where overall rates are high, show the lowest differentials.

Colour coding of country groupings
Scandinavia
Western Europe
Eastern Europe
Balkans
Ex-USSR
Asia, Australasia
Americas
Africa
Muslim

Sorted by proportion of young who are attenders	% young who are attenders	Sorted by proportion of old who are attenders	% old who are attenders	Sorted by ratio of old/young attenders	Ratio old/young	Year of survey
Japan	2.4	China	3.0	Japan	7.08	2000
China	2.6	Russian Fed	13.0	Switzerland	4.35	1996
Estonia	4.7	Sweden	14.0	Estonia	3.77	1999
Iceland	5.1	Norway	16.4	Iceland	3.45	1999
France	5.2	Japan	17.0	Denmark	3.38	1999
Denmark	5.3	France	17.1	France	3.29	1999
Finland	6.5	Iceland	17.6	Finland	3.18	2000
Russian Fed	6.7	Estonia	17.7	Spain	2.96	2000
Sweden	6.7	Denmark	17.9	Netherlands	2.95	1999
Belarus	8.5	Viet Nam	17.9	Greece	2.87	1999
East Germany	8.9	Czech Rep	18.4	Belgium	2.78	1999
Switzerland	9.1	East Germany	18.4	Belarus	2.68	2000
Czech Rep	9.5	Montenegro	18.7	Hungary	2.64	1999
Norway	9.7	Georgia	19.6	Luxembourg	2.39	1999
Azerbaijan	10.1	Ukraine	19.6	Azerbaijan	2.32	1997
Hungary	10.1	Latvia	20.3	West Germany	2.09	1999
Viet Nam	11.0	Lithuania	20.3	Sweden	2.09	1999
Latvia	11.1	Finland	20.7	East Germany	2.07	1999
Lithuania	11.1	Bulgaria	22.3	Austria	2.04	1999
Ukraine	11.8	Belarus	22.8	Canada	2.03	2000
Great Britain	12.1	Taiwan	23.1	Rep Moldova	2.00	2002
Netherlands	13.4	Serbia	23.2	Great Britain	1.99	1999
Belgium	14.3	Azerbaijan	23.4	Russian Fed	1.94	1999
Montenegro	14.5	Great Britain	24.1	Czech Rep	1.94	1999
Taiwan	16.5	Armenia	26.6	Ireland	1.89	1999
New Zealand	18.2	Hungary	26.7	Latvia	1.83	1999
Uruguay	18.2	New Zealand	27.5	Lithuania	1.83	1999
Spain	18.3	Uruguay	27.9	Romania	1.73	1999
Serbia	18.9	Australia	29.5	Norway	1.69	1996
Greece	19.1	Kyrgyzstan	32.2	Ukraine	1.66	1999
Luxembourg	19.9	Macedonia	36.5	Jordan	1.66	2001
Rep Moldova	21.4	Albania	37.4	Venezuela	1.64	2000
Kyrgyzstan	22.3	Slovenia	38.7	Viet Nam	1.63	2001
Australia	22.5	Iraq	39.2	Morocco	1.62	2001
Canada	22.9	Netherlands	39.5	Italy	1.62	1999
West Germany	22.9	Switzerland	39.6	Slovenia	1.61	1999
Bulgaria	23.0	Belgium	39.8	Chile	1.60	2000
Slovenia	24.1	Rep Moldova	42.8	Slovakia	1.59	1999
Albania	24.8	Rep Korea	42.9	Portugal	1.58	1999
Austria	25.2	Bosnia/Herz	43.2	Uruguay	1.53	1996
Macedonia	28.0	Egypt	46.3	Iran	1.53	2000
Armenia	30.9	Canada	46.6	Algeria	1.52	2002
Iraq	32.0	Singapore	47.3	New Zealand	1.51	1998
Argentina	33.9	Luxembourg	47.5	Albania	1.51	2002
Rep Korea	33.9	West Germany	47.9	Argentina	1.47	1999
Romania	33.9	Saudi Arabia	48.6	Kyrgyzstan	1.44	2003
Georgia	35.8	Argentina	50.0	United States	1.41	1999
Chile	36.3	Turkey	50.3	Taiwan	1.40	1994
Turkey	36.6	Austria	51.3	Turkey	1.37	2001
Portugal	37.5	Spain	54.1	Northern Ireland	1.34	1999
Venezuela	37.7	India	54.8	Dominican Rep	1.31	1996
Jordan	39.7	Greece	54.9	Australia	1.31	1995
Italy	40.0	Croatia	55.9	Macedonia	1.30	2001
Slovakia	40.5	Chile	57.9	Montenegro	1.29	2001
Iran	40.7	Romania	58.7	Puerto Rico	1.28	2001
Saudi Arabia	41.3	Portugal	59.1	Rep Korea	1.27	2001
Morocco	41.7	Venezuela	61.8	Bangladesh	1.26	2002
Singapore	41.7	Iran	62.1	Peru	1.24	2001
Algeria	42.9	Slovakia	64.2	Serbia	1.23	2001
Egypt	43.9	Italy	64.6	Iraq	1.23	2004
Bosnia/Herz	46.1	Algeria	65.1	Saudi Arabia	1.18	2003
United States	47.2	Jordan	65.9	Mexico	1.18	2000
Ireland	47.6	United States	66.6	Colombia	1.16	1998
India	49.0	Morocco	67.7	China	1.15	2001
Croatia	49.8	Dominican Rep	72.7	South Africa	1.15	2001
Dominican Rep	55.3	Colombia	72.9	Indonesia	1.14	2001
Northern Ireland	55.5	Northern Ireland	74.3	Malta	1.14	1999
Bangladesh	60.2	El Salvador	75.4	Singapore	1.13	2002
Puerto Rico	60.7	Zimbabwe	75.9	Croatia	1.12	1999
Peru	62.8	Bangladesh	76.1	India	1.12	2001
Colombia	63.1	Brazil	76.3	El Salvador	1.11	1999
South Africa	67.0	South Africa	77.0	Pakistan	1.10	2001
El Salvador	67.8	Puerto Rico	77.5	Poland	1.09	1999
Indonesia	68.5	Peru	77.8	Egypt	1.05	2000
Mexico	70.4	Indonesia	78.3	Brazil	1.04	1997
Brazil	73.6	Philippines	78.4	Tanzania	1.02	2001
Poland	74.2	Poland	81.0	Nigeria	0.99	2000
Philippines	79.3	Uganda	81.8	Philippines	0.99	2001
Malta	80.4	Mexico	82.8	Bulgaria	0.97	1999
Zimbabwe	82.5	Tanzania	87.1	Uganda	0.95	2001
Tanzania	85.0	Ireland	89.8	Bosnia/Herz	0.94	2001
Uganda	86.0	Malta	91.5	Zimbabwe	0.92	2001
Pakistan	86.8	Nigeria	94.4	Armenia	0.86	1997
Nigeria	95.4	Pakistan	95.4	Georgia	0.55	1996

Table 1: Proportion of young people (under 30s) and older people (50+) who were attenders and ratio of old to young attendance rates

The Muslim countries exhibit an intermediate position, with attendance generally more common among older people compared to younger people, though the differentials are not especially marked. Attendance rates are generally high – between 32% (young people in Iraq) to 95% (older people in Pakistan).

In both Japan and China, attendance at religious services is rare. However, the age differential in Japan is very high (just 2% of the young compared to 17% of older people) while in China it is very low (approximately 3% of all age groups are attenders). The countries of North and South America show intermediate age differentials, with many having relatively high attendance rates.

To conclude, although the general pattern seen in stable western democracies is of older people being more religious than younger people, this is by no means universal. There is much less differential seen in the countries of sub-Saharan Africa, and a number of ex-communist states also have high participation of the young compared to the old.

Western European age-religiosity model

To attempt to construct a general model of the different levels of religiosity with age, data from eight western European countries was combined. The countries included were those for which data was available in the WVS waves of 1981-2, 1990, 1999 and ESS wave 3 in 2006. These were Germany, Denmark, France, Great Britain, Italy (ESS wave 2), Netherlands (ESS wave 2), Norway (no data for WVS 1999) and Sweden. All these have had roughly stable religiosity levels for the different cohorts over the period in question (see next section).

A binary logistic regression analysis was performed considering the odds of an individual being an "Attender" or not (results are given in Appendix 3). The four survey waves were analysed separately with three variables included: country, age band and gender. When doing an investigative forward stepwise regression, the primary determinant was country of residence, with age band and gender being less significant determinants.

A summary graph of relative religiosity by age is given in Figure 1. Note that the age bands are not equal in length. This permits a closer investigation of the apparent trough in the 20s age group. In three of the four surveys a minimum level of religiosity was seen in the early to mid-twenties age bands. The line for the WVS 1990 data has a similar curve, though it does not reach such a low minimum.

From this graph, it is clear that for the countries in question, people aged 70 and over are between 2.5 and 4.5 times as likely to be attenders than are people in their late teens. Can we therefore assume that people in general (or at least those in western Europe) become more religious as they get older?

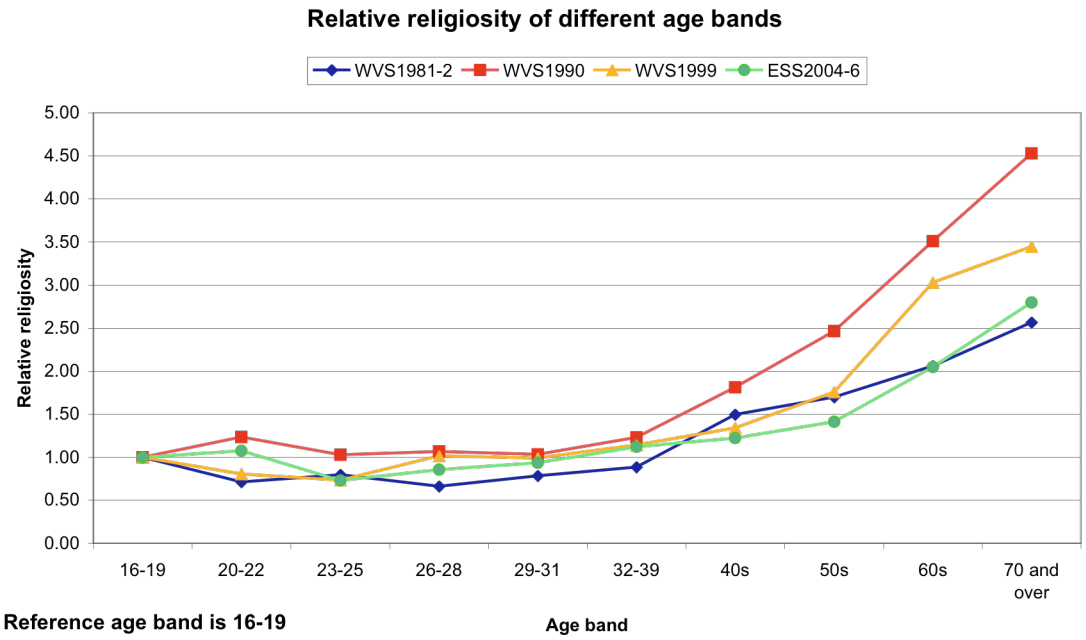

Figure 1: Relative religiosity of different age bands for 8 western European countries

Trends in religiosity of different cohorts

For countries which were part of the three main WVS rounds and the latest ESS round of 2006, then the evolution of religiosity for different cohorts over 25 years can be observed. If people do get more religious as they get older, then we would expect to see an upward trend in the attendance levels of each cohort over this time period. A total of 13 countries have data available that cover most of this time period (at least 3 survey rounds).

Respondents were classified into 10-year cohort groups. Four of these groups are studied in this section: those born in the 1960s (and therefore under 21 in 1981 and so the youngest group available for study; these people were aged 37-46 in 2006); those born in the 1950s, 1940s and 1930s. The following graphs (Figures 2-5) show the evolution of attendance rates of those cohorts from 1981 to 2006.

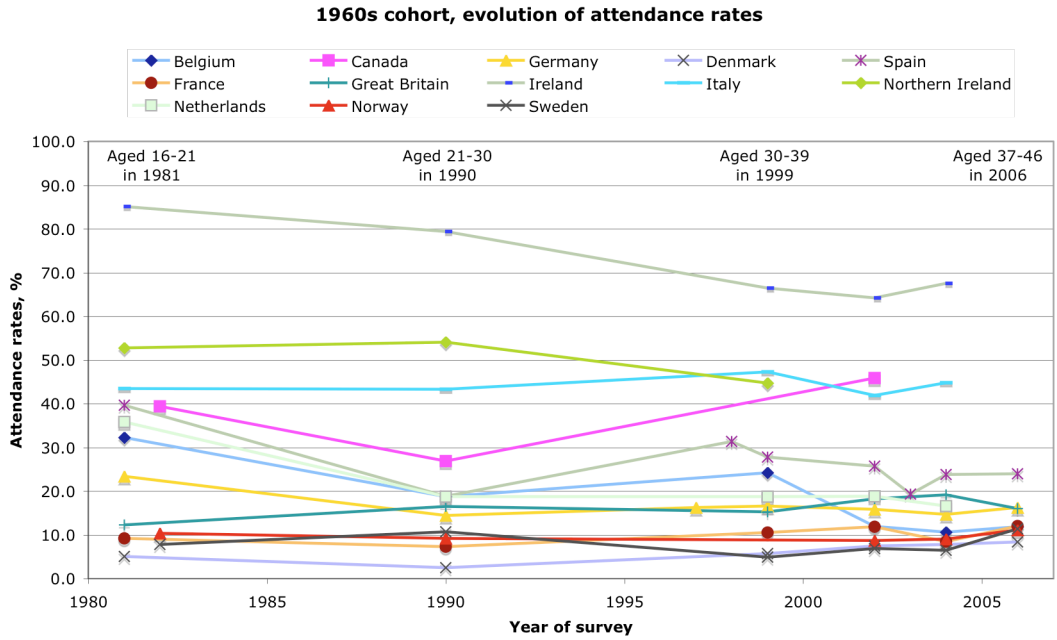

Figure 2: Evolution of attendance rates of 13 countries, 1960s cohort

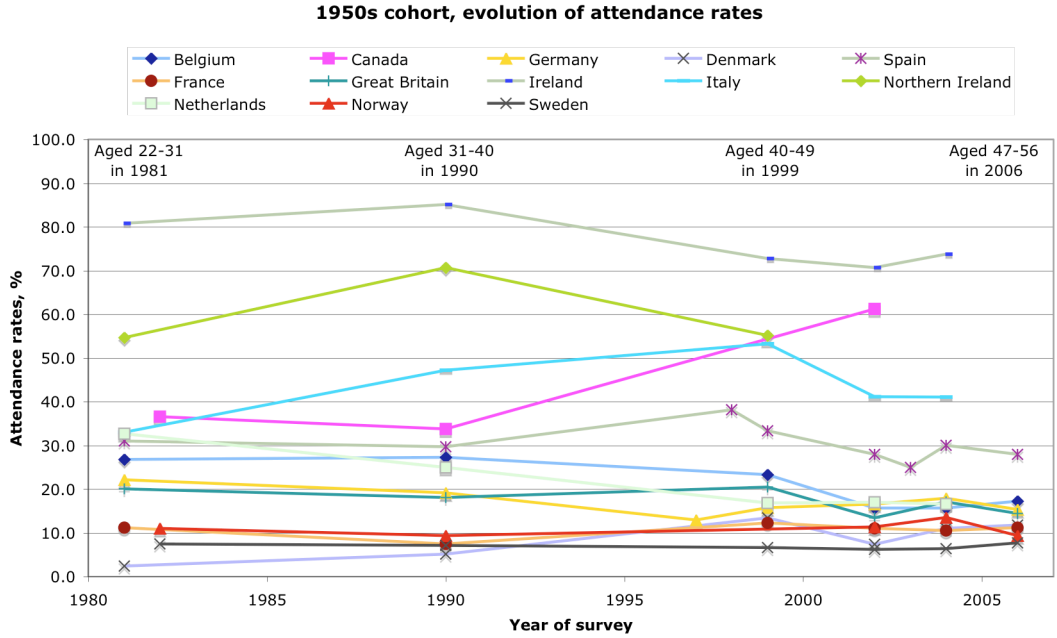

Figure 3: Evolution of attendance rates of 13 countries, 1950s cohort

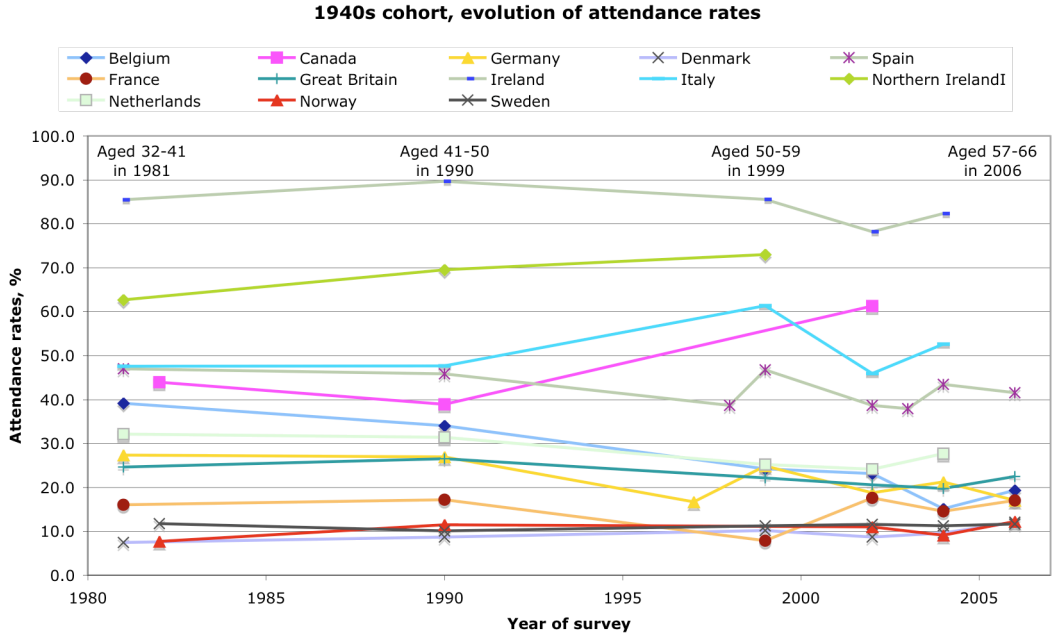

Figure 4: Evolution of attendance rates of 13 countries, 1940s cohort

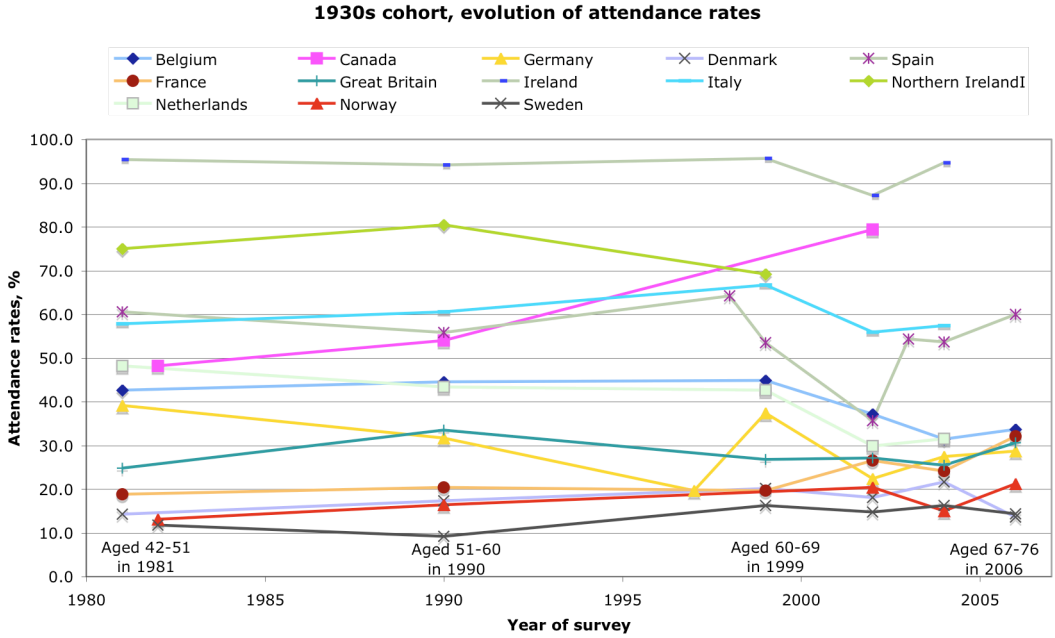

Figure 5: Evolution of attendance rates of 13 countries, 1930s cohort

From a qualitative examination of the these graphs, it would not appear that there is a systematic increase in religiosity over time for any particular cohort in this group of countries. However, what is clear from these graphs is that the cohorts of successively earlier decades are more religious than cohorts born more recently (ie. the lines in Figure 5, plotting the 1930s cohort, are noticeably higher up the graph than those in Figure 2 which plots the 1960s cohort).

There are various ups and downs for different countries and different cohorts; however, the overall impression is one of stability in the level of religiosity of a

particular cohort in a particular country over time. One might assume that attenders generally stay as attenders over a long period of time – or if this is not the case, then at least net losses are balanced by net gains.

There is one notable exception to the general rule of stability over time, and that is the fall in religiosity of the 1960s cohort between 1981/2 and 1990 in 9 out of the 13 countries. This is followed in 7 out of the 13 countries by a slight to moderate rise by the end of the 1990s. This trough is not mirrored by the cohorts of earlier generations (1950s, 1940s, 1930s), so it would appear to be likely due to an "age" effect rather than a "period" effect. The 1960s cohort were 21 and under in 1981, 21-30 in 1990 and 30-39 in 1999. Therefore, it would appear that that particular generation passed through a trough in religiosity in their 20s, although in many countries, if not all, it was recouped as they reached their 30s.

So do people become more religious as they get older?

The previous graphs merely give the visual impression that there does not, in general, appear to be an increase in religiosity with age. To give more mathematical rigour to this observation, and to attempt to identify the different influences of age, cohort and period, a binary logistic regression analysis was carried out using data sets from seven, eight and 10 different countries. The group of seven countries (Belgium, Germany, Denmark, France, Britain and Norway) comprises those that have seen little change in religiosity for each cohort over the 25 year period – they also have relatively low attendance rates. The group of 8 was those plus countries plus Italy; the group of 10 added Spain and Belgium too – these three had initially higher attendance rates. Italy has experienced some fall in overall religiosity, Spain even more and Belgium a most marked decline across all cohorts. Including these extra countries could add a confounding factor when trying to separate cohort and age influences. The results are given in Appendix 4.

The conclusions from this are not surprising and are as follows. A respondent's country is the primary determinant of a person's religiosity (only Denmark and Sweden are not significantly different from each other). Successively more recent cohorts are each less religious than previous ones (see Figure 6 below – note that the youngest cohorts are on the left of the x-axis). However, for the set of seven low attending countries, there has been no further decline in religiosity with the cohorts born after 1970. Clearly the biggest wave of secularisation happened between the cohorts born in the 1920s and those born in the 1950s.

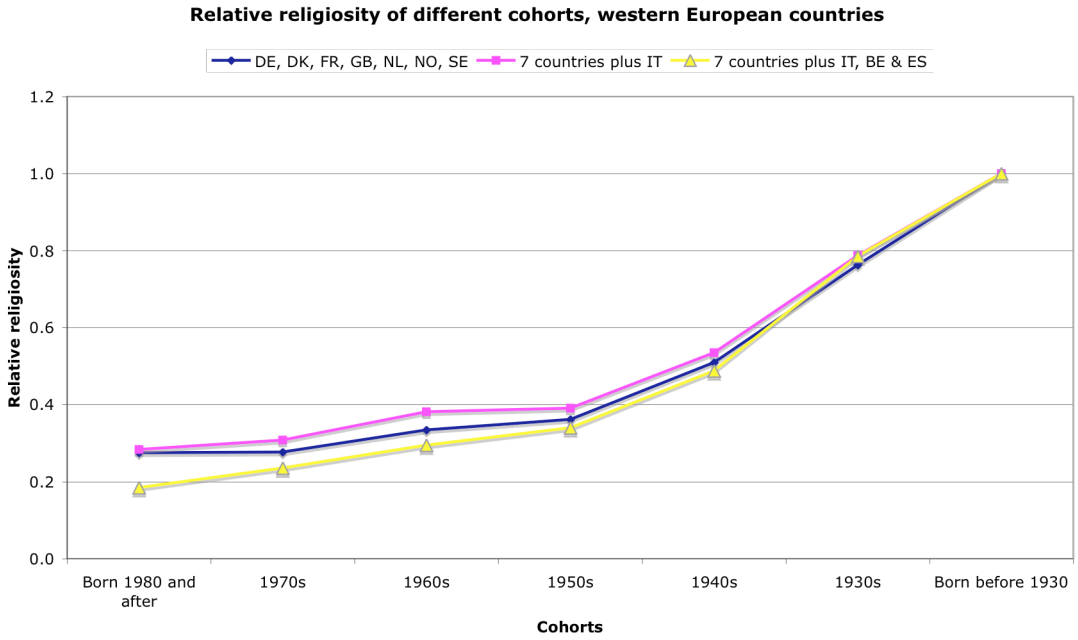

Figure 6: Relative religiosity of different cohorts for different country groupings (the reference cohort group is those born before 1930)

Looking at the age effect, there is a small but statistically significant trough in religious attendance in the 23-25 year age band whichever country combinations we use (see Figure 7). This fall is then recouped at higher ages.

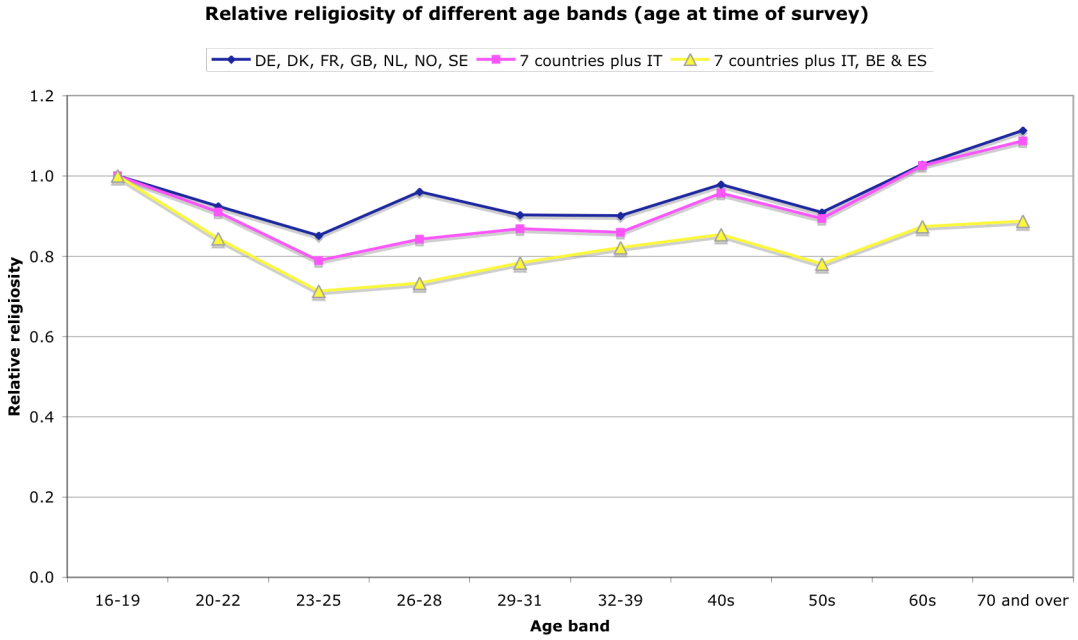

Figure 7: Relative religiosity of different age bands for different country groupings (the reference age band is 16-19 year olds)

Looking back at Figures 2-5, it would appear that after a cohort reach their 30s in age, there is no dominant trend, even amongst the western European countries; none is picked up in the statistical analysis. In some countries and in some periods there is an increase in religiosity; in many others stability; and in some a fall.

So to return to Figure 1; is the pattern seen of increasing religiosity with age misleading? Yes, it would appear likely that it is a relic of past levels of religiosity which have been maintained by older cohorts. In general, at least as seen in western Europe, people do not generally become more religious as they get older. There is however, a small, though significant fall in young adulthood: for every 100 attenders amongst late teens, only between 71 and 85 will be attenders in the age band 23-25.

Are young people less religious than they used to be?

Having focussed on the effect of age on religiosity in western Europe, we will now broaden the overview of religious trends over time by looking at all the countries where we have comparable data for two or more years. We again look at attendance rates of young people aged below 30, as shown in Figures 8-16. Note the different scales: in Figures 8 and 9 the scale is from 0-25 percent; Figures 10-13 show 0-50%; and Figures 14-16 show 0-100%. Countries were grouped with others of similar attendance levels so their trends can be fairly portrayed.

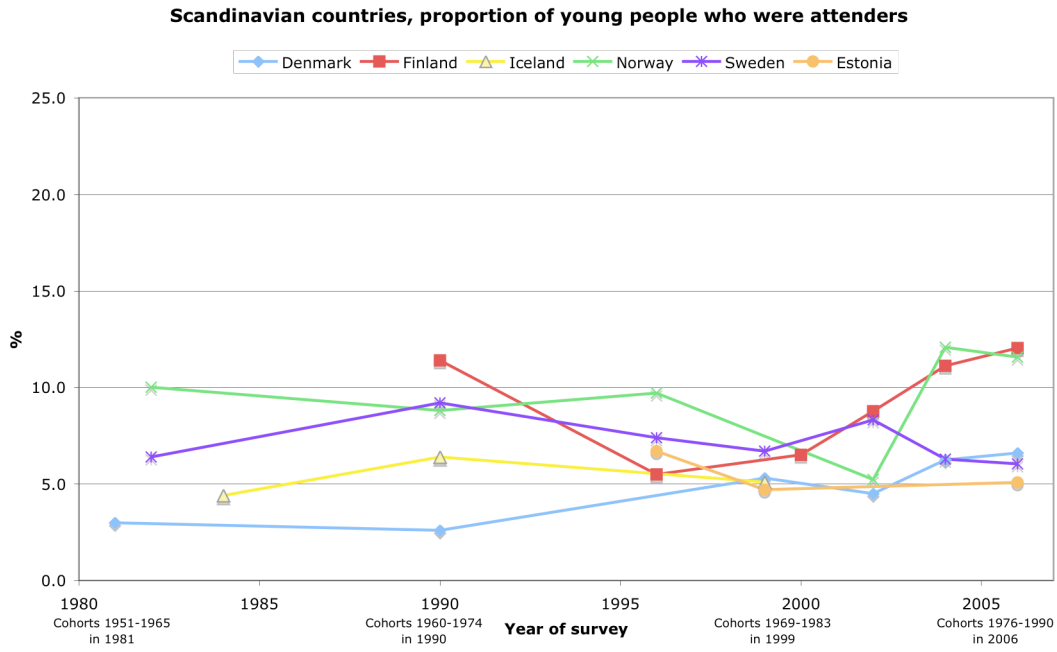

Figure 8: Scandinavian countries, trends in attendance rates of young people

In Scandinavia (Figure 8) rates of religiosity in young people have been as low as 3% (Denmark in 1990). Over the full period of 1981-2006 there has essentially been stability or even slight increases in young attendance rates.

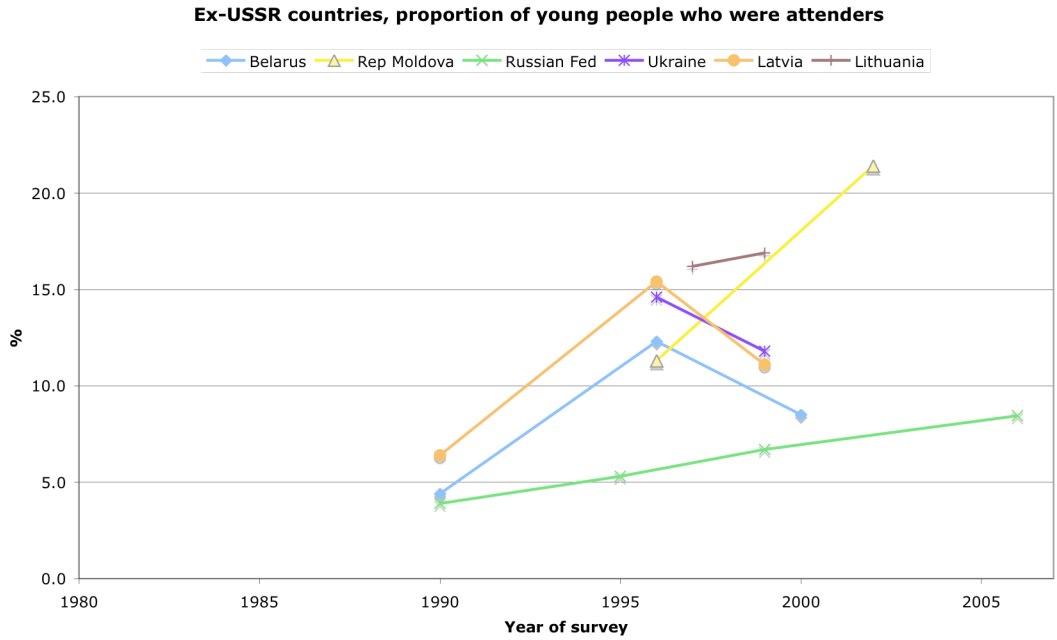

Figure 9: Ex-USSR countries, trends in attendance rates of young people

The countries of the former Soviet Union have followed a variety of trajectories: Estonia is similar to Scandinavia (and so is included in Figure 8). Latvia, Ukraine and Belarus have seen falling youth attendance in recent years. The trend for Russia over four surveys since 1990 nevertheless shows a steady increase in attendance, and in Moldova the increase is rather marked.

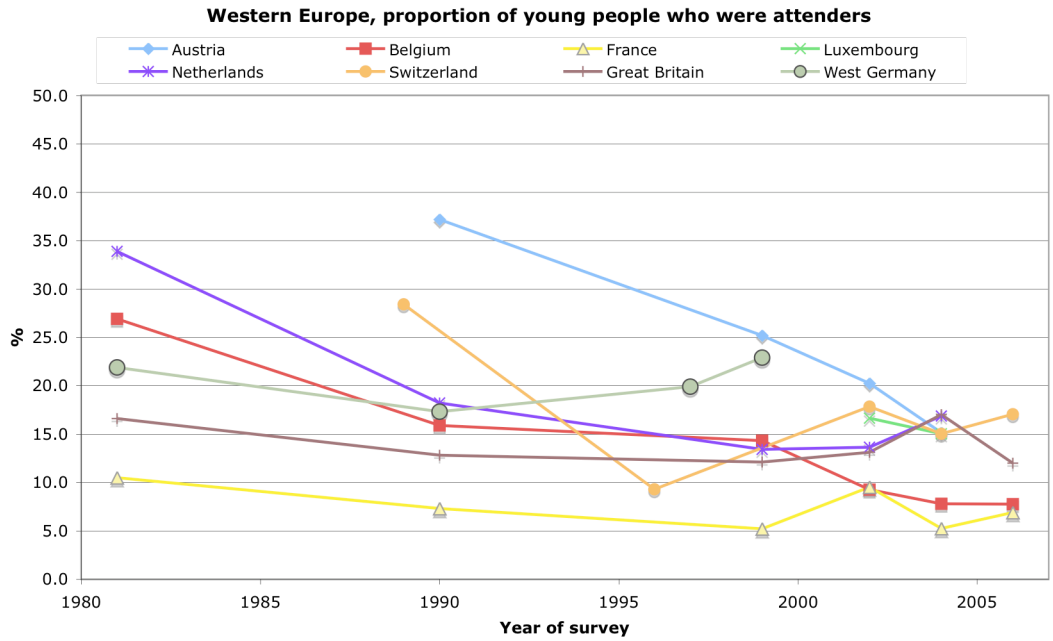

Figure 10: Western European countries, trends in attendance rates of young people

The majority of countries in Western Europe – both Catholic and Protestant by tradition – have seen falls in attendance of young people over the last quarter century (Figures 10 and 11). Some have seen much greater falls than others, although in many

a level of stability or even a small increase has been achieved since 1995 (France, Switzerland, Britain, Germany, Poland).

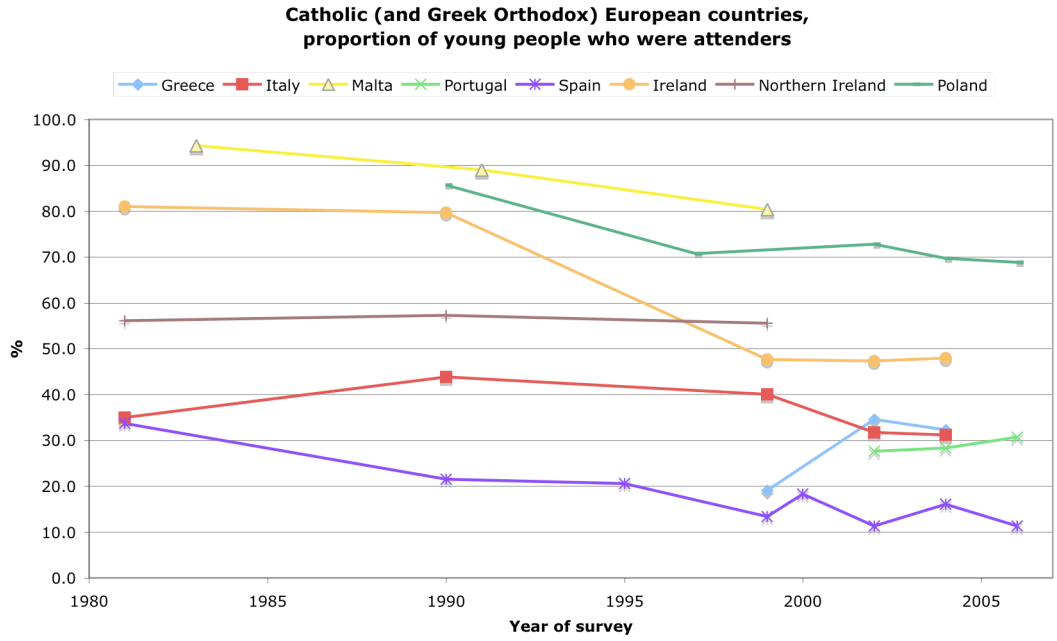

Figure 11: Catholic European countries, trends in attendance rates of young people

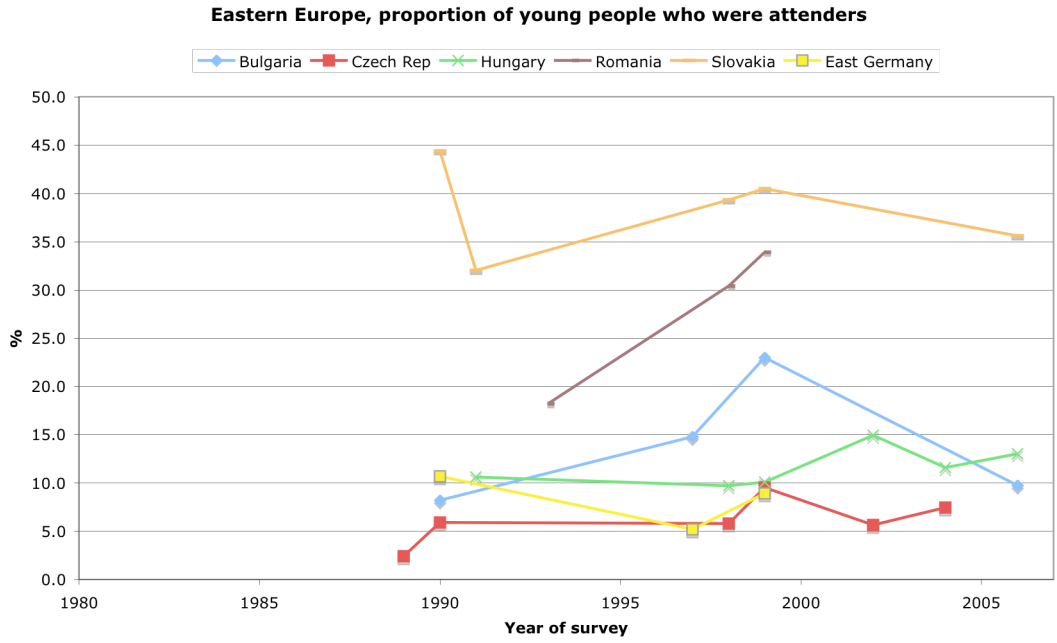

Figure 12: Eastern European countries, trends in attendance rates of young people

Four out of six of the Eastern European countries experienced a growth in attendance rates of young people in the 1990s (Figure 12); this was even more marked in all the Balkan countries except Slovenia (Figure 13). The 1990s were turbulent times for these countries and some observers have noted that an increase in religious observance was paralleled with a rise in nationalist sentiments.

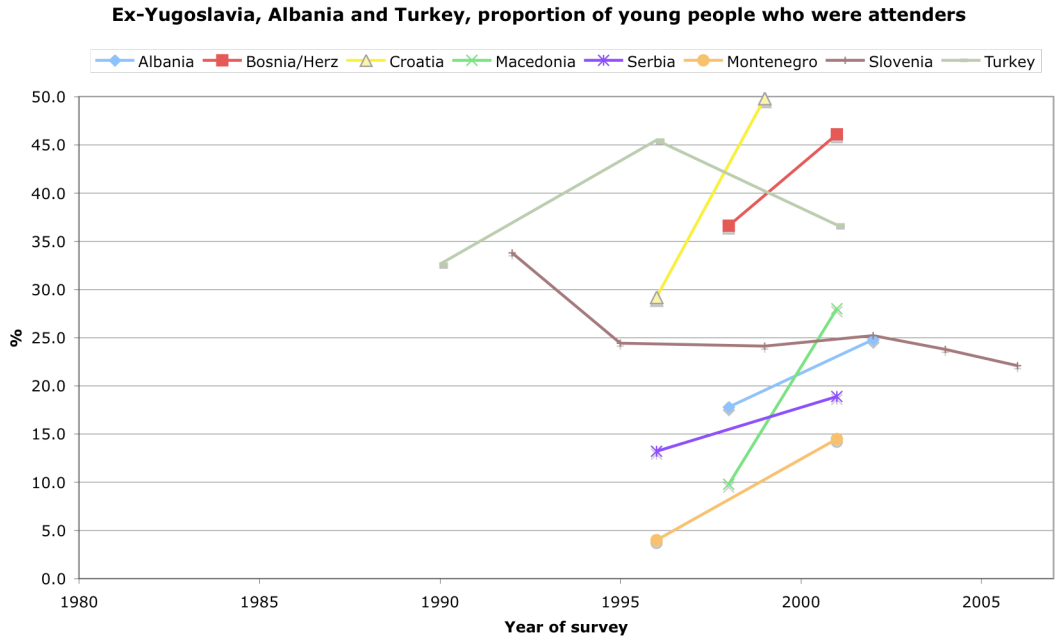

Figure 13: Balkan countries and Turkey, trends in attendance rates of young people

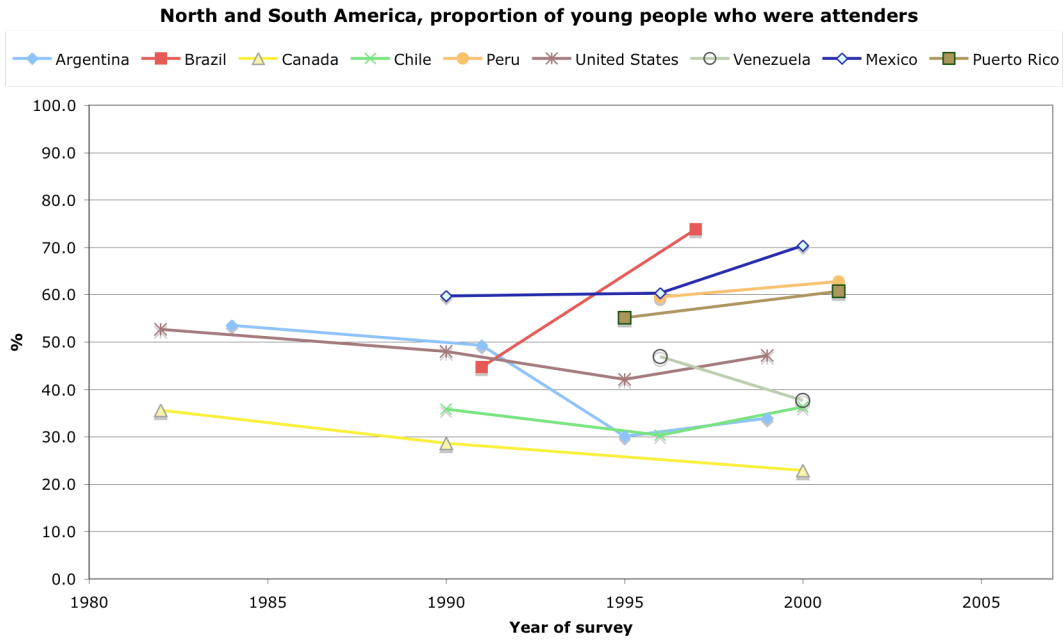

Figure 14: North and South America: trends in attendance rates of young people

Moving outside Europe, the youth attendance rate trends for the Americas are mixed. The United States saw a trough in 1995 followed by a rise. Canada's rates, however, are lower and declining. Puerto Rica, Mexico and Brazil have seen rises whilst falls have been seen in others, eg. Argentina and Venezuela.

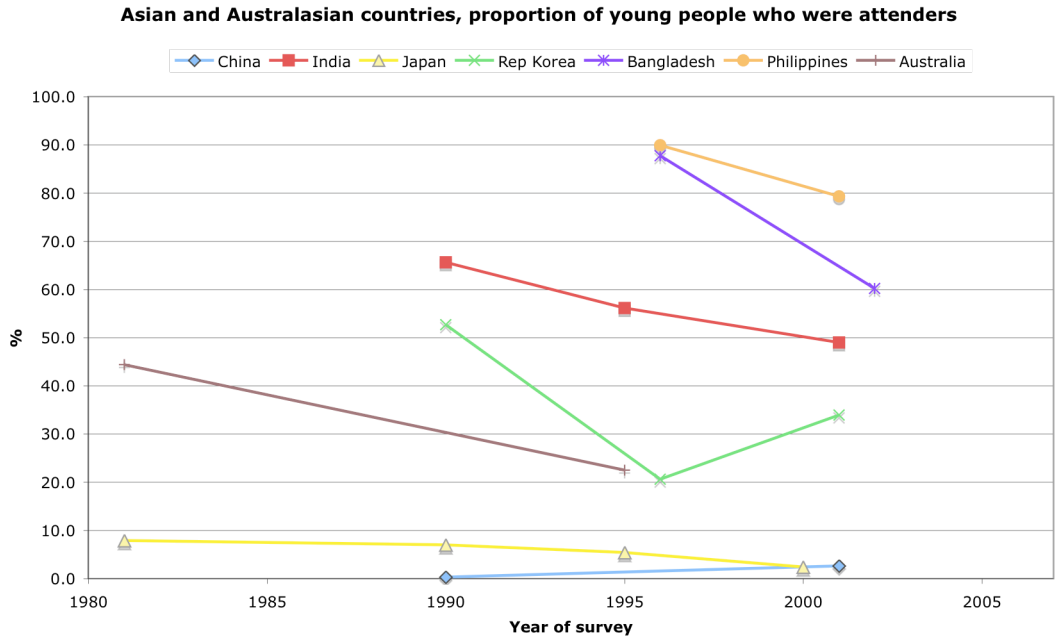

Figure 15: Asia and Australia, trends in attendance rates of young people

Asian and Australasian countries have by and large seen falls in attendance. China, however, has seen a rise from a very low base, and the Republic of Korea began to see a rise in recent years after an earlier substantial fall.

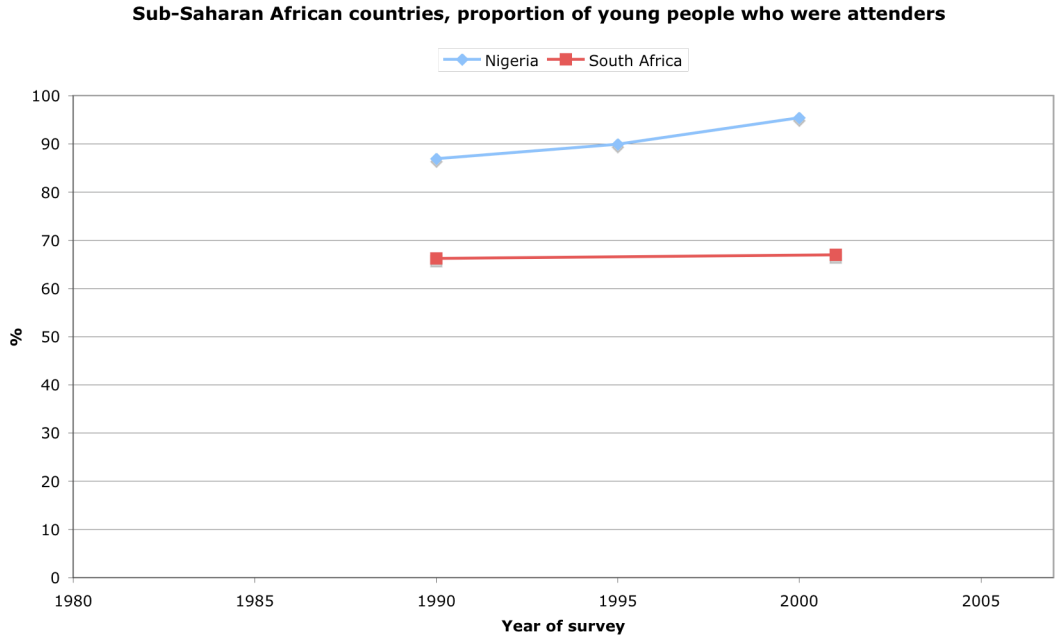

Figure 16: African countries, trends in attendance rates of young people

Finally, the two countries of sub-Saharan Africa which have measurements over a period, show that their high attendance levels have been maintained or even increased since 1990.

Discussion

The questions highlighted in this study cut across previous studies of religiosity relating to country determinants, period influences and the effects of age and cohort.

When looking at religiosity by whatever measure, large country-to-country variations are observed. This study confirms the conclusions of an earlier analysis of the first wave of the WVS, namely that "nation of residence" is the primary determinant of religious commitment (Campbell and Curtis, 1994). Subsequent studies have tried to pinpoint the specific factors which influence the different levels of religiosity from country to country and some determinants have been ascertained. For example a country's religiosity is positively correlated to education, to having a higher proportion of children in the population, to having a state religion and to greater religious pluralism. It is negatively associated with urbanisation, government control of religion and (naturally) communist suppression (Barro and McCleary. 2003). Nevertheless, many countries still do not fit well into the models. The high levels in the United States and Poland are difficult to explain in comparison with, for instance, the low levels in Scandinavia.

The increase in secularisation with overall economic development has been both foreseen and observed over a long period; John Wesley and Karl Marx were among the first to predict it, and a discussion of this "modernisation theory" is given in Barro and McCleary. 2003. The purpose of this study is not to examine the possible reasons behind changes in religiosity, but to simply note the variations currently happening. What this study has shown is that while declines are being seen in some parts of the world, increases are happening in others. Further work on explaining and interpreting the rise in religiosity of the young in certain countries and regions is clearly needed.

The influence of age of an individual on religiosity was looked at in some detail by Argue et al, 1999. They looked at evolving religiosity over a 12 year period of a panel of respondents in the United States; they found that religious participation increased from age 18 upwards. However, as all participants in the survey were married at the start of the study, that result may not necessarily be in conflict with the result found in this work. If marriage and having a child increase the probability of religious attendance (as proposed by Chaves, 1991, Sandomirsky and Wilson, 1990, and Wilson and Sherkat, 1994), then the age at which these events happen will be important in determining the form of the age effect. The apparent trough in religiosity in the mid-20s may be because this is the age associated with being most free from parental influence and before the influence of marriage and children starts to grow. As the mean age at first marriage and first child is now approaching 30 in many western countries, and continuing to rise (UNECE, 2008), then the trough could become deeper and later (though there is no indication yet of such changes - see Figure 1). The increased shunning of marriage in favour of non-marital cohabitation is likely to run parallel to a rejection of religious adherence, a trend seen in many developed countries.

Apart from the trough in religiosity in early adulthood, this study gives support to the proposition of relative stability in religiosity over the life course, a similar conclusion to that reached by Firebaugh and Harley (1991) and Hout and Greeley (1990). The conclusion of this present study is that, in general, cohorts do not become more

religious as they get older, tending to stay roughly constant once people reach their 30s. This refutes the proposition of Bahr (1970) and the arguments summarised by Barro and McCleary (2003) that older people are naturally attracted towards religion as they get older, in preparation for the afterlife.

Conclusions

To conclude, we will return to the questions posed in the title.

Are young people less religious than older people? This study confirms this to be the case in the stable developed countries surveyed in the WVS. However, as shown in Table 1, it does not hold true for certain African and ex-communist countries.

The question was then rephrased as to whether people in general become more religious as they get older. Although a trough in religiosity is seen for adults in their mid-20s in a group of western European countries, there is little increase in religious attendance after people reached their 30s. The fact that older people are currently seen to be more religious than younger people is merely a relic of the fact that older generations were more religious in the past and they have maintained that level through life.

Are young people less religious than they used to be? Clearly in western Europe the answer generally appears to be yes. Nevertheless, looking at the time trends for a wider range of countries, the variations between countries are quite wide; in several ex-communist states (especially in ex-Yugoslavia, but not including Slovenia) there has been a marked growth in religiosity amongst the young. In Scandinavia there has been stability or slight increase from a low base in the last quarter century. Even the fall in western Europe has steadied or sometimes reversed in the last decade. In the Americas, some countries have seen increases while others decreases. In Africa, the high attendance levels have augmented still further.

Overall this study highlights the great variations of not only base levels of youth religiosity but also in the trends – growth, stability or decline – from country to country. This probably reflects the unique cultural and political background of each country, and the vibrancy or otherwise of individual faith communities within each country. It would, therefore, be rash to predict any future trend for a particular country, even for the near future. To summarise, the global wave of secularisation – even if it exists – is not touching each country equally; churches, both locally or nationally, which respond to the needs of each new generation can stem or reverse the tide.

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Notes:

The Norwegian Social Science Data Services (NSD) maintains the data archive and is distributor of the European Social Survey data – see http://ess.nsd.uib.no

The World Values Survey data base is available online from the World Values Survey Association, a non-profit association with its seat in Stockholm, Sweden - see http://www.worldvaluessurvey.org/

Appendix 1: Wording of WVS and ESS questions and answer choices

WVS question: Apart from weddings, funerals and christenings, about how often do you attend religious services these days?

1. More than once a week
2. Once a week
3. Once a month
4. Only on special holy days/Christmas/Easter days
5. Other specific holy days
6. Once a year
7. Less often
8. Never, practically never

ESS question: Apart from special occasions such as weddings and funerals, about how often do you attend religious services nowadays?

1. Every day
2. More than once a week
3. Once a week
4. At least once a month
5. Only on special holy days
6. Less often
7. Never

Appendix 2: Confidence limits of observed attendance rates

The following table gives the 95% confidence limits for sample sizes typical of the WVS and ESS. As an example, if a 10% attendance rate is given for a particular country based on a WVS survey, then we have a 95% confidence that the true population attendance rate would be between 6% and 14%.

95% confidence limits of percentage attendance rates

Sample size of 200 (typical of WVS sample size of young people under 30)

Observed attendance rate of sample	10%	40%	70%
Confidence band +/-	4%	7%	6%
Lower limit (95% confidence)	6%	33%	64%
Upper limit (95% confidence)	14%	47%	76%

Sample size of 400 (typical of ESS sample size of young people under 30)

Observed attendance rate of sample	10%	40%	70%
Confidence band +/-	3%	5%	4%
Lower limit (95% confidence)	7%	35%	66%
Upper limit (95% confidence)	13%	45%	74%

Appendix 3: Regression analysis summary, religiosity by age band

Individual level data was used, and a binary logistic regression carried out, with respondents being categorised as either "Attenders" or not.

Odds ratios for being an attender by sex, age band and country for 4 survey waves

	WVS 1981-2			WVS 1990			WVS 1999			ESS 2006(4)		
	Exp(B)	Sig.		Exp(B)	Sig.		Exp(B)	Sig.		Exp(B)	Sig.	
Male (ref)	1.000			1.000			1.000			1.000		
Female	1.711	0.000	***	1.845	0.000	***	1.705	0.000	***	1.581	0.000	***
AgeBand		0.000	***		0.000	***		0.000	***		0.000	***
16-19 (ref)	1.000			1.000			1.000			1.000		
20-22	0.710	0.008	***	1.232	0.182		0.805	0.330		1.076	0.621	
23-25	0.796	0.080	*	1.029	0.856		0.734	0.154		0.730	0.039	**
26-28	0.661	0.006	***	1.067	0.678		1.015	0.944		0.857	0.272	
29-31	0.782	0.103		1.033	0.837		0.991	0.963		0.935	0.614	
32-39	0.884	0.294		1.231	0.133		1.140	0.476		1.122	0.273	
40s	1.496	0.000	***	1.810	0.000	***	1.338	0.112		1.223	0.047	**
50s	1.697	0.000	***	2.465	0.000	***	1.758	0.002	***	1.409	0.001	***
60s	2.062	0.000	***	3.507	0.000	***	3.030	0.000	***	2.046	0.000	***
70 and over	2.564	0.000	***	4.530	0.000	***	3.445	0.000	***	2.797	0.000	***
Country		0.000	***		0.000	***		0.000	***		0.000	***
Sweden (ref)	1.000			1.000			1.000			1.000		
Germany	3.308	0.000	***	3.039	0.000	***	2.820	0.000	***	2.017	0.000	***
Denmark	0.753	0.036	**	0.941	0.678		1.334	0.052	*	1.072	0.548	
France	1.293	0.039	***	1.691	0.000	***	1.394	0.014	**	1.518	0.000	**
GB	1.806	0.000	***	2.420	0.000	***	2.334	0.000	***	2.078	0.000	***
Italy	6.586	0.000	***	10.043	0.000	***	12.588	0.000	***	7.470	0.000	***
Netherlands	4.406	0.000	***	3.695	0.000	***	3.411	0.000	***	2.475	0.000	***
Norway	1.103	0.450		1.155	0.292		x			1.409	0.001	***
Constant	0.093	0.000	***	0.045	0.000	***	0.046	0.000	***	0.057	0.000	***

x indicates country was not included in the analysis
***** significant at .01**
**** significant at .05**
*** significant at .1**

Appendix 4: Regression analysis summary, cohort and age combined

Odds ratios for being an attender by sex, cohort, age band and country

	7 country group			8 country group			10 country group		
	Exp(B)	Sig.		Exp(B)	Sig.		Exp(B)	Sig.	
Male (ref)	1.000			1.000			1.000		
Female	1.545	0.000	***	1.698	0.000	***	1.763	0.000	***
CohortDecade		0.000	***		0.000	***		0.000	***
Born before 1930 (ref)	1.000			1.000			1.000		
1930s	0.763	0.000	***	0.788	0.000	***	0.786	0.000	***
1940s	0.510	0.000	***	0.535	0.000	***	0.488	0.000	***
1950s	0.362	0.000	***	0.391	0.000	***	0.340	0.000	***
1960s	0.335	0.000	***	0.381	0.000	***	0.294	0.000	***
1970s	0.277	0.000	***	0.308	0.000	***	0.235	0.000	***
1980 and after	0.275	0.000	***	0.284	0.000	***	0.184	0.000	***
AgeBand		0.017	**		0.000	***		0.000	***
16-19 (ref)	1.000			1.000			1.000		
20-22	0.924	0.412		0.910	0.245		0.844	0.009	***
23-25	0.851	0.101		0.789	0.004	***	0.713	0.000	***
26-28	0.960	0.687		0.842	0.044	**	0.733	0.000	***
29-31	0.903	0.316		0.868	0.102		0.784	0.000	***
32-39	0.901	0.240		0.860	0.045	**	0.822	0.001	***
40s	0.978	0.804		0.957	0.567		0.854	0.011	**
50s	0.909	0.303		0.894	0.165		0.781	0.000	***
60s	1.028	0.771		1.026	0.763		0.873	0.049	**
70 and over	1.114	0.277		1.087	0.341		0.887	0.098	*
Country		0.000	***		0.000	***		0.000	***
Sweden (ref)	1.000			1.000			1.000		
Belgium	x			x			3.311	0.000	
Germany	3.214	0.000	***	3.204	0.000	***	3.238	0.000	***
Denmark	1.032	0.635		1.034	0.611		1.030	0.659	
Spain	x			x			5.872	0.000	***
France	1.455	0.000	***	1.452	0.000	***	1.462	0.000	***
GB	2.114	0.000	***	2.115	0.000	***	2.131	0.000	***
Italy	x			9.005	0.000	***	9.306	0.000	***
Netherlands	3.166	0.000	***	3.140	0.000	***	3.204	0.000	***
Norway	1.278	0.000	***	1.282	0.000	***	1.284	0.000	***
Constant	0.193	0.000	***	0.178	0.000	***	0.219	0.000	***

x indicates country was not included in the analysis
***** significant at .01**
**** significant at .05**
*** significant at .1**

Note: Another set of regression analyses were carried out including, in addition, year of survey as an explanatory variable, and when this was included, two effects on the result were observed:

1. There was a significant "secularisation" effect between the 4 surveys
2. The age effect became much more pronounced, with increasing religiosity with age

However, it was decided to reject this model for two reasons:

1. The model was not borne out by the descriptive graphs of evolution of cohort religiosity over time (Figures 2-5). If we suppose that the effect of secularisation over the period is equally balanced by the effect of increased religiosity with age, this is a more complex argument than simply assuming that cohort religiosity is generally stable over time.
2. It is proposed that the apparent secularisation from one survey to the next is caused by the different mix of cohorts between surveys – loss of older ones

and gain of younger ones from the first survey to the latest. In the 1981 WVS survey the 1980s cohort were not included because they had not even been born! However, by the 2006 cohort, many of the older generations had died and so were no longer included. The whole set of ESS 2006 survey respondents were apparently less religious than WVS 1981 not because of secularisation of cohorts over that period, but because the older generations were no longer represented and younger, more secular, cohorts had replaced them.

Therefore, we conclude that the models presented in Figures 6 and 7 fairly represent the two separate effects of cohort and age.