LOOKING BACKWARD:
A Cross-National Study of Religious Trends

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Abstract

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Abstract

Retrospective questions in the 1991 and 1998 ISSP surveys yield detailed estimates of religious trends across dozens of countries. The estimates span most of the 20th century and appear to be remarkably consistent, reliable, and unbiased. Retrospective data thus greatly increase our knowledge of recent religious history, and retrospective methods provide inexpensive means to expand it further still. Even a cursory analysis of the ISSP data offer numerous new insights regarding secularization, the impact of Vatican II, religion and gender, religious repression, and the religious socialization of youth. The potential for further insights is immense.

Claims about religion's past or future pervade the literature on religious belief, behavior, and institutions. Theories of secularization are the broadest and oldest statements concerning such trends. But studies of almost every religious subject – be it Catholic contributions, Islamic radicalism, Russian religiosity, or New Age spirituality – revolve around questions of growth or decline. Had we a better grasp of religion's causes and consequences, we might be less captivated by its every twist and turn. But at least for now, trends remain central to serious scholarship no less than sensational journalism.

Against this backdrop, new sources of long-term religious data are of obvious interest, particularly if they provide multi-nation measures of attendance at churches, synagogues, mosques, and other places of worship.[1] Contemporary debates over religious trends almost always focus on attendance, even where the trends (or the data) scarcely exist. In the United States, for example, church attendance rates display remarkable long-run stability, stretching back from the present through the earliest Gallup polls. Yet scholars continue sifting through these data, teasing out age, period, and cohort effects, and arguing over their meaning. (Chaves 1989; Hout and Greeley 1987; Hout and Greeley 1990; Miller and Nakamura 1996; Sasaki and Suzuki 1987)

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Indeed, some scholars, such as Hadaway, Marler, and Chaves (1993) have gone so far as to hypothesize a form of *invisible* secularization in which America's "actual attendance rate has declined since World War II, despite the fact that the survey rate remained basically stable."[2] If controversy surrounds the relatively long and reliable record of attendance in America, how can we trust claims about secularization or stability in Canada, Australia, or Western Europe, where attendance data are sparse, let alone the countries of Asia, Africa, Latin America, Eastern Europe, and the former Soviet Union, where the data scarcely exist?

What we need is a new collection of old data – a large, international database on religious activity spanning many decades. In and of itself, the data would be of great interest and descriptive value. But merged with the mountain of secular time series already at our disposal, it would be a theoretical gold mine. The data would provide the first convincing, cross-national tests of numerous theories concerning religion, economics, and social change.

Such data already exist. This is the basic message of my paper. Moreover, we can easily augment these data, extending them over more items of information and many more countries. The requisite methods are inexpensive and straightforward, for despite the impossibility of re-surveying people in the past, we can readily use contemporary surveys to reconstruct the past. As I will show, recent polls conducted by the International Social Survey Program (ISSP) allow us to reconstruct long-run church attendance trends in thirty different countries, including the United States, Russia, Australia, Israel, Japan, and most of Europe. They do so thanks to a novel set of

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retrospective questions concerning the religious participation of the respondents and their parents when the respondent was growing up.

My analysis indicates that although retrospective data overstate actual rates of attendance, they are in most other respects remarkably consistent, reliable, and unbiased. Because the childhood of older respondents occurred farther back in time, the ISSP functions as mammoth intertemporal survey of religious involvement. Its 200,000 retrospective observations stretch from the 1920's through the 1980's – a longer and more detailed series of observations than we have ever had for any nation, let alone thirty.

The Approach

The retrospective approach has the flavor of a courtroom drama, wherein the DA peppers the witness with questions like, "Where were you on the morning of Sunday, July 5, 1961?" Phrased thus, one might expect hopelessly inaccurate replies; for who can remember attending church on any particular day thirty or forty years back? But the ISSP questions were not so phrased and did not concern any single event. Rather, the 1991 and 1998 surveys asked the following:

1) "[W]hen you were around 11 or 12, how often did you attend religious services then?"

2) "When you were a child, how often did your father attend religious services?"

3) "When you were a child, how often did your mother attend religious services?"

Replies were coded into standard categories, ranging from "never" to "several times each week." The respondents were also asked about their denominational affiliation and that of their parents' when they were growing up.

When 41-year-old respondents answer these questions they are describing events that date back thirty years. More generally, the N-year-old respondents in the 1998 ISSP provide information for the year 1998-N+12 and those in the 1991 ISSP provide information for 1991-N+12. Taken as a whole, the ISSP data thus constitute a massive retrospective survey of church attendance running from 1920s through the 1990s.

Can we trust this data? Not without evidence. But neither should we dismiss it out of hand. Standard surveys already bristle with other types of retrospective questions, including questions about one's education, birthplace, health, voting record, employment history, marital experiences, and criminal victimization. It is in fact a rare question that does *not* require information stored in long-term memory. Although it is hard to predict which questions will yield reliable responses, there is no reason to presume that people have special difficulty recalling their religious backgrounds.

Although the 1991 and 1998 ISSP appear to be the only multi-nation surveys to ask retrospective attendance questions, at least one major American survey, the General Social Surveys, included analogous questions in 1983-1986, 1988, and 1989 (Davis and Smith 1998). Comparing GSS and ISSP responses is straightforward, because the ISSP surveys were administered in America as add-on modules to the GSS. Thus the GSS provides more than seven thousand additional interviews with which to assess the reliability of the ISSP responses. As I will show in later sections, one may further test the data by comparing their results to those to American Catholic surveys conducted in

1963 and 1974 by NORC, and additional evidence can be gleaned from other independent surveys conducted in Canada, the U.S., and Europe.

Initial Results

Before turning to the problems that may afflict retrospective data in general and the ISSP data in particular, it helps to examine the estimates for several different countries. Table 1 summarizes estimated church attendance rates for parents and children in each ISSP country and each 5-year interval between 1925 and 1990. Figures 1 through 8 plot attendance trends for eight countries: the United States, the Irish Republic, Norway, Great Britain, the Netherlands, Russia, Hungary, and Poland.[3] Appendix 1 provides the corresponding figures for all thirty countries.

The first three countries are known for stable, but dramatically different, levels of attendance. America's reputation for religiosity dates back to the 19th century, and beginning with Gallup polls of the 1940's, U.S. surveys have consistently found attendance rates around 40% per week (Finke 1992; Greeley 1989). Repeated polls likewise confirm Ireland's status as Europe's most devoutly Catholic country – home to the only population with weekly attendance rates on the order of 90% (Barrett 1982). Norway is, by contrast, a bastion of *non*-observance, with current rates of attendance well below 10% and historical statistics that suggest only marginally higher rates earlier in the 20th century (Barrett 1982).[4]

Figure 1 captures the stable patterns described above while also extending them to decades that predate the earliest available surveys. At the same time, the U.S. data suggest an important *deviation* from stability – a downturn in childhood attendance

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starting in the mid-1960s and converging to parental rates by the mid-1980s.   Because

standard surveys only include adults, researchers have previously had little to say about

attendance among children.[5]

Compared to America, Ireland, and Norway, the nations of Great Britain and the

Netherlands provide more informative tests of the retrospective method. In Britain, for

example, scattered surveys and church membership statistics suggest steady and

substantial decline in rates of adult religious participation throughout the 20th century

(Bruce 1995; Gill, Hadaway, and Marler 1998; Smith 1993). And this is what we see in

figure 2, coupled with a far more dramatic decline in childhood rates of participation.   In

the Netherlands, decline arrived more suddenly and proceeded more rapidly. The data

reviewed by Laeyendecker (1995), Lechner (1996), Sengers (2001), and others identify

the 1960s as a period of crisis for the Catholic Church, after which Dutch religious

activity trends sharply downward. Figure 5 shows that the retrospective data capture the

both the timing and severity of this turning point. Moreover, by separately calculating

the trends for Catholics and non-Catholics, one immediately discovers that Catholics do

indeed account for more than three-quarters of the observed decline.[6]

From what was previously deemed single-period data, the retrospective method

has accurately derived five different historic profiles spanning sixty years or more. The

profiles include a decisive turning point (restricted to the Catholic portion of the Dutch

population), a case of long term decline (in England), and examples of long-term stability

– at high, low, and intermediate levels of attendance.

One can scarcely underestimate the value of a (valid) means of polling the past.

Even in the U.S., retrospective estimates extend our knowledge, tracing the country's

nearly flat attendance profile back through the mid-1930s, whereas standard polls provide reliable estimates dating back no further than the early 1950's.[7] The payoff is far greater for other Western nations, where pre-1970's polling was patchy at best. But the big score comes from Russia and other formerly communist countries, where survey statistics scarcely exist prior to 1990 and where government opposition to religion most certainly distorted any polling that did take place.

Table 1 affirms that the dominant feature of church attendance under communism was its low level – scarcely surprising given the communists' penchant for closing churches, jailing clerics, suppressing worship, seizing church property, and banning religious instruction. But repression varied over time and place, and the ISSP data document variation as never before.

In Russia, for example, church closings date back to the Soviet Constitution of 1918, "an all-out attack on religion" accompanied the "forced industrialization and collectivization of agriculture in 1928," and violent religious repression continued through the mid-1980s (Conquest 1968; Kurian 1991; Troyanovsky 1991). Figure 6 captures Stalin's initial attacks (note the drop between 1925 and 1930), the progressive repression thereafter, and the near-extinction of religious observance by the 1950s. Figure 6 also bears witness to another characteristic feature of the Soviet attack on religion, namely the militant secularization of youth. Whereas childhood attendance rates routinely equal or exceed those of their parents throughout the free world, we find the pattern reversed in communist Russia.

Religious repression and the forced secularization of youth were, in fact, standard features of communism throughout the Soviet sphere of influence, which by 1950

included all of Eastern Europe. Table 1 documents the magnitude and timing of the resulting attendance reductions in Latvia, Bulgaria, Czechoslovakia, East Germany, and Hungary.

In Hungary (figure 7) we encounter an apparent anomaly – a communist country where childhood attendance continues to exceed those of parents throughout the post-war era. There is, however, a simple reason why the standard pattern breaks down in this case: Hungary's communists tolerated religious instruction of children. The government permitted optional religious courses in state-run primary schools and compulsory instruction in the country's few church schools. According to Kurian (1991), "60% of [state] schools offer such courses and about 23% of Hungarian youth participate in them." In other respects, however, Hungary's leaders ruled as classic communists – seizing church estates (in 1945), nationalizing church-run schools (in 1948), dissolving religious orders (in 1950), and maintaining a government office (from 1951 through 1990) to regulate all church activities and religious publications. Figure 7 captures both the timing and the severity of their anti-religious actions.[8]

If Hungary is exceptional, Poland is a miracle – the one country where a Soviet-run government resigned itself to a devout populace and a powerful (Catholic) church. Figure 8 supports the claim that except for Ireland, "the proportion of practicing Catholics in the population is greater in Poland than in any other European country" (Kurian 1991). Yet even in Poland, retrospective data suggest a post-WWII decline in adult attendance, with the sharpest drops bracketing the years 1949 through 1956, when, according to Kurian (1991), "church and government were in engaged … in open war."

We have thus seen that retrospective data capture an astonishing range of religious turns and trends, from the piety of Poland to the secularity of Scandinavia. The estimates in table 1 vary too much to be artifacts of a simple bias; they mirror documented trends in the U.S. and Britain (and partially-documented trends in Scandinavia, Ireland, and most other Western nations); they fit the facts about communist countries; and they even capture turning points in the Netherlands, Russia, and Hungary. Though not reviewed above, retrospective estimates also yield credible trends for countries with virtually no history of attendance surveys, including Chile, Cypress, Israel, Japan, and the Philippines. No other method promises to reconstruct 20th-century trends with such ease and accuracy.

Potential Problems

Because promising methods often prove false, I turn next to types of error known to influence survey responses and autobiographical memory (Moss and Goldstein 1979; Rossi, Wright, and Anderson 1983; Rubin 1996; Schwarz and Sudman 1994).

Social desirability: Most people portray themselves and their parents as both good and "spiritual". More than eighty percent of American respondents to the General Social Surveys thus claim to feel "extremely close" or "somewhat close" to God "most of the time." The desire to maintain this image may lead people to overstate their childhood rates of church attendance or those of their parents.

Conventional wisdom: If majority opinion holds that people were more pious and religiously active in times past than today, survey respondents may be inclined to apply this image to their own past.

Projection: People may tend to project their current beliefs and behaviors into the past. Certainly, most people overestimate their current level of cognitive consistency (Kahneman, Slovic, and Tversky 1982). It appears that they also "edit" their memories of past beliefs and behavior in ways that enhance their current self-image. Although converts to some strict sects and new religious movements tend to overstate the prior, "sinful ways" (Snow and Phillips 1980), it seem like that most cases of projection shift memories and retrospective claims in the direction of current behavior.

Biased recall: Forgetfulness introduces errors in all observations concerning past experience. Large samples can minimize the problem of unbiased errors (though variance estimates will remain inflated and the correlations between church attendance and its covariates will be deflated). But forgetfulness may also introduce biased errors. If, as noted above, actual events compete in one's mind with desired or presumed images, then forgetfulness will tend to bias retrospective data toward responses that are personally gratifying, socially desirable, or consistent with conventional wisdom. The largest biases, however, probably occur simply because events are more readily remembered than non-events. Attending church is, inevitably, more memorable than *not* attending. Going involves numerous unique experiences and behaviors, from dressing up and packing the family into the car, to singing hymns and reciting prayers. The alternatives to church-going – sleeping in, doing chores, shopping, dining out – are neither particularly memorable nor uniquely linked to a particular time or day of the week. Behavioral psychologists, such as Tversky and Kahneman (1974), might call this a straightforward example of the *salience heuristic* which, in numerous experimental

settings, leads people to overstate the probability or prevalence of events that they can readily visualize or easily recall.

Age: It seems likely that all the problems described above tend to increase the retrospective attendance rates reported by older respondents relative to those reported by younger respondents. Older people are less likely to remember events from their childhood, if only because of the increased number of intervening years. They are thus more susceptible to social desirability bias (as they contemplate the godliness of their "sainted mothers") and more influenced by conventional wisdom (which exaggerates the general level of piety in "the good old days").[9] Also, since people tend to attend church more regularly as they age, projection bias works to inflate the retrospective claims and perceptions of older respondents relative to those of the young.

Sample bias: Even if respondents accurately report their parents' religious behavior, the data constitute a non-random sample of the adult population. An adult with two children is twice as likely to appear in the sample as an adult with one child, and childless adults will not appear at all. Retrospective responses will likewise over-represent subgroups, such as Hispanic Catholics in the U.S., whose population shares have grown because of high fertility or immigration.

All is not lost. Biases may exist still yet have relatively small impact, and not all forms of bias are equally serious. A uniform social desirability bias will, for example, inflate overall measures of church attendance but not distort trends, turning points, or the qualitative relationships between attendance and its correlates. Even the most extreme biases tend to preserve national rankings and other cross-country comparisons of religious activity. In some settings, retrospective data may actually be more accurate

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than non-retrospective data. This is almost certainly true throughout Eastern Europe and the former Soviet Union, where before the communist collapse religious people had good reason to understate their piety. And even in the United States, where standard surveys cover many decades, retrospective data provide an alternative view of the past. This is no small matter given the possibility that replies to standard survey questions have shifted over time due to changing social pressures, looser interpretations of questions, or declining response rates.[10]

Having dwelt upon the potential problems associated with retrospective responses, I should also note several advantages. Access to times past is, of course, the most obvious advantage. Low cost, relative to panel studies or repeated cross sections, is another. Consistency across time periods is yet another advantage.

Time series inferences from repeated cross-sections are often marred by year-to-year variation in dozens of factors, including sampling procedures, interview methods, question wording, exogenous events, and socio-economic trends. Even minor changes in response categories or question order can substantially shift the aggregate results between split samples of an otherwise identical survey. In particular, recent studies confirm that relatively minor changes in question wording, context, or response categories substantially alter average responses to church attendance questions. Researchers likewise suspect that the long-run decline in survey response rates (from the high 80% range in the 1940s and 1950s, down to the 40% range today) may have induced some spurious trends in attendance estimates. Panel studies add to these problems a steady and non-random attrition in the pool of original respondents, making samples progressively less representative over time.

A retrospectively generated time-series is by contrast, derived from a single set of responses to a single survey administered during a single span of time. Particularly when seeking to estimate aggregate time trends, this consistency may more than offset the problems of age effects, memory lapses, projection, and so forth. Indeed, when the primary goal is to generate a profile of aggregate *trends and turning points* (as opposed to accurate estimates of some underlying *level*), retrospective methods will often yield extremely robust results, regardless of the sampling method or question content.[11]

Evidence of Accuracy

I have attempted to assess the accuracy of the ISSP data in five different ways: (1) by reviewing general findings from the large literature in psychology and survey research concerning autobiographical memory and retrospective reporting; (2) by reviewing the results of a specific study that uses retrospective survey questions to estimate trends in political affiliation; (3) by analyzing retrospective attendance data for evidence of internal consistency; (4) by evaluating the intertemporal and cross-sample consistency of retrospective religious responses derived from different surveys and different periods; and (5) by comparing retrospective attendance rates to those obtained from non-retrospective sources. All five approaches strongly affirm the data's value.

General findings: Thanks to the efforts of survey researchers, cognitive psychologists, demographers, and other social scientists, there now exists a large literature on autobiographical memory and retrospective survey questions. (See, for example, the edited volumes by Moss and Goldstein (1979), Schwarz and Sudman

(1994), and Rubin (1996). Although none of this work directly concerns religion, it does identify what general factors influence the accuracy of retrospective reports.

As one might expect, the research demonstrates the need to proceed with caution. Some memories are highly unreliable, most notably those concerning general attitudes (Smith 1984) or the dating of routine events (Brewer 1994). When asked to report on their activities, respondents often overlook normal events and time-shift (or "telescope") repeated events toward the present (Bradburn, Huttenlocher, and Hedges 1994). Thus, when tracking *individuals* through time, retrospective methods cannot substitute for panel studies.

On the other hand, people *do* recall whether they routinely engaged in specific types of activities during distinct periods of their life. For this type of information, memory is relatively accurate, relatively unbiased, and relatively unaffected by respondent age, gender, or education. Moreover, work by Powers et al. (1978; see also Simkus 1995-1996; Solga 2001) suggests that the resulting aggregate-level estimates and correlations are as good as those obtained from direct (non-retrospective) panel studies.

Childhood attendance thus qualifies as a good candidate for retrospective research. It is a distinctive and well-defined activity, not easily confused with other activities, nor easily forgotten altogether.[12] Individual rates of attendance tend not to vary much over time, thus limiting problems associated with the misdating of memories. People rarely confuse their childhood and adult experiences, and childhood is the *only* period when most people routinely observe their parents' religious activities. Finally, our interest and statistical focus concerns aggregate trends, rather than individual histories.

Analogous research: In a study of America's New Deal political realignment,

Kristi Andersen (1979) analyzed retrospective party-identification data from the 1952

through 1972 Survey Research Center election studies, now known as the *National*

Election Studies. These surveys asked respondents their current party identification

(Democrat, Republican, or independent), whether their party identification had ever

changed, and if so, when. From these data and additional information about trends in the

age-structure of the American population, Andersen then constructed a set of

retrospective time series tracking the total population's political makeup from 1920

through 1948, a period for which detailed political survey data are largely lacking.

Andersen tested her estimates in two ways. The first compared the non-

retrospective political preferences obtained in the 1952 and 1956 SRC election studies to

the corresponding retrospective estimates derived from the 1968 and 1972 SRC studies.

The second compared the non-retrospective political preferences obtained in a 1937

Gallup poll (the earliest national poll of party identification) to the corresponding

retrospective estimates derived from the 1952 through 1972 SRC studies. In each case,

the retrospective and non-retrospective estimates proved remarkably similar. The direct

versus retrospective estimates for 1952 and 1956 differ by only a few percentage points,

and the retrospective estimates for 1937 essentially equal those of Gallup's direct 1937

poll.[13]

Andersen's study demonstrates that retrospective methods *can* yield highly

accurate estimates of aggregate trends.[14] Moreover, her data concern behavior that has

much in common with our data: political affiliation (as opposed to religious affiliation),

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switching parties (as opposed to switching religions); and voting (as opposed to church-going).

Internal consistency: Because there exist no comprehensive registries from which to establish actual rates of church membership attendance, present or past, consistency tests provide the primary means of checking the accuracy of attendance data.[15] Fortunately, many such checks are feasible, including various internal tests comparing the demographic correlates of retrospective and non-retrospective attendance. In terms of these statistical properties, retrospective data look remarkably like standard, non-retrospective data.

Decades of multivariate survey research in the U.S. and most other Western, developed nations leave little doubt as to the primary demographic correlates of (non-retrospective, self-reported) religious attendance. On average, women attend more frequently than men; older people attend more than young adults; college-educated people attend somewhat more than less-educated people; and married couples, particularly those belonging to the same denomination, attend more than single people. Self-identified Catholics attend more than Protestants, although the gap has narrowed since the 1960s; Christians attend more than non-Christians; and people with no religious preference attend the least. Attendance also varies by race and region. In the U.S., for example, attendance rates are relatively low in the West, and African-Americans attend more frequently than other Americans. The correlation between income and attendance is very weak, though often positive.

Column 1 of table 2 illustrates most of these effects using *non-retrospective* U.S. data from the 1972-1979 General Social Surveys. GSS data provide a nearly ideal basis for comparisons, because the American ISSP surveys are administered as subsets of, or add-ons to, the GSS. In column 1, the respondents' own attendance rates are regressed onto standard demographic variables (respondent age, sex, race, education, marital status, household income, and region) and two religious variables (indicating whether the respondent is married to a spouse of the same religion and indicating whether the respondent is Catholic). The size and signs of the coefficients show that all the variables behave as expected and all (except income) are associated with noticeable differences in attendance rates.[16]

Column 2 of table 2 reports analogous results for a subset of respondents with demographic attributes similar to the *parents* of ISSP respondents. Specifically, the subset was restricted to respondents who were: parents of at least one child, surveyed before 1980, raised in the US, and at least ten years older than their age of (first) marriage but no older than 55.[17] Once again, we obtain all the standard effects: attendance rates are significantly higher for women, blacks, people living in the South, Catholics, and people married to others of the same religion. Education has modest, but positive, impact, and income has scarcely any impact at all.

If retrospective responses are fairly accurate, then parents' attendance will correlate with their demographic attributes, and the magnitude of these correlations will correspond to those obtained in columns 1 and 2 using non-retrospective data. Mothers should attend more than fathers, Catholics more than non-Catholics, and so forth. Forgetfulness would tend to weaken these correlations, however, and projection bias

would tend to introduce spurious correlations. Hence, we can assess projection bias by estimating the extent to which the respondents' *own* demographic attributes influence the attendance rates they ascribe to their parents.

Columns 3 of table 2 relates the (retrospectively reported) attendance rates for the *parents* of ISSP respondents to the (retrospectively reported) demographic attributes of these same parents. Specifically, parent attendance rates are regressed onto parent gender, race, education, region, religion, religious homogamy, and the year to which these data apply.[18] Amazingly, every variable has its standard effect. As in the self-reported (non-retrospective) regressions of columns 1 and 2, women attend more than men, black Americans attend more than other Americans, people living in the South attend more than people living in the country's other regions, and people living in the West attend less. Likewise, years of education are positively correlated with attendance, Catholics attend more than Protestants, people with no religion attend the least, and couples sharing the same religion attend much more than couples with different religious affiliations. Each variable has the appropriate sign and, more impressively, an appropriate magnitude.

Column 4 re-runs the parents' attendance regression, adding the *respondent*s' gender, education, current income, marital status, religious homogamy, and religious identify.[19] If retrospective rates are substantially distorted by projection bias, then we should observe a (spurious) correlation between these variables and the attendance rates ascribed to parents.

The results, however, provide scarcely any evidence of such projection. The added variables (including respondent sex, education, income, and marital status) have

very little impact, neither direct nor through the coefficients associated with the parental characteristics.

Consider, for example, the respondent's gender, coded as variable SEX. Although female respondents report much higher *personal* rates of attendance than do male respondents, both genders ascribe identical rates of attendance to their parents. Both genders likewise ascribe substantially higher rates of attendance to their mothers than their fathers. (Thus, in column 4, the P_SEX coefficient is large and positive whereas the SEX coefficient is nearly zero.) Personal versus parental homogamy follows this same pattern. Respondents report much higher rates of attendance for parents married to spouses of the same religion, but these rates are virtually unaffected by the respondents' own homogamy or marital status. (Thus, the P_SAME coefficient is nearly ten times greater than the coefficients for SAME or MARRIED.)[20] Catholic respondents do ascribe somewhat higher rates of attendance to their parents than do non-Catholics, but this (CATH) effect is less than half the size of the parent being Catholic (P_CATH). The P_NONE effect associated with a parent not having a religion likewise dwarfs the NONE effect associated with the respondent having no religion. In fact, education (EDUC) is the only respondent effect *not* dominated by the corresponding parental effect (P_EDUC). Although one may offer *ad hoc* explanations for the marginally significant impact of EDUC, NONE, and CATH, the critical result is that *none* of the respondent variables has any real predictive power. These variables predict about 14% of the variance in the respondents' own attendance but only three 3% of the variance in parent attendance. In contrast, the corresponding parent variables predict about 15% of the variance in parent attendance.

Intra-family Correlations: Correlations across family members provide another test of internal consistency. From General Social Surveys, which routinely ask married respondents about their own attendance and that of their spouse, we obtain husband-wife attendance correlations in the range of .68 to .70.[21] If retrospective data are fairly accurate, we would expect to obtain a similar correlation for mothers and fathers. On the other hand, we would expect *inflated* correlations if the data were seriously distorted by the errors enumerated in the preceding section. Problems of projection, salience, social pressure, forgetfulness, and age will tend to afflict a respondent's statements about *both* parents. The person who overstates or understates his father's attendance will tend to do the same for his mother. Larger errors thus lead to (spuriously) stronger correlations.

In fact, however, the correlation between parents' rates of attendance shows no sign of inflation. Table 3 displays these and other intra-family attendance correlations derived from GSS questions concerning respondent, the respondent's spouse, the respondent's parents, and the respondent's childhood self. The correlation between the (retrospectively reported) rates of parental attendance is .63 – slightly less than the .68 and .70 correlations for respondents and their spouses.

Indeed, the entire matrix of correlations seems consistent with "real" behavior: respondents' current attendance rates correlate most closely with those of their spouses (.70 and .68), then with those of their same-sex parent (.24 and .25) and their own childhood attendance (.29 and .23), and finally with their opposite-sex parent (.21 and .23). The correlation between the attendance rates of spouses and their in-laws is smaller than any of these (between .18 and .16) – so small, in fact, that it excludes the possibility of any large and generalized reporting error (such as a general tendency for respondents

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to project their own behavior onto others, or to ascribe gender-specific patterns onto male versus female relatives, or to idealize or stereotype their relatives).

Sample bias: Internal evidence likewise mitigates concern about retrospective sample bias. The bias comes about because parents of two children are twice as likely to appear in a retrospective "sample" as parents of one child, and childless adults never appear at all. Similar over-counting occurs for sub-populations (such as Hispanic Catholics) that have grown over time due to high fertility or immigration.

Because the GSS routinely asks respondents about their number of siblings, we can directly estimate the correlation between family size and retrospective attendance. These turn out to be very small, in the range of .02 to .05. More importantly, weighting the retrospective data by inverse family size yields attendance profiles essentially identical to those obtained originally. The same holds for weighting and sample selection adjustments based on the respondent's migration history. Statistical results of these and other sample-related tests are available upon request.

Internal Tests – Summary: Statistical tests thus provide little or no internal evidence of bias. Judged on the basis of internal consistency, retrospective attendance data seem remarkably reliable. The impact of parent attributes (including gender, region, and denomination), the *non*-impact of respondent attributes, and the correlations among family members all fit the patterns that one observes with standard attendance data.

Intertemporal and cross-sample consistency: In order to provide meaningful information about the present, standard survey results must be consistent from one representative sample to the next. Retrospective results must do this and more, providing

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information that is also consistent *over time*. Thus, we would hope that a properly administered surveys yield consistent results about past attendance trends (during, for example, the 1940s and 1950s) whether the surveys occurred in 1970, 1990, or 2000.

Test #1: The 1991 and 1998 ISSP surveys provide limited test of consistency across time and samples.   Among the countries surveyed in both years, attendance profiles almost always follow very similar paths – capturing the same trends, the same overall levels, and the same turning points. However, with just two administrations, spaced seven years apart, these comparisons tell us relatively little about the consistency of samples over time.[22]

Test #2: Surveys of American Catholics provide a much more powerful test of consistency. In 1963 and 1974, that National Opinion Research Center conducted two major surveys of American Catholics. Because NORC went on to administer both the General Social Surveys and the American ISSP (and also because Andrew Greeley played a role determining the religion items in all these surveys), all these surveys employ fairly similar sampling techniques, survey methods, and core questions about religion. In particular, the two Catholic surveys include retrospective attendance questions comparable to those found in the 1991 and 1998 GSS/ISSP. The Catholic surveys also include far more information about the demographics and religiosity of the respondents' family than is found in any administration of the GSS/ISSP (or, for that matter, the WVS or NES). They substantially pre-date other sources of retrospective attendance data, and when merged with the GSS/ISSP they span many more years.[23] And they happen to concern the one large sub-population of Americans whose attendance patterns has changed noticeably in the past few decades.

From Gallup polls and other sources, it is known that Catholic attendance rates rose somewhat throughout the 1950s, leveled off in the 1960s, dropped sharply from the late-1960s through late-1970s, and leveled off again in the 1980s. In figure 9, we see that retrospective data do indeed capture the Catholic downturn of the late-1960s through late-1970's. (See the boxed symbols, which plot retrospective attendance rates for the parents of GSS respondents surveyed in 1989, 1991, and 1998.) The retrospective data also capture the milder "religious boom" of the late-1950s. Back further still, the data suggest a similar boom in the late-1920s, followed by modest decline throughout the 1930s and 1940s – periods too early to be captured by any standard surveys.

Most important, however, is the near-perfect correspondence across all three retrospective profiles – the profile (of circles) derived from 1963 Catholic survey, the profile (of triangles) derived from 1974 replication, and the profile of squares derived from the 1991 and 1998 GSS/ISSP. Thus, the N-year-old respondents to the 1963 survey reported rates of attendance for their parents that match the rates reported by N+11-year-old respondents to the 1974 survey and the N+35-year-old respondents to the 1998 survey.[24] This correspondence of retrospective reporting over 35 years is especially striking given the fact that personal (non-retrospective) rates of attendance differ quite dramatically over the same period. When asked about their own, current rates of attendance (as opposed to those of the parents during their childhood) the 1974 respondents report substantially lower rates than do the 1963 respondents, and the 1991/98 respondents reports rates that are lower still. Thus, *current memories* reported in year Y *about past behavior* from year X remain stable even as the intervening gap grows and the difference between current and past behavior increases.

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Test #3: Starting in 1975, and continuing every five years thereafter, Reginald Bibby has surveyed about 1,500 Canadians via mail. Bibby mails each new survey to all respondents to the preceding survey as well as a large random sample of new people. The 1990 and 1995 surveys included retrospective attendance questions, patterned after the GSS. We can, of course, use these data to estimate and plot retrospective attendance profiles analogous to those of figure 10. (Not surprisingly, the 1990 and 1995 profiles match quite closely.) More importantly, however, we can use the 652 people who participated in both surveys to assess the consistency of *individual-level* responses over a 5-year gap. The results are encouraging. For retrospective estimates of parental attendance, the individual-level correlation between 1990 and 1995 is .88, and only xx% of respondents shift their retrospective assessments by large amounts (e.g., from a "few times a year" or less to more than monthly).[25] This correlation compares favorably with the .92 correlation for *non*-retrospective attendance questions obtained after an interval of just three-to-six weeks in GSS test/retest experiments (Smith and Stephenson 1979), and it substantially exceeds the test/retest correlations for many attitudinal items.

External consistency: External comparisons further strengthen our confidence in the data.

One such set of comparisons concern national levels of religious activity. All versions of the ISSP, and not just those administered 1991 and 1998, include two questions concerning the respondent's current religion and current rate of church attendance. The 1985 through 1998 surveys thus provide several independent samples – both retrospective and non-retrospective – from which to estimate, rank, and compare

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national rates of religious involvement. In particular, we can directly estimate a nation's

average attendance rate (or, more precisely, that of its parents) from responses to the *non*-

retrospective attendance questions asked in 1985 through 1990. We can then correlate

these averages against corresponding national averages obtained from the 1991 and 1998

retrospective data (restricting our sample to the young respondents, who were age 11 or

12 in the 1980s). The test can be extended and replicated using multi-nation data from

Gallup in 1968, European Communities Surveys (ECS) from 1970 through 1992, World

Values Surveys (WVS) in the early 1980's and early 1990's, and ISSP data from 1985

through 1998.[26]

The question, of course, is whether the retrospective rankings correlate well with

the direct rankings. The answer is yes. For example, the correlation is .99 for the

retrospective data versus 1968 Gallup data, and the corresponding correlation is .97 for

the 1990 WVS data. Figures 10a and 10b show that the correlations do not depend upon

a few high-impact outliers.

Results: Looking Forward

I began this paper by noting that past studies of religious change have suffered

from dearth of data. Thanks to retrospective methods, we may soon face the opposite

problem – mountains of data on religious trends spanning numerous years, nations, and

religions. Indeed, thanks to sixty-four thousand respondents in thirty nations, the

"problem" has already arrived.

This is not the place for a detailed analysis of the ISSP data, much less a multi-

nation study of the interplay between religious and socio-economic trends since the

1920s. It is, however, a good time to summarize several major insights suggested by the data.

Secularization: Consider, for example, how the present study enhances our understanding of "secularization." Insofar as this term denotes *any* decline in religious activity, *regardless* of its duration, cause, or timing, then certainly our estimates provide evidence of widespread secularization. On the other hand, insofar as "secularization" denotes a theory and not just a descriptive label, and insofar as the theory posits progressive decline *caused* by modernization, then few countries fit the bill.[27] The theory cannot account for the continued vitality of religion in America, possibly the world's most modernized nation. It fares worse in Ireland and Poland, neither of which can be called pre-modern. Scandinavia offers little solace, because Denmark, Norway, and Sweden were secular from the start. And although decades of religious decline did accompany modernization in the Soviet Union and Eastern Europe, secularization from the barrel of a gun was never what the theorists sought to explain.

It is, in fact, only in Britain, Germany, and France that the paths follow the predictions. Nearly all the major proponents of secularization theory grew up in one of these nations (or one of the two small nations that they surround), whereas the theory's best-known detractors grew up in the United States.[28] Although the ISSP data explain why the two sides so readily talk past each other, they may also provide the basis for constructive debate.

As a prelude to the conversation, consider first that both sides have accurately described trends *in their own nations*. Adult attendance did decline in Britain, France, and Germany, and did hold up in the U.S. (As we shall see below, trends in Australia and

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Canada are more like those of the U.S. than scholars have realized.) Second, the trends

in most other non-communist countries follow *neither* of these patterns. Persistently high

attendance is confined to Catholic countries (such as Ireland, Poland, and the Philippines)

that have little in common with the U.S.; persistently low attendance occurs in countries

(such as Norway, Japan, and Israel) that have little in common with each other or with

Britain, France, and Germany; and elsewhere, decline and stability are episodic (as in

Austria, Switzerland, Italy, and the Netherlands). Third, no country in our sample

displays steadily increasing attendance, nor does any low-attendance country ever shift to

a higher long-run level.

Religious Resurgence and Transformation: As Berger and Luckman (1995) have

emphasized, the greatest challenges to secularization lie outside of Europe and North

America:

> The so-called Third World is in fact shaken by the onrush of religious
> movements. The Islamic renaissance has attracted most attention but it is far
> from being the only case. ... [Evangelical] Protestantism spreads like a prairie file
> – in wide stretches of East and Southeastern Asia, in Africa south of the Sahara
> and – most surprisingly – in all countries of Latin America. Often it is precisely
> those layers of society most touched by modernization which are most susceptible
> to religious enthusiasm. (Berger and Luckmann 1995)

No theory of religious change can justifiably ignore these developments – be it the venerable thesis of
secularization or the "new paradigm" of religious markets. But theories need data, and data on religious
change throughout the developing world are sketchy at best. Retrospective survey questions enable us to
systematically catalog the religious revolutions that have swept through much of Africa, Asia, Latin
America, and the Middle East. Few other investments in the field of survey research are likely to yield as
much bang per buck.

Growing Gaps? When Hadaway, et al. (1993) published evidence that American

survey statistics greatly overstate current rates of attendance, their most provocative

claims concerned unobserved religious trends:

> "Our research raises an intriguing question: Are behavioral patterns truly stable
> over the last 50 years, or have there been a decline in actual rates of church

attendance? That is, has the gap between self-reported and actual attendance remained constant, or has it increased in recent decades? ... We suspect that the actual attendance rate has declined since World War II, despite the fact that the survey rate remained basically stable. ... If this is true, the poll data, particularly time-series poll data, should not be taken at face value. ... These findings undoubtedly will stimulate the ongoing debate over secularization, particularly whether the cultural norm for church going has persisted while the [actual] behavior has diminished." (Hadaway et al. 1993)

Despite follow-up work claiming to confirm, refute, or extend these claims (e.g., Hadaway and Marler 1998; Hout and Greeley 1998; Presser and Stinson 1998), researchers have had no direct means of controlling the (postulated but invisible) growing gap between actual and reported rates of attendance. Until now.

We can safely reject the "growing gap" hypothesis. From the start, it rested upon the improbable coincidence that response biases always grow just fast enough to offset declining attendance. But with the addition of retrospective profiles, the level of improbability explodes. The hypothesis cracks under the *dual* stability of American attendance profiles – both those estimated directly from Gallup surveys spanning many decade *and* those now estimated retrospectively from the ISSP surveys of 1991 and 1998. Otherwise, one must postulate an incredibly complex system of offsetting biases, whereby the *age structure* of the response biases in each period exactly mimics the *time structure* of average biases over the periods prior to T, and these in turn exactly offset the *trend structure* of actual attendance, and all this despite the fact that no respondent can observe, much less influence, *any* of these aggregates. Insofar as surveys overestimate attendance, they have done so all along.

Trends Among the Young: While shutting down one theory of overlooked decline, the ISSP data do open the door to another. In many free countries, but especially Britain, Australia, New Zealand, France, and Canada, children's rates of attendance have fallen

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sharply, both absolutely and relative to parents. Given that religious commitments

typically develop during adolescent years (Argyle and Beit-Hallahmi 1975; Iannaccone

1990), these trends may provide key to understanding causes and consequences of

aggregate religious change. Standard surveys largely ignore youth – in part because they

are difficult to sample and in part because they neither vote, nor work, nor run

households. Hence, despite the importance that parents and churches attach to training

the young, religious research has always focused on adults. Though hardly a panacea,

retrospective questions provide a straightforward means of redressing this imbalance,

helping us understand the process of religious socialization and, perhaps, our own future.

"Spiritual" but "Not Religious": As an illustration, and invitation, to extend this

line of argument, consider the growing share of Americans who describe themselves as

having no religious affiliation, yet a strong interest "spirituality," and strong belief in

God, heaven, and other supernatural phenomena (see Hout and Fisher 2002). Though

present in all age groups, these "unchurched believers" are increasingly common among

younger adults, particularly those raised without religion. Surveys reveal a parallel, but

much more pervasive trend throughout Scandinavia, England, Germany, and other

countries with large unchurched populations (Stark, Hamberg, and Miller 2002). The

obvious question is whether these trends are caused by, and predictable from, prior trends

in childhood affiliation and attendance.

Religious Repression: In seeking to understand trends in religious socialization

(or lack thereof), we must certainly study the case of communism. The Soviet

"experiment" demonstrates that repressive governments can radically reduce religious

observance and commitment – albeit at horrific human cost. Despite their many failures,

the communists did manage to secularize most of their people, and it was no coincidence that they especially targeted children. Their methods have been a matter of record. Now, so too are the results.

The Catholic Crisis: As noted above, Catholics constitute the striking exception to America's post-war record of stable (adult) attendance. Moreover, the Catholic decline was strictly episodic, running from the late-1960s through the late 1970s. Despite widespread agreement on the timing and magnitude of this shift, scholars have offered diverse interpretations of its causes – ranging from the liberalizing reforms of Vatican II to the conservative *Humane Vitae* encyclical on birth control (Stark and Finke 2000). Statistical methods are of limited help in sorting things out, given the proximity of these events, not to mention the concomitant social changes (including the Vietnam war, political upheaval, the civil rights movement, changing women's roles, and the counterculture youth movement)

The ISSP data may not end the debate, but they significantly change its character. In particular, they show that the crisis was *not* an America phenomenon. Parallel crises occurred in other countries, including Canada, Australia, and the Netherlands. Five features stand out in each country. First, Catholic attendance rates greatly exceed non-Catholic rates prior to crisis. Second, Catholic rates begin a sharp decline in the mid-to-late 1960s. Third, the decline ends around 1980. Fourth, because no corresponding decline occurs among non-Catholics, the net effect is a substantial convergence of Catholic rates toward the non-Catholic norm. Fifth and finally, apart from this episode, the overall attendance pattern is one of long-term stability among both Catholics and non-Catholics.[29] Interestingly, the pattern does not arise in countries like Italy, Spain,

Portugal, France, and the Irish Republic, where the population is overwhelmingly

Catholic (nor where it is overwhelmingly non-Catholic). As I argue in a related working

paper (Iannaccone and Finke, 2003), the most likely explanation is that Vatican II greatly

reduced the sub-cultural barriers that had previously separated Catholics from

Protestants. In pluralistic countries with large Protestant populations, the unanticipated

consequence was that rank-and-file Catholics shifted toward a (mainstream) Protestant

view of attendance.

The Large Questions: Religion and ...

With the advent of large population surveys, sophisticated statistical methods, and

powerful computers, religious researchers have been able to test theories more rigorously

than ever before. At the same time, the cost of surveys, paucity of multi-nation datasets,

and near absence of trend data circumscribed the realm of questions amenable to modern

methods. Scholars found it much easier to study narrow questions about, say, the socio-

economic correlates of contemporary American church attendance rates than large

questions about the social causes and consequences of religious commitment.

The situation is changing, however, thanks to new cross-national studies (most

notably the ISSP and WVS), high-speed networking, and on-line archives. Retrospective

methods can round out the revolution insofar as they turn our survey statistics into time

series data. By combining multi-nation retrospective results with existing data on socio-

economic trends, we can test large questions as never before.

Many of the questions are centuries old. Does religious competition promote

civil strife (Hume 1983) or civility (Smith 1965)? Are some theologies more conducive

to capitalist economic development than others (Weber 1958)? Does a society need

religion to sustain its overarching moral order (Durkheim)? Others are relatively new, or

mix elements of old and new. Is Protestantism especially conducive to democracy

(Lipset, Kyoung-Ryung, and Torres 1993)? Does the welfare state "crowd out" the

demand for institutional religion (and vice versa)? What is the relationship between

religion and fertility? Religion and marriage? Religion and women's rights? Does

pluralism erode religious commitment (Berger 1967) or promote religious vitality (Finke

and Stark 1988)? Do national churches and state regulation undermine personal piety

(Iannaccone 1991)?

Answering such questions is immensely difficult, even with time-series and cross-

sectional data, but without such data the task becomes almost impossible.

Conclusions:

Despite a vast accumulation of empirical resources, a dearth of data

continues to frustrate research on religious trends, not to mention more general studies

about the causes, consequences, and character of religious change.   Our methods of

proof demand statistics and our statistics work best on surveys, but surveys tell us much

more about cross-sectional differences than intertemporal change. The most interesting

and important questions about religion and society remain the very questions we seem

least able to address.

The problem appears to have a straightforward solution. Stop making do with

scattered historical statistics, and tap the comprehensive history we collectively carry in

our minds. Stop grinding the same old survey questions though ever more complex

calculations, and begin mining the global storehouse of retrospective data. Let others wait for decades of polls spanning dozens of countries; reconstruct the past *now*.

There is no reason to hold hostage our questionnaires to the here-and-now of voter polls and marketing surveys. Social scientists study *people*, and people live for sixty, seventy, even a hundred years – they do not simply pop into being, complete a questionnaire, and forthwith vanish. Despite their limitations, human memories constitute our most plentiful and potentially detailed source of insight into recent history.

Never before have students of religious change stood to gain so much, so quickly. Mountains of unexplored multi-nation data already exist. Retrospective questions in the 1991 and 1998 ISSP surveys yield detailed estimates of religious trends across dozens of countries. The estimates span most of the 20th century, fit what we already know about America, greatly extend our statistics on Europe, and give us our first real look at trends and turning points in Russia and Eastern Europe. The data can be sliced and diced in many ways, yielding trends for mothers versus fathers, youth versus parents, Catholics versus non-Catholics, people with no religion, and so forth.

One could fill a book with insights from the ISSP data alone. Even a cursory analysis of the offers numerous new insights regarding secularization, the impact of Vatican II, religion and gender, religious repression, and the religious socialization of youth. One can only guess what other retrospective gems lie hidden in neglected questions from the GSS, American Catholic Surveys, Project Canada, NES, and more. One dreams of finding some long-forgotten survey that will extend our attendance estimates back to days of the Civil War.

The available evidence strongly affirms the validity of the retrospective approach. Retrospective attendance data stand up to numerous different tests of internal and external consistency. Indeed, the resulting aggregate trend estimates are so robust that they rival all but the best estimates derived from a standard sequence of independent survey estimate.

I do not claim that the mines of memory yield treasures on the cheap. We must tackle the problems of forgetfulness, misrepresentation, and sample bias with effort and creativity.[30] Retrospective data have many special features that demand special statistical methods. And despite the evidence that the ISSP questions yield good results, there is no reason to assume that they represent the best or only questions we can use to poll the past.

Retrospective methods are not for the faint of heart, but then again neither is any style of research. An air of authority may suffuse the information that comes to us in texts and tabulations, but they too embed countless errors of omission, transcription, bias, and outright fraud. Josiah Stamp's timeless warning about government statistics applies to them all: "you must never forget that every one of those figures comes in the first instance from the village watchman, who just put down what he damn pleases" (Stamp 1929: 259, reprinted in Kennedy (1998)).

We must not dawdle, however, while specialists perfect our retrospective methods. Better to replicate the ISSP questions at every turn than wait for ideal instruments. Stamp's village watchman is already dead, as is Stamp himself. We loose millions of other "watchmen" with every passing year.

Notes:

[1] Throughout this article I use the term "church attendance" in place of the awkward, but more accurate, phrase "religious service attendance."

[2] As Hadaway and Marler (1998) emphasize, it was this hypothesis (that "Americans were reporting the same level of attendance to pollsters while their actual church participation was dropping") that led them to study "actual" versus "reported" rates of attendance. Likewise, it is this notion of a "growing gap" (whereby "consistent responses to the polls [have] masked declines in actual church attendance") that remains the most important and controversial feature of their work. For comments on Hadaway, et al (1993), see (Caplow 1998; Hout and Greeley 1998; Presser and Stinson 1998; Woodberry 1996; Woodberry 1998).

[3] The attendance estimates in tables 1 and 2 are "midpoint" predictions derived from a series of overlapping regressions. For example, to obtain the 1960 rate for the U.S. in table 1, I regressed parental attendance on to parent gender and parent year for all U.S. observations corresponding to 1960 plus or minus four parent years. ("Parent year" refers to the year to which the retrospective observation should apply.) The regression provides the mid-point estimate listed in table 1 as well as confidence intervals and other relevant statistics.)   Appendix 2 describes my data and estimation methods in more detail, while also reviewing several other methods, which (fortunately) yield similar results.

[4] The U.S. is blessed with three independent sets of annual (semi-annual) surveys that consistently poll people about their religious beliefs and behavior: Gallup Opinion Polls starting in 1939, the National Election Studies starting in 1952, and the General Social Surveys starting in 1972. Surveys of religion in Ireland and Norway begin later, occur less often, and employ less consistent questions and samples.

[5] The October 2001 edition of *Religion Watch* (Cimino 2001,) cites recent studies that document large declines in Sunday school attendance in the United Church of Canada and the Church of England over the past few decades. The estimates of table 1 and 2 confirm that decline (both relative to parents and absolutely) has indeed been very sharp in these countries. The retrospective decline for U.S. youth is confirmed in part by Gallup and Lindsay (1999, 160), who report a teenage attendance rate of 70% for 1959-1961 in contrast to a 50% for 1988-1993. I find further evidence of ongoing decline in youth attendance rates based on my analysis of data from the 1976 – 1992 "Monitoring the Future" surveys of American High School seniors (Bachman 1997).

[6] Catholics constitute a little less than half of the Dutch population. For 5-year intervals running from 1930 through 1985, I estimate their attendance rates as: 81%, 82%, 84%, 82%, 82%, 79%, 81%, 79%, 72%, 55%, 46%, 48%. The decline is entirely concentrated in the years 1965 through 1980, and greatly overshadows the decline among non-Catholics, for whom the corresponding sequence from 1930 through 1985 is: 43%, 42%, 40%, 45%, 45%, 44%, 42%, 38%, 34%, 34%, 32%, 36%. For more Catholic versus non-Catholic effects and the critical period of the mid-60s through 70s, see the second-to-last section of the paper.

7 Although questions about church attendance appear in U.S. Gallup surveys dating back to 1939, we must discount polls prior to the 1950s, due to serious sampling problems (including under-representation of women, southerners, and blacks) described by Glenn (1987,).

[8] For more trends statistics on religion in Hungary as well as a very perceptive analysis of the impact of communism and the post-communist revival in religious activity, see Froese (2001). Note also that Froese uses the retrospective ISSP data to plot a time-trend of childhood rates of attendance in figure 3, p. 262.

[9] Surveys illustrate this last point. Year after year, a majority of Gallup-polled Americans agree that "religion is losing its influence in public life." Yet over these same years, the average responses to numerous questions about *current* rates of church attendance, prayer, church membership, and religious beliefs have remained virtually unchanged.

[10] Hadaway, Marler, and Chaves (1993) suggest that such problems have given rise to an "increasing gap" between actual and reported rates of church attendance in the U.S.

[11] To see why, let R_t represent the (attendance) estimate for period t generated via retrospective responses to a survey administered at time $M > t$. By definition, R_t is derived from respondents of a single age (or age group), A_t. Hence, the estimated change ΔR or correlation ρ_R across any two periods will be (largely) unaffected factors that exert (nearly) uniform biases across all age groups in the sample. (The major effect will be to shift *overall* levels up or down, while not changing relationships across time periods or between R and its demographic correlates, such as race, region, religion, gender, and marital status.) Extending this result to multiple samples, we see that, despite probable shifts in overall levels, the estimated trends and turning points in retrospective time series will tend to remain consistent despite shifting samples, questions, or survey methods.

[12] Despite the evidence (reported by Hadaway et al. 1993, and others) that people tend to overstate their actual attendance rates, their answers are remarkably consistent. Smith and Stephenson (1979) summarize a series of test/retest experiments in which GSS participants were re-interviewed over the phone several weeks after their initial face-to-face interviews. Despite the changed mode of interview and intervening weeks, 95% of respondents gave identical answers both times – a consistency rate far higher than those associated with most attitude questions and equal to those of standard demographic questions concerning the respondent's education, income, ethnicity, and number of siblings (p. 73-74). In light of the substantial psychometric literature demonstrating that people rapidly forget survey content (see Smith and Stephenson 1979,), we can be confident that questions about (current) attendance do elicit genuinely consistent answers.

[13] As Andersen (1979) notes, the 1952 and 1956 differences "are no larger than the differences between the [standard, non-retrospective] SRC and Gallup Poll results for party identification in those years." The results for 1937 are 32% Republican in Gallup versus 34% in the SRC reconstruction, 53% Democratic in both, and 16% independent in Gallup versus 12% in the SRC reconstruction. On the other hand, the SRC reconstructions do underestimate independents because the SRC surveys counted people as "always Democrat" or "always Republican" if they have consistently identified with one party despite beginning their voting careers as independents (Andersen 1979).

[14] Reiter (1980) contends that Andersen's results are less accurate than they seem and underestimate the actual amount of party switching occurred during the realignment of the 1930s. His evidence is, however, based largely upon what he himself calls "pitifully small" samples of Black and Jewish voters in the SRC surveys (p. 387). Moreover, as I will demonstrate later in the paper, the GSS and ISSP attendance data show no sign of the projection bias that Reiter ascribes to the SRC's party identification data.

[15] Although many congregations track weekly attendance, most employ casual methods of counting and abominable methods of record keeping. Denominations make no serious effort to track the aggregate attendance of their congregations. Although many denominations do maintain membership statistics, researchers must keep in mind that: congregations most congregations maintain notoriously sloppy

membership roles, different denominations employ radically different definitions of membership, and many contemporary congregations do not report to any denomination at all.

[16] It is also true that nearly all the coefficients are "statistically significant," but this means little given the large sample size, not to mention the nonstandard character of retrospective "samples". For an extended discussion of the limitations and misuse of significance tests see McCloskey (1998, 112-138).

[17] The respondent age restriction was employed because the GSS rarely asks respondents about the current ages of their children. Modifying this restriction, or the others, does not, however, alter the basic regression results.

[18] The ISSP surveys do not ask about parents' age, race, income, or region, and only the 1991 surveys asked about parents' education. I used respondent's race as a proxy for that of the parents, and the region in which the respondent grew up as a proxy for parents' region.

[19] Respondent age cannot appear in among the regressors, because it already appears in the expression for the year to which the retrospective data apply.

[20] The small and statistically insignificant PYEAR coefficient suggests that age-related biases do not substantially distort our trend estimates. Because PYEAR = (survey year) – (respondent age) + 11, its regression coefficient captures the combined impact of time trends *and* respondent age. Secularization would tend to shift this coefficient toward larger negative values, but given that all direct measures of U.S. attendance show little change over time, the actual time trend must be small in this case. Hence, in this case, the magnitude of the PYEAR coefficient reveals the impact of respondent age biases, including projection bias. A strong projection bias would tend to produce a strong and negative PYEAR coefficient because age is one of the strongest predictors of respondents' *own* attendance and religiosity.

[21] To maximize the comparability across generations, I restricted this correlation to the married respondents who had at least one child, were first married at least ten years ago, and who were less than 58 years of age (resulting in a sample size, N = 1,406). For all married respondents the correlation is .73 (and N=3,067).

[22] One might hope to do better with the American General Social Surveys, which include retrospective questions in the 1980's as well as 1991 and 1998. Unfortunately, attendance profiles in the U.S. lack the major trends or turning points needed for strong tests of consistency. For what it is worth, however, the GSS data do mirror reality, yielding a series of consistently flat retrospective profiles whether one works from responses in 1983-1985, 1987 – 1989, 1991, or 1998.

[23] Hout and Greeley (1987) provide a detailed analysis of American Catholic and non-Catholic attendance trends from 1940 through 1984. For analysis of the 1963 and 1974 American Catholic surveys and copies of the questionnaires, see Greeley (1976).

[24] The retrospective profiles in figure 10 do incorporate one important adjustment, derived from a comparison of the current (non-retrospective) attendance rates reported by Catholic parents in the 1974 American Catholic surveys and the corresponding current attendance rates reported by American Catholic parents in the 1973 through 1975 General Social Surveys. In principle, these surveys should yield nearly identical attendance rates, whereas in fact the American Catholic rate (of about 60%) substantially exceeds the GSS rate (of about 52%). I suspect that the difference arises: (1) because the Catholic surveys included few response categories (making it somewhat more difficult to report less-than-weekly attendance) and (2) the Catholic surveys included so many questions about one's Catholic beliefs, behavior, and upbringing that less pious Catholics might have been less likely to complete the interview or more likely to give inflated answers. Given that survey results often shift in response to changes in question wording, survey methods, or questionnaire length or content (Rossi et al. 1983), I decided to uniformly *deflate* the 1963 and 1974 American Catholic attendance rates by 52%/60% – the difference between the contemporaneous attendance rates reported in the 1974 Catholic survey and the 1973-1975 GSS surveys. Without this

adjustment, the 1963 and 1974 retrospective profiles would still match each other, and their movements would still parallel those of the 1991 and 1998 ISSP, but they would do so at a uniformly higher level.

[25] This consistency is especially striking given that Bibby's surveys are conducted by mail and require up to 2.5 hours to complete. With no interviewer present and such long questionnaires, respondents often get careless or even delegate the task to other household members.

[26] Sigelman (1977) summarizes results for a cross-national collection of 1968 Gallup polls. For more information on the European Communities Studies and World Values Surveys, see (Inglehart 1999).

[27] Berger (1979) and other proponents of secularization theory apply the term "modernization" to the combined forces of urbanization, education, rationalization, and increased pluralism. See Roberts (1990) for an extended summary of variants on the secularization thesis promoted by Berger, O'Dea, Parsons, Bellah, and others. The opponents of secularization theory (including Greeley (1985), Stark (1999), Hadden (1987), and Warner (1993)) do not dispute this definition, but they strenuously deny that any of these phenomena induce secularization.

[28] The term secularization comes from Max Weber (Swatos and Christiano 1999). Leading proponents of secularization include Bryan Wilson (1969) and Steve Bruce (1992) from Great Britain, Karel Dobbelaere (1987) from Belgium, Peter Berger (1967), and Thomas Luckman (1967). The leading critics of secularization theory include the Americans Andrew Greeley (1985), Rodney Stark (1999), Roger Finke (1992), Jeffrey Hadden (1987) and R. Stephen Warner (1993). For a recent historical overview of the secularization thesis and debate, see Swatos and Christiano (1999).

[29] Generalizations (4) and (5) must be modified somewhat in the case of the Netherlands, where non-Catholic attendance goes through a period of moderately from around 1960 through 1970.

[30] Although the accuracy and representativeness of retrospective data may prove difficult to assess, tests of reliability are relatively straightforward. Repeating queries on long-running longitudinal surveys is a direct approach, albeit costly. Polling different people on the same retrospective facts is easier – e.g., quizzing siblings about their parents or shared childhood experiences, or asking older couples about specific facts relating to their children or the early years of their marriage).

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Table 1
Estimated Attendance Rates, 1925-1990

		1925	1930	1935	1940	1945	1950	1955	1960	1965	1970	1975	1980	1985	1990
Australia	children	71	68	69	70	68	66	64	67	64	57	51	46	40	29
	parents	36	33	35	34	30	30	31	34	36	35	34	28	27	27
Austria	children	75	76	75	70	70	72	70	70	70	61	53	52	53	52
	parents	62	59	62	61	54	51	47	50	55	49	42	42	43	41
Bulgaria	children	--	65	39	30	23	18	12	6	5	6	3	3	3	3
	parents	--	49	42	32	29	27	18	12	11	9	6	7	6	6
Canada	children	--	--	78	72	74	72	76	76	62	52	50	47	40	18
	parents	--	--	59	53	49	51	62	58	54	48	46	43	40	21
Chile	children	--	69	65	59	59	64	64	58	55	51	51	53	54	49
	parents	--	52	49	50	43	40	47	43	39	39	39	39	36	35
Cyprus	children	--	--	79	73	61	54	50	53	48	41	36	34	33	31
	parents	--	--	68	63	58	51	45	47	44	36	32	31	30	31
Czech Rep.	children	--	33	59	58	56	44	32	26	22	21	20	15	10	12
	parents	--	12	47	44	42	35	30	28	24	23	24	19	11	14
Denmark	children	16	15	22	20	16	19	19	16	15	12	8	10	10	10
	parents	18	19	22	16	10	15	15	12	10	9	6	8	9	6
France	children	--	68	69	72	71	67	62	64	65	60	49	34	33	35
	parents	--	46	41	39	33	35	30	33	33	30	26	20	18	23
Germany-E.	children	38	38	37	33	30	28	25	18	14	11	9	9	11	4
	parents	32	21	25	24	20	17	17	13	11	10	8	8	8	3
Germany-W.	children	73	65	60	55	56	57	56	48	45	43	42	42	42	36
	parents	64	60	50	47	49	42	40	36	34	32	33	33	28	24
Great Britain	children	76	76	71	65	64	63	56	54	48	40	38	33	28	18
	parents	43	38	31	33	32	29	24	28	24	22	24	23	18	17
Hungary	children	85	90	89	90	87	75	64	59	48	38	35	30	27	41
	parents	64	67	63	62	62	55	48	45	34	25	25	20	16	16
Ireland	children	96	99	99	98	98	98	97	96	95	96	96	93	92	97
	parents	96	98	98	97	96	96	96	94	93	95	94	90	90	92
Israel	children	28	38	41	33	36	35	31	29	27	25	27	27	29	36
	parents	38	39	37	34	35	35	32	30	30	28	27	26	29	32
Italy	children	--	87	88	85	84	84	86	87	87	83	78	78	77	78
	parents	--	70	75	70	65	63	65	60	62	58	50	48	50	53

		1925	1930	1935	1940	1945	1950	1955	1960	1965	197	1975	1980	1985	1990
Japan	**children**	15	10	10	11	8	6	5	4	3	3	3	5	6	5
	parents	13	13	12	14	11	11	9	6	5	4	3	4	5	4
Latvia	**children**	--	--	31	24	16	14	9	5	3	5	5	3	3	8
	parents	--	--	30	25	23	23	18	11	8	8	8	6	4	2
Netherlands	**children**	61	60	58	60	64	66	64	61	54	47	40	34	37	54
	parents	61	56	56	58	60	61	59	60	55	51	44	38	40	54
New Zealand	**children**	66	62	63	61	60	58	55	54	55	48	39	35	33	6
	parents	34	33	31	32	32	29	30	33	35	36	32	29	28	27
No. Ireland	**children**	92	92	93	90	88	90	88	84	84	79	78	74	73	70
	parents	83	75	71	69	72	70	65	64	70	67	62	57	63	56
Norway	**children**	27	20	20	23	24	23	21	18	18	17	15	15	15	10
	parents	27	18	18	22	19	18	17	14	14	12	9	10	13	11
Philippines	**children**	84	77	80	79	77	75	74	75	76	76	76	78	78	76
	parents	85	78	74	73	73	73	71	72	75	73	72	75	76	78
Poland	**children**	--	86	90	86	87	87	85	84	84	82	82	82	81	83
	parents	--	85	85	84	83	81	78	74	72	69	68	66	65	68
Portugal	**children**	--	--	66	74	71	68	72	77	80	73	70	64	61	56
	parents	--	--	61	60	58	57	57	51	53	54	53	51	48	41
Russia	**children**	40	20	12	8	5	4	3	2	2	2	2	2	2	2
	parents	--	27	20	17	14	11	7	6	5	4	3	2	2	2
Slovakia	**children**	--	--	77	82	79	74	73	65	57	56	59	50	46	41
	parents	--	--	66	75	71	66	68	62	56	55	55	44	40	37
Slovenia	**children**	--	83	84	79	76	67	64	58	55	55	54	50	45	43
	parents	--	76	72	68	65	55	50	45	40	38	37	35	31	30
Spain	**children**	76	74	71	78	80	79	77	75	74	68	61	58	55	55
	parents	70	68	60	64	62	56	55	53	53	51	50	48	43	37
Sweden	**children**	--	50	25	25	23	21	18	14	15	14	12	11	12	10
	parents	--	14	18	16	13	14	14	15	12	12	11	10	10	11
Switzerland	**children**	--	--	48	57	65	67	62	56	54	51	48	44	36	30
	parents	--	--	32	40	49	44	41	38	40	41	38	34	26	23
United States	**children**	66	74	75	72	73	71	72	72	70	66	65	59	56	52
	parents	62	61	59	57	56	53	54	56	57	55	54	52	54	59

Notes/Source:
Estimates based on 1991 and 1998 ISSP surveys, retrospective questions.
Blank cells indicate fewer than 50 cases in estimation interval.   See Appendix 1 for details concerning estimation procedure.

Table 2:
Attendance Regressions for Respondents and Parents

	(1) ATTEND	(2) ATTEND	(3) P_ATTEND	(4) P_ATTEND
AGE	0.433			
	(16.81)**			
SEX	11.078	9.344		-0.496
	(13.33)**	(6.24)**		(0.41)
EDUC	1.261	1.604		0.910
	(8.62)**	(5.71)**		(3.88)**
REALINC	-0.007	-0.026		-0.021
	(0.38)	(0.80)		(0.86)
WEST	-6.854	-10.596		
	(5.90)**	(4.90)**		
SOUTH	7.552	8.437		
	(7.81)**	(4.94)**		
MARRIED	0.616			-1.596
	(0.52)			(0.80)
SAME	8.015	7.135		1.536
	(7.27)**	(4.27)**		(0.78)
CATH	17.148	18.297		5.557
	(17.14)**	(10.46)**		(2.81)**
NONE	-28.535	-34.281		-6.263
	(16.48)**	(8.98)**		(2.52)*
BLACK	11.193	15.263	15.556	14.263
	(8.26)**	(5.46)**	(8.44)**	(7.39)**
P_YEAR			-0.208	-0.213
			(5.80)**	(5.55)**
P_SEX			8.424	8.302
			(7.46)**	(7.07)**
P_EDUC			1.345	1.141
			(8.74)**	(6.57)**
P_SOUTH			4.707	5.736
			(3.55)**	(4.11)**
P_WEST			0.446	0.880
			(0.27)	(0.53)
P_SAME			16.772	14.038
			(10.16)**	(8.16)**
P_CATH			14.897	10.899
			(11.53)**	(5.62)**
P_NONE			-40.663	-40.235
			(15.55)**	(14.63)**
CONS	-16.942	3.466	420.432	423.145
	(5.82)**	(0.79)	(6.04)**	(5.71)**
Obs	9770	3157	4978	4626
R2	0.14	0.11	0.16	0.17

Notes:
     Absolute value of t-statistics in parentheses; * significant at 5% level; ** significant at 1% level.
     See appendix 1 for variable definitions.

Table 3:
Attendance Rate Correlations

	Male Resp.	Female Resp.	Male Spouse	Female Spouse	Male Parent	Female Parent
Male Spouse		*0.68				
Female Spouse	*0.70					
Male Parent	0.24	0.23	0.16	0.18		
Female Parent	0.22	0.25	0.16	0.16	0.62	
Male Child	0.29			*na*	0.58	0.66
Female Child		0.23	*na*		0.49	0.60

Source:
  NORC General Social Surveys, 1972-2000 [Davis and Smith 2001].

Notes:
  All variables are attendance rates reported by respondent. "Child" denotes the respondent's childhood attendance rate.
  * Respondent/Spouse correlations are restricted to married respondents, with at least one child, at least ten years older than age of (first) marriage, and 55 years old or less. All other correlations include all available cases.
  The number of cases per correlation ranges from about 1,000 (for parent-child and parent-spouse correlations) to more than 5,000 (for respondent-parent correlations).
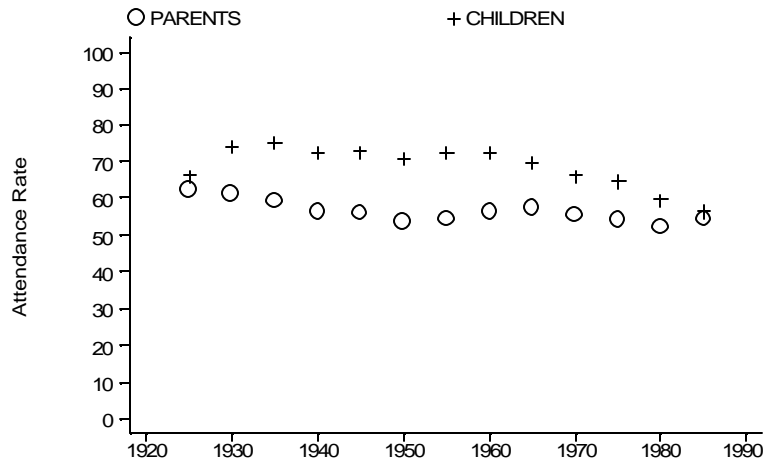
Fig __. United States - Child and Parent Attendance
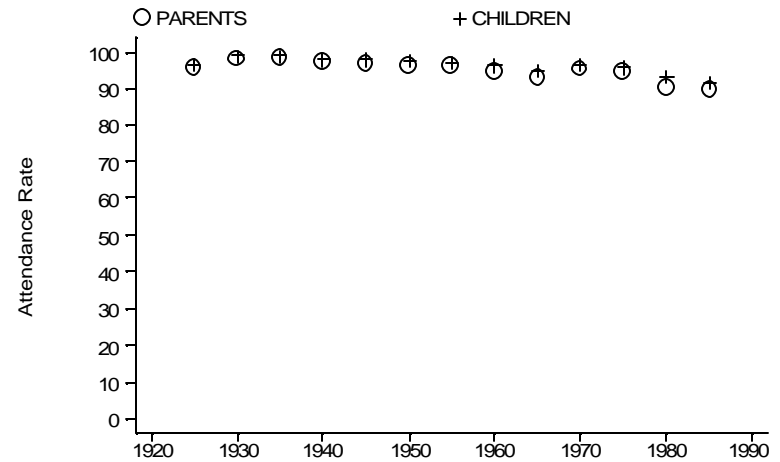
Fig __. Ireland - Child and Parent Attendance
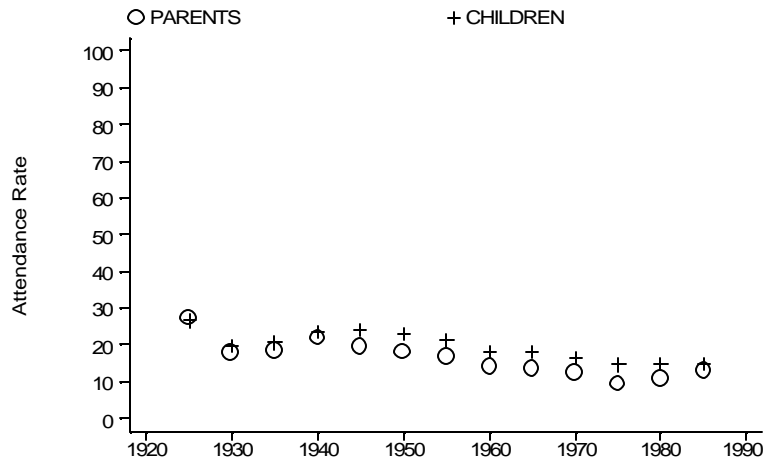
Fig __. Norway - Child and Parent Attendance
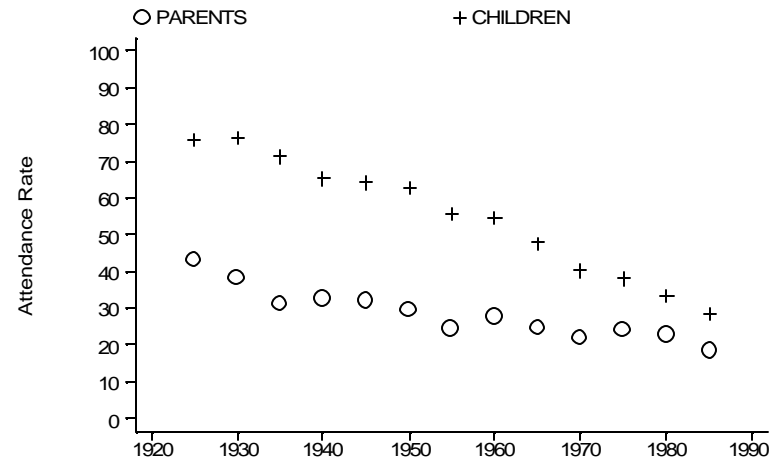
Fig __. Great Britain - Child and Parent Attendance

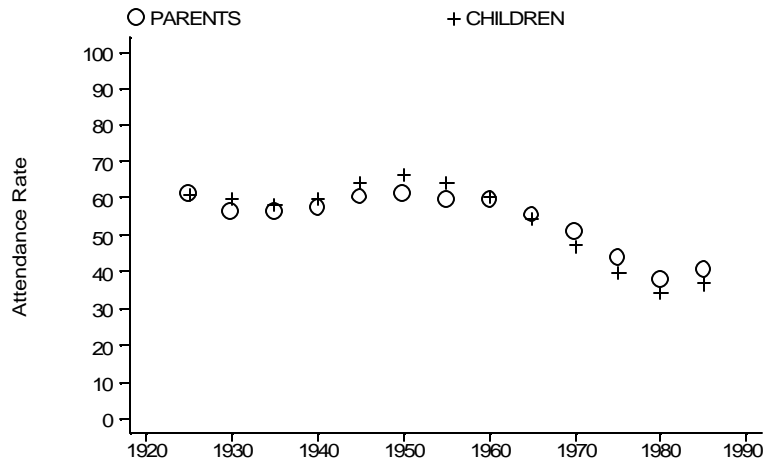**Figures 1 – 4: United States, Ireland, Norway, and Great Britain**
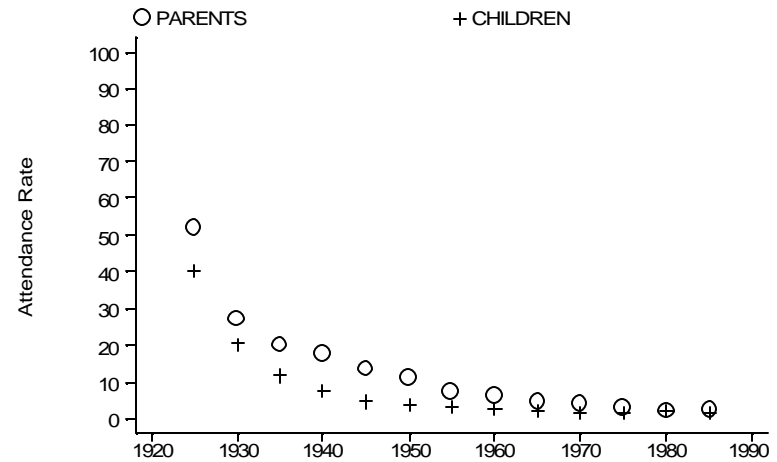
Fig __. Netherlands - Child and Parent Attendance

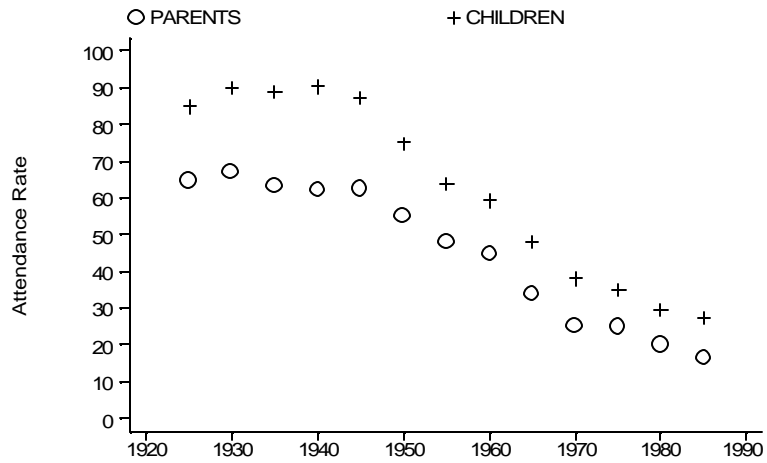Fig __. Russia - Child and Parent Attendance
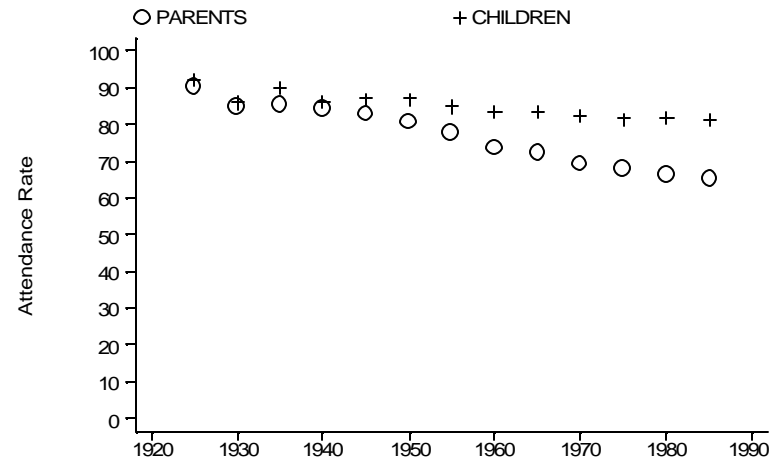
Fig __. Hungary - Child and Parent Attendance

Fig __. Poland - Child and Parent Attendance

Figures 5 – 8: The Netherlands, Russia, Hungary, and Poland

Fig. 9a: Alternative Attendance Measures
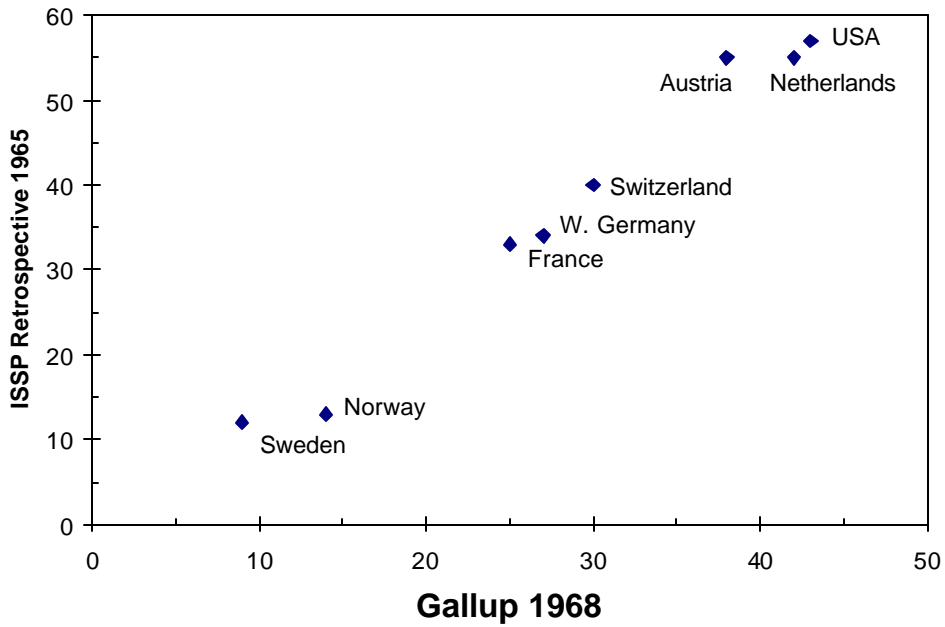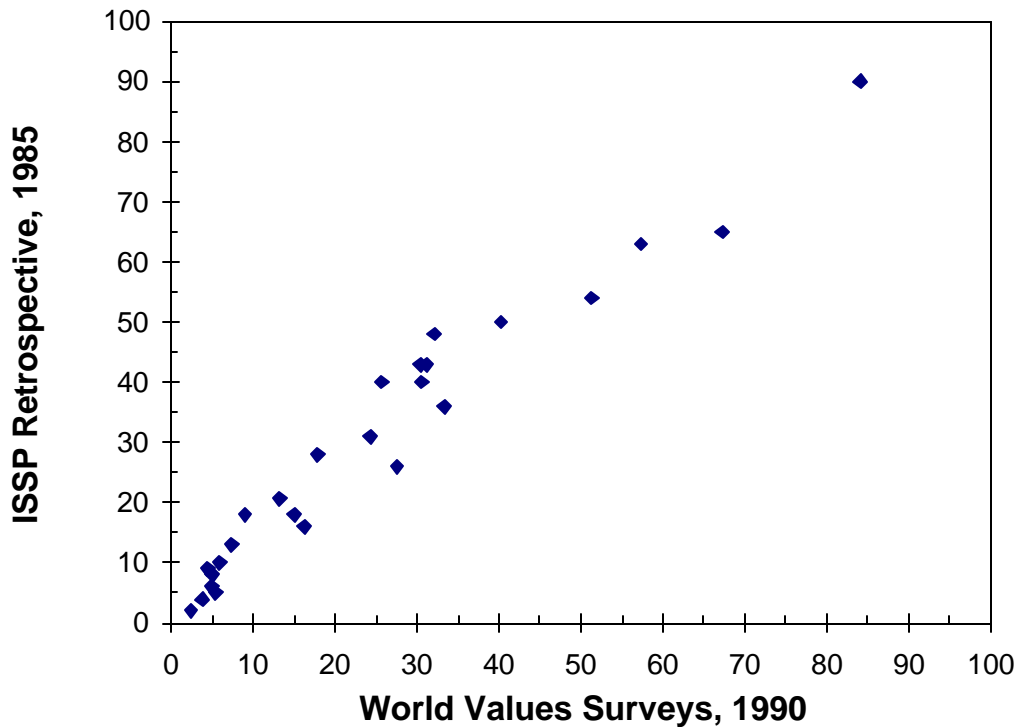(Direct 1968 vs. Retrospective 1965 [r=.99])

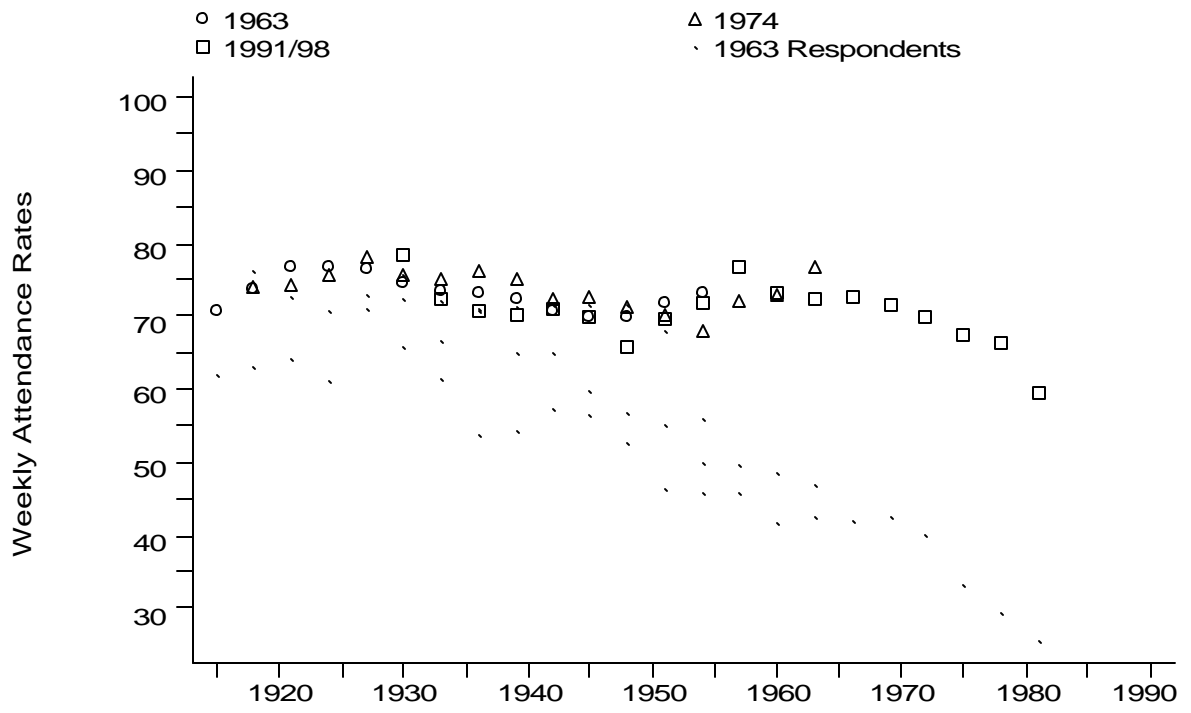**Fig. 9b: Alternative Attendance Measures**
(Direct 1990 vs. Retrospective 1985 [r=.97])

Fig 10. Parents of Catholic Respondents