

Religion and Changes in Family-size Norms in Developed Countries*

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ABSTRACT

This paper studies the influence of religious affiliation and frequency of church attendance in shaping preferences over family size across 13 developed countries and over five broad religious groups. The ideal number of children is higher for Conservative Protestants and Catholics, affiliations with more pronatalist teachings, than for Mainline Protestants or individuals with no religious affiliation. Religious affiliation regardless of religiosity is more significant in explaining differences in the ideal number of children for older individuals and for men than for women. With the progressive loss of influence of religious institutions in society, the degree of church attendance has become a more salient predictor of family norms, particularly for women. Church membership, independent of religiosity, exerts greater influence in demographic preferences in pluralistic societies than in countries monopolized by one religious affiliation.

INTRODUCTION

During the last three decades, developed countries have undergone important demographic transformations such as delays in age at first birth or at marriage as well as increases in extra-marital births and in cohabitation. These demographic choices are associated with an accentuation of individual autonomy and, among Europeans, with a reduction in religious practice and an abandonment of traditional religious beliefs (Van de Kaa 1987, Lesthaeghe and Surkyn 1988, Bumpass 1990, Surkyn and Lesthaeghe 2004). Changes have occurred faster in areas where they started later, such as in Southern Europe.

Previous research has extensively highlighted the relevance of religious affiliation and religiosity in a wide range of demographic outcomes (see Lehrer 2004 for a useful review). More specifically, the empirical research has shown that fertility behavior differs between women who are affiliated to any religious group and those without any affiliation, and that those differences actually increase with church attendance (Mosher et al. 1984, Sander 1992, Williams and Zimmer 1990, Lehrer 1996).

The paper takes a slightly different approach to focus on the role of religion and religious practice as meaningful predictors of family-size norms. It analyzes the ideal number of children in a family reported in a sample of around 16,000 adults in 13 developed countries. Data are based on the survey of Family and Changing Gender Roles conducted by the International Social Survey Program (ISSP) in 1994. Individuals are divided in five main religious groups: Mainline Protestants, Conservative Protestants, Catholics, those affiliated to other religions (mostly non-Christian), and those without an affiliation. The paper estimates the effect of religion and religiosity across countries as well as across denominations.

RELIGION AND FAMILY SIZE NORMS

Religion has long been recognized as an important determinant in household childbearing decisions. The major religious traditions confer a central role to the family in society. As a result, membership into a religious affiliation is expected to be associated with a desire for larger families. In modern societies, individuals who have abandoned traditional religious beliefs display differential demographic behavior and preferences. Recent analyses of the European Values Surveys, for example, have shown that those individuals with lower adherence to institutional religion prefer fewer children and are less likely to live in traditional families (Lesthaeghe and Surkyn 1988, Bumpass 1990, Surkyn and Lesthaeghe 2004). Fertility studies show that women with no affiliation have fewer children than any other group in the U.S. (Mosher et al. 1992, Lehrer 1996).

Moreover the emphasis placed on childbearing varies across denominations. Norms for big families are stronger within churches with more pronatalist teachings such as Catholics and Conservative Protestant denominations. Conservative Protestants exhibit differentially lower contraceptive use and higher fertility than other affiliations (Goldscheider and Mosher 1991, Lehrer 1996). Mormons stand out as the group with the highest ideal family size and fertility (Heaton 1986, Mosher et al. 1992, Lehrer 1996). McQuillan (2004) argues that the large institutional influence of the Mormon Church over its members reinforces their pronatalist values. The pronatalist views of the Catholic Church are supported by the restriction it imposes on the use of contraception. Further, McQuillan (2004) notes that guidelines on sexuality within marriage, such as the obligation of spouses not to deny gratification to their partners (marital debt), affect childbearing norms among Catholics. *Individuals adhering to a religious affiliation, particularly one with strong pronatalist teachings, prefer bigger families than those without religion (Hypothesis 1).*

Nonetheless, the influence of religion on childbearing behavior and preferences has changed over time. The adherence to the Church recommendations on contraception among Catholics, for example, has weakened substantially. To some this would account for the fast decline in family size among Catholics (Goldscheider and Mosher 1991, Mosher et al. 1986). In the 1999 Spanish Fertility Survey, for example, the percentage of married women having ever used a modern method of family planning is fully 82% of practicing Catholics and 91% of non-practicing Catholics (Adsera 2004 b). In the late 1970s, after years of consensus that Catholics living in the U.S. had significantly larger families than Protestants, Westoff and Jones (1979) pointed out that fertility rates of those groups were rapidly converging due to the sharp decrease in Catholic fertility. This result was confirmed in subsequent research for the U.S. and Northern Ireland, among others (O'Grada and Walsh 1995, Lehrer 1996). Fertility researchers gradually shifted their attention to analyze the positive impact of religious participation across affiliations on birth rates (Lehrer 2004). Janssen and Hauser (1981) note that among Catholics a weakening of the socialization power of the Church (i.e., through schooling influence) combined with various secular forces was likely responsible for the convergence.

Researchers have long recognized that religion is relevant for demographic preferences and behavior not only because of the specific teachings of the Church but also through its influence in the total context of the social organization (Goldscheider and Mosher 1991, McQuillan 2004). The progressive loss of community influence of religious institutions, particularly in traditionally Catholic countries such as Ireland, Austria and Southern Europe, weakens the link of membership to the denomination's values. Under these conditions, we should expect that only individuals with active participation would still be committed to church teachings. This is consistent with the finding that religious practice has become a key determinant in Catholic fertility in the last decades. Several

papers have shown an increased polarization in U.S. Catholicism, with significantly higher fertility among those with more frequent church attendance (Mosher and Hendershot 1984, Williams and Zimmer 1990, Sander 1992). A similar result is obtained for Spain (Adsera 2004 b). I anticipate finding a similar relationship between church attendance and family size preferences among younger generations across all denominations. *As the influence of religious institutions in society has lessened, religious practice has become a more salient predictor of family norms (Hypothesis 2).*

Further, the relevance of church membership in shaping individual norms on childbearing is expected to vary depending on the level of religious competition and religious regulation of a country. Stark and Iannaccone (1994) note that, in pluralistic societies, competition leads to vigorous organizations, the level of participation is high, and individuals faced with a wide range of choices are closely identified with their denominations. In countries where one denomination monopolizes the religious landscape backed by state regulation the impact of membership should depend on the extent that the religious organization is present in the public and political sphere. This argument is closely connected to Hypothesis 2. Stark and Iannaccone (1994) note that when religious deregulation occurs in a previously regulated society, desacralization – the loss of influence of religion over other institutions in society - follows. As a result religious institutions cease to exert influence over individual preferences in the powerful way they did before. The dismantling of some religious monopolies in Europe, such as Catholicism in Southern Europe, is likely to be accompanied by temporary declines in personal piety until new religious competition emerges and, with it, renewed religious commitment among individuals. The rapid institutional changes since the onset of Spanish democracy in 1975 and the recent drop of church attendance in the country is an example of this phenomenon. Under these circumstances, nominal membership to the dominant affiliation should lose its significance among new cohorts. As noted by Stark and Iannaccone, “there

will be a lag between the onset of desacralization and the rise of vigorous religious pluralism” (p.234, 1994). In Nordic countries, even if society is not sacralized, state regulations protect the dominant denomination (with poor church attendance) and constitute bureaucratic impediments for other groups to establish themselves in these countries. In that regard membership in the Church of Sweden or in the Norwegian State Church should only be associated with differential preferences when accompanied by effective participation. From the discussion above the following hypothesis follows naturally. *Religious membership should still influence demographic preferences in a country with religious competition even when not coupled with frequent church attendance. Conversely where one denomination controls the religious landscape, particularly if society is not sacralized, membership without practice should be less relevant than in a pluralistic society (Hypothesis 3).*

Finally, within this general framework, moderate differences across genders are expected. In all countries in the sample, a higher share of men than of women claims having no religious affiliation. Thus, we should expect that the fact of claiming membership to a religious group is, to some degree, a more differential statement for men than it is for women. Further, the intensity of religious practice is traditionally lower among men than among women in most affiliations. *The simple identification with a particular religious group as opposed to none, even if church participation is low, should be coupled with a differentially larger impact in norms for family size among men than among women (Hypothesis 4).*

DATA AND METHODOLOGY

The International Social Survey Program (ISSP) is an ongoing program of cross-national collaboration formed in 1983. In the U.S. the data is collected as part of the General Social Survey (GSS), conducted by NORC. The data in the paper correspond to the module Family and Changing

Gender Roles II, 1994.¹ Respondents were asked to comment on various topics regarding the family and changing gender roles as well as to provide some demographic background. Though individuals in 23 nations were surveyed, I restrict the sample to 13 developed countries that include information on religion and religiosity. In particular, the sample of around 16,000 individuals aged 18 years and older contains data from Australia, Austria, Canada, West Germany, Great Britain, Ireland, Italy, the Netherlands, New Zealand, Northern Ireland, Norway, Sweden, and the United States.²

The dataset reports the number of children each person would consider ideal but it does not include any information on the number of children ever born. In particular, respondents are asked "All in all, what do you think is the ideal number of children for a family to have?"

Two types of religious variables are provided for each individual: religious affiliation and the intensity of religious practice at the time of the interview. The survey provides detailed coding of religious denominations, especially across Protestant denominations. Depending on the country, respondents were asked either "Which religious group do you belong to?" or "Do you regard yourself as belonging to any particular religion? If yes, which?" Thirty-four alternative answers were offered.

(Table 1 About Here)

I divide the sample in five groups, as shown in Table 1. Jews and Muslims were dropped since only 31 and 23 individuals in the sample respectively belong to those groups. Following previous studies for the United States by Lehrer and Chiswick (1993) and Lehrer (1996) that use a classification based on work by Kelley (1972) and Smith (1990), I regroup all Protestant denominations in two main groups, Conservative or Mainline Protestants, defined by the strictness of their membership criteria. I use the same guidelines to classify churches absent in the U.S. but present in other countries in the sample. The "other religion" group is a residual category that includes a great variety of, mostly, non-Christian denominations.³ Finally, the "no religion" group includes both individuals

that explicitly report no religion as their affiliation as well as those who do not report any affiliation and declare they never attend religious services.

Regarding church attendance, respondents were asked either "How often do you attend religious services?" or "Apart from such special occasions as weddings, funerals and baptism, how often nowadays do you attend services or meetings connected with your religion?" Ten possible answers were offered to the respondents. To control for religious practice in the analysis, I construct a dummy that equals one for those individuals who report the highest attendance rate, once a week.

The descriptive statistics in Table 2 demonstrate the substantial cross-country differences in religiosity and fertility found in the sample. The percentage of individuals declaring no affiliation ranges from almost 60% in the Netherlands to less than 5% in Italy and Ireland. Weekly church attendance is more prevalent in Ireland with 72%,⁴ followed by Northern Ireland with 47% and the United States and Italy, both around 33%. The lowest rates of church participation are found in Nordic countries, with less than 5% attending weekly services. These numbers are consistent with the finding by Stark and Iannaccone (1994) that countries with a State Church, such as the Church of Sweden or the Norwegian State Church, have very low participation rates.

(Table 2 About Here)

Among countries in the sample, Italy has the lowest total fertility rate. In Italy as in other Southern European countries church participation has recently decreased dramatically, and high unemployment rates have been most unfavorable for family formation. Nordic countries, where support for mothers from the public sector is strong, and countries with flexible labor markets and low unemployment such as the US, the UK, Australia or New Zealand have higher fertility rates.⁵ The ideal number of children is larger than actual fertility and above the replacement level of 2.1 in all cases. The inclusion of individuals beyond childbearing-age in the sample as well as the

downward bias that childbearing postponement exerts in the total fertility indicator contribute to this difference. Further, the difference seems to be relatively large in countries with high unemployment and rigid labor markets where childbearing plans have been constrained by adverse economic conditions (Adsera 2005).

(Table 3 About Here)

Table 3 presents the shares of religious denominations by age group for all the countries together and separately for the US. The proportion of individuals with no religious affiliation has moved up from 14% of the oldest group to 24% of those less than 31 years of age. Whereas Catholics represent around a third of each age group, the share of Mainline Protestants has dropped from 44% in the oldest cohort to 36% among the youngest group. In the US, the decrease in the share of Mainline Protestants, from 51% to 33%, has been coupled with an increase in the representation of Catholics, from 23% of the oldest cohort to 31% of the youngest. Conservative Protestants, a minority in the overall sample, have a stable 20% share across cohorts in the US.

(Table 4 About Here)

Table 4 presents the percent within each denomination that attends church once a week for each age group. Religious participation is always slightly lower among men than among women except for young Conservative Protestant males, 47% percent of whom attend weekly services. The widest difference in participation occurs between conservative and mainline Protestants. One of the main differences between both groups of Protestants churches lies in the expected participation of affiliated individuals in each denomination, among other things.

The level of participation among Catholic men moves down from 43% for those over 50 to 19% for those 30 years of age and under. On the lowest end, only 5.5% of Mainline Protestant men under 31 attend services on a regular basis. Participation for women has also steadily decreased

across denominations, particularly among Catholics. While 57% of Catholic women over 50 attend weekly Mass, only 25% of those under 31 do. Still, as shown in Table 2, attendance levels vary widely across countries. For example, in the U.S. a third of Mainline Protestant men under 31 attend weekly services.

The ideal number of children is estimated with ordinary least squares that include both country dummies and individual control characteristics in addition to the religious variables. The control variables are age, education, civil status, country of origin and whether the mother of the respondent worked outside the house before the respondent was 14 years old. The reference categories are incomplete secondary schooling, never married and U.S. resident. Also, regional income per capita (in \$1992) is included to account for the relative level of development of the region. Individuals in richer areas may prefer smaller families when pondering quality versus quantity of children. However, they may be more optimistic about their ability to sustain a larger offspring.

EMPIRICAL RESULTS: RELIGION AND RELIGIOSITY

Differences across Countries

The first model includes two sets of country specific variables on religion to show the relevance of both religious affiliation and religious practice in shaping norms in family size across countries. One set takes a value of one for those individuals that belong to any religious affiliation in that country and a second set for those that attend weekly services. Table 5 presents the predicted ideal number of children for individuals without affiliation and, within those who belong to a church, separately for individuals with more or less frequent attendance. The control variables are set at the mean or modal category.⁶ The last two columns include the difference in preferred family size

between those with either less than weekly attendance or no religion and those with high religiosity within the same country.

(Table 5 About Here)

Weekly church attendance is associated with significantly stronger preferences for children in all countries for women and in most countries for men.⁷ Cross-country differences corroborate Hypothesis 3. As expected from the work by Stark and Iannacone (1994), membership not accompanied by frequent church attendance in countries where one denomination monopolizes the religious landscape, such as State churches in Nordic countries or Catholicism in Ireland, Italy or Austria, does not translate in differential preferences per-se.⁸ Religious practice for the very few who actively participate in church activities in Nordic countries, 3 to 4 percent of the population, must have a most distinctive meaning and translates in differential preferences and, possibly, demographic behavior. Norwegian men and women as well as Swedish women who attend services regularly prefer family sizes much larger than those with no affiliation or low religiosity and among the highest across all countries.

Conversely, in more pluralistic societies such as Australia, the Netherlands or, to some extent, the US and New Zealand both affiliation and religiosity matter incrementally. The Netherlands deserves a careful examination. Coefficients for religious affiliation and for religiosity are highly significant both for men and women. The gap in the predicted number of children between individuals without affiliation and those with active church participation is the largest among all countries. Interestingly, the Netherlands has both one of the largest shares of respondents without affiliation, 57.4%, and a rate of weekly church attendance among affiliated individuals as high as that of the US, 35%. In addition, the mix of religious denominations is quite rich. This results in a diverse society where membership to a church is likely to be accompanied by meaningful

differences in preferences and behavior. Australia displays the same pattern of effects, with predicted fertility preferences rising for both men and women from columns 1 to 2, and 2 to 3. Although significance is marginal, a similar pattern can be discerned for men in the U.S. and for women in New Zealand.

Differences by Denomination

Estimates in Table 6 include the religious affiliation of the surveyed person as well as an interaction of the religious affiliation with a dummy for weekly religious participation.⁹ All the coefficients for religious variables are significant and positive. The estimated coefficients for the interactions of religious affiliation and participation are very large (particularly those for Conservative Protestants), despite the numerous controls included in the model. As I carefully explain below, results accord to Hypothesis set forth in the analytical section.

Further, in Table 6, the ideal number of children increases significantly with age, while it is smaller for those whose mother worked before they reached the age of 14, particularly for men.¹⁰ Civil status matters only for women. The ideal number of children for a divorced woman is 6.2% smaller than for a single woman and around 3.5% smaller than for a widowed or married woman. This might indicate that a relatively larger part of the burden of divorce, such as raising children as a single parent, falls disproportionately on women's shoulders. As for completed education, only individuals with a four-year university degree report a larger ideal family size than high school dropouts. Regional per capita income is only significant at a 15% level and positive for women. These two findings could indicate that individuals with a more comfortable economic status are ready to support a larger family.¹¹

Column 1 in Table 7 displays predicted values for the models in Table 6 separately for men and for women. Individuals with less than weekly attendance in each denomination are compared to those with no religion and individuals with weekly church attendance are compared to those with poor church attendance within the same denomination.

(Table 6 About Here)

The ideal number of children is significantly higher for individuals with religious affiliation than for the reference group with no religion. Still substantial differences among religious groups appear. Conservative Protestants have the highest predicted preferred family size. Catholics and those affiliated to “other religion” follow closely behind and the Mainline Protestants have the lowest value among affiliations. The relative position of those denominations closely related to the strength of their pronatalist teachings confirms Hypothesis 1.

The impact of religiosity is moderately different across gender. Practice matters in shaping family preferences for Conservative women but not as markedly as for men. Conservative Protestant men who attend religious services regularly have the largest predicted ideal family size of all groups. Their predicted number of children (3.24) is a 43% higher than that of people with no affiliation and 35% higher than that of their counterparts who do not attend services regularly. Conservative women are ahead of the other denominations within each level of religiosity but by a smaller margin than men.

Conversely, among Catholics and, particularly, among members of other religions, religious practice plays a lesser role for men than it does for women. Men with poor church attendance in those affiliations display a desired number of children notably larger than those without religion and than their female counterparts. By contrast, the predicted family size of practicing individuals in both the Catholic and the “other religion” denominations is similar for men and women. Among Mainline

Protestants, the effect of affiliation and participation, though significant, is small and of similar size for both genders.

(Table 7 About Here)

Columns 2 to 4 in Table 7 present the predicted number of children for three age subgroups obtained from estimates similar to those in Table 6. An analysis across age groups shows whether shifts in church attendance have been coupled with changes in the preferred family size in recent cohorts. Moreover, meaningful age groups are useful homogenous samples to study the role of religiosity across denominations. Individuals are grouped in three broad life stages. Most individuals who were born after 1964 have not yet started or are just starting a family in 1994-- particularly given the increased delay in family formation in the last fifteen years. Middle-aged respondents, born between 1944 and 1964, are likely to have children in the house. Finally, those over 50, who were born before 1944, generally live in empty nests. In addition, these generations have undergone different societal ideological changes. For example, the older cohorts would have been out of college during the campus movements of 1968. Similarly, the meaning of the cold war may be relatively obscure for the younger cohort. The sample size varies moderately across groups.

Among men the ideal number of children increases moderately with age. Among women, it is the lowest for the middle-aged with less than weekly attendance in all denominations. Physical and time costs associated with childbearing during those years are likely to influence women's responses.

Validating Hypothesis 4, coefficients of religious affiliation for men are mostly significant across all age groups. In particular, Catholic affiliation is always significant regardless of religiosity. Catholic men under 31 years of age who are not very religious cite an ideal number of children 16% larger than the baseline of 2.1 preferred by those with no religion. The fact that affiliation alone is

not significant for Conservative Protestants under 50 years of age who do not attend services regularly is not surprising considering the high rate of religiosity of this small group. In that regard highly religious Conservative Protestants display the largest family-size norms of any group.

Preferred family sizes among highly religious men in Christian churches are always significantly larger than among those with poor attendance and the distance in norms between highly religious individuals and those without affiliation widens in younger generations. Within religious affiliations the predicted number of children for practicing men in Table 7 is relatively stable across ages--somewhat lower for those in their twenties. Groups with more pronatalist teachings (Conservative Protestants followed by Catholics) prefer big families. While practicing Catholics and practicing Conservative Protestants over 50 years of age report, respectively, an ideal number of children that is 19% and 44% higher than those without religion, the gap increases to 30% and 51% for individuals in their twenties (in line with Hypothesis 2).

Among women, by contrast, the value of religious affiliation as an explanatory variable for family size preferences has dwindled across generations, while that of religiosity remains high and significant across denominations (in line with Hypotheses 2 and 4). In the same way as participation seems to be more salient for shaping women's preferences, the relative loss of influence of religious institutions in broader aspects of everyday life seems to have had a larger impact for women than for men. In column 2, none of the coefficients for religious affiliation of women in the youngest cohort is significant at 10% level. This weakening in the relevance of religious affiliation among young women agrees with findings of an increased polarization across religiosity levels in fertility behavior within Christian denominations in the U.S. (Mosher and Hendershot 1984, Mosher et al. 1986, Mosher et al. 1992, Lehrer 1996) and particularly among Catholics (Williams and Zimmer 1990, Sander 1992). Similarly, Adsera (2004 b) finds a recent increase in disparity in fertility behavior

between practicing and non-practicing Catholic women in recent cohorts in Spain. Spain exemplifies a country where religious deregulation has occurred rapidly, desacralization has ensued, and, consistent with Hypotheses 2 and 3, the influence of religious institutions over the preferences of the younger generation has greatly faded. Interestingly in Table 7, the preferred family-sizes for practicing Catholic women over 50 and for those under 31 are similar even though the first represent more than 50% of Catholic women over 50, but the second only around a quarter of those under 31.

Finally, since the controversy over the existence of a fertility gap between Catholics and Protestants has been at the heart of fertility research, it is interesting to look at the differences in family norms across Christian churches. Pair-wise tests of the gap in preferences over family size between non-practicing Catholic and Mainline Protestant men reveal significant but small differences. Among practicing men the gap is only significant for those over 50. For practicing women the difference has steadily disappeared, from a significant 9% for those over 50 down to a non significant 1.8% for those in their twenties. Similarly, the gap between women in those two denominations that do not participate in church activities regularly has moved down from 6.2% to a non-significant 0.7% in the youngest group. Overall the disparity has significantly disappeared in the youngest generation both among highly religious men and among all women. Between practicing Conservative Protestants and Catholics the gap remains significant and somewhat large for the youngest men. Given the smaller weight of Conservatives in the sample, the disparity in family-norms between Catholics and Protestants is indeed dwindling, together with the closing of the actual fertility gap between those groups (Mosher et al. 1986, O Grada and Walsh 1995, Lehrer 1996).

CONCLUSIONS

This paper studies the influence of religious affiliation and frequency of church attendance in shaping preferences over family size across 13 developed countries and over five broad religious groups. The analytical section included several hypotheses that were confirmed in the empirical analysis. First, the ideal number of children is higher for conservative Protestants and Catholics than for Mainline Protestants and the lowest for individuals with no religion. This ranking accords to teachings on family size in each affiliation. Second, religious affiliation regardless of practice is more significant in explaining differences in the ideal number of children for older individuals and for men than for women. For younger generations, the degree of church attendance, particularly for women, strongly influences the reported ideal number of children. This is consistent with studies in the US, Ireland and Spain, among other countries, showing that religiosity is becoming an important predictor of attitudes and behavior related to childbearing in recent generations. The progressive loss of community influence of religious institutions in traditionally Catholic countries such as Ireland, Austria and Southern Europe weakens the link of membership to the denomination's values. Only individuals with active participation are still committed to church teachings. Third, weekly church attendance is coupled with norms for large families across all developed countries but church membership, independent of religiosity, matters more in pluralistic societies than in those monopolized by one religious affiliation. Finally, differences in family size preferences between young Catholic and Mainline Protestants are dwindling, particularly among women. This is consistent with the closing of the fertility gap between these affiliations observed in the data.

Results of this multi-country analysis of family-size norms contribute to the understanding of fertility trends across developed countries. The particularly sharp decrease in fertility rates across

Europe conforms to the fact that religious participation is lower for the younger cohort in these countries and that low religiosity individuals prefer smaller families. Though it is impossible to discern how much within-cohort participation will rebound as the young generation ages, church attendance among young Europeans is lower than it was some years ago (World Value Survey, various years).¹² The lower level of church participation of young generations jointly with increased relevance of religious practice in shaping women preferences, particularly among Catholics, are bound to be important determinants of the sharp reduction of the number of children in Southern Europe.

The ideal number of children has its limitations as a predictor of fertility. It conveys the preferences of the person surveyed at the time of the interview and has been shown to vary over a lifetime due to individual circumstances (Freedman et al. 1980, Thornton et al. 1984).¹³ Further, the ultimate number of children the person has might depend, among other things, on the type of union that he/she forms, the stability of the union over time, as well as on his/her economic hardships/opportunities in life (Lehrer and Chiswick 1993, Adsera 2005). However, researchers do not find any systematic discrepancy between the desired number of children and final parity by religion (Freedman et al. 1980, Adsera 2005). Thus, the analysis of the evolution of norms in family size across religious affiliations provides information crucial to understanding changes in society's preferences that are likely to affect fertility trends (Bongaarts 2001).

To sum up, the paper shows that in major religions family life plays a central role. Religious individuals, particularly those who are practicing, rank family life and a large offspring high in their preferences.

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Table 1. Religious Denominations

Religion Variable	ISSP Category
Catholic	Roman Catholic
Mainline Protestant	Methodist, Lutheran, Presbyterian, Church of England, Episcopal, Unitarian, Church of Sweden, Norwegian State Church, United Church of Canada, Other Christian
Conservative Protestant	Baptist, Congregational, Evangelist, Mormons
Other Religions	Shinto, Hindu, Buddhists, Sikh, Orthodox, Brethen, Ratana, Other non-Christian, Other miscellaneous.
No Religion	None

Notes: The Jewish and Moslem samples were too small to be significant and were dropped from the analysis.

Table 2. Sample characteristics and total fertility rate in 1994 by country.

Country	% No religion	% Attend church weekly	Total Fertility Rate	Mean Ideal N. Children	N. Obs.
Australia	29.1	11.5	1.85	2.59	1,275
Austria	10.2	19.8	1.44	2.21	942
Canada	15.8	22.2	1.62	2.52	886
Western Germany	11.5	13.3	1.35 ^a	2.24	2,210
Ireland	2.4	72.2	1.85	3.12	849
Italy	3.6	32.6	1.21	2.27	998
Netherlands	57.6	15.6	1.57	2.60	1,918
New Zealand	24.3	15.3	2.02	2.56	828
Norway	6.6	4.1	1.87	2.62	1,934
Sweden	26.1	3.3	1.88	2.44	1,073
United Kingdom	41.1	11.4	1.74	2.28	887
United States	9.8	33.0	2.04	2.48	1,259
Northern Ireland	10.4	43.3	n.a.	2.83	584

Notes: ISSP 1994. Percentages are calculated out of all individuals. Total fertility rate is the number of children a woman would have by the end of her fertile life if age specific fertility rates in the country remained constant. a. Total fertility rate for Germany is combined for both Eastern (lower) and Western Germany. n.a. Data not available.

Table 3. Shares of Religious Denominations by Age Group in 1994

Age	30-	31-50	51+
<i>All</i>			
Catholic	32.7	32.5	36.2
Other Religion	3.4	2.3	1.6
Mainline Protestant	36.6	38.3	44.3
Conservative Protestant	3.1	3.5	3.9
No Religion	24.2	23.4	14.0
<i>U.S.</i>			
Catholic	31.6	25.4	23.6
Other Religion	0.0	0.0	0.0
Mainline Protestant	33.6	43.8	51.3
Conservative Protestant	18.8	19.7	20.7
No Religion	16.0	11.1	4.3

Source: ISSP 1994

Table 4. Percent Attending Church once a Week in Each Denomination by Age Group.

Age	<i>Men</i>			<i>Women</i>		
	30-	31-50	51+	30-	31-50	51+
<i>All</i>						
Catholic	19.3	28.6	43.3	24.8	33.6	56.9
Other Religion	34.5	30.9	28.9	38.9	40.2	47.8
Mainline Protestant	5.5	8.7	11.2	8.1	12.0	18.4
Conservative Protestant	46.8	36.4	45.1	34.8	37.1	61.4

Source: ISSP 1994.

Table 5. Predicted Ideal Number of Children by religion and religiosity across countries.

	No Religion	Less than Weekly Attendance	Weekly Attendance	Difference Weekly vs. Less than weekly attendance	Difference Weekly attendance vs. No Religion
<i>Men</i>					
Australia	2.39	2.59**	3.09**	0.50	0.70
Austria	2.10	2.20	2.41*	0.21	0.31
Canada	2.49	2.54	2.84**	0.30	0.35
Western Germany	2.13	2.19	2.48**	0.29	0.35
Ireland	2.56	2.88	3.29**	0.40	0.73
Italy	2.14	2.24	2.31	0.07	0.17
Netherlands	2.27	2.49**	3.06**	0.57	0.79
New Zealand	2.42	2.49	3.26**	0.77	0.84
Norway	2.52	2.56	3.24**	0.68	0.72
Sweden	2.40	2.43	2.51	0.08	0.11
United Kingdom	2.20	2.25	2.56**	0.31	0.36
United States	2.23	2.41#	2.83**	0.42	0.60
Northern Ireland	2.60	2.59	3.06**	0.46	0.46
<i>Women</i>					
Australia	2.35	2.55**	3.16**	0.60	0.81
Austria	2.01	2.13	2.51**	0.38	0.50
Canada	2.46	2.41	2.87**	0.46	0.41
Western Germany	2.14	2.23	2.54**	0.31	0.40
Ireland	2.99	2.68	3.19**	0.52	0.20
Italy	2.72	2.16*	2.40**	0.24	-0.32
Netherlands	2.49	2.76**	3.36**	0.60	0.87
New Zealand	2.34	2.48#	3.03**	0.55	0.69
Norway	2.52	2.67	2.99**	0.32	0.47
Sweden	2.38	2.44	2.99**	0.54	0.61
United Kingdom	2.22	2.27	2.58**	0.30	0.36
United States	2.43	2.38	2.62**	0.24	0.19
Northern Ireland	2.57	2.71	3.11**	0.40	0.54

Notes: All the control variables are set at either the mean or the modal group. Sample sizes are 8,414 women and 7,228 men. Full regression results are available upon request.

The significance tests correspond to the difference with respect to the no religion for those with less than weekly attendance and with respect to those with less than weekly attendance within the same denomination for the high religiosity individuals. Two tailed-tests # $p < 0.15$; * $p < 0.10$; ** $p < 0.05$.

Table 6. Ideal number of children by gender.

	Men	Women
<i>Religion</i> (re: No Religion)		
Catholic	0.207** (0.034)	0.188** (0.034)
Other Religion	0.262** (0.083)	0.146* (0.082)
Mainline Prot.	0.079** (0.030)	0.111** (0.030)
Conservative Prot.	0.132* (0.078)	0.243** (0.070)
Cath.x Weekly Practice	0.325** (0.040)	0.382** (0.035)
Other x Weekly Practice	0.327** (0.141)	0.543** (0.122)
Mainline x Weekly Practice	0.288** (0.058)	0.296** (0.044)
Conservative x Weekly Practice	0.839** (0.113)	0.521** (0.094)
<i>Controls</i>		
Age	0.0024** (0.0008)	0.0044** (0.0008)
Married	-0.020 (0.027)	-0.070** (0.026)
Widowed	0.058 (0.070)	-0.078* (0.044)
Divorced	-0.042 (0.047)	-0.136** (0.040)
Mother work before child was 14	-0.068** (0.022)	-0.047** (0.020)
Primary School	0.032 (0.032)	-0.037 (0.030)
Secondary School	-0.003 (0.028)	-0.007 (0.026)
Short College	0.004 (0.040)	0.056 (0.037)
University Complete	0.052# (0.033)	0.076** (0.033)
Regional p.c. Income (1,000 \$1992)	-0.00003 (0.001)	0.0019# (0.001)
Constant	2.186** (0.067)	2.038** (0.064)
N.Obs	7,228	8,414
Adj R-Square	0.109	0.112

Notes: Country dummies included. Omitted categories are single, incomplete secondary school and U.S. resident. Standard errors in parentheses. Two tailed-tests #p<0.15; *p<0.10; **p<0.05.

Table 7. Predicted Ideal Number of Children and Religion by Gender across Age Groups

	All	30- yrs	31-50 yrs	51+ yrs
Men				
<i>Less than weekly attendance</i>				
No Religion vs.	2.27	2.10	2.31	2.36
Catholic	2.48**	2.43**	2.50**	2.49**
Other Religion	2.53**	2.53**	2.41	2.71**
Mainline Protestant	2.35**	2.27**	2.40**	2.35
Conservative Protestant	2.40*	2.20	2.35	2.61**
<i>Weekly attendance</i>				
Catholic	2.80**	2.74**	2.86**	2.79**
Other Religion	2.86**	2.63	2.99**	2.93
Mainline Protestant	2.64**	2.57**	2.73**	2.60**
Conservative Protestant	3.24**	3.17**	3.12**	3.40**
Women				
<i>Less than weekly attendance</i>				
No Religion vs.	2.19	2.53	2.12	2.09
Catholic	2.38**	2.56	2.29**	2.44**
Other Religion	2.33*	2.58	2.19	2.40#
Mainline Protestant	2.30**	2.54	2.24**	2.28**
Conservative Protestant	2.43**	2.73#	2.18	2.69**
<i>Weekly attendance</i>				
Catholic	2.76**	2.83**	2.72**	2.77**
Other Religion	2.88**	3.23**	2.62**	2.96**
Mainline Protestant	2.60**	2.78**	2.60**	2.54**
Conservative Protestant	2.95**	3.11*	3.03**	2.86

Notes: Results for column 1 are based on Table 5 and results for columns 2-4 are available from the author. All the control variables are set at either the mean or the modal group.

The significance tests correspond to the difference with respect to the no religion for those with less than weekly attendance and with respect to those with less than weekly attendance within the same denomination for the high religiosity individuals. Two tailed-tests # $p < 0.15$; * $p < 0.10$; ** $p < 0.05$.

Endnotes

¹ Further information on data collection and questionnaires can be obtained at www.gesis.org/en/data_service/issp/index.htm and www.issp.org/homepage.htm.

² For Austria the sample includes individuals aged 15 years and older, for Norway 16 to 79 years old, and for Sweden 18 to 74 years old.

³ Given the heterogeneity within this group, a meaningful interpretation of their predicted behavior is difficult.

⁴ Recent data indicate a substantial reduction in regular attendance to 50% in 1999. "Survey says Irish church attendance at lowest level," *Catholic World News*, 1999-DEC-18

⁵ For an analysis of how labor market conditions are coupled with recent cross-country fertility differences across developed countries see Adsera (2004 a).

⁶ The representative individual in all tables is a married 44-year old U.S. citizen with complete secondary schooling, whose mother did not work before he/she turned 14 years and who lives in a region with \$17,250 of 1992 per capita income.

⁷ In separate estimates I added data for Eastern Germany and Japan, two nations where large shares of respondents have no religion. Previous political pressures in Eastern Germany and the weaker requirement of weekly participation among affiliations common in Japan explain the low rates of attendance in those countries. As expected from these conditions, religious affiliation per-se, regardless of religiosity, has significant implications for desired family size.

⁸ The high predicted family-size among Italian and Irish women with no affiliation is potentially affected by the small sample size of that group.

⁹ Similar regressions were run using a dummy for church attendance of 2-3 times a month instead of weekly attendance. Even if less regular church attendance is more predominant among Mainline Protestants, results are close to those in Table 6.

¹⁰ This gender difference is even stronger in the older cohort. Among men and women 30 years old or less, a working mother does not affect their preferences. By contrast, it significantly lowers the reported ideal number of children among older men and, to a lesser extent, among older women.

¹¹ Persistent unemployment over the last two decades had a perverse income effect that accounts for part of the sharp reduction in fertility (and potentially affected family size norms) in Europe (Adsera 2004 a). Also, Heiland, Prskawetz and Sanderson (2005) find that in Western Europe more educated men and women are more likely to prefer a family of three (or more) children than other individuals.

¹² There is controversy on whether secularization is happening across developed countries in a longer historical perspective. See Stark (1999) and Bruce (2001) for two views on the issue.

¹³ For younger individuals it might reflect the number they wish. Older adults may report the actual number they had as an ex-post rationalization of their behavior. This behavior agrees with the theory of cognitive dissonance (Festinger 1957) that in the presence of a discrepancy between facts and attitudes, individuals will alter their attitudes to come to terms with the facts. For a paper on the predictive limitations of fertility intentions see Westoff and Ryder (1977).