

Title: Morality in context: A multilevel analysis of the relationship between religion and values in Europe

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Abstract

The exact relationship between religiosity and moral values is understudied, and it is unclear what the process of secularization means for the morality of Europeans. Previous research shows that religion is associated with low levels of political and economic development. A potential explanation is that religion provides an alternative moral authority to the authority of the state.

Using data from four waves of the European Values Study (EVS) 1981-2008, I analyze attitudes to personal autonomy (vs tradition) and self-interest (vs social norms) in a multilevel model of 48 European countries. The results show that religious decline has been accompanied by an increase in autonomy values, but not self-interest, that the relationship between religion and morality is stronger in more religious countries, and that it has declined since the 1980s. We also show that religiosity is more negatively associated with self-interest among people with low confidence in state authorities.

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Biographical statement

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INTRODUCTION

There is a general assumption that religious beliefs, behavior and belonging influence moral values and attitudes, although exactly what the association is remains unclear. During the past century, many European countries have undergone a process of secularization at an unprecedented scale. This raises the question of what consequence decline of religious belief and practice may have on the moral and social values of Europeans. More specifically the question is whether religious decline is accompanied by change from traditional to modern, or also by a subversion of values from pro-social to self-interested. Previous studies have found significant value change (Schwartz 1994; 2006; Inglehart and Welzel 2005) in most European countries. Specifically, there has been an increase in acceptance of personal autonomy on issues concerning sexuality and family. These studies also indicate that the change has been largely generational (Inglehart and Welzel 2005: 101; Tilley 2005). There is no similar evidence that moral values have become more self-interested or anti-social.

A second question concerns when (and why) we should see an association between religion and moral values: a number of studies do indicate that religious people are more likely to behave prosocially than nonreligious people (for example Putnam and Campbell 2010; Saroglou 2006; Shariff and Norenzayan 2007), but there could be different mechanisms for this association. In all faith traditions, moral values and prescriptions for social behavior constitute a substantial part of religious teachings. Belief in supernatural authorities (e.g. God), accounting systems (e.g. karma), and sanctions (e.g. Hell), could be reasons for internalizing these values and acting according to them. Moreover, religious communities facilitate social control and monitoring of behavior through dense networks and regular meetings, which may also constitute motivations for moral conduct (McCullough and Willoughby 2009: 81-2). Common for both belief in supernatural justice and religious social control is that they rely on a sense of legitimate moral authority that is separate from the state.

Norris and Inglehart (2004: 18-19) have argued that religion could be seen as a response to existential insecurity, by providing authority and predictability. Their analysis of the World Values Survey shows that national religiosity is strongly negatively related to economic development (Norris and Inglehart 2004). This could be the result of a psychological response to stress, but it is also possible that religious norms and networks fulfill a social “policing” function in the absence of legitimate alternatives. Since the main resources for promoting and sanctioning moral and civic values and behavior in Europe are state authorities such as legal and governmental institutions, the role religion plays is at best secondary. If it is the case that religion promotes moral values by creating a sense of moral authority, it should be particularly effective under the following three circumstances, 1) when the moral values in question are not sanctioned by the state, 2) when public authorities that have the power to sanction the moral values are not trusted, and 3) when the religious beliefs and behaviors that promote these moral values are widely shared within the society.

To examine questions about the relationship between religion and morality in Europe, the first part of this paper reviews relevant literature to introduce five hypotheses, the second part outlines the dependent variables used to measure moral values, the third part looks at trends over time and differences between countries relative to religion, while the fourth section tests the hypotheses about mechanisms by examining the relationship between religiosity and values in a multilevel model.

THEORY AND HYPOTHESES ABOUT MORAL VALUES AND RELIGION

Autonomy vs self-interest

Morality refers to normative guiding standards for prescribing appropriate behavior and proscribing inappropriate behavior. The definition of moral values used here is a formal, rather than a normative one. In other words, I use the word “moral”, not as a normative

evaluation, but to refer to understandings of good and bad, right and wrong, worthy and unworthy that vary between persons and between social groups” (Hitlin and Vaisey 2013: 55). Finke and Adamczyk (2008) distinguish between morality which is sanctioned by the state and morality which is not. Using international survey data they find that religion is more associated with moral values which are contested, but not state sanctioned. In other words, religion has more power to influence moral issues when secular legal codes are absent (Burkett and White: 460; Finke and Adamczyk 2008: 638-9).

In order to operationalize and measure morality, we can distinguish between different moral value dimensions. A number of studies in social psychology find that religion is negatively associated with individual autonomy values, and positively associated with traditionalist and group-centered morality. According to Haidt’s (2012) moral foundations theory, humans intuitively grasp a few basic moral principles that form the foundations for the adoption of more specific moral values and attitudes from cultural and environmental influences. A sense of fairness and protecting other individuals from harm are universal principles for making decisions about right and wrong. But compared to secular liberalism, religious cultural norms are more likely to additionally rely on moral foundations of authority, group loyalty and sanctity. The sanctity foundation is related to the ideal of purity and the feeling of disgust in response to contamination or infection, which may explain why rules against infidelity and sexual deviance, specific dietary requirements and ritual cleansing figure prominently in many religions. Tetlock and colleagues (2000) concluded that a value is sacred to someone if they refuse to measure it against profane concerns, and feel contaminated if they do. Neuroimaging studies shows that such “sacred values” are processed in the brain as moral imperatives of right and wrong, rather than pragmatic cost-benefit calculations (Berns et al. 2012).

In studies reviewed by Jost et al. (2003), conservatism and traditionalism have been shown to correlate strongly with religiosity. Cross-cultural personality and value studies have found that religiosity is also strongly correlated with Schwartz' (1994) value dimensions of tradition, conformity and security (McCullough and Willoughby 2009; Inglehart and Welzel 2005) as well as Altemeyer's (1981) Right-Wing Authoritarianism scale. National level religiosity also has a strong negative association with Inglehart and Welzel (2005)'s dimension of individual autonomy values, "self-expression values". Similarly, Schwartz (2006: 172) shows that countries with high levels of religiosity score lower on cultural value orientations of autonomy and egalitarianism, indicating a preference for order and hierarchy in religious societies.

A value dimension that is concerned with the contrast between self-interested behaviors and universally agreed social norms and principles, should be less associated with religion, simply because norms against cheating, dishonesty and theft are part of the moral framework in all societies, and for all individuals. To put it in Haidt's (2012) terminology, such values are primarily based on the care and fairness foundation rather than the authority, loyalty or purity foundations. Halpern (2001) found that self-interested values, such as justifying corruption and cheating, are associated with crime figures (victimization rates) at the national level, whereas what he calls personal-sexual morality (autonomy vs. purity) was not.

In addition, moral questions concerned with individual autonomy over one's life (euthanasia), family (divorce) or sexuality (homosexuality) are often openly contested even in countries where they are subject to legal sanction. As a consequence they may be regarded as the domain of religion or ideology, rather than matters of national or universal agreement (Finke and Adamczyk 2008).

Hypothesis 1: Religion is more negatively associated with moral justification of issues of individual autonomy than with acts of self-interest.

Generational value change

The associations between religiosity and morality raise the question of whether religious decline in Europe has led to a similar change in moral values. Comparative studies by Schwartz (1994, 2006) and Inglehart and Welzel (2005) have found a profound recent change in values in most European countries. Since the first value surveys in the 1980s there has been a significant increase in acceptance of personal autonomy, particularly on issues like sexuality, marriage, and abortion, and some of these attitude shifts have been accompanied by changes to the law. There is also a difference in value orientation between older and younger generations. Previous studies (Inglehart and Welzel 2005: 101; Tilley 2005) suggest that value change is largely due to generational replacement, and that each birth cohort is more “individualist” than the last.

It is not clear how much, if any, of this change is attributable to religious decline. In general, values seem to be strongly related to environmental and material conditions. People who enjoy secure conditions of health, climate and economy are more likely to hold values that are concerned with personal autonomy, and less likely to emphasize social hierarchies, group loyalties and sanctity than those whose survival is under threat (Haidt 2012; Norris and Inglehart 2004; Inglehart and Welzel 2005). The relationship between values and security can also be observed at the national level. For example, developed countries in Western Europe score much higher on value orientations emphasizing personal autonomy, and low on hierarchy and communitarian values compared to most other regions of the world. Over a period that in general has seen economic growth and increased living standards in Europe, in addition to religious decline, one would thus expect a general increase in autonomy values

affecting both religious and nonreligious populations. In contrast, there is no reason to expect the same for self-interest values, which are universally contested (Haidt 2012).

Hypothesis 2: Autonomy values have increased generationally whereas self-interest values have not.

Religious context

Because social norms are an important source of morality and a person's social environment consists of more than their religious group, what matters is not only their religious beliefs or practices, but "whether this religiousness is, or is not, ratified by the social environment" (Stark 1996). The social networks provided by religious communities seem to account for much of the relationship between religiosity and prosociality. According to Putnam and Campbell (2010) religious social networks in the US have the same effects irrespective of individual beliefs or behaviors. On a small scale such networks include friendship ties and links between religious groups and voluntary organizations and charities (Becker and Dinghra 2001; Wuthnow 1991). On a larger scale, people in countries with high levels of religiosity are more likely to volunteer, independently of their own levels of religiosity (Ruiter and De Graaf 2006). When it comes to antisocial behavior, Stark and Bainbridge (1996) suggest that the negative effect of religion on crime only works in contexts where there are sufficiently high levels of religiosity.

The reason for these aggregate level associations may be that religious norms need to be validated by a moral community of other religious people (friends and family) and social and political institutions (the media, the government) in order to be effective (Finke and Adamczyk 2008: 619). Some literature suggests that religious people would be more actively committed and more eager to distance themselves from nonreligious people in more secular countries, and vice versa (see for example Achterberg et al. 2009 and Ribberink et al. 2013),

but there is little evidence that moral polarization is a necessary feature of secularization. On the contrary, Finke and Adamczyk (2008: 634) found that religion was more associated with conservative morality in countries with higher levels of religiosity. Based on this literature, it is expected that both individual and country level religiosity will have an influence on moral values, but that the influence of individual religiosity on moral value dimensions will be stronger in contexts with a higher density of religious people.

Hypothesis 3: Individual religiosity has stronger associations with moral value dimensions in countries with high levels of religiosity.

Similarly, as religion declines, the average person is less likely to encounter other religious people. Hence we would also expect that the relationship between religiosity and morality would have weakened over time. According to Nevitte and Cochrane (2006), in addition to religious decline, there has also been a decline in the association between religiosity and moral values in all European countries with available data from the World Values Survey from 1981 to 2002. In other words it has become harder to predict someone's moral values from knowing their religious orientation and beliefs. Nevitte and Cochrane (2006) suggest that this shift is a symptom of individualization and suggest individuals are generally less influenced by communities and social institutions. However, the decline in association could also be due to other influences besides religion on morality, changes in religious values in response to secular society, nonreligion becoming a more acceptable position among those with traditional moralities, or a combination of these effects.

Hypothesis 4: The association between religiosity and moral value dimensions has decreased since the 1980s.

Moral authority

Aside from its social networks, a second reason why one might expect religion to affect morality is the sense of being monitored by a moral authority that arises from belief in supernatural agents. The effect of belief in an omniscient and judging deity seems to be a powerful motivator both for behaving altruistically and resisting cheating. In an economic game experiment by Shariff and Norenzayan (2007) participants who were primed with religious words gave more money to the other players than those who were given neutral primes. Shariff and Norenzayan (2007) attribute this to a fear of supernatural punishment. However, they found the same result with concepts associated with secular law, indicating an effect of a more general respect for authority. Other studies show that any watchful third party promotes honesty (Galen 2012: 889). These results indicate that religious belief in God or tight-knit religious communities may be particularly influential for morality in contexts where other observing authorities are perceived to be absent, illegitimate, or ineffective.

If religious norms and social networks are effective in creating moral communities and cohesive sets of values, one could imagine that they could partly substitute governmental and legal institutions in motivating moral judgements and behaviors. Just as we would expect religion to have greater influence over morality that is outside the domain of secular authorities (Finke and Adamczyk 2008), we would also expect religion to have greater influence on people who see their governing institutions as weak or illegitimate. Like religious morality, legal codes concern what is considered acceptable behavior by offering sanctions for norm transgressions. To what extent one trusts the legal codes to be implemented depends on one's confidence in institutions such as the police and the courts.

The difference should be seen mainly on universally agreed moral values concerned with self-interested behavior, such as "stealing is wrong", which should ordinarily be sanctioned by the state, rather than on the more contested values of personal and sexual

autonomy. Self-interested behaviors are expected to be less effectively prevented by the state and thus more likely to be influenced by religion among people who express low confidence in state institutions.

Hypothesis 5: Individual levels of religiosity have a stronger negative association with justifying self-interest among people with low confidence in state authorities.

DATA AND METHODS

The European Values Study (EVS) is an international survey that has run in four waves: in 1981, 1990, 1999 and 2008. The latest wave included 67,490 respondents from 46 countries, and combining the four waves gives a sample of 166,206 individual respondents. The EVS is ideal for this analysis as it includes a number of items concerning religion and values that have been asked over four waves in a number of European countries. Including all four waves enable us to view change over time. A factor analysis was conducted on the value questions in order to identify underlying value dimensions. As the data are multinational and I am interested in the effects of both individual and country characteristics, I use multilevel regression models to account for the fact that individual respondents are nested within countries.

Dependent variables: two dimensions of moral values

In all four waves the EVS, respondents were asked a question about justifications of morally contentious behaviors. Illegal or controversial acts such as abortion, cheating on taxes and drug use were presented to respondents and they were asked “Please tell me for each of the following whether you think it can always be justified, never be justified, or something in between” on a ten-point scale from 1(never) to 10(always). “Never” (1) makes up around 50% of responses on most items, with notable exceptions: divorce, abortion, and euthanasia (20-

30 % never) and joyriding, soft drugs, and bribery (70-80% never). These questions operationalize moral values, understood as guiding standards for right and good (or justifiable) behavior.

A factor analysis (Principal Axis Factoring with Oblimin rotation) was conducted on the whole European sample on the 14 items that were asked in all waves¹. Two factors were retained, based on both the subjective scree-test (Preacher and MacCallum 2003) and the Kaiser-Guttman criterion. The two factors are shown in Table 1. The first, accounting for 30 percent of the variance (Eigenvalue 4.12), had high loadings (above 0.5) on homosexuality, prostitution, abortion, divorce, euthanasia, and suicide. This dimension can be seen as an indicator of extent to which the respondent values personal autonomy and individual rights and is labelled *Autonomy vs. tradition*. Typically, these moral issues are highly contested in society, without being sanctioned by most European states. The second factor had high loadings on accepting a bribe, avoiding a fare on public transport, cheating on taxes, claiming government benefits you are not entitled to and lying in your own interest. This dimension (accounting for 10 percent of the variance) is labelled *Self-interest vs. social norms*, and concern behaviors that are universally condemned and usually sanctioned by the state. The factors were positively correlated ($r = 0.421$), and two items (Adultery and Taking soft drugs) loaded almost equally high on both factors. I discounted these two items and created two combined measures: the mean score on the six items with a high score on the first and second factor respectively. Both scales had high internal reliability, with Cronbach's Alpha 0.835 for autonomy and 0.762 for self-interest. The same two factors emerged when analyzing data from the four survey waves separately, and have also been found in analyses of earlier waves of the World Values Survey (Barker 1992; Halpern 2001; Nevitte and Cochrane 2006).

[Table 1 about here]

Independent variables: religiosity and confidence in public institutions

The two independent variables of particular interest are religiosity at the individual and country level, and confidence in public institutions. To measure religiosity, six dichotomous variables were added together into a scale from 0 (no to all) to 5 (yes to at least five):

Consider yourself a religious person, Religion is important in your life, Get comfort and strength from religion, Attend religious service at least monthly, Believe in God, Take moments of prayer and/or meditation (Cronbach's $\alpha=0.845$). This measure thus captures both the salience of religion in a person's life and their more concrete beliefs and practices. The country level religiosity is measured as the mean value on this scale for the whole country sample.

To measure confidence in public institutions I use a composite measure: This is the mean value of six variables, rating the respondent's confidence in the Civil Service, Government, Parliament, Police, Social Security, and The Justice System respectively, on a four point scale: 1) None at all, 2) Not very much, 3) Quite a lot, and 4) A great deal. The items have a high degree of internal reliability (Cronbachs $\alpha=0.854$).

RESULTS

Change over time

On average there has been an increase in justifying autonomy rather than tradition across Europe. Analysing this using all four waves of the EVS, and estimating the respondents' age from their birth decade and survey year the change appears to be a combination of cohort and period effect. As shown in Figure 1, each birth cohort is more likely to condone these behaviors than the previous cohorts and there has been an additional increase in liberal attitudes which has affected all age groups, at least in Western Europe since the 1980s. This

supports findings from previous studies (Inglehart and Welzel 2005: 101; Tilley 2005) that the change in autonomy values has been primarily generational.

Younger people are also more likely to justify self-interest rather than social norms, but as shown in Figure 1, the change over time on this dimension seems to be almost entirely an age effect. The older respondents are, the less likely they are to justify crime and cheating, regardless of when they were born. Eastern European countries have been excluded as they were only added in later waves, but the patterns are broadly similar. These findings support Hypothesis 2, that autonomy values have increased generationally, whereas self-interest values have not.

[Figure 1 about here]

Religion, values and confidence in public institutions within and between countries

Bivariate associations show that individual religiosity is significantly associated with both value scales. Whether measured by religious self-identification, service attendance or how important God is in the respondent's life, religion seems to matter a great deal for morality, but much more to justifying autonomy than to justifying self-interest, supporting Hypothesis 1. Someone who considers themselves nonreligious scores a mean value of 4.8 on justifying autonomy, meaning that they on average think behaviors such as abortion and divorce can be justified in some, if not all situations. In contrast, someone who attends services every week scores 3.3, meaning that they think these behaviors can very rarely be justified. The equivalent scores for justifying self-interest are 2.5 and 2.0 respectively. The difference is statistically significant ($p < 0.001$), but not nearly as large as both the religious and nonreligious are generally opposed to self-interested behaviors. It should be noted that as the items in this scale are usually protected by law, most would not condone them even if their justification was made on a legal basis rather than a moral one. As Figure 2 shows, these

differences hold when controlling for age, but the gap between those who identify as religious and those who do not is somewhat larger in younger than in the oldest birth cohorts. In other words the generational increase in autonomy values has been somewhat larger for nonreligious people. This indicates that the less religious parts of the European population have been particularly influenced by the trend towards more tolerant or permissive values. The effect could arise both because those most supportive of autonomy values are more likely to become nonreligious, and because religiosity may prevent adoption of individualist values. Figure 2 also shows that the change in autonomy values among the nonreligious mirrors the decline in religiosity over the same period, with the largest change taking place in the cohorts born in the 40s and coming of age in the 50s and 60s.

[Figure 2 about here]

Some of the differences between religious and nonreligious individuals may be due to effects of living in a more or less religious environment. Table 2 shows the average scores for justifying autonomy, justifying self-interest, and the religiosity scale. Countries in Western and Northern Europe generally have higher mean scores than countries in Eastern Europe on the autonomy scale, but there are exceptions such as Ireland and Italy which have more traditional moralities on average. The composite scale of religiosity correlates negatively with autonomy at the country level ($r=0.771$, $p<0.001$, $n=48$). In general, the more religious the population of a country, the less its people justify autonomy over purity. In contrast, there is no significant association between religiosity and self-interest at the aggregate level.

[Table 2 about here]

The mean values of “confidence in institutions” are also shown in Table 2. In Europe they range from 2.11 (Albania) to 2.85 (Denmark). As expected from value studies of modernization (Inglehart and Welzel 2005), in the countries where confidence in a country’s government and legal institutions is higher, justifying autonomy over tradition is more

prevalent while justifying self-interest is slightly lower. However, neither relationship is statistically significant.²

One thing to note is that one can oppose self-interested behaviors such as cheating on either traditional grounds, as they defy legitimate authority, or liberal grounds, as they undermine the general good. This could explain why the levels of approval are so similar cross-nationally. In order to test whether the individual and country differences hold in a multivariate analysis while controlling for the multinational and hierarchical nature of the data, the variables are analyzed in a multilevel regression model.

Multilevel models

Multilevel models were fitted with *autonomy vs. tradition* and *self-interest vs. social norms* as outcome variables. As control variables I included survey wave, with the most recent wave (2008-10) as the reference category. Sociodemographic variables include age and gender of respondent, with male as the reference category, and three categories of income, with low income as the reference category.³ The individual level variable of primary interest is the religiosity scale.⁴ In Model 2 I include the four-point measure of confidence in political and legal institutions as well as the country mean on the religiosity scale in 2008-10 (see Table 2). I also control for generalized trust, measured by the standard question with two answer categories (1) Most people can be trusted, 0) You can't be too careful when dealing with people), as this is likely related to all the variables of interest, and I want to distinguish between specific confidence in public institutions and a more general trusting attitude (Zmerli and Newton 2008).

In Model 3-5, interaction effects are included to see whether individual religiosity has a stronger effect in some contexts than in others.⁵ Specifically I want to test Hypothesis 4, that the association between religiosity and values has declined over time, by including

interactions between individual religiosity and survey year in Model 3. Hypothesis 3, that religion has a stronger effect on moral values in countries with higher or lower levels of religiosity is tested in Model 4 by including an interaction between individual and country mean score on the religiosity scale. Finally the interaction between individual religiosity and confidence in institutions is included in Model 5 in order to test Hypothesis 5, that religion has a stronger effect on moral values for people with lower confidence in public institutions. The results can be seen in Table 3 and 4.⁶

[Table 3 and 4 about here]

Autonomy vs. tradition

The variance partition coefficient in a null model shows that 22 percent of the variance on the autonomy vs. purity scale can be attributed to country level differences. The controls confirm that autonomy values have increased over time, and that younger people are more likely to hold them than older people. It also shows that such values are more common among women and people with higher income. Justifying autonomy is associated with low confidence in government institutions but also with generalized trust. This could be because people who value self-expression and personal autonomy are skeptical of the power and control held by the state and government institutions (Flanagan and Lee 2003: 267). At the same time, trust in other people as individuals is implicit in valuing personal autonomy over collective interests.

Religiosity is negatively associated with autonomy values, both at the individual and country level. The negative interaction effect between survey year and religiosity shows that the negative association between religiosity and autonomy values was stronger in the 1980s and has progressively weakened, supporting Hypothesis 4. Similarly, the negative cross level interaction effect in Model 4 between individual and country religiosity indicates

that the negative association between religiosity and autonomy values is strongest in countries with high average religiosity, thus supporting Hypothesis 3.

The very slight positive interaction between religiosity and confidence in institutions in Model 5 implies that the negative association between individual religiosity and autonomy values is somewhat weaker among people with more confidence in the state. However, as the -2 log likelihood indicates that the model fit is poor compared to model 3 and 4, this cannot be considered significant.

[Table 4 about here]

Self-interest vs. social norms

When it comes to self-interest values, only 8.2 percent of the variance is at the country level. The majority of the variance is explained by individual level sociodemographic variables such as age and gender. Men and younger people are the most likely to justify cheating and lying, but as Figure 1 showed, this appears to be mostly an age rather than a cohort effect, and the controls for survey years indicate a slight, but inconsistent, increase in self-interest values since the 1980s. People with low income are the most likely to justify self-interest, but higher income is not associated with stronger support for social norms compared to medium income.

In Model 1 and 2, religiosity only has a slight negative association with self-interest, and it is only significant at the individual level. Nonetheless the effect is comparatively large relative to variables such as income and generalized trust. Confidence in public institutions and generalized trust are both negatively associated with self-interest. The more one expects others to cheat and lie without appropriate sanctions, the easier it is to justify for oneself. In Model 3-5, the interactions with survey wave support Hypothesis 4 by showing that the effect

of religiosity was even more negative in the 1980s than in the more recent waves of the survey.

The interaction effect in Model 4 shows that country level religiosity does make a difference to the effect of individual religiosity, albeit a small one. In support of Hypothesis 3, individual religiosity has a more negative association with self-interest in countries with higher levels of religiosity (Model 4). In Model 5, religiosity has a weaker negative association with self-interest for people with high confidence in government. In other words Hypothesis 5, that individual level religiosity would be more associated with moral values when confidence in public institutions and state sanctioning is low, is supported. As hypothesized, this interaction is seen only for self-interest values (which should ordinarily be sanctioned by the state), whereas it was not significant for personal autonomy values (Table 3).

DISCUSSION

Understanding the nature of the relationship between religion and moral values is of great interest, especially in countries that are experiencing a rapid decline in religious observance, belief and identification. This paper has examined which moral values religion is most associated with, how these associations have changed over time, and how they vary by national context.

First, I found support for Hypothesis 1, that religion is most associated with openly contested values that concern individual autonomy. A factor analysis showed that attitudes to personal and sexual behaviors such as homosexuality, abortion and euthanasia were strongly related, and seem to represent a dimension of moral values contrasting traditional values of the sanctity of life and the body on the one hand with ideals of personal liberty and autonomy on the other. While religion was clearly negatively related to such autonomy values at both

the individual and country level, there was only a small negative association with the second factor, the dimension of self-interest (cheating, lying, stealing) contrasted with social norms and laws. The issues and behaviors loading on the autonomy vs. tradition factor are not subject to legal sanctions in all European countries, and many, such as homosexuality and euthanasia, are publicly debated with strong involvement from religious organizations. It is thus to be expected that religion is more associated with these than with attitudes to the more universally condemned and illegal behaviors in the self-interest vs social norms dimension (Finke and Adamczyk 2008).

I also found evidence in support of Hypothesis 2, that there has been an increase in autonomy values due to a cohort change, echoing the findings of Inglehart and Welzel (2005) and Tilley (2005). However, I did not find this for self-interest values. Self-interest values appear to decline over the life course as people age, but have not changed much over time from one cohort to the next.

The multilevel model showed that individual religiosity has a stronger negative association with both autonomy values and self-interest values in countries with high levels of average religiosity, supporting Hypothesis 3. The finding that the religious context matters could be seen as supporting a social network hypothesis, that the availability of religious fellow citizens increases the impact of religiosity on moral values (Putnam and Campbell 2010). However, the interaction effects also imply that the impact of religious context is particularly strong for individuals who are religious themselves, perhaps providing social validation for the association between religious belief and moral values (Finke and Adamczyk 2008; Stark 1996; Stark and Bainbridge 1996).

In support of Hypothesis 4, there is also evidence of a slight change in the nature of the relationship between religiosity and values over the 25 years from the first to the fourth wave of the EVS, with religion becoming less important for moral values over time. When

survey year is interacted with religiosity, I find that the effect of religiosity on moral values was stronger in the 1980s than in more recent waves of the survey. This result, combined with the support for Hypothesis 3, may suggest that religion's influence on morality is reduced with secularization.

Hypothesis 5, that religiosity should have a stronger effect on self-interest values when confidence in public authorities is low, was also supported. Individual religiosity has a negative association with the willingness to justify self-interest over social norms, but this effect is strongest for people whose confidence in institutions is low. This indicates that the social and moral influence of religiosity (Shariff and Norenzayan 2007) may be less important when secular authorities are perceived to be effective and trustworthy. In other words, religious norms may, to the extent that they are widespread enough, be a substitute for legal or utilitarian motives for supporting social norms over self-interest. However, I did not find any evidence of a similar effect for autonomy values. This may be partly because the morally contested behaviors covered by this value dimension, such as divorce and homosexuality, are not criminal acts in most of the countries and thus fall outside the domain of authority held by legal institutions (Finke and Adamczyk 2008).

While the results do not directly speak to the mechanism of the association between religiosity and moral values, the apparent social effect of religious norms, and state authorities call into question the idea that belief in observant deities on its own motivates moral behavior (Shariff and Norenzayan 2007). What this analysis suggests is that such individual beliefs depend on social validation as well as low confidence in alternative sources of moral authority.

LIMITATIONS AND FURTHER RESEARCH

This research has a number of limitations, which can be classified into three sets, providing avenues for further investigation. Firstly, future research should examine the relationship of these findings with behavioral outcomes. Some behavioral consequences of the value dimensions used here have been validated in previous studies. Halpern (2001) found that self-interest values are correlated with victimization rates, and Storm (2015) found that autonomy values are positively associated with reported volunteering and civic behavior. However, we cannot be certain that all moral behaviors follow the same patterns as attitudes *about* behaviors, nor can we say anything about the *salience* of these attitudes. For example, it is entirely possible that religious people in secular countries are more assertive of religious values in public moral debates (Achterberg et al 2009), even if on average their moral values is closer to those of a nonreligious person.

Another possible limitation is the uncertainty about whether and to what extent subjective confidence in public institutions reflects more objective aspects of quality of governance, modernization and development. The average confidence in political and legal institutions is not significantly associated with the Human Development Index, and only moderately correlated with The World Bank's World Governance Index (WGI) of the Rule of Law ($r=0.397$, $p=.006$, $N=46$). This could be partly due to within country differences between people who benefit from and feel discriminated against by government policies. However, it could also be due to misinformation or misinterpretation. As Halpern (2010: 62) has shown, perceptions of the risk of crime, for example, are only tenuously related to actual crime rates. The choice to use a measure of subjective perceptions of public authorities, is based on the assumption that religiosity provides a sense of moral authority, security and predictability, which individuals who have confidence in the government will benefit less from, regardless of objective quality of governance of the country. More clearly distinguishing between

confidence in authorities and the quality of those authorities is a challenge for future studies in this area.

Finally, a limitation of this research is that, while considering macro- and micro level effects of religion, it only measures religiosity along a single dimension. Future research in this area could attempt to account for the possibility of divergent effects of religious pluralism compared to homogeneity, and religious practice compared to belief or affiliation, as well as differences between different religious denominations. This could also help to answer under what circumstances we would expect moral polarization along religious lines.

CONCLUSION

In line with previous literature (e.g. Norris and Inglehart 2004), this research indicates that the processes of religious decline and moral value change in Europe are related. Several studies (e.g. Ruiter and De Graaf 2006) have also found a positive relationship between religion and prosocial behaviour. However, this analysis shows that while religious decline has been accompanied by an increased support for personal autonomy over traditional values, this rise in “individualism” does not represent a turn to self-interest or anti-social values. Further, the effect of religiosity on morality is moderated, especially by the religious environment, but also to some extent confidence in public authorities.

Previous studies suggest that religion can create a sense of moral authority that is effective in promoting norms and values (Finke and Adamczyk 2008; McCullough and Willoughby 2009; Shariff and Norenzayan 2007). The findings from this study supports this, and more specifically indicate that religion promotes moral values more effectively around personal concerns that are not sanctioned by the state, and when the quality of governance from state authorities is perceived to be lacking. It also suggests that a large national religious community may provide an alternative source of moral and social values.

The generational decline of religiosity in Europe is associated with a similar change in support for personal autonomy over traditional values of purity and sanctity, but it is not associated with any substantial increase in self-interest. As the influence of religion is dependent on the religiosity of other people, a decline in religiosity may be accompanied by a decrease in the influence of religion on moral values. Whether anything else replaces religion as a moral compass is unclear, but our analysis indicates that confidence in institutions as well as economic security and generalized trust are important predictors both of respect for the norms of society and the autonomy of other individuals.

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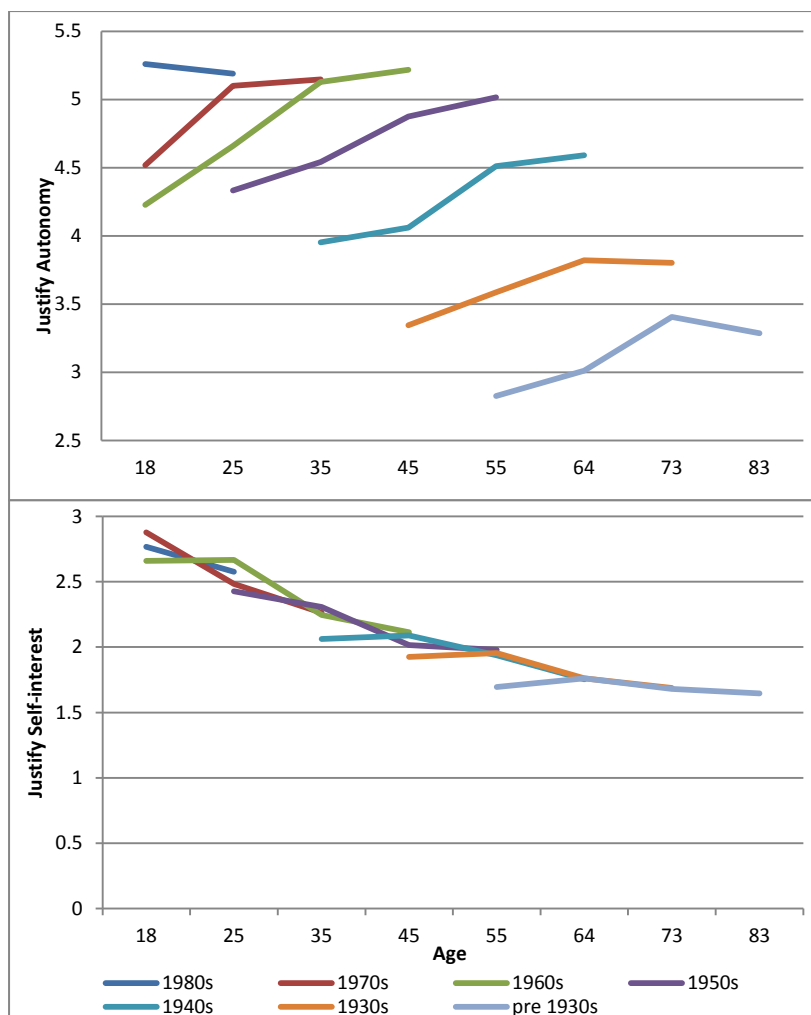
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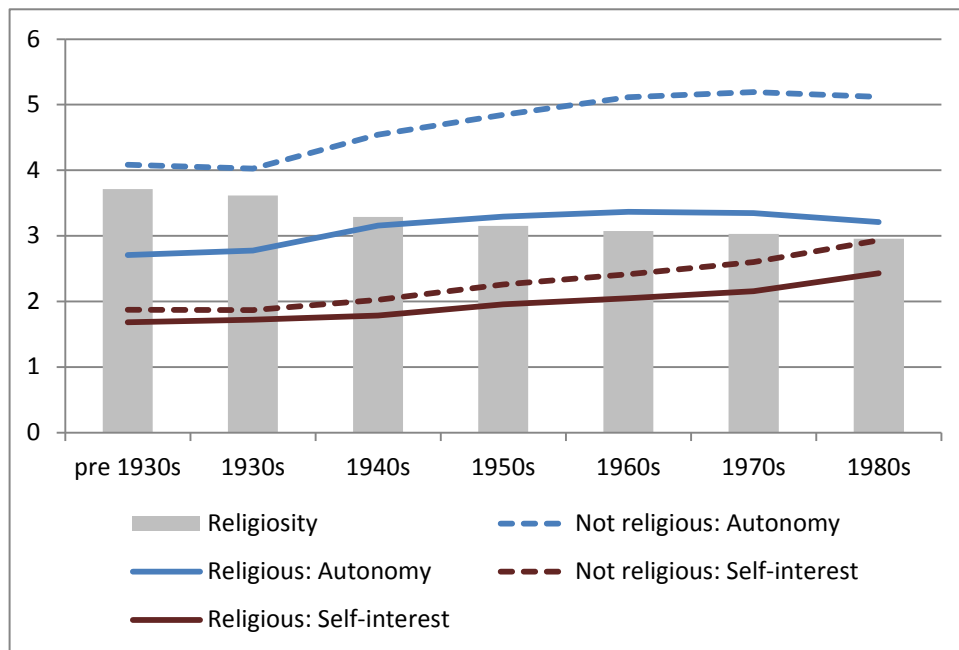
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Figure 1: Value change in Europe by age and birth cohort



EVS 1981-2008. Includes the 14 countries that were included in all four survey waves (Belgium, Denmark, France, Germany (West), Great Britain, Iceland, Ireland, Italy, Malta, Netherlands, Northern Ireland, Spain, Sweden, Switzerland). Autonomy N=67203 / Self-interest N=67332

Figure 2: Value change by religious self-identification and birth cohort



EVS 2008, N=62960

Table 1: Factor analysis (PAF) of Justifying behaviors

	Pattern matrix		Structure matrix	
Justifiable:	1	2	1	2
Divorce	0.786	-0.087	0.750	0.244
Abortion	0.780	-0.081	0.745	0.247
Homosexuality	0.711	-0.051	0.690	0.248
Euthanasia	0.609	0.014	0.615	0.270
Prostitution	0.557	0.190	0.638	0.425
Suicide	0.543	0.127	0.596	0.356
Someone accepting a bribe	-0.035	0.648	0.238	0.634
Cheating on taxes	-0.017	0.630	0.248	0.623
Avoiding a fare on public transport	0.056	0.592	0.305	0.615
Claiming benefits not entitled to	-0.089	0.577	0.154	0.539
Joyriding	-0.053	0.567	0.186	0.545
Lying in own interest	0.155	0.561	0.391	0.626
Adultery	0.294	0.405	0.465	0.529
Taking soft drugs	0.289	0.380	0.449	0.502
Initial Eigenvalues	4.812	1.993		
Percent of variance	34.4	14.2		

EVS 1981-2008 , N=119542

Table 2: Mean score on variables of interest in 48 countries (2008-2010)

Country	Autonomy	Self-interest	Religiosity	Confidence institutions	N
Albania	2.62	2.54	3.44	2.11	1534
Armenia	2.13	1.94	4.13	2.31	1505
Austria	4.68	2.40	2.93	2.54	1510
Azerbaijan	2.28	2.23	3.60	2.77	1477
Belarus	3.74	3.30	2.79	2.29	1507
Belgium	5.05	2.41	2.41	2.54	1512
Bosnia and Herzegovina	2.45	2.04	4.07	2.22	1500
Bulgaria	3.42	1.65	2.44	2.20	1500
Croatia	3.01	2.24	3.56	2.22	1498
Cyprus	2.38	2.41	4.24	2.70	999
Czech Republic	4.65	2.72	1.32	2.13	495
Denmark	5.98	1.61	2.26	2.85	1793
Estonia	3.46	2.18	1.70	2.52	1507
Finland	5.55	1.89	2.47	2.60	1518
France	5.45	2.55	1.82	2.57	1134
Georgia	2.13	1.81	4.42	2.39	1501
Germany East	4.80	1.87	0.88	2.60	1498
Germany West	4.86	2.39	2.58	2.51	1498
Great Britain	4.77	1.85	2.10	2.41	1513
Greece	3.68	2.50	3.86	2.22	808
Hungary	3.82	1.93	2.56	2.29	982
Iceland	5.34	1.80	2.82	2.61	1519
Ireland	3.80	2.28	3.57	2.48	1506
Italy	3.42	1.91	3.75	2.31	1499
Kosovo	1.51	1.43	4.58	2.28	1609
Latvia	3.36	2.60	2.98	2.55	1497
Lithuania	3.42	2.74	3.27	2.21	1551
Luxembourg	5.10	2.28	2.46	2.70	1516
Macedonia	3.02	1.82	3.67	2.33	1552
Malta	2.42	1.48	4.37	2.54	1090
Moldova	2.17	2.28	4.07	2.30	1479
Montenegro	2.83	1.96	3.39	2.32	1553
Netherlands	5.79	2.08	2.50	2.54	1489
Northern Cyprus	2.54	1.35	3.56	2.62	1490
Northern Ireland	3.65	2.24	3.46	2.16	1512
Norway	5.41	1.94	2.20	2.57	1509
Poland	3.18	2.53	4.13	2.73	1366
Portugal	4.07	2.10	3.28	2.54	1497
Romania	2.88	2.49	4.28	2.32	1174
Russian Federation	3.49	2.97	2.77	2.42	1271
Serbia	2.85	1.79	3.58	2.30	2326
Slovakia	4.20	2.94	3.37	2.69	1507
Slovenia	4.55	2.04	2.72	2.62	1493
Spain	5.07	2.42	2.62	2.52	1549
Sweden	6.34	2.51	1.54	2.57	1048
Switzerland	5.21	2.00	2.74	2.66	1003
Turkey	1.93	1.35	4.65	2.26	495
Ukraine	2.71	2.24	3.45	2.19	1601
Total	3.72	2.17	3.15	2.43	67490

EVS 2008-10

Table 3 Multilevel model: Justify Autonomy vs. Tradition

	Model 1	S.E.	Model 2	S.E.	Model 3	S.E.	Model 4	S.E.	Model 5	S.E.
Fixed Part										
Constant	5.315**	0.147	7.881**	0.457	7.812**	0.461	7.208**	0.456	7.896**	0.463
Survey year (Ref:2008-10)										
1999-2001	0.015	0.014	0.011	0.014	0.104**	0.025	0.122**	0.025	0.101**	0.025
1990-1993	-0.686**	0.016	-0.686**	0.016	-0.589**	0.026	-0.579**	0.026	-0.589**	0.026
1981-1984	-1.246**	0.021	-1.221**	0.021	-0.900**	0.039	-0.904**	0.039	-0.897**	0.039
Age	-0.019**	0.000	-0.018**	0.000	-0.018**	0.000	-0.018**	0.000	-0.018**	0.000
Female	0.198**	0.010	0.201**	0.010	0.202**	0.010	0.205**	0.010	0.202**	0.010
Income (Ref: Low)										
Medium	0.154**	0.012	0.147**	0.012	0.148**	0.012	0.149**	0.012	0.148**	0.012
High	0.410**	0.013	0.386**	0.013	0.389**	0.013	0.386**	0.013	0.389**	0.013
Religiosity scale	-0.343**	0.003	-0.332**	0.003	-0.305**	0.005	-0.113**	0.012	-0.331**	0.012
General trust			0.298**	0.011	0.299**	0.011	0.296**	0.011	0.299**	0.011
Confidence institutions			-0.213**	0.008	-0.213**	0.008	-0.209**	0.008	-0.248**	0.016
Country mean religiosity			-0.689**	0.138	-0.696**	0.139	-0.476**	0.138	-0.696**	0.139
Religiosity*Survey year (Ref:2008-10)										
Religiosity*1999-2001					-0.032**	0.007	-0.038**	0.007	-0.031**	0.007
Religiosity*1990-1993					-0.035**	0.007	-0.040**	0.007	-0.036**	0.007
Religiosity*1981-1984					-0.104**	0.010	-0.104**	0.010	-0.106**	0.010
Religiosity*Country religiosity							-0.066**	0.004		
Religiosity*Confidence institutions									0.011*	0.004
Random Part										
Country Intercept variance	1.008**	0.206	0.665	0.136	0.635**	0.130	0.647	0.132	0.666	0.136
Respondent Intercept variance	3.069**	0.012	3.025	0.012	3.021**	0.012	3.018	0.012	3.025	0.012
-2*Log likelihood	486945.4		464001.1		463833.1		463722.9		463995.1	
Difference -2*ll	203152.7		22944.3		168.1		110.2		-162.1	
N Countries	48		48		48		48		48	
N Respondents	122906		117549		117549		117549		117549	

EVS 1981-2010, *P<0.05, **<0.01

Table 4 Multilevel model: Justify Self-interest vs. Social norms

	Model 1	S.E.	Model 2	S.E	Model 3	S.E	Model 4	S.E	Model 5	S.E
Fixed part										
Constant	3.458**	0.057	4.016**	0.204	3.987**	0.204	3.851**	0.203	4.233**	0.205
Survey year (Ref:2008-10)										
1999-2001	-0.077**	0.010	-0.085**	0.010	-0.052**	0.017	-0.048**	0.017	-0.063**	0.017
1990-1993	-0.038**	0.011	-0.042**	0.011	-0.014	0.018	-0.012	0.018	-0.013	0.018
1981-1984	-0.120**	0.015	-0.125**	0.015	0.064*	0.027	0.063*	0.027	0.073**	0.027
Age	-0.017**	0.000	-0.017**	0.000	-0.017**	0.000	-0.017**	0.000	-0.017**	0.000
Female	-0.147**	0.007	-0.146**	0.007	-0.146**	0.007	-0.145**	0.007	-0.145**	0.007
Income (Ref: Low)										
Medium	-0.085**	0.009	-0.079**	0.009	-0.079**	0.009	-0.079**	0.009	-0.078**	0.009
High	-0.052**	0.009	-0.043**	0.009	-0.041**	0.009	-0.042**	0.009	-0.040**	0.009
Religiosity scale	-0.082**	0.002	-0.076**	0.002	-0.065**	0.003	-0.022*	0.009	-0.142**	0.008
General trust			-0.030**	0.008	-0.029**	0.008	-0.030**	0.008	-0.028**	0.008
Confidence institutions			-0.101**	0.006	-0.101**	0.006	-0.100**	0.006	-0.202**	0.012
Country mean religiosity			-0.107	0.061	-0.110	0.062	-0.061	0.061	-0.110	0.061
Religiosity*Survey year (Ref:2008-10)										
Religiosity*1999-2001					-0.011*	0.005	-0.013**	0.005	-0.009	0.005
Religiosity*1990-1993					-0.011*	0.005	-0.012*	0.005	-0.012*	0.005
Religiosity*1981-1984					-0.061**	0.007	-0.061**	0.007	-0.064**	0.007
Religiosity*Country religiosity							-0.015**	0.003		
Religiosity*Confidence govt									0.032**	0.003
Random Part										
Country Intercept variance	0.139**	0.028	0.128	0.026	0.128	0.026	0.126	0.026	0.128	0.026
Respondent Intercept variance	1.513**	0.006	1.499	0.006	1.497	0.006	1.497	0.006	1.496	0.006
-2*Log likelihood	400442.1		381868.2		381800.5		381772.1		381695.3	
Difference -2*ll	155820.3		18573.9		67.7		28.4		105.2	
N Countries	48		48		48		48		48	
N Respondents	123061		117693		117693		117693		117693	

EVS 1981-2010, *P<0.05, **<0.01

NOTES

¹ 46664 cases with missing values on these variables (due to survey design) were deleted by listwise deletion, leaving a sample of 119542 for the remainder of the analysis. There are slightly more missing values in the earlier surveys, and the valid sample is slightly younger and less religious than if the missing values had been randomly distributed.

² For comparison, the higher the country scores on the Human Development Index (HDI), a composite statistic of life expectancy, education, and income, the more people condone autonomy over tradition ($r=0.829$, $p<0.001$, $N=41$), but there is no significant relationship between justifying self-interest and the HDI.

³ No consistent education measure was available in the first two waves of the survey, so this could not be included. Analysis on the last two waves, not reported here, show that education is consistently positively associated with autonomy values, and negatively with self-interest values when controlling for all the other variables in the model.

⁴ I do not include religious denomination in the model as it is strongly correlated to both individual and country religiosity. In exploratory models not shown here, there were only weak or nonsignificant differences between the denominations. However, the effect of country mean religiosity may be partly due to variation in moral values by religious tradition as well as degree of religiosity. The effect of religious denomination as well as differences between affiliation, attendance and belief requires further research.

⁵ Country level interaction terms were entered one by one to avoid issues of multicollinearity, but it did not make a substantive difference to either the statistical significance or direction of the coefficients if they are entered together.

⁶ Alternative models including a random slope for religiosity did not have a better fit, and the random slope was not significant when also including the interaction terms. The direction or significance of the interaction coefficients do not change when including the random slope.