

Public acceptance of euthanasia in Europe: a survey study in 47 countries

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Abstract

Objectives In recent years, the European euthanasia debate has become more intense, and the practice was legalized in the Netherlands, Belgium, and Luxembourg. We aimed to determine the current degree of public acceptance of euthanasia across Europe and investigate what factors explain differences.

Methods Data were derived from the 2008 wave of the European Values Survey (EVS), conducted in 47 European countries ($N = 67,786$, response rate = 69 %). Acceptance of euthanasia was rated on a 1–10 scale.

Results Relatively high acceptance was found in a small cluster of Western European countries, including the three countries that have legalized euthanasia and Denmark, France, Sweden and Spain. In a large part of Europe public acceptance was relatively low to moderate. Comparison with the results of the previous EVS wave (1999) suggests a tendency towards a polarization in Europe, with most of Western Europe becoming more permissive and most of Eastern Europe becoming less permissive.

Conclusions There is roughly a West-East division in euthanasia acceptance among the European public, making a pan-European policy approach to the issue difficult.

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Introduction

Technological advances in medicine, along with demographic changes have placed an increased responsibility on the individual, the family and health care providers for making difficult end-of-life decisions, such as whether to refuse or withdraw life-extending treatment or sometimes even to hasten death (Jorgenson and Neubecker 1980; Seale 2000). At the same time, attitudes towards death are changing, with more and more people desiring to exert control over how, when and where to die (Kelner and Bourgeault 1993; Schroepfer et al. 2009).

In Europe, the debate over decriminalizing euthanasia, i.e. ending the life of an incurably ill person at his or her explicit request by a physician, has been stepped up in recent years, along with, in some countries, the pressure on governments to change the law to allow the practice. In

2002, the Netherlands became the first European country to adopt a law permitting physicians to practise euthanasia, albeit under strict conditions. This event triggered much debate across Europe. Belgium legalized euthanasia under similar strict conditions in the same year and Luxembourg did so in 2009. In several other countries, such as France, UK and Spain, the euthanasia debate is becoming more and more intense and the issue has regularly been appearing on the national political agenda (Ferreira 2007). In addition, highly publicized individual cases continuously reignite controversy across Europe, such as the French former teacher Chantal Sebire, who was suffering from cancer and committed suicide in 2008, after having lost a legal battle to receive euthanasia (Crumley 2008), and Belgian writer Hugo Claus, who had chosen euthanasia in 2008 because he did not want to go through the gradually debilitating process of his Alzheimer's disease (Hevesi 2008). The latter case intensified the discussion on the risk that legalization might lead to an increasing permissiveness as to the cases in which euthanasia is acceptable. Against this background, it is highly relevant to investigate recent European public perception of the issue and how it has developed in recent years.

Previous cross-national comparative research, based on the European Values Study (EVS) data collected in 33 countries in 1999/2000, has shown that the degree of euthanasia acceptance varies widely across Europe (Cohen and Marcoux 2006a, b). Data used in that study, however, were collected more than a decade ago. More recent public opinion survey data exist only for a few European countries (Schroder et al. 2003; Rietjens et al. 2005) and the use of divergent definitions of euthanasia and measurement methods makes it difficult to compare the results of national surveys.

The objective of the present study is to replicate the 1999 study, using data from the most recent wave of the EVS, conducted in 2008. These data give opportunity to compare, for the first time, the views of the general public in countries with and without a legal framework for performing euthanasia. Furthermore, the 2008 wave also includes a much larger number of countries ($N = 47$), with most of the new participating countries having predominantly Muslim or Orthodox populations, such as Moldavia, Georgia, Armenia and Azerbaijan. The inclusion of these countries makes it possible to investigate differences in euthanasia attitudes among religious groups in Europe more thoroughly. The religious-historical backgrounds of all studied countries are much more diverse than in any previous studies, creating a unique opportunity to examine the relation between these backgrounds and euthanasia acceptance.

The research questions addressed in this study are as follows: (1) what is the current degree of public acceptance

of euthanasia in 47 European countries and (2) to what extent can religious and socio-demographic factors explain differences in euthanasia acceptance, between and within these countries?

Method

Source

The data for this study were derived from the fourth and most recent wave of the European Values Study (EVS) (EVS 2010a), conducted in 2008 in 47 European countries. In each country, a representative multi-stage or stratified random sample of the adult population was approached for face-to-face interviewing (computer assisted personal interviewing or paper and pencil interviewing). More detailed information on the scope of the survey, the selection procedure and data collection procedure can be found elsewhere (EVS 2010b; EVS and GESIS 2010).

A general weighting factor was calculated to adjust for response bias related to gender and age and to adjust for the disproportional stratified sampling for regions of Germany and Belgium.

Measures

Dependent variable

The questionnaire included one item on euthanasia: 'Please tell me whether you think euthanasia (terminating the life of the incurably sick) can always be justified, never be justified, or something in between'. Respondents had to indicate their answer on a rating scale ranging from 1 (labelled 'Never justified') to 10 (labelled 'Always justified'), or 'Don't know'.

Independent variables

The country of residence, age, education, gender, urbanization level, income, religious denomination and degree of religiousness were chosen as independent variables.

To construct a measure of degree of religiousness, an explorative factor analysis (principal component analysis) was performed on 13 questions relating to various religious attitudes, beliefs and practices. A subset of nine items was eventually selected: 'the importance of religion in one's life', 'frequency of attending religious services', 'does one consider oneself to be a religious person', 'belief in God', 'belief in spirit or life force', 'the importance of God in one's life', 'getting comfort and strength from religion', 'taking moments of prayer or meditation' and 'frequency of praying to God outside religious services'. On the basis

of this subset, a religiousness score was computed for each respondent (standardized factor score), with a higher score indicating a higher level of religiousity.

To further explore the relationship between euthanasia acceptance and other values and attitudes, we constructed a measure of tolerance towards freedom of personal choices. This was done through a principal component analysis on items measuring the acceptance (like the euthanasia item rated on a scale from 1 to 10) of divorce, abortion, homosexuality, having casual sex, prostitution, suicide, and in vitro fertilization. These items do not measure personal preferences or predispositions, but capture the extent to which people accept that others make personal (life and death) choices. Another constructed measure described anti-democratic attitudes and was constructed through principal component analysis of five questions: whether it is good or bad to have a democratic political system, and agreement on the statements that ‘democracy may have problems, but it is better than any other form of government’, ‘in democracy, the economic system runs badly’, ‘democracies are indecisive and have too much squabbling’, ‘democracies aren’t good at maintaining order’. The exact wording of the questions and factor loadings for all factors can be found in “[Appendix](#)”.

Analysis

The association between the acceptance of euthanasia and all independent variables was first evaluated bivariate through one-way analysis of variance (ANOVA).

To examine the relationship between the degree of religiousness and euthanasia acceptance at country level, individual religiosity scores were aggregated per country and correlated with that country’s euthanasia acceptance score. On the basis of each country’s pair of scores, a two-axis scatter plot was constructed. In addition, the two variables were entered into a hierarchical cluster analysis (Ward’s method) at country level, to identify homogeneous groups of countries.

The country, age, education, sex, municipality size, income and degree of religiousness were then entered simultaneously into an analysis of covariance (ANCOVA) model to estimate the partial amount of variance in euthanasia acceptance explained by each independent variable (partial η^2 -value). Religious denomination was excluded from the multivariate model because of the lack of variation in religion within most countries (e.g. Turkey, 99 % Muslim) and strong association with the degree of religiousness (multicollinearity). To account for the hierarchical nature of the data (respondents within a country are more likely to have similar characteristics that effect euthanasia acceptance) linear mixed-effects models was also performed in order to see how the respondents

grouping by country moderates the relationship between religiousity and euthanasia acceptance.

To further explore the differences between religious denominations, the degree of euthanasia acceptance was compared between counties (one-way ANOVA), within each of the four major religious groups and the non-denominational group. If a religious denomination did not represent a least 5 % of a country’s population it was excluded from analysis for that country.

To explore the relationship between euthanasia acceptance and other societal attitudes we examined the bivariate associations (on a country level) between euthanasia acceptance on the one hand and tolerance towards freedom of personal choices and anti-democratic attitudes on the other.

Results

In total, 67,786 European citizens participated in the survey (overall response rate: 69.3 %). Response rates varied widely from 97.2 % in Azerbaijan to 37.4 % in Great Britain (Table 1).

The mean euthanasia acceptance score substantially varied across the 47 countries (Table 1; Fig. 1). The highest score was found for Denmark, immediately followed by Belgium, France, the Netherlands and Sweden. The lowest scores were found for countries such as Kosovo, Cyprus, Turkey, Georgia and Armenia. A one-way ANOVA model, with country as independent variable explained 20 % of the variance in euthanasia acceptance ($\eta^2 = 0.20$, $P < 0.001$). When comparing the 2008 country ranking of euthanasia acceptance with that of the previous wave, the largest increase in rank was found for Spain, Portugal, Great Britain, Germany and Italy. The decrease was largest for the Russian Federation, Ukraine, Greece, the Slovak Republic and Belarus.

The scatterplot of a country’s degree of euthanasia acceptance and religiosity indicated a moderate to strong inverse linear relationship between the two variables, with a higher degree of acceptance corresponding to a lower degree of religiosity (Fig. 2). Only Estonia and the Czech Republic appeared to fall somewhat outside the general linear pattern. Cluster analysis yielded five clusters of countries, with the upper-left and lower-right cluster in Fig. 2 being the most homogeneous. The upper-left cluster grouped five highly religious countries strongly rejecting euthanasia, Turkey, Kosovo, Malta, Georgia and Cyprus, whereas the lower-right cluster grouped an equal number of countries with the opposite profile, the Netherlands, Belgium, Denmark, France and Sweden. The remaining 37 countries were divided into three less homogenous clusters of countries taking an intermediate position.

Table 1 Acceptance of euthanasia by country, 2008

Country	Country abbreviation ^a	Completed interviews (<i>N</i>) ^b	Response rate (%) ^c	Degree of acceptance of euthanasia (mean score) ^c	SD	<i>N</i>	Rank	Previous rank (1999) ^f
Denmark	DK	1,507	59.8	6.79	2.84	1,464	1	2
Belgium	BE	1,509	69.4	6.75	2.60	1,507	2	5
France	FR	1,501	50.8	6.75	2.80	1,486	3	3
Netherlands	NL	1,554	57.4	6.67	2.79	1,534	4	1
Sweden	SE	1,187	46.7	6.54	2.90	1,037	5	4
Luxembourg	LU	1,610	46.4	6.09	3.35	1,537	6	6
Spain	ES	1,500	69.0	6.08	3.19	1,357	7	19
Finland	FI	1,134	89.6	5.91	2.89	1,065	8	9
Iceland	IS	808	63.1	5.78	2.87	777	9	13
Great Britain	GB ^d	1,561	37.4	5.64	3.06	1,481	10	17
Norway	NO	1,510	87.2	5.62	2.91	1,082	11	–
Slovenia	SI	1,366	75.3	5.51	3.28	1,324	12	12
Czech Republic	CZ	1,821	71.2	5.33	2.95	1,651	13	8
Switzerland	CH	1,272	65.4	5.05	3.11	1,200	14	–
Lithuania	LT	1,500	73.9	4.94	2.98	1,268	15	11
Belarus	BY	1,500	84.7	4.78	2.81	1,366	16	10
Latvia	LV	1,506	82.3	4.76	3.05	1,400	17	14
Portugal	PT	1,489	81.5	4.71	3.00	1,411	18	28
Germany	DE	2,075	65.2	4.69	2.94	1,967	19	21
Estonia	EE	1,518	80.7	4.67	2.87	1,429	20	16
Italy	IT	1,519	81.1	4.53	3.24	1,364	21	24
Austria	AT	1,510	94.9	4.51	3.07	1,426	22	20
Northern Ireland	NI ^d	1,090	64.3	4.49	2.78	446	23	23
Hungary	HU	1,513	59.9	4.45	3.24	1,488	24	25
Slovak Republic	SK	1,509	76.4	4.43	3.13	1,375	25	18
Russian Federation	RU	500	89.6	4.36	3.11	1,323	26	7
Bulgaria	BG	1,500	84.7	4.29	3.13	1,250	27	27
Croatia	HR	1,525	87.1	4.00	3.16	1,429	28	26
Ireland	IE	1,013	55.6	3.86	2.78	903	29	30
Ukraine	UA	1,507	75.1	3.69	3.20	1,286	30	15
Serbia	RS	1,512	77.1	3.54	3.15	1,413	31	–
Northern Cyprus	NCY	500	66.5	3.42	3.31	461	32	–
Greece	EL	1,500	45.3	3.37	2.78	1,426	33	22
Poland	PL	1,553	75.8	3.37	2.75	1,413	34	29
Romania	RO	1,504	54.1	3.20	2.84	1,376	35	31
Azerbaijan	AZ	1,505	97.2	3.14	2.80	1,451	36	–
Macedonia	MK	1,500	79.8	3.14	2.80	1,401	37	–
Montenegro	ME	1,516	89.0	3.06	2.97	1,431	38	–
Bosnia Herzegovina	BA	1,512	84.4	2.90	2.80	1,454	39	–
Albania	AL	1,534	93.5	2.69	2.54	1,381	40	–
Malta	MT	1,500	63.1	2.64	2.70	1,380	41	33
Moldova	MD	1,551	73.0	2.64	2.61	1,433	42	–
Armenia	AM	1,500	78.0	2.57	2.43	1,411	43	–
Georgia	GE	1,500	73.9	2.42	2.21	1,355	44	–
Turkey	TR	2,384	69.9	2.21	2.52	2,233	45	32
Cyprus	CY	1,000	81.7	2.00	2.04	915	46	–
Kosovo	OS	1,601	80.7	1.52	1.67	1,545	47	–

F-test, bivariate, $P < 0.001$; $\eta^2 = 0.20$

^a Code used by the ISO, except for The Turkish Republic of Northern Cyprus; which is only recognized by Turkey as a state

^b Unweighted numbers

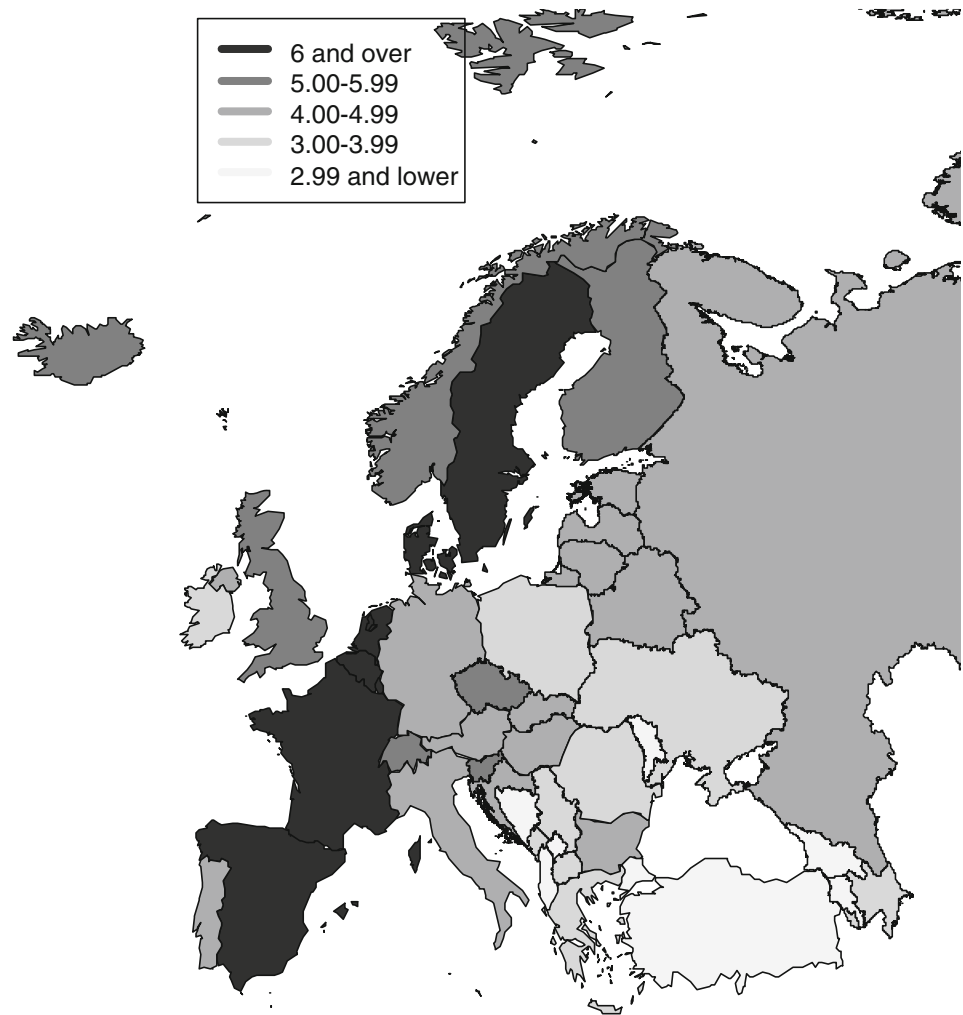
^c The response rate is calculated as the number of completed interviews divided by the initial sample size, excluding the following cases: no contact, language barrier, unable to co-operate for mental, physical or other reasons, ineligible address, moved

^d Northern Ireland is, together with England, Scotland and Wales (Great Britain), one of the four countries of the UK

^e Minimum = 1 (never justified), maximum = 10 (always justified)

^f The 1999 wave included 33 countries

Fig. 1 Acceptance of euthanasia in Europe, 2008 (mean acceptance scores by country in 5 classes). Map made using R software (packages Maps, Mapdata, Maptools)

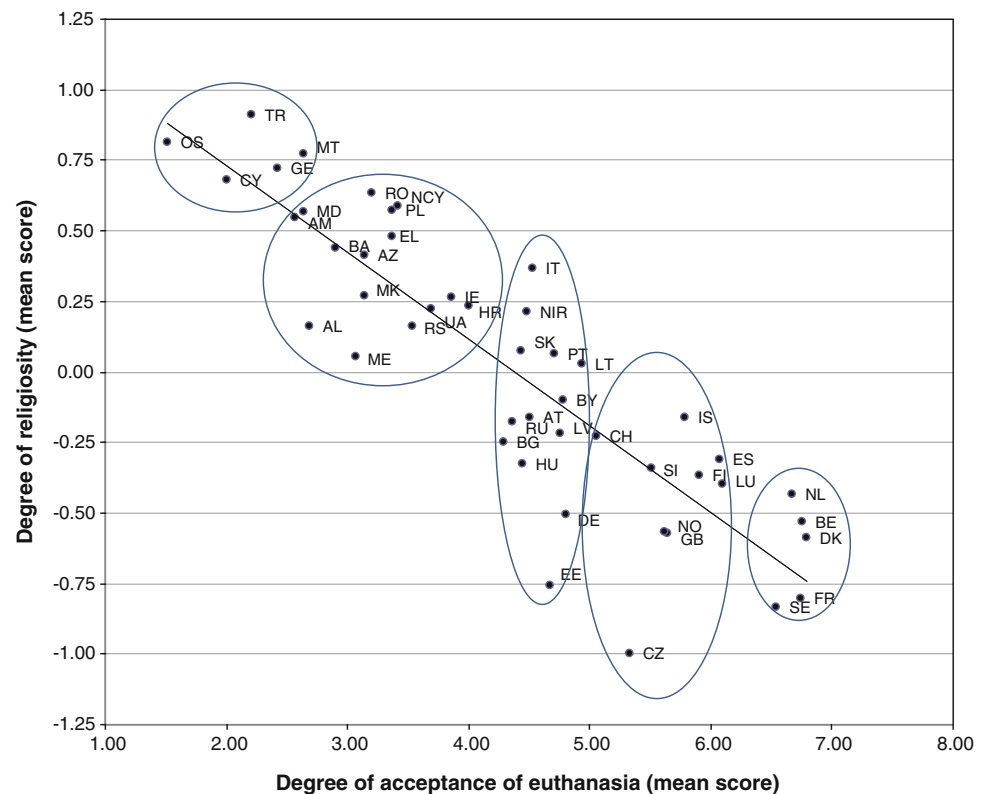


Euthanasia acceptance tended to decrease with age, to increase with income level, the level of education and urbanization and to be lower among women and as the degree of religiosity was higher. Because the degree of religiosity and income level was, however, highly associated with the country of residence, a multivariate analysis of covariance (ANCOVA) was performed. The seven-way ANCOVA model, with country, age, education, sex, municipality size, income and religiosity as independent variables explained, in total, 26 % of the variance in euthanasia acceptance ($\eta^2 = 0.26, P < 0.001$). In this model, the amount of variance explained by country alone dropped to 8 % (partial $\eta^2 = 0.08, P < 0.001$) and that of religiosity to 4 % (partial $\eta^2 = 0.04, P < 0.001$). All other variables had partial η^2 -values lower than 0.01 (the results of the ANCOVA are presented in the online only appendix). The linear mixed-effects model analysis found a significant variation of the religiosity effect due to country variation. Adjusting for this variation, the parameter estimates are more or less the same as those in the ANCOVA analysis (see online only appendix).

Comparison of the level of euthanasia acceptance across countries within the total Catholic, Orthodox, Protestant, Muslim and non-denominational population, indicated significant country differences for all religious denominations, with particularly large country differences within the non-denominational ($\eta^2 = 0.20, P < 0.001$) and Catholic group ($\eta^2 = 0.12, P < 0.001$), and much smaller country differences within the Orthodox ($\eta^2 = 0.07, P < 0.001$), Muslim ($\eta^2 = 0.06, P < 0.001$) and Protestant population ($\eta^2 = 0.05, P < 0.001$) (Fig. 3).

Further exploration of associations between euthanasia acceptance and other attitudes revealed no relevant association between anti-democratic attitudes and euthanasia acceptance. A strong association was found between euthanasia and tolerance towards freedom of personal choices. In fact, a principal component analysis showed euthanasia acceptance to belong to the same dimension as the other tolerance towards freedom of personal choice items. The strong association on a country level can be seen in Fig. 4, showing the scatterplot of country scores for

Fig. 2 Acceptance of euthanasia by religiosity at country level, 2008. Minimum acceptance score = 1 (never justified), maximum acceptance score = 10 (always justified). Degree of religiosity is a standardized factor score calculated on the basis of nine questions



both factors. It shows a strong linear relationship between the acceptance of euthanasia and the tolerance towards freedom of personal choices. The countries further below the linear trend line indicate countries with a euthanasia acceptance that is higher than could be expected based on their overall tolerance towards freedom of personal choices (e.g. Belgium), while those further above the linear trend line represent those for which the euthanasia acceptance is relatively lower when compared with tolerance towards freedom of personal choice items (e.g. Sweden and Greece).

Discussion

The present study indicates that the current public acceptance of euthanasia tends to be relatively low to moderate in a large part of Europe. A markedly high acceptance, however, is found in a small cluster of Western European countries, including Denmark, Belgium, France, the Netherlands, Sweden and Luxembourg. Religious characteristics are very important explanatory factors for euthanasia acceptance in Europe, both at the individual and country level. Acceptance of euthanasia strongly belonged to a dimension of attitudes regarding tolerance towards freedom of personal choice, with those countries with a positive attitude towards freedom of choice usually also accepting euthanasia as an option for incurably ill people.

The present study is the first to provide public opinion information on euthanasia for nearly all countries of the European continent on the basis of the same set of survey questions. Cross-national comparison may become increasingly relevant as the public debate on euthanasia in Europe has taken on an international dimension in recent years. In addition, this study is also unique in that it allows comparison among multiple religious groups, including Muslims and Orthodox. To date, not much is known about the views on euthanasia in these groups. Furthermore, the EVS surveys are conducted according to robust and reliable social science research methods and have as a major advantage when compared with many other surveys, the fact that they apply a random sampling using a comprehensive (i.e. full population) sampling frame, hence providing a better guarantee of being representative for the total adult population. Response rates obtained are fair to high, although the rates strongly vary between countries. Although in each country, a representative multi-stage or stratified random sample of the adult population was taken, small variations in the sampling procedure (and perhaps in the reporting of refusals or substitutions from the interviewers) may have caused these variations in reported response rates.

It is worth pointing out some possible shortcomings of this study. The EVS question on euthanasia did not specify whether the incurably ill person has to request life termination or not, as is the case for instance in the relevant legislation in e.g. the Netherlands and Belgium. Although

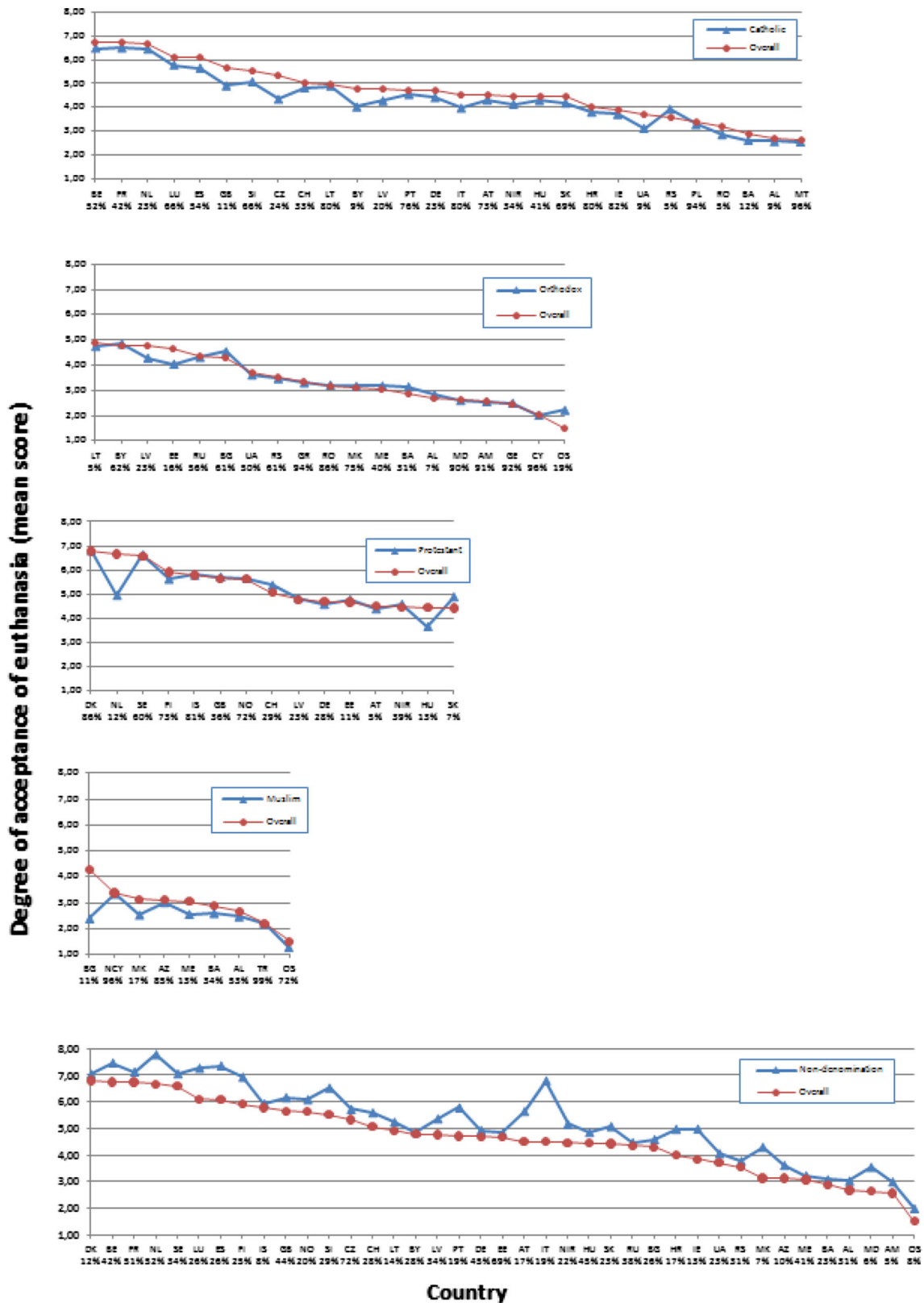
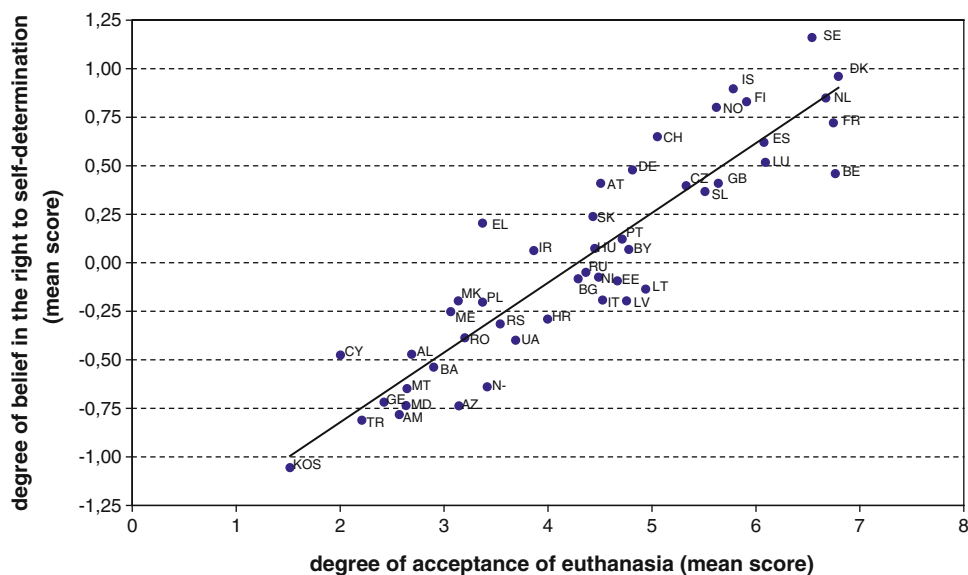


Fig. 3 Acceptance of euthanasia by religious denomination and country, 2008. Minimum acceptance score = 1 (never justified), maximum acceptance score = 10 (always justified). The row below the country codes displays the proportion of the particular religious or

non-denominational group within each country. A country is omitted if this proportion is lower than 20%. Countries are sorted from highest to lowest overall acceptance score

Fig. 4 Euthanasia acceptance by degree of tolerance towards freedom of personal choice at country level, 2008. Minimum acceptance score = 1 (never justified), maximum = 10 (always justified). The degree of tolerance towards freedom of personal choice is a standardized factor score calculated on the basis of the acceptance of, abortion, homosexuality, having casual sex, prostitution, suicide, and in vitro fertilization



euthanasia today is in many countries commonly understood as a voluntary decision to terminate life, it cannot be ruled out that some respondents (particularly from countries where euthanasia is less debated) had interpreted the term euthanasia as life termination without the person's knowledge or consent; particularly in certain countries, such as Germany and Austria, where euphemistic terms, such as Sterbehilfe are used in the public debate rather than the historically laden euthanasia (Oehmichen and Meissner 2003). Thus, it is possible that the differences in acceptance that were found between countries are partly due to interpretational differences. On the other hand, national debates on 'euthanasia'—also in countries that already legalized it—also comprise issues of fear of abuse such as 'euthanasia' without patient request. Therefore, the omission of the request in the definition used in the questionnaire may capture salient sensitivities underlying the debate on euthanasia within a specific country. Another limitation in the present study may be that acceptance of euthanasia was measured through a single question. The previous research suggests that euthanasia attitudes should be seen as a complex, multi-faceted concept (deCesare 2000; Holloway et al. 1994).

The finding that religiosity is an important factor in explaining people's attitudes towards euthanasia is consistent with the previous research (Bachman et al. 1996; deCesare 2000; Leinbach 1993; Sikora 2009; Suarez-Almazor et al. 1997). Official religious doctrinal viewpoints usually consider physician-assisted dying (including euthanasia and physician-assisted suicide) as morally wrong (Cohen et al. 2008), applying a sanctity of life principle. In religions, such as Catholicism, conservative Protestantism or Islam, the individual is neither the author of his or her own life nor the arbiter of his or her own death

but a steward of God's sacred gift of life (Larue 1985; Kopfensteiner 1996). It is, therefore, no surprise that as persons adhere more strongly to religious beliefs and consider religion important in their lives they will also more strongly see euthanasia as immoral and equal to killing (Snelling 2004).

The higher acceptance among non-religious persons is probably rooted in the fact that secular culture has put a relatively high value on freedom of choice in life, and death, choices (Donovan 1997). The results with regard to the four major religions are more difficult to interpret, because the effect of religious denomination is highly country dependent as is also suggested in previous researches (Cohen and Marcoux 2006a; Cohen et al. 2008). In general, Protestants seem to support euthanasia more than Catholics, Orthodox and Muslims, respectively. We can find support for this difference in how Protestant institutions and communities (in contrast to Catholicism, Orthodox Christianity and Islam) have not uniformly defined euthanasia as sinful. Some faith communities in Protestant Christianity seem to have argued that, when faced with terminal illness, one may well be disposed to ending one's life, and one's immediate community may support this method of death (Campbell 2000). Within Protestantism (both institutionally and ideologically), a variety of opinions on euthanasia exists (Bulow et al. 2008).

The wide country variation within the four religious groups found in this study is however striking, in particular for Catholics. A Catholic living in, for example, Spain or France, appears to be much more permissive towards euthanasia than a Hungarian or Polish Catholic, even though all these countries are predominantly Catholic. As Catholicism is widely spread across the European continent, the larger division within the Catholic population is

probably due to exposure to a wider variety of national and regional influences than are other major religions, which are more concentrated within specific European regions. A person's position towards euthanasia, whether Catholic, Protestant, or not religious, thus seems to be much more determined by the dominant culture within a country than by doctrinal religious stances of the denomination one associates with (De Moor 1995). People, religious or not, living in countries in which other people's right to self-determination is generally accepted, e.g. with regard to personal choices regarding sexuality, life and death, are for instance usually also more accepting of euthanasia as an option for incurably ill people. Particular historical factors (e.g. national socialist experiences with euthanasia) will also have an influence.

A broad comparison of the 1999 and 2008 country ranking of euthanasia acceptance suggests a tendency towards a polarization between Western and Eastern Europe. Most of the countries that increased in ranking are situated in the West or South-West of Europe whereas those that substantially decreased in ranking were predominantly Eastern European countries such as the Russian Federation, the Ukraine and Belarus.

A number of suggestions can be put forward to explain this finding. A first one is the so-called 'European east-west health divide' (Carlson 1998, 2004; Laaksonen et al. 2001). As a result of the drastic socio-economical and political changes after the fall of communism in the late 80 s and early 90 s, many Eastern European countries are now facing higher levels of morbidity and mortality and sometimes poor health care organization and financing compared with the West. Against this background, it is conceivable that people see euthanasia more as a threat, fearing that it may be used against them to economize on health care costs and free hospital beds.

The divergence in euthanasia attitudes between East and West may also reflect the two main changes in the European religious landscape over the last two decades: rapid and drastic secularization in Western Europe and a revival of religion in most—not in the Czech Republic or Estonia—parts of post-communist Europe (Tomka 2002, 2004). The growing opposition to euthanasia in countries, such as the Russian Federation and the Ukraine may be embedded within the growth in religiosity together with the emerging role of the churches in social and political life.

People in Eastern European countries, in particular the former Soviet ones, also tend to have much more negative attitudes towards democracy as a political system. Although our study demonstrated that this was not an important explanation for the differences in attitudes towards euthanasia, it is possible that the lower levels of a feeling of freedom of choice and control over their life documented among Eastern Europeans when compared

with their Western counterparts reflects underlying differences of trust in their ability to exercise autonomy (Halman et al. 2005). It may, therefore, be that euthanasia as an option to exercise autonomy relates much more to Western Europeans perspective towards autonomy than to that of Eastern Europeans.

It may be further noted that the three countries that have legalized euthanasia (i.e. the Netherlands, Belgium and Luxembourg) all appear at the top of the country ranking of euthanasia acceptance. It can be questioned therefore whether in countries such as Denmark, France, and Sweden, with a similar or even higher degree of public acceptance both in 2008 and 1999, pressure to follow their example in the next few years may not increase. To date, however, in Denmark and Sweden the issue has not yet risen up the political agenda. It is likely that besides public support, a number of other conditions need to be fulfilled for euthanasia to become a political issue, such as pressure group action (e.g. the Right-to-Die movement), the presence of a religious-secular (and progressive left-wing vs. conservative right-wing) political party conflict, the support of the medical profession and the occurrence of individual court cases on euthanasia which may serve as focusing events (Green-Pedersen 2007). Future changes may be highly dependent on what political parties hold the majority.

Conclusion

There is a sharp division in euthanasia acceptance among the European public. At country level, this division tends roughly to take the form of a polarization between West and East. Religious factors remain an important consideration in understanding differences in attitudes between countries. However, factors other than the religious climate of a country are relevant, including cultural, socio-economical and health care-related characteristics.

When considering the high diversity of views on euthanasia across Europe, a pan-European policy approach to debating the issue, as has for instance been tried by the Alliance of Liberals and Democrats for Europe in the European Parliament, seems extremely difficult, if not impossible. Instead, it is to be expected that each country will have its own debate, which will eventually lead to particular national solutions.

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Appendix

See Tables 2, 3 and 4.

Table 2 Constructed measures through principal component analysis (items and component loadings)

Item	Component loading
Religiosity ^a	
How important is religion in your life	0.774
How often do you attend religious services?	0.718
Are you a religious person?	0.773
Do you believe in: God?	0.785
Which of these statement comes closest to your beliefs (one of four statements ranging from 'there is a personal God' to 'I don't really think there is any sort of spirit, God or life force')	0.744
How important is God in your life	0.871
Do you get comfort and strength from religion?	0.831
Do you take moments of prayer/meditation?	0.728
How often do you pray to God outside religious services?	0.838
Tolerance towards freedom of personal choices ^b	
Please tell me whether you think ... can always be justified, never be justified, or something in between:	
Divorce	0.783
Abortion	0.779
Having casual sex	0.689
Prostitution	0.686
Suicide	0.642
Invitro fertilization	0.604
Homosexuality	0.759
Anti-democratic attitudes ^c	
Agreement to statement: Democracies aren't good at maintaining order	0.783
Agreement to statement: In democracy, the economic system runs badly	0.763
Agreement to statement: Democracies are indecisive and have too much squabbling	0.715
Agreement to statement: Democracy may have problems but it's better than any other form of government	-0.581
Having a democratic system is a very good, fairly good, fairly bad or very bad way of governing this country	-0.597

^a variance explained: 61.83 %; Cronbach's alpha: 0.84

^b variance explained: 50.25 %; Cronbach's alpha: 0.84

^c variance explained: 48.0 %; Cronbach's alpha: 0.73

Tables 3 Results of the ANCOVA analysis

Source	Type III Sum of Squares	<i>Df</i>	Mean square	<i>F</i>	Sig.	Partial η^2
Tests of between-subjects effects						
Intercept	393585.3	1	393585.3	51424.7	<0.001	0.502
Country	34868.2	45	774.8	101.2	<0.001	0.082
Age (6 groups)	1694.7	5	338.9	44.3	<0.001	0.004
Educational	991.1	2	495.6	64.8	<0.001	0.003
Sex	66.9	1	66.9	8.7	0.003	0.000
Municipality size	882.4	1	882.4	115.3	<0.001	0.002
Income Level	441.7	2	220.9	28.9	<0.001	0.001
Religiosity	17057.8	1	17057.8	2228.7	<0.001	0.042

Tables 3 continued

	B	95 % confidence interval	Sig.	Partial η^2
Parameter estimates				
Intercept	2.45	2.24–2.66	<0.001	0.010
Country				
Albania	0.61	0.39–0.84	<0.001	0.001
Azerbaijan	1.14	0.94–1.34	<0.001	0.002
Austria	2.20	1.98–2.43	<0.001	0.007
Armenia	0.75	0.53–0.96	<0.001	0.001
Belgium	4.15	3.92–4.37	<0.001	0.026
Bosnia Herzegovina	1.18	0.96–1.40	<0.001	0.002
Bulgaria	2.01	1.79–2.22	<0.001	0.006
Belarus	2.53	2.32–2.75	<0.001	0.010
Croatia	2.04	1.83–2.26	<0.001	0.007
Cyprus	0.28	0.03–0.53	0.03	0.000
Northern Cyprus	1.73	1.43–2.03	<0.001	0.003
Czech Republic	2.41	2.18–2.63	<0.001	0.009
Denmark	4.10	3.86–4.35	<0.001	0.021
Estonia	1.96	1.74–2.18	<0.001	0.006
Finland	3.27	3.03–3.51	<0.001	0.013
France	3.91	3.69–4.13	<0.001	0.023
Georgia	0.72	0.50–0.93	<0.001	0.001
Germany	1.95	1.74–2.16	<0.001	0.006
Greece	1.62	1.40–1.85	<0.001	0.004
Hungary	2.02	1.80–2.24	<0.001	0.006
Ireland	1.74	1.42–2.06	<0.001	0.002
Italy	2.68	2.43–2.92	<0.001	0.009
Latvia	2.43	2.21–2.65	<0.001	0.009
Lithuania	2.76	2.54–2.98	<0.001	0.011
Luxembourg	3.56	3.33–3.80	<0.001	0.016
Malta	1.14	0.85–1.44	<0.001	0.001
Moldova	0.79	0.57–1.00	<0.001	0.001
Montenegro	0.97	0.75–1.18	<0.001	0.001
Netherlands	4.05	3.83–4.28	<0.001	0.024
Norway	2.90	2.67–3.14	<0.001	0.011
Poland	1.55	1.33–1.77	<0.001	0.004
Portugal	2.85	2.59–3.12	<0.001	0.009
Romania	1.55	1.34–1.77	<0.001	0.004
Russian Federation	2.07	1.85–2.29	<0.001	0.007
Serbia	1.76	1.54–1.98	<0.001	0.005
Slovak Republic	2.32	2.10–2.54	<0.001	0.008
Slovenia	3.20	2.95–3.45	<0.001	0.012
Spain	3.59	3.35–3.83	<0.001	0.016
Sweden	3.52	3.28–3.76	<0.001	0.016
Switzerland	2.70	2.46–2.95	<0.001	0.009
Turkey	0.96	0.75–1.17	<0.001	0.002
Ukraine	1.77	1.55–1.99	<0.001	0.005
Macedonia	1.24	1.03–1.45	<0.001	0.003
Great Britain	3.17	2.90–3.43	<0.001	0.01
Northern Ireland	2.52	2.12–2.91	<0.001	0.003

Tables 3 continued

	B	95 % confidence interval	Sig.	Partial η^2
Kosovo	Ref cat		.	.
Age (years)				
18–29	0.58	0.49–0.68	<0.001	0.003
30–39	0.62	0.52–0.71	<0.001	0.003
40–49	0.57	0.48–0.66	<0.001	0.003
50–59	0.43	0.34–0.53	<0.001	0.002
60–69	0.27	0.17–0.36	<0.001	0.001
70 and older	Ref cat		.	.
Educational attainment				
Low (primary or lower)	–0.54	–0.64 to 0.45	<0.001	0.002
Mid (secondary)	–0.24	–0.29 to 0.18	<0.001	0.001
High (post secondary)	Ref cat		.	.
Sex (male vs. female)	–0.07	–0.12 to 0.03	0.003	0
Municipality size (<100,000 vs. >100,000 inhabitants)	–0.31	–0.37 to 0.26	<0.001	0.002
Income				
Low (<500 euro)	–0.41	–0.52 to 0.30	<0.001	0.001
Mid (500–2,500 euro)	–0.22	–0.31 to 0.14	<0.001	0.001
High (2,500 euro and higher)	Ref cat		.	.
Religiosity (factor score)	–0.70	–0.73 to 0.67	<0.001	0.042

R^2 of the model = 0.257

Ref cat reference category

Tables 4 Results of linear mixed-effects model analysis

Parameter	Estimate	Std. error	<i>df</i>	<i>t</i>	Sig.	95 % confidence interval
Parameter estimates of fixed effects						
Intercept	2.54	0.18	1170.4	14.19	<0.001	2.19–2.89
Country						
Albania	0.43	0.18	1288.6	2.34	0.02	0.07–0.79
Azerbaijan	0.97	0.18	1135.5	5.31	<0.001	0.61–1.33
Austria	2.07	0.18	1295.5	11.30	<0.001	1.71–2.44
Armenia	0.39	0.19	1261.6	2.02	0.04	0.01–0.77
Belgium	3.99	0.19	1327.0	21.55	<0.001	3.63–4.36
Bosnia Herzegovina	0.98	0.19	1274.8	5.24	<0.001	0.62–1.35
Bulgaria	1.95	0.18	1261.9	10.67	<0.001	1.59–2.31
Belarus	2.45	0.18	1212.8	13.55	<0.001	2.10–2.81
Croatia	2.01	0.18	1225.7	11.03	<0.001	1.65–2.37
Cyprus	0.14	0.22	1262.1	0.63	0.53	–0.29 to 0.57
Northern Cyprus	1.54	0.24	1040.9	6.43	<0.001	1.07–2.01
Czech Republic	2.35	0.19	1512.7	12.11	<0.001	1.97–2.73
Denmark	3.96	0.20	1597.5	20.11	<0.001	3.58–4.35
Estonia	2.19	0.19	1372.8	11.62	<0.001	1.82–2.55
Finland	3.09	0.19	1510.7	16.12	<0.001	2.72–3.47
France	3.88	0.19	1452.7	20.31	<0.001	3.50–4.25
Georgia	0.36	0.21	1115.1	1.69	0.09	–0.06 to 0.77
Germany	2.03	0.18	1295.7	11.01	<0.001	1.67–2.39
Greece	1.70	0.19	1364.3	8.81	<0.001	1.32–2.07

Tables 4 continued

Parameter	Estimate	Std. error	<i>df</i>	<i>t</i>	Sig.	95 % confidence interval
Hungary	1.91	0.18	1272.5	10.44	<0.001	1.55–2.27
Ireland	1.78	0.22	2247.1	7.91	<0.001	1.34–2.22
Italy	2.87	0.19	1507.2	14.87	<0.001	2.49–3.25
Latvia	2.32	0.18	1262.1	12.67	<0.001	1.96–2.67
Lithuania	2.65	0.18	1277.1	14.43	<0.001	2.29–3.01
Luxembourg	3.30	0.19	1463.0	17.37	<0.001	2.93–3.67
Malta	1.29	0.25	964.0	5.10	<0.001	0.79–1.79
Moldova	0.72	0.20	1215.5	3.62	<0.001	0.33–1.11
Montenegro	0.84	0.18	1223.5	4.62	<0.001	0.48–1.20
Netherlands	3.75	0.18	1312.9	20.31	<0.001	3.38–4.11
Norway	2.67	0.19	1528.2	13.79	<0.001	2.29–3.04
Poland	1.50	0.19	1358.5	7.75	<0.001	1.12–1.89
Portugal	2.73	0.20	1696.6	13.84	<0.001	2.34–3.12
Romania	1.25	0.21	1194.5	6.02	<0.001	0.84–1.66
Russian Federation	2.04	0.18	1243.4	11.17	<0.001	1.68–2.39
Serbia	1.63	0.18	1247.0	8.93	<0.001	1.27–1.99
Slovak Republic	2.18	0.18	1236.4	12.02	<0.001	1.83–2.54
Slovenia	2.98	0.20	1608.3	15.27	<0.001	2.60–3.36
Spain	3.30	0.19	1502.3	17.23	<0.001	2.92–3.67
Sweden	3.21	0.20	1686.3	15.95	<0.001	2.82–3.61
Switzerland	2.62	0.19	1523.8	13.64	<0.001	2.24–2.99
Turkey	1.01	0.24	800.3	4.19	<0.001	0.54–1.49
Ukraine	1.58	0.18	1276.6	8.57	<0.001	1.22–1.94
Macedonia	1.14	0.18	1187.9	6.28	<0.001	0.78–1.50
Great Britain	2.99	0.20	1843.8	14.64	<0.001	2.59–3.40
Northern Ireland	2.41	0.25	3639.2	9.60	<0.001	1.92–2.91
Kosovo	Ref cat	.	.	.	.	.
Age (years)						
18–29	0.56	0.05	51015.1	11.66	<0.001	0.46–0.65
30–39	0.59	0.05	51020.5	12.17	<0.001	0.50–0.69
40–49	0.54	0.05	51021.0	11.38	<0.001	0.45–0.64
50–59	0.41	0.05	51014.0	8.60	<0.001	0.32–0.51
60–69	0.26	0.05	50999.8	5.26	<0.001	0.16–0.35
70 and older	Ref cat	.	.	.	.	.
Educational attainment						
Low (primary or lower)	–0.51	0.05	50973.2	–10.12	<0.001	–0.61 to 0.41
Mid (secondary)	–0.24	0.03	51010.5	–8.17	<0.001	–0.30 to 0.18
High (post secondary)	Ref cat	.	.	.	.	.
Sex (male vs. female)	–0.07	0.03	51019.9	–2.62	0.01	–0.12 to 0.02
Municipality size (<100,000 vs. >100,000 inhabitants)	–0.30	0.03	51019.1	–10.20	<0.001	–0.35 to 0.24
Income						
Low (<500 euro)	–0.40	0.05	51002.3	–7.32	<0.001	–0.50 to 0.29
Mid (500–2,500 euro)	–0.19	0.04	51014.9	–4.40	<0.001	–0.27 to 0.10
High (2,500 euro and higher)	Ref cat	.	.	.	.	.
Religiosity (factor score)	–0.70	0.05	45.9	–13.36	<0.001	–0.81 to 0.60
Estimates of covariance parameters						

Tables 4 continued

Parameter	Estimate	Std. error	<i>df</i>	<i>t</i>	Sig.	95 % confidence interval
Parameter	Estimate	Std. error	Wald Z	Sig.		95 % confidence interval
Residual	7.57	0.05	159.7	<0.001		7.48–7.67
Religiosity (subject = country)	0.11	0.03	4.3	<0.001		0.07–0.18

Explanatory note: the model adjusted for the variation of the religiosity effect owing to country variation. The parameter estimates of fixed effects present the effects of the different variables on euthanasia acceptance and are similar to those in the ANCOVA model. The estimates of covariance parameters indicate that there is a significant variation of the religiosity effect due to country variation

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