



Religiosity and justification of euthanasia: multilevel moderation of beliefs in life after death

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ABSTRACT

Although research consistently shows that both individual and national religiosity are negatively associated with the justification of euthanasia, there is a lack of knowledge about the moderators of this relationship. Beliefs in life after death provide a framework for attributing meaning beyond earthly existence. Using data from the most recent wave of the European Values Study project (EVS, 2022), this study examined how such beliefs in life after death relate to the justification of euthanasia and moderate the religiosity-euthanasia relationship at both individual and cultural levels in a cross-national context. A multilevel analysis of 35 countries and approximately 48,000 participants revealed that both religiosity and beliefs in life after death significantly increased opposition to euthanasia. Moreover, beliefs in life after death strengthened the negative association between religiosity and the justification of euthanasia. Findings suggest that these beliefs in life after death operate simultaneously at the individual and cultural levels. These results highlight the importance of multilevel approaches to understanding end-of-life attitudes and underscore the need for public health policies to consider cultural beliefs about death when addressing euthanasia legislation and clinical decision-making.

1. Introduction

The literature has examined religiosity and cultural factors largely as separate influences on euthanasia attitudes (Bartolomé-Peral and Coromina, 2020; Cohen et al., 2006, 2014; DeCesare, 2000; Groenewoud et al., 2023; Stronegger et al., 2013; Verbakel and Jaspers, 2010). This study addresses this gap by examining how individual religiosity, beliefs in life after death, and cultural context interact to shape end-of-life attitudes across Europe.

The European Values Study (EVS) is a cross-national, repeated cross-sectional survey that has examined the ideas, beliefs, preferences, attitudes, values, and opinions of European citizens every nine years since 1981. This study adopts the broad conceptualisation of euthanasia employed by the EVS, which encompasses what bioethicists distinguish as *active euthanasia* (direct administration of lethal medication for someone suffering from a terminal illness), *assisted suicide* (provision of means for self-termination), and *passive euthanasia* (withdrawal of life-sustaining treatment) (EVS, 2022; Varkey, 2020). The EVS is an ideal resource for examining how individual and cultural factors shape moral attitudes on a cross-national scale. We operationalise beliefs in life after death as convictions regarding moral or spiritual continuation following

death, including notions of divine reward or punishment, such as heaven and hell (Haraldsson, 2006).

Research consistently demonstrates that religiosity is a significant predictor of opposition to euthanasia (Cohen et al., 2006, 2014; Levin et al., 2020; Verbakel and Jaspers, 2010), with effects varying substantially across cultural contexts. This relationship reflects deep theological commitments shared across major religious traditions (Ahaddour et al., 2018; Nelkin, 2004; Tomašević, 2013). However, beliefs in life after death don't come only from formal religious teachings. Research reveals that even secular and non-religious people hold beliefs about some form of continuity after death (Georgiadou and Pnevmatikos, 2019; Haimila and Muraja, 2023). This indicates that such beliefs are better understood not just as religious ideas, but as expressions of common ways minds make sense of the world, influenced by different cultures.

What remains absent is a multilevel model integrating individual religiosity, individual beliefs in life after death, and cultural context. This study is structured around a central overarching research question: whether beliefs in life after death serve as cross-level moderators of the religiosity-euthanasia relationship – that is, whether these beliefs intensify or attenuate the relationship between individual religiosity and

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attitudes towards end-of-life practices. As a preliminary step in examining moderation, we analysed the main effects (Fig. 1), namely that religiosity predicts opposition to euthanasia and that beliefs in life after death – at both individual and cultural levels – independently predict such opposition. Although these main effects have been documented in previous research, they are essential for understanding the conditions under which the effects of religiosity vary. The primary theoretical and empirical contribution of this study, however, rests on testing the cross-level moderation model: the hypothesis that religiosity effects are deeply contingent on eschatological worldviews operating simultaneously at individual and cultural levels.

2. The relationship between religiosity and the justification of euthanasia

Religious people oppose euthanasia because of theological principles common to the main traditions. Although individual religious communities interpret these doctrines differently, several core principles emerge consistently: divine sovereignty (God alone determines when life begins and ends); the sanctity of life (human life as an intrinsic divine gift, not a commodity); the attribution of spiritual meaning to suffering (as an opportunity for growth or redemption); and stewardship (humans as caretakers rather than owners of life) (Ahaddour et al., 2018; Nelkin, 2004; Tomašević, 2013). These theological rationales generate widespread resistance to euthanasia, though their interpretation varies across religious traditions and within them.

Empirically, the literature demonstrates that religiosity is significantly and negatively associated with the justification of euthanasia (Bartolomé-Peral and Coromina, 2020; Inglehart et al., 2021; Levin et al., 2020). This association is observed both at the individual level and within the religious environment of countries (Köneke, 2014; Verbakel and Jaspers, 2010). Consequently, lower levels of religiosity are associated with higher acceptance of end-of-life practices (Cohen et al., 2014). We therefore hypothesised that religiosity is negatively associated with the justification of euthanasia (H1).

3. The relationship between beliefs in life after death and the justification of euthanasia

Beliefs in life after death influence how people make moral decisions at the end-of-life, drawing on universal ways of thinking rather than relying solely on formal religious teachings. Children from a variety of cultural backgrounds develop two distinct but coexisting ways of understanding death (Harris, 2018). One is a biological view, recognising that death means the end of mental and physical functions; the other is a religious or continuity view, which sees the deceased as continuing to exist in some other form. As people grow older, they don't simply discard the biological perspective. Instead, they combine both ways of thinking, switching between them flexibly depending on the situation—a pattern that continues well into adulthood (Watson-Jones et al., 2017). In the

predominantly Christian and Islamic context of Europe, these beliefs commonly crystallise into eschatological constructs: affirmation of an afterlife, heaven as divine reward, and hell as retribution (Bering, 2002; Flannelly et al., 2008).

Across Abrahamic traditions—Christianity, Islam, and Judaism—the principle that only divine authority determines the timing and manner of death creates a theological rationale for opposing euthanasia. When individuals hold strong beliefs in life after death—whether articulated as divine judgement, spiritual accounting, or moral consequence—this conviction reinforces the idea that death should remain a natural event timed by a higher power (Bering, 2002; Sabriseilabi and Williams, 2022). Although religious traditions differ in how they categorise euthanasia (suicide, murder, or both) and assign divine consequences, they converge on a shared understanding: death carries transcendent meaning. This general eschatological framework functions as a unified predictor of opposition to euthanasia across traditions (Tomašević, 2013). We therefore hypothesised that beliefs in life after death, as an individual characteristic, are negatively associated with the justification of euthanasia (H2a).

Beliefs in life after death vary across Europe: they are most prevalent in Western Europe (58.9 %), followed by Nordic countries (52.8 %) and Eastern Europe (47.6 %) (Haraldsson, 2006). This regional variation reflects the persistence of theological traditions and their cultural influence across different national contexts (Bering, 2002; Bibby, 2017). In societies where secular worldviews prevail, beliefs in life after death often take on naturalised forms (Haimila and Muraja, 2023; Manning, 2025) – such as continuity through biological recycling (returning to natural cycles), social immortality (living on through the memories and legacies of others), or speculative scientific ideas like technological life extension – rather than traditional supernatural religious notions. This regional and cultural variation in the prevalence of beliefs in life after death itself creates differences in average opposition to euthanasia across countries. We therefore hypothesised that beliefs in life after death, as a cultural characteristic, are negatively associated with the justification of euthanasia (H2b).

4. Moderation of beliefs in life after death

When individuals hold strong beliefs in life after death – whether articulated through theological frameworks emphasising divine judgement and moral accountability, or through more philosophical convictions emphasising existential continuity – these eschatological convictions may reinforce the protective stance toward life encoded in religious doctrine. This reinforcement may occur because strong beliefs in life after death, regardless of their specific theological interpretation, intensify concerns about the transcendent meaning of mortality and divine authority over death (Bering, 2002; Sabriseilabi and Williams, 2022; Tomašević, 2013). Consequently, among highly religious individuals, those with strong beliefs in life after death may express markedly greater opposition to euthanasia than equally religious

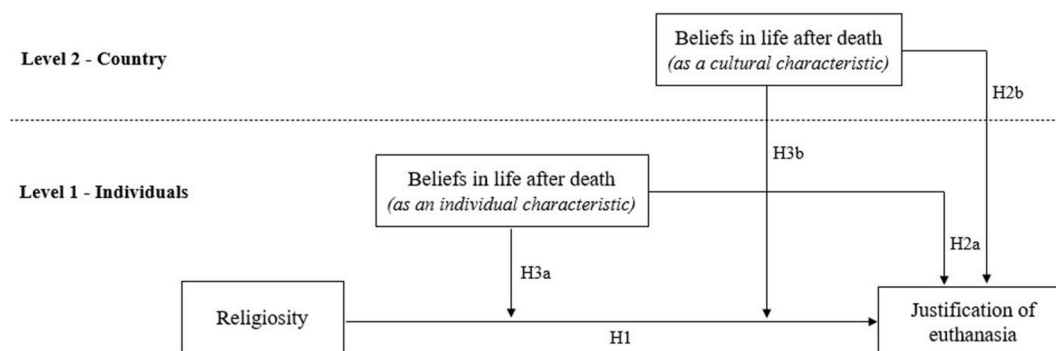


Fig. 1. Conceptual model.

individuals with weaker afterlife beliefs, because robust eschatological convictions amplify the sacred-life concerns central to religious opposition (Bartolomé-Peral and Coromina, 2020). More broadly, the strength of beliefs in life after death operates as a moderator across the religiosity spectrum: individuals with stronger convictions – whether from religious or secular backgrounds – may experience greater reinforcement for opposing euthanasia. However, individuals with weaker or tentative beliefs in life after death may experience less reinforcement of this protective stance toward life. This reduction in reinforcement emerges because weaker afterlife convictions reduce the salience of transcendent accountability, thereby weakening the eschatological rationale for opposing end-of-life interventions. We therefore hypothesised that beliefs in life after death, as an individual characteristic, moderate the relationship between religiosity and the justification of euthanasia (H3a).

At the macro level, the cultural prevalence of beliefs in life after death may shape the strength of religiosity's effect on euthanasia opposition. In nations where such beliefs are widespread and institutionally supported, theological doctrines emphasising transcendent accountability and divine authority over death are deeply internalised through normative cultural messaging and institutional reinforcement (Chen et al., 2025). As a result, highly religious individuals in these contexts may encounter a cultural environment that validates and reinforces eschatological concerns about mortality, thereby strengthening the negative effect of their personal religiosity on euthanasia opposition (Bones and Sabriseilabi, 2018). In contrast, in secularised nations where beliefs in life after death lack cultural prevalence and institutional support, personal religiosity may operate without this contextual reinforcement, thus weakening its impact on end-of-life attitudes. We therefore hypothesised that beliefs in life after death, as a cultural characteristic, moderate the relationship between religiosity and the justification of euthanasia (H3b).

5. Method

5.1. Sample and procedures

This study used data from the fifth and most recent wave of the European Values Study covering 36 countries and 59,438 respondents (EVS, 2022). Conducted every nine years, the EVS examines the ideas, beliefs, preferences, attitudes, values, and opinions of European citizens. Data collection took place between mid-2017 and late 2021, primarily through face-to-face interviews. The EVS employed random probability sampling to ensure representativeness of the adult population (aged 18 and over) in each participating country. To adjust for response bias and disproportionate stratified sampling, one of the calibration weights provided by the EVS was used applied based on the marginal distribution of age, gender, educational attainment, and region. Further details are available in the GESIS – Leibniz Institute for the Social Sciences data catalogue (EVS, 2022).

5.2. Measures

5.2.1. Religiosity

Based on the proposal by Cohen et al. (2014) and the EVS 2022 wave, seven of the nine items used by the authors to measure religiosity were included. The two items 'Getting comfort and strength from religion' and 'Taking moments of prayer or meditation' were not available in this wave. The items retained were: 'The importance of religion in one's life', 'Frequency of attending religious services', 'Does one consider oneself to be a religious person', 'Believe in God', 'Belief in spirit or life force', 'The importance of God in one's life', 'Frequency of praying to God outside religious services'. Response scales reverse-coded so that higher values indicated greater religiosity. To assess whether these items reflected a single underlying dimension as proposed by Cohen et al. (2014), a confirmatory factor analysis (CFA) was performed. Given the ordinal

nature of the data, the diagonal weighted least squares (DWLS) estimator was applied (Muthén and Satorra, 1995), which is well suited for ordered categorical variables and provides robust parameter estimates (Li, 2016). Model fit was evaluated using multiple indices: chi-square (χ^2), the comparative fit index (CFI ≥ 0.95), the Tucker–Lewis index (TLI ≥ 0.95), the root mean square error of approximation (RMSEA < 0.07), and the standardized root mean square residual (SRMR ≤ 0.08) (Hu and Bentler, 1999; Kline, 2016; Hair et al., 2019). The one-factor model demonstrated good fit to the data: $\chi^2(14) = 5083.099$, $p < .001$; CFI = 0.994; TLI = 0.991; RMSEA = 0.081; SRMR = 0.043. Reliability was high (McDonald's $\omega = 0.917$, $\alpha = .922$, Kline, 2016). Based on this model, and to account for differences in response scales, a standardized factor score ($M \approx 0$, $SD \approx 1$) was derived for each respondent, with higher scores indicating stronger religiosity.

5.2.2. Justification of euthanasia

The justification of euthanasia was assessed with this question included in the EVS (2022): 'To what extent do you think euthanasia (ending the life of an incurably ill person) is justified?'. This topic has also been addressed in various studies, such as Bartolomé-Peral and Coromina (2020), Köneke (2014), and Tormos et al. (2023). Responses were rated on a 10-point scale ranged from 1 (never) to 10 (always).

5.2.3. Beliefs in life after death

The EVS (2022) includes three items to measure beliefs in life after death: (1) 'Do you believe in: life after death?', (2) 'Do you believe in: hell?', (3) 'Do you believe in: heaven?' (developed by Sabriseilabi and Williams, 2022). Responses were dichotomous ("Yes" or "No"). Given the categorical nature of these variables, multiple correspondence analysis (MCA) was applied to evaluate whether they could be combined into a reliable index of beliefs after death. MCA is especially suited for categorical variables, as it optimally quantifies them for scale construction (Carvalho, 2008; Gifi, 1996; Greenacre, 2007). The procedure also includes the calculation of Cronbach's alpha after transforming the variables. In this study, MCA yielded a Cronbach's alpha of 0.86, indicating strong reliability (Kline, 2016). Based on the three items, a standardized index ($M \approx 0$, $SD \approx 1$) was derived to quantify beliefs in life after death, with higher scores indicating stronger beliefs.

The EVS operationalises beliefs in life after death through three items – referring to belief in life after death itself, heaven, and hell. These items capture distinct dimensions of beliefs in life after death that are historically shaped by Christian and Islamic theological traditions, which remain culturally influential across Europe (Haraldsson, 2006). We acknowledge that other traditions conceptualise the afterlife differently, such as *reincarnation* in Hindu and Buddhist contexts, or the more restrained *eschatologies* found in certain Jewish traditions. Nevertheless, the three items available in the EVS 2022 showed very good reliability (Cronbach's $\alpha = .86$, Kline, 2016), suggesting that respondents from diverse religious and secular backgrounds interpret them as expressions of a common conviction: that human existence transcends physical death and carries spiritual or moral weight. This choice of operationalisation reflects a considered methodological choice consistent with cross-national survey research (Davidov et al., 2014). In contexts involving culturally and religiously diverse populations, priority is given to measurement coherence and cross-national comparability, which may limit theological precision within specific traditions.

5.2.4. Control variables

Sex (0 = female, 1 = male) was included as women are generally less favourable toward euthanasia (Cohen et al., 2014; DeCesare, 2000). Age was also considered, since justification for euthanasia tends to decrease with age (Bartolomé-Peral and Coromina, 2020; Cohen et al., 2013, 2014; Tormos et al., 2023). Education was included as attitudes towards euthanasia tend to be more positive with higher education levels (Bartolomé-Peral and Coromina, 2020; Cohen et al., 2006, 2014; Verbakel and Jaspers, 2010). Similarly, income was accounted for, as higher

income levels are often associated with greater justification for euthanasia (Bartolomé-Peral and Coromina, 2020; Cohen et al., 2014; Stroenegger et al., 2013). Household composition was considered as rejection of euthanasia often increases with the number of adults and children in the household (Cohen et al., 2014). Finally, life satisfaction was included, as life satisfaction is negatively correlated with the acceptance of euthanasia (Aghababaei and Wasserman, 2013). While a relationship between life satisfaction and attitudes towards euthanasia has been identified in an Iranian study, it is important to recognise that the evidence may be influenced by cultural limitations. Nevertheless, this variable was included as a control to test whether it is also associated with the justification of euthanasia in European countries.

5.3. Data analysis

Descriptive statistics, reliability coefficients, and bivariate correlations were computed for all study variables, including both control and key predictor variables. The analyses were based on the EVS (2022) dataset, with appropriate data weighting applied to construct design-unbiased estimators. One of the 36 countries was excluded due to missing data across key variables. For the remaining 35 countries, a listwise deletion approach was implemented to handle missing values, resulting in a final weighted sample of $N = 47,887$, which corresponded to 82.2 % of the full weighted sample ($N = 58,221$). Given the hierarchical structure of the data (individuals nested within countries), a multilevel modelling approach was used to test the research hypotheses. Specifically, linear mixed effects models were employed to estimate both Level 1 (individual level) and Level 2 (country level) main effects, as well Level 1 interaction effect and cross-level interactions. For predictor variables at Level 1, group-mean centering was applied, while grand-mean centering was used for Level 2 variables (Bauer and Curran, 2005). This centering approach ensures proper interpretation of within-group and between-group effects. To examine and visualise interaction effects, simple slope analyses were conducted, interaction effects were probed at three levels of the moderator: low ($-1SD$), medium (mean), and high ($+1SD$). Interaction plots were generated to illustrate the nature of these effects, with slopes estimated to compare the strength and direction of relationships at different values of the moderator.

6. Results

6.1. Descriptive statistics and correlations

The final sample comprised 47,887 participants from 35 countries, ranging in age from 18 to 82 years ($M = 48.04$ and $SD = 17.64$ years). Women made up 51.4 % of the sample. Years schooling ranged from 0 to 28, with a mean of 17.61 years ($SD = 3.88$ years).

Table 1 presents descriptive statistics, correlations, and reliabilities for the study variables. Religiosity and beliefs in life after death were both negatively and significantly related to the justification of euthanasia at the individual level ($r = -0.42$, $p < .001$ and $r = 0.26$, $p < .001$, respectively). At the country level, beliefs in life after death showed a moderate (Cohen, 2016) and significant negative correlation with euthanasia justification ($r = -0.37$, $p < .001$). Table A1 (Online Appendix A) provides a detailed country-level description of the study variables.

6.2. Hypotheses testing

To determine whether multilevel analysis was appropriate, the Intra-Class Correlation (ICC) for euthanasia justification was calculated. The ICC was 0.215 (LRT (1) = 11930, $p < .001$) indicating that 21.5 % of the variance in the justification of euthanasia was attributable to differences between countries. This justified the use of multilevel modeling. Before estimating the multilevel models, multicollinearity was assessed using variance inflation factors (VIF). All tolerance values ranged between 0.55 and 1.83 (threshold of 5, Hair et al., 2019).

Individual variables – sex, age, years of schooling, income, household size, and life satisfaction – were included as controls in the models estimating the results and testing the research hypotheses (Table 2). In both models, the control variables showed significant effects, except for life satisfaction, which was significant only in the first model. Men, older individuals, those with lower levels of education or incomes, and those living in larger households tend to be less supportive of euthanasia (Tables 2 and 3). These effects persisted even after accounting for the main predictors and their interactions. The first model also indicated that greater life satisfaction was associated with slightly lower support of euthanasia.

The results support Hypothesis 1, as religiosity was found to be negatively and significantly associated with the justification of euthanasia ($B = -0.77$, $t = -42.46$, $p < .001$, part $R^2 = 0.047$). This indicates

Table 1
Descriptive statistics, and correlations of the variables.

	Mean	SD	1	2	3	4	5	6	7	8	9
<i>Individual-level variables</i>											
1. Sex ^a	0.49	–									
2. Age	48.04	17.64	–0.03								
3. Education ^b	17.61	3.88	0.01	–0.18**							
4. Income ^c	2.28	1.93	0.07*	–0.09*	0.26**						
5. Household size	2.78	1.46	0.01	–0.31**	0.02	0.08*					
6. Life satisfaction ^d	7.38	2.07	–0.01	0.01	0.00	0.01	–0.01				
7. Religiosity ^e	–0.03	1.02	–0.16**	0.13***	–0.13**	–0.28**	0.15**	–0.01	(0.92)		
8. Beliefs in life after death ^c	0.00	0.99	–0.12**	–0.02	–0.09*	–0.19**	0.10**	–0.01	0.60**	(0.86)	
9. Justification of euthanasia ^f	5.31	3.35	0.03	–0.07*	0.13**	0.30**	–0.14**	0.01	–0.42**	–0.26**	
<i>Country-level variable</i>											
10. Beliefs in life after death (Country average) ^e	0.00	0.34	–0.02	–0.02	–0.06*	–0.41***	0.16**	–0.01	0.42**	0.35**	–0.37**

Note. N (individual level) = 47,887. N (country level) = 35. Cronbach's alpha is reported in parentheses.

* $p < .01$; ** $p < .001$.

^a Dummy variable. It is reporting the proportion of male.

^b Education was measured by years of schooling.

^c Household monthly net income (x1000), corrected for ppp in euros.

^d Scale ranges from 1 (dissatisfied) to 10 (satisfied).

^e Standardized factor scores.

^f Scale ranges from 1 (never) to 10 (always).

Source. EVS (2022). Own elaboration.

Table 2

Multilevel model to estimate the main effects of religiosity and beliefs in life after death on the justification of euthanasia.

	B	SE	t	p
Intercept	5.24	0.19	28.10	<0.001
<i>Level 1 Control Variables</i>				
Sex (Male = 1)	-0.15	0.03	-5.60	<0.001
Age	-0.01	0.00	-13.82	<0.001
Years of schooling	0.03	0.00	8.28	<0.001
Income	0.09	0.01	8.95	<0.001
Household size	-0.09	0.01	-8.51	<0.001
Life satisfaction	-0.01	0.01	-5.60	0.029
<i>Level 1 Predictor</i>				
Religiosity	-0.77	0.02	-42.46	<0.001
<i>Level 1 Moderator</i>				
Beliefs in life after death	-0.12	0.02	-7.13	<0.001
<i>Level 2 Moderator</i>				
Beliefs in life after death (Country average)	-3.34	0.58	-5.80	<0.001
<i>Variance components</i>				
Residual (L1)	7.92	LRT (1) = 6114		<0.001
Country (intercept) (L2)	1.20			
<i>Model Fit Indices</i>				
2 Log Likelihood	-117617.52			
AIC	235194.76			
BIC	235364.37			
R ² marginal	0.18			
R ² conditional	0.29			

Notes. N (individual level) = 47,887. N (country level) = 35. L1 – Level 1 (Individual-Level). L2 – Level 2 (Country Level).

Source. EVS (2022). Own elaboration.

that individuals with higher levels of religiosity are less likely to justify euthanasia. Hypothesis 2a is also supported, as individual beliefs in life after death were significantly related to euthanasia justification ($B = -0.12$, $t = -7.13$, $p < .001$, part $R^2 = 0.025$). The negative coefficient suggests that individuals who hold stronger beliefs in life after death tend to be less accepting of euthanasia. The results also support Hypothesis 2b. At the country level, the average beliefs in life after death was negatively and significantly associated with euthanasia justification ($B = -3.34$, $t = -5.80$, $p < .001$, part $R^2 = 0.112$). This suggests that in societies where beliefs in life after death is more prevalent, individuals are generally less accepting of euthanasia regardless of their personal beliefs.

The results provide support for Hypothesis 3a (Table 3). The interaction term between religiosity and individual beliefs in life after death was significant ($B = -0.46$, $t = -21.97$, $p < .001$, part $R^2 = 0.005$), indicating that the negative association between religiosity the justification of euthanasia varies depending on an individual's belief in life after death. Probing this interaction (Table 4) revealed that the negative relationship between religiosity and the justification of euthanasia was weaker among individuals with lower beliefs in life after death (Simple slope = -0.57 , $Z = -11.30$, $p < .001$), and stronger among those with beliefs in life after death (Simple slope = -1.39 , $Z = -23.90$, $p < .001$).

Hypothesis 3b is also supported, as the cross-level interaction between religiosity and the country-level average belief in life after death was significant ($B = -0.48$, $t = -2.93$, $p = .005$, part $R^2 = 0.004$). This suggests that the strength of the relationship between religiosity and euthanasia justification is influenced by cultural norms surrounding beliefs in life after death. Simple effects analysis (Table 4) showed that the negative association between religiosity and euthanasia justification was weaker in countries where belief in life after death was less prevalent (Simple slope = -0.82 , $Z = -11.10$, $p < .001$), and stronger in countries where belief in life after death was more widespread (Simple

Table 3

Multilevel model to estimate interaction effects of religiosity and beliefs in life after death on the justification of euthanasia.

	B	SE	t	p
Intercept	5.46	0.19	28.16	<0.001
<i>Level 1 (Individual-Level) Control</i>				
Sex (Male = 1)	-0.12	0.03	-4.52	<0.001
Age	-0.01	0.00	-12.24	<0.001
Years of schooling	0.03	0.00	8.62	<0.001
Income	0.09	0.01	8.83	<0.001
Household size	-0.08	0.01	-7.75	<0.001
Life satisfaction	-0.01	0.01	-0.91	0.362
<i>Level 1 Predictor</i>				
Religiosity	-0.99	0.05	-19.11	<0.001
<i>Level 1 Moderator</i>				
Beliefs in life after death	0.08	0.02	4.39	<0.001
<i>Level 2 Moderator</i>				
Beliefs in life after death (Country average)	-3.60	0.02	-6.02	<0.001
<i>Interaction Effects</i>				
Religiosity x Beliefs in life after death (L1)	-0.46	0.02	-21.97	<0.001
Religiosity x Beliefs in life after death (L2)	-0.48	0.16	-2.93	0.005
Beliefs in life after death (L1) x Beliefs in life after death (L2)	-0.25	0.05	-4.67	<0.001
Religiosity x Beliefs in life after death (L1) x Beliefs in life after death (L2)	0.42	0.07	6.30	<0.001
<i>Variance components</i>				
Residual (L1)	7.78	LRT (2) = 180		<0.001
Country (intercept) (L2)	1.30			
Religiosity (slope) (L2)	0.07			
<i>Model Fit Indices</i>				
2 Log Likelihood	-117236.16			
AIC	234430.94			
BIC	234666.29			
R ² marginal	0.19			
R ² conditional	0.31			

Notes. N (individual level) = 47,887. N (country level) = 35. L1 – Level 1. L2 – Level 2.

Source. EVS (2022). Own elaboration.

slope = -1.15 , $Z = -14.90$, $p < .001$). Figs. 2 and 3 illustrate the Level 1 interaction and the cross-level interaction.

Additionally, a significant three-way interaction was found between religiosity, individual beliefs in life after death, and country-level beliefs

Table 4

Simple effects of religiosity on justification of euthanasia at different levels of beliefs in life after death.

	Estimate	SE	95 % CI		z	p
			Lower	Upper		
L1 Moderator levels						
<i>Beliefs in life after death</i>						
Mean	-0.57	0.05	-0.67	-0.47	-11.30	<0.001
-1SD = -0.922						
Mean = 0	-0.98	0.05	-1.08	-0.88	-19.20	<0.001
Mean +1SD = 0.922	-1.39	0.06	-1.50	-1.27	-23.90	<0.001
L2 Moderator levels						
<i>Beliefs in life after death (Country average)</i>						
Mean	-0.82	0.07	-0.97	-0.68	-11.10	<0.001
-1SD = -0.335						
Mean = 0	-0.99	0.05	-1.09	-0.88	-19.10	<0.001
Mean +1SD = 0.335	-1.15	0.08	-1.30	-1.00	-14.90	<0.001

Note. Simple effects are estimated keeping constant other independent variable (s) in the model. L1 – Level 1. L2 – Level 2. CI – Confidence Interval.

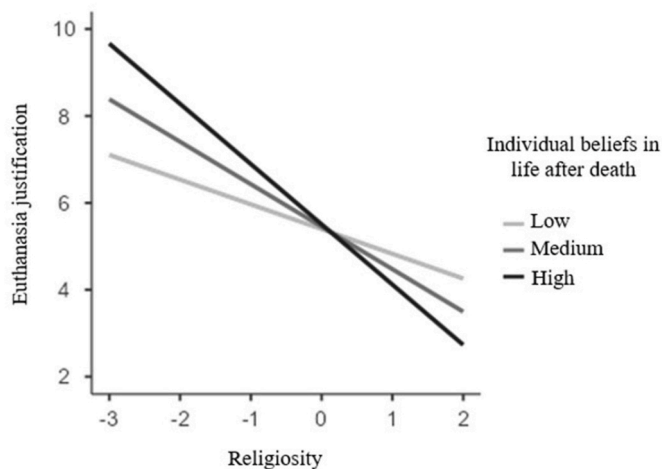


Fig. 2. Simple regression slopes for the relationship between religiosity and justification of euthanasia across different levels of individual beliefs in life after death. *Note.* Low (-1SD), medium (Mean), and high (+1SD) levels of beliefs in life after death are presented.

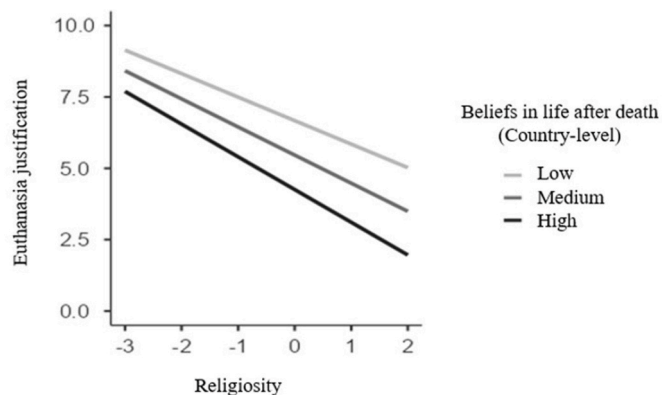


Fig. 3. Simple regression slopes for the relationship between religiosity and justification of euthanasia across different levels of country-level belief in life after death. *Note.* Low (-1SD), medium (Mean), and high (+1SD) levels of beliefs in life after death are presented.

in life after death ($B = 0.42$, $t = 6.30$, $p < .001$). This suggests that the moderating effect of individual beliefs in life after death is further shaped by the broader cultural in which individuals are embedded.

7. Discussion

Cross-national comparison is particularly relevant considering the intensification of public debate on euthanasia across Europe and the increasing number of countries that have adopted legal and regulatory frameworks for the practice (Walsh, 2024). The first finding of this study is that more religious individuals tend to justify euthanasia less, corroborating previous research (Levin et al., 2020; Verbakel and Jaspers, 2010). Religiosity continues to have a significant effect on opposition to euthanasia. Within the Abrahamic lineage – Christianity, Islam, and Judaism – opposition to euthanasia is anchored in a shared theological architecture. Paramount to Christian and Islamic bioethics is the doctrine of divine sovereignty, which posits that the timing of death belongs exclusively to God; consequently, any human intervention to hasten this process is viewed as a usurpation of a sacred prerogative (Ahaddour et al., 2018; Tomašević, 2013). Parallel to this, Jewish theology highlights the imperative of *pikuach nefesh*, prioritising the preservation of life above nearly all other obligations (Nelkin, 2004).

Across these traditions, life is revered not as personal property but as a divine trust, a perspective that fundamentally prohibits its deliberate termination (Nelkin, 2004). Moreover, suffering is not understood as a meaningless state to be eliminated; rather, it is often imbued with redemptive potential or seen as a catalyst for spiritual maturation (Tomašević, 2013). This is reinforced by the ethic of stewardship, which casts humans as guardians rather than owners of their existence (Ahaddour et al., 2018). Yet, theological reasoning is not monolithic. Non-Abrahamic faiths, such as Buddhist and Hindu traditions, navigate these end-of-life dilemmas through distinct paradigms – referencing karma, dharma, and reincarnation rather than divine command (Bering, 2002; Haraldsson, 2006). Such diversity highlights that while religious opposition to euthanasia is widespread, the moral logic underpinning it may vary profoundly across traditions.

The second finding is that beliefs in life after death, both at an individual and cultural level, are negatively associated with the justification of euthanasia. This relationship reflects a fundamental theological principle: beliefs in transcendent accountability shape moral reasoning about end-of-life decisions (Flannelly et al., 2008). Across Abrahamic traditions, the conviction that death initiates divine judgement where human actions in this life carry eternal consequences, creates a theological rationale for preserving life and opposing euthanasia. Among secular people who hold continuity beliefs – framing them as biological recycling, social legacy, or energetic transformation – these convictions shape how they approach end-of-life decisions within secular frameworks rather than spiritual ones (Haimila and Muraja, 2023; Manning, 2025). Secular perspectives prioritise the preservation of natural processes and respect for the circulation of nature rather than appealing to divine judgement. Within these frameworks, an individual's social presence endures through memory and legacy, enabling people to find dignity in accepting biological finitude, while viewing natural processes as deserving respect rather than intervention. At the cultural level, societies where beliefs in life after death predominate institutionalise theological reasoning about death and dying, creating a shared moral framework that constrains individual acceptance of euthanasia, regardless of personal religious commitment (Atkinson and Bourrat, 2011; Hynson, 1979).

Beyond our primary hypotheses, a significant three-way interaction between individual religiosity, individual belief in life after death, and the cultural prevalence of these beliefs was observed. This interaction suggests that the moderating effect of individual beliefs in life after death on the relationship between religiosity and euthanasia justification is further shaped by the broader cultural context in which individuals are embedded. Theoretically, these results align with the argument that beliefs about life after death are embedded within cultural systems that guide moral values and behaviour (Bering, 2006; Cohen and Consoli, 2006). We propose the concept of theological ecology: in contexts where beliefs in life after death are culturally dominant, the theological doctrines linking moral accountability to divine judgement are institutionally reinforced and widely internalised. Consequently, individuals with strong religiosity in these contexts are exposed to a cultural environment saturated with theological reasoning about death and moral consequence, amplifying the restrictive effect of their own religious commitment. In highly secularised contexts, even religiously committed individuals operate in a cultural landscape where theological arguments about divine sovereignty or judgement carry diminished social authority, thereby moderating the effect of individual religiosity. This demonstrates that theological influence operates not merely at the individual level but through the cultural instantiation and reinforcement of theological worldviews. Secularised societies nurture what might be called a secular worldview ecology, where cultural values such as individual autonomy, naturalistic understanding, and practical attitudes towards death shape very different moral perspectives. Studies reveal that in societies where secular values are dominant, a strong focus on personal autonomy and thoughtful decision-making about end-of-life care greatly increases public support for euthanasia (Georgiadou and

Pneumatikos, 2019; Haimila and Muraja, 2023). These insights suggest that the complex interaction observed may reflect competing ecological effects - theological in communities where religion holds sway and secular where secularism is more prevalent.

At a practical level, implications for public health policies and clinical practices in culturally diverse societies are evident. The formulation of laws on euthanasia, for example, must be cognisant of the prevailing cultural prevalence of belief in life after death, which, as demonstrated, shape the social acceptability of these practices. Migration and pluralism contexts involving both religious and secular diversity require sensitivity to competing worldviews. In religiously diverse contexts, tension arises between theological frameworks (divine sovereignty versus human agency). In secular-diverse contexts, tension arises between secular frameworks emphasising autonomy, naturalism, and legality. In mixed religious-secular plural contexts, both sets of frameworks coexist, requiring clinical communication that acknowledges the legitimacy of both religious and secular moral reasoning about death. Moreover, the extant data imply that minor individual effects over time can accumulate and engender substantial social change (Götz et al., 2022), particularly when reinforced by cultural systems that are aligned with these beliefs. This phenomenon also clarifies the reasons behind the persistent opposition to euthanasia in certain societies, despite the trend of global secularisation, as well as the rapid adoption of euthanasia policies in others.

7.1. Limitations and future work

Given that attitudes towards euthanasia are complex and multifaceted, the use of a single indicator to measure justification presents limitations. As noted above, the EVS questionnaire does not include items that distinguish between active and passive end-of-life practices. However, research suggests that public understanding of euthanasia terminology encompasses this broader spectrum, and real-world decision-making often blurs these distinctions, such as withdrawing mechanical ventilation or administering palliative sedation (Olsen et al., 2010; van der Hoven et al., 2010). This ambiguity, however, may strengthen the real-world relevance of our findings. We capture how people think about end-of-life decisions when they vote or form opinions on policy, not how bioethicists categorise these practices (Riisfeldt, 2023). Future research could employ complementary approaches. Vignette-based studies within specific religious communities could illuminate whether individual-level interactions of religiosity and beliefs in life after death differ in theological reasoning about active versus passive interventions. However, such tradition-specific designs would sacrifice the multilevel structure afforded by large-scale cross-national surveys; mechanistic depth would come at the cost of statistical power for testing cultural moderation effects. Alternatively, future cross-national surveys employing improved measures of afterlife belief types (rather than aggregated strength) could extend our multilevel moderation analysis across theological traditions, directly testing whether the theological ecology effect we document here varies by religious tradition.

A critical limitation concerns the theological heterogeneity within religious traditions. Christian denominations - from Pentecostal to Catholic to Lutheran - hold varying theological positions on the permissibility of passive euthanasia, the role of suffering, and the doctrine of double effect. Similarly, Islamic jurisprudence (fiqh) exhibits substantial variation across schools of law (madhabs) regarding end-of-life interventions. Jewish halakhic reasoning distinguishes between *pikuach nefesh* (saving a life) and hastening death in ways that differ across Orthodox, Conservative, and Reform traditions. Our operationalisation of religiosity does not capture these theological distinctions, treating all Christian respondents, for example, as operating within a monolithic framework. This represents a genuine loss of precision. However, it also reflects an important finding: despite this theological diversity, the fundamental principle that transcendent accountability

shapes end-of-life reasoning appears robust across traditions. Future research employing qualitative, tradition-specific designs could illuminate the theological mechanisms through which religious commitment and beliefs in life after death shape end-of-life attitudes. Such studies could examine whether Christian reasoning emphasising divine sovereignty operates similarly to Islamic frameworks centred on divine will, or whether Jewish concepts of *pikuach nefesh* produce distinct moral reasoning patterns. These qualitative insights would complement our cross-national quantitative findings by revealing how the moderation effects we document are articulated and justified within specific theological traditions.

There is an inherent tension between theological specificity and large-scale sociological measurement. While theological traditions vary substantially in how they conceptualise euthanasia and its associated divine consequences - including differing interpretations of punishment, judgement, and moral accountability in the afterlife - such distinctions cannot fully be captured in cross-national survey research. Rather than aiming to reproduce tradition-specific theological doctrines, this study adopts a level of abstraction that allows for the examination of how beliefs in life after death moderate the relationship between religiosity and euthanasia justification at both individual and cultural levels. This precision-generality trade-off is well-documented in cross-national survey research (Davidov et al., 2014) and is a necessary condition for enabling meaningful comparison across diverse religious and secular populations.

A further limitation concerns the specificity of our measurement of beliefs in life after death. Ideally, the analysis would include a direct measure of the theological conviction that the timing and manner of death fall under divine rather than human authority, a principle often invoked in religious opposition to euthanasia. As the European Values Study does not include such an item, our three-item composite (life after death, heaven, and hell) serves as a broader proxy for eschatological concern. While this measure demonstrates very good reliability and captures the widely shared view that linking belief to moral reasoning. Future research could extend this analysis by employing targeted questionnaires or qualitative approaches to directly examine perceived locus of authority - specifically, whether individuals view life-and-death decisions as a matter of divine jurisdiction - and assess whether this greater specificity strengthens the moderating effects observed here.

Our study demonstrates that these moderation effects are present and provides an indication of their magnitude; however, it doesn't identify the specific theological doctrines through which they operate, nor does it assess whether these effects differ across Christian, Muslim, and Jewish traditions, or across different types of end-of-life care. Addressing such questions would require qualitative engagement with religious communities, experimental designs using realistic scenarios, or focused quantitative research within specific traditions - approaches that lie beyond the scope of large-scale cross-national survey data. Rather than constituting a limitation of the present study, this delimitation highlights its contribution: by adopting a broad, cross-national perspective, we identify associations that are robust across multiple contexts and show that the strength of these effects is contingent on cultural setting. In doing so, these findings help to delineate the theological and contextual processes that warrant closer examination in future research.

8. Conclusion

This study contributes to the existing body of knowledge regarding attitudes towards euthanasia by illustrating that both religiosity and beliefs in life after death negatively influence its justification at individual and cultural levels. Multilevel analysis also revealed a significant interaction between these variables, suggesting that the effects of religiosity are amplified or attenuated depending on the eschatological beliefs shared in each cultural context. These results reinforce the idea that beliefs in life after death act as individual convictions and as

cultural mechanisms for moral regulation. In this sense, this model overcomes the limitations of previous studies by demonstrating that cultural context exerts an active influence on and moderates the effect of individual beliefs on attitudes towards euthanasia.

The practical implications of this phenomenon are of equal relevance. In the context of increasingly diverse societies, the development of public policies on end-of-life issues must acknowledge cultural belief systems as an integral component of legislative and clinical processes. The potential for significant ethical tensions to arise from the clash between individual values and cultural norms is especially pronounced in contexts of migration and religious pluralism. The integration of cultural beliefs into explanatory models is also conducive to understanding why some societies resist the legalisation of euthanasia, even in the context of increased global secularisation.

Statement ethics approval not required

Our analysis employed secondary data from the European Values Study (EVS, 2022), a cross-national survey coordinated by the GESIS – Leibniz Institute for the Social Sciences. The original EVS data collection (2017–2021) across 36 countries received ethical approval from the respective institutional review boards in the participating countries and obtained informed consent from all participants (EVS, 2022). Our secondary analysis of these anonymised, publicly available data did not require additional institutional ethical review.

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CRediT authorship contribution statement

Bruno Frutuoso Costa: Conceptualization, Formal analysis, Funding acquisition, Investigation, Project administration, Resources, Software, Supervision, Validation, Writing – original draft, Writing – review & editing. **Helena Carvalho:** Data curation, Formal analysis, Investigation, Methodology, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.socscimed.2026.119024>.

Glossary

- Euthanasia denotes the practice of intentionally ending the life of a person suffering a terminal illness. This conceptualisation entails what bioethicists have long categorised as both "active" and "passive" forms of end-of-life practices.
- Active euthanasia is the direct administration of a medication that results in the patient's death by a healthcare professional.
- Active assisted suicide entails the provision of means by which patients may terminate life.
- Passive euthanasia involves the deliberate withdrawal or withholding of life-sustaining treatments, thereby enabling natural death to occur.
- The Christian perspective on life after death encompasses the idea of moral continuity following one's demise. This belief implies the

existence of divine reward or punishment, as exemplified by concepts such as heaven and hell.

Data availability

The authors used data from the European Values Study (2022), which is available for download at the following link: <https://doi.org/10.4232/1.13897>.

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