

Opposing Abortion, Gay Adoption, Euthanasia, and Suicide

Compassionate Openness or Self-Centered Moral Rigorism?

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Summary

In secularized modern Western societies, moral opposition to the liberalization of abortion, gay adoption, euthanasia, and suicide often relies on justifications based on other-oriented motives (mainly, protection of the weak, e.g., children). Moreover, some argue that the truly open-minded people may be those who, against the stream, oppose the established dominant liberal values in modern societies. We investigated whether moral and religious opposition to, vs. the acceptance of, the above four issues, as well as the endorsement of respective con vs. pro arguments reflect (a) “compassionate openness” (prosocial, interpersonal, dispositions and existential flexibility), (b) “compassionate conservatism” (prosocial dispositions and collectivistic moral concerns), or (c) “self-centered moral rigorism” (collectivistic moral concerns, low existential quest, and low humility instead of prosocial dispositions). The results, to some extent, confirmed the third pattern. Thus, compassionate openness does not seem to underline modern moral opposition, possibly in contrast to some rhetoric of the latter.

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Keywords

moral opposition – conservatism – religion – prosociality – homosexuality – euthanasia

Introduction

Why are some people in favor of, whereas others oppose modern legal, societal, and moral acceptance or tolerance of issues such as abortion, gay rights, euthanasia, and suicide? Typically, negative versus positive attitudes toward these acts themselves or their societal and legal acceptance reflect broad social and moral conservatism as opposed to liberalism (e.g., Koleva, Graham, Iyer, Ditto, & Haidt, 2012; Tuman, Roth-Johnson, & Jelen, 2013; van den Akker, van der Ploeg, & Scheepers, 2013). In these kinds of studies, conservatism has been measured as a personality disposition (discomfort with novelty and complexity), as the social attitude of right-wing authoritarianism (conformity to traditional norms and/or authorities), or as an endorsement of natural and social order-related collectivistic values. Additionally, religiosity is typically associated with opposition to these issues (e.g., Cohen et al., 2006; Malka, 2014; Stack & Kposowa, 2011), which seems to be explained partly by the underlying conservatism and authoritarianism (Mavor, Macleod, Boal, & Louis, 2009), and partly by specific religious ideology that provides anthropological micro-theories legitimizing such opposition (Turiel & Neff, 2000).

However, following recent trends in modern societies that put other-oriented altruistic concerns at the center of morality while considering other, conservative/collectivistic, concerns to be secondary (Graham, Haidt, & Nosek, 2009), or independent from morality (Turiel & Neff, 2000), contemporary moral opponents have developed considerable argumentation in favor of an alternative to the traditional perspective. In this argumentation, the endorsement or tolerance of the above mentioned issues, i.e., abortion, gay adoption, euthanasia, and suicide, denotes moral individualism and egotism; inversely, moral opposition to these issues is motivated by care-based, altruistic concerns regarding the well-being of others, especially of those who are weak, such as children (e.g., Garrett & Lantos, 2013; Pope John Paul II, 1992). Moreover, from the same alternative perspective, this moral opposition in the context of modern secularized liberal societies (e.g., several Western European countries) should be seen as the reflection not of conservatism, but of real open-mindedness, since it presents non-conformity to the mainstream, politically correct, dominant liberal norms.

In the present work, we investigated the psychological pertinence of these stands. More specifically, we examined whether moral and religious opposition to abortion, gay adoption, euthanasia, and suicide does indeed reflect other-, not self-oriented dispositions (care as value, empathy, altruism, humility) and open-mindedness (tendency to question one's own beliefs), or simply conservative, non-interpersonal, traditionally collectivistic, moral concerns (specifically, valuing authority, loyalty, and purity). We investigated these questions first with regard to opposition vs. acceptance of these four domains and second with regard to the endorsement of respective con and pro arguments/justifications. Regarding the latter, be it for opposition or acceptance, we distinguished between arguments based on (a) care for others, (b) social functioning concerns, and (c) impersonal principled deontology. Below we detail the rationale of these research questions and present our expectations.

Moral Opposition: Conservatism and Collectivistic Non-Interpersonal Values

There is considerable evidence showing that conservative tendencies (e.g., conservative personality, right-wing authoritarian attitudes, or right-wing political orientation) predict low acceptance of, and high opposition to (the legal tolerance of), key socially debatable moral issues. Liberal dispositions predict the opposite. This is the case with regard to abortion (Remennick & Hetsroni, 2001; Tuman et al., 2013), homosexuality (van den Akker et al., 2013), euthanasia (Aghababaei, Wasserman, & Hatami, 2014; Koleva et al., 2012; Sørbye, Sørbye, & Sørbye, 1995), and suicide (Domino & Su, 1995). Moreover, unrestricted sexual attitudes are linked to pro-abortion attitudes and behavior (Coleman, Rue, Spence, & Coyle, 2008), and traditional gender roles emphasizing gender inequality underline negative attitudes towards abortion and homosexuality (Brint & Abrutyn, 2010; Osborne & Davies, 2012; Wang & Buffalo, 2004). It is likely due to the above mentioned conservative dispositions, common to the various issues, that anti-abortion attitudes go hand in hand with opposition of gay rights (Poteat & Mereish, 2012), and that the disapproval of euthanasia is also related to the disapproval of other issues like abortion (Maher, Sever, & Pichler, 2008) and suicide (DeCesare, 2000).

Thus, research shows that opposition to these moral issues reflects the need for attachment to traditional norms and self-restricted ways of behaving within a social group, especially with regard to the domains of life preservation and sexuality. Additional research also shows that the more value

people place on autonomy and independence of the individual, the higher the likelihood that people will be accepting abortion, gay rights, euthanasia, and suicide. More precisely, supporting women's reproductive rights and freedom from government interference in private lives is typical of pro-choice vs. pro-life individuals (Chambers, Baron, & Inman, 2006). Similarly, the endorsement of self-expression vs. self-survival values underlines the acceptance of homosexuality across the globe (Adamczyk & Pitt, 2009). Finally, greater acceptance of euthanasia in European countries is predicted by the belief in the right to self-determination (Cohen et al., 2006) and the value placed on autonomy, at both the individual and the national levels (Verbakel & Jaspers, 2010).

Moreover, one can reasonably expect such moral opposition to be based on the attachment to moral foundations that are typical of collectivistic societies, which emphasize the need to preserve the natural order of things, and of individuals who place an emphasis on group maintenance and cohesion (more precisely, in our view, individuals with a literal understanding of the group's maintenance and cohesion as if acceptability of suicide or euthanasia for some individuals would threaten these objectives). These should be the so-called "binding" moral foundations, i.e., the values that bind individuals in traditional societies: loyalty to the kinship and the ingroup, respect of the authorities, and purity with respect to a sacred and "natural" order of things (see Graham et al., 2009). These three moral foundations indeed reflect prevention rather than promotion concerns (Cornwell & Higgins, 2013). Evidence confirms the value placed on purity predicts not only opposition to the sexuality-related issues of abortion and same-sex relations (Koleva et al., 2012; see also Inbar, Pizarro, & Bloom, 2009, for the role of disgust sensitivity), but also opposition to euthanasia (Koleva et al., 2012). Beyond purity, it cannot be excluded that ingroup loyalty and respect of authority also play a role in predicting homonegativity (Rosik, Dinges, & Saavedra, 2013).

Moral Opposition: Other-Oriented Altruism?

Contrary to the above-mentioned evidence for moral opposition being based on conservatism, prevention-focus, collectivistic values, and low autonomy, in very recent years, moral opponents of these issues provide justifications for their positions which are other-oriented, prosocial, and non-egotistic/self-centered. These prosocial justifications place emphasis on the need to protect those who are weak and vulnerable. At least in modern secular Western societies, there has clearly been a shift from traditional, religious, and natural order-based arguments to prosocial justifications (Garrett & Lantos, 2013).

For instance, opponents of gay adoption have typically justified their position as stemming from their concerns for the well-being and optimal development of children. The latter objectives are threatened, according to them, if children grow up in homosexual families and thus lack, among other things, distinct models of a male and a female parent (e.g., Garrett & Lantos, 2013; Gato & Fontaine, 2013). Similarly, anti-abortion individuals and groups typically justify their position as resulting from the need to protect a human being (preborn) who is unable to defend his/her own rights to life (e.g., Macleod & Hansjee, 2013). Moreover, opposition to euthanasia is usually justified by the concern of possible abuse, during the decision process, of the vulnerable people who are often too ill and/or too aged or too young (e.g., Karlsson, Strang, & Milberg, 2007). Finally, it is not uncommon for a low acceptance of suicide to be justified by the perception of the target person as a victim needing help (DeScioli, Gilbert, & Kurzban, 2012).

Interestingly, across all four of these moral issues, a common denominator of moral opposition is the accusation that the “perpetrators” of these acts are immorally individualistic and motivated by egotistic motives. These include the excessive search for one’s own (sexual) pleasure, as far as abortion and homosexuality are concerned, instead of assuming responsibilities toward others; and comfort and lack of courage, as far as euthanasia and suicide are concerned, by ending one’s own life when facing terrible personal difficulties, thus in a way neglecting the needs and/or wellbeing of family or other proximal individuals (e.g., Beckwith, 2007; Boer, 2007; DeScioli et al., 2012; Pope John Paul II, 1992).

The main aim of the present work was thus to test whether there is some psychological validity of these kinds of moral positions. Does the disapproval of abortion, gay adoption, euthanasia, and suicide reflect prosocial, altruistic, dispositions in terms of other-oriented values (care, fairness), emotions (empathy), and behavioral tendencies (generosity, charity)? Similarly, do moral opponents tend to be humble people with low egotism since they seem to be very sensitive to the fact that moral acceptance may reflect unethical self-centeredness?

Nevertheless, even if moral opposition to abortion, gay adoption, euthanasia, and suicide is often justified today by interpersonal, care-based arguments, it continues to also be justified by impersonal, principistic, deontological arguments: the sacredness of life (Rottman, Keleemen, & Young, 2014), purity/sanctity regarding sexuality (Rosik et al., 2013), or social functioning-based arguments (the need to preserve the group and/or of social order: e.g., Burdette, Ellison, & Hill, 2005; Karlsson et al., 2007). Therefore, going a step further, we also investigated whether prosocial and non-egotistical personal

dispositions characterize, in particular, those moral opponents who explicitly endorse care-based arguments (protection of the weak and vulnerable) but not necessarily those who endorse social functioning-based and impersonal, deontological arguments.

Prosocial Concerns, Compassionate Conservatism, or Non-interpersonal Moral Rigorism?

We also investigated whether moral opposition to abortion, gay adoption, euthanasia, and suicide, as well the endorsement of specific types of justificatory arguments (care-based, social functioning-based, and impersonal deontology-based), reflect conservative collectivistic moral foundations, mainly purity, but also authority and loyalty. In line with previous research and the theory presented above, we expected conservative values to be related to moral opposition as well as to the endorsement of con arguments based on social functioning and impersonal deontology.

What was unclear and thus particularly interesting to investigate was whether moral opposition and the related justifications reflect (a) *only* prosocial concerns (unlikely, given the substantial previous research and theory on underlying conservatism reviewed above); (b) “compassionate conservatism”, i.e., a blend of conservative (collectivistic) values and prosocial orientation (possible; see below); or (c) “non-interpersonal moral rigorism”, i.e. the mere presence of conservative, but not prosocial, orientations (possible; see below).

In favor of pattern b, previous research and theory attests that, to some extent, conservative personality and conservative attitudes may co-exist with prosocial orientations. According to the Moral Foundations Theory (Graham et al., 2009), conservatives have a kind of extended morality compared to liberals, in that they are animated by both types of moral concerns, i.e., strictly interpersonal ones (care, fairness) and traditional societal and impersonal ones (loyalty, authority, purity). Similarly, religious fundamentalists have educational attitudes that are not simply conservative (authoritarian and punitive) but combine authority with warmth and care (Wilcox, 1998). Moreover, in a study among Muslim Iranian students, Aghababei et al. (2014), using the HEXACO model of personality, found that negative attitudes toward euthanasia were related to low openness to experience, but also to high agreeableness and humility-honesty.

In favor of pattern c, one can mention previous evidence showing that abstract, principistic, impersonal deontology may be in conflict with interpersonal prosocial concerns even in situations when the well-being and life

of proximal others is threatened (Van Pachterbeke, Freyer, & Saroglou, 2011). When the two are in conflict (e.g., honesty vs. lying to save somebody's life; respect of a contract vs. its disrespect to help a friend find a better life), conservatives and right-wing authoritarians tend to privilege interpersonal deontology at the detriment of prosociality (Van Pachterbeke, Saroglou, & Dupont, 2010). Interestingly, people (young U.S. Catholics) who oppose abortion and euthanasia tend to also be in favor of capital punishment (Maher et al., 2008). The co-existence of anti-abortion with pro-death penalty attitudes seems to be explained, at least partially, by the desire to see criminals punished (Wiecko & Gau, 2008). Finally, people with sexist attitudes, i.e., a non-egalitarian consideration of women and men, tend to oppose elective and traumatic abortion (Osborne & Davies, 2012) and gay and lesbian adoption (Rye & Meaney, 2010).

Moral Opposition: Open-Mindedness in a Normatively Liberal Society?

It has been argued that when liberal values become dominant and widely accepted in a given society and supported by corresponding legislation, many people would endorse them simply by conformity to what has become normative and mainstream. The "real" open-minded people, those with openness to change and tendency to question the mainstream norms and beliefs, may swim against the sociocultural tide (see Gebauer et al., 2014). Consequently, they may end up opposing liberal values—for reasons that are not necessarily the same as those of the "old" conservatives. Interestingly, proponents of moral mistrust and opposition against liberalization in the domains of sexuality/family and preservation of life argue that they are the real liberals, the ones who dare to critically question the established norms (Cimino, 1997; Kotrosits, 2014).

Previous research, in principle, contradicts such assumptions. For instance, openness to experience, the personality dimension denoting experiential and intellectual/ideological openness, predicts favorable attitudes toward homosexuality in the US (Shackelford & Besser, 2007) and toward euthanasia in Iran (Aghababaei et al., 2014). Nevertheless, moral opposition by cognitive open-mindedness may be seen as a legitimate hypothesis in highly secularized Western European countries with high acceptability and social/legal tolerance of issues such as abortion, homosexual relations and parenting, euthanasia, and suicide. To give one example, in Belgium, in 2009, only 31% of people perceived abortion as never justified (Draulans & Billiet, 2012); and in 2013, 71% supported gay marriage and adoption (IFOP, 2013), and 75% extension of

euthanasia law to children (Laporte, 2013). Also, it has been argued that, under some circumstances, such as when care/fairness and collectivistic moral foundations activated by an issue cause a conflict for conservatives but lead to no conflict for liberals (e.g., gay marriage), integrative complexity of thought may be greater among (moderate) conservatives (Joseph, Graham, & Haidt, 2009).

To examine this research question on possible open-mindedness and readiness to question established beliefs and norms, we focused on *existential quest*, i.e., the tendency to doubt and question one's own worldviews and beliefs and be open to the possibility of change of the latter (Van Pachterbeke, Keller, & Saroglou, 2012). This construct is independent from the content of beliefs, worldviews, and norms, whether conservative or not, pro-religious or not, and has been found to be related to low authoritarianism, the need for closure, dogmatism, and high empathy (Van Pachterbeke et al., 2012).

Religious Moral Opposition: Based on Other-Oriented or Conservative Collectivistic Moral Concerns?

Finally, we investigated whether religiosity predicts moral opposition based on non-egotistic, altruistic, and open-minded personal dispositions toward people in need or based on underlying conservative, non-interpersonal, collectivistic moral values. Existing theory and research provides evidence in favor of the latter hypothesis but does not exclude the possibility of the former.

Religiosity typically relates to low acceptability if not opposition to abortion, homosexuality, euthanasia, and suicide, and thus across various religious and cultural contexts (see for large international studies: Boyd & Chung, 2012; Cohen et al., 2006; Lottes & Alkula, 2011; Malka, 2014; Stack & Kposowa, 2011; van den Akker et al., 2013; Verbakel & Jaspers, 2010). Previous research has shown the role of collectivistic values (especially purity and disgust sensitivity; Olatunji, 2008; Rosik et al., 2013), conservative authoritarian attitudes (Mavor et al., 2009), and low cognitive complexity and flexibility (Brandt & Renya, 2010; Hill, Terrell, Cohen, & Nagoshi, 2010) in predicting religious prejudice against moral outgroups, in particular homosexuals. Is this generalizable across the four moral issues studied here? Moreover, the specificity of religion with regard to morality is that it encompasses both prosocial concerns and motives, especially but not exclusively toward proximal people and ingroup members, and collectivistic and conservative moral values emphasizing the need for preservation of the natural, social, and personal order (Graham & Haidt, 2010; Malka, Soto, Cohen, & Miller, 2011; Saroglou, 2013; Saroglou, Delpierre, & Dernelle, 2004). We thus investigated whether religious moral opposition denotes mere

prosocial concerns, compassionate conservatism, or non-interpersonal, self-centered moral rigorism.

Method

Participants

Participants were young adults and adults who were recruited and completed the survey mostly during intercity train commutes in the French-speaking part of Belgium as well as in public areas of a university city in the same region ($N = 253$). The study was advertised as an investigation of “opinions and attitudes concerning socially debated questions”. Three people were removed from the analyses because they were younger than 18 years old, and another 20 were excluded based on their answers to the “catch-items” of the Moral Foundation Questionnaire (Graham et al., 2011) that detect those who are not really paying attention during the study. The final sample contained 230 adults (54% women) aged 18 to 84 years ($M = 30.31$, $SD = 13.08$). The majority (72%) were Belgians, 16.7% were from other Western countries, and the remaining participants were from non-Western countries. Almost half of the participants were university students (48%) and 44% already had a university degree.

Measures

Disapproval of the Four Moral Issues

The degree of opposition to, or acceptance of, the four moral issues was assessed by four questions, one for each moral issue: “How much do you agree that abortion [euthanasia, suicide, gay adoption] is justifiable?” Respondents rated each item on a 6-point Likert scale ranging from 1 = *not at all agree* to 6 = *totally agree*. For the analyses, the scores were reversed, with higher scores denoting disapproval. A score of global disapproval (across the four issues) was additionally computed ($\alpha = .74$).

Con or Pro Arguments

Afterwards, participants were requested to evaluate their degree of agreement on a list of 12 items we provided to them (see Appendix). These items were short sentences detailing arguments relative to each of the four moral issues (three arguments for each moral issue, i.e., abortion, euthanasia, suicide, and gay adoption). Participants who, for a certain moral issue, had scored 1-3 on the previous disapproval-approval question were requested to evaluate three “con”

arguments, i.e., justifying the disapproval of that moral issue. On the contrary, those who, for a certain moral issue, had scored 4-6 on the previous disapproval-approval question were requested to evaluate three “pro” arguments, i.e., justifying the approval of that moral issue. Thus, depending on their answer to each of the four previous disapproval-approval questions, participants had to evaluate 12 arguments that could be either all (12) or only some of them (3, 6, or 9) in the same direction (con or pro). In total, we created 24 items, i.e., 12 pros and 12 cons. Degree of agreement was indicated on 6-point Likert scales.

Be it for endorsement or opposition, the three arguments for each of the four moral issues were generated by the authors to reflect, respectively, (a) interpersonal care for people’s well-being (*care* arguments), (b) concerns for society’s functioning (*social deontology* arguments), or (c) affirmation of impersonal deontological principles (*impersonal deontology* arguments). Examples of con arguments are: “Life does not belong to us; we cannot decide when to end it” (impersonal deontology-based, against euthanasia); “For their optimal development, children need to have a mother and a father with their distinct complementary roles” (care-based, against gay adoption); and “It is somewhat selfish to leave society by committing suicide” (social deontology-based, against suicide). Examples of pro arguments are: “People who served society all their life should have the right to end it” (social deontology-based, in acceptance of euthanasia); “I understand that for some people life can be unbearable” (care-based, in acceptance of suicide); and “To forbid gay couples to adopt children would be a form of discrimination based on sexual orientation” (impersonal deontology-based, in acceptance of gay adoption). The list of all 24 items, together with the respective *Ms* and *SDs*, is presented in the Appendix.

Hypothesized Predictors

Humility

Participants received a list of 16 adjectives describing human characteristics, half positive (*loyal, sincere, kind, intelligent, humorous, well liked, talented, attractive*) and half negative (*inconsiderate, phony, insensitive, unintelligent, dumb, unattractive, unwise, unpopular*) (see Rowatt, Ottenbreit, Nesselrode, & Cunningham, 2012, Study 2; only *funny* was new here, in place of *athletic* which is more relevant as a positive characteristic for the US). They rated the 16 items using a 9-point rating scale ranging from 1 = *well below average* to 9 = *well above average*. As in Rowatt et al. (2002, Study 2), participants did this two times, first rating themselves compared to the “average person” and then evaluating proximal people (colleagues, acquaintances) compared to the “average person”; and

we computed humility as the difference in scores between the evaluation of proximal others and the self-evaluation.

Spontaneous Prosociality

Participants were asked to indicate what they would do if they won 100,000 Euros and specify each expenditure and the percentage of money they would allocate for each one (see Clobert & Saroglou, 2013). The total percentage of money participants spontaneously allocated to others (e.g., family, friends, and charities) instead of themselves was coded as a score of spontaneous prosocial behavioral intention.

Existential Quest

The Existential Quest Scale (Van Pachterbeke et al., 2012) assesses flexibility in existential beliefs and worldviews, i.e., valuing doubt and being open to questioning and changing one's own existential beliefs and worldviews. Sample items are: "Being able to doubt about one's convictions and to reappraise them is a good quality" and "I know perfectly well what the goal of my life is (reverse)". This is a 9-item measure with 7-point Likert scales.

Empathy

Eight items, four for empathetic concern and four for perspective taking, were selected from the Interpersonal Reactivity Index (Davis, 1983) to keep the questionnaire within a reasonable length (5-point Likert scales were used). A global score of empathy was computed by averaging the scores of the eight items.

Moral Foundations

The 20-item Moral Foundations Questionnaire-short version (Graham et al., 2011; our French translation) was administered. This questionnaire measures endorsement of the five moral foundations, i.e., care, fairness, loyalty, authority, and purity (6-point Likert scales). Following previous work (e.g., Napier & Luguri, 2013), we additionally combined the care and the fairness items into a single variable called "individualizing" values (the care item on cruelty against animals was not included since it decreased reliability); and the items of authority, loyalty, and purity into a single score representing the "binding" values. For the clarity of presentation, we call the two, respectively, "interpersonal" and "collectivistic" morality.

Charity Donations

Participants were asked to report whether they had donated to a charity organization in the last 12 months. The format answer was yes (coded as 0) or no (1).

Religiosity

The 12-item questionnaire of the four basic religious dimensions, i.e., believing, bonding, behaving, and belonging (see Saroglou, 2011), was administered (7-point Likert scales). A sample item for each dimension is respectively: "Religious beliefs have important implications for our understanding of human existence"; "Religious rituals, activities or practices make me feel positive emotion"; "I am attached to the religion for the values and ethics it endorses"; and "In religion, I enjoy belonging to a group/community." A global score on the 12 items was computed, the four dimensions being highly interrelated in secular societies.

Note that the French versions of the measures have all been used successfully in previous research. This is the case with the Existential Quest Scale (e.g., Van Pachterbeke et al., 2012), the Interpersonal Reactivity Index (Gilet, Mella, Studer, Grünh, & Labouvie-Vief, 2013), the Moral Foundations Questionnaire (Deak & Saroglou, 2012; see also for a similar later French version, Métayer & Pahlavan, 2014), and the Four Basic Dimensions Religiosity scale (Clobert, Saroglou, & Hwang, in press, Study 1).

Results

Means and standard deviations of disapprovals of abortion, gay adoption, euthanasia, and suicide, as well as the hypothesized correlates/predictors are detailed in Table 1. On the basis of participants' scores on the former four indicators (5-7, before reversal), it turned out that 76.4% accepted abortion, 86.1% accepted euthanasia, 40.1% accepted suicide, and 64.5% accepted gay adoption. The four opinions were importantly intercorrelated, with *rs* ranging from .25 to .64.

We carried out correlational analyses of the relationships between moral disapprovals and the hypothesized individual differences (see Table 2). The disapproval of all four moral issues (abortion, gay adoption, euthanasia, and suicide) was positively related to collectivistic morality in general, and in particular with the endorsement of the moral foundations of loyalty and purity; endorsement of authority was significantly related to the disapproval of gay adoption. No relationship was found between either care or fairness (interpersonal morality) and the disapproval of any of the four issues. Moreover, all four disapprovals of abortion, gay adoption, euthanasia, and suicide were negatively related to existential quest and positively related to religiosity. Finally, they were unrelated to humility, empathy, and the two indicators of prosocial behavior, i.e., spontaneous prosociality and reported charity donations.

TABLE 1 *Means and standard deviations of moral disapprovals and the hypothesized correlates/predictors*

	<i>M</i>	<i>SD</i>	α
Disapproval of			
Abortion	2.63	1.48	
Gay adoption	3.04	1.68	
Euthanasia	2.56	1.36	
Suicide	3.86	1.43	
Total disapproval	3.02	1.12	.74
Interpersonal morality	4.54	0.64	.64
Care	4.22	0.82	
Fairness	4.84	0.66	
Collectivistic morality	3.62	0.76	.79
Loyalty	3.61	0.86	
Authority	3.64	0.94	
Purity	3.61	1.05	
Existential quest	4.97	0.97	.68
Humility	-0.09	0.95	.82
Religiosity	2.93	1.71	.95
Empathy	3.42	0.44	.66
Spontaneous prosociality	21.83	25.83	
Charity donations	0.51	0.50	

For a global view of the individual differences that underline the type of arguments justifying moral positions, we averaged the arguments of the same type, across the four moral issues, to form three variables of pro argument types (care concerns, social deontology, and impersonal deontology) and three variables of con argument types (again, care concerns, social deontology, and impersonal deontology). Cronbach's alphas ranged from .50 to .79. The correlational results were similar to, but also extended, the above results (see Table 3). All three types of con arguments were positively linked to loyalty authority, and purity (collectivistic morality) as well as religiosity, which was, on the contrary, negatively related to all types of pro arguments. Impersonal deontology-based con arguments were related to low existential quest, but also to low humility. Moreover, care-based pro arguments were positively related to interpersonal morality (both care and fairness) as well as empathy. Finally, the endorsement

TABLE 2 *Coefficients of correlations between moral disapprovals and the hypothesized correlates/predictors*

Individual differences	Disapproval (of)				
	Total	Abortion	Gay adoption	Euthanasia	Suicide
Interpersonal morality	-.01	.05	.01	.01	.09
Care	-.05	.03	-.00	-.00	.01
Fairness	.02	.06	.00	.01	.09
Collectivistic morality	.32**	.25***	.29***	.24***	.19**
Loyalty	.32**	.22**	.26***	.24***	.23***
Authority	.13	.09	.14*	.11	.09
Purity	.32**	.27***	.28***	.23**	.17**
Existential quest	-.29**	-.26***	-.22**	-.26***	-.15*
Humility	-.08	-.04	-.09	-.03	-.06
Religiosity	.59***	.50***	.43***	.53***	.25***
Empathy	-.01	.03	-.03	-.03	-.05
Spontaneous prosociality	.01	.05	.03	-.00	-.07
Charity donations	.12	.11	.11	.10	.05

* $p < .05$. ** $p < .01$. *** $p < .001$.

of each of the three types of con arguments was related to spontaneous prosociality but not to reported charity donations.

Several of the hypothesized explanatory individual differences were inter-correlated (see Table 4). For instance, collectivistic morality was negatively related to existential quest; it could thus be that moral opposition is explained only by moral conservatism and that socio-cognitive structures (here inflexibility in existential attitudes) do not play any additional role. Similarly, religiosity was both positively related to collectivistic morality and negatively related to existential quest. It could thus be that moral opposition is explained only by strictly psychological individual differences (moral collectivism or inflexibility) and that religious ideology is just a confound. To clarify thus the unique power of each variable in predicting global moral disapproval, we conducted a hierarchical regression analysis of moral disapproval on interpersonal morality, collectivistic morality, existential quest, humility, empathy, spontaneous prosociality, and reported charity donations (Model 1), and we added religiosity as predictor in Model 2. The results are detailed in Table 5. As Model 2 indicates, religiosity was a main predictor of moral opposition, but beyond this

TABLE 3 Means and standard deviations of pro and con moral argument types and coefficients of correlations with hypothesized relevant individual differences

	Total con arguments (Ns = 145-166)			Total pro arguments (Ns = 189-207)		
	Impersonal deontology	Social deontology	Care concerns	Impersonal deontology	Social deontology	Care concerns
<i>M</i>	3.26	4.20	4.43	4.80	4.40	5.04
<i>SD</i>	1.48	1.40	1.18	0.86	0.10	0.76
Interpersonal morality	.06	.03	.03	.11	.11	.22**
Care	.05	.05	.06	.10	.11	.24***
Fairness	.01	-.00	-.01	.10	.12	.19*
Collectivistic morality	.42***	.32***	.28***	-.06	.05	-.02
Loyalty	.40***	.24**	.21**	-.05	.02	-.07
Authority	.29***	.33***	.23**	-.03	.07	-.01
Purity	.32***	.20*	.23**	-.06	.03	.02
Existential quest	-.21*	-.12	-.08	.07	.06	.03
Humility	-.18*	-.06	-.12	-.02	-.01	-.10
Religiosity	.48**	.24**	.25**	-.22**	-.22**	-.16*
Empathy	.10	.05	.07	-.02	-.00	.16*
Spontan. prosociality	.19*	.16*	.16*	-.02	-.09	-.03
Charity donations	.04	.01	.13	-.08	-.05	-.03

* $p < .05$. ** $p < .01$. *** $p < .001$.

TABLE 4 Intercorrelations between hypothesized correlates/predictors of moral opposition

	Coll. morality	Exist. quest	Humility	Religiosity	Empathy	Spont. prosoc.	Charity
Interpersonal morality	.16*	.04	.12	.23***	.26***	.08	.07
Collectivistic morality		-.20**	-.12	.32***	-.01	.18*	-.11
Existential quest			.15*	-.23***	.10	.04	.10
Humility				.00	.10	.06	-.07
Religiosity					.15*	.17*	.20**
Empathy						.31***	.16*
Spontan. prosociality							.08

* $p < .05$. ** $p < .01$. *** $p < .001$.

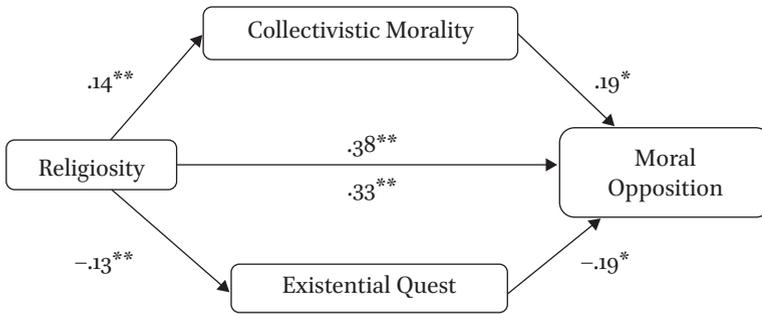
TABLE 5 *Hierarchical multiple regression of global moral opposition on the hypothesized predictors*

	Model 1			Model 2		
	β	<i>t</i> -test	95% CI	β	<i>t</i> -test	95% CI
Interpersonal morality	-.03	-0.35	[-.31, .21]	-.12	-1.86†	[-.43, .01]
Collectivistic morality	.27	3.81***	[.19, .61]	.13	2.00*	[.00, .37]
Existential quest	-.22	-3.12**	[-.41, -.09]	-.11	-1.80†	[-.26, .01]
Humility	-.04	-0.57	[.21, -.12]	-.05	-0.85	[.20, -.08]
Empathy	-.03	-0.34	[-.50, .32]	-.08	-1.19	[-.56, .14]
Spontan. prosociality	.11	1.55	[-.00, .01]	.08	1.23	[-.00, .01]
Charity donations	.05	0.72	[-.20, .43]	-.05	-0.90	[-.39, .15]
Religiosity				.56	8.61***	[.29, .46]
<i>R</i> ²	.17			.41		
<i>F</i>	5.22			15.69		
Δ^2	.17			.24		

Note. *N* = 187. CI = confidence interval. † *p* = .07. * *p* < .05. ** *p* < .01. *** *p* < .001.

effect, moral opposition was additionally predicted by both high collectivistic morality and low interpersonal morality, and also by low existential quest (for the two latter constructs, the statistical significance was marginal). The inclusion of gender and age in the regression did not impact the results.

The nature of the inter-relations found and their psychological significance described in the previous paragraph also allowed for testing the hypothesis that religiosity predicts global moral opposition (disapproval of all four moral issues) as a result of the indirect effect of collectivistic morality and (low) existential quest. The correlations of religiosity with these two hypothesized mediators were significant, respective *r*s = .32 and -.23, *p* ≤ .001. All three variables predicted moral opposition. We first tested the simple mediation model using the SPSS macro (MEDIATE) designed by Hayes and Preacher (2014). This macro facilitates the implementation of the recommended bootstrapping methods (5000 re-sampling) and provides a method for probing the significance of conditional indirect effects at different values of the moderator variable. As shown in Figure 1, the indirect effect of religiosity on global moral opposition through collectivistic morality and existential quest was significant



For mediation via collectivistic morality: $IE = .03$, $SE = .01$, 95% CI = [.00, .05]

For mediation via existential quest: $IE = .03$, $SE = .01$, 95% CI = [.00, .06]

Note. $N = 213$. Numbers on paths represent unstandardized regression coefficients. CI = confidence intervals. * $p < .05$. ** $p < .01$.

FIGURE 1 *Mediation by collectivistic morality and existential quest of the link between religiosity and moral opposition to abortion, gay adoption, euthanasia, and suicide.*

though small in size: for collectivistic morality, $IE = .03$, $SE = .01$, 95% CI = [.004, .058], and for existential quest, $IE = .03$, $SE = .01$, 95% CI = [.005, .061].

Discussion

Moral opposition versus acceptance of hotly debated issues like gay adoption, abortion, euthanasia, and suicide may constitute, to some extent, a global tendency which may be driven by common underlying personality and individual differences characteristics. Results of the present study are in favor of this idea, since the attitudes toward these four moral issues were intercorrelated and were similarly associated with the same personality and individual differences characteristics.

In the present study, we investigated whether moral opposition reflects (a) prosocial, interpersonal moral orientation or lack of it, if not self-centeredness (low humility); and (b) existential flexibility or conservative, collectivistic, moral orientation. In other words, we investigated whether moral opposition reflects (a) compassionate openness, (b) compassionate conservatism, or (c) non-interpersonal moral rigorism. We also investigated the role of religiosity as unique or not unique predictor of moral attitudes and as possibly predicting these attitudes through the mediating role of individual differences.

Based on a sample of adults and young adults from one of the most secularized and liberal—in terms of legislation and public opinion with regard to the above four moral issues—European countries (Belgium), the results are, to some extent, in favor of the third pattern (non-interpersonal moral rigorism). First, collectivistic morality, in particular that valuing purity and loyalty, was the key characteristic that distinguished moral opposition from the acceptance of abortion, gay adoption, euthanasia, and suicide. Collectivistic morality (all three moral foundations, i.e., loyalty, authority, and purity) was, in addition, higher among moral opponents who highly endorsed the con arguments against the acceptance of the four issues we provided to participants, not only the social functioning- and impersonal deontology-based arguments, but also the care-based ones.

Second, prosocial, other-oriented vs. self-centered, dispositions were measured here in terms of emotional (empathy), moral (care and fairness), behavioral (spontaneous generosity and self-reported charity donations), and personality (humility) tendencies. Overall, these tendencies did not seem to be related to, thus possibly explaining, moral opposition vs. acceptance of each of the four moral issues. This suggests that the key difference between moral conservatives and moral liberals is the endorsement versus de-consideration of collectivistic morality, but not really other-oriented, interpersonal, prosocial concerns, emotions, values, and personality dispositions. With regard to this issue, note also that, in a recent study carried out in Canada, the humanization of the preborn (preborn humanness perception, which can be considered an empathetic consideration) did not explain the difference between conservatives and liberals in low vs. high acceptance of abortion (MacInnis, MacLean, & Hodson, 2014).

Nevertheless, there were some indications that an emphasis on other-oriented prosocial concerns may be more present among moral liberals than among moral opponents. When, in addition to religiosity, both interpersonal (care, fairness) and collectivistic (authority, loyalty, purity) moral foundations were entered as predictors (what very likely controlled for a global pro-morality tendency) into the regression analysis on the data from the entire sample, moral disapproval was slightly predicted—marginally significant result—by low interpersonal morality, beyond thus the role of collectivistic morality and religiosity (see also Rosik et al., 2013, where homonegativity was predicted by low attachment to care/fairness). Moreover, when the data from each group (i.e., moral opponents and moral liberals) were considered separately, to investigate the degree to which these two groups endorsed the respectively con and pro arguments provided to them, it turned out that valuing, in general, interpersonal morality in life (care and fairness) was unrelated to moral opposition,

even when moral opponents highly endorsed care-based (con) arguments. It was on the contrary, characteristic of moral liberals who highly endorsed care-based (pro) arguments. Furthermore, those moral opponents who highly endorsed impersonal deontology-based arguments turned out to be low in humility. The only result that, at first glance, did not seem to fit with the above picture was that the fact that moral opponents who highly endorsed all three kinds of con arguments tended to also report more spontaneous generosity. This result may indicate that strong moral opponents may have their own way of expressing prosocial motives (e.g., ingroup prosociality, given that generosity in that measure was mostly toward relatives and friends). Nevertheless, it constitutes a weak counter-indication, compared to the accumulated findings mentioned above; and the self-reported character of the spontaneous generosity measure contrasts with the strength of the much more indirect humility measure that indicated low humility among those moral opponents who highly endorse impersonal deontology-based con arguments. Alternatively, it may be that among moral opponents one can find both “compassionate” conservatives and “surlly” conservatives, the coexistence of the two making the relation between prosocial orientations and moral opposition null.

In other words, the present study showed that moral opposition reflects not only mere collectivistic morality, known to be typical among conservatives (Graham et al., 2009), but more precisely exclusively collectivistic morality, not necessarily accompanied by interpersonal prosocial concerns. This suggests that, even if conservatives usually endorse both kinds of morality (Graham et al., 2009), they may give some priority to one of them, especially when the two are in conflict (see Van Pachterbeke et al., 2011). At least some kinds of moral opponents—here those who highly endorsed impersonal-deontology arguments—seem to be clearly self-centered. Nevertheless, further research should deepen our understanding of this question, since another study showed that both conservatives and liberals may believe that their opinion is superior to that of others (Toner, Leary, Asher, & Jongman-Sereno, 2013).

Third, the present study also showed that moral opposition to all four issues is associated with low flexibility, measured here in terms of low readiness to value doubt, to question, and to be open to the possibility of changing one's own attitudes, worldviews, and beliefs in the existential domain. These findings confirm, even in a very liberal and secular context, the general research trend showing that ideological and moral liberalism reflects cognitive flexibility and open-mindedness (Jost, Glaser, Kruglanski, & Sulloway, 2003). They are also in line with a study showing that the prioritization of care/fairness over the three collectivistic values reflects post-conventional reasoning (Baril & Wright, 2012).

Finally, religiosity consistently predicted moral disapproval of all four issues as well as both high endorsement of the con arguments among moral opponents and low endorsement of the pro arguments among moral liberals. Moreover, religious moral opposition seemed to be, at least partly, explained by a combination of the “traditional” cognitive and moral factors (closed-minded low existential quest and conservative collectivistic values) and not by prosocial personal dispositions. Nevertheless, as suggested by the results of the regression analysis, religiosity, in addition to moral collectivism, low existential quest, and (low) prosocial dispositions, had unique explanatory power in predicting moral opposition, possibly because it provides a specific ideology and interpretative discourse.

In sum, moral and religious opposition to abortion, gay adoption, euthanasia, and suicide seems to reflect neither compassionate openness nor compassionate conservatism, but non-interpersonally-oriented moral rigorism. In addition, prosocial dispositions characterize those moral liberals who justify their position with care-based arguments, whereas low humility characterizes those moral opponents who justify their position using impersonal deontology-based arguments.

The present study presents some limitations. Although the sample was not composed of students and was rather heterogeneous, it was a convenience sample, not representative of the country’s population. The generalizability of the findings must also be established by replicating the study in other Western countries, especially those differing in mean religiosity and mean social acceptance of abortion, gay adoption, euthanasia, and suicide. Moreover, it would have been optimal if the pro and con arguments for each of the four social issues had been pretested in order to confirm their belonging to the appropriate type of justification. Similarly, we focused here on global disapproval versus justifiability of the four moral issues. There is no doubt that the real life situations and moral choices are much more complex and diverse. An additional issue to be considered with prudence is that the humility measure used can also be interpreted as indirectly measuring self-esteem and not necessarily humility. Finally, the cross-sectional nature of the data does not allow us to infer possible causal directions. Nevertheless, it seems reasonable to conceive that personality tendencies and attachment to broad moral foundations logically and chronologically precede, and thus predict, concrete moral positions on the four issues and the endorsement of related arguments.

Beyond these limitations, the findings of the present study raise an intriguing issue. In modern secularized Western societies, people who morally disapprove of the social and legal tolerance of issues such as abortion, gay adoption,

euthanasia, and suicide often justify their position as being prosocially motivated (i.e., concern for the weak and the vulnerable: Garrett & Lantos, 2013; Macleod & Hansjee, 2013); and sometimes perceive those who accept the above issues as too self-centered (e.g., Beckwith, 2007; Boer, 2007; DeScioli et al., 2012). One could finally argue that moral opponents are the real open-minded people who go against mainstream dominant (here liberal) values (Cimino, 1997; Kotrosits, 2014). However, the present findings do not provide evidence confirming the presence of the above other-oriented motivations and open-minded personality tendencies.

References

- Adamczyk, A., & Pitt, C. (2009). Shaping attitudes about homosexuality: The role of religion and cultural context. *Social Science Research, 38*, 338-351.
- Aghababaei, N., Wasserman, J. A., & Hatami, J. (2014). Personality factors and attitudes toward euthanasia in Iran: Implications for end-of-life research and practice. *Death Studies, 38*, 91-99.
- Baril, G. L., & Wright, J. C. (2012). Different types of moral cognition: Moral stages versus moral foundations. *Personality and Individual Differences, 53*, 468-473.
- Beckwith, F. J. (2007). *Defending life: A moral and legal case against abortion choice*. New York, NY: Cambridge University Press.
- Boer, T. A. (2007). Recurring themes in the debate about euthanasia and assisted suicide. *Journal of Religious Ethics, 35*, 529-555.
- Boyd, K. A., & Chung, H. (2012). Opinions toward suicide: Cross-national evaluation of cultural and religious effects on individuals. *Social Science Research, 41*, 1565-1580.
- Brandt, M. J., & Renya, C. (2010). The role of prejudice and the need for closure in religious fundamentalism. *Personality and Social Psychology Bulletin, 36*, 715-725.
- Brint, S., & Abrutyn, S. (2010). Who's right about the Right? Comparing competing explanations of the link between white evangelicals and conservative politics in the United States. *Journal for the Scientific Study of Religion, 49*, 328-350.
- Burdette, A. M., Ellison, C. G., & Hill, T. D. (2005). Conservative Protestantism and tolerance toward homosexuals: An examination of potential mechanisms. *Sociological Inquiry, 75*, 177-196.
- Chambers, J. R., Baron, R. S., & Inman, M. L. (2006). Misperceptions in intergroup conflict: Disagreeing about what we disagree about. *Psychological Science, 17*, 38-45.
- Cimino, R. P. (1997). *Against the stream: The adoption of traditional Christian faiths by young adults*. Lanham, MD: University Press of America.

- Clobert, M., & Saroglou, V. (2013). Intercultural non-conscious influences: Prosocial effects of Buddhist priming on Westerners of Christian tradition. *International Journal of Intercultural Relations*, *37*, 459-466.
- Clobert, M., Saroglou, V., & Hwang, K.-K. (in press). East Asian religious tolerance vs. Western monotheist prejudice: The role of (in)tolerance of contradiction. *Group Processes and Intergroup Relations*.
- Cohen, J., Marcoux, I., Bilsen, J., Deboosere, P., van der Wal, G., & Deliens, L. (2006). European public acceptance of euthanasia: Socio-demographic and cultural factors associated with the acceptance of euthanasia in 33 European countries. *Social Science and Medicine*, *63*, 743-756.
- Coleman, P. K., Rue, V. M., Spence, M., & Coyle, C. T. (2008). Abortion and the sexual lives of men and women: Is casual sexual behavior more appealing and more common after abortion? *International Journal of Clinical and Health Psychology*, *8*, 77-91.
- Cornwell, J. F. M., & Higgins, E. T. (2013). Morality and its relation to political ideology: The role of promotion and prevention concerns. *Personality and Social Psychology Bulletin*, *39*, 1164-1172.
- Davis, M. H. 1983. Measuring individual differences in empathy: Evidence for a multi-dimensional approach. *Journal of Personality and Social Psychology*, *44*, 113-126.
- Deak, C., & Saroglou, V. (2012, May). *Emotional intelligence and moral foundations as predicting deontological, non-prosocial moral choices*. Poster presented at the 4th European Conference on Emotion, Canterbury, Great Britain.
- DeCesare, M. A. (2000). Public attitudes toward euthanasia and suicide for terminally ill persons: 1977 and 1996. *Biodemography and Social Biology*, *47*, 264-276.
- DeScioli, P., Gilbert, S. S., & Kurzban, R. (2012). Indelible victims and persistent punishers in moral cognition. *Psychological Inquiry*, *23*, 143-149.
- Domino, G., & Su, S. (1995). Conservatism and attitudes toward suicide: A study of Taiwanese-American and U.S. adults. *Omega: Journal of Death and Dying*, *30*, 131-143.
- Draulans, V., & Billiet, J. (2012). L'éthique: Le "lourd vaisseau des mœurs" ne prend pas de brusques virages... à moins que? In L. Voyé, K. Dobbelaere, & K. Abts (Eds.), *Autre temps, autre mœurs: Travail, famille, éthique, religion et politique—La vision des Belges* (pp. 105-143). Brussels, Belgium: Racine.
- Garrett, J. R., & Lantos, J. D. (2013). Marriage and the well-being of children. *Pediatrics*, *131*, 559-563.
- Gato, J., & Fontaine, A. M. (2013). Anticipation of the sexual and gender development of children adopted by same-sex couples. *International Journal of Psychology* *48*, 244-253.
- Gebauer, J. E., Bleidorn, W., Gosling, S. D., Rentfrow, P. J., Lamb, M. E., & Potter, J. (2014). Cross-cultural variations in Big Five relationships with religiosity: A sociocultural motives perspective. *Journal of Personality and Social Psychology*, *107*, 1064-1091.

- Gilet, A.-L., Mella, N., Studer, J., Grünh, D., & Labouvie-Vief, G. (2013). Assessing dispositional empathy in adults: A French validation of the Interpersonal Reactivity Index (IRI). *Canadian Journal of Behavioural Science, 45*, 42-48.
- Graham, J., & Haidt, J. (2010). Beyond beliefs: Religion binds individuals into moral communities. *Personality and Social Psychology Review, 14*, 140-150.
- Graham, J., Haidt, J., & Nosek, B. (2009). Liberals and conservatives use different sets of moral foundations. *Journal of Personality and Social Psychology, 96*, 1029-1046.
- Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology, 101*, 366-385.
- Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology, 67*, 451-470.
- Hill, E. D., Terrell, H. K., Cohen, A. B., & Nagoshi, C. T. (2010). The role of social cognition in the religious fundamentalism-prejudice relationship. *Journal for the Scientific Study of Religion, 49*, 724-739.
- IFOP (2013). *Enquête sur la droitisation des opinions publiques européennes* [Survey of the shift of the European public opinions to the right-wing]. Retrieved from http://www.ifop.com/media/poll/2255-1-study_file.pdf.
- Inbar, Y., Pizarro, D. A., & Bloom, P. (2009). Conservatives are more easily disgusted than liberals. *Cognition and Emotion, 23*, 714-725.
- Joseph, C. M., Graham, J., & Haidt, J. (2009). The end of equipotentiality: A moral foundations approach to ideology-attitude links and cognitive complexity. *Psychological Inquiry, 20*, 172-176.
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin, 129*, 339-375.
- Karlsson, M., Strang, P., & Milberg, A. (2007). Attitudes toward euthanasia among Swedish medical students. *Palliative Medicine, 21*, 615-622.
- Koleva, S. P., Graham, J., Iyer, R., Ditto, P. H., & Haidt, J. (2012). Tracing the threads: How five moral concerns (especially purity) help explain culture war attitudes. *Journal of Research in Personality, 46*, 184-194.
- Kotrotsis, M. (2014). The queer life of Christian exceptionalism. *Culture and Religion: An Interdisciplinary Journal, 15*, 158-165.
- Laporte, C. (2013, October 2). Vous acceptez l'euthanasie des enfants [You accept children's euthanasia]. *La Libre Belgique*. Retrieved from <http://www.lalibre.be/actu/belgique/vous-acceptez-l-euthanasie-des-enfants-524b967a35703eef3a0c3589>.
- Lottes, I. L., & Alkula, T. (2011). An investigation of sexuality-related attitudinal patterns and characteristics related to those patterns for 32 European countries. *Sexuality Research and Social Policy, 8*, 77-92.

- MacInnis, C. C., MacLean, M. H., & Hodson, G. (2014). Does "humanization" of the preborn explain why conservatives (vs. liberals) oppose abortion? *Personality and Individual Differences, 59*, 77-82.
- Macleod, C. I., & Hansjee, J. (2013). Equality, support and rights discourses undermining reproductive 'choice'. *Culture, Health and Sexuality, 15*, 997-1010.
- Maher, M. J., Sever, L. M., & Pichler, S. (2008). Young Catholics and pro-life thinking: How Catholic college students view the issues of abortion, euthanasia, and capital punishment. *Research in the Social Scientific Study of Religion, 19*, 17-41.
- Malka, A. (2014). Religion and domestic political attitudes around the world. In V. Saroglou (Ed.), *Religion, personality, and social behavior* (pp. 230-254). New York, NY: Psychology Press.
- Malka, A., Soto, C. J., Cohen, A. B., & Miller, D. T. (2011). Religiosity and social welfare: Competing influences of cultural conservatism and prosocial value orientation. *Journal of Personality, 79*, 763-792.
- Mavor, K. I., Macleod, C., Boal, M., & Louis, W. (2009). Right-wing authoritarianism, fundamentalism and prejudice revisited: Removing suppression and statistical artifact. *Personality and Individual Differences, 46*, 592-597.
- Métayer, S., & Pahlavan, F. (2014). Validation de l'adaptation française du questionnaire des principes moraux fondateurs. *Revue Internationale de Psychologie Sociale, 27*, 79-107.
- Napier, J. L., & Luguri, J. B. (2013). Moral mindsets: Abstract thinking increases a preference for "individualizing" over "binding" moral foundations. *Social Psychological and Personality Science, 4*, 754-759.
- Olatunji, B. O. (2008). Disgust, scrupulosity and conservative attitudes about sex: Evidence for a mediational model of homophobia. *Journal of Research in Personality, 42*, 1364-1369.
- Osborne, D., & Davies, P. G. (2012). When benevolence backfires: Benevolent sexists' opposition to elective and traumatic abortion. *Journal of Applied Social Psychology, 42*, 291-307.
- Pope John Paul II. (1992). *Catechism of the Catholic Church*. Citta del Vaticano: Liberia Editrice Vaticana.
- Poteat, V. P., & Mereish, E. H. (2012). (Dis)similarity between liberals and conservatives: Predicting variability in group differences on abortion and same-sex marriage rights attitudes. *Basic and Applied Social Psychology, 34*, 56-65.
- Remennick, L. I., & Hetsroni, A. (2001). Public attitudes toward abortion in Israel: A research note. *Social Science Quarterly, 82*, 420-431.
- Rosik, C. H., Dinges, L. J., & Saavedra, N. (2013). Moral intuitions and attitudes toward gay men: Can moral psychology add to our understanding of homonegativity? *Journal of Psychology and Theology, 41*, 315-326.
- Rottman, J., Kelemen, D., & Young, L. (2014). Tainting the soul: Purity concerns predict moral judgments of suicide. *Cognition, 130*, 217-226.

- Rowatt, W. C., Ottenbreit, A., Nesselroade, K. P., & Cunningham, P. (2002). On being holier-than-thou or humbler-than-thee: A social psychological perspective on religiousness and humility. *Journal for the Scientific Study of Religion*, *41*, 227-237.
- Rye, B. J., & Meaney, G. J. (2010). Self-defense, sexism, and etiologic beliefs: Predictors of attitudes toward gay and lesbian adoption. *Journal of GLBT Family Studies*, *6*, 1-24.
- Saroglou, V. (2011). Believing, bonding, behaving, and belonging: The big four religious dimensions and cultural variation. *Journal of Cross-Cultural Psychology*, *42*, 1320-1340.
- Saroglou, V. (2013). Religion, spirituality, and altruism. In K. I. Pargament, J. J. Exline, & J. W. Jones (Eds.), *APA Handbook of psychology, religion and spirituality* (Vol. 1, pp. 439-457). Washington, DC: American Psychological Association.
- Saroglou, V., Delpierre, V., & Dernelle, R. (2004). Values and religiosity: A meta-analysis of studies using Schwartz's model. *Personality and Individual Differences*, *37*, 721-734.
- Shackelford, T. K., & Besser, A. (2007). Predicting attitudes towards homosexuality: Insight from personality psychology. *Individual Differences Research*, *5*, 106-114.
- Sørbye, L. W., Sørbye, S., & Sørbye, S. W. (1995). Nursing students' attitudes towards assisted suicide and euthanasia. *Scandinavian Journal of Caring Sciences*, *9*, 119-122.
- Stack, S., & Kposowa, A. J. (2011). Religion and suicide acceptability: A cross-national analysis. *Journal for the Scientific Study of Religion*, *50*, 289-306.
- Toner, K., Leary, M. R., Asher, M. W., & Jongman-Sereno, K. P. (2013). Feeling superior is a bipartisan issue: Extremity (not direction) of political views predicts perceived belief superiority. *Psychological Science*, *24*, 2454-2462.
- Tuman, J. P., Roth-Johnson, D., & Jelen, T. (2013). Conscience and context: Attitudes toward abortion in Mexico. *Social Science Quarterly*, *94*, 100-112.
- Turiel, E., & Neff, K. (2000). Religion, culture, and beliefs about reality in moral reasoning. In K. S. Rosengren, C. N. Johnson, & P. L. Harris (Eds.), *Imagining the impossible: Magical, scientific, and religious thinking in children* (pp. 269-304). Cambridge, UK: Cambridge University Press.
- van den Akker, H., van der Ploeg, R., & Scheepers, P. (2013). Disapproval of homosexuality: Comparative research on individual and national determinants of disapproval of homosexuality in 20 European countries. *International Journal of Public Opinion Research*, *25*, 64-86.
- Van Pachterbeke, M., Freyer, C., & Saroglou, V. (2011). When authoritarianism meets religion: Sacrificing others in the name of abstract deontology. *European Journal of Social Psychology*, *41*, 898-903.
- Van Pachterbeke, M., Keller, J., & Saroglou, V. (2012). Flexibility in existential beliefs and worldviews: Introducing and measuring existential quest. *Journal of Individual Differences*, *33*, 2-16.
- Van Pachterbeke, M., Saroglou, V., & Dupont, S. (2010). *Abstract deontology: The dark side of non-interpersonal morality*. Unpublished manuscript, Université catholique de Louvain, Louvain-la-Neuve, Belgium.

- Verbakel, E., & Jaspers, E. (2010). A comparative study on permissiveness toward euthanasia: Religiosity, slippery slope, autonomy, and death with dignity. *Public Opinion Quarterly*, 74, 109-139.
- Wang, G.-z., & Buffalo, M. D. (2004). Social and cultural determinants of attitudes toward abortion: A test of Reiss' hypotheses. *Social Science Journal* 41, 93-105.
- Wiecko, F. M., & Gau, J. M. (2008). Every life is sacred . . . kind of: Uncovering the sources of seemingly contradictory public attitudes toward abortion and the death penalty. *Social Science Journal* 45, 546-564.
- Wilcox, W. B. (1998). Conservative Protestant childrearing: Authoritarian or authoritative? *American Sociological Review*, 63, 796-809.

Appendix

Con and pro arguments for each of the four moral issues

Argument Types	Proposed Arguments	<i>M (SD)</i>
Abortion con		
Care	An unborn child is innocent; abortion kills an innocent person.	4.83 (1.12)
Social deontology	People must take responsibility for their behavior.	5.21 (0.83)
Impersonal deontology	Life begins at conception; we do not have the right to take life.	4.76 (1.07)
Abortion pro		
Care	Women have the right to have control over their body.	5.23 (1.10)
Social deontology	It is better to have abortions than a society with unwanted children.	4.53 (1.25)
Impersonal deontology	In case of rape or incest abortion is a necessity.	5.30 (0.86)
Euthanasia con		
Care	Euthanasia is too easy a way of getting rid of people who suffer.	4.32 (1.54)

Argument Types	Proposed Arguments	<i>M (SD)</i>
Social deontology	Euthanasia weakens the respect for life in a society.	4.86 (1.55)
Impersonal deontology	Life does not belong to us; we cannot decide when to end it.	4.77 (1.38)
Euthanasia pro		
Care	It is better to let someone die than to force him/her to live a life full of suffering.	4.52 (1.01)
Social deontology	People who served society all their life should have the right to end it.	4.22 (1.43)
Impersonal deontology	People have the right to end their life if they want to.	4.86 (1.27)
Suicide con		
Care	To commit suicide is a shame, because the person cannot fully develop the potential of his/her life.	4.04 (1.33)
Social deontology	It is somewhat selfish to leave society by committing suicide.	4.15 (1.53)
Impersonal deontology	We cannot just do whatever we want with life.	3.07 (1.53)
Suicide pro		
Care	I understand that for some people life can be unbearable.	5.06 (0.94)
Social deontology	Like any living organism, society has its losses.	3.63 (1.59)
Impersonal deontology	People have the right to end their life when and how they choose.	4.31 (1.14)
Gay adoption con		
Care	For their optimal development, children need to have a mother and a father with their distinct complementary roles.	5.32 (0.93)
Social deontology	Heterosexual marriage is capital for society, one should preserve it well.	4.32 (1.61)

(cont.)

Argument Types	Proposed Arguments	<i>M (SD)</i>
Impersonal deontology	A homosexual relationship is unnatural and immoral.	3.68 (1.68)
Gay adoption pro		
Care	Gay people are also humans and they should be able to create a family like anyone else.	5.25 (0.84)
Social deontology	Homosexual couples are as capable as other couples to raise children to be the citizens of tomorrow.	5.16 (0.91)
Impersonal deontology	To forbid gay couples to adopt children would be a form of discrimination based on sexual orientation.	5.06 (1.08)

Note. *Ns* for con arguments: 145-166. *Ns* for pro arguments: 189-207.