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How Religiosity Shapes Rejection of Homosexuality Across the Globe

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ABSTRACT

This study investigates to what extent different dimensions of religiosity are differentially related to rejection of homosexuality in countries around the world and, moreover, to what extent these relationships can be explained by particular mediators: authoritarianism and traditional gender beliefs. The theoretical framework includes in particular socialization and integration theories. Hypotheses are tested by employing multilevel models, using data from the World Values Survey, covering 55 countries around the world for the period 2010–2014. The results indicate that every dimension of religiosity has a positive relationship with rejection of homosexuality, rejecting some of our hypotheses: those who adhere to any denomination more often attend religious services and have stronger religious particularistic beliefs, or those who are more religiously salient do reject homosexuality more strongly. Sobel tests and bootstrapping procedures indicate that the relationships between the dimensions of religiosity and rejection of homosexuality are partially explained by authoritarianism and traditional gender beliefs.

KEYWORDS

Homosexuality; attitudes; religiosity; authoritarianism; gender beliefs; cross-national data

Many studies have examined which individual factors can determine rejection of homosexuality (Adamczyk & Pitt, 2009; Adamczyk, 2017; Herek & Capitano, 1996; Jäckle & Wenzelburger, 2015; Janssen & Lubbers, 2016; Rowatt et al., 2006). Religiosity appears to be one of the strongest socializing determinants to explain rejection of homosexuality. This relationship is based on the premise that individuals' moral attitudes are adopted via exposure to socializing agents—in this respect, religious institutions (Durkheim, 1951; Ultee, Arts, & Flap, 2003). Although most religions emphasize that people should respect others, most religions tend to categorize homosexuality as something “unnatural” or “impure” (Yip, 2005).

Due to trends of secularization, the influence of religion on individuals' daily lives is argued to have become less prominent, but the general attitude toward homosexuality remains negative in many countries (Adamczyk, 2017; McGee, 2016a, 2016b). Therefore, religiosity can still play a central role in

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individuals' lives and affect their attitudes, because so many individuals still identify with a religious denomination (Hackett, Grim, Stonawski, Skirbekk, & Potančoková, 2012). Although religious attendance might have decreased in many countries, perhaps other dimensions of religiosity are more important determinants in explaining why individuals persist to be negative toward homosexuality (Halman & van Ingen, 2015).

Stark and Glock (1968) proposed that there is not one but different dimensions of religiosity. They made a classical distinction between religious practice, belief, experience, knowledge, and the consequences of religiosity, also known as religious saliency. So as religion is considered to act as a socializing force, it is therefore relevant to study which relationships there are between these different dimensions of religiosity and rejection of homosexuality in different contexts.

Whitley (2009) and Jäckle and Wenzelburger (2015) already studied the relationships between different measures of religiosity and the rejection of homosexuality. However, they did not examine whether and which of the classical distinctions in religiosity, proposed by Stark and Glock (1968), are associated with rejection of homosexuality. Furthermore, Whitley (2009) only included studies conducted in the United States or Canada, and the data were collected from 1978 till 2007 in his meta-analysis. In this contribution we will use more recent data, i.e., the sixth wave (2010–2014) of the World Values Survey (WVS), to assess whether the influence of religiosity still holds, in spite of secularization trends. As far as we know, this study is the first one to consider all these religious distinctions as related to rejection of homosexuality. This leads to the first research question:

RQ1: Which dimensions of religiosity contribute to explain rejection of homosexuality in several countries around the world in the period 2010 and 2014?

Not only religiosity can explain rejection of homosexuality; other beliefs and opinions can be important predictors. Two other perspectives in studies aiming to explain rejection of homosexuality proposed particular mediators, i.e., authoritarianism and traditional gender beliefs (Adamczyk, 2017; Kite & Whitley, 1996; Whitley, 2001; Whitley & Ægisdóttir, 2000). People with an authoritarian personality are more likely to respect authority and show aggression toward outgroups, i.e., ethnic minorities and also homosexuals (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1969; Newcomb, 1961; in Altemeyer, 1998; Scheepers, Felling, & Peters, 1990). Gender belief systems consist of attitudes people have about appropriate roles for men and women (Bailey, Kim, Hills, & Linsenmeier, 1997, pp. 2–5; Deaux & Kite, 1987). The relationships will be discussed in more detail in the Theory section.

Some studies actually investigated whether these factors mediate the relationships between different dimensions of religiosity and rejection of homosexuality (Altemeyer, 2003; Johnson et al., 2011; Tsang & Rowatt, 2007; Whitley & Lee,

2000; Wilkinson, 2004). However, they did not use large or representative samples. The current study will improve on this by taking advantage of large and representative cross-national data and include both mediators to test whether these theoretical arguments hold generally for different dimensions of religiosity. Therefore, the second research question is:

RQ2: To what extent are the relationships between different dimensions of religiosity and rejection of homosexuality explained by authoritarianism and traditional gender beliefs in countries around the world in the period 2010 and 2014?

Theory and hypotheses

Exposure to socializing agents, such as religious institutions, is considered to be essential in explaining individuals' moral attitudes (Durkheim, 1951; Ultee et al., 2003). The central idea of socialization and integration theory is that social norms are adopted and, moreover, internalized via exposure to socializing agents. Socializing agents are, for example, individuals' parents and schools, but religious institutions are also important socializing agents. The level of the socializing effect varies with the extent to which individuals are exposed to these socializing agents: individuals who are more exposed to certain norms are more likely to embrace, adopt, and internalize these norms. The proposition that exposure to socializing agents affects individuals' social norms and attitudes will be used to explain the relationships between the different determinants and rejection of homosexuality (Adamczyk and Pitt, 2009; Van den Akker, Van der Ploeg, & Scheepers, 2013).

Different dimensions of religiosity

Stark and Glock (1968) proposed that there are different dimensions of religiosity, namely, religious practices, beliefs, experiences, knowledge, and saliency. This study will use the distinctions of these different dimensions, in this order, to formulate different hypotheses related to rejection of homosexuality.¹ Although these dimensions of religiosity are related, we are interested in the relationships between every single dimension of religiosity and the rejection of homosexuality, controlling for the effect of other dimensions of religiosity.

Religious practice is defined as "the expectation held by all denominations that the faithful will observe and perform certain rites and sacred or liturgical acts" (Stark & Glock, 1968, p. 81). Religious practices fall into two classes: rituals and devotion. In this study, the focus will be on participation in religious rituals, because these are often performed in the presence of others, whereas devotional practices are performed in a more private sphere.

Belonging to a religious group in itself influences individuals' social norms, because people have more contact with those who belong to the same group, and group members have the urge to comply with the norms and values of this group

(Festinger, 1950; McPherson, Smith-Lovin, & Cook, 2001). If the social norm is that people have to reject homosexuality, adherents are more likely to adopt this attitude. Individuals who adhere to any denomination are actually more likely to express anti-gay views (Ellison & Musick, 1993; Jaspers, Lubbers, & De Graaf, 2007; Schulte & Battle, 2004; Schwartz & Lindley, 2005). Therefore, the expectation is that adherence to any specific denomination induces rejection of homosexuality compared to non-adherence. Moreover, there may be differences between different denominations. Adamczyk and Pitt (2009) found that, globally, Muslims disapproved of homosexuality more than Catholics, Orthodox Christians, Jews, Hindus, Buddhists, and people with no religion. However, Muslims did not differ significantly from Protestants in their rejection of homosexuality. An explanation is that the main Protestant denominations have been losing members, while the more conservative Protestant denominations are still growing (Adamczyk, 2017; Robbins, 2004). Jäckle and Wenzelburger (2015) also found that across the globe, Muslims reject homosexuality the most. This leads to the following hypotheses:

H1(a): Individuals who adhere to any denomination reject homosexuality more strongly than individuals who do not adhere to a denomination.

H1(b): Muslims reject homosexuality the most, compared to individuals who do not adhere to a denomination.

Religions provide different norms, for example, on charity and altruism, and they emphasize these norms by collective rituals. Participation in these rituals is an indicator of an individual's integration into the religious community. Although different religions have different expectations regarding religious attendance, we do not focus on these expectations but rather on the actual behavior of religious people. The expectation is that the more strongly people are integrated, the more frequently they participate, the more they are exposed to, and the more they will comply with the norms of the group (Durkheim, 1951; Reitsma, Scheepers, & Grotenhuis, 2006). Overall, the proposition is that religious denominations are not positive toward homosexuality, so the general hypothesis is that individuals are more likely to adopt this negative attitude if they are more frequently exposed to traditional norms and values toward homosexuality. An indicator of a religious ritual whereby exposure is unavoidable is religious attendance. Therefore, the hypothesis is:

H2: The higher the frequency of individuals' religious attendance, the more strongly they reject homosexuality.

Belief is the most important feature of Christian commitment (Stark & Glock, 1968, p. 22). A believer is defined as "a person who acknowledges a supernatural realm and who conceives of the supernatural historic Christian term—a

personal God, a divine Saviour, and a life beyond death” (p. 22). However, Eisinga, Felling, and Peters (1988) already indicated that it is mystery as to why doctrinal beliefs—beliefs in Jesus—are related to any kind of prejudice. But a theoretical relationship is possible if one assumes, just like Glock and Stark (1966), that doctrinal beliefs are positively related to religious particularism, which explains prejudice toward outgroups (Scheepers, Gijsberts, & Hello, 2002).

Religious particularism is often related to anti-Semitism (Eisinga et al., 1988, pp. 48–55). However, religious particularism can also be related to prejudice toward other outgroups (Scheepers et al., 2002). Glock and Stark (1966) essentially proposed that a strong bond with Christian doctrines induces religious particularism that strengthens people’s belief that their religion is the only true religion. This can drive unfavorable attitudes toward other religious outgroup—in fact, to all outgroups not accepting traditional Christian teachings. As Allport (1966, p. 450) stated, “since God is for the ins, the outs must be excluded” Therefore, the expectation is that religious particularism induces negative attitudes toward outgroups who have a lifestyle that is incompatible with their own religious beliefs. Stereotypical homosexual lifestyles may be considered to violate norms and values of different religious denominations (Halstead & Lewicka, 1998). Therefore, the hypothesis is:

H3: The stronger religious particularistic beliefs individuals have, the more strongly they reject homosexuality.

Religious saliency differs from previous dimensions of religiosity. It pertains to the extent to which religiosity may have a self-perceived effect on individuals’ day-to-day life (Stark & Glock, 1968, p. 16). Although different religious texts are not open to “abnormal” sexual behavior (Adamczyk, 2017; Yip, 2005; pp. 49–51), those who take their religiosity seriously into account in their everyday decisions are expected to live by the “golden rule”: the principle that one should treat others as one would like others to treat oneself. This principle occurs in some form in almost every religion (Eisinga et al., 1988; pp. 70–71; Spooner, 1928; pp. 310–312). Batson, Schoenrade and Ventis (1993, p. 310) found that religiously salient people are less prejudiced, less racist, and less anti-Semitic. Scheepers et al. (2002) found that people for whom religion is more important in their daily lives have less negative attitudes toward ethnic minorities in many European countries. The expectation is therefore that individuals for whom religiosity is salient are less negative toward other outgroups, and hence reject homosexuality less strongly, because religion is more important in their daily lives. The hypothesis is:

H4: The more salient religion is in individuals’ life, the less strongly they reject homosexuality.

Explaining the relationships: Authoritarianism and traditional gender beliefs

In previous research, two perspectives that are also often related to rejection of homosexuality are authoritarianism and traditional gender beliefs (Kite & Whitley, 1996; Whitley, 2001; Whitley & Ægisdóttir, 2000). Authoritarianism and traditional gender beliefs are also related to different dimensions of religiosity (Altemeyer, 1981, 1988; Altemeyer & Hunsberger, 1992; Moore & Vanneman, 2003; Peek, Lowe, & Williams, 1990; Weller, Levinbok, Maimon, & Shaham, 1975). Therefore, hypotheses will be formulated on direct as well as mediating relationships of authoritarianism and traditional gender beliefs with rejection of homosexuality.

People with an authoritarian personality are more likely to have more respect for authority and show more aggression toward outgroups when the authorities allow this in society. They also exhibit support for traditional values when these traditional values are proclaimed by the authority. Outsiders are judged on the basis of traditional moral values (Adorno et al., 1969, pp. 222–279). Classical studies have shown that authoritarianism drives attitudes toward ethnic minorities (Altemeyer, 1998; Newcomb, 1961; Scheepers et al., 1990). Moreover, some studies already looked at the relationships of authoritarianism with attitudes toward other outgroups (Altemeyer, 1998; Whitley, 1999). Based on classical insights, the expectation is that people with an authoritarian personality make a distinction between an ingroup and outgroups and tend to reject the latter. Gays and lesbians can be seen as an outgroup, because the majority has a heterosexual orientation. So the hypothesis is:

H5: The stronger individuals have an authoritarian personality, the more strongly they reject homosexuality.

Previous research has shown that the relationship between religiosity and rejection of homosexuality is reduced when authoritarianism is included (Altemeyer, 2003; Johnson et al., 2011; Laythe, Finkel, Bringle, & Kirkpatrick, 2002; Tsang & Rowatt, 2007; Whitley, 2009). So it may not be the intrinsic nature of the motivation underlying some people's religion that induces rejection of sexual outgroups, but rather the authoritarian manner in which some people hold their religious beliefs.

Moreover, this study investigates to what extent the relationships between different dimensions of religiosity and rejection of homosexuality are explained by authoritarianism. The dimensions of practice and belief are both expected to be positively associated with rejection of homosexuality. Roggemans, Spruyt, Van Droogenbroeck, and Keppens (2015) included measurements of religious practice and religious belief and found that a significant part of the relationships between these measurements of religiosity and rejection of homosexuality are actually explained by authoritarianism and traditional gender beliefs—however, only in

a selective sub-national sample. So we tested whether it holds in more general representative cross-national samples that individuals who adhere to a denomination, who attend religious services, or who have strong religious particularistic beliefs more often have an authoritarian personality and therefore reject homosexuality more strongly. The hypothesis is:

H6(a): The positive relationships between religious practice and religious particularism with rejection of homosexuality are explained by authoritarianism.

The expectation is that individuals who live their religion, i.e., adhere to religious saliency, live by the “golden rule.” Therefore, they are less likely to have an authoritarian personality, because the proposition is that they do not show aggression toward outgroups and have more mutual tolerance (Scheepers et al., 2002; Yip, 2005). So the expectation is that religiously salient people reject homosexuality less strongly, but this relationship is explained by the fact that they have a less strongly authoritarian personality. The hypothesis is:

H6(b): The negative relationship between religious saliency and rejection of homosexuality is explained by authoritarianism.

Traditional gender beliefs include stereotypes about appropriate gender roles and attitudes toward those who apparently violate these standards—for example, gay men and lesbian women (Deaux & Kite, 1987). According to these traditional beliefs, men should exhibit masculine behavior and women should exhibit feminine behavior. Homosexuality poses a threat to the worldview that places “masculine” and “feminine” at two opposite ends of a dimension (Habarth, 2008; Kite & Whitley, 1996).

Moreover, gay men and lesbians are disliked, at least in part, because of their perceived sex role deviance, in particular by people who have traditional gender beliefs (Krulowitz & Nash, 1980; Laner & Laner, 1979, 1980; Weinberger & Millham, 1979). In a meta-analysis, Kite and Whitley (1996) found that people who have more traditional gender role views reject homosexuality more strongly. Therefore, the hypothesis is:

H7: The stronger individuals have traditional gender beliefs, the more strongly they reject homosexuality.

The relationship between religiosity and traditional gender beliefs has repeatedly been demonstrated (Moore & Vanneman, 2003; Peek et al., 1990). However, this study investigates to what extent the relationships between different dimensions of religiosity and rejection of homosexuality is explained by traditional gender beliefs. The dimensions of religious

practice and religious particularism are both expected to be associated with traditional gender beliefs. Belonging to a religious group influences individuals' social norms, because group members have the urge to comply with the norms and values of this group (Festinger, 1950; McPherson et al., 2001). Religious institutes often advocate the traditional gender division of men in the labor force and women at home. As Voas, McAndrew, and Storm (2013) stated: "The conservative ethos of religious organizations validates and reinforces the choice [of a woman] to be a home-maker."

So individuals who adhere to a denomination or those who attend religious services are more frequently exposed to traditional gender beliefs and therefore are more likely to have traditional gender beliefs themselves. Furthermore, individuals who believe that their religion is the only true religion are more likely to be intolerant toward outgroups (Scheepers et al., 2002). If individuals are more intolerant toward outgroups, they are also expected to share traditional views on other moral attitudes, such as gender beliefs. So if individuals have more traditional gender beliefs, gay men and lesbians are disliked, at least in part, because of their perceived sex role deviance. Roggemans et al. (2015) found that a significant part of the relationships between religious practice and religious belief with rejection of homosexuality are explained by traditional gender beliefs. Piumatti (2017) also found that the relationship between religiosity and rejection of homosexuality was explained by traditional gender beliefs. However, both studies only used selective national samples. So we tested whether it holds in more general representative cross-national samples. Thus the hypothesis is:

H8(a): The positive relationships between religious practice and religious particularism with rejection of homosexuality are explained by traditional gender beliefs.

Religiously salient people are expected to live by the "golden rule." So the expectation is that religiously salient people less often reject homosexuality, but this effect is explained by traditional gender beliefs. The hypothesis is:

H8(b): The negative relationship between religious saliency and rejection of homosexuality is explained by traditional gender beliefs.

Data and measurements

The World Values Survey

To test the formulated hypotheses, the sixth wave of the World Values Survey (WVS) was used. The data were collected in the period 2010 and 2014 in 60 countries around the world, and more than 90,000 respondents participated

(World Values Survey, 2017). The WVS is a global network of different social scientists studying different (religious) values and moral attitudes and what impact they have on individuals' social and political lives; therefore, these data are appropriate to investigate the relationship of religiosity with rejection of homosexuality in a quantitative manner. Moreover, the WVS covers a full range of variations, from very rich to very poor countries, in many of the world's cultural regions.

Dependent variable

The dependent variable for this study is rejection of homosexuality. Respondents were asked whether they think homosexuality can always or never be justified. Respondents could answer this question by using a 10-point scale ranging from 1 to 10. In the current study, this variable was recoded in a way that a higher score on this scale means that respondents reject homosexuality more strongly, ranging from 1 = *homosexuality can always be justified* to 10 = *homosexuality can never be justified*.

Independent variables

To measure religious denomination, respondents were asked whether they considered themselves belonging to a religion or religious denomination. If yes, which one? A distinction was made between individuals who (0) do not belong to a denomination, (1) Roman Catholic, (2) Protestant, (3) Orthodox (Russian/Greek/etc.), (4) Muslim, (5) Hindu, (6) Buddhist, (7) Other Christian,² and (8) Other.³

Religious attendance was measured with the following question: "Apart from weddings and funerals, about how often do you attend religious services these days?" Respondents could answer with (1) more than once a week, (2) once a week, (3) once a month, (4) only on special holy days/Christmas/Easter days, (5) once a year, (6) less often, and (7) practically never. Religious attendance was recoded in a way that a higher score means that respondents have a higher frequency of religious attendance.

Religious particularism was measured with the statement: "The only acceptable religion is my religion." Respondents had to indicate whether they (1) *strongly agree* to (4) *strongly disagree* with this statement. It was recoded in such a way that a higher score means that respondents have stronger religious particularistic beliefs.

To measure religious saliency, respondents were asked to indicate how important religion is in their life. Respondents could answer with (1) very important, (2) rather important, (3) not very important, or (4) not at all important. Religious saliency was recoded such that a higher score means that respondents are more religiously salient.

Recent studies have shown that child-rearing values are the best indicator of authoritarianism, in particular, whether one considers it especially important for children to learn obedience (Hetherington & Weiler, 2009, pp. 48–50; Solt, 2012; Stenner, 2005, pp. 23–24). Therefore, to measure individuals' authoritarian personality, respondents received a checklist of 11 qualities⁴ that children can be encouraged to learn at home. They had to indicate which, if any, they consider to be especially important (1) or not (0). They could choose up to five. A scale was made with three qualities: "obedience," "imagination," and "independence." First, scores on the qualities "imagination" and "independence" were reversed, because these two are the opposite of authoritarianism. Second, the scores on the three qualities were summed, and the mean score was calculated. Respondents had to have a least a valid score on two out of three qualities to have a valid score on this scale. A higher score on this scale means that respondents have more authoritarian child-rearing values and, therefore, a stronger authoritarian personality.⁵

To measure individuals' traditional gender beliefs, the following statements were used: "When a mother works for pay, the children suffer"; "On the whole, men make better political leaders than women do"; "A university education is more important for a boy than for a girl"; and "On the whole, men make better business executives than women do." Respondents had to indicate whether they (1) *strongly agree*, (2) *agree*, (3) *disagree*, or (4) *strongly disagree* with these statements. First, all statements were recoded in such a way that a higher score means that respondents have a more traditional opinion about gender roles. A factor analysis showed that the first statement's communality was a slightly too low (0.152; Yong & Pearce, 2013). However, if this statement of this already reliable scale (a Cronbach's alpha of 0.725) was left out, the increase in Cronbach's alpha was negligible (0.754; Nunnally, 1978). Therefore, this statement was not left out, and the mean score on these four statements was calculated and a new scale constructed. Respondents had to have at least a valid score on two out of four statements to have a valid score on this scale.

Education, gender, age, individual's income, and marital status were included as control variables. An analysis of variance (1-way ANOVA) and multiple regression models showed that religious attendance, religious particularism, religious saliency, authoritarianism, traditional gender beliefs, education, age, and income could be treated as continuous variables, i.e., the difference in R^2 between a linear and a nonlinear model was negligible.

Initially, 90,350 respondents were included in the data from 60 different countries. However, five countries were excluded from the data, since they had a missing value on the dependent or independent variables. Then the data consisted of 55 countries with a total 84,064 respondents. After listwise exclusion of the respondents with missing values on the dependent and independent variables, the data consisted of 67,648 respondents. Those

respondents with a missing value on any variable were excluded, because the number of missing values per variable were relatively small. Most percentages of missing values on a variable were between 0 and 2%.

The descriptive statistics of the variables discussed above are presented in the Appendix, [Table A1](#).

Analyses and results

Descriptive analyses

[Figure 1](#) illustrates the country averages regarding rejection of homosexuality. It illustrates that countries such as Armenia, Tunisia, Azerbaijan, and Georgia reject homosexuality the most, whereas countries such as Sweden, The Netherlands, Australia, and Spain reject homosexuality less strongly.

Strategy and multilevel modeling

In the current study, individuals are nested within countries. Multilevel modeling makes it possible to determine which part of the variation of rejection of homosexuality could be explained by individual-level indicators and which part to the variation on the country level. The intraclass correlation coefficient (ICC) shows how much of the variation can be explained by country characteristics. The ICC is 0.387⁶: so more than 38% is explained by country characteristics. This indicates that multilevel modeling is preferred as an appropriate method.

Model 1 only includes all dimensions of religiosity. In Model 2 the control variables on the individual level are also included. In Model 3, authoritarianism and traditional gender beliefs are included to test for the mediating effects of these variables.⁷

Results

Tests of direct relationships

The results are presented in [Table 1](#). Model 1 shows that all dimensions of religiosity are significant. People who adhere to any denomination reject homosexuality more strongly than those who adhere to no denomination. Therefore, Hypothesis 1(a) is confirmed. The expectation is that Muslims reject homosexuality the most; however, it appears that Hindus reject homosexuality even more. Furthermore, when Hindus are the reference category, Muslims reject homosexuality significantly less strongly than Hindus ($b = -0.244$, $p = 0.001$), but other Christians do not differ significantly from Hindus ($b = -0.120$, $p = 0.218$). This interesting finding will be explained further on. Nonetheless, Hypothesis 1(b) is rejected.

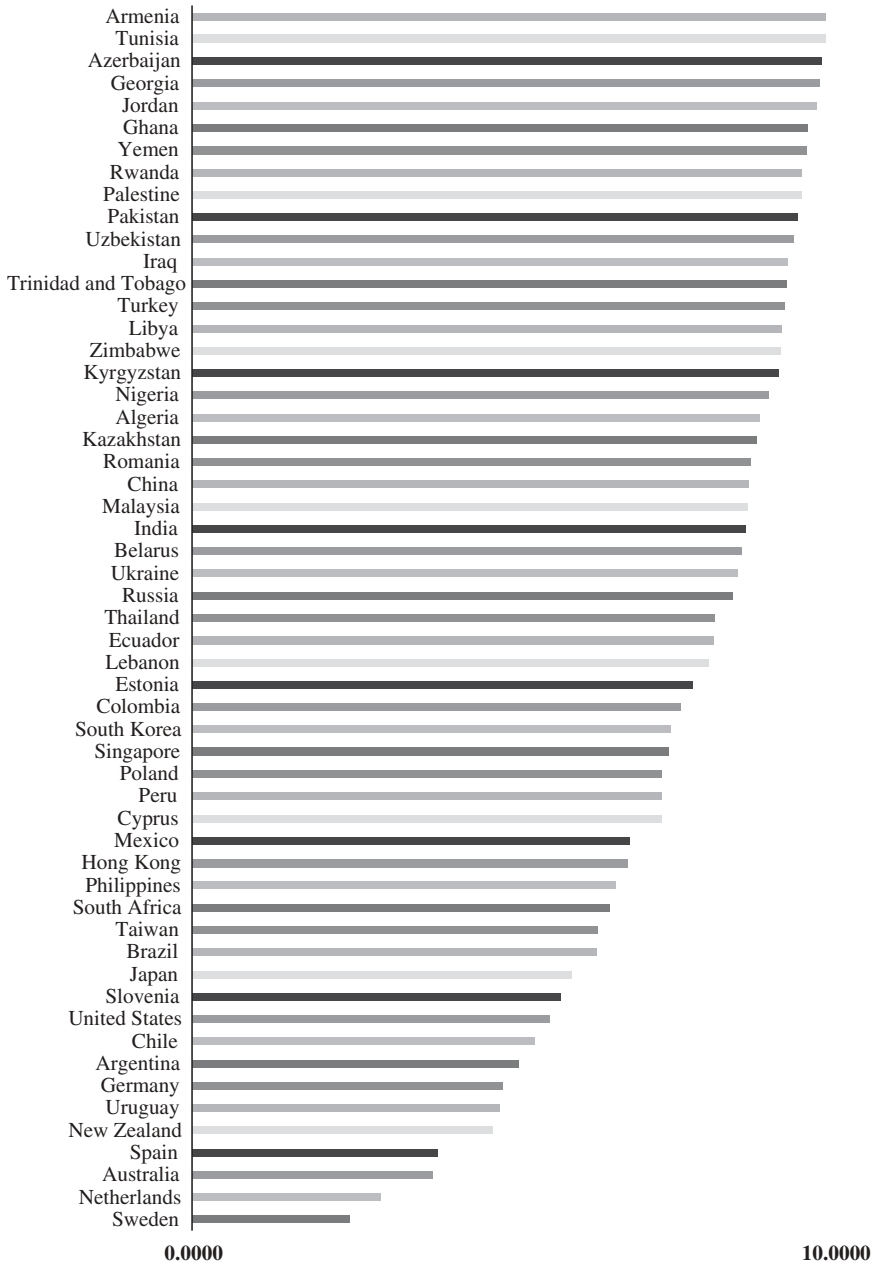


Figure 1. Rejection of homosexuality (mean per country) (2010–2014). *N* = 67,648.

The expectation is that religious attendance and religious particularism have a positive relationship with rejection of homosexuality. Model 1 shows that the effects of religious attendance, religious particularism, and religious saliency are all significant. This implies that the more frequently individuals attend religious services, the stronger religious particularistic beliefs individuals have; or the more salient religion is in individuals' life,

Table 1. Multilevel: Rejection of homosexuality.

	Model 1		Model 2		Model 3	
	B	SE	B	SE	B	SE
Intercept	5.398***	0.218	5.826***	0.229	5.105***	0.223
<i>Independent individual-level variables</i>						
Religious denomination						
<i>No denomination (ref.)</i>						
<i>Roman Catholic</i>	0.239***	0.038	0.232***	0.038	0.214***	0.037
<i>Protestant</i>	0.624***	0.043	0.633***	0.042	0.606***	0.042
<i>Orthodox (Russian/Greek/etc.)</i>	0.359***	0.055	0.330***	0.054	0.314***	0.054
<i>Muslim</i>	0.577***	0.052	0.583***	0.051	0.544***	0.051
<i>Hindu</i>	0.821***	0.078	0.793***	0.077	0.752***	0.077
<i>Buddhist</i>	0.502***	0.066	0.407***	0.065	0.391***	0.065
<i>Other Christian</i>	0.701***	0.076	0.757***	0.075	0.736***	0.074
<i>Other</i>	0.614***	0.059	0.612***	0.058	0.596***	0.058
Religious attendance	0.065***	0.005	0.054***	0.005	0.050***	0.005
Religious particularism	0.276***	0.011	0.238***	0.010	0.208***	0.011
Religious saliency	0.287***	0.013	0.259***	0.013	0.248***	0.013
Authoritarianism					0.565***	0.032
Traditional gender beliefs					0.217***	0.015
Education			-0.079***	0.005	-0.068***	0.005
Gender (<i>ref. = female</i>)			0.354***	0.018	0.304***	0.019
Age			0.013***	0.001	0.012***	0.001
Income			-0.075***	0.005	-0.072***	0.005
Marital status						
<i>Married (ref.)</i>						
<i>Living together as married</i>			-0.376***	0.038	-0.375***	0.038
<i>Divorced</i>			-0.260***	0.049	-0.246***	0.049
<i>Separated</i>			-0.264***	0.069	-0.264***	0.069
<i>Widowed</i>			0.031	0.042	0.009	0.042
<i>Single</i>			-0.106***	0.026	-0.097***	0.025
Individual-level variance	5.609		5.435		5.393	
Country-level variance	2.506		2.624		2.427	
-2 log likelihood	308,974.749		306,836.850		306,319.767	

WVS (2010–2014). $N = 67,648$.* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

the more they reject homosexuality. So Hypothesis 2 and Hypothesis 3 can be confirmed. However, Hypothesis 4 is refuted, because the expectation was that the more salient religion is in individuals' life, the less they would reject homosexuality.

Model 2 shows that the effects for the different dimensions of religiosity are still significant, after controlling for all control variables on the individual level. Also in this model, Hindus reject homosexuality the most, but still, other Christians do not differ significantly from Hindus ($b = -0.036$, $p = 0.710$). Higher educated individuals reject homosexuality less strongly than lower educated individuals; males more than females; and older individuals more than younger individuals. Furthermore, the higher the income of individuals, the less strongly they reject homosexuality. Also, individuals with different marital statuses differ significantly: those who are not married reject homosexuality less strongly than those who are married. However, widowed people do not differ significantly from married individuals.

Tests of mediation

Authoritarianism and traditional gender beliefs are included in Model 3. The expectations are that both mediators have a positive effect on rejection of homosexuality and, moreover, explain the relationships between the different dimensions of religiosity and rejection of homosexuality. The results show that a stronger authoritarian personality or stronger traditional gender beliefs indeed contribute to more rejection of homosexuality. Therefore, Hypotheses 5 and 7 are confirmed.

Compared to Model 2, all relationships of the different dimension of religiosity with rejection of homosexuality are less strong, so this suggests that, to some extent, authoritarianism and traditional gender beliefs explain these relationships. The normal theory approach, also called the Sobel test, formally investigates the significance of a mediating variable (Hayes, 2013). First, religious denomination was dichotomized (“no denomination” versus “a denomination”). Second, regression analyses were run with the different independent variables predicting authoritarianism or traditional gender beliefs. Third, a regression analysis was run with the different independent variables and mediators predicting the dependent variable. According to the Sobel test, authoritarianism⁸ and traditional gender beliefs⁹ both play a significant mediating role in the relationships between all dimensions of religiosity and rejection of homosexuality.

The Sobel test assumes that the sampling distribution is normally distributed. However, it is desirable to use a test that does not require this assumption. An inferential test that does not require this assumption and respect irregularities in the sampling distribution is a bootstrapping procedure, called PROCESS (Hayes, 2013, pp. 105–113). It offers measures of the effect size of direct and indirect effects. Based on the bootstrap confidence intervals, the significance of the direct and indirect effects can be determined. Furthermore, contrary to the Sobel test, this procedure can estimate coefficients of more complex models involving multiple mediators. The results show that all dimensions of religiosity have a positive effect on authoritarianism and traditional gender beliefs (see [Figure A1](#) in the Appendix). In the Appendix, [Table A2](#) shows the indirect effects of the different dimensions of religiosity on rejection of homosexuality, via authoritarianism or traditional gender beliefs. If 0 is not in the confidence interval, the indirect effect is significant ($p < 0.05$). It shows that every indirect effect is significant. Overall, these results are in line with Hypotheses 6(a) and 8(a), but not in line with Hypotheses 6(b) and 8(b), because the expectations were that religiously salient people live by the “golden rule” and therefore are less likely to have authoritarian personality and traditional gender beliefs. Thus Hypotheses 5, 6 (a), 7, and 8(a) are confirmed. However, Hypotheses 6(b) and 8(b) are refuted.

Furthermore, the standardized results in the Appendix, [Table A3](#) show that religious saliency is the most important predictor, followed by religious denomination and religious particularism.

Robustness checks

The results show that in all models ([Table 1](#)), Hindus reject homosexuality most strongly. In the data, there are 3,807 individuals who adhere to Hinduism (5.628%). The majority, i.e., 3,311 out of 3,807 Hindus, live in India (86.971%). Therefore, it is interesting to test whether Hindus reject homosexuality still the most when Hindus from India are excluded from the data, because it might be a country effect, rather than the effect of religious denomination that explains this strong rejection. The results of these analyses are presented in the Appendix, [Tables A4](#) and [A5](#). Model 1 shows that other Christians reject homosexuality the most. However, when other Christians are the reference category, Protestants ($b = -0.052$, $p = 0.506$), Muslims ($b = -0.165$, $p = 0.051$), Buddhists ($b = -0.152$, $p = 0.113$), and others ($b = -0.114$, $p = 0.194$) do not differ from other Christians. This suggests that especially Hindus from India reject homosexuality and not so much all Hindus in these data.¹⁰

Conclusion and discussion

Religiosity appears to be one of the most important characteristics explaining rejection of homosexuality (Adamczyk & Pitt, 2009; Adamczyk, 2017; Herek & Capitanio, 1996; Rowatt et al., 2006; Schulte & Battle, 2004). Exposure to socializing agents, such as religious institutions, is considered to be essential in explaining individuals' attitudes (Durkheim, 1951; Ultee et al., 2003). The influence of religion on individuals' daily lives is argued to have become less prominent due to secularization processes, but the general attitude toward homosexuality remains negative in many countries (Adamczyk, 2017; McGee, 2016a, 2016b). Stark and Glock (1968) proposed that there are different dimensions of religiosity. Therefore, this study is—as far as we know—the first one to focus on the relationships between these different dimensions of religiosity and rejection of homosexuality to assess whether the relationships between these different dimensions and rejection of homosexuality vary.

It was found that individuals who adhere to any denomination reject homosexuality more strongly than those who do not adhere to a denomination. Hindus reject homosexuality the most, but other Christians do not differ from the Hindus. One reason for this finding may be that some of the main Christian denominations have been losing members, while the more conservative denominations are still growing (Adamczyk, 2017; Robbins, 2004). However, the finding that Hindus reject

homosexuality the most is not in line with previous studies (Adamczyk & Pitt, 2009; Adamczyk, 2017; Jäckle & Wenzelburger, 2015). Additional tests (available on request) revealed that gay legislation and HIV prevalence could not explain this finding. Future research should find another explanation why Hindus, especially in India, reject homosexuality the most.

A higher frequency of individuals' religious attendance is also related to stronger rejection of homosexuality. So individuals who are more integrated into a religious community and therefore are more frequently exposed to traditional norms and values, by attending religious services, more strongly reject homosexuality. This finding is consistent with previous research (Schulte & Battle, 2004; Whitley, 2009).

Furthermore, individuals who have stronger religious particularistic beliefs—who believe that their religion is the only acceptable religion—also more strongly reject homosexuality. Strong religious ingroup favoritism is associated with more unfavorable attitudes toward other religious outgroups (Allport, 1966, p. 450) and, more generally, with more unfavorable attitudes toward ethnic outgroups (Scheepers et al., 2002). Individuals who have stronger religious particularistic beliefs might feel threatened by the deviating lifestyles homosexuals have that violate their religious norms and values (Halstead & Lewicka, 1998).

The expectation was that the more salient religion is in individuals' lives, the less strongly they would reject homosexuality. Salient people take their religiosity seriously into account in their daily decisions. Furthermore, the expectation was that they would live by the "golden rule." Previously, Scheepers et al. (2002) actually found that religious saliency reduced unfavorable attitudes toward ethnic outgroups. However, this study shows that the more important religion is in individuals' lives, the more strongly they reject homosexuality.

Nevertheless, there are multiple explanations why religious saliency would increase rejection of homosexuality (Adamczyk, 2017, pp. 25–27). Religious saliency is likely to shape moral attitudes through the engagement in a religious community or religious group. Through activities, religious adherents are more likely to get formal and direct exposure to the (negative) attitude their religion has toward homosexuality. Such collective exposure apparently overrides individuals' saliency when it comes to rejection of homosexuality belonging to people's ingroup.

Overall, it seems that every dimension of religiosity has a positive relationship with rejection of homosexuality. Exposure to this socializing agent, religion, has for all dimensions a positive relationship with rejection of homosexuality, which is in line with socialization and integration theories (Durkheim, 1951; Ultee et al., 2003).

The current study also found that authoritarianism and traditional gender beliefs are related to rejection of homosexuality, which is in line with previous studies (Adamczyk, 2017; Kite & Whitley, 1996; Whitley, 2001; Whitley & Ægisdóttir, 2000). Moreover, these theoretical relationships, previously assessed in predominantly smaller samples, also appear to hold in large and representative samples. We found strong evidence for mediation in the relationships between different dimensions of religiosity and rejection of homosexuality. It appears that individuals who adhere to a denomination, who more frequently attend religious services, or who have stronger religious particularistic beliefs—who believe that their religion is the only acceptable religion—have a stronger authoritarian personality and stronger traditional gender beliefs and, consequently, reject homosexuality more strongly. To the best of our knowledge, this is the first time these mediators have been tested so rigorously on such a large scale, providing evidence to the generalization of these theoretical insights. However, the question of causality now emerges: Does religiosity (really) induce authoritarianism and traditional gender beliefs, or vice versa? There is no convincing evidence for the direction of this relationship, but the proposition is that religiosity induces authoritarianism, because Adorno et al. (1969) and Eisinga et al. (1988, p. 98) suggested that exposure to socialization with religious doctrines contributes to the development of an authoritarian personality. Therefore, this causal relationship is assumed and tested in this study.

This study shows the importance of different dimensions of religiosity in explaining rejection of homosexuality. This is a curious relationship. The influence of religion is argued to have become less prominent in individuals' lives, since trends of secularization seem to be present in many societies, but the general attitude toward homosexuality remains rather negative (Adamczyk, 2017; McGee, 2016a, 2016b). This is a disturbing finding, because this means that different religions still shape individuals' moral attitudes, despite trends of secularization (Inglehart & Baker, 2000). Apparently, different religions pass on their negative views on homosexuality no longer by actual exposure, but in other, more latent ways as well.

Although this study has made some scientific improvements, it has its shortcomings, and there are some lacunae. First, as in every large-scale study, we are aware of the limitations of the number of items available, implying “partial coverage” (Van de Vijver & Leung, 1997) of the different religious dimensions with the available items. Nonetheless, we propose that the construction of our variables was valid and scientifically substantiated. Second, no more fine-grained distinction was made between different religious groups, although it was already made clear that religious groups differ a lot. This study tried to make a distinction between Sunni Islam and Shia Islam; however, these groups were too small to make valid comparisons. Future research could try to disentangle these two groups. But not only

Muslim groups should then be disentangled, but all denominations, because the relationships of different religious groups with rejection of homosexuality could be different.

Another drawback of this study is that the dimensions of religious experience and religious knowledge could not be taken into account. Future research could try to add these dimensions of religiosity to determine whether they have an effect on rejection of homosexuality and whether the relationships between these dimensions and rejection of homosexuality are also partially explained by authoritarianism and traditional gender beliefs. Furthermore, since the ICC in this study was large, indicating large differences between countries, future research should try to explain these differences.

Overall, it is important that not only individuals change their attitudes toward homosexuality to a more tolerant one but also, maybe even primarily, religious institutions. Religious institutions have found ways to continuously pass on these negative views. Therefore, it is important to focus on these religious institutions. Changing attitudes among leaders of religious institutions might also change the messages to which individuals are directly, but perhaps more important, indirectly exposed to. Let them love their neighbor, irrespective of their sexual orientation. Eventually, this may drive more tolerant attitudes toward outgroups and especially toward homosexuals.

Notes

- 1 The dimension of religious knowledge will not be discussed, because no literature was found that relates this dimension of religiosity to rejection of homosexuality, nor even prejudice toward other outgroups. Furthermore, the expectation would be that especially this dimension would suffer from the issue of multicollinearity. Moreover, the dimension of religious experience was initially hypothesized; however, no question in the World Values Survey could measure this dimension of religiosity.
- 2 The three largest categories are: Christian, Independent African Church (e.g., ZCC, Shembe), Jehovah's Witnesses.
- 3 The three largest categories are: Other; not specific, Daoism, Native; folk religion.
- 4 Independence, Hard work, Feeling of responsibility, Imagination, Tolerance and respect for other people, Thrift, saving money and things, Determination, perseverance, Religious faith, Unselfishness, Obedience, Self-expression.
- 5 Previous studies have shown that the internal consistency of this constructed scale is low (Brandt & Henry, 2012; Weiner & Federico, 2017). In the current study the Cronbach's alpha was also low (Cronbach's alpha of 0.256). Items from checklist measures often show a low internal consistency. Other studies also included the quality of "Tolerance and respect for other people" to make a scale; however, the internal consistency of this scale was even worse (Cronbach's alpha of 0.146; Singh & Dunn, 2015). However, based on the well-considered decisions made in previous studies (Brandt & Henry, 2012; Weiner & Federico, 2017, p. 404), authoritarianism was measured the same way and was not excluded.
- 6 $ICC = (3.707 / (3.707 + 5.860))$.

- 7 In this full model, a multicollinearity test was done to test whether variables are perfectly multicollinear. Based on the variance inflation factors (VIF), there were no variables that correlated too high ($VIF > 10$) (O'Brien, 2007).
- 8 Religious denomination: Sobel test statistic: 8.646 ($p = 0.000$); Religious attendance: Sobel test statistic: 4.526 ($p = 0.000$); Religious particularism: Sobel test statistic: 7.865 ($p = 0.000$); Religious saliency: Sobel test statistic: 9.711 ($p = 0.000$).
- 9 Religious denomination: Sobel test statistic: 3.297 ($p = 0.001$); Religious attendance: Sobel test statistic: 6.309 ($p = 0.000$); Religious particularism: Sobel test statistic: 13.751 ($p = 0.000$); Religious saliency: Sobel test statistic: 2.171 ($p = 0.030$).
- 10 In India, homosexuality is still illegal. However, additional analyses found that, controlled for gay legislation, Hindus still reject homosexuality more strongly than Muslims. Another explanation might be that India has one of the world's largest populations of people with HIV/AIDS (Timmons & Kumar, 2009). In the 1980s, people did not understand the causes and wrongly believed it affected only homosexuals; therefore, rejection of homosexuality was strong (Keene, 2002). In the current study, an additional check found no relationship between HIV prevalence per country and rejection of homosexuality.

Disclosure statement

No potential conflict of interest was reported by the authors.

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Appendix

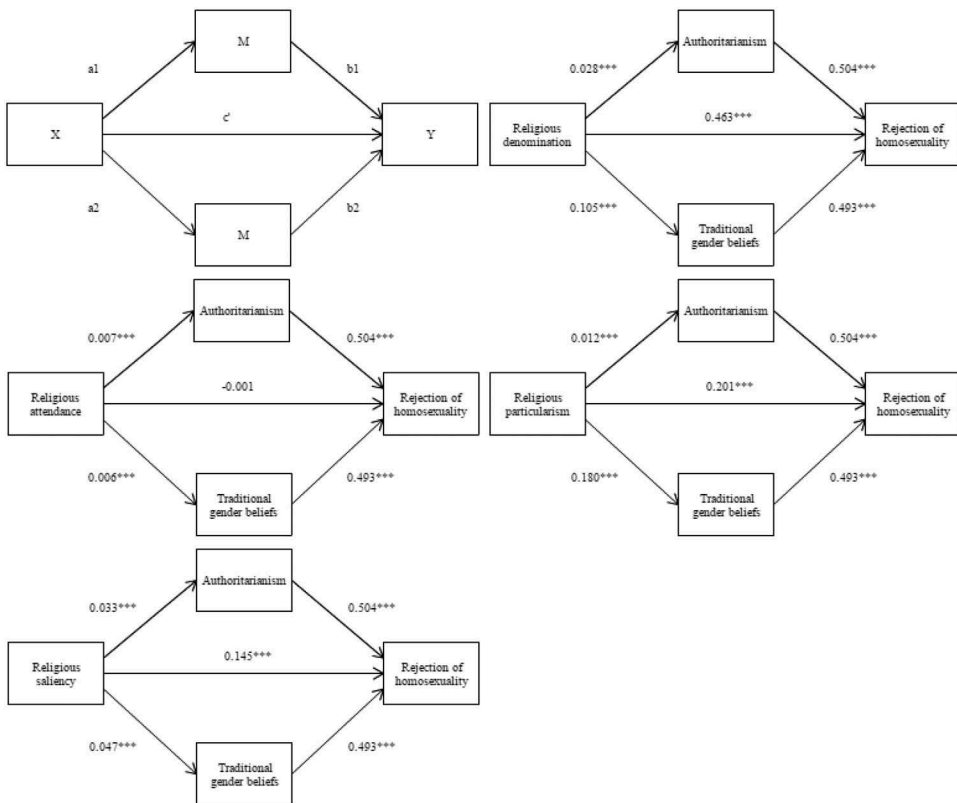


Figure A1. Testing mediating effects (bootstrap).
WVS (2010–2014) $N = 67,648$

Table A1. Descriptive statistics.

	Minimum	Maximum	Mean	SD
<i>Dependent variable</i>				
Rejection of homosexuality	1	10	7.72	3.03
<i>Independent individual-level variables</i>				
Religious denomination				
<i>No denomination</i>	0	1	0.16	0.36
<i>Roman Catholic</i>	0	1	0.19	0.39
<i>Protestant</i>	0	1	0.11	0.32
<i>Orthodox (Russian/Greek/etc.)</i>	0	1	0.11	0.32
<i>Muslim</i>	0	1	0.27	0.44
<i>Hindu</i>	0	1	0.06	0.23
<i>Buddhist</i>	0	1	0.04	0.20
<i>Other Christian</i>	0	1	0.02	0.14
<i>Other</i>	0	1	0.04	0.19
Religious attendance	1	7	4.05	2.16
Religious particularism	1	4	2.51	1.07
Religious saliency	1	4	3.16	1.02
Authoritarianism	0	1	0.55	0.30
Traditional gender beliefs	1	4	2.38	0.71
Education	1	9	5.76	2.37
Gender (ref. = female)	0	1	0.48	0.50
Age	18	99	41.70	16.32
Income	1	10	4.92	2.08
Marital status				
<i>Married</i>	0	1	0.57	0.50
<i>Living together as married</i>	0	1	0.07	0.26
<i>Divorced</i>	0	1	0.04	0.19
<i>Separated</i>	0	1	0.02	0.13
<i>Widowed</i>	0	1	0.06	0.23
<i>Single</i>	0	1	0.25	0.43

WVS (2010–2014). *N* = 67,648.

Table A2. Indirect effects of the different dimensions of religiosity.

Indirect effect (X → M → Y)	B	SE	LCI	UCI
Religious denomination				
Authoritarianism	0.027	0.004	0.020	0.034
Traditional gender beliefs	0.072	0.006	0.062	0.084
Religious attendance				
Authoritarianism	0.008	0.001	0.006	0.009
Traditional gender beliefs	0.005	0.001	0.003	0.007
Religious particularism				
Authoritarianism	0.012	0.001	0.001	0.015
Traditional gender beliefs	0.125	0.004	0.118	0.132
Religious saliency				
Authoritarianism	0.037	0.002	0.033	0.041
Traditional gender beliefs	0.032	0.002	0.028	0.037

WVS (2010–2014). *N* = 67,648.

Table A3. Multilevel: Rejection of homosexuality (standardized).

	Model 1	
	B	SE
Intercept	7.671***	0.210
<i>Independent individual-level variables</i>		
Religious denomination	0.231***	0.013
Religious attendance	0.108***	0.011
Religious particularism	0.223***	0.011
Religious saliency	0.253***	0.013
Authoritarianism	0.170***	0.010
Traditional gender beliefs	0.154***	0.011
Education	-0.161***	0.011
Gender (<i>ref.</i> = female)	0.152***	0.009
Age	0.198***	0.010
Income	-0.149***	0.010
Marital status	0.108***	0.010

WVS (2010–2014). $N = 67,648$.* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.**Table A4.** Multilevel: Rejection of homosexuality (With all countries).

	Model 1		Model 2	
	B	S.E.	B	SE
Intercept	0.925***	0.082	1.366***	0.100
<i>Independent individual-level variables</i>				
Religious denomination				
<i>No denomination (ref.)</i>				
<i>Roman Catholic</i>	0.242***	0.038	0.234***	0.038
<i>Protestant</i>	0.625***	0.043	0.634***	0.042
<i>Orthodox (Russian/Greek/etc.)</i>	0.349***	0.055	0.319***	0.055
<i>Muslim</i>	0.564***	0.052	0.571***	0.052
<i>Hindu</i>	0.815***	0.078	0.786***	0.077
<i>Buddhist</i>	0.500***	0.066	0.405***	0.066
<i>Other Christian</i>	0.702***	0.076	0.758***	0.075
<i>Other</i>	0.614***	0.059	0.612***	0.058
Religious attendance	0.065***	0.005	0.054***	0.005
Religious particularism	0.275***	0.011	0.237***	0.010
Religious saliency	0.286***	0.013	0.258***	0.013
Authoritarianism				
Traditional gender beliefs				
Education			-0.079***	0.005
Gender (<i>ref.</i> = female)			0.353***	0.018
Age			0.013***	0.001
Income			-0.075***	0.005
Marital status				
<i>Married (ref.)</i>				
<i>Living together as married</i>			-0.375***	0.038
<i>Divorced</i>			-0.259***	0.049
<i>Separated</i>			-0.263***	0.069
<i>Widowed</i>			0.031	0.042
<i>Single</i>			-0.106***	0.026
Countries (<i>ref.</i> = Sweden)				
<i>Algeria</i>	4.943***	0.119	4.942***	0.118
<i>Azerbaijan</i>	6.530***	0.117	6.610***	0.115
<i>Argentina</i>	2.474***	0.117	2.492***	0.115
<i>Australia</i>	1.389***	0.109	1.310***	0.107

(Continued)

Table A4. (Continued).

	Model 1		Model 2	
	B	S.E.	B	SE
<i>Armenia</i>	6.481***	0.118	6.495***	0.117
<i>Brazil</i>	3.205***	0.103	3.179***	0.102
<i>Belarus</i>	5.789***	0.110	5.812***	0.108
<i>Chile</i>	2.639***	0.118	2.539***	0.117
<i>China</i>	6.631***	0.117	6.402***	0.116
<i>Taiwan</i>	3.477***	0.111	3.476***	0.109
<i>Colombia</i>	4.469***	0.104	4.569***	0.103
<i>Cyprus</i>	4.117***	0.117	4.154***	0.116
<i>Ecuador</i>	5.025***	0.106	5.062***	0.105
<i>Estonia</i>	5.404***	0.106	5.348***	0.105
<i>Georgia</i>	6.212***	0.118	6.237***	0.116
<i>Palestine</i>	5.632***	0.121	5.725***	0.119
<i>Germany</i>	2.270***	0.097	2.065***	0.095
<i>Ghana</i>	5.978***	0.100	6.016***	0.100
<i>Hong Kong</i>	4.237***	0.111	4.121***	0.110
<i>India</i>	4.939***	0.106	4.759***	0.105
<i>Iraq</i>	5.524***	0.115	5.530***	0.114
<i>Japan</i>	3.400***	0.123	3.234***	0.121
<i>Kazakhstan</i>	5.887***	0.105	5.994***	0.104
<i>Jordan</i>	5.776***	0.115	5.771***	0.114
<i>South Korea</i>	4.688***	0.109	4.761***	0.108
<i>Kyrgyzstan</i>	5.680***	0.109	5.807***	0.108
<i>Lebanon</i>	4.699***	0.111	4.827***	0.110
<i>Libya</i>	5.223***	0.109	5.325***	0.108
<i>Malaysia</i>	4.906***	0.110	4.959***	0.109
<i>Mexico</i>	3.720***	0.098	3.654***	0.098
<i>Netherlands</i>	0.678***	0.102	0.434***	0.101
<i>New Zealand</i>	2.204***	0.129	2.294***	0.127
<i>Nigeria</i>	5.271***	0.101	5.412***	0.101
<i>Pakistan</i>	5.569***	0.115	5.557***	0.115
<i>Peru</i>	4.220***	0.112	4.291***	0.110
<i>Philippines</i>	3.119***	0.108	3.056***	0.107
<i>Poland</i>	4.276***	0.121	4.154***	0.119
<i>Romania</i>	5.489***	0.112	5.459***	0.110
<i>Russia</i>	5.691***	0.103	5.647***	0.102
<i>Rwanda</i>	6.447***	0.103	6.522***	0.103
<i>Singapore</i>	4.318***	0.099	4.382***	0.098
<i>Slovenia</i>	3.210***	0.114	3.095***	0.113
<i>South Africa</i>	3.048***	0.093	3.211***	0.092
<i>Zimbabwe</i>	5.734***	0.101	5.769***	0.101
<i>Spain</i>	1.418***	0.113	1.176***	0.112
<i>Thailand</i>	4.749***	0.124	4.650***	0.123
<i>Trinidad and Tobago</i>	5.907***	0.114	5.805***	0.113
<i>Tunisia</i>	6.024***	0.119	5.942***	0.118
<i>Turkey</i>	5.607***	0.110	5.664***	0.109
<i>Ukraine</i>	5.558***	0.109	5.541***	0.108
<i>United States</i>	2.696***	0.093	2.742***	0.092
<i>Uruguay</i>	2.343***	0.118	2.185***	0.117
<i>Uzbekistan</i>	5.940***	0.111	6.032***	0.110
<i>Yemen</i>	5.706***	0.134	5.534***	0.133
Individual-level variance	5.605		5.430	
Country-level variance	0.000		0.000	
-2 log likelihood		308,576.354		306,434,176

WVS (2010–2014). *N* = 63,442.

p* < 0.05; *p* < 0.01; ****p* < 0.001.

Table A5. Multilevel: Rejection of homosexuality (Without India).

	Model 1		Model 2	
	B	SE	B	SE
Intercept	0.881***	0.082	1.284***	0.102
<i>Independent individual-level variables</i>				
Religious denomination				
<i>No denomination (ref.)</i>				
<i>Roman Catholic</i>	0.254***	0.038	0.250***	0.038
<i>Protestant</i>	0.658***	0.043	0.675***	0.042
<i>Orthodox (Russian/Greek/etc.)</i>	0.372***	0.056	0.346***	0.055
<i>Muslim</i>	0.530***	0.054	0.546***	0.053
<i>Hindu</i>	0.398***	0.117	0.396***	0.115
<i>Buddhist</i>	0.556***	0.068	0.454***	0.067
<i>Other Christian</i>	0.711***	0.078	0.785***	0.077
<i>Other</i>	0.596***	0.060	0.594***	0.059
Religious attendance	0.057***	0.006	0.045***	0.005
Religious particularism	0.312***	0.011	0.268***	0.011
Religious saliency	0.279***	0.013	0.254***	0.013
Authoritarianism				
Traditional gender beliefs				
Education			-0.089***	0.005
Gender (<i>ref. = female</i>)			0.382***	0.019
Age			0.014***	0.001
Income			-0.071***	0.005
Marital status				
<i>Married (ref.)</i>				
<i>Living together as married</i>			-0.273***	0.039
<i>Divorced</i>			-0.208***	0.049
<i>Separated</i>			-0.220**	0.070
<i>Widowed</i>			0.038	0.043
<i>Single</i>			-0.088***	0.026
Countries (<i>ref. = Sweden</i>)				
<i>Algeria</i>	4.942***	0.120	4.955***	0.119
<i>Azerbaijan</i>	6.541***	0.118	6.654***	0.116
<i>Argentina</i>	2.487***	0.117	2.501***	0.115
<i>Australia</i>	1.399***	0.109	1.328***	0.107
<i>Armenia</i>	6.434***	0.119	6.488***	0.117
<i>Brazil</i>	3.219***	0.103	3.189***	0.102
<i>Belarus</i>	5.780***	0.110	5.833***	0.108
<i>Chile</i>	2.644***	0.118	2.546***	0.117
<i>China</i>	6.628***	0.118	6.422***	0.117
<i>Taiwan</i>	3.479***	0.111	3.511***	0.110
<i>Colombia</i>	4.471***	0.104	4.560***	0.103
<i>Cyprus</i>	4.119***	0.118	4.176***	0.116
<i>Ecuador</i>	5.035***	0.107	5.069***	0.105
<i>Estonia</i>	5.397***	0.106	5.350***	0.105
<i>Georgia</i>	6.167***	0.118	6.234***	0.117
<i>Palestine</i>	5.641***	0.121	5.768***	0.120
<i>Germany</i>	2.258***	0.097	2.052***	0.095
<i>Ghana</i>	5.984***	0.100	6.032***	0.101
<i>Hong Kong</i>	4.220***	0.111	4.126***	0.110
<i>Iraq</i>	5.537***	0.116	5.559***	0.115
<i>Japan</i>	3.385***	0.123	3.249***	0.122
<i>Kazakhstan</i>	5.900***	0.106	6.034***	0.105
<i>Jordan</i>	5.777***	0.116	5.793***	0.115
<i>South Korea</i>	4.690***	0.110	4.802***	0.108
<i>Kyrgyzstan</i>	5.691***	0.110	5.850***	0.108

(Continued)

Table A5. (Continued).

	Model 1		Model 2	
	B	SE	B	SE
<i>Lebanon</i>	4.720***	0.112	4.871***	0.110
<i>Libya</i>	5.221***	0.110	5.347***	0.109
<i>Malaysia</i>	4.945***	0.110	5.010***	0.109
<i>Mexico</i>	3.720***	0.098	3.661***	0.098
<i>Netherlands</i>	0.687***	0.102	0.442***	0.101
<i>New Zealand</i>	2.212***	0.129	2.314***	0.127
<i>Nigeria</i>	5.279***	0.101	5.442***	0.101
<i>Pakistan</i>	5.573***	0.116	5.572***	0.116
<i>Peru</i>	4.215***	0.112	4.283***	0.111
<i>Philippines</i>	3.114***	0.109	3.069***	0.108
<i>Poland</i>	4.278***	0.121	4.170***	0.119
<i>Romania</i>	5.470***	0.112	5.459***	0.111
<i>Russia</i>	5.677***	0.104	5.654***	0.102
<i>Rwanda</i>	6.466***	0.103	6.541***	0.103
<i>Singapore</i>	4.356***	0.099	4.439***	0.098
<i>Slovenia</i>	3.207***	0.114	3.098***	0.113
<i>South Africa</i>	3.049***	0.093	3.228***	0.092
<i>Zimbabwe</i>	5.748***	0.101	5.800***	0.101
<i>Spain</i>	1.412***	0.113	1.168***	0.112
<i>Thailand</i>	4.703***	0.125	4.618***	0.124
<i>Trinidad and Tobago</i>	6.016***	0.116	5.895***	0.115
<i>Tunisia</i>	6.026***	0.120	5.952***	0.119
<i>Turkey</i>	5.618***	0.111	5.693***	0.110
<i>Ukraine</i>	5.546***	0.110	5.556***	0.108
<i>United States</i>	2.710***	0.094	2.778***	0.092
<i>Uruguay</i>	2.346***	0.118	2.174***	0.117
<i>Uzbekistan</i>	5.937***	0.112	6.052***	0.110
<i>Yemen</i>	5.711***	0.135	5.557***	0.134
Individual-level variance	5.617		5.427	
Country-level variance	0.000		0.000	
-2 log likelihood		289,525.225		287,347.944

WVS (2010–2014). *N* = 63,442.

p* < 0.05; *p* < 0.01; ****p* < 0.001.