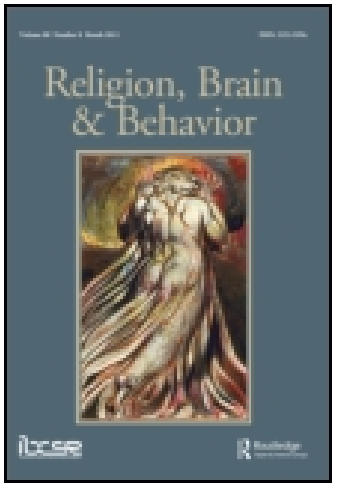


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# Secular rule of law erodes believers' political intolerance of atheists

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# Secular rule of law erodes believers' political intolerance of atheists

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Atheists are distrusted in societies with religious majorities. However, relatively little is known about the underlying reasons for this phenomenon. Previous evidence suggests that distrust of atheists is in part the result of believers thinking that being under supernatural surveillance by a watchful God underlies moral behavior. However, secular rule of law, including institutions such as police, judges, and courts, are also potent sources of prosocial behavior in some parts of the world. The presence of such secular authority therefore could replace religion's prosocial role and erode believers' rejection of atheists. In two complementary cross-national analyses, we found support for this hypothesis: believers from countries with a strong secular rule of law showed markedly reduced political intolerance of atheists compared to believers from countries with a weak secular rule of law. This relationship remained strong after controlling for individual demographic characteristics and several country-level socio-economic predictors of atheist distrust, such as human development, individualism, religious involvement, and distrust of people in general.

**Keywords:** atheism; God; government; prejudice; religious beliefs; trust

## Secular rule of law erodes believers' political intolerance of atheists

Although the majority of the world remains religious, rising levels of economic wealth and social safety nets have led to increasing secularization in the post-industrial world (Norris & Inglehart, 2004). One consequence of this secularization trend has been the growing prevalence of atheists, who are estimated to number in the hundreds of millions, possibly more than half a billion worldwide (Norenzayan & Gervais, 2013; Zuckerman, 2008). Despite their significant numbers, however, atheists score at the bottom of cultural acceptance polls in countries with religious majorities (Edgell, Gerteis, & Hartmann, 2006; Gervais, 2011; Gervais, Shariff, & Norenzayan, 2011; Inglehart, Basanez, Diez-Medrano, Halman, & Luijkx, 2004; Norenzayan & Gervais, 2012). In recent polls, only 45% of American respondents reported that they would vote for a qualified atheist presidential candidate of their preferred political party (reported in Edgell et al., 2006). The atheist candidate received the lowest support out of several hypothetical candidates belonging to various marginalized groups; was the only one who did not secure a majority vote; and belonged to one of the few groups whose cultural acceptance has not increased substantially over time (Edgell et al., 2006). Intolerance of atheists is not confined to the political domain: Americans rate atheists as the group that least agrees with their vision of America, as well as the group that they would least approve of as marriage

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partners for their children (Edgell et al., 2006). Although atheists are rejected where there are religious majorities, there is considerable variability in attitudes towards atheists across nations (Zuckerman, 2008). For example, while 95% of Pakistanis agree or strongly agree with the statement "Politicians who don't believe in God are unfit for public office," only 39% of both Americans and Mexicans do so, compared to only 21% of Canadians, and merely 8% of Danes (Inglehart et al., 2004). What explains this cultural variability? This question has not received adequate attention from researchers, and is the central question of this paper. Building on recent experimental work exploring factors underlying and potentially mitigating negative attitudes towards atheists (Gervais, 2011; Gervais, et al., 2011; Gervais & Norenzayan, 2012b), we tested the hypothesis that cultural exposure to effective rule of law is a key factor that reduces believers' intolerance of atheists.



## Believing in religious belief

For cooperation to flourish, individuals must identify potential cooperators and potential free riders – a central adaptive problem in human cooperation (e.g., Axelrod, 1984; Henrich & Henrich, 2007). However, trustworthiness, as a highly valued trait in other people (Cottrell, Neuberg, & Li, 2007), can only be inferred from indirect cues (Simpson, 2007). There likely are several religious cues that elicit trust, such as costly behaviors that are hard to fake (Bulbulia & Sosis, 2011; Sosis & Alcorta, 2003) and credible displays on the part of cultural models that transmit faith in cultural learners (Henrich, 2009). Above and beyond the trust-promoting benefits of religious participation, religious beliefs in supernatural monitors might also promote cooperation by triggering cues that someone is watching. A variety of evidence indicates that people act more prosocially when they believe that their behavior is being monitored. For example, exposure to pictures of eyes encourages generosity and reduces cheating in anonymous laboratory contexts (Haley & Fessler, 2005), as well as in naturalistic settings (Bateson, Nettle, & Roberts, 2006). Conversely, anonymity—even illusory cues to anonymity such as wearing dark glasses or being in a dimly lit room—promotes self-interested behavior (e.g., Hoffman, McCabe, Shachat, & Smith, 1994; Zhong, Bohns, & Gino, 2010). Thus, observers may infer that a person who perceives that they are under surveillance will be on their best behavior, and may therefore be trusted.

However, people in large, anonymous societies cannot watch each other all of the time. This is why in such societies, belief in watchful gods may serve an important social function. Prosocial religious groups endorse the existence of watchful deities who are capable of monitoring and judging human thought and behavior even when no humans are watching (Bering, 2011; Johnson & Bering, 2006; Norenzayan, in press; Norenzayan & Shariff, 2008; for a critical review, see Schloss & Murray, 2011). Consistent with this reasoning, experimentally induced thoughts of supernatural agents, like thoughts of other people watching, heighten psychological states that reflect the experience of being under social monitoring (Gervais & Norenzayan, 2012a). Additionally, God's knowledge of morally relevant behaviors, rather than morally irrelevant behaviors, is more cognitively accessible in the minds of believers (Purzycki et al., 2012). Therefore, reminders of God and other supernatural agents also encourage a variety of prosocial behaviors (e.g., McKay, Efferson, Whitehouse, & Fehr, 2011; Piazza, Bering, & Ingram, 2011; Pichon, Boccato, & Saroglou, 2007; Randolph-Seng & Nielsen, 2007; Shariff & Norenzayan, 2007).

A persistent association between religious beliefs and displays, and cooperative behavior may therefore lead people to use belief in supernatural monitors as a trust cue. Consistent with this, Sosis (2005) reports several historical and contemporary ethnographic examples of religious membership serving as a potent elicitor of trust in cooperative exchanges. Existing experimental evidence from the "trust game" also supports this association between religiosity and trusting behavior in the lab. Participants, particularly believers, were more willing to transfer money to other believers, with the expectation of greater reciprocal cooperation on the latter's part (Tan & Vogel, 2008).

This line of reasoning brings us back to the question of why believers view atheists with suspicion. If believers treat sincere belief in God as a cue of trustworthiness, then non-belief would be seen as a strong cue for lack of trust. Consistent with this argument, several lines of experimental evidence show that believers treat criminal untrustworthiness, such as committing theft or insurance fraud, as typical of atheists, but not of Christians, gays, Jewish people, Muslims, or feminists; belief in God and, specifically, the belief that people behave better when they feel that they are under supernatural surveillance, strongly predicted distrust of atheists (Gervais et al., 2011).

In sum, thinking of God activates the same reputational concerns as does thinking that other people are watching (Gervais & Norenzayan, 2012a). This leads believers to act more cooperatively when God is salient. It also follows that believers treat belief in God as a cue of trustworthiness (e.g., Norenzayan & Shariff, 2008), and view atheists as "moral wild cards" because atheists do not believe that a real God is monitoring their behavior. Thus, one key consequence of religious prosociality is distrust of atheists (Gervais et al., 2011).

## The interchangeable functions of social and supernatural surveillance

Large-scale prosociality rooted in religion is far from the only source of prosociality; modern secular institutions have given rise to high levels of cooperation and trust in many places, in some cases even replacing supernatural authority (Norris & Inglehart, 2004). Consistent with this pattern found at a societal level, experimentally induced reminders of secular authority concepts (e.g., civic, jury, police) increase prosocial behavior to the same extent as do reminders of a watchful God (Shariff & Norenzayan, 2007). Therefore, secular and sacred authority could serve interchangeable functions in encouraging trust and prosociality, with important implications for distrust of atheists.

To the extent that people become aware of other "higher" (though not supernatural) powers that monitor social interactions, they may be less inclined to rely on belief in supernatural sources of social monitoring as cues to trustworthiness, and as a result be less likely to view atheists with intolerance; that is, trust-inspiring secular authorities that enforce prosocial behavior should reduce intolerance of atheists. This effect should be specific to atheist distrust and not merely a by-product of reduced distrust of people in general.

This hypothesis gains plausibility in light of recent experimental evidence using cognitive priming. Following the logic outlined above, we (Gervais & Norenzayan, 2012b) found that reminders of secular authority reduced distrust of atheists in samples drawn from countries with strong secular institutions (Canada and the USA). In one study, overt reminders of effective secular authority (watching a video

on the effectiveness of local police, compared to watching a video about local tourist attractions) reduced distrust of atheists. In two additional experiments, reminders of secular authority using an implicit priming technique again reduced distrust of atheists. These effects were specific to atheists. In all three studies, distrust or prejudice towards other groups, such as gays, that are also targeted by many religious groups was not affected. In sum, reminders of watchful secular authorities (e.g., police, judges, courts) reduced believers' distrust of atheists, but (as predicted by the theoretical argument) *did not* affect prejudice towards, or distrust of, other groups.



## Present research

If cultural exposure to reliable secular authority reduces intolerance of atheists, then, all else being equal, religious believers from countries with a firmly established secular rule of law should be less intolerant of atheists than believers from countries with fewer secular institutions enforcing prosocial interactions. In other words, effective secular rule of law should predict reduced intolerance of atheists among believers worldwide. We focused on a dependent measure that assessed tolerance of atheists in politics, because this is one important domain of trust and cultural acceptance that has been widely assessed across societies. We tested this hypothesis using three strategies. First, to rule out perceived similarity or in-group bias as an obvious alternative explanation, we excluded atheists from our samples, focusing instead on the question of believers' intolerance of atheists. Second, we assessed whether the effects of rule of law on intolerance of atheists were dependent on the prevalence of religious believers across countries. Third, a single statistical model that would have included all the covariates would have led to a sharp reduction in sample size. To overcome this problem, we conducted two complementary statistical analyses (henceforth, Model 1 and Model 2) that controlled for different covariates, enabling us to test the robustness of our findings against alternative third variable explanations.

One alternative explanation is that the rule of law's effect on intolerance of atheists is caused by high levels of human development enjoyed by countries with a strong rule of law. This is plausible because human development is a powerful predictor of a variety of social attitudes, including societal trust and lower levels of intolerance towards marginalized groups. Another possibility is that it is the cultural ideology of individualism (Triandis, 1993)—also associated with greater rule of law—that erodes distrust of atheism by fostering values associated with respect for freedom of thought and action even for citizens seen to be counter-normative. Consistent with these two possibilities, both human development and individualism indeed independently predict international variation in attitudes towards atheists (Gervais, 2011). A third alternative explanation is that the path from strong rule of law to less intolerance of atheists is not specific to atheists, but is a by-product of rule of law fostering trust towards people in general. To assess these alternative explanations, Model 1 controlled for country-level human development and prevalence of religious believers, and evaluated the specificity of effects by controlling for trust towards people in general. Model 2 included human development, prevalence of religious believers, and individualism as country-level covariates, and assessed individual-level key socio-demographic controls (see below). Cross-national

sample sizes varied between $N = 31$ and $N = 54$, contingent on the availability of cases depending on the variables under consideration.

## Method

### *Model 1*

We calculated a country-by-country measure of political intolerance of atheists. In this model, we controlled for international differences in human development and religious belief. In addition, we measured distrust of people in general to test the alternative possibility that effective secular authority reduces atheist distrust by making people generally more trusting of each other.

#### *Political intolerance of atheists*

We selected participants from Waves 4 and 5 (1999–2007) of the World Values Survey (Inglehart et al., 2004) who indicated that they believe in God. Using these participants, we calculated mean country-level agreement with the statement "People who do not believe in God are unfit for public office" as a measure of atheist distrust ($N = 48{,}446$ people from 35 countries). This item, and others like it, are widely used by sociologists to assess social exclusion of various out-groups, including distrust of atheists worldwide (Zuckerman, 2008). In a separate pilot study with American participants ($N = 50$), we found that endorsement of this political intolerance item correlated significantly and highly with a single-item standard "distrust thermometer" assessing distrust towards atheists (see Gervais et al., 2011) ($r = 0.57$, $p < .001$), providing additional validity evidence for the dependent measure.

#### *Secular rule of law*

Rule of law was assessed using data collated by the World Bank pertaining to the degree to which secular authorities create and enforce laws that help guarantee individual coordination and cooperation, focusing on "quality of contract enforcement, property rights, the police, and the courts" (http://info.worldbank.org/governance/wgi/mc_countries.asp). We calculated a composite rule of law score by calculating each country's mean score for the years 2000–07. Standardized scores ranged from countries with very ineffective secular authority (e.g., Nigeria: $-1.58$, Russia: $-0.64$) to countries with very effective secular authority (e.g., Canada: 1.67, Finland: 1.91). In addition, this index is strongly associated with other government effectiveness indices, such as the World Bank's overall government effectiveness index ($r = 0.97$) and Transparency International's Corruption Index ($r = -0.97$). The overall pattern of results is similar if either of these measures is used instead of rule of law.

#### *Covariates*

We included key country-level variables that have previously been linked to international differences in atheist distrust (Gervais, 2011). We calculated mean Human Development Index scores (a combined measure of health, wealth, and

education: http://hdr.undp.org/en/statistics/) for the years 2000–07. In addition, we calculated mean prevalence of religious belief (percentage of people who believe in God) from the World Values Survey (Waves 4–5). To measure general distrust, we calculated the percentage of participants in each country who disagreed when asked whether most people can be trusted ($N = 55{,}754$ people from 38 countries). Atheist distrust and general distrust were not significantly correlated across nations ($r = 0.17$, $p = .34$). We then conducted formal statistical mediation to further test whether rule of law's relationship with atheist distrust is statistically mediated by distrust of people in general.



### *Model 2*

We conducted Model 2 with two primary goals in mind. First, we tested whether the results of Model 1 were robust to a host of individual-level socio-demographic controls (see below for more details about this procedure). Second, in addition to human development and religious belief, we assessed country-level individualism, which in previous research has been found to predict a reduction in atheist distrust (Gervais, 2011). The general distrust measure was not included because to do so while also controlling for individual-level background variables would have dramatically reduced our sample size.

#### *Political intolerance of atheists*

We used a previously published country-by-country measure (Gervais, 2011) derived from Wave 4 (1999–2004) of the World Values Survey. This measure utilized the same World Values Survey item assessed in Model 1; however, Gervais (2011) controlled for a number of individual differences by selecting only participants who indicated belief in God ($N = 40{,}271$), and regressing endorsement of the statement on age, sex, income, education, and frequency of attendance at religious services, saving unstandardized residuals. These residuals, averaged at the country level, provide a country-by-country measure of atheist political intolerance among believers, with important individual controls. This measure includes 54 countries representing all habitable continents and most of the world's population; countries span the entire spectrum from little intolerance towards atheists (Denmark: $-1.34$) to substantial intolerance (Indonesia: 1.10).

#### *Secular rule of law*

We assessed the same country-by-country index as in Model 1, except that Model 2 relied on the earliest index available from the World Bank (from 1996) for all 54 countries included.

#### *Covariates*

In addition to socio-demographic development (54 countries rated on the UN Human Development Index), and prevalence of religious belief (percentage of individuals who believe in God, from the World Values Survey; 54 countries), Model 2 also assessed

individualism (39 countries taken from Hofstede, 2001, http://www.geert-hofstede.com/), which independently predicts reduced atheist distrust (Gervais, 2011).

## Results

### *Model 1*

Without inclusion of the covariates, rule of law strongly predicted reduced atheist distrust ($\beta = -0.57$, $p < .001$; see Figure 1). In this analysis, rule of law alone explained 30% of the variance (adjusted $R^2$) in global political intolerance of atheists among religious believers. Next, we tested whether this effect was robust to international differences in socio-demographic development, country-level religious involvement, and to general distrust of others, by regressing atheist distrust on these predictor variables (Table 1). Rule of law remained a significant unique predictor of reduced atheist distrust among religious believers ($\beta = -0.57$, $p = .005$). We also tested whether general distrust for others mediated the relationship between effective rule of law and atheist distrust, controlling for socio-demographic development and prevalence of religious belief. Bootstrapping analysis using 5000 re-samples (Preacher & Hayes, 2008) revealed that general distrust did not mediate the relationship between effective rule of law and atheist distrust (95% percentile confidence interval of the indirect effect: −0.03–0.22). The evidence was consistent with the interpretation that the effect of rule of law on reduced intolerance of atheists was not attributable to

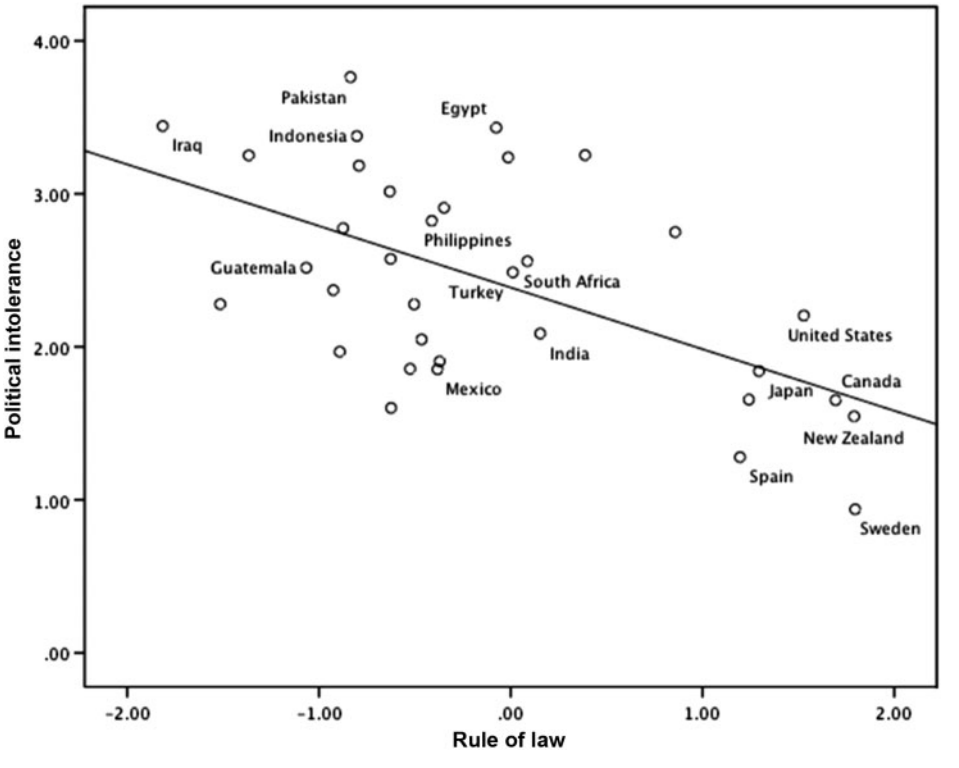


Figure 1. Strong secular rule of law predicts less political intolerance of atheists.
Note: Select countries labeled.

Table 1. Effective secular rule of law uniquely predicts reduced political intolerance of atheists among religious believers across countries ($N = 31$), controlling for percentage of religious believers, human development, and general distrust (Model 1).

| Measure | B | SE(B) | $\beta$ | $t$ | $p$ |
|---|---|---|---|---|---|
| Rule of law (2000–07) | −0.38 | 0.74 | −0.51 | 3.06 | .005 |
| % religious believers | 1.63 | 0.58 | 0.41 | 2.81 | .009 |
| Human development | −0.73 | 0.34 | −0.29 | 2.14 | .04 |
| General distrust | −1.32 | 0.85 | −0.27 | 1.56 | .13 |

international differences in human development, religious belief, or general distrust of other people.

### *Model 2*

Without inclusion of the covariates, secular rule of law accounted for 47% of the variance (adjusted $R^2$) in worldwide political intolerance of atheist distrust ($\beta = -0.70$, $p < .001$). In a regression model with rule of law and all additional covariates entered simultaneously, only rule of law exerted a significant unique effect on atheist distrust ($\beta = -0.44$, $p = .04$; Table 2). This effect was not attributable to greater levels of human development, higher individualism, or reduced religious belief found in countries with more effective governments, despite the fact that these variables were inter-correlated (see Table 3) and independently predicted reduced atheist distrust in previous research that did not include secular rule of law (Gervais, 2011). Of particular interest, these results emerged when analyzing political intolerance of atheists solely among religious believers. Furthermore, we found no significant interaction between rule of law and

Table 2. Effective secular rule of law uniquely predicts reduced political intolerance of atheists among religious believers across countries ($N = 39$), controlling for several country-level covariates (percentage of believers, individualism, human development) and individual level covariates (age, sex, income, education, and frequency of attendance at religious services) (Model 2).

| | B | *SE(B)* | $\beta$ | $t$ | $p$ |
|---|---|---|---|---|---|
| Rule of law (1996) | −0.28 | 0.13 | −0.44 | 2.12 | .04 |
| % religious believers | 0.007 | 0.003 | 0.21 | 1.93 | .06 |
| Individualism | −0.004 | −0.004 | −0.17 | 1.10 | .28 |
| Human development | −0.74 | 0.84 | −0.17 | 0.89 | .38 |

Table 3. Zero-order inter-correlations among the variables (Model 2).

| | Human Development Index | % religious | Individualism | Rule of law (1996) |
|---|---|---|---|---|
| Political intolerance of atheists | −0.63 | 0.45 | −0.64 | −0.70 |
| Human development | | −0.36 | 0.64 | 0.80 |
| % religious believers | | | −0.24 | −0.34 |
| Individualism | | | | 0.73 |

country-level prevalence of religious belief in predicting atheist distrust ($p = .83$). In other words, believers in countries with ineffective secular rule of law are more intolerant of atheists compared to equally fervent believers in countries with effective secular rule of law. In sum, political intolerance of atheists is attenuated in countries with secular authorities capable of effectively policing their citizens; this relationship between rule of law and distrust of atheists was not explained by international differences in socio-demographic development, prevalence of religious belief, or individualism, all of which have been previously linked to atheist distrust (Gervais, 2011).



## Discussion

Atheists are among the least trusted people where there are religious majorities: that is, in most of the world. Nevertheless, there are marked international differences in the degree to which this distrust is shared. This study demonstrated that the cross-cultural variability in one key distrust measure—political intolerance of atheists among believers—could be explained by believers' exposure to effective secular institutions that encourage cooperation among individuals. Worldwide, believers exhibit more political tolerance of atheists in countries with governments that can effectively establish a rule of law, holding constant other international predictors of atheist distrust as well as individual-level demographic variables. These effects were not moderated by country-level prevalence of religious believers. This suggests that equally devout believers hold different levels of political tolerance for atheists depending on their societal exposure to effective secular authority. Alternative explanations centering on socio-demographic development, individualism, and general distrust of people were considered, but received no empirical support. Neither is reverse-causation a plausible alternative. There is little a priori reason to expect that greater acceptance of atheists contributes to the establishment of a stronger rule of law in a country. These cross-cultural findings, combined with causal evidence from laboratory studies that experimentally induce reminders of secular authority (Gervais & Norenzayan, 2012b), more plausibly suggest that exposure to secular authority reduces atheist distrust among believers.

### In watchful gods and governments we trust

These findings are relevant not only for explaining the origins of anti-atheist intolerance; they further extend previous research demonstrating that, in some key respects, gods and governments serve interchangeable psychological and social functions. Awareness of mortality, for example, increases people's tendency to defend the symbols of both their gods and their governments (Greenberg, Porteus, Simon, Pyszczynski, & Solomon, 1995). Furthermore, when people experience threats to their personal sense of psychological control, they seek external sources of control either in their gods, or in their governments (Kay, Gaucher, Napier, Callan, & Laurin, 2008; Kay, Shepherd, Blatz, Chua, & Galinsky, 2010). Moreover, when people's faith in their governments is shaken, their belief in a controlling God increases (and vice versa), suggesting interchangeable functions (e.g., Kay et al., 2010).

The findings of this cross-cultural study, along with studies priming secular authority (Gervais & Norenzayan, 2012b), reveal another, distinct function of both

gods and governments: both offer surveillance mechanisms that monitor prosocial interactions among anonymous strangers. These findings also add to a growing literature suggesting that belief in watchful, moralizing gods may have contributed to the process of the scaling up of human societies, from small foraging bands to large, cooperative groups of anonymous strangers (e.g., Norenzayan, in press; Norenzayan & Shariff, 2008; Roes & Raymond, 2003). Once supernatural surveillance and other religious mechanisms stabilize large cooperative groups, they are able to create a variety of additional secular institutions that can also promote cooperation. These secular institutions, if effective in creating and maintaining high levels of trust, may erode, and sometimes supplant, religion's social and psychological functions (e.g., Norris & Inglehart, 2004). As a result, several countries in the world, such as in Northern Europe, tend to have effective governments, an erosion of religious belief and practice, and little distrust of atheists.



## Limitations and conclusion

Surveys are useful tools for assessing broad national and cross-cultural patterns that also allow for statistical controls. However, survey data are necessarily limited as they are affected by a variety of cognitive and communicative processes that may pose validity threats (Schwarz & Sudman, 1996). Therefore our results should be interpreted with caution, and in combination with other methods for assessing atheist distrust, such as hiring decisions, implicit associations, and indirect ways of measuring trust-related stereotypes (see Gervais et al., 2011). Another limitation is that atheist distrust was measured in the political domain only, as this was the sole item that we could find that directly assessed distrust of atheists across a wide range of cultures. While the willingness to elect individuals for political office is a key facet of trust and cultural acceptance, there are other domains of cooperation that also heavily depend on trust, such as in economic exchange, and the teaching of children. Future research could examine the role of secular authority in other domains of social life.

A potentially important variable that was not included in these analyses is country-level economic inequality, which has been found to be another strong positive predictor of religiosity (see Solt, Habel, & Grant, 2011). The question arises, then, whether our results are robust to variation in economic inequality. Including this additional national-level variable was unfeasible given the small cross-national sample sizes that we were working with. It can be argued that conceptually, rule of law and inequality are to some extent overlapping constructs, because a strong rule of law assumes public accountability, which leads to restrictions on large economic disparities. Moreover, in our analyses we partly addressed this omission by controlling for human development, which is more sensitive to economic disparities than country-level gross domestic product (GDP). Much larger cross-cultural samples are needed to more adequately tease apart the effects of economic inequality from human development and rule of law. We leave this interesting question open for future research.

Another limitation was the correlational nature of the findings. While causality cannot be inferred from the present data, we do note that several counter-explanations (human development, individualism, general distrust) were considered but did not receive support. Furthermore, in other studies, experimentally induced reminders of secular authority were found to reduce atheist distrust (Gervais &

Norenzayan, 2012b). Both of these findings are consistent with the hypothesis that the causal arrow runs from secular rule of law to lower distrust of atheists.

Both watchful gods and watchful governments can keep people honest and encourage cooperative behavior towards strangers. Given that religion's prosocial effects lead to atheist distrust (Gervais et al., 2011; Gervais & Norenzayan, 2012b), and given the compensatory relationship between religious and secular prosociality (e.g., Kay et al., 2010; Norris & Inglehart, 2004), the establishment of reliable secular authority decreases believers' rejection of atheists. The present study helps us to explain cross-cultural variability in an important but often neglected prejudice that is linked to prosocial religions: intolerance of atheists.



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