A Double-Edged Sword: The Countervailing Effects of Religion on Cross-National Violent Crime*

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Objective.   There has been a growing interest in the relationship between culture and crime in recent years, but there is little research investigating the role of religion. To clarify this empirical cleavage, we propose a Durkheimian model of the countervailing effects of religion on violent crime. *Methods.*   We test our propositions with robust linear models and a large country sample ($N = 100$). *Results.*   We show that religious intensity and belief in an active God are not significantly associated with intentional homicide. However, religious intensity is positively and significantly associated with assault. We also find that belief in an active God is negatively and significantly associated with assault and has a stronger effect than several structural variables. *Conclusion.*   The findings provide partial support for our Durkheimian model and suggest that cultural factors are important for predicting certain types of violent crime.

Despite mounting evidence that structural features of a society, such as inequality, poverty, and modernization, are central to understanding levels of violent crime across nations (Chamlin and Cochran, 2006; LaFree and Kick, 1986; Messner, 1982; Neumayer, 2003; Pratt and Godsey, 2003; Pridemore, 2008), there is a pervasive absence of culture in cross-national research on violent crime. As Nivette (2011:104) notes in a recent meta-analysis of homicide studies, cultural variables, such as trust, religion, and values "remain scarcely tested at the international level" and, as a result, their impact on homicide, and other types of violent crime, "remains unknown."

Influenced by the lack of research exploring the relationship between culture and crime, the present study investigates how a cultural concept—religion—impacts cross-national violent crime rates. We draw on and test two often overlooked elements of Durkheimian theory ([1897]1979): that intense collective religious sentiments should lead to higher rates of violent crime, whereas widespread belief in a God active in the world should lead to lower rates of violent crime.

This study also advances the literature empirically in several important respects. Past cross-national crime research generally predicts homicide rates (Messner, 1989; Neapolitan, 1997; Pratt and Godsey, 2003; van Wilsem, 2004) using small samples significantly biased toward Western developed nations (i.e., the average sample size is 44; see Nivette, 2011). As van Wilsem (2004:90) notes, "the focus on homicide has narrowed the research field, and has resulted in a situation in which it is not clear if the structural correlates of

national homicide rates relate in the same way to other types of crime or . . . whether they operate differently." We address this by examining both intentional homicide data from the United Nations and a new measure of assault/mugging using victimization data from the Gallup World Polls (GWPs) for 100 nations, including countries in North America, South America, Europe, Asia, and Africa. And, finally, we move beyond categorical measures of religion (e.g., majority religion of a country) and employ attitudinal measures of religious intensity and religious beliefs. This is, to our knowledge, the first study to adopt all of these empirical advances.

Culture and Violent Crime in Cross-National Studies

There are few studies investigating the link between culture and cross-national crime (see, for instance, Pridemore, 2002; Pridemore and Trent, 2010). Some scholars have sought to connect structural characteristics to more culturally-oriented arguments like cultures or subcultures of violence (Altheimer, 2013; Neapolitan, 1994). For example, Neapolitan (1994) argues that a common set of cultural values, which emerged as a response to colonialism and subjugation in Latin America, may explain Latin America's high homicide rates net of structural variables, yet he does not directly test the effect of cultural values. Other scholars have focused on the link between social ties, trust, and organizational participation and cross-national violent crime rates, although they generally find negligible effects (Lederman, Loayza, and Menendez, 2002; Robbins and Pettinicchio, 2012).

Even studies of culture and cross-national crime tend to place religion at the periphery and not at the theoretical or empirical center of the study (see Pridemore and Trent, 2010). For instance, it is common for studies to employ religion variables as operationalizations of other concepts, such as using Protestantism to measure moral individualism (Messner, 1982), using Eastern religions to measure anti-individualism (Antonaccio and Tittle, 2007), or using religiosity to measure social capital (Lederman, Loayza, and Menendez, 2002; Robbins and Pettinicchio, 2012). It is no surprise, then, that cross-national studies investigating the relationship between religion and crime are wanting (Corcoran, Pettinicchio, and Robbins, 2012).

When religion is the theoretical and empirical focus of a study, it is common to operationalize religion merely as majority religion dummy variables (or the percentage of a particular religion in a country), which cannot distinguish between varying levels of religious intensity or explain variation in crime rates for countries of the same religious type (see Groves, McCleary, and Newman, 1985; Groves, Newman, and Corrado, 1987; Helal and Coston, 1991; Neapolitan, 1997). These general religion measures produce mixed results, with studies finding negative, positive, and null effects for religion on violent crime rates (Groves, McCleary, and Newman, 1985; Groves, Newman, and Corrado, 1987; Neapolitan, 1997).

Unnithan et al. (1994:58) state that "[i]t may be prudent to postpone drawing strong implications" regarding "the effect of religion on homicide and suicide until more precise measures of religiosity are developed for cross-national research." To our knowledge, only three studies operationalize religion with more specific measures using data from the World Values Survey (WVS): Shariff and Rhemtulla (2012) and Jensen (2001, 2006). They each find divergent effects of religion on homicide rates depending on how it is measured. However, all three studies have serious data and methodological limitations. All of them include two or more highly correlated religion measures ($r > 0.90$) in the same regression models. Because multicollinearity can "result in coefficients appearing to have the wrong

sign" (El-Dereny and Rashwan, 2011:587), their results may be mere statistical artifacts of highly correlated religion measures. Because the WVS data are biased toward Western, Christian countries, this significantly limits the generalizability of their results as do small sample sizes (29 in Jensen, 2001, 41 in Jensen, 2006, and 67 in Shariff and Rhemtulla, 2012). The present study uses a larger, more diverse country sample with religion measures that vary within religious traditions, allowing us to assess the independent effects of religious tradition, religious intensity, and religious beliefs on cross-national violent crime rates.

Theory

While Durkheimian theory has been tested extensively in cross-national crime research, DiCristina (2004) identifies that a core component of his theory regarding "collective sentiments related to collective things" has been overwhelmingly neglected in the literature (see Pridemore and Kim, 2006, for an exception). Collective sentiments regarding *collective* things refer to shared "feelings we have for ideal and material things that 'are beyond the circle of our private interests' and require from us 'sacrifices and privations of all sorts'" (DiCristina, 2004:65). They are in contrast to collective "sentiments related to the individual" that privilege human dignity, sympathy, and compassion, and "respect for the lives, freedom, honor and possessions of individuals" (DiCristina, 2004:66; Durkheim, [1900]1969:54–55). Durkheim's theory of homicide identifies that the stronger these collective sentiments related to *collective* things are, the higher the homicide rates will be:

> Whenever society is integrated in such a way that the individuation of its parts is weakly emphasized, the intensity of collective states of conscience raises the general level of the life of the passions; it is even true that no soil is so favorable to the development of the specifically homicidal passions. (Durkheim, [1897]1979:356)

As DiCristina (2004:69) notes: "Durkheim suggested that where 'family spirit', 'religious faith' (presumably religion proper) and 'political faith' are very strong, an offense against a family, church or nation can 'inspire murders', for such offenses tend to be viewed as 'sacrileges'." In this way, collective sentiments regarding collective things, whether familial, religious, or political, can serve as "stimulants to murder" as they tend to devalue individual life:

> When it is a matter of defending a father or of avenging a God, can the life of a man count in the scale? It counts indeed very little when offset against objects of such value and weight. This is why political beliefs, the sentiment of family honour, the sentiment of caste, and religious faith—all these may often in themselves carry the seeds of homicide. (Durkheim, [1900] 1957:115–16)

Thus, Durkheim theorizes a positive association between the "number, intensity and precision" of "collective sentiments related to collective things" and homicide rates (DiCristina, 2004:70; Pridemore and Kim, 2006).

Durkheim's discussion of collective sentiments related to collective things focused heavily on religion generally and its connection to homicide specifically. He identifies in *Suicide* that where "religious faith is very intense it often inspires murders" ([1897]1979:356). As such, he "proposed that passionate attachment to religious group life encouraged homicide" (Jensen, 2006). Durkheim's theory is naturally extended to other forms of violence as the shared religious sentiments that emphasize the collective over the individual should encourage interpersonal violence whether lethal or nonlethal. Thus, we hypothesize that

violent crime rates will be higher in nations with higher levels of religious intensity (i.e., collective religious sentiments that permeate the lives of residents).

Yet Durkheim does not suggest that "all forms of religiosity" will facilitate violence (Jensen, 2006). He identifies that certain types of religious belief are conducive to regulating moral behavior and thus should reduce deviance and crime, including violent crime (Durkheim, [1897]1979:375–36). When the regulations provided by a shared religious belief system "supposedly emanate from superhuman authority, human reflection has no right to bring itself to bear on them. It would be actual contradiction to attribute such an origin to them and permit free criticism of them" (Durkheim, [1897]1979:375). In this way, the unquestionable nature of shared belief systems necessary for the regulation of behavior is supported by a belief that the regulations emanate from a God. However, Durkheim notes that belief in a God that is "outside of the universe and everything temporal cannot serve as a goal for our temporal activity, which is thus left without an objective. . . . Abandoning the world to us, as unworthy of himself, he simultaneously abandons us to ourselves in everything respecting the world's life" (Durkheim, [1897]1979:376). Here, Durkheim indicates that the extent to which belief in God will matter depends on whether the God is viewed as more active in temporal affairs, such that he or she provides behavioral regulations, including prohibitions against violence, which must be followed unquestionably. Given this, we hypothesize that violent crime rates will be lower in nations with higher levels of belief in an active God.

Data and Methods

Data

We use data from the 2009–2012 GWPs for 100 countries (see Table 1 for country list). The GWP is a regularly occurring nationally representative survey of adult (15+) residents in over 150 countries that make up over 98 percent of the world's adult population. The survey is translated into the primary languages of the countries and is then given to approximately 1,000 individuals. In most countries, the survey is conducted once per year, but in some countries it is conducted only once every two or three years. In countries where at least 80 percent of the population has telephones, telephones are used to conduct the survey; in all other countries, face-to-face interviewing is used. When data weights are applied, the data are nationally representative for each country.[1] Compared to the WVS, the GWP is a larger cross-national survey with more diverse countries. All data taken from the GWP are aggregated to the country level and weighted to be nationally representative. Data for structural control variables come from a variety of sources and are reported with the variable descriptions.

Dependent Variables

We test our hypotheses on two types of violent crime—intentional homicide and assault/muggings. Although homicide rates are considered the most reliable cross-national measure of crime (Kick and LaFree, 1985; LaFree, 1999; Messner, 1989; Neapolitan, 1997;

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[1] The weights account for oversamples, household size, nonresponse, unequal selection probability, population statistics, and design effects.

TABLE 1

Descriptive Statistics

Parameters	N^a	Mean	SD	Minimum	Maximum
ln(intentional homicide)	100	1.49	1.22	−0.90	4.15
ln(assault)	100	−2.97	0.83	−5.11	−1.27
Infant mortality	100	26.56	25.15	2.20	106.70
GINI	100	39.17	8.73	24.70	64.30
Young males (15–24 years)	100	17.80	3.43	10.60	23.90
Female labor participation	100	51.40	15.58	13.20	88.30
Catholic	100	0.34	0.48	0	1
Other Christian	100	0.26	0.44	0	1
Importance of religion	100	0.73	0.25	0.12	0.99
Belief in an active God	100	0.62	0.23	0.14	0.97

[a]Country list: Afghanistan, Albania, Algeria, Argentina, Armenia, Austria, Azerbaijan, Bangladesh, Belarus, Bolivia, Bosnia and Herzegovina, Brazil, Bulgaria, Burundi, Cambodia, Cameroon, Canada, Chad, Chile, Colombia, Comoros, the Democratic Republic of Congo, Costa Rica, Croatia, the Czech Republic, Denmark, Djibouti, the Dominican Republic, Ecuador, El Salvador, Estonia, France, Georgia, Germany, Ghana, Greece, Guatemala, Honduras, India, Indonesia, Iraq, Ireland, Israel, Italy, the Ivory Coast, Japan, Kazakhstan, Kenya, South Korea, the Kyrgyz Republic, Latvia, Lithuania, Macedonia, Malawi, Malaysia, Mali, Mauritania, Mexico, Moldova, Morocco, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Palestine, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Romania, Russia, Rwanda, Senegal, Singapore, Slovenia, South Africa, Spain, Sri Lanka, Sudan, Sweden, Switzerland, the Syrian Arab Republic, Tajikistan, Tanzania, Thailand, Tunisia, Turkey, Uganda, Ukraine, the United Kingdom, the United States, Uruguay, Uzbekistan, Venezuela, Vietnam, Zambia, and Zimbabwe.

Pratt and Godsey, 2003), there is considerable debate regarding which data source is the best for measuring homicide across countries. Some scholars strongly favor using data from the World Health Organization (WHO) (Messner, Raffalovich, and Shrock, 2002; Lederman, Loayza, and Menendez, 2002), whereas others prefer to use data from crime control agencies (Chamlin and Cochran, 2006; Messner, 1982). Some studies have found official counts of crime to be as reliable as other data sources (Bennett and Lynch, 1990). Chamlin and Cochran (2006) found a strong bivariate association ($r = 0.93$) between homicide data from the WHO and the U.N. Survey on Crime Trends and Operations of the Criminal Justice Systems (UN-CTS). While the correlation between the two data sources varies by year, the correlations are generally positive and significant (Marshall and Block, 2004). The U.N. Office on Drugs and Crime (UNODC) pools indicators of intentional homicide from WHO, UN-CTS, and national police statistics. Using a seven-year row-mean of UNODC homicide rates from 2005 to 2011[2] and a three-year row-mean from WHO homicide data,[3] the two homicide measures are strongly correlated at $r = 0.93$ for their shared, reduced sample of 53 countries. This strong correlation suggests that there is little difference between the homicide measure drawn from the UNODC and the one drawn from the WHO data. Given this, we use the UNODC data, which maximizes the quantity and diversity of the country sample. The intentional homicide dependent variable is thus a seven-year row-mean from 2005 to 2011 that is logarithmically transformed, which normalizes the distribution.

Intentional homicide is the primary operationalization of crime, including violent crime, in cross-national studies as it is the most comparable and reliable measure of international crime. Other types of crime may be defined differently across countries or may be

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[2]The row-mean ignores missing values. Some countries contain all seven years, while others do not.

[3]These data are available for download at ⟨http://www.who.int/violence_injury_prevention/surveillance/databases/mortality/en/⟩.

underreported in countries with corrupt police or justice systems. Victimization surveys—surveys asking respondents whether they have been the victim of various types of crime—are thus "preferred to police administrative data for most types of cross-national research because of their greater potential for achieving comparability in crime definitions across nations" (Lynch, 2006:247). However, cross-national comparisons of victimization surveys are difficult as nation-specific surveys may have different designs, question wordings, and may not have nationally representative samples (Lynch, 2006). Even the more uniform International Crime Victimization survey, "which is designed explicitly for cross-national comparisons," suffers from small sample sizes (Lynch, 2006:232). The GWP addresses these limitations as it asks the same victimization question across all countries and has nationally representative country samples when weighted. In the 2009–2012 GWPs, respondents were asked: "Within the last 12 months, have you been assaulted or mugged?" This question was aggregated up to the country level and represents the proportion of individuals in each country who have been assaulted or mugged within the last 12 months. If this question was asked in the same country in multiple years, we used data from the latest year. While this measure includes both assaults and muggings, for ease of identification, we refer to this measure as "assault." This variable is logarithmically transformed, which normalizes its distribution.

Independent Variables

Jensen (2006) proposes the percent of a nation's respondents who identify religion as "very important" in their lives as a measure of religious intensity. Thus, following Jensen (2006), we measure religious intensity with a similar question from the 2009–2010 GWP: "Is religion an important part of your daily life?" This variable represents the proportion of respondents in a country who responded "Yes" to the question.[4] This question captures whether religion is important in one's "daily" life and thus is a measure of the degree to which religion's influence permeates one's life, rather than being relegated to a compartmentalized religious sphere. As this is a country-level measure, lower levels of it represent countries where religion is not important for the daily lives of residents. Even moderate levels, where around 50 percent agreed with the question, still have large percentages of the population that can serve as countervailing influences against excessive normative religious integration (i.e., the sentiments related to religious collective things are not universally shared). In fact, moderate levels suggest that there are societal institutions other than religion also socializing residents. However, high levels of this measure, in which the vast majority of residents responded affirmatively, represent societies in which religion is a dominant force affecting the daily lives of nearly all residents, a condition conducive to high levels of religious intensity (i.e., strong collective sentiments related to religious collective things).

To measure belief in an active God, we use the following 2009–2010 GWP question: "Do you believe God is directly involved in things that happen in the world, or not?" This variable represents the proportion of respondents in a country who responded "Yes" to this question.[5]

[4]Jensen (2001, 2006) used the WVS question "how important is religion in your life" to measure religious intensity. We use a similar measure from the GWP, "is religion an important part of your daily life" (yes or no). The percentage of 2010–2012 WVS respondents who reported that religion is "very important or rather important" in their life is correlated with our GWP measure at $r = 0.92$ (for the subset of 39 countries they share). This suggests that the response format of the GWP question does not affect its measurement.

[5]Individuals were allowed to respond with "yes," "no," or "I don't believe in God." To ensure that the limited response choices do not bias the measurement, we compared this GWP measure with the closest

The religious intensity and belief in an active God measures are only correlated at 0.60 and exhibit little collinearity in the models (i.e., their VIF scores are always under 4).

Control Variables

We also include a number of other control variables that might confound the relationship between religion and crime. Since inequality may produce social cleavages that increase violent crime rates in a country (Chamlin and Cochran, 2006; Pratt and Godsey, 2003; Pridemore, 2008), we include the 2009–2010 GINI coefficient (World Bank, 2009–2010). Due to missing data in some countries and because inequality changes slowly over time (see Messner, Raffalovich, and Shrock, 2002), we use data from the nearest year, but not exceeding a maximum of 10 years (see also Nivette and Eisner, 2013).

Following Pridemore (2008, 2011), we control for poverty using infant mortality rates, instead of the gross domestic product, as they capture more than "income-based representations of general material well-being" (Nivette and Eisner, 2013:10; Messner, Raffalovich, and Sutton, 2010). The infant mortality rate refers to the annual number of infant deaths per 1,000 live births (World Bank, 2009–2010). Past research suggests that it should be positively associated with violent crime rates.

Prior research controls for the female labor participation rate (percentage of female population ages 15+) as a measure of lack of guardianship as well as the weakening of the family institution due to modernization (World Bank, 2009–2010; see Gartner, 1990; Neumayer, 2003; Nivette and Eisner, 2013). Alternatively, routine activities theory suggests that the more women work outside of the home the higher their likelihood of being victimized due to increased proximity to motivated offenders (Gartner, Baker, and Pampel, 1990). Past research predicts that the female labor participation rate should have a positive effect on violent crime.

To account for the most criminogenic section of society, we follow Nivette and Eisner (2013) and control for the proportion of the male population aged 15–24 for the years 2005 and 2010 depending on when the dependent variable was collected (U.N. Department of Economic and Social Affairs, 2012 World Population Prospects).[6] The proportion of young males is predicted by past research to be positively associated with violent crime. We include the total population growth rate from 2000 to 2005 as a control variable (U.N. Department of Economic and Social Affairs, 2012 World Population Prospects), which past research predicts will increase violent crime through disrupting societal norms or facilitating inequality (Lee, 2001; Nivette, 2011; Nivette and Eisner, 2013). Since the religious denomination of a country may affect violent crime rates and account for variation in religious intensity and belief (Groves, McCleary, and Newman, 1985; Groves, Newman, and Corrado, 1987; Helal and Coston, 1991; Neapolitan, 1997), we also control for whether the largest religion in a country is Catholic (1 = Catholic; 0 = otherwise) or another Christian tradition (1 = Protestant, Orthodox, or "unspecified" Christian; 0 = otherwise) (2005 CIA World Factbook). The referent category combines Muslim countries

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question we could find from another cross-national survey. The 2008 International Social Survey Programme (ISSP), another cross-national survey with nationally representative data, asks the question "Do you agree or disagree with the following: There is a God who concerns Himself with every human being personally" with responses of strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree. The GWP and ISSP measures are highly correlated for the subset of countries they share ($N = 30$): the percentage of ISSP respondents who reported that they "strongly agree" or "agree" is correlated with our GWP measure at $r = 0.84$. This provides further support for the validity of the GWP measure.

[6]Using data only from 2010 does not change the results.

with other religion countries (Buddhism, Judaism, Hinduism, Animism, and Shintoism) as there are no statistically significant differences between them in models predicting the dependent variables (results not shown). Prior studies predict that Christian countries should have higher rates of violent crime than Muslim countries. Table 1 provides the descriptive statistics for all the variables and the list of countries in the sample.

Model Specification

We use robust linear models (robust LMs using M-estimation with Huber weighting), which downweights influential cases and allows outliers to remain in a model without unduly influencing the results (Fox, 2008). We also estimated ordinary least squares (OLS) regression models (results not shown). After performing numerous regression diagnostics to verify that the underlying model assumptions were met, the results suggested that some countries were potential outliers. OLS models with the full sample and OLS models with outliers excluded (results not shown) produce substantively similar results as those from the robust LMs. Thus, we present and discuss results from the robust LMs. Given that we hypothesize causal directions for our independent variables as does past research for the control variables, we use p values for one-tailed tests to evaluate our predictions. We also estimated sensitivity analyses to verify that the findings are robust to different model specifications. Specifically, we replaced infant mortality for the logarithmically transformed gross domestic product per capita (GDP) (World Bank, 2009–2010) and the GINI Index for the World Income Inequality Database's ratio of the top 20th percentile's income or consumption share to the bottom 20th percentile's (U.N. Development Program, 2005; see Nivette Eisner, 2013; Pridemore, 2008). Results mirror those presented below.

Results

Table 2 provides the robust LM regression results predicting logarithmically transformed intentional homicide (Model 1) and assault (Model 2) rates. Congruent with the literature, Model 1 shows that inequality, infant mortality, and percent young males significantly increase intentional homicides (LaFree and Kick, 1986; Pratt and Godsey, 2003; Pridemore, 2008). However, female labor force participation is not significantly related to homicide rates. Catholic and other Christian countries have significantly higher rates of intentional homicide compared to Muslim and other religion countries. Contrary to our hypotheses, religious intensity and belief in an active God are not significantly related to intentional homicide rates net of the control variables.

Model 2 presents the robust LM regression results predicting the logarithmically transformed assault rate. Infant mortality, youth population, growth rate, Catholic, and other Christian are significantly and positively related to assault rates. Turning to the independent variables, as hypothesized, religious intensity is significantly and positively related to assault rates, while belief in an active God is significantly and negatively associated with assault rates. Belief in an active God has the second largest effect size in the model (–0.374) following Catholic (0.387), which has the largest effect size. Religious intensity has the fourth largest effect size in the model following the other religion variables. Interestingly, in these models, the cultural religion variables (i.e., religious intensity, belief in an active God, Catholic, and other Christian) have larger effects than all the structural variables.

TABLE 2

Religion and Violent Crime, Robust Linear Models ($N = 100$)

Parameters	Intentional Homicide		Assault	
	Model 1		Model 2	
	b	beta	b	beta
GINI	0.055***	0.392	0.003	0.030
	(0.013)		(0.010)	
Infant mortality	0.012*	0.239	0.008*	0.235
	(0.005)		(0.004)	
Young males (15–24 years)	0.146***	0.409	0.059*	0.245
	(0.037)		(0.028)	
Female labor participation	−0.002	−0.029	−0.008	−0.148
	(0.006)		(0.005)	
Growth rate	−0.067	−0.073	0.155*	0.246
	(0.094)		(0.072)	
Catholic	0.585*	0.228	0.675***	0.387
	(0.255)		(0.196)	
Other Christian	0.851***	0.307	0.655***	0.348
	(0.265)		(0.203)	
Importance of religion	0.457	0.093	1.097*	0.329
	(0.614)		(0.472)	
Active God	−0.549	−0.104	−1.333***	−0.374
	(0.509)		(0.391)	
Constant	−3.777***		−4.502***	
	(0.608)		(0.467)	

p values are for one-tailed tests: ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$. (Standard errors in parentheses.)

Discussion and Conclusion

Most cross-national studies of crime, including violent crime, focus on structural rather than cultural predictors. Nivette's meta-analysis noted how there are too few studies of culture and crime "to make accurate judgments about their worth in cross-national research" (2011:120). A primary reason for this is that it is "difficult to reliably operationalize" cultural concepts on a "'large-n' scale" (Nivette, 2011:120). Most studies of culture and cross-national crime draw on the WVS for their cultural measures, which limits the diversity and size of the country sample. By using the GWP, we were able to test both structural and cultural predictors on a large diverse sample of 100 countries, a vast improvement over prior cross-national crime studies. Focusing on one cultural concept—religion—we theorized how it can increase and decrease violent crime, a large departure from prior individual-level Durkheimian research emphasizing the prosocial impact of religion on crime (Baier and Wright, 2001). We show that net of structural predictors, two cultural predictors—religious intensity and belief in an active God—do not significantly affect homicide rates, but do significantly affect assault rates.

While past studies focus almost exclusively on how religion decreases crime (see Baier and Wright, 2001), we proposed that religion may both decrease *and* increase crime depending on how it is measured. We argued that societies with higher levels of religious intensity should have higher rates of violent crime due to emphasizing collective sentiments over individual well-being (Durkheim, [1897]1979:356–37). Religious intensity, as measured by the percentage of people in a country for whom religion is an important part of their

daily life, does not significantly affect homicide. Thus, Jensen's (2001, 2006) findings may be a result of having a smaller, less diverse sample and fewer control variables. However, religious intensity is significantly associated with higher rates of assault, which is robust to changes in the sample and control variables. This provides support for the Durkheimian ([1897]1979) hypothesis that religious intensity should increase violent crime rates.

We also identified an often-overlooked Durkheimian argument—that belief in a God who is active in worldly affairs should decrease violent crime. While the proportion of people in a country who believe this does not significantly affect intentional homicide, it is significantly associated with lower rates of assault. Importantly, it has one of the largest effects in these models and has a greater effect on assaults than many structural factors, including inequality. Thus, while structural predictors account for most of the explained variation in intentional homicide, structural and cultural predictors help account for cross-national variation in assault.

In this way, the findings also contribute to the immense literature on structure and crime that almost exclusively employs intentional homicide as the one-and-only operationalization of crime. Consistent with prior work, we show that inequality and poverty are significantly and positively related to intentional homicide. Yet, of these oft-cited structural predictors of crime, only poverty is significantly and positively related to assault, and even still, its effect is much smaller than the effects of religion. These findings are in contrast to van Wilsem's (2004) study, which found income inequality and GDP to significantly predict a larger number of criminogenic outcomes. The difference in the results is most likely due to van Wilsem's less diverse and considerably smaller sample. This suggests that generalizing findings from cross-national homicide studies to cross-national violent crime more broadly may be problematic and that even results from studies using the International Crime Victims Survey (ICVS) may not be applicable to larger, more diverse country samples. As such, more cross-national research is needed considering the role of culture and structure on these and other types of crime.

What might explain the divergent predictors for homicide versus assault? While we can only speculate, we suggest three possible explanations. First, because homicide rates are derived from reports from criminal justice or health systems, which might be corrupt, they may be more prone to bias than measures of violent crime from victimization surveys. We think this explanation is unlikely as the effects of most structural predictors do not depend on the official data source used (Nivette, 2011) and for unambiguous types of crime, victimization surveys tend to provide crime rates consistent with those from official statistics (Lynch, 2006). Second, the religion measures may have a stronger effect on assault because the measures are drawn from the same data set. To investigate this, we examined the individual-level data to ensure that individuals who report that religion is important in their daily lives and those who believe in an active God are not more or less likely to report being assaulted. The individual-level correlation between religious intensity and assault victimization is 0.036 and the individual-level correlation between belief in an active God and assault victimization is 0.005. These extremely weak correlations do not support this second explanation. Third, since homicide is an extreme and rarer form of violence, it may be affected more so by dire circumstances (i.e., poverty and inequality) than cultural factors; that is, lethal violent crime rates may be more influenced by structure than nonlethal violent crime rates. More research is needed to identify whether this is the case.

This study is not without limitations. We use single indicators to operationalize our religion measures. While more indicators would be better, cross-national crime research often uses single measures to operationalize independent variables. It would be preferable to

have a religion measure that captures both belief in an active God *and* belief in a God who prohibits violence. Durkheim assumed that any belief in an active God would entail beliefs prohibiting violence and promoting social order. Yet it is possible that societies may believe in an active God who actually condones violence. While our study is unable to address this, if this is the case, it would downwardly bias our estimates as high levels of belief in an active God could be associated with high levels of violence in some countries, which would reduce the negative relationship. The strong negative association between belief in an active God and assault suggests that, *on average*, Durkheim's assumption may be correct. Although the GWP does not include additional religion measures such as the WVS, its larger, more diverse sample allows for greater generalizability of the results. Another limitation of this study is that the GWP victimization data combine assaults and muggings. Still, this is an improvement over past research, which typically relies on homicide rates or ICVS victimization data for a small sample of, usually European, countries. Finally, since our results are confined to the societal level, our findings do *not* speak to whether individuals who report more religious intensity and less belief in an active God commit more assaults. Instead, following Durkheimian theory, the findings address how societal levels of religious intensity and belief in an active God are associated with assault rates. Future research would benefit from investigating whether these findings are applicable at the individual level.

Overall, our study opens the door for a new research agenda aimed at clarifying how various elements of religion—a chief characteristic of culture—influence violent crime. We firmly believe that such a research program is long overdue. For the time being, our study has advanced this research agenda by showing how religion can act as a countervailing force simultaneously increasing and decreasing some forms of violent crime.

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