

The Effect of Personal Religiosity on Attitudes toward Abortion, Divorce, and Gender Equality —Does Cultural Context Make a Difference?*

Amy Adamczyk

Department of Sociology, City University of New York
899 10th Ave., New York, NY 10019, USA
E-mail: aadamczyk@jjay.cuny.edu

Abstract

Across the globe, people differ considerably in their attitudes about abortion, divorce, and gender equality. These differences are reflected in the diversity of laws regulating divorce, penalties for women obtaining abortions, and differences in women's levels of political representation. While personal religious beliefs are often seen as having a significant role in shaping attitudes, economic development and political stability are also seen to be important predictors of attitudes about sexual morality and gender equality. This study draws on ideas from cultural sociology and the sociology of religion to address the interrelationship between personal religiosity and national cultural orientations to explain cross-national variation in public opinions about abortion, divorce, and gender equality. Using

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data from the fourth wave of the World Values Survey and hierarchical linear modeling techniques, support is found for a broad cultural axis of survival vs. self-expressive orientations, and personal religious involvement for shaping attitudes about abortion and divorce. Moreover, personal religious involvement appears to have a greater effect on attitudes about abortion, divorce, and gender equality in countries like the United States, which have a strong self-expressive cultural orientation, than in many Sub-Saharan African nations.

Key Words: religion, abortion, divorce, gender equality, culture

I. Introduction

Across the world, people differ considerably in their attitudes about divorce, abortion, and gender equality. Whereas many Muslim-majority countries severely limit abortion access, abortion was legalized in the Soviet Union in the 1920s (David, 1992), and in some countries (i.e. Cuba, Estonia, and Russia) women, on average, have at least one abortion during their lifetime (Sedgh, Henshaw, Singh, Bankole, & Drescher, 2007). A similarly diverse range of attitudes can be found regarding divorce and gender equality. Since attitudes typically form the basis of laws and policies, understanding the forces that shape public opinion about family planning, marital dissolution, and gender equality offers valuable insight into why nations differ so considerably in their laws and regulations regarding these issues. This study offers insight into how public opinion varies in relation to personal religious beliefs and national cultural orientation. The study focuses on attitudes toward abortion, divorce, and gender equality because most people will directly or indirectly encounter these issues in their everyday lives, and there tends to be less agreement about these issues both within and between nations, than for other behaviors, such as theft, of which most people disapprove (Finke & Adamczyk, 2008).

Personal religious beliefs are typically considered important factors for explaining attitudes about abortion, divorce, and gender equality. Indeed, research by Jelen and Wilcox (2003) found that religion is one of the most important predictors of attitudes towards abortion in the United States. Most major religions support traditional family structures and gender roles, and, as a result, more religious people tend to have less equitable gender attitudes and are less supportive of abortion and divorce. This relationship can be found across a broad range of countries and religions (Finke & Adamczyk, 2008; Scheepers, Grotenhuis, & Van Der Slik, 2002; Voicu, 2009).

Early social scientists, including Durkheim, Weber, and Marx, predicted that as nations industrialize and develop, religious beliefs would diminish and have less of an impact on individuals' attitudes and behaviors. However, contemporary research in the sociology of religion has found that even as many nations develop and stabilize, religious beliefs and behaviors have remained strong, (Finke & Stark, 1992; Stark & Finke, 2000). While religious beliefs would seemingly lead to more conservative attitudes, researchers (Yuchtman-Yaar & Alkalay, 2007) have found that economic development tends to be related to more liberal attitudes, which raises the question of how these two forces combine to shape attitudes?

To address this question, this study combines ideas from Ronald Inglehart and colleagues' (Inglehart, 2006; Inglehart & Baker, 2000; Inglehart, Norris, & Welzel, 2002) cultural axis of survival vs. self-expression, and the sociology of religion's anti-ascetic hypothesis (Burkett & White, 1974; Finke & Adamczyk, 2008; Tittle & Welch, 1983). Using data from the fourth wave of the World Values Survey and hierarchical linear models (HLM), which make it possible to simultaneously examine individual and country-level effects, this study finds that in nations where the culture is characterized by self-expression, most residents are more accepting of gender equality, divorce, and abortion than are residents in survival oriented nations. However, in self-expressive cultures religious involvement also appears to have a greater influence on attitudes about gender equality, divorce, and abortion, as ambiguity increases in the larger culture over what should be considered right or wrong.

II. Theory and Background

A. Individual Religious Beliefs and Attitudes

Across nations and within countries, religious beliefs and

behaviors are seen as powerfully influencing attitudes about sexual morality and gender equality. To varying degrees, most major religions disapprove of abortion and divorce, and support traditional gender roles. As a result, people who find religion personally important are more likely than others to follow the views of their religion and disapprove of divorce, abortion, and gender equality (Banaszak & Plutzer, 1993; Finke & Adamczyk, 2008; Jelen & Wilcox, 2003; Kenworthy & Malami, 1999; Peek, Lowe, & Williams, 1991)

In addition to religious importance, researchers have also found that religious participation may shape moral attitudes (Adamczyk & Pitt, 2009; Scheepers & Van Der Slik, 1998; Yuchtman-Yaar & Alkalay, 2007). Not all religions emphasize participation in religious rituals, and nations differ substantially in the extent to which they regulate religion, which can shape the opportunities available for religious involvement (Grim & Finke, 2007; Stark & Finke, 2000). Nevertheless, even if the diversity and quantity of opportunities to participate in religious activities are influenced by the state, people who are actively involved in their religion are more likely than less involved individuals to hear about their religion’s stance on issues like abortion. Religiously active people should also be more likely to develop relationships with religious believers who have more conservative views, which, in turn, should influence their own attitudes (Scheitle & Adamczyk, 2009). These ideas lead to the first hypothesis:

H1: People who find religion important and/or have greater religious involvement will have more disapproving attitudes about abortion, divorce, and gender equality.

B. Survival vs. Self-Expressive Culture

Along with individual religious beliefs and affiliation, a number of studies have suggested that a nation’s level of

development and industrialization may play a major role in shaping attitudes about divorce, abortion, and gender equality. Using data from three waves of the World Values Surveys, Inglehart and his colleagues (Inglehart, 1990, 2006; Inglehart & Baker, 2000; Inglehart et al., 2002) examined the link between economic development and attitudinal change. They found that as nations undergo industrialization and modernization processes, attitudes and values shift away from concerns associated with physical and economic security to values that are increasingly rational, tolerant, and trusting (Inglehart & Baker, 2000). This shift in cultural orientation from survival to self-expression may, in part, explain why residents of more developed nations have more liberal attitudes about divorce, gender equality and abortion than residents in less developed countries.

When a nation regularly faces political and economic uncertainty and insecurity, people are more likely to support values and norms that are similar to what they already know (Inglehart et al., 2002); familiarity breeds security. As a result, people in nations characterized by a strong survivalist orientation may be less tolerant of non-traditional ideas, lifestyles, and behaviors that differ from the norm. However, as nations develop and stabilize, people increasingly feel secure. Once basic needs like food, shelter and safety are satisfied, concern shifts to issues related to subjective well-being, quality of life, and self-expression (Inglehart, 1997).

The survival vs. self-expressive cultural index has been conceptualized as a value system capable of guiding individuals' specific actions, attitudes, judgments and goals (Bergh, 2007). Because survival vs. self-expressive cultural orientations may be shaped by a nation's overall level of economic development and political stability, the overwhelming majority of residents in a particular country may be influenced by the national survival/self-expressive culture.

Relying primarily on aggregate data, Inglehart and colleagues (Inglehart, 2006; Inglehart & Baker, 2000; Inglehart et al., 2002;

Inglehart & Norris, 2003) examined the relationship between national cultural orientations and attitudes, including gender equality. However, using aggregate data we cannot unravel whether only individuals with a given cultural orientation (e.g. survival) are likely to have more conservative attitudes, or living in a nation with a given cultural orientation is likely to shape all residents' attitudes, irrespective of an individual's orientation. Theoretically, the distinction is important for understanding at what level the force is coming from that is leading to differences in people's attitudes. To date, only two studies have examined the role of national survival vs. self-expressive cultural orientations for explaining individuals' attitudes (Adamczyk & Pitt, 2009; Stack, Adamczyk, & Cao, 2010). Both studies found that even after accounting for individuals' cultural orientations, living in a nation with a stronger self-expressive orientation is associated with more liberal attitudes towards seemingly deviant and often illegal behaviors.

Unlike previous research, the current study is interested in how national survival vs. self-expressive cultural orientations shape more commonplace issues that most people are likely to engage. Adamczyk and Pitt (2009) found an influence of a national cultural axis of survival vs. self-expression on attitudes towards homosexuality, and Stack et al. (2010) found the same for attitudes about prostitution. But, much of the world disapproves strongly of homosexuality and prostitution. According the fourth wave of the World Values Survey, 69% of respondents said that homosexuality is never justified, and 73% said prostitution is never justified. In contrast, the majority of the world's citizens will either have gone through, or know about others who have experienced a divorce, dealt with family planning issues, and/or personally encountered gender inequality. Since the only studies to examine the influence of national survival vs. self-expressive cultural orientations for explaining individuals' attitudes have focused on more deviant topics, we do not know whether the cultural orientation of a

country will also shape attitudes about more mundane issues, like the sexual division of labor,¹ reproductive behaviors, and marital dissolution. This study will test whether the survival vs. self-expression cultural index is relevant for issues that are likely to be salient for most people. If the survival vs. self-expressive country orientations do not shape attitudes about divorce, abortion, and gender equality, this would suggest that the relevance of survival and self-expressive cultural orientations is largely restricted to explaining public opinion regarding more controversial subjects. Below is the second hypothesis:

H2: Compared to residents in nations characterized by self-expression, individuals who reside in nations characterized by a survival orientation will have more disapproving attitudes about divorce, abortion, and gender equality.

C. Religion and Survival vs. Self-Expressive Cultural Orientations

Many early social scientists (Durkheim, 1912; Weber, 1904) thought that with economic development and political stability religious belief would decline, but contemporary research in the sociology of religion (Finke & Stark, 1992; Stark & Finke, 2000) has found that religion continues to have a powerful effect on individuals even as nations develop and stabilize. If self-expressive value orientations are associated with more liberal attitudes, but religious beliefs continue to have an influence, how do these factors combine to shape public opinion about divorce, abortion,

¹ Hayes, McAllister, and Studlar (2000) examined the relationship between postmaterialism and feminism, finding that people who adopt postmaterialist values were more likely to endorse feminist beliefs. While their analysis used data from the World Values Survey, they only examined the influence of individual attitudes about postmaterialism, and did not consider the influence of a national postmaterialist culture for explaining individuals' attitudes.

and gender equality? The sociology of religion’s anti-ascetic hypothesis (Burkett & White, 1974; Hadaway, Elifson, & Petersen, 1984; Tittle & Welch, 1983) is able to offer some theoretical insight into how personal religiosity shapes attitudes in nations at different places on the cultural axis of survival vs. self-expression.

Research in the sociology of religion (Burkett & White, 1974; Finke & Adamczyk, 2008; Hadaway et al., 1984) has found that personal religiosity is less likely to influence attitudes about illegal behaviors than attitudes about issues that do not have strong legal underpinnings. Referred to as the antiascetic hypothesis, the idea is that while all individuals are held accountable for actions that are illegal and universally sanctioned, “[religiosity] ought to inhibit deviance to the greatest extent where the individual has few external guides for behavior” (Tittle & Welch, 1983: 659). Consistent with this idea, researchers have found that personal religiosity has a weaker influence on behaviors such as stealing and burglary, but a stronger influence on attitudes about sexual morality (Finke & Adamczyk, 2008) and behaviors, like drinking, which are not typically universally condemned by the state (Burkett & White, 1974; Hadaway et al., 1984; Tittle & Welch, 1983).

Combining ideas from the antiascetic hypothesis (Burkett & White, 1974; Tittle & Welch, 1983) with survival vs. self-expression cultural orientations (Inglehart & Baker, 2000), personal religious beliefs should have a greater influence on attitudes about abortion, divorce, and gender equality in nations characterized as self-expressive, as opposed to survivalist. Because self-expressive cultures tolerate a diversity of perspectives (Inglehart & Baker, 2000; Inglehart et al., 2002), people in such nations will have to look beyond their immediate cultural context to find an authority capable of guiding attitudes regarding behaviors that do not have legal underpinnings. Consistent with the antiascetic hypothesis (Tittle & Welch, 1983), religion may be an important source that people living in self-expressive cultures draw on to direct their attitudes about sexual morality and gender

equality. Conversely, in a nation characterized by a survivalist culture, the majority of people may disapprove of divorce, abortion and gender equality because the larger culture is less tolerant of these things. Hence, in nations characterized by a survivalist culture, personal religious beliefs may have less of an effect on people's attitudes because religion will be one of many voices disapproving of divorce, abortion, and gender equality.

To date, only one study (Adamczyk & Pitt, 2009) has looked at the interrelationship between national cultural orientations and personal religious beliefs and behaviors for explaining attitudes. Adamczyk and Pitt (2009) found that personal religiosity has a greater influence on attitudes about homosexuality in self-expressive nations. The current study will examine the interrelationship between national cultural orientations and personal religiosity for explaining public opinions about divorce, abortion, and gender equality—issues that most individuals will encounter in their everyday lives and which, at least in the case of divorce,² are not illegal in the vast majority of countries. The final hypothesis is:

H3: Personal religiosity will have a greater influence on disapproving attitudes about abortion, divorce, and gender equality in nations characterized by a self-expressive culture as opposed to a survivalist culture.

III. Data and Methodology

To examine the role of cultural context and religion in shaping attitudes about abortion, divorce, and gender equality, this study relies on data from the fourth wave of the World Values Surveys (WVS) (Inglehart, 2004). The WVS were developed to enable cross-national comparisons on a range of attitudes, values,

² Some form of divorce is allowed in every country, except the Philippines and Vatican City.

and behaviors, and to monitor changes in these things across countries (Inglehart & Baker, 2000). The sample includes 40 societies and 60,047 cases. National random and quota sampling were used and the data were collected through fact-to-face interviews. After countries that did not have information on key variables were excluded, the sample size was reduced to 44,542 cases and included 32 nations.³ Table 1 presents descriptive statistics for all variables included in the sample.

A. Dependent Variables

This study focuses on three dependent variables—disapproval of abortion, disapproval of divorce, and attitudes about gender inequality. Disapproval of abortion is measured with a single question that asks whether abortion can always be justified, never be justified, or something in between. Responses range from abortion is always wrong=1 to abortion is always right=10. Disapproval of divorce asks whether divorce can always be justified and ranges from always wrong=1 to always right=10. Both disapproval of abortion and divorce were reverse coded so that higher numbers indicate greater disapproval.

Gender inequality is assessed on a scale consisting of three measures. The first measure asks respondents whether men make better political leaders and ranges from strongly agree=1 to strongly disagree=4. The second measure asks respondents whether university is better for a boy than a girl and ranges from strongly agree=1 to strongly disagree=4. The third measure asks

³ The following countries could not be included because they were missing information on the outcome variables, the questions used to create the survival cultural index or the key religion variables: Algeria, China, Israel, Saudi Arabia, Turkey, Morocco, Iran and Iraq. Multiple imputation could not be used to replace this missing data because these techniques are inappropriate when the data are systematically missing (i.e. not asked in the country survey) (Allison, 2001).

Table 1 Descriptive Statistics for Variables Included in the Analysis (Individual N= 44,542; Country N=32)

Variable	Mean	SD	Min	Max
Individual-Level Variables				
Abortion not Justified	8.23	2.55	1	10
Divorce not Justified	6.88	2.99	1	10
Gender Inequality Index	-0.28	2.21	-3.94	4.25
Religious Attendance	4.52	2.05	1	7
Religious Importance	3.34	0.93	1	4
Muslim (Reference)	0.27	0.44	0	1
Catholic	0.23	0.42	0	1
Protestant	0.14	0.35	0	1
Orthodox	0.09	0.28	0	1
Jewish	0.00	0.06	0	1
Hindu	0.04	0.20	0	1
Buddhist	0.03	0.16	0	1
Other Religion	0.05	0.22	0	1
None	0.14	0.35	0	1
All Else	0.01	0.11	0	1
Individual Self-Expression vs. Survival Values (Index Sum)	-0.04	2.59	-9.31	6.04
Female	0.51	0.50	0	1
Married	0.58	0.49	0	1
Number of Children	2.09	1.98	0	8
Financial Satisfaction	5.38	2.71	1	10
Education	5.21	2.45	1	9
Birth Cohort				
Before 1920	0.00	0.04	0	1
1920-1929	0.02	0.14	0	1
1930-1939	0.06	0.24	0	1
1940-1949	0.10	0.30	0	1
1950-1959	0.15	0.36	0	1
1960-1969	0.22	0.41	0	1
1970-1979	0.25	0.44	0	1
>1980 (Reference)	0.19	0.40	0	1
Country-Level Variables				
Country Mean of Self-Expression vs. Survival	-0.03	1.43	-3.74	2.04

Logged Population	7.39	0.71	5.84	8.98
Muslim (Reference)	0.31	0.47	0	1
Catholic	0.28	0.46	0	1
Protestant	0.19	0.40	0	1
Orthodox	0.13	0.34	0	1
Hindu	0.03	0.18	0	1
Buddhist	0.06	0.25	0	1

respondents whether they agree=1, do not agree or disagree=2, or disagree=3 with the statement that when jobs are scarce men should have more right to a job than a woman. Since the three measures are on different scales, each measure was divided by its standard deviation before being added together. The scale was then reverse coded so that higher numbers indicate less support for gender equality. The alpha for the three measures is 0.62.⁴

B. Individual-Level Variables

The index for the survival vs. self-expression values is taken from Inglehart (2006) and colleagues’ work (Inglehart & Baker, 2000) on comparative cultural sociology. Using several waves of the World Values Surveys (WVS) and data from 65 societies, Inglehart and colleagues (2000) found that value orientations across countries could be collapsed into two principal factors or dimensions of cultural life: self-expression vs. survival and traditional vs. secular-rational. This study focuses on self-expression vs. survival. The scale used in this study is created from the same

⁴ Because the reliability of the scale was not particularly high, all models were run using the individual measures that comprised the scale. When the outcome variable was whether men make better political leaders or men should have more right to a job the results were virtually the same as those presented in Table 3. For a university education, neither the country survivalism index or the cross-level interactions were significant, but consistent with the results presented in Table 3, Model 2 religious attendance was associated with more conservative attitudes and Muslim religious affiliates were significantly less likely to support gender equality than all other religious affiliates, except Jews and Buddhists.

five questions from the WVS that Inglehart and Baker (2000) used to create their scale. The items are: (1) giving priority to economic security over self-expression⁵ (ranges from 1 to 4); (2) respondent describes self as not very happy (ranges from 1 to 4); (3) respondent would under no circumstances sign a petition (ranges from 1 to 3), (4) you have to be very careful about trusting people (ranges from 0 to 1), and (5) homosexuality is not justifiable (ranges from 1 to 10). Before adding the five measures together, all variables were divided by their standard deviation so that they had a standard deviation of 1. While higher numbers indicate a stronger survival orientation and less of a self-expression orientation, lower numbers indicate a stronger self-expressive orientation and less of a survival orientation. Inglehart and Baker's (2000) self-expression or survival index is highly correlated with a larger eleven item index, $r = 0.96$.

Religious attendance and importance may have independent influences on attitudes, and so both of these religion measures are examined. Religious importance is a single measure that indicates how important religion is in the respondent's life. Responses were reverse coded so that "4" indicates "very important" and "1" indicates "not at all important." Religious attendance is a single measure that indicates frequency of religious attendance. The measure was reverse coded so that "1" indicates "never or practically never" and "7" indicates "more than once a week."

Religious affiliation is measured with nine dummy variables: Buddhist, Catholic, Hindu, Jewish, Christian Orthodox, Protestant,

⁵ This measure was derived from a question that asks, "If you had to choose, which one of the things on this card would you say is most important? And which would be the next most important?" Respondents who chose "giving people more say" and "protecting freedom of speech" were coded "1." Respondents who chose "maintaining order in the nation" and "fighting rising prices" were coded as 4. The remaining respondents were coded as either "2" or "3" depending on whether they put one of the post-materialist responses before or after the materialist response.

other religion, no religious affiliation, and all else.⁶ Islam is the reference category.

Several other variables are included as controls because previous research has found that these variables are associated with either religion or the three outcomes (Finke & Adamczyk, 2008; Scheepers et al., 2002; Stack et al., 2010; Yuchtman-Yaar & Alkalay, 2007). Gender is measured with a dummy variable where “1” indicates female and “0” indicates male. Marital status is also measured with a dummy variable where “1” indicates married and “0” indicates all other options. Number of children specifies the number of children that the respondent has, where “0” indicates no children and “8” indicates eight children or more. Financial satisfaction indicates how satisfied respondents are with the financial situation of their household on a ten-point scale where higher numbers indicate more satisfaction. Education indicates the respondent’s level of education where “1” indicates no formal education and “9” indicates a university education. Finally, each model includes seven dummy variables indicating the decade in which the respondent was born to conceptually account for the idea that change in attitudes within countries over time is likely due to either cohort replacement or period effects.⁷ People born

⁶ The “all else” category, which includes less than 1% of the sample, consists of people who were assigned a code in the WVS of DN or NA. Based on the WVS codebook it looks like these responses were added by the WVS analysts/data cleaners and not included as viable question responses for people being surveyed. I considered setting responses in the “else” category to missing, but since these respondents were assigned a code of NA or DK, we can assume that they did not fit into one of the denominational/religious categories provided to people being surveyed. Hence, it would not be appropriate to set them to missing and then impute missing values for them. For this reason they are included in the analyses as “else.”

⁷ To assess whether change within nations is due to either cohort replacement or period effects data at more than one time point is needed. While multiple waves of the WVS are available, limiting the analytical sample to only countries that include key measures for three available waves (i.e. 1990, 1995, and 2000) would eliminate several less developed countries, reducing variation on key variables and excluding several Muslim-majority countries. Additionally, a power analysis using

after 1980, which is the youngest cohort, is the comparison group.

C. Country-Level Variables

The key country-level indicator is the country self-expression vs. survival scale. The measure was created by aggregating the individual-level measure of self-expression vs. survival for all of the individuals in the same country for each nation included in the analysis.⁸ Higher numbers indicate a greater emphasis on survival than self-expression.

Some research (Adamczyk & Pitt, 2009; Inglehart & Baker, 2000) suggests that a nation's religious tradition may shape residents' values. This study, therefore, includes five dummy variables that measure the religious tradition of the nation where respondents reside. Whereas most nations tend to be dominated by a single religion (e.g. Spain by Catholicism; Jordan, Egypt and Indonesia by Islam), there were a few nations (e.g. Singapore) in the study that have high proportions of more than one religion.⁹ The major religious group that included the largest proportion of

Optimal Design software (2006) found that for the 23 available countries, the power to detect significant country-level effects would be quite weak.

⁸ Since, as Inglehart and Baker (2000) argue, the shift in values from survival to self-expression is largely driven by economic development, a measure of GDP instead of the survivalism scale was considered. However, the results did not differ substantially on the basis of whether GDP or the survivalism scale was used. To maintain consistency with Inglehart's cultural framework, this study relies on the survivalism vs. self-expression scale, rather than GDP, which may capture values (i.e. traditional vs. secular-rational orientations) that extend beyond those included in the self-expression vs. survivalism scale, which is the focus of this study.

⁹ I also considered including the proportion of each religion within a nation. However, since most nations tend to be dominated by a single religion, as the proportion of one religion increases, the proportion of the other religions tend to decrease, making it difficult to interpret the influence of many different religions within the same country. Researchers have typically handled this issue by including a set of dummy variables for the dominant religion (Finke & Adamczyk, 2008; Kenworthy & Malami, 1999; Yuchtman-Yaar & Alkalay, 2007).

people within a country was designated as the dominant religion. This information was taken from the 2001 World Christian Database, which was accessed through the Association of Religion Data Archives (www.TheARDA). Appendix A presents each nation’s largest religion¹⁰ (i.e. Protestant, Catholic, Christian Orthodox, Hindu, Buddhist, and Muslim). Finally, preliminary analysis showed that population size was associated with some of the outcome variables. Hence, a measure of logged population is included for each country.

IV. Methods

The analysis is conducted using generalized mixed models (Breslow & Clayton, 1993) and the HLM software program developed by Raudenbush, Bryk, Cheong and Congdon (2005). Hierarchical modeling techniques make it possible to discern variance within nations (micro-level effects) from variance between nations (macro-level effects). Whereas ordinary least square (OLS) regression assumes that errors are independent of each other, residents of the same nation are more likely to be similar to one another than to residents of different nations, which violates the standard OLS assumption of independent errors. HLM techniques correct for correlated errors among residents of the same nation and use the appropriate degrees of freedom for country units.

The multivariate analysis will begin by first examining the contribution of individual-level variables for attitudes about abortion. Formally, the model for examining attitudes about abortion with all of the individual level measures is:

¹⁰ The ARDA’s coding has only one category for Christians. If the ARDA’s coding indicated that the majority of a nation was Christian, I looked at the within country distributions of Catholics and Protestants in the WVS to see which had the largest proportion of adherents.

$$Y_{ij} = \beta_{0j} + \beta_{1j} (\text{Religious importance}) + \beta_{2j} (\text{Religious attendance}) + \beta_3 (\text{Individual self expression vs. survival values}) + \beta_4 (\text{Female}) + \beta_5 (\text{Education}) + \beta_6 (\text{Married}) + \beta_7 (\text{Children}) + \beta_8 (\text{Financial satisfaction}) + \beta_{11-18} (\text{Birth cohort}) + \beta_{19-28} (\text{Religious affiliation}) + r_{ij}.$$

The i indexes individuals and j indexes country level influences. The distribution of r_{ij} is assumed to be (random normal) with a mean of 0 and variance of σ^2 .

To explore the effect of the national context on attitudes about abortion, the country-level variables are then included on the intercept of the previous model. Formally, the model for the intercept is:

$$\beta_{0j} = \gamma_{00} + \gamma_{01} (\text{Country mean self-expression vs. survival values}) + \gamma_{02-6} (\text{Dominant cultural / religious tradition}) + \gamma_{07} (\text{Logged population}) + u_{0j}.$$

In this model, j indexes country level influences, β_{0j} is the intercept term from the individual-level equation (representing individual attitudes about abortion adjusted for individual attributes), and u_{0j} is a country level disturbance assumed to be normally distributed with a mean of 0 and variance of t_{00} .

The final model examines whether the country self-expression vs. survival index explains variation in the influence of religious importance and attendance on disapproval of abortion. The two religion cross-level interaction terms are included to test whether the country level self-expression vs. survival cultural index significantly changes the strength of the relationship between the two individual-level religion measures and disapproval of abortion. Formally, this is written:

$$\begin{aligned} \beta_{1j} &= \gamma_{10} + \gamma_{11} (\text{Country mean self-expression vs. survival values}) + u_{1j}. \\ \beta_{2j} &= \gamma_{20} + \gamma_{21} (\text{Country mean self-expression vs. survival values}) + u_{2j}. \end{aligned}$$

where β_{1j} is the personal religious importance coefficient for people in country j and β_{2j} is the religious attendance coefficient for people in country j . U_{1j} refers to a country specific disturbance in the association between the country self-expression vs. survival values and individual religious importance assumed to be normally distributed with a mean of 0 and variance of t_{11} . Similarly, u_{2j} refers to a country specific disturbance in the association between the country self-expression vs. survival values index and religious attendance. These exact same steps are done to analyze the influence of religion and cultural context on attitudes about divorce and gender equality.

Aside from dummy variables, all variables in the analysis are grand mean centered,¹¹ which means that the intercept term represents the average attitude for people who are assigned the suppressed category for all dummy variables and the average value on all other variables. The analysis uses the recommended weights, which account for the unequal probability of selection of persons within nations.

To maintain the largest sample size possible, the analysis utilizes multiple imputation techniques, which take full advantage of the available data and avoid some of the bias in standard errors and test statistics that can accompany listwise deletion (Allison, 2001).¹² Missing values are imputed for five datasets and the parameter estimates are averages of regression coefficients produced through the imputation option in the statistical computing program, Hierarchical Linear and Nonlinear Modeling (Raudenbush et al., 2005). Standard errors from the multiple

¹¹ Predictors can also be centered around the mean value for the country where individuals live. In this case the intercept would be interpreted as the relative deviation for individual groups (i.e. nations). Grand mean centering, which presents the average outcome for individuals and the overall sample, tends to be particularly useful for interpreting interaction terms. With grand mean centering coefficients involved in interaction terms represent the effect of the term when its paired interaction term is set at the mean (see Raudenbush & Bryk, 2002).

¹² Missing data was imputed based on a technique outlined in Van Buuren, Boshuizen and Knook (1999).

Table 2 Individual and Country-Level Effects for Explaining Disapproval of Abortion and Divorce (Individual N=44,542; Country N=32)

	No Justification for Abortion						No Justification for Divorce					
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Intercept	8.47***	0.15	8.37***	0.21	8.38***	0.21	6.77***	0.25	6.61***	0.23	6.62***	0.23
Individual-Level Variables												
Religious attendance	0.09***	0.02	0.09***	0.02	0.09***	0.02	0.12***	0.02	0.12***	0.02	0.12***	0.02
Religious importance	0.33***	0.04	0.33***	0.04	0.33***	0.03	0.26***	0.04	0.26***	0.04	0.25***	0.04
Religious Affiliation^a												
None	-0.16	0.13	-0.16**	0.05	-0.16**	0.05	0.10	0.19	0.10+	0.06	0.10+	0.06
Catholic	-0.12	0.12	-0.13*	0.05	-0.13**	0.05	0.03	0.18	0.03	0.06	0.03	0.06
Protestant	-0.08	0.09	-0.09+	0.05	-0.10+	0.05	0.33	0.24	0.33***	0.06	0.32***	0.06
Orthodox	-0.39*	0.18	-0.37***	0.07	-0.37***	0.07	-0.29	0.27	-0.28**	0.09	-0.28***	0.09
Jewish	-1.06*	0.51	-1.06***	0.18	-1.06***	0.18	-0.45	0.34	-0.45*	0.21	-0.45*	0.21
Hindu	-0.08	0.11	-0.08	0.10	-0.08	0.10	0.36**	0.13	0.37**	0.12	0.37***	0.12
Buddhist	-0.20	0.14	-0.20*	0.08	-0.21*	0.08	0.37*	0.17	0.38***	0.10	0.37***	0.10
Other religion	-0.13	0.11	-0.13*	0.06	-0.14*	0.06	0.19	0.17	0.19**	0.07	0.19**	0.07
All else	-0.27	0.17	-0.27*	0.11	-0.27*	0.11	-0.03	0.24	-0.03	0.13	-0.03***	0.13
Individual Self-Expression vs. Survival Values	0.20***	0.02	0.20***	0.01	0.20***	0.01	0.21***	0.02	0.21***	0.01	0.21***	0.01
Female	-0.19***	0.04	-0.19***	0.02	-0.20***	0.02	-0.18**	0.06	-0.18***	0.03	-0.18***	0.03
Education	-0.04**	0.01	-0.04***	0.01	-0.04***	0.01	-0.06***	0.01	-0.06***	0.01	-0.06***	0.01
Married	0.13*	0.05	0.13***	0.03	0.13***	0.03	0.42***	0.06	0.42***	0.03	0.42***	0.03
Children	0.02*	0.01	0.02*	0.01	0.02*	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Financial Satisfaction	0.01	0.01	0.01*	0.00	0.01*	0.00	0.03**	0.01	0.03***	0.01	0.03***	0.01
Birth Cohort^b												
Before 1920	0.55	0.35	0.55*	0.27	0.55*	0.27	0.21	0.29	0.21	0.32	0.21	0.32
1920-1929	0.37***	0.09	0.37***	0.09	0.37***	0.09	0.44***	0.12	0.44***	0.10	0.44***	0.10
1930-1939	0.13	0.09	0.14**	0.06	0.14**	0.06	0.27*	0.12	0.28***	0.07	0.28***	0.07
1940-1949	-0.03	0.08	-0.03	0.05	-0.03	0.05	0.09	0.09	0.09*	0.06	0.09	0.06
1950-1959	-0.14**	0.05	-0.14***	0.04	-0.14**	0.04	-0.16+	0.09	-0.16**	0.05	-0.16**	0.05
1960-1969	-0.09+	0.05	-0.09+	0.04	-0.09*	0.04	-0.16*	0.08	-0.16***	0.05	-0.16***	0.05
1970-1979	-0.07*	0.03	-0.07	0.03	-0.07*	0.03	-0.14**	0.05	-0.14***	0.04	-0.14***	0.04
Country-Level Variables												
Country												
Self-Expression vs. Survival			0.24*	0.20	0.33**	0.10			0.57***	0.11	0.59***	0.11
Logged population			-1.02	0.38	0.24	0.20			0.53*	0.22	0.54*	0.22
Country Religious Tradition^c												
Catholic			0.73*	0.34	0.71*	0.34			0.39	0.37	0.39	0.37
Protestant			0.20	0.32	0.19	0.32			0.38	0.35	0.38	0.35
Orthodox			-1.02*	0.38	-1.03*	0.38			-0.34	0.41	-0.36	0.41
Hindu			-0.84	0.67	-0.82	0.68			-1.05	0.74	-1.07	0.74
Buddhist			0.30	0.52	0.31	0.52			0.61	0.56	0.65	0.56

Cross-Level Interactions						
Religious Attendance by Country Survival Index			-0.04**	0.01		-0.04** 0.01
Religious Importance by Country Survival Index			-0.08**	0.02		-0.05+ 0.03
Variance						
Country Intercept	0.60***	0.35***	0.33***	0.85***	0.40***	0.40***
Religious Attendance Slope	0.01***	0.01***	0.01***	0.01***	0.01***	0.01***
Religious Importance Slope	0.04***	0.04***	0.02***	0.03***	0.04***	0.03***
Individual Intercept ^d	4.86***	4.86***	4.86***	6.77***	6.77***	6.77***

+ <.10, * <.05, ** <.01, *** <1.00

- Notes: a. The reference group is Muslims.
- b. The reference group is people born after 1980.
- c. Islam is the reference category.
- d. Individual intercept does not have a significance level.

imputation process are calculated to reflect the uncertainty that is generated through simulated data. The final individual-level sample size consists of 44,542 respondents.

V. Results

A. Abortion Attitudes

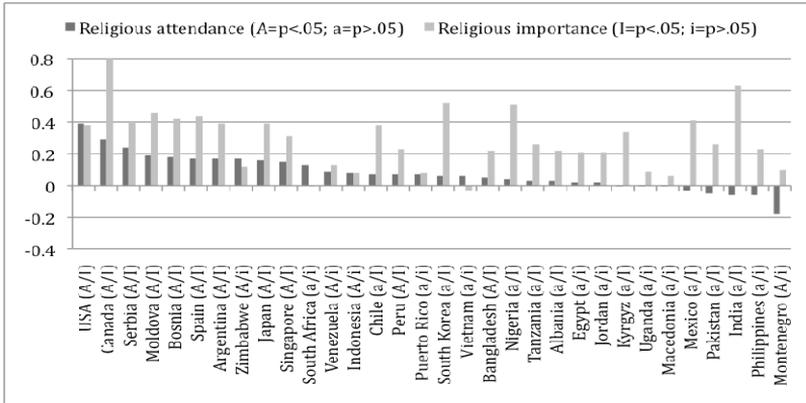
The first three models in Table 2 present the multivariate analysis of the attitude that there is no justification for abortion. In a separate analysis, I found that 19% of the variance in attitudes about abortion is to found between nations, and 81% within nations. Compared to other outcomes modeled with hierarchical models, 19% is quite high, suggesting that a much higher-than-average share of attitudes about abortion is shaped by the country context.

The first model in Table 2 examines the influence of

individual-level variables on disapproval of abortion. Both religious attendance and importance are significantly and positively related with the disapproval of abortion. Additionally the two religion variables appear to explain unique variation in abortion attitudes, which offers support for the first hypothesis. For every unit of increase in religious attendance, disapproval of abortion increases by .09 units, and for every increase in religious importance, disapproval of abortion increases by .33 units. At this point in the analysis, Muslims appear less likely than Orthodox Christian and Jewish affiliates to see abortion as justifiable, but this relationship changes in the next model when controls for country religious tradition are included. Respondents who emphasize survivalist values are more likely to disapprove of abortion. Women appear to have more liberal attitudes about abortion than men and lower levels of education are associated with more conservative abortion attitudes. Finally, married people are more likely than others to disapprove of abortion.

The HLM model shows that, on average, religious attendance and religious importance are significant and associated with more disapproval across nations. Figure 1 provides information on the extent to which religious attendance and importance shape disapproval of abortion within individual nations. Whereas the bars show the size of the coefficients for religious attendance and importance, “A” (i.e. attendance) and “I” (i.e. importance) indicate whether the variables are significant. As mentioned above, attendance and importance are moderately correlated (0.47) and explain some of the same variation in the outcome. Figure 1 shows the unique influence of each religion variable, while controlling for the other religion variable and all of the other variables included in Model 1 of Table 2. As expected, in most nations religious importance and attendance are positively associated with disapproval. After controlling for religious attendance, the effect for religious importance appears to be greatest in Canada, and the effect for religious attendance appears to be greatest in the United States.

Figure 1 Effect Sizes of Religious Attendance and Religious Importance by Country for Explaining Disapproval of Abortion (OLS Unstandardized Regrssion Estimates)



Note: OLS regression coefficients are adjusted for all of the variables presented in Model 1 of Table 2. When a bar appears to be missing (e.g. attendance for Uganda) it means that the effect size is zero or very close to zero.

While the Philippines, India, Pakistan and Mexico have religious attendance effects that are negatively associated with disapproval of abortion, none of these effects are significant ($p < .05$). Only in Montenegro is religious attendance negatively associated with disapproval of abortion.

The second model in Table 2 examines the influence of the country-level variables on disapproval of abortion. When the country-level variables are included, Muslim affiliates appear to have more disapproving attitudes of abortion than Catholic, Christian Orthodox, Jewish, and Buddhist affiliates, people coded as having another religion, and people who did not claim a religion. The magnitude of the effect of the religious affiliation variables in Model 2 of Table 2 are the same or very similar to those in Model 1 of Table 2. However, when country religious tradition is included in Model 2 the standard errors for most of the religious affiliation variables are reduced by close to 50%. When the country

religious tradition is included the coefficients of the other variables can be estimated more precisely, which is why more religious affiliation variables (i.e. Catholic, Buddhist, no religion, other religion, and all else) are significant in the second model. There are no significant ($p > .05$) differences in abortion attitudes between Muslims and Protestants, and Muslims and Hindus, even though these coefficients are also negative.

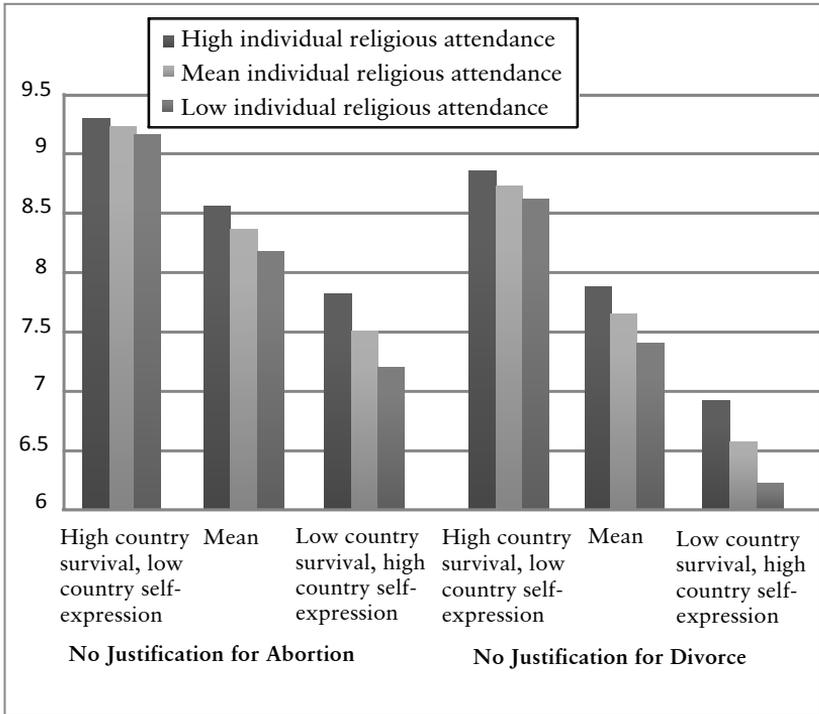
Consistent with the second hypothesis, Model 2 shows that people living in countries that have a stronger survivalist orientation are more likely to disapprove of abortion. Model 2 also shows that people living in Muslim-majority countries¹³ are significantly more likely than people living in Christian Orthodox nations to disapprove of abortion, and they are less likely than people living in Catholic-majority nations to disapprove of abortion. The third model¹⁴ in Table 2 includes the cross-level interaction between the country self-expression vs. survival index and the individual religiosity measures. Both of the cross-level interactions are significant and negative, which offers support for the third hypothesis. In countries that place a greater emphasis on survival, religious attendance and importance have less of an influence in shaping attitudes about abortion.

To better understand the interaction terms, Figure 2 presents predicted values of attitudes about abortion by personal religious attendance and three different levels of the country self-expressive vs. survival index. In countries that are one standard deviation

¹³ In a separate analysis the reference group was switched to Christian Orthodox. This analysis showed that people living in Christian Orthodox countries also had significantly more liberal attitudes about abortion than people living in Protestant, Catholic, and Buddhist nations. Likewise, a separate analysis showed that people living in Catholic countries had significantly more conservative attitudes than people living in Hindu, Muslim, and Christian Orthodox nations.

¹⁴ Because the abortion variable is somewhat skewed, in a separate analysis a dichotomous abortion measure where people who responded that abortion is never justified were coded "1" and all others were coded "0" was used. In this analysis all of the key relationships remained the same, except the Orthodox country variable was now only significant at the .10 level.

Figure 2 Predicted Values of Attitudes about Abortion and Divorce for Three Levels of Country Survival vs. Self-expression by Individual Religious Attendance



Note: Predicted values are presented for Protestant affiliated married middle-aged women living in Protestant majority countries where they have been assigned the mean on all other variables.

above the mean on the survivalism index (i.e. greater emphasis on survival), religious attendance has very little influence on attitudes about abortion. Regardless of personal religious attendance, almost everyone in countries characterized as having a survival orientation (1 SD above the mean) have a score of 9.3 on the disapproval of abortion scale. However, in nations that put a greater emphasis on self-expression, religious attendance appears to have a greater

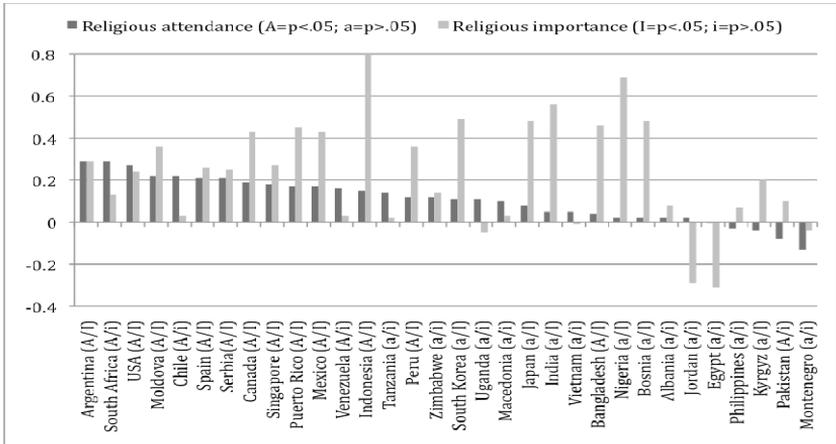
influence on attitudes about abortion. In countries characterized as having a stronger self-expressive orientation (1 SD below the mean), people who regularly attend religious services (1 SD above the mean) have a score of 7.8 on the disapproval of abortion measure, but people who rarely attend religious services (1 SD below the mean) have a score of 7.2 on the disapproval of abortion measure. A very similar pattern can be found for the interaction between country survivalism and religious importance.

B. Divorce Attitudes

Models 4, 5, and 6 in Table 2 present the multivariate analysis for explaining attitudes about divorce. In a separate analysis, I found that 18% of the variance can be explained at the country level and 82% of the variance can be found at the individual level. Model 4 includes the individual-level variables. Increases in religious attendance and importance are significantly associated with more disapproving attitudes about divorce, which offers support to the first hypothesis that people who find religion important and/or are more religiously involved will have more disapproving attitudes about abortion, divorce, and gender equality. Figure 3 presents the effect sizes for religious attendance and importance for individual nations. Argentina is the country with the largest religious attendance effect and Indonesia is the nation with the largest religious importance effect. At this point in the analysis Hindus and Buddhists appear more likely than Muslims to disapprove of divorce.

Model 5 of Table 2 includes the country-level variables. Consistent with the second hypothesis, respondents who are living in countries that have a stronger survival orientation are more likely to disapprove of divorce. When country religious tradition is included, individual Muslim affiliates appear to be more approving of divorce than Protestants, Hindus, Buddhists and people classified as having another religion, but they are less approving of divorce than Orthodox Christians and Jews.

Figure 3 Effect Sizes of Religious Attendance and Religious Importance by Country for Explaining Disapproval of Divorce (OLS Unstandardized Regrsson Estimates)



Note: OLS regression coefficients are adjusted for all of the variables presented in Model 4 of Table 2. When a bar appears to be missing (e.g. attendance for Egypt) it means that the effect size is zero or very close to zero.

Model 6 of Table 2 includes the cross-level interactions between the personal religiosity variables and the country self-expression index. The interaction with attendance is significant at the .05 p-level and the interaction for religious importance is significant at the $p < .10$ level. A separate analysis shows that when the religious importance interaction is examined without religious attendance it is also significant at the .05 p-level, indicating that these variables are explaining some of the same variation. The second set of bars in Figure 2 present predicted values of attitudes about divorce by personal religious attendance and the country self-expressive vs. survival index. Attitudes about abortion and divorce are both measured on ten-point scales and the figure illustrates that people are more likely to disapprove of abortion than divorce, regardless of their religious participation, or the level of survivalism vs. self-expression within their nation. Consistent

with the analysis of abortion attitudes, when individuals reside in nations that put greater emphasis on survival than self-expression, religious attendance has less of an influence on divorce attitudes.

C. Attitudes about Gender Equality

Table 3 presents the results of the multivariate analysis of attitudes about gender equality. A separate analysis found that 20% of the variance in attitudes about gender equality can be explained with reference to country-level variables, and 80% of the variance

Table 3 Individual and Country-level effects for explaining supportive attitudes for gender inequality (Individual N=44,542; Country N=32)

	Support for Gender Inequality					
	Model 1		Model 2		Model 3	
	Coefficient	SE	Coefficient	SE	Coefficient	SE
Intercept	0.26	0.18	0.23	0.22	0.24	0.22
Individual-Level Variables						
Religious Attendance	0.02+	0.01	0.02+	0.01	0.02+	0.01
Religious Importance	0.07+	0.04	0.08+	0.04	0.08+	0.04
Religious Affiliation ^a						
None	-0.31**	0.10	-0.31***	0.05	-0.31***	0.05
Catholic	-0.37***	0.09	-0.36***	0.04	-0.37***	0.04
Protestant	-0.35***	0.09	-0.35***	0.04	-0.35***	0.04
Orthodox	-0.41***	0.09	-0.41***	0.06	-0.41***	0.06
Jewish	-0.02	0.17	-0.02	0.15	-0.02	0.15
Hindu	-0.26**	0.08	-0.26**	0.08	-0.26**	0.08
Buddhist	-0.08	0.15	-0.08	0.07	-0.08	0.07
Other Religion	-0.37**	0.10	-0.37***	0.05	-0.37***	0.05
All Else	-0.19	0.12	-0.19**	0.10	-0.19+	0.10
Individual						
Self-Expression vs. Survival	0.07***	0.01	0.07***	0.00	0.07***	0.00
Female	-0.88***	0.01	-0.88***	0.02	-0.88***	0.02
Education	-0.15***	0.04	-0.15***	0.00	-0.15***	0.00
Married	0.08*	0.02	0.08**	0.03	0.08**	0.03
Children	0.04*	0.01	0.04*	0.01	0.04*	0.01
Financial Satisfaction	0.01*	0.06	0.01**	0.00	0.01**	0.00

Birth cohort ^b						
Before 1920	0.38	0.39	0.38	0.23	0.38	0.23
1920-1929	0.42**	0.13	0.42***	0.08	0.42***	0.08
1930-1939	0.24*	0.10	0.24***	0.06	0.23***	0.06
1940-1949	0.14+	0.08	0.14*	0.05	0.14*	0.05
1950-1959	0.04	0.06	0.04	0.04	0.04	0.04
1960-1969	0.05	0.06	0.05	0.04	0.05	0.04
1970-1979	0.03	0.05	0.03	0.03	0.03	0.03
Country-Level Variables						
Country						
Self-Expression vs. Survival			0.47***	0.09	0.35**	0.11
Logged Population Country Religious Tradition ^c			0.63**	0.20	0.63**	0.20
Catholic			-0.15	0.33	-0.16	0.33
Protestant			0.29	0.33	0.29	0.33
Orthodox			-0.00	0.34	-0.00	0.34
Hindu			-0.85	0.64	-0.86	0.65
Buddhist			0.57	0.46	0.54	0.47
Cross-Level Interactions						
Religious Attendance by Country Survival Index					-0.02**	0.01
Religious Importance by Country Survival Index					-0.01	0.02
Variance						
Country Intercept	0.62***		0.48***		0.47***	
Religious Attendance Slope	0.00***		0.00***		0.00***	
Religious Importance Slope	0.03***		0.03***		0.03***	
Individual Intercept ^d	3.43		3.43		3.43	

+<.10, *<.05, **<.01, ***<.001

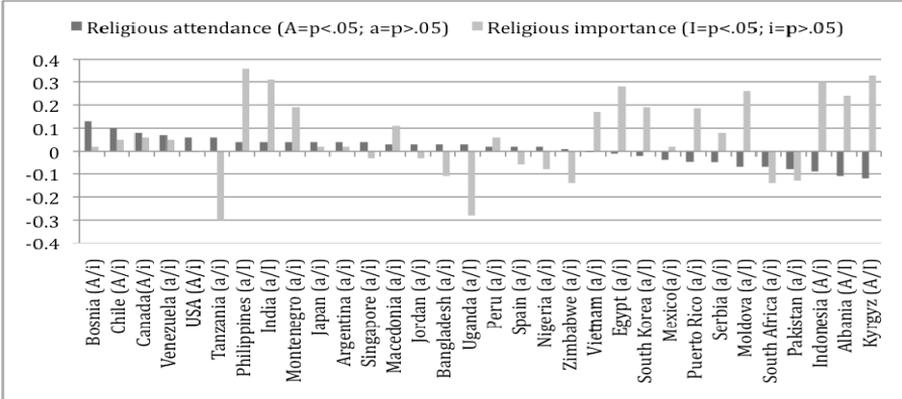
Notes: a. The reference group is Muslims.

b. The reference group is people born after 1980.

c. Islam is the reference category.

d. Individual intercept does not have a significance level.

Figure 4 Effect Sizes of Religious Attendance and Religious Importance by Country for Explaining Supportive Attitudes for Gender Inequality (OLS Unstandardized Regrssion Estimates)



Note: OLS regression coefficients are adjusted for all of the variables presented in Model 1 of Table 2. When a bar appears to be missing (e.g. attendance for Vietnam) it means that the effect size is zero or very close to zero.

can be located at the individual level. Model 1 includes the individual-level variables. Unlike the analysis of attitudes about abortion and divorce, neither religious importance nor attendance are significantly ($p < .05$) associated with attitudes about gender equality. However, a separate analysis showed that when examined individually, religious attendance and importance are significant and positively associated with support for gender inequality. Figure 4 shows the magnitude of the religious attendance and importance effects within individual nations. Unlike the previous figures, the sizes of the coefficients are less consistently positive and significant. Bosnia has the largest effect size for religious attendance, and the Philippines has the largest effect size for religious importance. Model 1 of Table 3 also shows that all of the religious affiliation coefficients are negative and several of them are significant, including Catholic, Protestant, Orthodox Christian, Hindu, other religion and no religion. The coefficients for Jews, Buddhists and

people in the all else category have not reached significance, but these are also the smallest groups in the sample with Jews and other people contributing less than 1% to the total sample size. Unlike the analyses of abortion and divorce, several of the denominational affiliation variables are significant before any country-level variables are included, suggesting that Muslims in this study may have more consistent attitudes about gender inequality than they do for attitudes about abortion and divorce. Alternatively, the gender inequality measure may simply have more reliability and validity than the two other outcome measures. Whereas the divorce and abortion measures were each derived from one question, the gender inequality outcome is the result of combining three questions, which should increase its reliability.

Model 2 in Table 3 includes the country-level variables. People who live in countries that put a greater emphasis on survival are less likely to support gender equality, offering support for the second hypothesis. People residing in Muslim-majority countries do not appear to differ significantly in their gender attitudes from people living in other countries. Hence, the effect of Islam appears only for Muslim affiliates and not people who are living in nations where there is a high proportion of Muslims.

Model 3 of Table 3 includes the cross-level interactions between religious attendance and the country survival index, and religious importance and the country survival index. Whereas the latter interaction is not significant, the cross-level interaction between religious attendance and the country survival index is significant, offering some support to the third hypothesis. Consistent with the findings for abortion and divorce, religious attendance has less of an influence on attitudes about gender equality in nations characterized by a stronger survival orientation.

VI. Discussion and Conclusion

Early work in sociology predicted that as nations industrialize

and develop, religious beliefs would diminish. However, contemporary research in the sociology of religion has found that religious beliefs and behaviors have remained strong, even as many nations develop and stabilize (Finke & Stark, 1992; Stark & Finke, 2000). This study is the first to offer insight into the relationship between religion and cultural orientations for shaping individuals' attitudes about abortion, divorce, and gender equality.

Examining a range of attitudes that vary in the extent to which people around the world may disapprove, this study found that in nations where cultural values emphasize self-expression, most residents are more accepting of abortion, divorce, and gender equality than people living in nations characterized by a survival orientation. Previous studies (Baldassarri & Gelman, 2008; Danigelis, Hardy, & Cutler, 2007; Stack & Kposowa, 2006, 2008) have found relationships between specific symbolic orientations—authoritarianism, religious fundamentalism, and political conservatism—and attitudes about morality. This study is the first to examine the influence of a larger cultural axis of survival vs. self-expression, which subsumes a number of symbolic orientations, for explaining attitudes about divorce, abortion, and gender equality. The cultural axis of survival vs. self-expression offers a more unified and parsimonious explanation than specific symbolic orientations of why individuals' attitudes become more liberal as nations industrialize and develop.

While people living in self-expressive nations may have more liberal attitudes, personal religious involvement also appears to play a greater role in shaping attitudes in nations characterized as self-expressive. By contrast, in nations characterized as having a survival orientation, personal religious participation has relatively little impact on attitudes about abortion, divorce, and gender equality. These findings add some important insights into why religion seems to have such a powerful influence on attitudes in many industrialized and developed nations.

In contrast to survivalist cultures, in self-expressive cultures

the media, politics, and educational and legal institutions are likely to support a greater range of views about the family, sexual reproduction, and the sexual division of labor. For example, in self-expressive cultures television shows are likely to present traditional and nontraditional family arrangements (i.e. single parents, homosexual couples, etc.), and show women in a variety of roles. Unless people in self-expressive cultures isolate themselves from the larger culture (i.e. the Amish), the attitudes of most people, regardless of religious beliefs, are likely to be more liberal and tolerant. In self-expressive societies, religion, in contrast to other institutions, is likely to take a clearer and more consistent stance on issues, like abortion and divorce. As a result, religious people living in nations characterized as self-expressive may be more likely to draw on religiously inspired perspectives to develop and defend their attitudes about divorce, abortion, and the sexual division of labor.

This study also found that Muslims have more disapproving attitudes about abortion than Catholics, Orthodox Christians, Jews, Buddhists, people with no religion, and people in the other religion and all else categories. Muslims were also more supportive of gender inequality than Catholics, Protestants Orthodox Christians, Hindus, and people with no religion or of another religion. For both sets of attitudes, Muslims consistently differed from only four of the religious categories—Catholics, Orthodox Christians, and people with no religion or of another religion. While Muslims generally appear to have more conservative social values (Finke & Adamczyk, 2008; Yuchtman-Yaar & Alkalay, 2007), clearly the extent to which they differ from other religious affiliates depends on the specific attitude being examined and the religious group to which they are being compared.

One important direction for future research would be to investigate how the larger cultural context shapes behaviors such as divorce and abortion. Clearly, we would expect there to be some relationship between the attitudes examined in this study and their

corresponding behavior. But, the opinions people have may not follow their behaviors once they find themselves in a situation where abortion or divorce is a real, rather than a hypothetical possibility. Hence, many women may disapprove of abortion, but if pregnant and unmarried, their prior opinions may matter less than the circumstances in which they find themselves as a predictor of behavior in the near future (Adamczyk & Felson, 2008). Of course, the opposite relationship may also occur—people who approve of divorce may not necessarily leave an unhappy marriage. Several studies (Moore & Vanneman, 2003; Regnerus, 2003; Scheepers et al., 2002) suggest that even after accounting for individuals' opinions, the surrounding culture and access to the resources that facilitate certain behaviors shape the likelihood of enacting those behaviors. Indeed, the findings in this study offer support for the role played by value orientations in the larger cultural context in explaining individuals' attitudes, even after accounting for individuals' cultural orientations.

In addition to public interest in these issues, this study focused on attitudes towards divorce, abortion, and gender equality because it was expected that there would be greater variation in the extent to which people disapprove of these issues, than would be the case for behaviors, like stealing, which are illegal across nations. Because behaviors like stealing and burglary have strong state sanctions and there is a great deal of agreement between and within countries about the unacceptability of these behaviors, they are less likely to be shaped by religion and the larger culture (Finke & Adamczyk, 2008). Cultural orientations appear to shape the relationship between religiosity and attitudes about abortion, divorce, and gender inequality in the same way that they shape the relationship between religiosity and homosexuality (Adamczyk & Pitt, 2009). Combined, these findings show that in self-expressive cultures, in contrast to survival-oriented cultures, personal religiosity is more likely to influence a wide array of issues ranging from what may be viewed as deviant

(i.e. homosexuality) to the commonplace (i.e. divorce).

When we use surveys that focus on a single nation or region of the world, we can easily overlook the role that a nation’s culture plays in shaping its residents’ attitudes. The findings in this study suggest that nations’ cultural orientations vary along an axis of survival and self-expression, and the extent to which religion shapes attitudes, in part, depends on their placement along this cultural axis. Knowing the sources of attitudes sheds a great deal of light on why nations differ so considerably in their views of sexual morality and gender equality, and how we might expect people’s attitudes to differ based on the cultural orientation of their nations.

Appendix A

Country	No Justification for Abortion (range=1 to 10)	No Justification for Divorce (range=1 to 10)	Support for Gender Inequality (range=-3.9 to 4.2)	N	Dominant Religion*
Zimbabwe	9.72	9.02	-0.57	1,002	Protestant
Indonesia	9.71	8.50	-0.07	1,004	Muslim
Bangladesh	9.69	9.45	1.36	1,500	Muslim
Tanzania	9.67	7.02	-1.03	1,171	Muslim
Jordan	9.48	7.85	1.63	1,223	Muslim
Nigeria	9.32	8.53	1.15	2,022	Protestant
Peru	9.18	7.16	-1.29	1,501	Catholic
Pakistan	9.10	9.08	0.29	2,000	Muslim
Venezuela	9.00	6.22	-1.30	1,200	Catholic
Uganda	8.97	7.75	-0.31	1,002	Protestant
Puerto Rico	8.93	6.53	-1.79	720	Catholic
Egypt	8.85	6.42	1.56	3,000	Muslim
Vietnam	8.67	8.24	0.11	1,000	Buddhist
Chile	8.62	5.78	-0.71	1,200	Catholic
S Africa	8.41	7.02	-0.86	3,000	Protestant
Kyrgyz	8.39	7.61	-0.04	1,043	Muslim
Argentina	8.35	5.56	-1.11	1,280	Catholic
Mexico	8.34	6.30	-0.86	1,535	Catholic
Singapore	8.31	7.56	-0.49	1,512	Muslim
Philippines	8.15	7.69	0.85	1,200	Catholic
India	7.83	7.16	0.57	2,002	Hindu
S Korea	7.63	6.42	-0.35	1,200	Protestant
Moldova	7.43	6.58	-0.07	1,008	Orthodox Christian
Montenegro	7.25	5.89	-0.42	1,060	Orthodox Christian
Bosnia	7.19	5.56	-0.97	1,200	Muslim
Macedonia	7.17	6.83	-0.78	1,055	Orthodox Christian
Albania	7.13	6.62	-0.38	1,000	Muslim
USA	6.64	5.08	-1.89	1,200	Protestant
Canada	6.51	4.95	-1.97	1,931	Catholic
Serbia	6.26	5.66	-0.71	1,200	Orthodox Christian
Japan	6.21	4.70	-0.19	1,362	Buddhist
Spain	6.19	4.64	-1.77	1,209	Catholic

* Dominant religion indicates the religion with the largest proportion of adherents amongst the following six groups: Muslims, Catholics, Protestants, Hindus, Orthodox Christians, and Buddhists. Estimates of the largest proportion are provided by the 2001 *World Christian Database*, which was accessed through the Association of Religion Data Archive's (www.TheARDA).

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個人宗教觀對於墮胎、離婚及性別平權態度 之影響：文化背景有關係嗎？

艾美·亞當契克

Department of Sociology, City University of New York
899 10th Ave., New York, NY 10019, USA
E-mail: aadamczyk@jjay.cuny.edu
(林允安譯)

摘 要

每個人對於墮胎、離婚以及性別平等的態度相當不同；這些差異大大地反映在各國的離婚法規、對女性進行墮胎的懲罰、及女性的政治代表性上面。儘管個人的宗教信仰常被認為能顯著地形塑每個人的態度，一國的經濟發展及政治穩定性也同樣被視為是影響性道德觀及性別平等的重要因素。本研究試圖從文化社會學及宗教社會學的角度，強調個人宗教觀與國家文化傾向的交互關係，以此解釋各國在墮胎、離婚、性別平等議題上的不同輿論觀點。本文使用世界價值觀調查的第四波資料，運用階層線性模型方法，研究結果支持「求生存或自我表現傾向」這個廣泛的文化軸線，以及個人的宗教參與程度，皆會形塑人們對於墮胎及離婚的態度。再者，相較於許多撒哈拉以南的非洲國家，在諸如美國等有較強自我表現文化傾向的國家中，個人宗教信仰對於墮胎、離婚、性別平等觀點的影響較鉅。

關鍵詞：宗教、墮胎、離婚、性別平等、文化