

# ISLAMIC CONSERVATISM AND SUPPORT FOR RELIGIOUS FREEDOM

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## Abstract

The literature on the Muslim world has found that although Muslims have a high support for democracy, that same support has been lower when it comes to democratic virtues such as tolerance. It has been unclear, however, what specifically about the Muslim world that contributes to this paradox. I offer methodological and theoretical contributions to this scholarly discussion. Methodologically, I employ Bayesian item response theory (IRT) that improves the previous studies by relaxing the requirement that all units of analysis answer an identical set of questions. I present a picture of conservatism levels in 26 countries and offer an insight on the relative importance of social issues among Muslims across the world. On the theoretical level, I provide evidence that it is Islamic conservatism that leads to the tolerance deficit. This conservatism is related to the perception of Islam superiority and different from being pious or traditional.

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## ISLAMIC CONSERVATISM AND SUPPORT FOR RELIGIOUS FREEDOM

Although early research argued that Islam is incompatible with democracy (e.g., Kedourie 1992; Lipset 1994, 5; Huntington 1997), contemporary studies have provided evidence for the opposite. Support for democracy is high among Muslims and in Muslim-majority countries (e.g., Esposito and Mogahed 2007; Jamal and Tessler 2008; Mujani and Liddle 2007, 2009; Norris and Inglehart 2002; Rose 2002; Tessler 2002, 2003). Muslims, just like non-Muslims, prefer a democratic leader to a strong leader and democracy to authoritarianism.

Stating that one supports democracy, however, is not the same as saying one submits to democratic values, among the most important being religious tolerance. In addition to (or perhaps more than) elections, democracy needs tolerance—a willingness of the people to put up with ideas, groups, or beliefs they disagree with (Gibson 2010, Linz and Stepan 1996). It is this aspect of democracy that studies start to show the Muslim world is lacking (e.g., Gu and Bomhoff 2012; Spierings 2014). Muslims support democracy, but are less willing to tolerate offensive acts, especially if the acts are hostile to religion (Djupe and Calfano 2012).

In part because this line of research is new, little is known about the factors behind this relatively low level of tolerance. I aim to advance the literature by focusing on religious tolerance and by offering methodological and theoretical contributions. On the methodological level, I employ a modeling technique of survey response that is based on Bayesian item response theory (IRT). The method offers three advantages relative to the past studies. First, instead of treating observed survey responses as given, the method models them as influenced by an unobserved latent variable “Islamic conservatism.” This variable efficiently summarizes attitudes toward multiple issues and makes a comparison between individuals or between aggregation categories

easier. Second, the approach acknowledges the empirical fact that not all survey questions are created equal. Some may be better than the others in separating the most and least conservative respondents. Questions may also differ in their likelihoods to elicit affirmative responses from the respondents. Third, insofar as it is possible to create a common space and connect respondents based on the questions they answer, the method allows for a cross-countries comparison even if the respondents do not answer an identical set of questions.

On the theoretical level, I argue that Islamic conservatism is the main drive behind the relatively low tolerance level among Muslims in the Muslim world. Islamic conservatism is different from social conservatism in that the former pertains to issues specific to Islam whereas the latter relates to general social issues debated by Muslims and non-Muslims alike, such as abortion, euthanasia, and alcohol. I provide individual-level evidence that Islamic conservatism predicts support for religious freedom above and beyond the effects of economic condition and level of piety. By differentiating Islamic and general conservatism, I argue that when it comes to respecting rights of religious minorities in Muslim-majority countries whether Muslims have become more liberal in the Western sense (such as by supporting abortion or same-sex marriage) matters less than whether Muslims submit to a religious ethnocentrism.

I divide the remainder of this article into six sections. In the first section, I review the literature on democracy and tolerance and discuss how in the Muslim world support for democratic values has been lower than the support for democracy as a system. The second section presents the argument for the need to differentiate Islamic and general social conservatisms. A section on Bayesian item response theory then follows. It is not meant to be technical, but rather to provide the reader with a broad understanding of the method. In the fourth and fifth sections, I outline the analytical procedures and present the results. I show how levels of Islamic conservatism vary

across countries and provide evidence for the predictive power of the construct on the support for religious freedom. Lastly, I offer discussions of the results and highlight avenues for future research.

### **Democracy and Democratic Values in the Muslim World**

Support for democracy is arguably the most researched topic when it comes to the study of the Muslim world. Scholars are baffled why Muslim-majority countries seem immune to waves of democratization. Early researchers such as Kedourie (1992) and Huntington (1997), championing a political culture perspective, argue that the answer to a large extent lies on Islam's incompatibility with democracy. Since democracy generally requires a separation between religion and public affairs (Brathwaite and Bramsen 2011; Fox 2006; Philpott 2007), that Islam regulates almost every aspect of life makes it difficult to contain the religion from permeating the public sphere. Muslims, this view argues, are facing difficulties creating a rational public sphere because their religion already tells them everything they need to know.

More contemporary research, however, has casted doubts on this assertion. Instead of assuming what Muslims think about democracy based on what we think we know about Islam, contemporary research utilizes public opinion surveys to understand Muslims' political attitudes based on what Muslims say about themselves. These studies consistently find that Muslims, like their Western or Christian counterparts, want and support democracy (e.g., Esposito and Mogahed 2007; Gu and Bomhoff 2012; Hofmann 2004; Jamal and Tessler 2008; Norris and Inglehart 2002). The relative resistance of Muslim-majority countries to waves of democratization therefore is due more to institutional factors than to Islam itself. In fact, there is a paradox in that Muslims want

democracy more than non-Muslims but Muslim-majority countries are generally not a democracy (Maseland and Hoorn 2011; Rowley and Smith 2009).

A new generation of research expands this finding and looks into the acceptance of democratic values, most notably religious tolerance. Democracy requires that its citizens say “I do” not only to elections and the system but also to tolerance, trust, and participation (Gibson 2010; Inglehart 2003). At the very least, these democratic virtues help making democracy work (Putnam 1993). Studies that look into this topic have found that the Muslim world tends to be less tolerant (Gu and Bomhoff 2012; Milligan, Andersen, and Brym 2014). Even in non-Muslim majority countries such as the United States (Djupe and Calfano 2012) or Western Europe (Verkuyten et al. 2014), Muslims are found to have relatively low level of tolerance. Unfortunately, in part because the topic is relatively understudied compared to one on Muslims’ support for democracy, little is known about factors that contribute to this tolerance deficit.

What is it in the Muslim world that explains the low level of tolerance? Two perspectives present two plausible explanations. The modernization perspective attributes the phenomena to the lower economic development of Muslim-majority countries. Economic security is positively related to post-modernist values, such as trust and tolerance (Inglehart 1997; Norris and Inglehart 2012). As people become more economically and existentially secure, they can devote more time and resources to activities that are related to self-expression, autonomy, and diversity, as opposed to survival and sustenance. Psychologically, the theory conforms to what we know about terror-management (Greenberg, Pyszczynski, and Solomon 1986). In the face of threat, people have a tendency to affirm traditional moral views. Pertaining to tolerance, this affirmation of traditionalism may manifest itself in the rejection of “the others”.

The second perspective, the cultural hypothesis, focuses the inquiry on religion. Related to Islam, some have argued that Islam's theology is distinct and less amicable to democratic virtues than the theologies of Judeo-Christian faiths (e.g., Huntington 1997). It is more reasonable, however, to broaden the scope to religion in general and not limit it to Islam. Even after controlling for socio-economic status, religion is known to have negative consequences on tolerance (e.g., Gibson 2010; Putnam and Campbell 2010). That the Muslim world tends to be low in tolerance may be due to the fact that it has a much higher level of religiosity than the Western countries or even the rest of the world (Norris and Inglehart 2012; Pew Global 2008).

What is missing from this cultural perspective is its lack of nuance. It fails to recognize that religion has separate components (Putnam and Campbell 2010; Smidt and Guth 2009). At the very basic, there is piety or one's level of religious practice. There are also belonging to religious organization, religious attitudes, and politically charged religious attitudes (Spierings 2014). These aspects of religiosity may have different relationships to religious tolerance and support for religious freedom.

### **Separating Islamic and General Conservatism**

I define Islamic conservatism as a preference for social norms, traditions, or orders that is supportive of the confluence of politics and religion consistent with traditional Islamic values (also see Blaydes and Linzer 2008, 577). I concur with Blaydes and Linzer (2008) in that I do not claim that Islamic conservatism represents the true Islam. I refrain from entering the normative debate about what Islam is or is not. I diverge from Blaydes and Linzer (2008) in that I intentionally limit the construct to pertain only to social attitudes.

It is useful to distinguish Islamic conservatism from a general social conservatism and piety or personal religiosity. Islamic conservatism may be likened to fundamentalism or religious ethnocentrism (Altemeyer and Hunsberger 2005) that is characterized by ingroup-outgroup divide and perceived superiority of one's moral worldview<sup>1</sup>. More than practicing one's belief, Islamic conservatism implies one's desire to create a society that is legally and formally based on that belief, even at the expense of discriminating against the others. Although personal piety tends to go hand in hand with such conservatism (Savage and Liht 2008; Ysseldyk, Matheson, and Anisman 2010), they have distinct political outcomes (Ellison and Musick 1993; McFarland and Warren 1992). Muluk, Sumaktoyo, and Ruth (2012), for example, show that the support for religious violence among Indonesian Muslims is positively related to the support for Islamic laws and negatively to the level of one's religious practice.

Islamic conservatism is also different from a general social conservatism. While the first is inspired by Islam or Islamic teachings, the latter is closer to a simple preference for traditional norms, regardless of religion. To scholars familiar with American politics, the distinction between

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<sup>1</sup> Throughout this article, I use the term fundamentalism primarily to connect Islamic conservatism to the existing bodies of research on the psychology of religion and on religion and politics. I stick to the term "Islamic conservatism" as opposed to "Islamic fundamentalism", however, because the latter may bring an image of Muslim extremists. Since "conservatism" is widely used in political science, the term "Islamic conservatism" underlines an important aspect of this study: that the subjects are everyday people and not some militants detached from everyday social and political lives. These people have opinions about social issues just like voters everywhere have opinions. It is these opinions and their consequences that this study tries to capture.

the two would be best explained with a thought experiment. Imagine an American political system where George McGovern had not decided to appeal to the seculars in the 1972 Democratic party convention and the Religious Right had not been formed by conservative Republicans as a reaction (Layman 2001). The two parties would be still divided, possibly along the civil-rights line, but religion would be a less divisive issue. One party would be still more conservative than the other, but that conservatism would be more weakly correlated to religion than it is in reality. The kind of conservatism championed by the conservative party in our thought experiment would be an example of a general social conservatism. Admittedly, this difference may be more of a degree than a kind. Politicians are apt in using religious language to champion a cause (e.g., Albertson 2014; Blaydes and Linzer 2012), which blurs the already opaque line between traditional issues and religious issues. To ascertain that such a distinction exists in the dataset, I employ exploratory factor analysis instead of confirmatory factor analysis.

### **A Bayesian Markov Chain Monte Carlo (MCMC) Approach to IRT**

Before it became popular in political science, educational psychologists had widely used IRT to assess the performance of test takers (e.g., Bock 1997; Lord and Novick 1968). It offers some advantages relative to the other methods. Relative to the traditional "count the number of correct responses" approach, IRT allows the researcher to empirically estimate, based on the test-takers' performance, how difficult the questions are and adjust the test-takers' scores based on the difficulties of the questions they incorrectly or correctly answered. This in turn makes it possible to understand what issues are most strongly related to Islamic conservatism and what issues separate the most and least conservative respondents.



Another advantage of Bayesian IRT relates to the way it handles missing data. Unlike most methods (e.g., factor analysis) that assume the missing data is either missing completely at random (MCAR) or missing at random (MAR), Bayesian IRT does not require any assumption about missingness. It estimates the model based on whatever information is available from the respondents. The way missingness affects the estimates is through the estimates' credible intervals<sup>2</sup>. Estimates that have fewer data will have wider credible intervals, which represent their greater uncertainties. Lastly, relative to latent class analysis (e.g., Blaydes and Linzer 2008), IRT has the advantage of producing a continuous score. This score may then be used as the independent or dependent variable of interest in the next step of analysis.

In political science, applications of IRT are most widespread in the studies of American public opinion (e.g., Levendusky and Pope 2010; Tausanovitch and Warshaw 2013; Treier and Hillygus 2009) and ideal point estimation of legislators' or elites' ideology (e.g., Clinton, Jackman, and Rivers 2004; Martin and Quinn 2002). The method, however, is less widely used in comparative political research with the most notable exception being Treier and Jackman's (2008) application of IRT on Polity data.

There are many IRT models, but this article employs the *1-dimensional 2-parameter normal-ogive* model (1D-2PNO) as one of the simplest models that is robust enough to some violations of its assumptions (Harrison 1986; Ip 2010). Given  $n$  respondents and  $k$  questions, a respondent's answer to a question is modeled as following the probability:

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<sup>2</sup> Credible interval is the Bayesian term for confidence interval. There are some theoretical differences between the two, but for most intent and purposes they can be interpreted in the same way.

$$\Pr(y_{ij} = 1 | \theta_i, \beta_j, \alpha_j) = F(\beta_j \theta_i - \alpha_j), \quad i = 1, \dots, n; \quad j = 1, \dots, k \quad (1)$$

$$= \Phi(\beta_j \theta_i - \alpha_j), \quad i = 1, \dots, n; \quad j = 1, \dots, k \quad (2)$$

where  $y_{ij}$  is respondent  $i$ 's response on question  $j$  ("0" if the response indicates a moderate religious view and "1" if indicates religious conservatism),  $\theta_i$  is respondent  $i$ 's latent trait (Islamic conservatism), and  $\beta_j$  and  $\alpha_j$  are two item parameters of question  $j$ . The term "one-dimensional" in the model's name refers to each respondent having only one conservatism score representing her conservatism level in a continuous spectrum.  $F(\cdot)$  is a link function translating the linear equation in the bracket into [0,1] probability space. The term "normal ogive" in the model name indicates that the cumulative density function of the standard normal distribution is used as link function (Equation 2).

Parameter  $\beta_j$  is called the discrimination parameter of question  $j$ . Technically, it indicates how steep the change in the probability of a correct answer is for a unit change in the latent trait. More practically, the coefficient signifies how well a question discriminates between, in our case, the most and least conservative respondents. The bigger the coefficient is, the more conservatism affects the likelihood of expressing an agreement to the question.

Parameter  $\alpha_j$  is known as the difficulty parameter. It affects the likelihood of respondents agreeing with the question, regardless of their conservatism level. The bigger the coefficient is, the less likely respondents are to agree with the question. Since we may safely assume that respondents would be less likely to agree with extreme questions, the coefficient in turn would be of interest because it tells us how extreme an issue is. A Bayesian MCMC approach to estimate  $\theta$ ,  $\beta$ , and  $\alpha$  involves three steps: (1) specification of priors, (2) calculation of posterior density, and (3) the MCMC sampling itself.

### *Specification of Priors*

In general, priors represent what we know about our variables. Although priors may be chosen for their mathematical convenience (e.g, conjugate priors, see Gelman et al. 2004; Jackman 2009), the priors of a normal ogive model follow the normal distribution, which have the benefit of being congruent with our understanding of attitudes on social issues:

$$\theta \sim N(\mu_\theta, \sigma_\theta^2) \quad (3)$$

$$(\beta, \alpha) \sim M_2(\mu_{\beta,\alpha}, \Sigma_{\beta,\alpha}) \quad (4)$$

In regard to  $\theta$ , we may reasonably think that Islamic conservatism follows a normal distribution. Few people are extremely liberal and few are extremely conservative. Most should be somewhere in the middle. The rationale is the same for  $\beta$  and  $\alpha$ . Most issues concerning Islam and society should be neither too extreme nor too liberal, but lie somewhere in the middle.

### *Calculation of Posterior Density*

A posterior density can be understood as the probability of having certain values of population parameters given actual data and the parameters' priors. It follows straightforwardly from Bayes formula of proportionality:

$$P(\theta, \beta, \alpha | Y) \propto \prod_{i=1}^n \prod_{j=1}^k [\Phi(\beta_j \theta_i - \alpha_j)]^{y_{ij}} [1 - \Phi(\beta_j \theta_i - \alpha_j)]^{1-y_{ij}} \quad \times \quad (5.i)$$

$$\prod_{i=1}^n \phi(\theta; \mu_\theta, \sigma_\theta^2) \quad \times \quad (5.ii)$$

$$\prod_{j=1}^k \phi_2(\beta, \alpha; \mu_{\beta,\alpha}, \Sigma_{\beta,\alpha}) \quad (5.iii)$$

where part (i) of Equation (5) is the likelihood of  $n \times k$  independent Bernoulli trials (see Equation 2), part (ii) is the prior of the latent conservatism scores of  $n$  independent respondents, and part (iii) is the bivariate normal prior for the  $\beta$  and  $\alpha$  of the  $k$  questions.

### *MCMC Sampling of the Posterior*

While the two preceding steps are the Bayesian part of a Bayesian MCMC approach to IRT, the sampling step is the MCMC part. The basic spirit is that if it would be too hard for one to analytically derive quantities of interest (e.g., mean or variance) from a joint density function, one may be able to do it more easily by sampling from the density. That is, one obtains the quantities empirically through an MCMC sampling instead of analytically through mathematical derivations. Various sampling algorithms are available (see Gelman et al. 2004 Chapter 11), but this article uses the commonly employed Gibbs sampling.

The method works on the principle that one may divide a posterior density into *full conditionals* of the components, estimate the components separately, and recover the posterior from the separate estimations. Following a data augmentation process, one may derive the full conditionals' distributions as follow (also see Albert 1992; Bazan, Bolfarine, and Leandro 2006):

$$(Z_{ij}|\bullet) \sim \begin{cases} 1_{(y_{ij}=1)}N(\beta_j\theta_i - \alpha_j, 1), & y_{ij} = 1 \\ 1_{(y_{ij}=0)}N(\beta_j\theta_i - \alpha_j, 1), & y_{ij} = 0 \end{cases} \quad (6.i)$$

$$(\theta_i|\bullet) \sim N\left(\frac{\sum_{j=1}^k \beta_j(Z_{ij} + \alpha_j)}{1 + \sum_{j=1}^k \beta_j^2}, \frac{1}{1 + \sum_{j=1}^k \beta_j^2}\right) \quad (6.ii)$$

$$(\beta_j, \alpha_j|\bullet) \sim M_2\left(\beta_j, \alpha_j; \left[X'X + (\Sigma_{\beta,\alpha})^{-1}\right]^{-1} \left[X'Z_j + (\Sigma_{\beta,\alpha})^{-1} \mu_{\beta,\alpha}\right], \left[X'X + (\Sigma_{\beta,\alpha})^{-1}\right]^{-1}\right) \quad (6.iii)$$

, where  $X = [\theta \quad -1]_{n \times 2}$

$\mu_{\beta,\alpha}$  and  $\Sigma_{\beta,\alpha}$  from Equation (4)

$Z_j = (Z_{1j} \quad Z_{2j} \quad \dots \quad Z_{nj})'$

The Gibbs sampling then proceeds straightforwardly: [1] Set initial starting values for  $\theta, \beta, \alpha$ ; [2] Draw  $Z$  using Equation (6.i); [3] Draw new  $\theta$  using Equation (6.ii); [4] Draw new  $\beta, \alpha$  using Equation (6.iii); and [5] Repeat steps 2 to 4 as many as the desired number of iterations using the most recent values of  $\theta, \beta, \alpha$ .

Before proceeding to the analysis, it is useful to briefly discuss how the method relaxes the requirement to use a wholly identical set of questions for all respondents. Item response models allow for an estimation of a latent trait as long as there exists a common space that contains all respondents. If we define that two respondents are connected if it is possible to write a path from one to the other by tracing the questions they answer, a common space means that there must exist at least one path to connect a respondent to each of the other respondents.

Table 1 presents an illustration of a common space. A black dot indicates that the respondent answers the corresponding question. Respondents A, B, and C are located in a common space because it is possible to create a path from each of the respondents to any of the other ones based on the questions they answer. A path from A to C, for example, will involve B as the go-between. Respondent D, on the other hand, is not in the same common space as A, B, and C. She answers a totally different set of questions and cannot be compared to A, B, and C.

The common space works because respondents' latent conservatism scores are defined relative to each other (Equation 6). That is, the scores are in principle the positions of the respondents in relation to the positions of other respondents in the common space. In Table 1, respondents A and C answer different sets of questions. Considering only this aspect, both are incomparable. However, an IRT model estimates respondent A relative to B and respondent B relative to C. As such, respondents A and C will become comparable due to respondent B.

[TABLE 1 HERE]

### **Analysis I: Item Response Estimation**

I used the publicly available dataset from the Pew Research Center (2013). Between October 2011 and November 2012, Pew surveyed 32,604 Muslims in 26 countries and asked various questions on social attitudes and religious practices, among others. Selecting which among these questions must be used in the IRT was the first important task. In the next three subsections, I describe how I selected the IRT questions from the survey's pool of questions, specifications of the IRT model, and results from the IRT estimation. Since it is impossible to present all 32,604 individual scores, I aggregate the scores on the country-level.

#### *Question Selection and Dimensionality*

Deciding which questions to use from the survey data is a crucial step because all other steps follow from it. Yet, it is also the one least "scientific". It resembles art more than hard science. The conventional concept of statistical significance is almost of no help because this step involves exploration more than inference and because the huge sample size would make virtually everything statistically significant. I approached this challenge in three steps. In the first step, I went through the questionnaire and identified questions that on the face value (1) pertain to attitudes or opinions on social issues, (2) have social components in the sense that the question is related to people, society, or social groups, (3) are related to Islamic conservatism; and (4) were asked in at least half of the countries studied. The criteria helped to exclude demographic and personal history questions, questions that are related to faith doctrines (e.g., Q43j "Believe in one God"), and country-specific questions. Forty questions passed these requirements.

In the second step, I dichotomized non-binary questions. The dichotomizing rule is simple. Conservative responses were assigned a value of “1” and “0” otherwise. This means that the dichotomization was not symmetric. For example, Q83 asked whether sons or daughters should have a greater right to parents’ inheritance. The responses are “sons”, “daughters”, “both have equal rights”, and “neither”. Because the conservative response in this case would be “sons”, I assigned a value of “1” to respondents who answered “sons” and “0” otherwise.

In the third step, I did an exploratory factor analysis (EFA) with the WLSMV<sup>3</sup> (weighted least square with mean and variance adjusted) estimation method in MPLUS 7.3. The goal is to find items that go together strong enough so that they may be justifiably modeled with a unidimensional IRT. Another, more substantive, goal is to provide a picture of the structures of Muslims’ social attitudes: what issues go together with what and how many factors best represent the attitudes.

I did the exploration by examining the amount of variance explained by models incorporating between one and five latent factors with varimax rotation. Specifying one latent factor to explain all 40 variables accounts for 24.22% of the variables’ variance. Each additional factor explains 10.5%, 4.4%, 2.3%, and 2.3% of the variance, respectively. There is no textbook guidance of what to do when a factor analysis indicates that a large number of factors is needed to explain large enough variance in the data. Certain responsible judgment calls are needed.

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<sup>3</sup> The approach treats each of the dichotomous observed variables as having a continuous underlying latent variable and tries to estimate this underlying variable. The weight matrix is constructed from the robust variance form of the asymptotic covariance matrix of the parameters (Muthen, du Toit, and Spisic 1997)

In making such calls, I consider two things. First, unidimensional IRT models have been shown to be robust to the violation of unidimensionality. That is, although the underlying data is not strictly unidimensional, unidimensional IRT models still provide robust parameter estimates (Harrison 1986; Ip 2010). This is especially helpful when a researcher is faced with a choice between violating a strict unidimensionality and estimating a hard-to-interpret multidimensional model with a large number of factors.

Second, in addition to explained variance, I also consider whether adding a factor “steals” questions away from the previous factors. A factor can be regarded as stable if adding another factor does not change which questions load to it. This is the reason I only explored the model up to five latent factors. Adding a factor from four to five (or even six) does not change the pattern of questions that load to the first and second factors. Questions that are explained by the first and second factors continue to load most substantively to them even after another factor is added. The first and second factors therefore can be regarded as the underlying traits of their respective questions. The interested reader should consult the Online Supplement for details of the process.

Table 2 presents the amount of variance of each question that is explained by each factor in the five-factor EFA model. I set the threshold of inclusion to be 10%. That is, a question counts as loaded to a factor if *the factor best explains the question* and if *it explains at least 10% of the question’s variance*. Of particular interest are the first and second factors. They are stable because they explain their respective questions equally well even in the four-factor model (see Online Supplement). Adding a fifth or sixth factor does not take from these factors their questions.

They also on the face value represent our variables of interest: Islamic and general conservatisms. The first factor best represents Islamic conservatism, whereas the second factor covers a general social conservatism. Abortion, prostitution, and homosexuality are debated



everywhere, not exclusively by Muslims. In the remainder of this section, to conserve space, I focus on Islamic conservatism. The interested reader should consult the Online Supplement for estimation results of the general social conservatism model. It is worth noting that changing the threshold (from 10% to some other value) does not greatly affect the parameter estimates. This is due to the robustness of the unidimensional IRT and the parallel between IRT's discriminating parameter and factor loading. A question with a small loading is automatically weighted less in the IRT estimation and therefore does not greatly affect the resulting estimates.

[TABLE 2 HERE]

#### *IRT Estimation*

I separately estimated the Islamic and general conservatism models using their respective questions. The reason for these separate estimations as opposed to estimating a two-dimensional IRT model is because the benefit does not seem to outweigh the cost. Computing a two-dimensional IRT requires a greater computational power, especially with the large sample size. A two-dimensional IRT model is also harder to interpret than a one-dimensional one. On the other hand, the preceding factor analysis shows that the two factors are virtually orthogonal to each other. Each factor's questions are only weakly loaded to the other factor. This suggests that specifying a second dimension would not do much to explain the first dimension's questions.

Estimations of the two conservatism models followed the same procedure. To improve computational speed, I used R's MCMCpack package (Martin, Quinn, and Park 2013)<sup>4</sup>. I specified the priors as  $\theta \sim N(0,1)$  and  $(\beta, \alpha) \sim M_2 \left( \begin{bmatrix} 0 \\ 0 \end{bmatrix}, \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix} \right)$  and constrained the most conservative respondents (i.e., those with the highest rate of agreement) to have positive scores and the least conservative ones to have negative scores. I set the number of iterations to 15,000 and thinning interval to 10 (i.e., the program saved only every 10<sup>th</sup> iteration), which, in addition to another 10,000 burn-in (i.e., sampling iterations that were discarded and not stored), created an effective 160,000 iterations.

Convergence diagnostics suggest that the MCMC process in each model successfully reached the stationary distribution. A simple predictive test also provides evidence that the models predict respondents' answers to the questions better than a coin toss (an average of 79% for the Islamic conservatism model and 87% for the general conservatism model). Details of these evidence are available in the Online Supplement.

### *Results of IRT Estimation*

Gaining a greater confidence that the MCMC processes converged and the models have sufficient explanatory power on their respective questions, I now turn to the estimation results. To conserve space, only visual descriptions of the results are presented and emphasis is put on the Islamic conservatism model. The interested reader should consult the Online Supplement for a more complete presentation of the models' statistics.

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<sup>4</sup> The models were run on a high-end computing system available in the author's university. The Islamic and general conservatism models each took 50 and 36 hours to complete, respectively.

Figures 1 and 2 present point estimates, density distributions (represented by the shaded strips), and 95% credible intervals for the discriminating and difficulty parameters of questions from the Islamic conservatism model. In terms of discriminating parameters, it is noteworthy that the analysis produces two groups of questions, one with  $\beta \leq 1$  and the other with  $\beta > 1$ . Questions in the first group have a low discriminating power and are less capable to discriminate between conservative and moderate respondents. Questions in the second group, on the other hand, have a high discriminating power and are particularly good in separating conservatives and moderates. Interestingly, out of five questions in this category, the top three are related to issues that border human rights violations (e.g., death penalty for those who leave Islam and stoning for adulterers).

[FIGURE 1 HERE]

In regard to difficulty parameters, two things are worth noting. First, the distribution is more dispersed. Most questions lie somewhere between  $-0.5$  and  $+0.5$ , but it is impossible to categorize them as in regard to the discriminating parameters. Second, it is interesting to note that the questions on which the respondents were least likely to agree, regardless of their conservatism scores, pertain to whether women do not have the right to decide for themselves whether or not to wear a veil and to whether people who leave Islam must be punished by death.

The difficulty parameter of the veil question is interesting because it means that the respondents tended to agree that a decision of whether or not to wear a veil to some extent must be decided by the woman's herself. This contradicts the notion that Muslims regard women rights as practically non-existent. In terms of respondents' disagreement that people who leave Islam must be punished by death, one might quickly blame social desirability bias. Perhaps the

respondents did not want to sound extreme during the interviews or were concerned with their securities so as to tone down their answers. On the other hand, the fact that the question elicited least agreement even when compared to other explicitly violent questions (e.g., stoning for adulterers, hand-cutting for thieves) suggests that social desirability cannot be the whole story. Perhaps a significant portion of the respondents disagreed with the question because they truly thought that a conversion from Islam should not lead to capital punishment.

[FIGURE 2 HERE]

After item parameters, the next parameter of interest is  $\theta$  or the latent conservatism score. I aggregate the 32,604 individual scores on the country level. I took sampling weight into account by multiplying the country's respondents' scores with the probabilities of the respective respondents being selected in the survey. Formally, for each MCMC iteration,

$$\Theta_i = \frac{1}{\sum_{j=1}^{n_i} w_{ij}} \sum_{j=1}^{n_i} \theta_{ij} w_{ij} \quad (7)$$

where  $\Theta_i$  is the Islamic conservatism score for country  $i$ ,  $i = 1, \dots, 26$  in that particular iteration,  $w_{ij}$  is the sampling weight for respondent  $j$  in country  $i$ ,  $\theta_{ij}$  is the Islamic conservatism score for respondent  $j$  in country  $i$  in that iteration, and  $n_i$  is the number of respondents in country  $i$ .

Figure 3 presents country-level Islamic conservatism scores. It provides strong support for the common knowledge that Afghanistan and Pakistan, along with other Arab countries, are relatively conservative. The world's largest Muslim-majority country Indonesia occupies the middle of the spectrum and is less conservative than its neighbor Malaysia. Indonesian Muslims are also relatively less conservative than Southern Thai Muslims who struggle to define their

existence in the Buddhist-majority Thailand. Turkey, one of the favorite case studies in the study of Muslim democracies, is relatively moderate. The only Muslim-majority countries that are less conservative than Turkey are post-Soviet or European ones (e.g., Albania, Kazakhstan, Azerbaijan), which points to a possible legacy of communist institutions and political culture—a potentially fruitful topic for future studies.

[FIGURE 3 HERE]

Before proceeding to the analysis of how well Islamic conservatism predicts support for religious freedom, it is necessary to examine how Islamic conservatism, general conservatism, and religiosity are different from each other. I use four different indicators of religiosity, all recoded so that higher values mean higher religiosity. Reading the Qur'an (Q65) asked respondents how often they read or listen to the Qur'an. Responses range from "never" (score of 1) to "every day" (score of 5). Frequency of prayer (Q61) asked how often respondents prayed outside of religious services attendance. Values range from 1 ("never") to 7 ("several times a day"). Attending Mosque (Q34) indicates how frequent respondents went to mosque for salah and Friday prayer. Responses range from 1 ("never") to 6 ("more than once a week"). Lastly, importance of religion (Q36) asked how important religion was in the respondents' lives. It ranges from 1 ("not at all important") to 4 ("very important"). I treat these indicators separately instead of creating a composite index in part because they have different response scales and a composite index would need a justification on how to weight the variables (also see Blaydes and Linzer 2012). Future research may be interested in addressing how to calculate religiosity more empirically, such as by applying Bayesian IRT on a set of religiosity indicators.

Table 3 presents individual-level correlations between the variables. Two patterns are noteworthy. First, the correlation between Islamic and general conservatism is low, which suggests that the two are indeed different. Second, correlations between Islamic conservatism and religiosity are higher than ones between general social conservatism and religiosity. This supports the argument made in the literature review that Islamic conservatism is more strongly related to Islam and its teachings than general social conservatism is.

[TABLE 3 HERE]

### **Analysis II: Islamic Conservatism and Religious Freedom**

Having estimated the Islamic conservatism model and show that it is different from religiosity and a general social conservatism, I now examine its relationship to support for religious freedom. I employed a multilevel logistic regression with random intercept. A multilevel modeling is appropriate in this case since individuals as units of analysis are nested within countries.

#### *Dependent Variables*

The dependent variables come from the same Pew dataset used in the IRT estimation (Q10 and Q11). Q10 asked respondents on a 4-point scale their perception of how free religious minorities in their countries were to practice their religions. I dichotomized the responses and assigned a value of 1 to those who perceived that minorities were free and 0 otherwise. Q11 followed up this question by asking whether the freedom (or lack thereof) was a good thing.

I created two dichotomous dependent variables out of these questions. The first, *affirmation of freedom* (hereafter, Affirmation), was calculated only for respondents who indicated that

religious minorities in their countries were free. These respondents were assigned a value of 1 if they indicated in Q11 that such a freedom was a good thing and 0 otherwise. This variable therefore taps into affirming that religious minorities being free is a good thing. The second variable, *opposition to discrimination* (hereafter, Opposition), taps into the opposition to minorities being discriminated. It was calculated only among those who indicated in Q10 that religious minorities were not free to practice their religions. It takes a value of 1 if the respondent indicated that such a lack of freedom was a bad thing, and 0 otherwise.

Roughly 86% of respondents either said that minorities were free and that was a good thing or that minorities were not free and that was bad. Breaking the percentage further down, this proportion is dominated (94%) by respondents who thought that minorities in their countries were free and that was a good thing. This suggests that the Affirmation variable may be prone to social desirability bias. Even conservative respondents arguably did not want to make their countries look unfree or indicate that freedom for minorities was bad. The Opposition variable is therefore a harder test for the hypothesis since it involves both explicitly acknowledging that minorities were not free and stating that the lack of freedom was a bad thing.

#### *Individual-Level Explanatory Variables*

In addition to the Islamic and general conservatism scores obtained from the IRT estimations, I included seven other individual-level predictors: education level, age, gender, personal economic condition, country economic condition, religiosity, and number of Muslim friends. Education level was calculated from Q101 in the dataset. Since Pew's coding of education varies across countries, I followed Blaydes and Linzer's (2012) approach and created a 3-category education variable (less than secondary education, at least secondary education, and at least

university level). Age is a continuous variable obtained from Q96, whereas gender is a dichotomous variable with males as reference derived from Q95.

Personal economic condition is measured by the respondent's subjective assessment of her personal economic situation (Q7). Responses range from 1 ("very bad") to 4 ("very good"). The inclusion of personal economic condition and education level tests whether Islamic conservatism has an explanatory power on the dependent variables that is beyond and above the effects of socio-economic predictors that are the main thrust of the modernization theory. Perceived economic condition of the country, on the other hand, was derived from Q6 of the questionnaire and has responses ranging from 1 ("very bad") to 4 ("very good"). It is a proxy for policy satisfaction and support for the government. The literature suggests that hostilities toward religious outgroups may originate from a perception that the government has been biased toward the minorities, resulting in a poor economic condition in general and among the majority (Hui 2010; Moghaddam 2006)

To control for religiosity level, I include the frequency of prayer variable. The variable is widely used as an indicator of religiosity in the religion and politics literature (e.g., Putnam and Campbell 2010). The frequency of reading the Qur'an may be biased against the less educated and the illiterate. The go to mosque variable may be discriminating against women because in some countries it is uncommon for women to go to mosque. The importance of religion, on the other hand, is too broad for my purpose of tapping into personal piety. Switching among these indicators, however, does not greatly affect the conclusions. Lastly, I include the number of respondent's close friends who are Muslims (Q49) to account for the effect of social networks (e.g., Djupe and Calfano 2012; Putnam and Campbell 2010). People may be less tolerant toward minorities if they have fewer close friends from the minority groups. Responses for this variable range from 1 ("none of them") to 5 ("all of them").



*Country-Level Explanatory Variables*

As country-level variables, I included for each country the logged value of its 2010 Gross Domestic Product (GDP) per capita, its 2010 Human Development Index (HDI) score, its proportion of Muslim population in 2010, and the average of its Government Regulation Index (GRI) scores from 2003, 2005, and 2008. GDP per capita and the HDI score were obtained from the World Bank's and the United Nations Development Programme's databases, respectively. These indicators are intended to control for the effects of social and economic modernization. Proportion of Muslims and the GRI score, on the other hand, were obtained from the 2011 update of the Association of Religion Data Archive (ARDA) National Profiles dataset<sup>5</sup>.

Proportion of Muslims is included as a proxy for Muslims' general social and economic influence. Tolerance for minorities may be decreasing as Muslims become larger in number and take a dominating role in the society. Alternatively, the relationship may be curvilinear in that after a certain point proportion of Muslim population no longer matters because it is already so high Muslims no longer perceive non-Muslims as a feasible threat.

Lastly, the GRI is included to control for the countries' institutional differences. Countries do not engage religions in the same way or level (Stepan 2000). Some build a wall to separate the sacred and the secular. Some have no such wall, but still nonetheless maintain an impartial relationship with all religions. Still, some others play favorites by building institutions that favor one religion, sometimes at the expense of the others. This institutional partiality relates to societal

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<sup>5</sup> Available from [http://www.thearda.com/Archive/Files/Downloads/INTL2008\\_DL.asp](http://www.thearda.com/Archive/Files/Downloads/INTL2008_DL.asp) and downloaded on May 27, 2015.

partiality (Grim and Finke 2006). It is hard to expect a tolerant society if institutions of the state themselves are nurturing discrimination. Discrimination of minority beliefs may be simply a function of the government regulating against the beliefs, as opposed to the citizens themselves are intolerant toward the beliefs. By including the GRI score, I intend to control for these institutional factors and get a cleaner estimate of the effect of Islamic conservatism.

### *Results*

Table 4 presents regression coefficients from the two models<sup>6</sup>. It provides evidence for the negative effect of Islamic conservatism on the two indicators of support for religious freedom. Respondents with a higher Islamic conservatism score were less likely to agree that freedom for religious minorities is a good thing (Model 1) or that a lack of freedom for minorities is a bad thing (Model 2).

To facilitate an understanding of the effect of Islamic conservatism on tolerance toward minorities, Figure 4 presents the estimated probabilities of a positive response (value of 1) on each of the dependent variables across a range of Islamic conservatism scores when other continuous predictors are set to their means and binary predictor (gender) to its reference (males). A movement in the conservative direction from -2 to +2<sup>7</sup> results in a 5% decrease in the probability of saying

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<sup>6</sup> A total of 19 countries were analyzed from 26 countries available in the Pew dataset. Morocco and Uzbekistan were excluded because the general conservatism questions were not fielded there. Russia and Thailand were excluded because they are not Muslim-majority. Afghanistan, Iran, and Kosovo were excluded for missing one or more variables needed for the multilevel modeling.

<sup>7</sup> This is approximately the range of the Islamic conservatism variable (-2.28 to 1.84).

that freedom for minorities is a good thing and a 19% decrease in the probability of saying that restriction toward religious minorities is a bad thing. Islamic conservatism therefore has its strongest impact on the opposition to discrimination. Among respondents who perceived that religious minorities were unfairly treated, those high in Islamic conservatism were less likely to think that such a restriction is bad.

In addition to the expected effect of Islamic conservatism, Table 4 also reveals a positive effect of general social conservatism on all dependent measures. Viewing it from the perspective of liberal Western politics, an individual who opposes homosexuality or alcohol is presumably a conservative and often be equated to fundamentalists or extremists. But the findings from Table 4 suggests that such a labeling oversimplifies things and care must be taken to differentiate different types of conservatism.

Personal economic condition and the perception of the country's economic condition both have contradictory effects on the Affirmation and Opposition variables. They significantly increase the probability of the former and decrease the latter's. Respondents who had a more positive perception of the economy were more likely to state that freedom for minorities was a good thing but less likely to say that a lack of freedom for such people was a bad thing. In other words, they were more likely to express an affirmative ("good") response in the follow-up question (Q11), regardless of their assessments of whether or not minorities were free.

This may be due to the better perception of economic well-being leads to a lower willingness to disrupt the status quo. In other words, individuals tend to think that people get what they deserve (Lerner 1980). When an individual does well in the system or perceives that the system is doing well, she becomes less willing to oppose the system, which in this case manifests in the higher probability of saying that freedom for minorities was good in the case that they

perceived such a freedom or the lower probability of saying that discrimination toward minorities was bad (which is equivalent to a higher probability of saying that discrimination was good) in the case that they perceived such a discrimination. Future research may want to explore this finding further. How does people's support for status quo influence the effort to improve minorities' religious freedom?

[TABLE 4 HERE]

[FIGURE 4 HERE]

#### *Robustness Check: Authoritarianism in Disguise?*

A last analysis is needed to test the robustness of the findings. Specifically, could it be that Islamic conservatism is nothing but authoritarianism in another form? After all, studies have linked religious conservatism to authoritarianism (Altemeyer and Hunsberger 2005) and authoritarian predispositions are known to lead to conservative political attitudes (e.g., Cizmar et al. 2013; Hetherington and Weiler 2009). To test this hypothesis, I did a series of multilevel logistic regressions. I used a question that asked respondents whether a democratic form of government is preferable to a strong leader (Q14) as a proxy for authoritarianism. It is a rough proxy, but it is the best that is available in the dataset and is theoretically justified by authoritarians' strong preference for order and support for authority. I assigned a value of 1 if respondents preferred a strong leader to a democratic government and 0 otherwise.

Table 5 presents the results of the robustness test. In the first model, I predict the preference for a strong leader. Both types of conservatism increase the probability of respondents preferring a strong leader to a democratic government. This suggests that Islamic and general conservatisms

are both related to authoritarianism. In the second and third models, I re-estimated the models from Table 4, including leader preference as another predictor. These models generally support the robustness of the findings. Both Islamic and general conservatisms maintain their statistically significant negative and positive effects, respectively, on the support for religious freedom. This suggests that Islamic and general conservatisms are more than just authoritarianism in disguise.

[TABLE 5 HERE]

### **Discussion**

This article aims to contribute to the study of the Muslim world on the methodological and theoretical levels. In this last section, I discuss how these contributions have been made and how they may be further advanced in future research.

#### *Methodological Contributions*

Methodologically, I employ Bayesian item response theory to estimate the Islamic conservatism scores of 32,604 respondents in 26 countries across the world. To the best of my knowledge, this study is the first to compare countries based on how conservative their citizens are across a wide range of social issues. This approach offers researchers at least two advantages relative to the previous studies. First, the use of IRT allows the researcher to utilize a fuller set of survey questions, even if the respondents answered only different parts of the survey. This prevents the need to discard questions or cases and enables the researcher to get a more complete picture of the respondents' attitudes.

The advantage of this contribution is obvious. A researcher who employs the traditional method of using only cases that share similar questions to calculate an Islamic conservatism score from the same 16 questions produced by the EFA in Table 2 would lose eight countries (Afghanistan, Albania, Iran, Morocco, Russia, Thailand, Turkey, and Uzbekistan) because at least one of the questions was not asked in those countries. These constitute almost one third of the 26 countries studied. A significant amount of information therefore would be lost.

Second, IRT estimates questions' difficulty and discriminating parameters and allows scholars of the Muslim world to understand what issues Muslims are least likely to agree with and what issues best discriminate between conservative and moderate Muslims. Future research may want to follow up this topic by examining geographical variations. Do Muslims in Asia, Middle East, Europe, and the United States, for example, assign different importance to different issues? The existing evidence hints to this possibility. American Muslims, for example, find themselves much better assimilated socially and economically to the American society than their European counterparts do to their respective countries (Jamal 2010). This difference in turn may lead to different attitudes toward democracy and liberal democratic values.

### *Theoretical Contributions*

When it comes to theoretical contributions, this article illuminates an aspect in Muslims' religious life that explains their support of religious freedom or lack thereof. I present empirical evidence that Islamic conservatism has a detrimental effect on the support for religious freedom and that it is different from being religious or being socially conservative. This is indeed consistent with a large body of literature that discusses how religious ethnocentrism uniquely shapes one's attitudes (e.g., Altemeyer 2003; Laythe, Finkel, and Kirkpatrick 2001; Mavor et al. 2009).

The question, then, why does Islamic conservatism have such a strong effect? What drives it? There are at least two possible answers. The first is psychological. Studies have related fundamentalism to a psychological predisposition characterized by closed-mindedness and authoritarianism (Altemeyer and Hunsberger 2005; Saroglou 2002). Due to this predisposition, people high in Islamic conservatism may be less accepting of diversity and less tolerant toward other groups. A consequence of this view is that the effect of Islamic conservatism on tolerance would be generalized to other groups, regardless of whether the groups are religious or secular in nature. This is indeed a strong claim since it attributes the cause to the person and to an extent neglects the context.

The second explanation is more political and sociological and places a greater emphasis on the social environment. By focusing on the individual, the first explanation assumes that the way an individual thinks about social issues follows closely the way she thinks about religion. An open-minded person thinks open-mindedly in *all* situations, whereas a close-minded person thinks close-mindedly. Research, however, has shown that individuals have a hierarchy of values (Jacoby 2014; Tetlock 1986) and engage in motivated reasoning (Jost et al. 2003). The pressure to engage in motivated reasoning is the highest when an issue or value conflicts with core beliefs that have a much higher priority. This implies that even individuals who are high in Islamic conservatism and predisposed to think narrowly do not always think that way. These individuals can avoid motivated reasoning and think freely when the issues they are facing are distant enough from their religious beliefs (Hood, Hill, and Spilka 2009; Hunsberger, Pratt, and Pancer 1994). In that case, there is little need to subjugate the issues to the faith.

An important consequence follows that highlights the important role of political elites. Elites politicize issues and religion as one of the most important sources of moral codes is a

particularly appealing object of politicization (Wald, Silverman, and Fridy 2005). Employing religious framing on a political issue will affect the public's perception of how well connected the issue is with religion (Chong and Druckman 2007). The more an issue is paired with religion, the more religious beliefs become a relevant and superordinate consideration for that issue.

In the context of American politics, this politicization helps explain how issues like abortion and gay marriage are increasingly tied to religious divides (Putnam and Campbell 2010). In the Muslim world, the role of political elites is evident in the shaping of anti-American attitudes among Muslims (Blaydes and Linzer 2012). In countries where politics is competitive, both Islamists and secularists present a nationalistic, anti-American posture to appeal to the voters. To the contrary, in countries where Islamists are already dominant, there is no need to resort to anti-Americanism, which corresponds to a lower level of anti-Americanism in those countries.

By the same token, one may hypothesize that politicization of religion drives the relationship between Islamic conservatism and support for religious freedom. Politicians use religious appeals to invite voters to support a greater role of religion in politics and form a coalition of religiously conservative voters. Since it is impossible to build an identification to an ingroup without also defining an outgroup (Billig and Tajfel 1973), the same appeal then results in a lower tolerance and acceptance toward non-Muslim minorities. An implication of this view is that Islamic conservatism should be less influential when predicting tolerance toward groups that are not strongly related to religion, such as political dissenters.

Issues related to the general social conservatism, on the other hand, are weakly politicized because there is only little controversy concerning them. Issues such as abortion or same-sex marriage are still off the table in most of the countries studied. As a result, these issues have no negative bearing on tolerance toward religious minorities. The positive effect of this type of



conservatism on the tolerance toward religious minorities may be actually explained by a sharing of values. Religious people, including minorities, are more likely to be opposed to issues related to the general social conservatism. Supporting religious freedom for minorities therefore may be perceived as a support for like-minded people. Future research will benefit from exploring why and how the two types of conservatism are different and examine how this differentiation is related to the patterns of elite competitions in Muslim-majority countries.

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**Table 1. Illustration of a Common Space**

	Q1	Q2	Q3	Q4	Q5
Respondent A	●	●			
Respondent B		●	●		
Respondent C			●		
Respondent D				●	●

**Table 2. List of Questions and Amount of Explained Variance**

Questions List <sup>8</sup>	<i>R</i> <sup>2</sup> (%)				
	Factor	Factor	Factor	Factor	Factor
	1	2	3	4	5
Q92d. Stoning people who commit adultery	<b>75.9%</b>	0.1%	3.5%	3.6%	9.4%
Q92c. Cutting hands for thieves	<b>70.9%</b>	0.0%	5.5%	2.7%	6.4%
Q92a. Giving Muslim leaders power to decide family dispute	<b>69.9%</b>	0.9%	1.2%	0.0%	0.4%
Q79a/Q80. Favor making sharia official law	<b>69.4%</b>	2.3%	2.1%	0.4%	0.2%
Q92b. Death penalty for people who leave Islam	<b>64.2%</b>	1.5%	0.1%	2.0%	4.6%
Q52/Q52AFG. Muslims have duty to convert others	<b>36.6%</b>	0.0%	3.3%	2.0%	1.1%
Q15. Religious leaders should influence political matters	<b>34.7%</b>	0.3%	1.6%	1.7%	0.0%
Q78. A wife must always obey her husband	<b>33.6%</b>	3.2%	6.6%	0.2%	0.4%
Q55. Islam is the one true faith leading to heaven	<b>29.7%</b>	2.2%	21.2%	0.1%	4.7%
Q77. A wife should not have the right to divorce her husband	<b>27.8%</b>	0.7%	5.6%	0.1%	0.1%
Q58. Women do not have the right to decide whether or not to wear a veil	<b>22.4%</b>	0.9%	2.3%	0.4%	0.0%
Q68/69. How close laws in country follow sharia and whether bad or good	<b>19.2%</b>	1.3%	3.7%	0.2%	0.0%
Q84b. Polygamy is morally acceptable	<b>18.8%</b>	0.9%	0.0%	0.1%	0.1%
Q83. Sons should have greater right to parents' inheritance	<b>18.5%</b>	0.0%	0.4%	0.0%	0.0%
Q16. Must believe in God to be moral	<b>15.5%</b>	4.0%	10.8%	0.3%	2.8%
Q13. Islamic parties better than others	<b>13.9%</b>	0.0%	1.4%	0.8%	0.0%
Q84f. Suicide is morally unacceptable	1.4%	<b>67.6%</b>	1.0%	0.5%	0.0%
Q84h. Prostitution is morally unacceptable	0.1%	<b>66.7%</b>	0.3%	5.9%	0.4%
Q84j. Homosexuality is morally unacceptable	0.4%	<b>63.4%</b>	0.8%	8.6%	0.5%

<sup>8</sup> Questions with more than one question numbers indicate that they are a combination of several related questions measuring the same issue. The reason Pew gave the questions multiple question numbers is because they were asked in different countries with slight wording differences.

Q84i. Extra-marital sex is morally unacceptable	8.8%	<b>58.1%</b>	4.8%	2.9%	1.4%
Q84e. Euthanasia is morally unacceptable	0.0%	<b>53.1%</b>	0.0%	1.4%	0.0%
Q84g. Abortion is morally unacceptable	0.7%	<b>49.8%</b>	0.6%	0.2%	0.3%
Q84d. Drinking alcohol is morally unacceptable	8.4%	<b>40.1%</b>	1.7%	0.0%	1.8%
Q57. There is only one true way to interpret teachings of Islam	0.5%	0.0%	<b>23.6%</b>	0.0%	0.8%
Q67. Sharia should not be open to multiple interpretations	0.0%	0.1%	<b>17.1%</b>	0.1%	0.2%
Q53/Q53AIU. Man engaging in premarital sex may be killed	8.6%	0.2%	1.1%	<b>87.2%</b>	0.0%
Q54/Q54AIU. Woman engaging in premarital sex may be killed	14.1%	0.5%	2.4%	<b>59.8%</b>	0.0%
Q89. Violence to defend Islam is justified	13.7%	1.2%	0.0%	<b>17.1%</b>	1.1%
Q38/Q38IRN. Not okay if daughter married a Christian	5.2%	1.7%	9.2%	1.0%	<b>79.0%</b>
Q37/Q37IRN. Not okay if son married a Christian	1.1%	1.6%	3.9%	0.2%	<b>78.9%</b>
Q26. Western culture hurts morality	9.4%	2.4%	3.2%	1.8%	4.7%
Q17. Do not like Western music or culture	8.9%	1.6%	5.7%	2.0%	3.8%
Q66. Sharia is the revealed word of God	4.7%	0.3%	8.2%	0.2%	0.1%
Q19. Conflict between science and religion	2.0%	0.0%	3.6%	2.7%	0.1%
Q24. Islam and Christian/Buddhism do not share similarities	1.8%	0.2%	4.9%	0.0%	3.3%
Q20. Do not believe evolution	1.5%	0.2%	4.4%	0.1%	0.2%
Q14. Prefer strong leader to democratic leader	0.7%	0.1%	0.1%	0.0%	0.0%
Q84c. Birth control is morally unacceptable	0.3%	9.7%	0.4%	4.8%	0.0%
Q84a. Divorce is morally unacceptable	0.1%	6.4%	2.8%	3.9%	0.3%
Q75/Q75IRN. Conflict between being devout and living in modern society	0.0%	0.1%	1.8%	5.3%	0.0%

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**Table 3. Correlations between Conservatism and Religiosity**

	Islamic Conservatism	General Conservatism	Reading Qur'an	Frequency Prayer	Attending Mosque	Importance of Religion
Islamic	1					
General	.134*** N=30,167	1				
Qur'an	.516*** N=29,388	.151*** N=29,388	1			
Prayer	.460*** N=29,624	.158*** N=29,624	.513*** N=28,931	1		
Mosque	.363*** N=29,806	.125*** N=29,806	.391*** N=29,091	.388*** N=29,297	1	
Importance	.452*** N=29,898	.215*** N=29,898	.439*** N=29,155	.441*** N=29,382	.311*** N=29,571	1

\*\*\* p<.01 \*\* p<.05 \* p<.10

**Table 4. Multilevel Logistic Regressions**

	<b>Model 1: Affirmation of Freedom</b>	<b>Model 2: Opposition to Discrimination</b>
<b>Individual-level Predictors</b>		
Islamic Conservatism	-.118*** (.04)	-.227** (.10)
General Conservatism	.117*** (.03)	.224*** (.08)
Frequency Praying	.017 (.01)	-.044 (.04)
Education Level	-.020 (.04)	.056 (.09)
Age	.440** (.18)	-.219 (.43)
Female	.164*** (.05)	.390*** (.12)
Personal Economic Condition	.128*** (.04)	-.181** (.08)
Country Economic Condition	.086** (.03)	-.462*** (.08)
Proportion of Muslim Friends	-.113*** (.04)	-.036 (.10)
<b>Country-Level Predictors</b>		
GDP 2010	-.492 (.33)	.554 (.47)
Proportion of Muslims	-.313 (1.01)	2.335 (1.47)
GRI	-.019 (.07)	-.160 (.10)
HDI 2010	5.058 (3.17)	.299 (4.72)
<b>Random Effect and Intercept</b>		
Intercept	2.819* (1.64)	-3.431 (2.36)
Standard deviation of intercept	.581 (.10)	.774 (.16)
Observations	18572	1683

\*\*\* p<.01 \*\* p<.05 \* p<.10 . Standard errors in parentheses.

**Table 5. Robustness Check**

	<b>Model 1: Prefer Strong Leader</b>	<b>Model 2: Affirmation of Freedom</b>	<b>Model 3: Opposition to Discrimination</b>
<b>Individual-level Predictors</b>			
Islamic Conservatism	.112*** (.03)	-.123*** (.04)	-.184* (.11)
General Conservatism	.06*** (.02)	.104*** (.03)	.200** (.09)
Prefer Strong Leader		-.429*** (.05)	.145 (.12)
Frequency Praying	.005 (.01)	.016 (.01)	-.039 (.04)
Education Level	-.036 (.02)	-.021 (.04)	.052 (.09)
Age	.374*** (.11)	.441** (.19)	-.354 (.46)
Female	.065** (.03)	.168*** (.05)	.389*** (.12)
Personal Economic Condition	-.116*** (.02)	.119*** (.04)	-.205** (.09)
Country Economic Condition	-.087*** (.02)	.083** (.03)	-.471*** (.08)
Proportion of Muslim Friends	-.049* (.03)	-.130*** (.04)	-.006 (.10)
<b>Country-Level Predictors</b>			
GDP 2010	-.197 (.30)	-.531 (.34)	.657 (.51)
Proportion of Muslims	-.827 (.92)	-.441 (1.02)	2.250 (1.58)
GRI	.089 (.06)	-.008 (.07)	-.121 (.11)
HDI 2010	.260 (2.89)	5.300* (3.21)	-.847 (5.05)
<b>Random Effect and Intercept</b>			
Intercept	1.654 (1.49)	3.282** (1.67)	-3.786 (2.54)
Standard deviation of intercept	.536 (.09)	.588 (.10)	.837 (.17)
Observations	21084	17655	1564

\*\*\* p<.01 \*\* p<.05 \* p<.10 . Standard errors in parentheses.

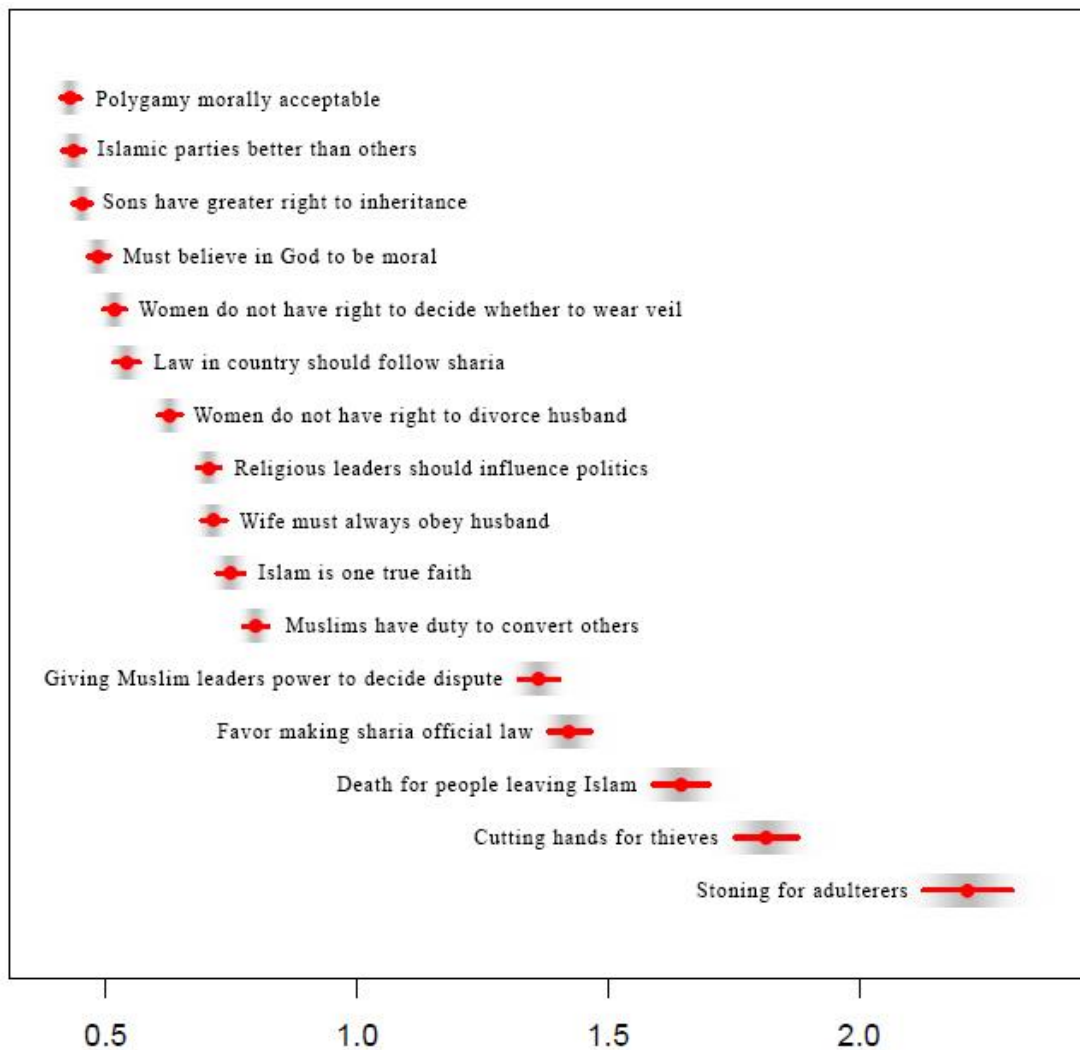


Figure 1. Discriminating Parameters ( $\beta$ ) of Questions in the Islamic Conservatism Model



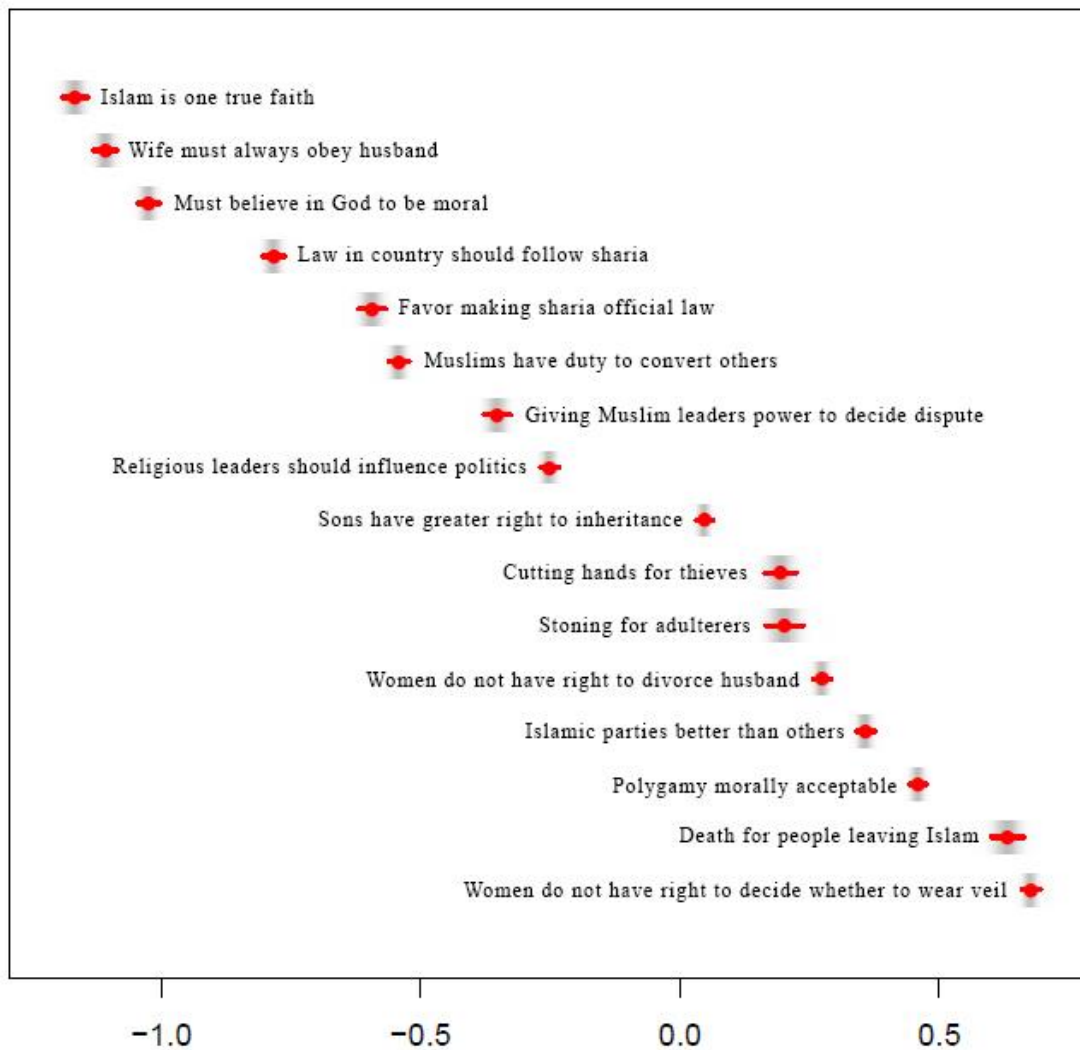
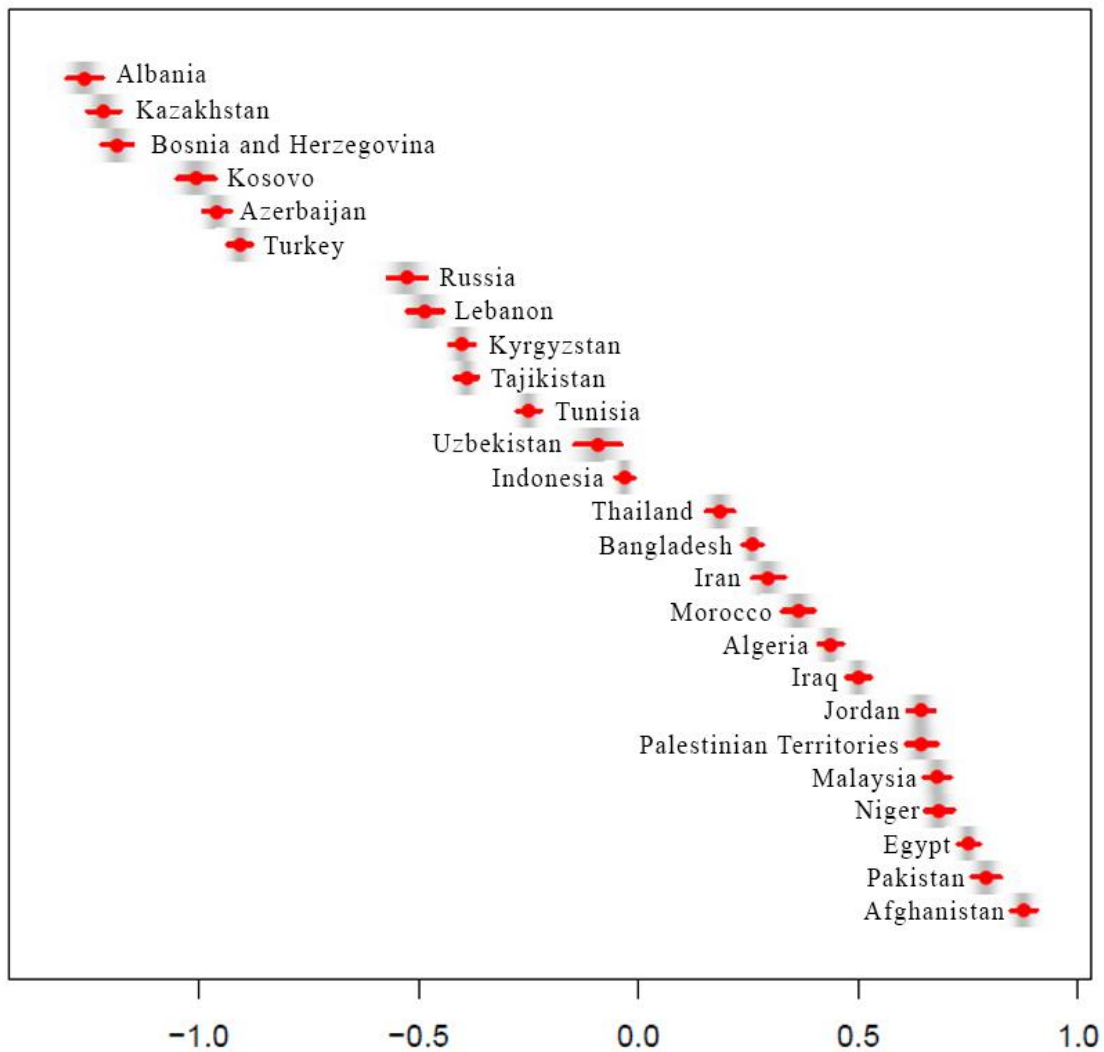
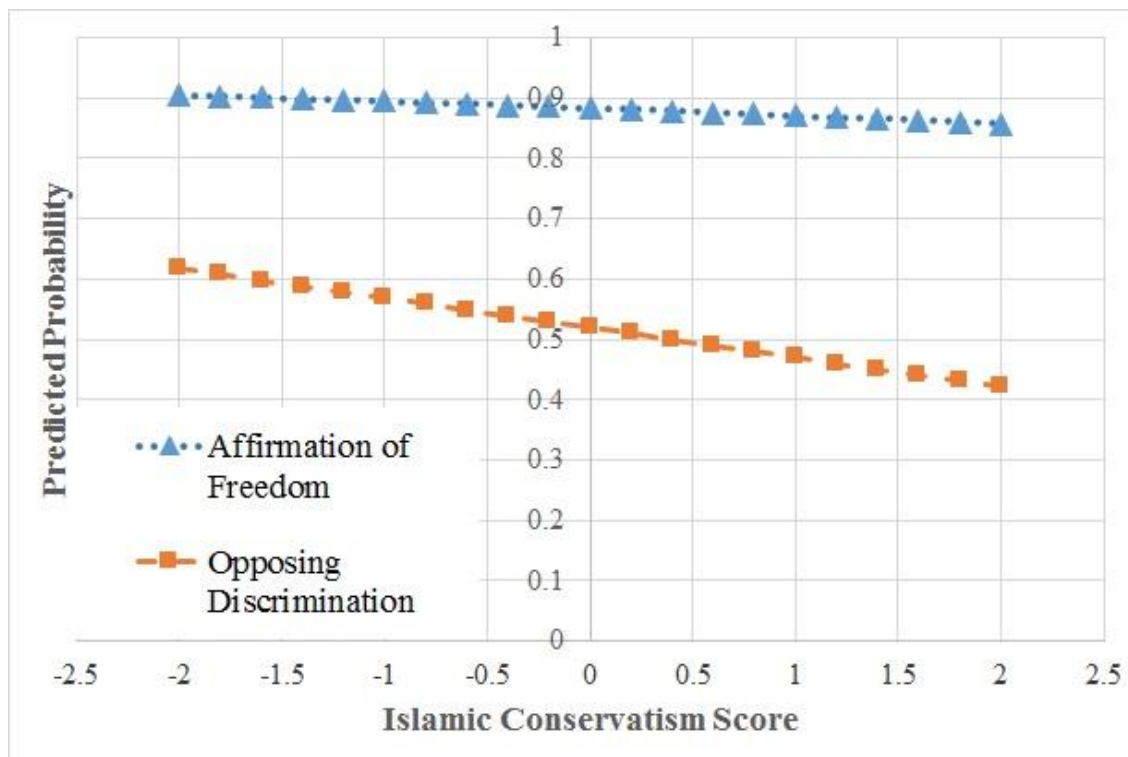


Figure 2. Difficulty Parameters ( $\alpha$ ) of Questions in the Islamic Conservatism Model



**Figure 3. Country-level Islamic Conservatism Scores**



**Figure 4. Predicted Probabilities of Supporting Religious Freedom**