# Going Global:
# Testing Theories with International Data

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Over the last 10 to 15 years there has been a sharp increase in the quantity and quality of international data collections on religion. Surveys have measured the religious beliefs and behaviors of individuals in a growing number of countries, and cross-national collections now offer detailed measures on the relationship religion holds with other institutions for virtually every country in the world. When combined with a growing number of measures that take us far beyond religion, we can now explore religion and the relationship it holds with other key social and political measures and the relationships the religious groups hold with each other. Moreover, the data allow us to move beyond "Western" and historically Christian nations to test theories in the global arena.

My presentation will review the opportunities and challenges for collecting new sources of international data and for using the data to test theory. First, I will look at the national and cultural context of religion and introduce some of the most recent cross-national data collections. Building on this introduction, I will review the opportunities these new data collections offer for exploring new research questions and testing old theoretical queries. Second, I will look at religion within countries. Here I will stress the importance of exploring the interactions between religions as well as understanding the distinctive religious beliefs, behaviors and spiritual experiences of each religion. Once again, I will introduce new data sources and propose theoretical and substantive issues that should be addressed. Finally, I will discuss how levels of analysis can be combined to better test the theoretical questions we are posing, allowing us to assess how individual decision-making is made within a local and national context. For each of these areas, I offer examples from my own research on how the data can be used and I discuss the implications of the new data for future research and theory.

## The National Religious Context

Although many theories of religion propose to offer macro-level explanations for variations across nations, little cross-national data was available until recently. David B. Barrett's *World Christian Encyclopedia*, published by Oxford Press in 1982, was one of the first attempts at estimating religious adherents by nation across the globe; but, as the title would suggest, it offered far more detail for Christian groups than other world religions. Plus, attention was largely focused on a single measure: religious adherents. Since 2000, however, there have been a growing number of collections that are opening up new avenues of exploration.

### *Cross-national Data on Religion*

The most significant cross-national collections have been assembled around the topic of religion and state relations. Freedom House (Marshall 2000), the Religion and State Project at Bar Ilan University (Fox 2008), the Pew Research Center (2009) and the Association of Religion Data Archives (www.theARDA.com) at the Pennsylvania State University (Grim and Finke

2006) have all conducted multiple cross-national collections since 2000.[1] Although the collections vary in the research methodologies and information sources used, there is a high level of agreement *across* the collections. For example, when they measure similar concepts, such as state restrictions on religion, the measures of these major studies are highly correlated. And, with the lone exception of Freedom House, the collections include a wide range of measures on the relationship between religion and state. Indeed, the most recent Religion and State collection offers 51 measures of state support for religion, 29 measures of state restrictions on religion and 30 measures on the state's discrimination against religion.[2]

The data collections by the ARDA and Pew Research Center, however, go beyond the influences of the state to look at how social, religious and cultural pressures might restrict the activities of some religions and support the activities of others. These measures include the influence of formalized social movements and other religious movements, as well as the generalized cultural and social pressures often faced by minority religions. Plus, these collections tap into religion's relationship to social conflict, both as the victim and the perpetrator of violence. Each of these measures moves us beyond religion's formal relations with the state and serves to uncover the relationship religion holds to the larger culture.

Yet another source of cross-national data uses summary scores from national surveys of individuals. As surveys are administered to a growing number of nations and the measures used are standardized across the surveys, the summary findings for each nation offer measures for the nation as a whole. For example, the ARDA has assembled a cross-national data file with 623 variables by aggregating the World Values Survey (WVS) for 82 countries across the first four collection waves. The file includes measures such as "[p]ercent saying religion is 'very important' in life," "[p]ercent belonging to religious organizations" and "[p]ercent that believe in God" for select waves.[3] The aggregated survey measures are especially effective for cross-national studies because they tap into the difficult to measure religious beliefs and attitudes of the country as a whole.[4]

The end result is that the paucity of cross-national data on religion prior to 2000 gradually is giving way to multiple data options in recent years. This opens up many new research opportunities. I offer a few examples below.

*Using the New Data*

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[1] The collections conducted by the ARDA and the Religion and State project are currently available on theARDA.com. The Pew Research Center's collections should be available from theARDA.com in the near future.

[2] For an overview of the data collections go to: http://www.thearda.com/ras/. The data collections for both the Association of Religion Data Archives and the Religion and State Project can be downloaded from www.theARDA.com at: http://www.thearda.com/Archive/CrossNational.asp.

[3] The file can be reviewed and downloaded at theARDA.com: http://www.thearda.com/Archive/Files/Descriptions/WVSAGG.asp

[4] To review a detailed list of cross-national datasets on economic, demographic, and social measures, go to: https://www.google.com/publicdata/directory. Assembled by Google, the list links to 130 data providers, such as World Bank, and has links to 2,177 measures.

When presented with multiple new data collections and hundreds of new measures, the obvious question is: What do we do with all of this data? Mark Twain is credited with this caution: "Data is like garbage. You'd better know what you are going to do with it before you collect it." In the case of these collections, however, there is much we can do.

One of the most obvious uses for the data is to test theory. My initial motivation for leading a data collection in this area is that the state's restrictions on and alliances with religion lie at the heart of the religious economies model's attempt to explain religious vitality. Rodney Stark and I have argued when religious restrictions were lifted in early America, the religious freedoms unleashed a new supply of religions and resulted in an increased religious vitality (Finke 1990; Finke and Stark 1992). More recently Jonathan Fox and Ephraim Tabory (2008) have used the cross-national data sources listed above to test this thesis, finding that state restrictions on religion are "significantly and negatively correlated" with attending religious services, but hold little relationship with beliefs. No doubt, more studies will explore this topic since it addresses both the religious economies and secularization theories.

Fortunately, however, the new data allow us to go far beyond tests of religious vitality or secularization. The abundance of measures on religion and state are of obvious interest to political scientists, posing numerous questions on when and why the state will form alliances with religion or when the state will increase restrictions on religion.[5] But the data offer more than substantive answers about religion and state, they allow us to test theoretical propositions on the origins of religious freedoms or religious establishments.[6]

The data also go far beyond questions about the state to explore the consequences of the state's support and restrictions on religion (Finke 2013). Whereas, political leaders often justify religious restrictions as a necessity for curbing violence and maintaining public order, both our theory and the data collected suggest otherwise. Social conflict is often a consequence of increased religious restrictions. Below I offer a few examples from my own research to illustrate the strong association between social conflict and religion's relationship with the state.

The most carefully documented example is the relationship religious persecution holds with government and social restrictions. Defining religious persecution as physical abuse or physical displacement due to one's religious practices, profession or affiliation, Brian Grim and I found that government restrictions on religion were the strongest predictor of religious persecution and that the social restrictions enacted by other religions, social movements and the culture as a whole were powerful predictors as well. Figure 1 summarizes the analysis we completed for an article in the *American Sociological Review* and a later book with Cambridge University Press (Grim and Finke 2007; 2011). Even when controls are entered for a long list of

[5] The Religion and State website reports that eight books and 76 articles have used the Religion and State data collections, with the majority being completed by political scientists. Even this recent and increasing volume of work, however, has only begun to address the many substantive and theoretical questions surrounding religion and state relations.

[6] Political scientist Anthony Gill's (2008) book on *The Political Origins of Religious Liberty* is perhaps the most obvious example, but economists (Iannaccone, Haight and Rubin 2011) and sociologists (Finke 2013; Stark and Finke 2000) have offered related theoretical propositions.

economic and demographic variables, and for the civilization divide measure suggested by Samuel Huntington (1996), restrictions on religion remain powerful predictors of persecution.

More recently Jaime Harris and I have extended the analysis using religiously motivated violence and Robert Martin and I explored the relationship using the more general measure of Intrastate Social Conflict, one that goes beyond religiously motivated violence. In each case increased restrictions on religion show a positive and significant relationship with each measure of social conflict. Table 1offers a summary of how social and state restrictions on religion are related to each form of social conflict, with the relationship being the strongest for religion-related violence (see Finke and Harris 2012; Finke and Martin 2012).[7] Yet, these few examples offer only a glimpse at what has been done, what can be done and what I will suggest needs to be done.

*Future Research*

So what still needs to be done? Below I offer a sampler of the many research projects that remain and the cross-national measures that are still lacking. The implications for future research are many, but I limit myself to only a few.

First, and perhaps most obvious, we have only started to understand the consequences of religion and state relations on other social institutions. Even in the area of politics, where the most research has been conducted, many research questions remain on how this relationship influences religion's involvement in public discourse and political mobilization. When seeking to understand the decline of liberal nationalism and the rise of fundamentalism in Egypt, Syria, Iran and Algeria, Mansoor Moaddel (2005) stressed the importance of allowing religions to enter into the public discourse and the cultural conversations. Whether the movements are pro-democracy or pro-theocracy, past work has shown that religious movements are often instrumental in political change (Toft, Philpott, and Shah 2011). We also need to understand the consequences on the economy. Economists have begun to look at how religious freedom and establishment are related to economic activity, yet past studies are often limited by the data available and sometimes by their knowledge of religion (Barro and McCleary 2003; Boone, Brouwer, Jacobs, Witteloostuijn, and Zwaan 2012; Kuran 2011). And, despite the extensive body of research on social conflict, the role of religion in fueling and curbing these conflicts is poorly understood. The initial research suggests that religion and state relations will provide some important answers, but few details have been offered to date.

A second implication is that we need to better understand the origins of religious freedoms and the sources of religion and state alliances. Despite the theoretical work by Anthony Gill (2008) and the detailed data collections of Jonathan Fox's Religion and State project, explaining this relationship remains elusive. For example, promises of religious freedom have become the standard in national constitutions, but the chasm between promise and practice is vast. When Robert Martin and I try explaining this chasm in a forthcoming article in the *Journal*

[7] Prior to these collections, there were few attempts to test the arguments in Huntington's (1996) influential *The Clash of Civilizations and the New World Order*. Many spoke against it, but the data were lacking.

*for the Scientific Study of Religion* (Finke and Martin 2015), we find that an independent judiciary is an important predictor of government restrictions on religious freedoms, whereas free elections and government effectiveness are insignificant in our full models. But there is still much work to be done. How do the freedoms granted vary by the type of religious group or the type of freedoms being studied? What explains the establishment and disestablishment of alliances between religion and state? Each of these research questions has already received some research attention, but our improving data sources allow us to refine both our empirical tests and our theoretical discussions.

The third implication is closely related to the second: we need to better understand the relationship religious liberties hold with other liberties. On the one hand religious liberties are an extension or even a duplication of other liberties, such as the freedom of speech and freedom to assemble. On the other hand, religions hold a distinctive institutional base, which can be in alliance or tension with the state; and they can be guided by divine commands that effectively mobilize action. Brian Grim and I have documented the strong correlations between religious liberties and many other liberties, but what do these correlations mean (see Figure 2)? We know that some civil liberties can be in conflict with others, such as religious freedoms and the liberties of women, gays and lesbians. How and why does the value given to different liberties vary across countries and over time? Despite these potential conflicts, however, initial reviews of the data would suggest that all boats rise together. When one civil liberty is protected, it enhances the chances of all liberties being protected.

Finally, despite touting the great improvements in data since 2000, the final implication I will mention is that we still need more cross-national data. The ARDA and Pew Research Center collections have added new measures on cultural and social restrictions, but we need more measures on the relationship religion holds with the larger culture and society. We also need more historical measures. Like so many social measures, cross-national measures of religion need to be collected over a longer span of time, allowing us to more effectively chart and explain social changes. Some progress has been made, but it is still limited. The World Religion Dataset offers adherence estimates in five-year intervals beginning in 1945, but is limited to the single measure of religion.[8] The Religion and State Project offers a rich array of measures, but is limited to19 years. Yet, another area needing more and improved measures is religion's overlap with ethnicity and other social identities. Scholars know that religion and ethnicity are often closely related, and a few have stressed the importance of understanding these identities when explaining the relationship between religion and social conflict (Wellman and Tokuno, 2004), but better cross-national data collections are still badly needed.

The implications for future research could continue, but I now want to turn to global research that moves from the national context to the individuals, institutions and social interactions within nations.

[8] The file can be reviewed and downloaded at theARDA.com: http://www.thearda.com/Archive/Files/Descriptions/WRDREG.asp

## Religion within Countries

Unlike the recent surge of cross-national collections, international surveys of individuals have been in progress for several decades. The ambitious and highly regarded World Values Survey (WVS) began in 1981 as a part of the European Values Study, quickly expanded its outreach and has fielded six waves of data collection. The surveys have now been conducted in nearly 100 societies, with the most recent sixth wave including nearly 60 societies. A second major international data collection, the International Social Survey Programme (ISSP) was started in 1984 and three of their collections (1991, 1998 and 2008) have extended modules on religion. The 2008 collection included more than 40 countries. These two collections alone provide the foundation for much of our international data on religion. Because they now include multiple years and have often relied on standardized survey items, they offer some important comparisons across countries and over time.

The study of global religion is deeply indebted to the WVS and the ISSP, but today I want to move beyond these well-known collections and mention a few international resources that might be overlooked. I will be especially attentive to some of the innovative measures being introduced by these new collections. Whereas the WVS and ISSP often strive to maintain continuity in measures in an effort to chart trends over time, many of the new collections can be more open to testing new measures. Although equally important, I will only briefly mention the importance of using units of analysis other than the individual for within country studies.

*Data on Individuals and Groups*

Some of the very best multi-nation surveys offer only weak or sporadic measures of religion. The Demographic and Health Surveys (DHS), which offer in-depth questions on demographic issues, health and nutrition in nearly 90 countries, and the Global Barometer Study, which focus heavily on political attitudes in 55 political systems, are two examples. Each of these international projects offers high quality national surveys and makes the data available for download free of charge. But, unfortunately, the Demographic and Health Surveys only ask about religious affiliation or identity and some have no measures on religion.[9] Organized by regions of the globe, surveys in the Global Barometer Study offer far more measures, but the specific measures used varies widely by region. Whereas, the Asian Barometer surveys generally include three measures of religion (i.e., identity, practice, and religious importance) the Arab Barometer surveys touch on religion in multiple areas of the survey.[10] Despite the limitations of the DHS and Global Barometer collections, however, they open up new research opportunities to explore the relationship religion holds with politics, health and demography around the globe. To the extent that we reveal interesting findings, we also build the case for more measures of religion.

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[9] The DHS studies are now being assembled into the Integrated Demographic and Health Series at the University of Minnesota: https://www.idhsdata.org/idhs/

[10] For more information on the Global Barometer Study go to: http://www.jdsurvey.net/gbs/gbs.jsp . To review the survey for each global region, go to: www.afrobarometer.org, www.arabbarometer.org, www.asianbarometer.org and www.latinobarometro.org.

A third multi-nation survey effort is conducted by the Pew Research Center (PRC). When compared to the WVS and the ISSP, they offer fewer nations and far shorter surveys that are focused on a narrower range of topics. Yet, these surveys often introduce new measures of religion and provide information that is not available from the other major surveys. Table 2 offers one example of the data I used for my own research (Grim and Finke 2011). Despite conducting the survey in only 10 countries, the Pew results nicely illustrate that respondents were highly concerned about their own religious freedoms, but were much less concerned about the religious freedoms of others. [11] The Pew surveys will not replace the rich coverage provided by the WVS and ISSP, but the frequency of the surveys and the diversity of topics covered allow them to offer new insights.

The large multi-nation surveys provide obvious opportunities for our research to go global, but this global diversity can often arise in regional surveys or even surveys of a single nation. Because of the reduced scope and cost of more local surveys, they allow for the introduction of more diverse and innovative measures. One example is the Religious Experience Survey in Taiwan (REST), which was administered in both Taiwan and China (Tsai 2013). Building on the survey work of Xinzhong Yao and Paul Badham (2007), this survey introduces a diverse range of measures on religious and spiritual experiences. These measures reveal the beliefs and experiences that are shared by adherents of virtually all of the religions in Taiwan and China, as well as identifying the boundaries that remain. Given the religious diversity in Taiwan and China, the authors are forced to struggle with the practical issue of measuring religious experiences across the major world religions of Buddhism, Christianity and Daoism, as well as the diversity within and outside those groups. Surveys like REST are serving as a testing ground for possible new measures on the large international surveys.

Finally, though most of the surveys reviewed above focus on the religious experiences, beliefs and practices of individuals, or the views they hold toward other social institutions, we should not ignore the religious groups or the interactions between these groups. This can be accomplished using a couple of different approaches. The first is to collect data on the individual groups or social movements. Rather than having the individual as the unit of analysis, data are collected on the local congregation, social movements or the religious groups within the country. A second approach is to include survey questions asking about the respondent's interaction with other religious groups. I will offer one example below to illustrate how this approach can test a major theoretical proposition and address significant substantive issues.

*Using the Data*

One of the most enduring social scientific theories for explaining social distance and prejudice between groups is some variation of the contact theory. Most often associated with Gordon Allport's (1954) classic book, *The Nature of Prejudice*, the theory proposes that when intergroup contact increases, the desired social distance between the groups will decline and

[11] 2006 Pew Forum Pentecostalism Survey. "Spirit and Power: A Ten-Nation Study of Pentecostals," http://www.PewForum.org/surveys/pentecostal.

prejudice and discrimination will be reduced.[12] Given the tensions between various religious groups around the globe, the study of contact and the relationships across religious groups would seem like an obvious area of study. Yet, the applications of this theory to religion, and the collection of data on the contact between individuals of different religious groups are remarkably sparse.

Thanks to the support of the John Templeton Foundation, theARDA.com recently added a series of measures on social contact and desired social distance between religious groups on the 2012 Caucasus Barometer surveys of Armenia, Azerbaijan and Georgia. All three of the countries are in the south Caucasus region and all were part of the former Soviet Union, but they have very distinctive political, ethnic and religious histories. For example, 96 percent of Armenia's population belongs to the nationally recognized Armenian Apostolic Church, 99 percent of Azerbaijan is Muslim, and 86 percent of Georgia's population belongs to the nationally recognized Georgian Orthodox Church. Despite low levels of religious involvement, religious affiliation remains an important source of identity and confidence in religious institutions remains high in each of the countries.

For each of these countries religion remains an important boundary-marker for various conflicts within and across countries. Many of these tensions are centuries old and remain active today. The ongoing conflict between Armenia and Azerbaijan over the Nagorno-Karabakh region continues to heighten the tensions between Muslims and Christians of each country (Goldenberg 1994:2; O'Ballance 1997:60). Georgia has experienced conflicts with Muslims in South Ossetia and has fought Muslims from North Caucasia who volunteered to fight Christian Georgians during the Georgia-Abkhazia conflict (O'Ballance 1997:135). Each of these conflicts revolve around ethno-political disputes rather than religion (Cornell 1998), but the conflicts have served to reinforce religious boundaries and the tensions between the religious groups (see Goldenberg 1994:62; O'Ballance 1997:60).

Ben Gurrentz and I have recently used the new measures in the Caucasus Barometer to address the most fundamental question of social contact theory: does social contact across two groups serve to reduce the social distance desired between the groups? Our results clearly documented the social barriers between religions. In Georgia, more than half of those interviewed report at least some objection to family members simply doing business with atheists, Jews or Muslims and more than 90 percent objected to intermarriage. Armenia reports similar results. In Azerbaijan, objection toward business transactions with atheists and Georgian Orthodox members was more modest (33 percent and 39 percent, respectively), but objections toward a family member marrying an atheist, Georgian Orthodox member or a Jew remained high, with 95 percent of Azerbaijanis objecting to intermarriage with both Georgian Orthodox members and Jews.

When we tested for the effects of social contact, our results clearly showed both the power and the limitations of social contact for reducing the social distance desired. Using

[12] For an overview of the theory and a meta-analysis of research conducted in the area see Pettigrew and Tropp (2006) and Pettigrew, Troop, Wagner and Christ (2011).

propensity score matching, we compared members of the majority religion having contact with minority religion members to those having little or no contact. We found that even moderate contact significantly reduces the social distance desired from religious minorities. The basic proposition of the theory was strongly supported. But we also found that because the initial objections to intergroup marriage were so high the level of objection remained high even though the declines were highly significant. These tests provide several important insights. First, it provides an important test of the social contact theory. Second, it applies the thesis to religion and tests the thesis in a region where religious tensions are high. Finally, it helps us to evaluate the limitations and strengths of the theory in the global arena. To what extent do the theoretical propositions hold for other religions, cultures and countries?

*Future Research*

Significant progress has been made in conducting and analyzing cross-national surveys on religion, but many challenges remain. Once again, I will offer only a sampler of the work ahead of us.

Perhaps the most obvious challenge is developing survey measures that hold a uniform meaning across religions, cultures and languages. Tom Smith (2004), the past secretariat of the ISSP, distinguishes between emic and etic questions. Etic questions have "a shared meaning and equivalence across cultures, and emic questions are items of relevance to some subset of the cultures under study" (Smith 2004, p. 446). The goal of any survey is to use terms and questions that hold the same shared meaning for all respondents. For cross-national surveys, the most immediate challenge for achieving this shared meaning is one of accurate translations, but the larger problem is finding survey measures that hold a shared meaning for all of the religious and cultural groups being surveyed. Improved research requires improved measures and improved measures require that the existing measures are subjected to evaluation.

Evaluating the measures must occur at two levels. The first is conceptual. We must begin by clearly defining what it is that we are trying to measure and how it is related to key theories of interest. Seemingly simple and universally shared concepts like God and prayer must be defined with precision if they are to guide our measures. The second is an evaluation of the actual measures. Are they consistently tapping into the concept of interest? Developing improved measures begins with effective translation, but it can't end there. We must conduct systematic investigations into the effectiveness of cross-national measures by using focus groups and the many empirical tests designed for evaluating survey measures (Alwin 2007). The ARDA's recent development of an online feature called the Measurement Wizard offers yet another tool for comparing how question wording and the response categories used can influence the results received.[13]

One of the many areas needing closer attention and improved measures is religious identity. Earlier we noted the importance of developing macro-level measures on religion's

[13] The ARDA's Measurement Wizard is located in theARDA.com's Religion Research Hub and can be accessed at: http://www.thearda.com/mawizard/

relationship with other social identities. This is equally important at the micro-level. Understanding both the number of identities respondents hold and the salience of each identity can prove important for understanding religion and the relationship it holds within the larger society. For example, when the Pew Research Center asked Muslims and Christians "What do you consider yourself first" and they were given the options of "A citizen of your country" or "a Muslim/Christian," the responses varied widely from one country to the next (Pew Global Attitudes Project, 2006). In Great Britain 81 percent of the Muslims considered themselves Muslim first compared, to 46 percent in France and 36 percent in Indonesia. For Christians, 42 percent of those in the United States considered themselves Christian first, compared to 14 percent in France and Spain. Beyond the salience of the identity, it is especially important to understand the overlap between identities. Scholars often refer loosely to ethno-religious identities, but the extent and sources of the overlap are poorly understood. Likewise, the overlap between national identity and religion or political party and religion can be viewed as inseparable or completely unrelated.

Finally, I have given almost no attention to data collections on the religious institutions and movements within countries. For most countries we have little data on how religious organizations and religious social movements are organized, how they are related to other social institutions or even their overall size. Yet, these institutions and movements often play a crucial role in mobilizing religious, social and political action. To the extent that we ignore this level of analysis, we are handicapping our understanding of religion and the influence of religion on the larger society.

## Multi-level Research and Theory

Although we frequently refer to macro- and micro-level theories, the division between them often is artificial. Indeed, macro-level theories are typically built on micro-level assumptions and propositions about human behavior and decision-making. For example, Weber's ([1904] 1958) attempts to explain the rise of capitalism in the *Protestant Ethic* were built on psychological principles and the religious and social views of individual actors. Likewise, micro-level theories must be placed within a larger social context to understand how social reality is defined or how rewards and penalties are administered. At the very least, the social context provides the parameters for what is seemingly possible and socially desirable.[14]

Despite this inherent link between the micro and macro levels, our research is often confined to a single level, especially our quantitative empirical research. In part, this has been due to the weakness of our theories in making clear links between the different levels, but it has also been due to the limitations of our data and our statistical tools. Gradually, however, our opportunities for conducting multi-level analysis have been increasing.

[14] See Stark and Finke (2000, p. 36-41) for a short overview of how social context, personal preferences and human understanding can motivate and guide behavior. This book also provides a theoretical foundation for three levels of analysis.

A final research area I want to stress is using data and theory that are based on multiple levels of analysis. Rather than looking only at the national context or only at the beliefs, attitudes and behaviors of individuals, I want to stress the importance of including both levels of analysis. Not only does a multi-level approach provide a more complete explanation, it is frequently a more effective test of a theory. The approach allows us to evaluate how the social context combines with the individual's quality and traits to explain social actions and attitudes.

Before I discuss and illustrate how this approach can be used for the study of religion, let me offer a couple explanatory notes. First, I will not review data collections that are distinctively multi-level. Although a few collections are intentionally multi-level, most are not. Instead the researcher will often draw on two data sources to construct a multi-level file. Second, I want to stress that the levels included can widely vary. In the example I offer below one level is the individual's responses to the WVS and the second is the national context. But the contextual levels might be a congregation, a school or a community and the analysis might include more than two contextual levels.

The point I am trying to illustrate is basic one: if we are to understand the actions of individuals, we must better account for their social and cultural context. Quite simply, I am suggesting that social structure, cultural norms and the density of social networks all help to shape the actions of individuals.

*Using Multi-level Data*

Durkheim's ([1897] 1951) classic statement on religion and suicide provided clear propositions on the importance of social structure and social bonds in promoting conformity and preventing suicide. Stressing strong social bonds and the density of social networks, Durkheim argued for the importance of the social rather than individual qualities or beliefs. When applied to religious groups, he stressed the importance of the groups for social and moral integration. To the extent that individuals were integrated into tight social networks and shared similar moral beliefs, Durkheim proposed that suicide would be low. Building on this insight Rodney Stark (1996) proposed that when individuals are integrated into strong moral communities, they are more likely to conform to their religious beliefs. He went on to illustrate how this proposition could be applied to conformity and social deviance more generally.

Despite offering clear theoretical propositions, Durkheim and Stark were limited in the methods they could use for testing these propositions. In recent years, however, multilevel modeling techniques and the data needed for the new techniques have greatly improved. As a result, the approach has been used with increasing frequency to test the moral communities argument (Regnerus 2003; Adamczyk 2012). Unfortunately, cross-national tests are relatively few. I will offer one example of how this approach can be used with cross-national data to the test the influence of the religious context on the moral attitudes of individuals.

It is common knowledge that religious involvement and beliefs vary widely from country to country. Based on the World Values Survey the percentage attending a worship service at least monthly is 8 percent in Sweden, 49 percent in the United States and 95 percent in Nigeria.

If we look at the percentage of the population considering religion important, the same three countries have percentages of 29, 72 and 99.[15] But the question we are posing is: does this variation in the national religious context make a difference? Does the national context, as well as the individual's personal religiosity, serve to shape attitudes and behavior?

To answer these questions and to test the moral community arguments in the international arena, Amy Adamczyk and I proposed to test four hypotheses (Finke and Adamczyk 2008). Two of the four hypotheses are as follows:

*#1. To the degree that people hold strong religious beliefs and participate in religious rituals, they will hold more conservative views of morality.*

*#2. When nations have high levels of religious belief and practice, individuals will tend to hold more conservative views of morality.*

The first hypothesis proposes that an individual's religious beliefs and involvement shape personal beliefs and action. The second proposes that the national religious context will affect individual morality, regardless of personal religiosity. In other words, we are predicting that both the national religious context and the personal religious beliefs and practices will shape an individual's view of morality.

We used two international surveys to test for the influence of national context and personal religious practice and beliefs on positions held on various types of morality. For the sake of brevity, however, I only report on our main findings from the ISSP. The ISSP had three measures on attitudes about premarital sex and cohabitation that we combined into a three-item index for our measure of views on sexual morality. At the individual level, we had measures for worship attendance, importance of religion and a series of control variables closely linked to both morality and religion. At the national level, we had a summary measure of religiosity for the nation and the extent of religious concentration.

We sorted out the effects of national context and personal religious beliefs and practices using Hierarchical Linear Modeling Techniques (HLM).[16] This technique allows us to discern variation within nations (micro-level effects) from variation between them (macro-level effects). Unlike other linear models, the random coefficients produced with these models relax the assumptions on the independence of individual observations, allowing us to enter macro-level variables (e.g., county religiosity) that are aggregated from micro-level variables (e.g., personal religious beliefs) used in the equation. Thus, individual morality will be explained by individual characteristics as well as the national context.

Table 3 offers our results in detail, but I limit my attention to a few key findings. First, Model 2 provides strong support for our first hypothesis: personal religious belief and attendance are significantly associated with more conservative moral attitudes, even when we enter a series of control variables. Second, Model 3 provides strong support for both hypotheses 1 and 2.

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[15] The percentages were downloaded from theARDA.com's National Profiles on July 15, 2014 (http://www.thearda.com/internationalData/). The percentages for Nigeria were from the 2000 WVS and the percentages for the U.S. and Sweden were from 2005.

[16] For an introduction to multi-level modeling, see Raudenbush, Bryk and Congdon (2005) or Kreft and DeLeeuw (1998).

When entered with individual belief and attendance, the country's level of religiosity is significant, positive and holds a standardized beta that is larger than any other variable in the model. As a country's overall level of religiosity increases, so also do individuals' negative attitudes about cohabitation/premarital sexual relations. A final result I want to highlight is the interaction between the two levels. Model 4 shows that as a country's level of religiosity increases, disapproval of cohabitation/premarital sexual relations increases even more for people with a higher level of religiosity. The findings help to sort out the independent effects of personal beliefs and practices from the national religious context.

Although not shown here, the article goes on to replicate the findings with other morality measures and concludes that the relationships are weaker or do not hold for moral codes sanctioned by the state. The influence of religion is strongest when the morality studied is distinct from or beyond the requirements of the state. Adamczyk and colleagues have continued this line of research and have uncovered many additional findings on the multi-level relationships between religion and morality around the globe (Adamczyk and Hayes 2012). As I will review below, however, there is still much to be done.

*Future Research*

The example I just offered tested two propositions arising from a single theoretical argument. As I noted earlier, however, macro-level theories rely on micro-level assumptions and propositions and micro-level theories must be placed within a larger social context to fully understand human decision-making. The moral community arguments first proposed by Durkheim offer an obvious example of a theory requiring multi-level analysis, but virtually all theories would benefit from a better understanding of the link between the micro and macro-levels of analysis.

For example, the contact theory reviewed earlier offers multi-level proposals that have largely gone untested. The theory proposes that intergroup contact is most effective when four optimal social contact conditions are met: equal group status, common goals, intergroup cooperation and support from the authorities. The first condition, equal group status, highlights that even intimate and frequent contact does little to change intergroup prejudice if those having contact are of unequal status. The second and third conditions, common goals and intergroup cooperation, establish the influence of cooperative rather than competitive actions for the attainment of mutually beneficial outcomes. The final condition, support from authorities, points to the importance of sanctions stemming from formal and informal authority figures that can either facilitate or impede positive interaction.

Each of these conditions points to important macro-level variables that should be considered when explaining social distance and prejudice between religious groups. Indeed, the conditions are closely tied to the religion and state measures reviewed earlier. When the state fails to support equal and cooperative interactions, or even promotes the isolation of select religious groups, the quantity and the quality of the interactions between members of the

different religious groups is reduced. [17] The theory proposes that we must understand how the state supports and impedes religious intergroup interactions, if we are to effectively predict the consequences of social contact between members of different religious groups.

We also need to explore more levels of analysis. The example offered above used nation as the second level of analysis, but as noted earlier the local congregation, school, community or other regional unit can be used as the second level. Indeed, when studying religion, the local congregation often is a crucial social context. Jenny Trinitapoli's (2009) studies in rural Malawi offer one example. Using data both for congregations and individuals, her multi-level analysis revealed that personal beliefs and congregational characteristics were both influential in predicting HIV risk behaviors. She found that the messages, encouragement and monitoring of congregational leaders, as well as personal beliefs about appropriate sexual behavior were strong predictors of a reduction in risk behaviors.

Whereas, Trinitapoli's study included data collections at two levels of analysis, most do not. Multi-level studies often require researchers to match two very different sources of data, such as survey data and neighborhood census data or survey data and national measures from the UN and other sources. This type of analysis often forces us to think creatively about how we can generate the data needed to effectively test our theories.

## Moving Forward

Going global with our research is not an easy task. Building on my review, I conclude by offering five challenges for improving our global research. Each is simple, and perhaps obvious, but very difficult.

First, we need to be more aware of the data sources available. This presentation has attempted to highlight a few important sources, but I have only scratched the surface. As the director of theARDA.com, I encourage you to take advantage of the hundreds of data files and other resources we make available online free of charge. The rich data archive is an obvious resource for quantitative researchers, but qualitative researchers also benefit from these resources. The ARDA's online tools are especially helpful in generating a quick overview of nation or a global region without requiring the researcher to download a single data file. When combined with many other online resources, international research is becoming possible for a growing number of scholars.

Second, we must continue to refine our data collections and our statistical tools to more effectively answer the substantive and theoretical questions being asked of global research. As demonstrated by the examples above, sorting out contextual effects and understanding the relationships between religious members and institutions, requires that we find the correct data and use the appropriate statistical tools.

A third challenge is improving the measures we are using. For young scholars, this challenge often seems far out of their reach. After all, few (if any) will generate the resources

[17] We emphasize the role of government regulations in restricting interaction, but the limited interaction also can result from natural physical barriers or from social barriers placed on one or more the groups.

needed to conduct a multi-nation survey. But contributions can be made in several areas. At the macro-level the collection of a few new measures, or even a single new measure, can often lead to exciting new research findings when combined with existing cross-national measures.[18] At the micro-level, theARDA.com's Measurement Wizard tool now makes it easier to compare and better evaluate the wording of survey items measuring more than 100 different concepts and coming from hundreds of surveys. Even when scholars aren't conducting multi-nation surveys, they can help to evaluate existing measures and offer direction for future surveys.

Closely related to the improvement of measures, a fourth challenge is demonstrating the need for more measures of religion on more surveys. One of the reasons that religion measures are beginning to appear on demographic, health and political surveys is because a core group of researchers are demonstrating that religion is an important predictor. To justify the addition of religion measures we need to demonstrate that religion should be a variable of interest for a diversity of disciplines and substantive areas.

A final challenge is refining concepts and theories for global research. Although most of my attention has focused on data collections and statistical analysis, it is impossible to discuss these topics without stressing the importance of theory. Without having clearly defined concepts that easily cross cultural and religious boundaries, it is impossible to know what you are striving to measure. The precise wording of survey items or the coding of cross-national measures becomes impossible without this clarity. Likewise, clear propositions are needed to guide both the data analysis and the collection of data. The propositions identify the concepts that are of central interest and offer guidance on how the analysis should be conducted. Just as we must continue to revise our measures to improve global research, we must continue to improve the clarity and precision of our theories to improve our research. Going global with our data collections offers many challenges, but it promises to improve our theories as well as our research.

[18] For example, the ARDA's initial cross-national data collection on religious restrictions and persecution was based on the *International Religious Freedom Reports* and was completed with little external funding (Grim and Finke 2006).

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Table 1: Government and Social Restrictions on Religion by two Social Conflict Measures for the 139 Nations with a Population of Two Million or More*

| | Violent Social Conflict is Present (ISC = 1) | Religion-Related Violence is Widespread |
|---|---|---|
| ***Government Restrictions on Religion*** | | |
| ***Government Restrictions Index (GRI)*** | | |
| **Low, 0 (n=30)** | **20%** | **0%** |
| **Medium, 1-5 (n=58)** | **26%** | **21%** |
| **High, 6-10 (n=51)** | **45%** | **45%** |
| | | |
| ***Government Interference in Religious Worship*** | | |
| **No Interference (n=49)** | **18%** | **4%** |
| **Some Interference (n=55)** | **36%** | **22%** |
| **Severe Interference (n=35)** | **43%** | **60%** |
| | | |
| ***Social Restrictions on Religion*** | | |
| ***Social Restrictions Index (SRI)*** | | |
| **Low, 0-3 (n=38)** | **5%** | **8%** |
| **Medium, 4-6 (n=49)** | **33%** | **12%** |
| **High, 7-10 (n=52)** | **50%** | **50%** |
| | | |
| ***Goals of Social Movements*** | | |
| **Support religious freedoms (n=80)** | **19%** | **8%** |
| **Seek power/hegemony for one religion (n=59)** | **49%** | **49%** |

* The ISC is a composite measure generated from the Major Episodes of Political Violence (MEPV) dataset and the Minorities at Risk (MAR) Project dataset for the years 2004 and 2005 (see Finke and Martin 2012, Appendix C). The measures of religion-related violence and government restrictions of worship derive from ARDA researchers' coding of the U.S. State Department's 2005 International Religious Freedom reports; these reports contain data collected from July 1, 2004 to June 30, 2005.

Source: Finke, Roger and Robert R. Martin. 2012. "Religious Freedom and Conflict: A Review of the Evidence." A report prepared for the USAID Conflict Management and Mitigation Office. ARDA/ASREC Working Paper Series, retrieved 7/28/2014 (http://www.thearda.com/rrh/papers/conflict.asp).

Table 2: Pew Research Center on Religious Freedom being "very important" for Self vs. Others

| | Country | My Freedom | Other's Freedom | Difference |
|---|---|---|---|---|
| greatest survey difference | India | 73 | 43 | 30 |
| | Nigeria | 90 | 69 | 21 |
| | Philippines | 71 | 52 | 19 |
| | South Africa | 75 | 62 | 13 |
| | Kenya | 87 | 75 | 12 |
| | South Korea | 42 | 34 | 8 |
| smallest survey difference | United States | 91 | 85 | 6 |
| | Brazil | 84 | 79 | 5 |
| | Guatemala | 73 | 69 | 4 |
| | Chile | 75 | 72 | 3 |

*Question wording: How important is it to you to live in a country where (insert item)? Is it very important, somewhat important, not too important or not important at all?*

*- you can practice your religion freely*

*- there is freedom of religion for religions other than your own*

Source: 2006 Pew Forum Pentecostalism Survey. "Spirit and Power: A Ten-Nation Study of Pentecostals," http://www.PewForum.org/surveys/pentecostal.

Table 3: [a]Multilevel Estimates for Religion and Other Variables on Sexual Morality Using ISSP

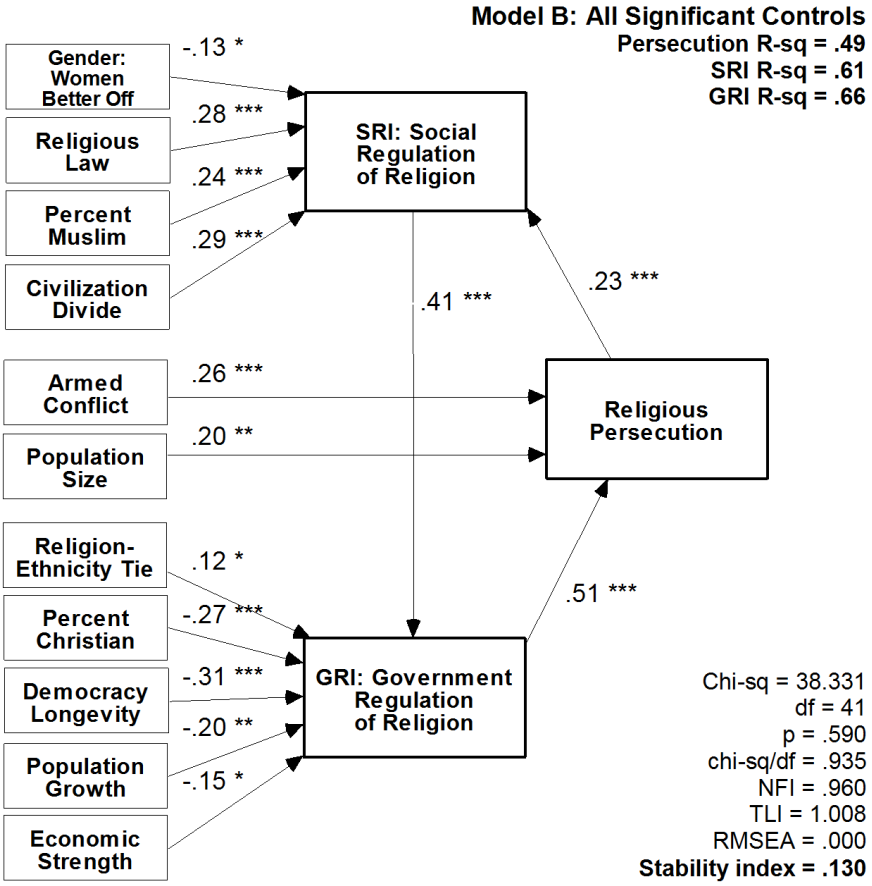
| | Model 1 (baseline) | | Model 2 (level 1 variables) | | Model 3 (level 2 variables) | | Model 4 (cross-level interaction) | |
|---|---|---|---|---|---|---|---|---|
| | B | SE | B | SE | B | SE | B | SE |
| Intercept | -0.04 | 0.07 | -0.18** | 0.05 | -0.18** | 0.06 | -0.18** | 0.06 |
| **Individual-level Variables** | | | | | | | | |
| Attendance | | | 0.15*** | 0.01 | 0.15*** | 0.01 | 0.15*** | 0.01 |
| Religious importance | | | 0.22*** | 0.02 | 0.22*** | 0.02 | 0.22*** | 0.01 |
| Sex | | | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.01 |
| Age | | | 0.01*** | 0.00 | 0.01*** | 0.00 | 0.01*** | 0.00 |
| Degree | | | -0.06*** | 0.01 | -0.06*** | 0.01 | -0.06*** | 0.01 |
| Married | | | 0.07*** | 0.02 | 0.07*** | 0.02 | 0.07*** | 0.02 |
| [a]Protestant | | | 0.15*** | 0.04 | 0.15*** | 0.04 | 0.15*** | 0.04 |
| None | | | 0.19*** | 0.02 | 0.19*** | 0.02 | 0.19*** | 0.02 |
| No answer | | | 0.15*** | 0.04 | 0.15*** | 0.04 | 0.15*** | 0.04 |
| Other | | | 0.34** | 0.09 | 0.34** | 0.09 | 0.34** | 0.09 |
| Orthodox | | | 0.10** | 0.03 | 0.10** | 0.03 | 0.10** | 0.03 |
| **Country-level Variables** | | | | | | | | |
| Country Levels of Religiosity | | | | | 0.39** | 0.13 | 0.31* | 0.12 |
| Religious Concentration | | | | | -0.69** | 0.20 | -0.70** | 0.20 |
| Migration | | | | | -0.04 | 0.02 | -0.04 | 0.02 |
| [a]Protestant | | | | | -0.01 | 0.07 | -0.03 | 0.07 |
| Orthodox | | | | | 0.13 | 0.09 | 0.13 | 0.09 |
| **Cross-level Interactions** | | | | | | | | |
| Attendance X Country Levels of Religiosity | | | | | | | -0.03 | 0.03 |
| Religion Important X Country Levels of Religiosity | | | | | | | 0.15*** | 0.04 |
| **Variance Components** | | | | | | | | |
| Individual estimate, $\hat{\sigma}^2$ | 0.90 | | 0.55 | | 0.55 | | 0.55 | |
| Attendance slope, $\tau_{11}$ | | | 0.0049 | *** | 0.0049 | *** | 0.0049 | *** |
| Religious importance slope, $\tau_{22}$ | | | 0.0086 | *** | 0.0086 | *** | 0.0046 | *** |
| Country intercept, $\tau_{00}$ | 0.14 | *** | 0.09 | *** | 0.06 | *** | 0.06 | *** |

+<.1 *<.05 **<.01 ***<.001

[a]Catholic is the comparison category.

Source: Finke, Roger and Amy Adamczyk. 2008. "Cross-National Moral Beliefs: The Influence of National Religious Context." *The Sociological Quarterly* 49: 617-652.

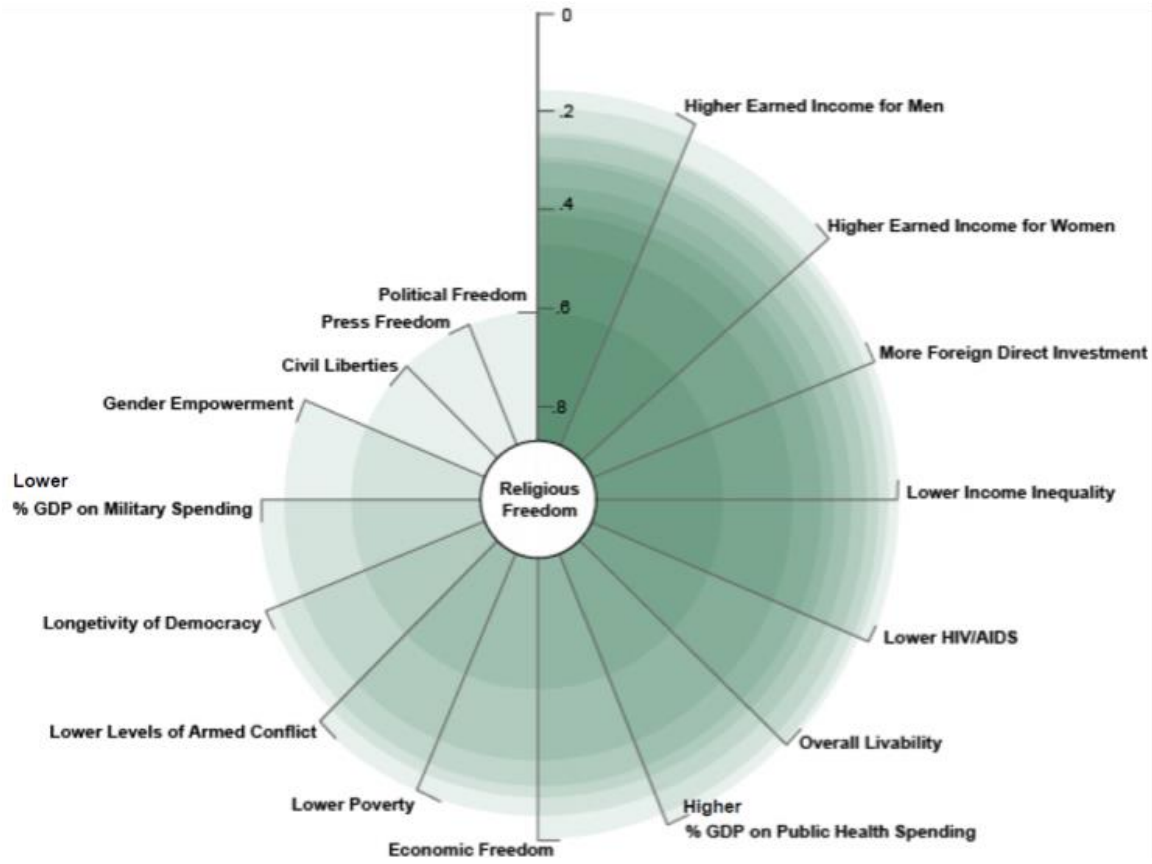
Figure 1: Explaining Religious Persecution




*** p < .001; ** p < .01 * p < .05, two-tailed
Exogenous variables were allowed to correlate if sig. at p < .05, two-tailed.
Error terms are not shown in diagram.
N = 143 countries > 2 million population

Source: Grim, Brian J., and Roger Finke, 2007, "Religious Persecution in Cross-National Context: Clashing Civilizations or Regulated Economies?" *American Sociological Review*, 72 (4): 633-658.

Figure 2: Correlation of Religious Liberties with Other Liberties and Well-being.




Data on up to 200 countries; number of countries compared varies depending on data availability.
(Note: The closer the circle is to the center, the stronger the direct correlation.)

Source: Grim, Brian J. and Roger Finke. 2011. *The Price of Freedom Denied: Religious Persecution and Violence.* Cambridge, United Kingdom: Cambridge University Press.