DOES EXISTENTIAL SECURITY AFFECT RELIGIOUS TOLERANCE IN THE MIDDLE EAST?

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Abstract

Policymakers often characterize Middle Eastern conflict as religiously-motivated and identity-driven, assuming that religious intolerance is innate, ossified, and destined to fuel conflict well into the future. This paper questions such assumptions by examining the origins of religious tolerance across nine Arab states. Religious tolerance, literature argues, often stems from a person’s sense of security. With the exception of one paper, however, this link has not been investigated in the Middle Eastern context; previous studies stress religious and cultural variables. This paper, therefore, draws upon the latest wave of World Values Survey data to examine the relationship between an individual’s perception of security and his/her willingness to have a neighbor of a different religion—a useful proxy for religious tolerance. To do so, this paper employs a linear probability model, taking note of reported economic status, feelings of physical security, and demographic indicators such as region, education level, age, and gender. It finds that existential security does affect tolerance across nine Middle Eastern countries, though the relationship in Iraq, specifically, is quite textured. Ultimately, this paper recommends that policymakers consider individuals’ perceptions of security when constructing policy in the Middle East. Perhaps, with a more nuanced understanding of religious tolerance’s determinants, policymakers will be better equipped to respond to—or prevent—Middle Eastern conflict.

Keywords: religious tolerance, existential security, Middle East
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Introduction

Observers and policymakers struggle to explain conflict in the Middle East. Why do these countries appear to exhibit such low levels of tolerance? What will enable people in the region to live harmoniously?

Analysts regularly look to sectarianism, religion, culture, or history to explain Middle Eastern conflicts. Many of these arguments are compelling, explaining dimensions of what we see today. Nonetheless, these approaches pose two challenges. First, they are difficult or impossible for policymakers to act upon. Citizens of the Middle East are unlikely to undergo mass conversion or collectively forget their histories. Culture and religion are near impossible to change on a policy-level, and need time to evolve organically. Second, and more importantly, cultural, religious, and historical explanations only represent a fraction of the total possible drivers of conflict. Economic and security variables, notably, are rarely studied as motivators of conflict in the region—yet economic and security conditions may very well motivate or discourage conflict (Humphreys 2003; Grim and Finke 2007).

The following study investigates tolerance in the Middle East using a new angle: individuals’ existential security. Existential security represents an individual’s sense of security in his/her livelihood (Inglehart 1997, Norris and Inglehart 2004), and tolerance involves coexisting with people with opposing viewpoints or lifestyles (Sullivan et al. 1982). Specifically, this paper asks whether an individual’s personal security affects his/her tolerance of others. To answer this question, this paper draws upon the World Values Survey’s self-reported public opinion data from nine countries in the Middle East: Algeria, Morocco, Tunisia, Libya, Lebanon, Iraq, Jordan, Palestine, and Yemen. It employs linear probability models and instrumental variable analysis to investigate the relationship between existential security and tolerance across
the Middle East. After examining the region as a whole, this study will hone in on Iraq—a place of particular concern for policymakers today. Throughout the paper, this analysis asks: does a person’s sense of security impact his/her willingness to live next to a neighbor of a different religion?

The results offer compelling evidence that, yes, it does: there is a statistically significant relationship between existential security and tolerance. As a person’s sense of security decreases, she/he also becomes less tolerant of people of other religions. Robustness checks confirm this relationship across nine countries in the Middle East, though note regional and ethnic-level variation, especially in Iraq. Given these findings, policymakers may want to consider citizens’ perceptions of security when crafting new policy for the Middle East. The following analysis addresses tolerance’s relevance, literature’s evaluations of tolerance, and reports new findings and implications.

**Conceptual Background**

Tolerance for others, particularly out-groups, has significant implications for society. Capacity to interact with others yields favorable conditions for conflict resolution, trade, and the advancement of popularly representative government. If a person is willing to live next to members of other groups, for example, she/he will not likely take up arms against them. Mutual willingness to interact facilitates trade relationships. Peacefully co-existing neighbors may be more likely to cooperate with each other on other levels, such as civil society or government. For all of these reasons, tolerance can have significant policy implications.

The evolution of tolerance in society, however, is less straightforward. Are levels of tolerance consistent, or do they vary? Is tolerance a product of culture or religion, or can it be linked to more dynamic societal variables? If tolerance levels are innate and static, there will be
limits on countries’ capacities to enact policies to promote tolerance. If tolerance levels are driven by more variable factors, however, then countries may have the capacity to encourage tolerance.

Existential security represents an individual’s sense of security in his/her livelihood. Previous literature notes that existential security has the capacity to create and ossify in-groups and out-groups (Inglehart et al. 2006. Milligan et al. 2014). This paper predicts that, like many other regions in the world, less access to food, employment, and physical safety will drive people to be less tolerant of other groups—particularly members of another religion.

Regardless of the findings, understanding this dynamic could be enormously beneficial. Arab governments, world powers, businesses, religious institutions, and many other parties
question how to bring security and prosperity to the region. Arab countries have employed a variety of techniques, ranging from authoritarian monarchies (Morocco, Jordan) to faux democracies (Egypt, Yemen) and increasingly liberal alternatives (Tunisia). In most of these countries, however, conflict or threat of conflict persists, regional economic integration is low, and individuals have limited control over their own destinies. Major world powers have also struggled to find effective ways to engage with the region’s countries and people. The U.S., for example, actively backs its allies with aid and political capital, but is increasingly questioning its capacity to intervene in the region militarily. NGOs working in the region struggle to assuage the wounds of conflict and to promote satisfying living conditions for all. All of these actors could benefit from a deeper understanding of what drives the region’s troubles.

Literature review

With one exception, noted below, scholars have not examined the relationship between existential security and tolerance in the Middle East. Literature from other parts of the world, however, offers strong impetus to do so. In particular, scholarly work demonstrates that (1) tolerance and trust underlie societal cohesion and predict democratic functionality, and (2) existential security influences religious tolerance across the world. Limited data and analysis, however, have hampered scholars’ ability to apply these findings to the Middle East. The following section outlines key findings about tolerance across the globe, and then identifies gaps in Middle East tolerance literature.

Trust and Tolerance Support the Political System

Considerable research examines the implications of tolerance and its cousin, societal trust. Tolerance is broadly defined as a willingness to co-exist peacefully with others. Societal
trust, more broadly, represents a faith in the good intentions of others in your society. In general, research on volatile, developing countries focuses on tolerance, whereas analyses of stable, developed countries focus on societal trust.

Studies of societal trust note its role in shaping countries’ economic and political realities (Almond and Verba 1963, Jamal 2001, Sapienza et al. 2006, Cui et al. 2014). Societal trust, argue Sapienza, Guiso, and Zingales (2006), is the concept through which economic literature first considered cultural preferences. The relationship between societal trust and economics is straightforward; societal trust helps shape preferences, and economic decisions are a function of human preferences. The relationship, moreover, is not unidirectional; economic conditions may shape culture, and culture may persist long after underlying economic conditions change (Guiso et al. 2006). Societal trust also affects governance. Many argue that societal trust promotes effective, representative governance. Jamal (2001) and Cui et al. (2015), for example, outline long lists of scholars who link societal trust to effective democratic governance. The rationale, Jamal notes, stems from social trust’s capacity to “lubricate cooperative relationships,” thereby facilitating collective action (Jamal 2001, p. 1330). Consequently, there is consensus that societal trust impacts economic decisions and underlies effective democratic governance.

Tolerance is a manifestation of trust. Like trust, scholars consider tolerance a predictor for democratic capacity (Sullivan et al. 1982, Sullivan and Transue 1999, Sarkissian 2011, Milligan et al. 2014, Spierings 2014). Tolerance’s impact on politics was recognized by early theorists, such as John Locke, John Stewart Mill, and Alexis de Tocqueville (Milligan et al. 2014). Tolerance facilitates democratic governance, many argue, because it establishes a safe environment where different ideas can coexist and compete openly (Sullivan and Transue 1999). Moreover, it is important to note that tolerance was never a purely western phenomenon;
tolerance was politically codified in the Muslim world, in fact, before it was in Europe (Milligan et al. 2014).

Scholars argue about how to categorize religious and political tolerance, and if these forms of tolerance affect governance in the same way. Some scholars differentiate between religious and political tolerance. Sullivan et al. (1982), for example, assert that religious tolerance, unlike political tolerance, exists outside the realm of politics. In a liberal, secular democracy, they claim, a person’s religious preferences should not affect his/her compatriot’s political experiences. Conversely, unlike religious tolerance, a person’s political tolerance may directly challenge or enable the political rights of his/her fellow citizens. This conceptualization, however, fails to consider the potential overlap between religious and political positions. It also omits societies governed by something other than a liberal, secular democracy. Other scholars, such as Sarkissian (2011), perceive a closer relationship between religious and political tolerance. If a person is tolerant of other religious groups, Sarkissian argues, she/he will be more likely to accept other political parties. This conceptualization better fits the Middle East, where political parties and ethno-religious affiliation often overlap (Armstrong 2014). Nearly every Middle Eastern country has religiously-based political parties, militias, or governing entities (Lebanon’s Hezbollah, Yemen’s Houthis, Syria’s Alawis, Egypt’s Muslim Brotherhood, etc.). Consequently, it is reasonable to assume that religious tolerance has political ramifications in the Middle East.

_Tolerance is Linked to Existential Security_

Scholars agree that tolerance influences political realities. Yet where does tolerance come from? How are conditions for tolerance created or limited?
Several scholars hone in on country-level economic conditions. The “post-materialist thesis” holds that economic development yields increased levels of tolerance (Inglehart 1990, Huber et al. 1993, Andersen 2012). Indeed, wealth could account for a number of positive spill-over effects, and tolerance may be one of them. Other country-level analyses link economic conditions—such as recession and inequality—to xenophobia (Inglehart and Welzel 2005, Andersen and Fetner 2008, Andersen 2012, Kriesi 2012, Milligan et al. 2014).

In sub-country and individual-level analyses, moreover, existential security emerges as a predictor of tolerance. In 1977, Inglehart coined “existential security” to express “subjective well-being and quality of life concerns” (Inglehart 1997, p. 43-44). Subsequently, in 2005, Norris and Inglehart built upon this concept, framing it as a facet of human security encompassing physical, societal, and personal dimensions. Psychology studies have adopted the term, as well, adapting it to represent an individual’s self-awareness, capacity for relaxation, social recognition, and ability to communicate distress (Lind et al. 2014). This paper conceives of existential security as a composite of individuals’ access to sustenance, physical safety, and financial stability. Existential security—or, at a minimum, its components—have been linked to tolerance. Many scholars find strong links, for example, between economic status (e.g. income levels, job security) and tolerance for others—particularly minority groups (Brym and Lenton 1991, Crush and Pendleton 2004, Brym and Degtyarey 1993). Studies of anti-Semitism especially endorse this finding, in surveys ranging from Russia (Brym and Degtyarey 1993) to Canada (Brym and Lenton 1991). Others link security to religious tolerance, finding that decreased perceptions of safety lead to lower levels of tolerance (Wike and Grim 2010, Gibson 2004, Guiso and Zingales 2006).
Ultimately, some combination of economics and security appear to be the most compelling drivers of religious tolerance. This makes sense: when people feel safe, they are more capable of empathizing with others, whereas when people feel their livelihoods are threatened, they will care less about the higher-level goals. Jeanne Knutson (1972) explains this according to Maslow’s hierarchy of needs: people care less about fairness and equality when their basic needs have not been met (Guiso et al. 2006). Despite this intuitive connection, however, literature has not yet explored this relationship in the Middle Eastern context.

*Existential Security and the Middle East*

Scholars researching tolerance in the Middle East primarily focus on religion and culture (Sarkissian 2011, Spierings 2014). Spierings (2014), for example, asks if “Islamic attitudes” in five Arab countries influence their propensity for political tolerance. Spierings operationalizes Islamic attitudes with several variables—belonging, commitment, orthodoxy and Muslim political attitudes—and, ultimately, concludes that Islamic attitudes have no convincing effects on rates of political tolerance. In a similar study, Ani Sarkissian (2011) asks whether religiosity influences religious tolerance in Arab countries. Sarkissian finds that religiosity—measured according to preference for fundamentalist views—correlates with religious tolerance; the more fundamentalist an individuals’ beliefs, the less likely he/she is to express tolerance for those of another religion. This analysis, however, does not account for respondents’ tendencies to report what is socially acceptable. In many Arab countries, it is socially preferable to present as “religious” and, across the globe, “tolerance” has more positive connotations than “intolerance.” Consequently, Sarkissian may have been picking up on a correlation between two variables reflecting socially-acceptable responses.
One Middle East-oriented study establishes a causal link between existential security and tolerance: Inglehart, Moaddel, and Tessler’s 2006 analysis of in-group solidarity in Iraq. The authors hone in on existential security as a driver of tolerance, though conduct their analysis on a country-level; they do not consider individuals’ reports of security, but rather assume that the American invasion of Iraq and its aftermath led to decreases in all Iraqis’ existential security. This paper offers a useful first glance at relationships between tolerance and existential security in Iraq but, ultimately, the authors’ choice of country-level analysis is highly problematic; many Kurds in Iraq, for example, feel more secure than before—are they the population that is also more willing to live next to a neighbor of another religion? Nonetheless, this paper offers a useful starting point.

Why have there been limited connections between existential security and tolerance in the Middle East? Also, more broadly speaking, why have there been few quantitative studies of tolerance in the Middle East? Until recently, public opinion studies on the Middle East have suffered from a lack of data (Tessler and Jamal 2006). This has affected the way in which scholars conceive of the region, and the ways in which popular conceptions of the region are established. In 1983, Kerr called attention to this, noting that there had not been much Middle East-oriented research focusing on individuals as a unit of analysis, resulting in analytical frameworks based upon the assumption that Middle Eastern events were driven by culture and society, as opposed to individual choice or experience (Kerr 1983). Over a decade later, Hudson echoed these sentiments (Hudson 1995). Tessler and Jamal (2006) summarized Hudson’s position nicely: Hudson claimed that the “absence of rigorous and systematic survey data encourages a ‘reductionist’ approach to inquiry, in which grand generalizations are advanced in the mistaken belief that citizen orientations can be explained and predicted from knowledge of
the ‘essential’ attributes of Islamic or Arabic culture” (Tessler and Jamal 2006, p. 433).

Fortunately, more rigorous public opinion surveys have been conducted in the Middle East over the past 15 years. With this new data, it is increasingly possible to consider decision-making at an individual level of analysis. The following analysis takes advantage of this new opportunity.

Like Inglehart, Moaddel, and Tessler, this paper hones in on existential security as a potential predictor of tolerance. Unlike Inglehart, Moaddel, and Tessler, however, this analysis takes full advantage of individual-level survey data. Instead of assuming the presence of existential insecurity (not an implausible assumption, though a rather imprecise one), this paper measures individuals’ perceptions of their existential security and matches these perceptions with their reported willingness to live next to a member of another religion. Thus, the following analysis asks: do individuals’ perceptions of their existential security affect their tolerance for members of other religions?

**Analysis Plan**

This paper anticipates that existential security affects tolerance in the Middle East. Specifically, as individuals’ senses of security decrease, their tolerance for members of another religion will also decrease. To test this hypothesis, this paper constructs and employs a linear probability model (LPM) based upon World Values Survey (WVS) indicators.

This model draws from WVS’s individual-level interviews. (More is written on the WVS in “Data Analysis.”) As noted above, quantitative studies of the Middle East generally consider country-level data. This paper, however, draws upon surveys of individuals. Examining these issues on an individual level is advantageous, because it acknowledges the vast differences

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1 The World Values Survey introduced a Middle East component in 2001, and, beginning in the mid-2000s, the Arab Barometer has carried out thoughtful public opinion surveys tailored specifically to the region.
within each country’s population. When citizens are considered on aggregate, demographic
nuances are often lost.

Thus, drawing upon individual-level data, this paper employs the following model:

\[ \text{ReligiousTolerance}_i = \beta_0 + \beta_1 \text{SecurityIndex}_i + \beta_2 (\text{SecurityIndex} \times \text{SecurityIndex}) + \beta_3 \text{Class}_i + \beta_4 \text{EducationLevel}_i + \beta_5 \text{Age}_i + \beta_6 \text{Gender}_i + \beta_7 \text{Year}_i + \beta_8 \text{Country}_i + \beta_9 \text{Region}_i + \epsilon_i \]

Each variable in the model comes from a WVS question (or questions—See Appendix A).

Religious tolerance, the dependent variable, is coded according to respondents’ answers to the
question: “On this list are various groups of people. Could you please mention any that you
would not like to have as neighbors?” Respondents who mentioned “members of another
religion” are coded as 0, and respondents who did not mention members of another religion are
coded as 1. The security index is a composite of three WVS survey questions, which target an
individual’s sense of food, financial, and physical security. Together, these variables represent
existential security. The squared security index (SecurityIndex \times SecurityIndex) is included to
capture any non-linear relationships in the data. Non-linear relationships would reflect different
effects of existential security at its lowest and highest levels, thus it is important to account for
this possibility. The control variables are mostly demographic in nature. Respondents’ age and
gender, and the survey’s year, country, and (sub-country) region are all noted by the
interviewers. Two of the controls—class and education—rely upon respondents’ self-
classification.

These survey responses are imperfect, yet valuable. They represent expressed
preferences, rather than actual preferences, and perceptions of reality, rather than actual
measures of, for example, crime rates and family income. Consequently, it is useful to note each
variable’s virtues, limitations, and potential biases.
The dependent variable, religious tolerance, may over-estimate tolerance. When asked who they do not want to have as neighbors, respondents may be disinclined to report prejudice, or may not think to mention members of another religion if they live in a religiously homogenous area. If these reactions occurred, respondents will appear more tolerant than they actually are. Moreover, it is useful to note that although Sunnis and Shias are technically members of the same religion, most Sunnis and Shias consider their sectarian counterparts non-Muslim. To the extent that respondents consider Sunnis and Shias co-religionists, responses will, again, be biased towards tolerance.

The existential security variables, however, simply present subjective realities. Here, respondents answer questions according to their perceptions of their financial situations, neighborhood security, and food access—not according to any objective, measured observations. These responses, however, yield important information about respondents’ experiences of their surroundings. Studies measuring economic phenomena—such as inequality—often find that perceived inequality has far greater implications than actual income disparity (Norris and Inglehart 2005). If a person is poor relative to his society, but does not perceive himself as such, he may not take action; whereas if a person perceives himself as poor—even if he is not, relatively speaking—he may be more likely to participate in protests, agitate for change, etc. Similarly, this paper anticipates that respondents’ perceptions of their financial situations, neighborhood security, and food access will produce meaningful effects—perhaps even more meaningful than actual, objective measures of financial situations, neighborhood security, and food access.

2 Consequently, a Shia Yemeni, for example, may report that she/he does not wish to live next to members of other religions—which include Sunnis.
This paper uses a linear probability model (LPM) to measure the hypothesis and an instrumental variable analysis to test for causality. The dependent variable, religious tolerance, is dichotomous. As such it is well-suited to LPM, probit, or logit. This paper uses LPM to simplify analysis, but checks its findings against a modified probit model to verify accuracy. In addition, this analysis used a “robust” command to account for potential heteroskedasticity in the data. If there is evidence of correlation, this paper will then test for directionality using “savings” as an instrument. A person’s degree of savings likely correlates with his/her degree of existential security, but it does not directly affect a person’s degree of tolerance for others. Thus, by measuring the effect of savings on tolerance, this paper can measure, indirectly, the impact of existential security on tolerance.

After examining results on an aggregate, pan-Middle East level, this paper will closely examine response from Iraq. Iraq has large Shia and Sunni populations, in addition to smaller groups of religious minorities. Sectarianism—a cousin of intolerance—is often deemed Iraq’s chief cancer. Furthermore, the country’s continued violence and government inefficacy demands a better understanding of the Iraqi people’s preferences, motivations, and beliefs. To better measure Iraqi society, this section of the analysis will add two new controls to the basic model: respondents’ town size, and respondents’ ethnicity.

Data Description

This paper draws upon data from World Values Survey’s Longitudinal Multiple-Wave Documentation Dataset. In particular, it analyzes nine countries’ data from the sixth wave of the World Values Survey (WVS). The WVS has conducted surveys since 1981. The sixth wave, conducted between 2010 and 2014, contains the largest number of Arab countries yet (See Appendix B). Of the eleven Arab countries surveyed in the sixth wave, however, two did not
include responses for key tolerance variables (Egypt and Kuwait), and one surveyed a thoroughly unrepresentative sample of the country’s population (Qatar). Consequently, these countries were omitted. Thus, this analysis focuses on the remaining countries: Algeria, Iraq, Jordan, Morocco, Lebanon, Libya, Palestine, Tunisia, and Yemen.

The WVS aims to secure in-person, representative interviews with adults. Most WVS surveys are conducted face-to-face, with the exception of some rural participants. Local research groups implemented surveys in each country. The WVS instructed these groups select a representative sample from their country, exceeding 1,000 participants. While full probability sampling was preferred, local researchers often employed quota sampling: they divided their country into regions, and then randomly selected participants within the regions, adjusting, at times, for ethnic or gender representativeness. The surveys include all country residents, including non-citizens.

This paper examines data from nine Arab countries (See Appendix C). Respondents varied in age from 18 to 90 years old, with a mean of 37.88, and a skewedness favoring younger respondents. Gender distribution is roughly equal. Respondents’ satisfaction with their financial situations ranges substantially, and their perceptions of their own socioeconomic class peak, predictably, in the “middle class” categories. The majority of respondents regularly had access to

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3 According to Human Rights Watch, Qatar has the highest ratio of non-citizens to citizens in the world. Qatari nationals comprise only 12% of the population. The sixth wave of the World Values Survey, however, did not include non-Qatars in its survey; question V245 asks if respondents were born in Qatar, and only 7.66% of respondents identified themselves as immigrants. Thus, this sample is unrepresentative of the people living in Qatar and, as such, Qatar was omitted from this analysis.

4 The World Values Survey of Palestine includes Gaza, the West Bank, and Jerusalem. Although Jerusalem and the West Bank are de facto under Israeli control, many other countries considered had regions who were or had recently experienced some degree of occupation (Iraq, Lebanon). The sixth wave of the World Values Survey did not have complete data on Israel, which is not included in this analysis.
sufficient food over the past year and felt secure in their neighborhoods. Respondents’ education levels span from no formal education to university degrees, with a balanced distribution.

Given the unequal distributions and nominal nature of the “financial,” “food,” and “security” variables, this analysis lumped each variable into two categories: “high” and “low.” (Thus, responses to “financial,” for example, included two categories: high financial satisfaction, relative to other respondents, and low financial satisfaction, relative to other respondents.) Similarly, this analysis grouped “class” into three categories: high, middle, and low.

Correlation between variables is low (See Appendix D)—the most powerful correlations are between self-reported class and financial satisfaction (0.37), class and education level (-0.33), and age and education (-0.32). These correlations are simple to explain; class and financial situation overlap conceptually, people of a higher class will be more educated, and older people will have had less access to education. Country and region variables are perfectly correlated (1), because they describe the exact same pieces of land.

To facilitate measuring existential security, this paper created an index variable. The Security Index is a composite of three questions—“financial,” “food,” and “security”—combined via principal component analysis. This new variable ranges from –2.00 to 1.49, and is important in relative terms only.5

Finally, a test on tolerance—the paper’s dependent variable—finds substantial unwillingness to live next to someone of a different religion, regardless of country surveyed (Figure 2). On net, 38.60% of respondents voiced unwillingness to live next to someone of a different religion. The following section evaluates these results using regression analysis.

5 The actual numbers mean very little—they are only useful to compare to other values of the index.
Results

Data from nine Middle Eastern countries demonstrates a strong correlation between existential security and religious intolerance. Specifically, when individuals report higher insecurity, they also report higher unwillingness to live next to someone of another religion—and an individual’s insecurity drives his/her intolerance. Although the data supports this paper’s hypothesis, nuances emerged: the relationship, on aggregate, was not linear, there was marked country-level variation, and there was evidence of directionality.

When reading these outputs, it is important to note the signs and significance levels of the results. Several variables—the indices, the class categories, and the education categories—are qualitative and categorical. Therefore, they are only relevant in relative terms. A one unit
increase in the security index, for example, does not directly reflect a $100 increase in salary, but rather an individual’s increased sense of security. Consequently, the results are best suited to convey directionality (e.g. less security yields less tolerance) and significance (as measured by the p-values).\(^6\)

As each of the models demonstrates, the relationship between security and tolerance is not linear (Table 1). This was puzzling; initially, this analysis predicted that decreases in security would yield proportional decreases in tolerance. Adding a squared form of index (SecurityIndex*SecurityIndex), however, revealed that for every unit decrease in security, there was a slightly smaller decrease in tolerance. (Thus, instead of the relationship being 2:2 or 100:100, it was 2:1 and 100:10.) This relationship, moreover, proved significant at the one percent level (p = 0.004).\(^7\)

\(^6\) It does not tell us, therefore, how much income, additional food, or reduction in crime rates would make people less tolerant.

\(^7\) Interestingly, the reverse proved true as well: adding the square root version of the index yielded the same relationship, at identical significance levels. Also, when broken down by country, this demonstrates that some countries have negative and significant relationships between security and tolerance—including many countries (Jordan, Lebanon, Yemen) which hadn’t demonstrated this relationship in other iterations of the security index variable. This particular relationship demonstrates a exponentially higher impact of security on tolerance. On net, the combination of these variables demonstrates that there is, in fact, a negative and significant relationship between existential security and religious tolerance—although the magnitude of this relationship varies.
Aside from the existential security index (in its various iterations), several controls provided meaningful results. Education categories, when included in the model, demonstrated that as individuals’ education levels increased, their reported intolerance decreased, at highly significant levels ($p = 0.000$, Model 3; $p = 0.000$, Model 4). This is to be expected; research generally finds that tolerance increases with education levels. Country and region-level fixed
effects also yielded statistically significant coefficients for most countries and regions. This is also unsurprising; the countries and regions in the Middle East are far from uniform. The remaining control variables—age, gender, class categories, and year—did not yield significant results.

In addition to a statistically significant correlation between existential security and religious tolerance, there is evidence of directionality. An instrumental variable analysis demonstrates that decreases in existential security cause decreases in religious tolerance—and not the other way around. An individual’s savings is correlated with an individual’s sense of security at the one percent level (p = 0.000). Using savings as in instrument for the squared security index, a two-stage-least-squares regression found the squared security index significant, at a ten percent level (p = 0.090).\(^8\) This provides strong evidence in support of a causal relationship. Given the country and region-level variations, however, this causal relationship will be reevaluated below in the context of Iraq.

**Robustness**

Robustness checks confirmed the results of the linear probability model, tested alternate conceptions of tolerance, and revealed meaningful variation at country and regional levels. Probit models are often run when working with a dichotomous dependent variable, because linear probability models run the risk of attenuation bias. Running this paper’s models with probit, however, yielded near identical results. This demonstrates that the linear probability model was sufficiently accurate.

In addition to running probit models, this analysis tested other forms of tolerance. The World Values Survey asks respondents about their willingness to live next to people who speak

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\(^8\) Bootstrap standard errors were calculated to correct for the generated regressor.
different languages, immigrated from different countries, or are of another race. Here, existential security had the same impact as before, though at different significance levels (See Appendix E). The “Language” and “Immigrant” models were significant at the five percent level, and the “Race” model was significant at the 20 percent level. Although this paper primarily focuses on religious tolerance, these robustness checks provide strong evidence for a link between existential security and tolerance in its many forms. This finding confirms earlier analyses (such as Inglehart 1997), which connect low levels of existential security to forms of xenophobia.

Moreover, country-level regressions offered new nuances. Running the base model in different countries, one-by-one, revealed relationships of different proportions between security and tolerance. Some countries (Algeria, Palestine, Libya) exhibit identical results to the aggregate model. Other countries present analogous, though not identical results. Tunisia and Morocco, for example, have linear relationships between the security index and tolerance. The results for Jordan, Lebanon, and Yemen indicate statistically significant relationships between the square root of the security index and tolerance. Iraq is the only country with inconclusive evidence, when examined at the country level. These results offer two meaningful conclusions: most countries tested have a significant, negative relationship between existential security and tolerance, but the magnitudes of these relationships vary.

Variation amongst countries reflects their vast differences. The Middle East, like many regions, is an artificial construction (Khalidi 1995); scholars employ many different groupings of the Middle East—sometimes Turkey is included, sometimes North Africa is excluded, etc. These differences reflect a struggle to cohesively define an economically, culturally, and politically diverse region. The realities facing Yemen—a near-failed state with substantial poverty and religious/ethnic diversity—are different than those of Jordan—a tightly-governed monarchy,
flush with Western aid, and almost entirely Sunni Muslim. Therefore, when examining the region as a whole, it is useful to be mindful of country (and sub-country)-level variations. How, for example, do local constructions of ethnicity affect these conclusions? Do rural and urban experiences make a difference? What is the role of separatist groups? The following section considers such questions in the context of Iraq.

**Sub results: Iraq**

Iraq merits further investigation due to its inconclusive results above and, more pragmatically, due to its relevance to American foreign policy. Today, 12 years after the US-backed invasion and three years after the American withdrawal, the U.S. military is back in Iraq. ISIS’s advance in the Sunni-majority northwest proved too much for the Iraqi Army, prompting American re-engagement. Violently targeted post-Saddam Hussein, many—though not all—Sunni tribes have opted to accept ISIS in their hometowns, rather than work with the Iraqi government. If America and Iraq hope to craft an effective anti-ISIS strategy, they must consider the preferences and perceptions of these Sunnis. The following section examines Iraq as a whole, and then hones in on two Sunni-majority, ISIS-dominant regions: Nianwa and Kirkuk.

As mentioned above, existential security—even in its squared and rooted iterations—did not significantly correlate with religious tolerance in Iraq. Initially, this seems counter-intuitive; why should the logic employed elsewhere change in Iraq? Moreover, in a previous study, Inglehart, Moaddel, and Tessler explicitly link Iraqi existential security to Iraqis’ levels of tolerance (Inglehart, Moaddel, and Tessler 2006). Perhaps, however, other factors are at play—sectarianism and recent history may play more of a role in determining Iraqis’ tolerance than their sense of security. Nonetheless, a closer examination of the data indicates that, for many Iraqis, existential security does play a significant role.
To better understand the impact of existential security in Iraq, this analysis sorted responses by ethnicity and tested other forms of tolerance. In Iraq, measures of religious tolerance are inadequate to capture Iraq’s Kurdish/Arab divide. Other WVS questions, however, targeted willingness to live next to someone who (a) speaks a different language, (b) comes from a different country, or (c) is a member of a different race/ethnicity (عرق). Substituting these variables for the original religious tolerance variable yielded interesting results: while existential security does not appear to affect Iraqis’ propensity for religious tolerance, it does significantly impact their propensity for tolerance of non-natives, speakers of other languages, and members of other races (See Appendix F). Moreover, when running the baseline regression ethnicity by ethnicity, vastly different results emerge for Kurds and Arabs. Kurds, surprisingly, show a linear, positive, and significant relationship between existential security and religious tolerance; that is, when a Kurd’s sense of security increases, she/he becomes less tolerant (p = 0.074). Conversely, when Arabs feel more secure, they become more tolerant of other religions (p = 0.076 for security index squared). Therefore, there is a relationship between economic security and tolerance in Iraq, albeit more nuanced than initially anticipated.

In addition, a closer look at two Sunni Arab, ISIS-dominated areas reveals a statistically significant relationship between these Iraqis’ existential security and levels of tolerance. The Arabs in Nianwa and Kirkuk exhibit a negative, linear relationship between their existential security and tolerance levels, at the five percent level (p = 0.013). Unfortunately, savings does not qualify as an instrument for this subsample—perhaps because the number of observations is quite low (152). Therefore, we can conclude that there is a relationship between a person’s sense of security and willingness to tolerate others, but we cannot confirm directionality via statistical analysis.
Discussion

This paper’s results suffer from some limitations but, ultimately, offer useful lessons for policymakers and researchers. Several limitations merit attention. First, the WVS data available restricted the number of countries available for analysis. The sixth WVS did not include Saudi Arabia, Syria, Bahrain, Oman, or the United Arab Emirates. Other countries—Egypt, Israel, Kuwait, and Qatar—lacked data on key variables, such as willingness to live next to someone of a different religion. Consequently, the countries analyzed in this paper represent a subset of the Middle East; thus, the paper’s findings do not automatically apply to the entire region. Second, WVS surveys did not reach every sub-country region. In Iraq, for example, the WVS did not survey Anbar province. This is especially unfortunate, because, often, the omitted regions are those in most need of study and understanding. Third, the WVS’s failure to differentiate between Sunnis and Shias limited this analysis. Instead of classifying respondents as Sunni Muslim or Shia Muslim, the survey lumped Sunnis and Shias together. This especially limited analysis of Iraq, Yemen, and other mixed regions. Overall, these limitations constrain our ability to tease out details, but the takeaway remains the same: there is substantial evidence that existential security impacts tolerance in the Middle East.

This finding offers policy-relevant takeaways. In particular, policymakers should note that (1) individual perceptions of existential security matter and (2) intolerance and conflict have roots in existential security. Consequently, future actions should be mindful of individuals’ senses of security in addition to sectarianism, religion, and history.

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9As noted earlier, while most Sunnis see Shias as members of another religion (and vice versa), some do not. This open-minded subset, however, is likely a minority. Consequently, it is very unlikely that intolerance or tolerance was misidentified as a result of this detail.
As noted earlier, people often act based upon their perceptions. This paper indicates that when people feel less secure, they will be less tolerant of others. This has implications for security policy in the region. Moving forward, policymakers should note the impacts of their policies on individuals’ senses of security. Decision makers should, therefore, consider impacts on existential security when evaluating policies such as embargos, drone strikes, and military interventions.

In addition, when evaluating responses to Middle Eastern conflicts, policymakers may want to consider existential security’s role in creating them. This paper does not disprove the importance of sectarianism, culture, and history. It does, however, establish a causal relationship between existential security and tolerance. Given this finding, policymakers seeking to address conflict may wish to identify ways to improve individuals’ sense of security. Standard military interventions could be useful, but other, development-oriented interventions may prove equally or more effective in the long-run.

Lastly, policymakers must remain mindful of country-level, region-level, and individual-level variation within the Middle East. While the countries in this analysis share some common characteristics (regional proximity, Arab Muslim majorities) and exhibit congruent results (existential security linked to tolerance), they also present some differences. The Kurds in Iraq were some of the most striking outliers; as Kurds’ senses of security increased, their levels of tolerance decreased. This was the opposite of other relationships observed. In the case of many Kurds, however, their desire to live apart from others may, on some level, reflect their goal of an independent Kurdistan. Seeming anomalies like the Iraqi Kurds should be acknowledged, even if they run counter to the trends in the rest of the region. Moreover, even in countries exhibiting a negative relationship between existential security and tolerance, the nature of these relationships
vary. Some countries had linear relationships, and others had exponential relationships. These variations do not detract from the main takeaway of this paper, but suggest that each country, region, and sub-group merits attention in research. Thus, policymakers’ responses must be mindful of this regional variation, and resist conceiving of the Middle East as an ideologically coherent unit.

Conclusion

For many years, data limitations stunted studies of tolerance in the Middle East. Consequently, scholars, policymakers, and journalists relied upon culture and religion to explain Middle Easterners’ tolerance or intolerance of others. Elsewhere in the world, however, studies found that individuals’ senses of security drive their capacities for tolerance. This paper finds that this relationship extends to the Middle East, as well. As a person’s sense of security lessens, she/he is less likely to be tolerant of others.

This finding builds upon earlier literature, yet leaves more room for questions. The results above confirm earlier scholarship linking existential security to tolerance, including a study linking existential security to tolerance in Iraq (Inglehart et al. 2006). This paper, however, expands upon these findings, proving the existential security-tolerance relationship across nine Middle Eastern countries. While the results are not uniformly consistent (the Kurds, for example, are outliers), the overall trend is clear. Future studies have ample opportunity to build upon this research. Many questions remain: do ethnic and religious minorities have the same responses to existential security as their majority counterparts? How has the existential security and tolerance connection changed over time? Can religiosity be measured and, if so, is it also a significant predictor of tolerance?
Earlier, this paper contemplated whether peoples’ levels of tolerance were static or changing. Specifically, it questioned whether tolerance could be attributed to slow-changing variables—such as history or religion—or if it is driven by more fluid, economic variables. This paper acknowledges a link between existential security and tolerance, but it does not disprove a relationship between religiosity and tolerance. Moreover, although many cultural and historical factors are controlled for in this analysis (e.g. country fixed effects), this paper does not explore this relationship extensively. Future analyses may wish to delve deeper into these variables, though, in doing so, they should not lose sight of existential security’s salience.

This paper offers evidence that, in fact, Middle Easterners are motivated by many of the same things as other people: access to sustenance, financial stability, and a desire for personal safety. These factors, in turn, help shape the region’s capacity for tolerance. Analysts and policymakers, therefore, should consider individuals’ perceptions of security when drafting new policies for the Middle East.
### Appendix A: WVS VI Survey Questions on Existential Security and Tolerance

*Source: World Values Survey, 2001-2014*

<table>
<thead>
<tr>
<th>Category</th>
<th>Label</th>
<th>World Values Survey Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security Index</td>
<td>Security</td>
<td>V170. Could you tell me how secure do you feel these days in your neighborhood? (Ranked 1-4, from “Very secure” to “Not at all Secure”)</td>
</tr>
<tr>
<td>(measures existential</td>
<td>Food</td>
<td>V188. In the last 12 months, how often have you or your family gone without enough food to eat? (Ranked 1-4, from “Often” to “Never”)</td>
</tr>
<tr>
<td>security)</td>
<td>Financial</td>
<td>V59. How satisfied are you with the financial situation of your household? (Ranked 1-10, from “Completely dissatisfied” to “Completely satisfied”)</td>
</tr>
<tr>
<td>Tolerance</td>
<td>Religion</td>
<td>V41. On this list are various groups of people. Could you please mention any that you would not like to have as neighbors? (Option: “People of a different religion”)</td>
</tr>
<tr>
<td></td>
<td>Race*</td>
<td>V37. On this list are various groups of people. Could you please mention any that you would not like to have as neighbors? (Option: “People of a different race”)</td>
</tr>
<tr>
<td></td>
<td>Language*</td>
<td>V44. On this list are various groups of people. Could you please mention any that you would not like to have as neighbors? (Option: “People who speak a different language”)</td>
</tr>
<tr>
<td></td>
<td>Immigrant*</td>
<td>V39. On this list are various groups of people. Could you please mention any that you would not like to have as neighbors? (Option: “Immigrants/Foreign Workers”)</td>
</tr>
<tr>
<td>Controls</td>
<td>Age</td>
<td>V242. (Following birth-year prompt) This means you are ____ years old?</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>V240. Coded as male/female based upon observation.</td>
</tr>
<tr>
<td></td>
<td>Class</td>
<td>V238. People sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. Would you describe yourself as belonging to the upper class, upper middle class, lower middle class, working class, or lower class?</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>V248. What is the highest educational level that you have attained?</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>V262. Recorded by Interviewer.</td>
</tr>
<tr>
<td></td>
<td>Country</td>
<td>V2. Recorded by interviewer.</td>
</tr>
<tr>
<td></td>
<td>Region</td>
<td>V256. Recorded by interviewer</td>
</tr>
<tr>
<td></td>
<td>Ethnicity*</td>
<td>V254. Ethnic group coded according to interviewer’s observation.</td>
</tr>
<tr>
<td></td>
<td>Town Size*</td>
<td>V253. Eight options on a scale, recorded by interviewer.</td>
</tr>
<tr>
<td></td>
<td>Instrument</td>
<td>V237. During the past year, did your family save money, just get by, spend some savings, or spend savings and borrow money?</td>
</tr>
</tbody>
</table>
**Appendix B:** Arab Countries in WVS, by wave and year.  
*Source: World Values Survey, 2001-2014*

<table>
<thead>
<tr>
<th>Country</th>
<th>Wave IV</th>
<th>Wave V</th>
<th>Wave VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>2002</td>
<td></td>
<td>2014</td>
</tr>
<tr>
<td>Egypt</td>
<td>2001</td>
<td>2008</td>
<td>2012</td>
</tr>
<tr>
<td>Iraq</td>
<td>2004</td>
<td>2006</td>
<td>2013</td>
</tr>
<tr>
<td>Jordan</td>
<td>2001</td>
<td>2007</td>
<td>2014</td>
</tr>
<tr>
<td>Morocco</td>
<td>2001</td>
<td></td>
<td>2011</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kuwait</td>
<td></td>
<td></td>
<td>2013</td>
</tr>
<tr>
<td>Lebanon</td>
<td></td>
<td></td>
<td>2013</td>
</tr>
<tr>
<td>Libya</td>
<td></td>
<td></td>
<td>2013</td>
</tr>
<tr>
<td>Palestine</td>
<td></td>
<td></td>
<td>2013</td>
</tr>
<tr>
<td>Qatar</td>
<td></td>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>Tunisia</td>
<td></td>
<td></td>
<td>2013</td>
</tr>
<tr>
<td>Yemen</td>
<td></td>
<td></td>
<td>2013</td>
</tr>
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</table>
## Appendix C: Summary Statistics

*Source: World Values Survey, 2001-2014*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
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<tr>
<td>Neighbor</td>
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<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Financial</td>
<td>5.65</td>
<td>2.54</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Security</td>
<td>3.26</td>
<td>0.79</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Food</td>
<td>3.49</td>
<td>0.84</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Gender</td>
<td>0.51</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Age</td>
<td>37.88</td>
<td>14.34</td>
<td>18</td>
<td>90</td>
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<tr>
<td>Education</td>
<td>4.86</td>
<td>2.82</td>
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<td>9</td>
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<tr>
<td>Class</td>
<td>2.73</td>
<td>0.99</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Year</td>
<td>2013.07</td>
<td>0.95</td>
<td>2011</td>
<td>2014</td>
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Observations: 1035
### Appendix D: Correlation of Key Variables


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<tr>
<th>Neighbor</th>
<th>Financial</th>
<th>Security</th>
<th>Food</th>
<th>Gender</th>
<th>Age</th>
<th>Education</th>
<th>Class</th>
<th>Year</th>
<th>Country</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighbor</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>0.01</td>
<td>1.00</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>0.04</td>
<td>0.08</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>-0.03</td>
<td>0.24</td>
<td>0.12</td>
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</tr>
<tr>
<td>Gender</td>
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<td>-0.04</td>
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<tr>
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<td>0.04</td>
<td>-0.04</td>
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<td>Education</td>
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</tr>
<tr>
<td>Year</td>
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<td>0.23</td>
<td>0.00</td>
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<td>0.03</td>
<td>0.19</td>
<td>0.16</td>
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<td>0.00</td>
<td>-0.02</td>
<td>-0.18</td>
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<td>1.00</td>
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<tr>
<td>Region</td>
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<td>0.13</td>
<td>0.00</td>
<td>-0.02</td>
<td>-0.18</td>
<td>-0.14</td>
<td>0.14</td>
<td>1.00</td>
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</table>
### Appendix E: Comparison of Different Measures of Tolerance

*Source: World Values Survey, 2001-2014*

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1) Immigrant</th>
<th>(2) Language</th>
<th>(3) Race</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security Index</td>
<td>-0.00860*</td>
<td>-0.00980**</td>
<td>-0.00302</td>
</tr>
<tr>
<td></td>
<td>(0.00459)</td>
<td>(0.00443)</td>
<td>(0.00454)</td>
</tr>
<tr>
<td>Squared Security Index</td>
<td>-0.00727**</td>
<td>-0.00397</td>
<td>-0.00482</td>
</tr>
<tr>
<td></td>
<td>(0.00357)</td>
<td>(0.00344)</td>
<td>(0.00352)</td>
</tr>
<tr>
<td>Gender</td>
<td>0.0250***</td>
<td>0.0122</td>
<td>0.0338***</td>
</tr>
<tr>
<td></td>
<td>(0.00870)</td>
<td>(0.00837)</td>
<td>(0.00858)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.000440</td>
<td>-0.000399</td>
<td>-0.000713***</td>
</tr>
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<td>(0.000325)</td>
<td>(0.000315)</td>
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<tr>
<td>Class Category</td>
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<tr>
<td></td>
<td>(0.00669)</td>
<td>(0.00640)</td>
<td>(0.00656)</td>
</tr>
<tr>
<td>Education Category</td>
<td>-0.0141***</td>
<td>-0.0250***</td>
<td>-0.0187***</td>
</tr>
<tr>
<td></td>
<td>(0.00352)</td>
<td>(0.00336)</td>
<td>(0.00345)</td>
</tr>
<tr>
<td>Year</td>
<td>0.0436</td>
<td>0.334***</td>
<td>-0.104</td>
</tr>
<tr>
<td></td>
<td>(0.122)</td>
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<td>(0.112)</td>
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<tr>
<td>Constant</td>
<td>-87.42</td>
<td>-672.8***</td>
<td>209.6</td>
</tr>
<tr>
<td></td>
<td>(245.6)</td>
<td>(251.9)</td>
<td>(224.6)</td>
</tr>
</tbody>
</table>

Country FE: YES
Region FE: YES
Observations: 10,350
R-squared: 0.171

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
## Appendix F: Comparison of Different Measures of Tolerance in Iraq

*Source: World Values Survey, 2001-2014*

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1) Immigrant</th>
<th>(2) Language</th>
<th>(3) Race</th>
<th>(4) Religion</th>
</tr>
</thead>
<tbody>
<tr>
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<td>-0.0633***</td>
<td>-0.0297*</td>
<td>-0.0265*</td>
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<tr>
<td></td>
<td>(0.0160)</td>
<td>(0.0155)</td>
<td>(0.0144)</td>
<td>(0.0144)</td>
</tr>
<tr>
<td>Security Index, Squared</td>
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<td>-0.0104</td>
<td>-0.00110</td>
<td>-0.00541</td>
</tr>
<tr>
<td></td>
<td>(0.0121)</td>
<td>(0.0114)</td>
<td>(0.0109)</td>
<td>(0.0110)</td>
</tr>
<tr>
<td>Gender</td>
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<tr>
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<td>(0.0293)</td>
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<td>Class Category</td>
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<td>(0.0686)</td>
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<td>(0.0629)</td>
<td>(0.0619)</td>
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</tbody>
</table>

Region FE                   | YES           | YES          | YES      | YES         |
Town Size FE                | YES           | YES          | YES      | YES         |
Ethnicity FE                | YES           | YES          | YES      | YES         |
Observations                | 1,123         | 1,123        | 1,123    | 1,123       |
R-squared                   | 0.074         | 0.062        | 0.091    | 0.091       |

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1
References:


Gibson, J. L. (2004). Enigmas of intolerance: Fifty years after Stouffer’s Communism,


