

**Education, Income and Support for Suicide Bombings
Evidence from Six Muslim Countries**

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Abstract: We examine the effect of educational attainment and income on support for suicide bombing among Muslim publics in six predominantly Muslim countries that have experienced suicide bombings: Indonesia, Jordan, Lebanon, Morocco, Pakistan, and Turkey. We make two contributions. First, we present a conceptual model, which has been lacking in the literature. Second, we consider attitudes towards two different targets of suicide bombings: civilians within the respondent's country and Western military and political personnel in Iraq. We find that the effect of educational attainment and income on support for suicide bombings varies across countries and targets. Our findings therefore draw attention to the difficulties of making generalizations about Muslim countries, and the importance of distinguishing between targets of suicide bombings.

1. INTRODUCTION

Perpetrators use suicide bombing as a high profile and cost-effective tactic in the hope of producing cultural, economic, social, or political change (Berman and Laitin 2006; Pape 2003). In different conflicts, suicide bombings have targeted civilians, military personnel, political personnel, or some combination of these targets (Gambetta 2006). Such attacks were rarely used prior to the 1980s, but their numbers and the damage they cause have increased dramatically (Enders and Sandler 2005). As of 2005, more than 350 suicide bombings were perpetrated in countries other than Iraq (Hoffman 2006, 131). In Iraq, there have been more than 545 suicide bombings between the U.S.-led invasion of May 2003 and the end of September 2007 (O'Hanlon and Campbell 2007, 10).¹ In addition to claiming thousands of casualties, suicide bombs destroy infrastructure and private property, weaken the investment climate, undermine the tourism industry, and lead to the reallocation of resources in a way that undermines economic growth (Frey, Luechinger and Stutzer 2007; Drakos and Kutan 2003; Hafez 2007; Siqueira and Sandler, 2006; Yechiam, Barron and Erev 2005).²

The characteristics of ordinary men and women are critical to understand the use of suicide bombing tactics. Political scientist Robert Pape (2005, 81) and political sociologist Jeff Goodwin (2006, 326-327) argue that organizations executing suicide bombing campaigns require substantial public (or community) support in order to replenish their membership, finance the bombings, and avoid detection and elimination by government forces. The policy question is: what can be done to reduce public support for suicide bombing? Many politicians, diplomats, social scientists and Nobel laureates believe that increasing the educational attainment and income of ordinary men and women will reduce support for suicide bombing. Indeed, billions of dollars in government expenditure and foreign aid are being directed to education and economic development in Muslim countries in the hope of reducing public support for suicide bombing and other forms of terrorism (Novelli and

Robertson 2007). In spite of the matter's importance, little social scientific research has been done on the relationship between education, income, and public attitudes towards suicide bombings.³

In this study, we assess the argument that educational attainment and greater income discourage public support for suicide bombing. We use public opinion data from six predominantly Muslim countries that have experienced devastating suicide bombings within their borders in recent years: Indonesia, Jordan, Lebanon, Morocco, Pakistan and Turkey. We make two contributions to the literature. First, we present a conceptual model, which has been lacking in the literature. Second, we consider attitudes towards two different targets of suicide bombings: civilians within the respondent's country and U.S. and other Western military and political personnel in Iraq. Since the existing empirical literature does not distinguish between the two types of intended targets for suicide bombings, a key part of the story is missing: targeting the military and political personnel of an overwhelmingly powerful occupier by any means possible does not raise the same ethical dilemmas that targeting civilians does, and the Western military presence in Iraq is widely viewed as illegitimate among Muslim publics.⁴ Put differently, we believe that suicide bombings against civilians are publicly perceived as acts of terrorism but suicide bombings against military and political targets are publicly perceived as acts of legitimate self-defense and guerrilla warfare (Goodwin 2006).

2. COUNTRY BACKGROUNDS

The sample countries are predominantly Muslim but from different regions of the Muslim world, including East Asia (Indonesia), South Asia (Pakistan), the Middle East (Jordan and Lebanon), North Africa (Morocco), and Eurasia (Turkey). They have a combined Muslim population of around 500 million, about forty percent of the world's total population of Muslims. Some are more economically developed than others, as indicated by the 2005 purchasing power-adjusted per-capita incomes (Indonesia: \$4232; Jordan: \$5542; Lebanon: \$5457; Morocco: \$4956;

Pakistan: \$2722; Turkey: \$9107).⁵ Three are democracies (Indonesia, Lebanon, and Turkey), one vacillates between democracy and military rule (Pakistan), and two are monarchies with weak parliaments (Morocco and Jordan). All six countries have experienced internal strife and instability in recent memory even though Morocco and Jordan are somewhat more stable than the rest. Three are Arab-majority countries (Jordan, Lebanon and Morocco). More importantly for our study, all six countries have experienced suicide bombings against both innocent civilians and political-military actors in recent memory.

In Indonesia, suicide bombings followed the East Asian crisis and the overthrow of President Suharto's authoritarian government in 1998 (Chen 2007). These events worsened attitudes towards the West, and gave rise to the violent Islamist group Jamaa Islamiya (Hefner 2000). The Jamaa Islamiya claimed responsibility for Indonesia's most devastating attacks—the Bali bombings of 2002 and 2005 that killed 164 foreign nationals and 38 Indonesian citizens (Hefner and Zaman 2007).

Abu Mus`ab al-Zarqawi, the previous Jordanian-born leader of al-Qaida in Iraq, claimed responsibility for the 2005 suicide bombings in Jordan that targeted civilians. The bombings took place near international hotels in Amman and claimed 60 lives and injured 115 others. The Jordanian government's strong alliance with the U.S. arguably motivated al-Zarqawi to plan these attacks.⁶

Lebanon's association with suicide bombing began in 1983 when Hizballah, a fundamentalist Shi'a organization, executed the first such attacks in the Middle East. Hizballah attackers drove and detonated explosive-laden trucks into barracks of U.S. Marines and French paratroopers who were sent to strengthen the Gemayel government that was established with the help of Israel. Several groups (the Syrian Nationalist Party, socialist groups, a communist group, and Hizballah) carried out such attacks, particularly against Israeli troops occupying areas of southern Lebanon (Lester, Yang,

and Lindsay 2004). The targets have included civilians, politicians, and foreign militaries and diplomats.

Morocco experienced suicide bombings in 2003 and 2007 in Casablanca, killing 45 civilians and injuring over a hundred others. Casualties were mostly Moroccan even though the attacks targeted Westerners and Israelis and killed some Western and Israeli tourists and diplomats. It remains unclear whether the attacks were carried out by homegrown militants or an international terrorist network. A series of suicide bombings also targeted American diplomatic offices in Casablanca, though there were no casualties besides the bombers; Islamist extremists who want to topple the monarchy were blamed for the attacks. Moroccan government reports also claim that certain rural areas of Morocco export suicide bombers to Iraq.⁷

Pakistan has been plagued by suicide bombings for over two decades. Suicide bombings have been used by warring extremist Shi'a and Sunni groups. More recently, Taliban-style organizations have used suicide bombings against government officials they blame for being too close to the United States. The targets of the attacks have included military personnel, tribal leaders, political personnel, legal figures, and civilians (both local and foreign). Since 2003, there have been at least 21 incidents of suicide bombings, which have killed 382 and injured 882; thousands more have been harmed by other forms of guerrilla warfare and terrorism.⁸

Finally, suicide bombings in Turkey have been carried out by Kurdish militants and al Qaeda-linked extremists. The Kurdish rebellion against Turkish rule has produced at least two suicide bombings targeting military and political personnel that left 22 dead (Goodwin 2006). The al Qaeda-linked suicide bombings, in contrast, killed 58 civilians and injured 101 others.⁹

3. CONCEPTUAL MODEL

In this section, we present a simple conceptual model that explains the precise ways in which educational attainment and income affect support for suicide bombing. In turn, our conceptual model guides our empirical methodology, analysis, and interpretations. Since there is only scarce literature on what affects the attitudes of ordinary men and women towards suicide bombing, our conceptual model draws from the literature on the determinants of suicide bombers (Pape 2005; Goodwin 2006) and a model developed by Ganzach (1998) to study the relationship between intelligence and job satisfaction. Figure 1 illustrates our conceptual model of how educational attainment and income affect attitudes towards suicide bombing. The solid lines reflect a direct relationship, and the dashed line represents a mediating effect. The essential idea is that educational attainment and income directly discourage support for suicide bombing, but indirectly encourage support for suicide bombing via political dissatisfaction. The model can be applied to understand attitudes towards different suicide bombing targets.

[Figure 1 about here]

The intuition of observers who argue that education should discourage support for violent attacks is sensible because, formal education should instill ordinary men and women with values and skills that reduce support for suicide bombing. Indeed, there is growing qualitative evidence that school curricula in Muslim countries emphasize tolerance and pluralism (Hefner and Zaman 2007). Since educational attainment implies more familiarity with such curricula, we argue that educational attainment discourages support for suicide bombing. In addition, educational attainment should provide the skills to verify the legitimacy of claims made by some Islamist ideologues that suicide bombing is a permissible form of martyrdom.

Higher income can also discourage support for suicide bombing because people may be more satisfied with life and do not believe that drastic measures are necessary to bring about change. Lower income, in contrast, leads to feelings of unhappiness, helplessness, and desperation. Nobel

laureate Kim Dae Jung argues that “At the bottom of terrorism is poverty. That is the main cause.” Like educational attainment, therefore, greater income should discourage ordinary men and women from supporting suicide bombing, holding all other factors constant.¹⁰

We argue instead that educational attainment and higher income increase political dissatisfaction, such as dissatisfaction with one’s government or foreign policy, when holding all other factors constant. We also argue that politically dissatisfied men and women are more sympathetic to suicide bombings. Our argument that there is such a relationship among educational attainment, income, political dissatisfaction, and support for suicide bombing is partly based on an early study by Lerner (1958) who finds that the educated and wealthy among ordinary men and women in Arab Muslim countries have more at stake from political outcomes and subsequently adopt extremist political attitudes. Our assertion is also consistent with the statements of Nobel laureate Desmond Tutu, who believes that “... A sense of grievance and injustice can fill people with resentment and despair to the point of desperation”. Put differently, our conceptual model shows that political dissatisfaction moderates the extent to which educational attainment and income discourage support for suicide bombing. In the next section, we discuss the implications of our conceptual model in an empirical analysis.

4. DATA AND METHODOLOGY

The data on public attitudes in our countries of interest comes from the Pew Global Attitudes Project (PGAP), carried out by the Pew Research Center—a non-partisan think-tank based in Washington, DC. The samples from Indonesia, Jordan, Lebanon, and Turkey are representative of the population in the country but the samples from Morocco and Pakistan are disproportionately urban. The PGAP 2005 contains data on one thousand respondents from each country, and each respondent is of age eighteen or above.¹¹

4.1 Dependent Variables and Multivariate Models

The PGAP asked Muslim respondents only from the countries above about their attitudes towards suicide bombings. To measure public attitudes towards suicide bombings against civilians, we use the following PGAP question:

“Some people think that suicide bombing and other forms of violence against civilian targets [in our country] are justified in order to defend Islam from its enemies. Other people believe that, no matter what the reason, this kind of violence is never justified. Do you personally feel that this kind of violence is often justified to defend Islam, sometimes justified, rarely justified, or never justified?”

Half of the Muslim respondents were asked the above question with the words “in our country” included and half were asked the question without them. We combine the answers in one variable we call *civilians*, drop recipients answering “don’t know” and “refused” from the sample, and code the dependent variable as follows: never justified=0, rarely justified=1, sometimes justified=2, often justified=3. We use an ordered probit model to take advantage of the ordered nature of the dependent variables (Long and Freese 2006).

To code for attitudes towards suicide bombings against foreigners in Iraq, we use the PGAP’s next question:

“What about suicide bombing carried out against Americans and other Westerners in Iraq? Do you personally believe that this is justifiable or not justifiable?”

Here too, we drop observations where the answer is “don’t know” and “refused” and code the dependent variable *iraq* as follows: justifiable=1, not justifiable=0. While not all Americans and other Westerners in Iraq are political-military personnel, it is not clear, that survey respondents considered this point. We use a binomial probit model because of the binary nature of the dependent variable (Wooldridge 2002).

The sample sizes drop for each country because only Muslims were asked questions on suicide bombing. The reduction in the country's sample size is greater the smaller the proportion of Muslims in the country. For example, the sample is smallest for Lebanon where a significant share of the population is non-Muslim and largest for Pakistan and Indonesia where the population is mostly Muslim.

4.2 Hypothesis and Explanatory Variables

Following our conceptual model, there are two hypotheses and both will be tested for *civilian* and *iraq* samples. Our first hypothesis is:

H_1 : More educated people are less likely to support suicide bombings

We expect this hypothesis to hold when it comes to support for attacks against civilians because education encourages the kind of critical thinking that identifies and tackles moral dilemma such as the ones that would arise when civilians are attacked. We do not expect this hypothesis to be sustained by evidence in the case of attacks against foreign occupiers of Muslim lands because such attacks are widely perceived to be legitimate and morally uncontroversial among Muslims. We code educational attainment as a series of four dummy variables indicating a respondent's highest level of attainment: *belowprimary* (below primary education) *primary* (primary education), *secondary* (secondary education), and *higher* (higher education). If our hypothesis holds, then we would see positive and statistically significant coefficients for *primary*, *secondary*, and *higher*, and larger coefficient magnitude for higher levels of education.

Our second hypothesis derived from our conceptual models is:

H_2 : Richer people are less likely to support suicide bombings

Higher income could discourage support for suicide bombing because those who are more satisfied with life do not believe that drastic measures are necessary to bring about change. We

construct a per-capita income variable by converting the mean value of the monthly household income interval in the current currency from the PGAP survey to 2005 USD then dividing it by the number of people in the household. This per-capita value is a more valid indicator of socioeconomic status than total household income from the survey because households vary dramatically in size. For each country, we divide the population into four evenly-sized per-capita income quartiles: *quartile1* (poorest), *quartile2* (lower-middle income), *quartile3* (upper-middle income), and *quartile4* (richest). If our hypothesis holds, then we would see positive and statistically significant coefficients for *quartile2*, *quartile3*, and *quartile4*, and larger coefficient magnitude for higher income quartiles.

Our conceptual model indicates that in order to examine the effect of education and income, it is necessary to control for political dissatisfaction in a multivariate analysis. If political dissatisfaction is not controlled for, the effects of education and income are dampened—statistically significant coefficients for educational attainment and income should be larger when there is a control for political dissatisfaction. We construct *dissatisfaction* or political dissatisfaction variable differently for the analyses of suicide bombings against civilians compared to the analysis of bombings against Westerners in Iraq.

For the analysis of bombings against civilians, *dissatisfaction*=0 if the respondent is satisfied with the way things are going in her own country and does not feel that Islam is under threat; *dissatisfaction*=1 if the respondent is either dissatisfied with conditions in her country or believes that Islam is under threat; *dissatisfaction*=2 if the respondent is dissatisfied with conditions in her country and believes that Islam is under threat.

For the analysis of bombings against Westerners in Iraq, *dissatisfaction* is coded differently to reflect the international nature of suicide bombings in Iraq. Specifically, *dissatisfaction*=0 if the respondent has a favorable opinion of the US and does not feel that Islam is under threat; *dissatisfaction*=1 if the respondent either has an unfavorable opinion of the US or believes that Islam

is under threat; *dissatisfaction*=2 if the respondent has an unfavorable opinion of the US and believes that Islam is under threat. Tessler and Robbins (2007) find in their analysis of surveys of Algerian and Jordanian publics that respondents' negative judgments about U.S. foreign policy are correlated with approval of terrorism against the United States. Those with an unfavorable opinion of the US are more likely to support suicide bombing against U.S. and other Westerners in Iraq.

In the analyses of *civilians* and *iraq* as the dependent variables, we include several other controls (in addition to political dissatisfaction) that have been documented to affect political attitudes of ordinary men and women. These other control variables are the respondent's gender dummy (*male*), age-cohort dummies (*age18_29*, *age30_49*, *age50plus*), marital status dummy (*married*), number of children in the household (*number of children*), and controls for regions within each country that we do not report in tables below to save space. Gender may matter because males are generally considered in the sociology and psychology literature to be more aggressive than females (Fair and Shepherd 2006). Similarly, the age of a respondent may also matter because the nature of civic education and political experiences vary across age-cohorts. In addition, youth is frequently associated with greater aggression (Markowitz and Felson 1998), suggesting that younger individuals are more likely to support suicide bombing than older individuals. Finally, marital status and a respondent's number of children may matter because the family environment and responsibility for the welfare of a partner and for children may discourage support for conflict.

4. DESCRIPTIVE STATISTICS

Table 1 presents the attitudes of ordinary Muslim men and women towards suicide bombings that target civilians in one's home country. The share of respondents who believe such bombings are sometimes justified or often justified is highest in Jordan (43.4 percent) and Lebanon (32.4 percent). Less than a quarter of respondents support suicide bombings that targeting civilians

in Indonesia (14.6 percent), Morocco (11.0 percent), Pakistan (23.0 percent), and Turkey (13.2 percent).

[Table 1 about here]

Table 2 shows the attitudes of Muslims towards suicide bombings that target Westerners in Iraq, and as we anticipated, there is far more support for attacks on Westerners in Iraq than for attacks in one's home country. Almost one-half or more respondents support such bombings in Jordan (49.1 percent), Lebanon (49.4 percent) and Morocco (56.8 percent). Around one-quarter of respondents in Indonesia (27.4 percent), Pakistan (26.9 percent) and Turkey (23.6 percent) support suicide bombings against Westerners in Iraq.

[Insert Table 2 about here]

Table 3 breaks down public attitudes towards suicide bombings targeting civilians by the respondent's highest level of educational attainment. Support for suicide bombing against civilians seems to decrease with educational attainment in Indonesia. Elsewhere, there are no clear patterns across educational attainment levels. In Jordan and Turkey, support is lowest among those with college and university degrees relative to other levels of education. In contrast, those with college and university degrees in Lebanon are most supportive of suicide bombings against civilians. There is no clear pattern between educational attainment and support for bombings against civilians in Morocco.

[Insert Table 3 about here]

Table 4 shows educational attainment and public attitudes towards suicide bombings against Westerners in Iraq. Respondents with college and university education are most supportive in Indonesia, but there are no discernable patterns in Jordan, Lebanon, Morocco, Pakistan, and Turkey.

The sample size (N) in Tables 3 and 4 reveal the distribution of educational attainment of the entire sample of respondents in the six countries. Pakistan has the lowest overall educational

attainments of respondents not completing primary education (51 percent). In the remaining countries, over half of the respondents have completed either primary or secondary education. Higher educational attainment is highest in Lebanon and Turkey (10 percent or greater).

[Table 4 about here]

Table 5 shows a breakdown of per-capita income quartile and attitudes towards suicide bombings that target civilians. There is a pattern in Indonesia and Jordan: the richest are most supportive of suicide bombing. In Jordan, Morocco, and Turkey, support for bombings that target civilians are comparable across income quartiles. In Pakistan, the richest respondents are least supportive of suicide bombings that target civilians.

[Table 5 about here]

Table 6 presents a breakdown of per-capita income quartile and attitudes towards suicide bombings against Westerners in Iraq. The richest are slightly less supportive in Jordan, Lebanon, and Turkey. In contrast the richest in Pakistan are most supportive of suicide bombings against Westerners in Iraq. There is no clear pattern between per-capita income quartile and support for such suicide bombings in Morocco.

[Table 6 about here]

Several patterns emerge in Tables 1 and 2. As argued in the Introduction, support for suicide bombings on civilians is less than support for bombings against foreigners in Iraq in each of the seven countries. The most extreme example of support depending on the target of suicide bombing is among respondents in Morocco, where there is little support for bombings targeting civilians, but large support for bombings targeting Westerners in Iraq. Such a difference confirms our suspicions that motivations and correlates of support for suicide bombing depend on the target of suicide bombing. Country-level characteristics of certain countries are also worth noting. Support for suicide bombing is high in Jordan possibly because at least half of the respondents are from families

displaced from the other side of the Jordan River and will therefore be sympathetic to Palestinian suicide bombings that target Israeli civilians. Comparing attitudes towards both types of suicide bombings, the levels are lowest in Turkey possibly because many Muslims in Turkey adhere to peaceful interpretations of Islam (Yavuz 2003). There is a consistent pattern across the six countries: those with low levels of education (below primary education and primary education) are more likely to respond “Don’t know/Refused”. This is similar to trends from other surveys where those with low levels of education are less likely to express an opinion (Krueger 2007). In the next section, we use multivariate analysis to gauge the effect of education and income on suicide bombings.

5. MULTIVARIATE ESTIMATION RESULTS

Table 7 presents the descriptive statistics for the variables used for the multivariate analyses as well as in the original sample that precedes the exclusion of incomplete observations. The two datasets we use for regressions with *iraq* and *civilians* as dependent variables largely overlap, but not exactly because we did not want to exclude cases unnecessarily (some respondents answer the question on Iraq but not the one about attacks on civilians and vice versa). The distribution for most variables did not change much after excluding observations with missing entries, with few exceptions.¹²

[Table 7 about here]

The multivariate estimation results on the effect of education and income on public attitudes towards suicide bombing are presented in Tables 8 to 13. Each table is dedicated to one country and contains the results for the basic model (without a control for political dissatisfaction) and extended model (with a control for political dissatisfaction). The inclusion of a control for political dissatisfaction should provide more precise estimates of the effect of education and income than the basic model. As discussed earlier, an ordered probit model is used to analyze support for suicide

bombing against civilians, and a binomial probit is used to analyze support for suicide bombings against Westerners in Iraq.

5.1 Indonesia

Table 8 presents the estimation results for Indonesia. Among ordinary Muslims in Indonesia, there is evidence that educational attainment makes people less supportive of suicide bombings that target civilians. Compared to those without primary education, both the basic and extended models indicate that those with higher education are less likely to support suicide bombing against civilians. There is no statistical evidence, however, that income affects attitudes towards the suicide bombing of civilians.

[Table 8 about here]

Regarding support for suicide bombings against Westerners in Iraq, the basic probit model in Table 8 shows that those with higher education in Indonesia are more supportive of suicide bombings than those without primary education. After controlling for political dissatisfaction in the extended model, however, there is no statistical evidence that any level of education or income affect attitudes towards suicide bombing against Westerners in Iraq.

5.2 Jordan

Table 9 provides the estimation results for Jordan. There is evidence that educational attainment and income in Jordan reduce support for suicide bombings that target civilians. The basic and extended models show that respondents with primary education are less likely than those without primary education to support suicide bombing against civilians. The coefficient's magnitude for secondary education are considerably larger, thus indicating that respondents with secondary education are more opposed to such suicide bombings than those with only primary education. The

coefficient for higher education in both models are smaller than the coefficients for secondary, therefore suggesting that respondents with higher education are less opposed to suicide bombing than those with secondary education. Compared to the poorest respondents, those from the upper-middle income quartile and especially the richest quartile are strongly opposed to suicide bombings against civilians, holding all other characteristics constant. The extended model shows that controlling for political dissatisfaction, there is a slight increase in the coefficient sizes of educational attainment, which supports the conceptual model's prediction of political dissatisfaction having moderating effect on support for suicide bombing.

[Table 9 about here]

The binomial probit results in Table 9 on support for suicide bombing against Westerners in Iraq shows that respondents in Jordan with primary education and especially secondary education are more likely to support suicide bombing compared to those without primary education. In contrast, the statistically significant and growing coefficients on income quartile coefficients indicate that greater income strongly discourages support for suicide bombing. The extended model confirms that primary and secondary education increase support for suicide bombing against Westerners in Iraq, and that greater income decreases support. The extended model therefore suggests that political dissatisfaction among respondents in Jordan strongly encourages support for suicide bombing, and that it mediates the effect of primary education and greater income. College or university education has no statistically significant relationship with support for suicide bombing against Westerners in Iraq in either of the models. Thus, primary and secondary educational attainment in Jordan encourages support for both types of suicide bombing, holding all other factors constant. In contrast, greater income in Jordan discourages support for both types of suicide bombing.

5.3 Lebanon

Table 10 presents the estimation results for Lebanon. According to both the basic and extended ordered probit models of suicide bombings against civilians, there is no statistical evidence that educational attainment and income have an impact among ordinary Lebanese men and women. [Table 10 about here]

Table 10 also shows that there are some statistically significant relationships in Lebanon between educational attainment, income, and support for suicide bombings against Westerners in Iraq, however. The basic binomial probit model indicates that support for suicide bombing is greater for upper-middle income and the richest respondents than the poorest respondents. The extended model shows that respondents with secondary education are more supportive of suicide bombing than those without primary education. The income coefficients in the extended model are positive, statistically significant, and successively larger, therefore indicating that greater income in Lebanon encourages support for suicide bombing against Westerners in Iraq. They also suggest that political dissatisfaction moderates the effect of education and income on support for suicide bombing.¹³

5.4 Morocco

Table 11 presents the estimation results for the sample from Morocco. The basic ordered probit model of support for suicide bombings against civilians among Muslims provides no statistical evidence that educational attainment affects attitudes. Respondents in the upper-middle income quartile in Morocco, however, are more supportive of suicide bombing than the poorest respondents. After the inclusion of political dissatisfaction index in the extended model, the effect size of being in the upper-middle income quartile shrinks slightly.

[Table 11 about here]

There is less conclusive evidence from Morocco on support for suicide bombing against Westerners in Iraq. Both the basic and the extended models in Table 11 show that there are no statistically significant coefficients for any of the education and income dummy variables.

5.5 Pakistan

Table 12 presents the estimation results for the sample for Pakistan. According to the ordered probit basic model of support for suicide bombings against civilians, respondents with higher education are less likely to support suicide bombings than those without primary education. There is also evidence that respondents from the richest quartile are less likely to support suicide bombing against civilians than the poorest respondents. The extended model indicates that controlling for political dissatisfaction increases the coefficient size of higher education and being rich; this supports our conceptual model that political dissatisfaction reduces the negative impact of educational attainment and income on support for suicide bombing.

[Table 12 about here]

The binomial probit estimation results from Pakistan on support for suicide bombings against Westerners in Iraq, however, offer less convincing evidence on the effect of education and income. The basic and extended models in Table 12 offer no statistical evidence that educational attainment matters. The extended model provides some evidence that, compared to the poorest respondents, upper-middle income respondents in Pakistan are less likely to support suicide bombing against Westerners in Iraq.

5.6 Turkey

Table 13 shows the estimation results for Turkey. In the case of Turkish respondents, there is no statistical evidence from the basic and extended models that educational attainment and income affect the attitudes towards suicide bombings of civilians.

[Table 13 about here]

The basic binomial probit results in Table 13 on support for suicide bombing against Westerners in Iraq show that that none of the coefficients of educational attainment are statistically significant. There is evidence from both the basic and extended model, however, that respondents from the richest quartile in Turkey are less likely to support suicide bombings against Westerners in Iraq. This is not surprising because the wealthier stratum in Turkey tends to be more westernized than the rest of society. Coefficient sizes in the basic and extended models are of comparable sizes.

5.7 The effect of education and income on political dissatisfaction

Our conceptual model proposes that educational attainment and higher income encourage political dissatisfaction and that, in turn, political dissatisfaction increases support for suicide bombing. In addition to directly discouraging support for suicide bombing, educational attainment and income also indirectly encourage support for suicide bombing. The difference in the coefficients for educational attainment and income in the basic and extended models provides some evidence to support the effect of educational attainment and income on political dissatisfaction. For a clearer picture, we present the ordered probit results on the determinants of political dissatisfaction in Appendix Table 1 and Appendix Table 2 using the *civilians* and *iraq* samples respectively. Again, the coding of political dissatisfaction for the *civilians* sample reflects dissatisfaction with domestic policies while the coding of political dissatisfaction for the *iraq* sample reflects dissatisfaction with foreign policy issues.

In accordance with our conceptual model's predictions, the results in Appendix Table 1 for Indonesia, Morocco, and Pakistan suggest that educational attainment, more so than income, increases the likelihood of being politically dissatisfied with domestic policy. The reason behind the lack of such a correlation in Lebanon and Turkey is that the more educated and wealthier in these countries tend to support the government for historical reasons. Among Lebanese Muslims, they tend to be Sunnis who gained much influence in the Hariri era. In Turkey, the more educated and wealthy tend to support the Laic and secular institutions, even though the relationship between demographics and attitudes is changing quickly. In Jordan, much of the population is highly politicized, which may explain the lack of statistical significance for these variables.

The results in Appendix Table 2 for Indonesia, Jordan, and Pakistan indicate that educational attainment and income increase the likelihood of being dissatisfied with foreign policy, and thus also support our conceptual model. Respondents in Pakistan with primary education are more likely to be politically dissatisfied than those without primary education. Respondents with secondary education in Indonesia and Jordan are more likely to be politically dissatisfied than those without primary education. In contrast, the results from Turkey indicate that educational attainment is associated with lower likelihood of dissatisfaction. The results from Indonesia show that respondents from the lower-middle, upper-middle income, and richest quartiles are much more likely to be politically dissatisfied than those in the poorest quartile. Greater income in Jordan, however, is associated with political satisfaction.

6. DISCUSSION

There are a number of possible explanations behind our argument regarding why educational attainment in some cases does not make people less supportive of suicide bombing. As mentioned earlier, the direct effect of educational attainment on suicide bombing attitudes depends critically on

the content of education and the values inculcated in educational institutions. If educational curricula and institutions do not promote peaceful conflict resolution, then educational attainment may not affect attitudes towards suicide bombing. A key explanation for why greater income may not lead to lower support for suicide bombings is that wealthier individuals are more likely to be ideologically extreme and committed because they have more time to dedicate to ideological pursuits (Krueger 2007; Krueger and Maleckova 2003; Lerner 1958).

The Pew surveys are some of the best available today to gauge support for suicide bombings among Muslim publics but there are data limitations that affect our findings. One of the main data limitations is that respondents might answer such survey questions strategically out of concern that divulging their preferences might make them vulnerable to persecution (Drakos and Gofas 2006). Several variables may be affected by this coding issue, including our two dependent variables *iraq* and *civilians*. We expect the survey to show less support for suicide bombings on civilians and higher satisfaction for some countries than candid answers would reveal. The income-related variables may also be flawed because of attitudes towards divulging information about wealth.

Another data limitation is that PGAP 2005 lacks information on the type of schooling that people have received. Krueger (2007) suggests that religious training may influence attitudes towards suicide bombing (though he is unable to test this hypothesis). However, according to Robert Hefner and Muhammad Zaman (2007), madrassas (or Islamic schools) cannot account for the scale of support for suicide bombing because the proportion of the population that attended them is considerably smaller than the share of respondents who support suicide attacks. Tahir Andrabi and others report, for example, that less than 1 percent of all students in Pakistan attend madrassas (Andrabi et al. 2006). Moreover, most madrassas in the Muslim world remain pedagogically and theologically pluralistic, and strongly condemn suicide bombing as a sin (Hefner and Zaman 2007).

7. CONCLUSION

There is evidence that educational attainment discourages support for suicide bombings against civilians in Indonesia and Pakistan, but surprisingly encourages support for such bombings in Jordan. As evidence of our thesis that the target of suicide bombing matter, there is evidence from Indonesia and Jordan that educational attainment encourages support for suicide bombing against Westerners in Iraq. Greater income discourages support for suicide bombings against civilians in Jordan and Pakistan. In contrast, greater income in Morocco encourages support for suicide bombings against civilians. In Jordan, Pakistan and Turkey, higher income discourages support for suicide bombings against Westerners in Iraq. Higher income in Lebanon, however, encourages support for suicide bombings against Westerners in Iraq. Finally, there is some evidence that educational attainment and income increases political dissatisfaction, which in turn moderates the beneficial effect of education and income on reducing support for suicide bombing.

The results of this study offer some support for the findings of Princeton economist Alan Krueger, who argues in his book *What Makes a Terrorist* that education and income have no discernible impact on public support for terrorism (2007, 12-13). At the same time, this study reveals that the effect of education and income on attitudes depends on the country and the target of suicide bombings. Therefore, this study draws attention to the difficulty of making generalizations about the relationship between educational attainment, income, and support for suicide bombing across Muslim countries.

Despite the difference in findings across countries, it would be wasteful to think in terms of developing radically different approaches for every country. Accordingly, we present two general policy recommendations. The first policy recommendation is the continued expansion of education with the adoption of peace education in school curricula that discourages the use of suicide bombing as a tactic. Governments and international donors can draw from the growing body of qualitative

research on the design and implementation of successful peace education curricula in conflict areas (Bekerman 2004; Boulding 1988; Ben-Porath 2006). The purpose of such education would not be to reduce political grievances that can be very real but to suggest other ways to bring about change that cause less suffering and damage to society. Governments with democratic or semi-democratic institutions may be able to convince their publics with further liberalization that the voting booth and civic activism may be better venues than the use of violence. This, however, may be too much to ask from some of the more oppressive regimes and the narrow oppressive elites that lead them.

The second policy recommendation is based on our finding that political dissatisfaction reduces the effectiveness of educational attainment and income. The present dissatisfaction with the U.S.-led military occupations of Iraq and Afghanistan and with Western support and collusion with unpopular governments can be reduced if governments of Muslim countries, U.S., and other Western states adopt policies that respect the dignity, welfare, interests and lives of Muslims everywhere. For example, supporting trade, economic integration and cooperative international security would improve opinion of Western governments and reduce the feeling that Islam is under threat. These policies of completing educational expansion with peace education curricula and reducing political dissatisfaction should be implemented simultaneously, not in isolation.

Finally, we encourage others to test the robustness of this study's results by using alternative data sources. Currently, several public opinion data collection efforts are underway in the Muslim world, including *The Arab Barometer* and *The Asian Barometer* (both collected by an international consortium of universities and research centers) and the *Poll of the Muslim World* (collected by Gallup). Since these surveys contain different samples and questions on attitudes towards suicide bombing, there are opportunities to gain a more complete understanding of the relationship between educational attainment, income, and support for suicide bombing in Muslim countries.

REFERENCES

- Andrabi, Tahir, Jishnu Das, and Asim Khwaja. 2006. Religious School Enrollment in Pakistan: A Look at the Data. *Comparative Education Review* 50 (3):446-477.
- Bekerman, Zvi. 2004. Potentials and Limitations of Multicultural Education in Conflict-Ridden Areas: Bilingual Palestinian-Jewish schools in Israel. *Teachers College Record* 106 (3):574-610.
- Ben-Porath, Sigal. 2006. *Citizenship under Fire: Democratic Education in Times of Conflict*. Princeton: Princeton University Press.
- Berman, Eli, and David Laitin. 2006. Hard Targets: Theory and Evidence on Suicide Attacks. Unpublished manuscript.
- Boulding, Elise. 1988. *Building a Global Civic Culture: Education for an Interdependent World*. Syracuse: Syracuse University Press.
- Burgoon, Brian. 2006. On Welfare and Terror: Social Welfare Policies and Political-Economic Roots of Terrorism. *Journal of Conflict Resolution* 50 (2):176-203.
- Chen, Daniel. 2007. Islamic Resurgence and Social Violence during the Indonesian Financial Crisis. in *Institutions and Norms in Economic Development*, edited by Mark Gradstein and Kai Konrad. Cambridge, Mass.: MIT Press.
- Cragin, Kim, and Peter Chalk. 2003. *Terrorism and Development: Using Social and Economic Development to Inhibit a Resurgence of Terrorism*. Santa Monica, CA: RAND.
- Drakos, Konstantinos, and Andreas Gofas. 2006. The Devil You Know but Are Afraid to Face: Underreporting Bias and its Distorting Effects on the Study of Terrorism. *Journal of Conflict Resolution* 50 (5):714-735.
- Drakos, Konstantinos, and Ali Kutan. 2003. Regional Effects of Terrorism on Tourism in Three Mediterranean Countries. *Journal of Conflict Resolution* 47 (5):621-641.

- Enders, Walter and Sandler, Todd. 2005. After 9/11: Is It All Different Now? *Journal of Conflict Resolution* 49 (2): 259-77.
- Fair, Christine, and Bryan Shepherd. 2006. Who Supports terrorism? Evidence from Fourteen Muslim Countries. *Studies in Conflict and Terrorism* 29 (1):51-74.
- Frey, Bruno, Simon Luechinger, and Alois Stutzer. 2007. Calculating Tragedy: Assessing the Costs of Terrorism. *Journal of Economic Surveys* 21 (1):1-24.
- Gambetta, Diego. 2006. *Making Sense of Suicide Missions*. New York: Oxford University Press.
- Ganzach, Yoav. 1998. "Intelligence and Job Satisfaction." *Academy of Management Journal* 41 (5):526-539.
- Goodwin, Jeff. 2006. What Do We Really Know About (Suicide) Terrorism? *Sociological Forum* 21 (2):315-330.
- Gurr, Ted. 1970. *Why Men Rebel*. Princeton: Princeton University Press.
- Hafez, Mohammed. 2007. *Suicide Bombers in Iraq: The Strategy and Ideology of Martyrdom*. Washington, DC: United States Institute of Peace.
- Hamzeh, Ahmad Nizar. 2004. *In the Path of Hizbullah*. Syracuse, New York: Syracuse University Press.
- Hefner, Robert. 2000. *Civil Islam*. Princeton: Princeton University Press.
- Hefner, Robert, and Muhammad Qasim Zaman (Eds.). 2007. *Schooling Islam: The Culture and Politics of Modern Muslim Education*. Princeton, NJ: Princeton University Press.
- Hoffman, Bruce. 2006. *Inside Terrorism*. New York: Columbia University Press.
- Krueger, Alan B. 2007. *What Makes a Terrorist: Economics and the Roots of Terrorism*. Princeton: Princeton University Press.
- Krueger, Alan B. and Maleckova, Jitka. 2003. Education, Poverty, and Terrosim: Is There a Causal Connection? *Journal of Economic Perspectives* 17(4): 119-44.

- Lerner, Daniel. 1958. *The Passing of Traditional Society*. Glencoe, IL: Free Press.
- Lester, David, Bijou Yang, and Mark Lindsay. 2004. Suicide bombers: Are psychological profiles possible? *Studies in Conflict and Terrorism* 27 (4):283-295.
- Li, Quan, and Drew Schaub. 2004. Economic Globalization and Transnational Terrorism: A Pooled Time-Series Analysis. *Journal of Conflict Resolution* 48 (2):230-258.
- Long, J. Scott, and Jeremy Freese. 2006. *Regression Models for Categorical Dependent Variables Using Stata*. College Station: Stata Press.
- Markowitz, Fred and Richard Felson. 1998. Social-Demographic Differences in Attitudes and Violence. *Criminology* 36 (1): 117-138.
- McDonald, Patrick. 2004. Peace through Trade or Free Trade? *Journal of Conflict Resolution* 48 (4): 547-572.
- Norton, Augustus R. 2007. *Hezbollah: A Short History*. Princeton, N.J.: Princeton University Press.
- Novelli, Mario, and Susan Robertson. 2007. The Politicization of Development Aid to Education after September 11. Pp. 249-258 in *Schooling and the Politics of Disaster*, edited by Kenneth Saltman. New York: Routledge.
- O'Hanlon, Michael, and Jason Campbell. 2007. Iraq Index: Tracking variables of reconstruction and security in post-Saddam Iraq. October. Washington, DC: The Brookings Institution.
- Pape, Robert. 2003. The Strategic Logic of Suicide Terrorism. *American Political Science Review* 97 (3): 343-361.
- Pape, Robert. 2005. *Dying to Win: The Strategic Logic of Suicide Terrorism*. New York: Random House.
- Siqueira, Kevin, and Todd Sandler. 2006. Terrorists versus the Government Strategic Interaction, Support, and Sponsorship. *Journal of Conflict Resolution* 50 (6): 878-898.

Tessler, Mark and Robbins, Michael. 2007. What Leads Some Ordinary Arab Men and Women to Approve of Terrorist Acts against the United States? *Journal of Conflict Resolution* 51(2): 305-28.

Wooldridge, Jeffrey. 2002. *Econometric Analysis of Cross-Section and Panel Data*. Cambridge: MIT Press.

Yavuz, M. Hakan. 2003. *Islamic Political Identity in Turkey*. New York: Oxford University Press.

Yechiam, Eldad, Greg Barron, and Ido Erev. 2005. The Role of Personal Experience in Contributing to Different Patterns of Response to Rare Terrorist Attacks. *Journal of Conflict Resolution* 49 (3):430-439.

Table 1: Public attitudes towards suicide bombing of civilians

	Indonesia	Jordan	Lebanon	Morocco	Pakistan	Turkey
Never justified	67.9	28.9	34.5	80.9	50.4	64.9
Rarely justified	15.5	26.7	16.3	4.8	17.4	8.5
Sometimes justified	12.6	31.2	16.9	5.3	11.5	10.2
Often justified	2.0	12.2	15.5	5.7	11.5	3.0
Don't know/Refused	<u>2.0</u>	<u>1.0</u>	<u>6.3</u>	<u>3.3</u>	<u>9.2</u>	<u>13.4</u>
	100%	100%	100%	100%	100%	100%
N	970	967	563	1000	1203	965

Source: Pew Global Attitudes Project, 2005

Notes: Reflects the attitudes of adult Muslims (aged 18 and above).

Table 2: Public attitudes towards suicide bombing of Westerners in Iraq

	Indonesia	Jordan	Lebanon	Morocco	Pakistan	Turkey
Not justified	66.3	43.5	41.0	38.7	60.4	61.9
Justified	27.4	49.1	49.4	56.8	26.9	23.6
Don't know/Refused	<u>6.3</u>	<u>7.4</u>	<u>9.6</u>	<u>4.5</u>	<u>12.7</u>	<u>14.5</u>
	100%	100%	100%	100%	100%	100%
N	970	967	563	1000	1203	965

Source: Pew Global Attitudes Project, 2005

Notes: Reflects the attitudes of adult Muslims (aged 18 and above).

Table 3: Educational attainment and public attitudes towards suicide bombing of civilians

	Indonesia	Jordan	Lebanon	Morocco	Pakistan	Turkey
<i>Below primary:</i>						
Never justified	65.3	27.5	29.2	80.2	43.7	52.9
Rarely justified	21.0	28.5	31.5	4.3	18.9	5.9
Sometimes justified	11.3	30.8	19.1	5.5	12.1	10.6
Often justified	0.0	11.4	10.1	4.9	13.1	1.2
Don't know/Refused	<u>2.4</u>	<u>1.7</u>	<u>10.1</u>	<u>5.1</u>	<u>12.2</u>	<u>239.4</u>
	100%	100%	100%	100%	100%	100%
N	124	403	89	329	556	85
<i>Primary:</i>						
Never justified	66.9	33.5	32.1	80.4	54.4	64.6
Rarely justified	15.2	21.8	29.4	6.1	16.2	7.9
Sometimes justified	14.4	30.1	16.6	5.6	12.3	9.9
Often justified	1.4	14.1	17.7	5.6	10.7	3.3
Don't know/Refused	<u>2.1</u>	<u>0.5</u>	<u>4.3</u>	<u>2.4</u>	<u>6.4</u>	<u>14.2</u>
	100%	100%	100%	100%	100%	100%
N	369	206	187	377	432	395
<i>Secondary:</i>						
Never justified	68.7	26.9	38.5	83.0	56.4	66.8
Rarely justified	14.9	24.5	24.0	4.1	20.0	10.3
Sometimes justified	12.2	36.7	14.4	5.1	9.1	9.5
Often justified	3.2	11.5	15.4	7.4	9.1	2.9
Don't know/Refused	<u>0.9</u>	<u>0.4</u>	<u>7.7</u>	<u>0.4</u>	<u>5.4</u>	<u>10.2</u>
	100%	100%	100%	100%	100%	100%
N	435	286	208	217	110	386
<i>Higher:</i>						
Never justified	76.2	30.6	39.2	80.5	63.4	68.7
Sometimes justified	9.5	38.9	19.0	2.6	12.9	6.1
Rarely justified	4.8	15.3	21.5	3.9	7.9	13.1
Often justified	0.0	13.9	16.5	5.2	7.9	4.0
Don't know/Refused	<u>9.5</u>	<u>1.4</u>	<u>3.8</u>	<u>7.7</u>	<u>7.9</u>	<u>8.1</u>
	100%	100%	100%	100%	100%	100%
N	42	72	79	77	101	99

Source: Pew Global Attitudes Project, 2005

Notes: Reflects the attitudes of adult Muslims (aged 18 and above)

Table 4: Educational attainment and attitudes towards suicide bombing of Westerners in Iraq

	Indonesia	Jordan	Lebanon	Morocco	Pakistan	Turkey
<i>Below primary:</i>						
Not justified	66.1	44.2	41.0	42.6	56.8	57.6
Justified	24.2	49.1	49.4	54.1	25.0	11.8
Don't know/Refused	<u>9.7</u>	<u>6.7</u>	<u>9.6</u>	<u>3.3</u>	<u>18.2</u>	<u>30.6</u>
	100%	100%	100%	100%	100%	100%
N	124	403	563	329	556	85
<i>Primary:</i>						
Not justified	69.4	43.7	40.1	37.7	63.2	59.2
Justified	23.4	48.1	54.0	57.8	29.6	25.3
Don't know/Refused	<u>6.2</u>	<u>8.2</u>	<u>5.9</u>	<u>4.5</u>	<u>7.2</u>	<u>10.4</u>
	100%	100%	100%	100%	100%	100%
N	369	206	187	377	432	395
<i>Secondary:</i>						
Not justified	65.0	40.5	43.8	36.4	62.7	64.0
Justified	29.0	52.5	47.1	58.5	29.1	24.3
Don't know/Refused	<u>6.0</u>	<u>7.0</u>	<u>9.1</u>	<u>5.1</u>	<u>8.2</u>	<u>11.7</u>
	100%	100%	100%	100%	100%	100%
N	435	286	208	217	110	386
<i>Higher:</i>						
Not justified	52.4	38.9	39.2	33.8	64.4	67.7
Justified	45.2	51.4	48.1	58.4	24.7	24.2
Don't know/Refused	<u>2.4</u>	<u>9.7</u>	<u>12.7</u>	<u>7.8</u>	<u>10.9</u>	<u>8.1</u>
	100%	100%	100%	100%	100%	100%
N	42	72	79	77	101	99

Source: Pew Global Attitudes Project, 2005

Notes: Reflects the attitudes of adult Muslims (aged 18 and above)

Table 5: Per-capita income and public attitudes towards suicide bombing of civilians

	Indonesia	Jordan	Lebanon	Morocco	Pakistan	Turkey
<i>Quartile 1 (poorest):</i>						
Never justified	67.7	26.7	36.6	83.4	47.8	64.4
Rarely justified	16.0	24.8	28.2	2.1	18.9	8.1
Sometimes justified	12.9	35.9	12.2	3.7	11.0	10.7
Often justified	1.4	9.9	17.6	5.4	12.9	2.1
Don't know/Refused	<u>2.0</u>	<u>2.7</u>	<u>5.3</u>	<u>5.3</u>	<u>9.4</u>	<u>14.6</u>
	100%	100%	100%	100%	100%	100%
N	356	262	131	187	318	233
<i>Quartile 2 (lower middle):</i>						
Never justified	65.0	28.4	34.2	81.2	54.0	60.8
Rarely justified	16.9	28.4	26.0	6.7	13.4	5.7
Sometimes justified	13.1	29.2	15.8	6.0	12.9	14.1
Often justified	2.5	14.0	13.7	4.2	12.0	4.0
Don't know/Refused	<u>2.5</u>	<u>0.0</u>	<u>10.3</u>	<u>1.8</u>	<u>7.6</u>	<u>15.4</u>
	100%	100%	100%	100%	100%	100%
N	160	236	146	165	224	227
<i>Quartile 3 (upper middle):</i>						
Never justified	72.8	26.2	35.6	75.3	53.0	65.9
Rarely justified	14.0	25.0	22.4	5.2	16.1	11.2
Sometimes justified	8.6	34.8	23.1	9.7	10.4	7.2
Often justified	2.7	13.5	14.0	9.1	11.5	2.7
Don't know/Refused	<u>1.8</u>	<u>0.4</u>	<u>4.9</u>	<u>0.7</u>	<u>9.0</u>	<u>13.0</u>
	100%	100%	100%	100%	100%	100%
N	230	244	143	167	279	223
<i>Quartile 4 (richest):</i>						
Never justified	65.6	33.8	36.3	74.2	52.6	69.4
Sometimes justified	15.7	29.2	28.2	7.2	21.6	10.2
Rarely justified	15.2	24.7	15.3	4.8	9.8	9.1
Often justified	1.7	11.9	16.1	9.6	6.5	3.2
Don't know/Refused	<u>1.7</u>	<u>0.5</u>	<u>4.0</u>	<u>4.2</u>	<u>9.4</u>	<u>8.1</u>
	100%	100%	100%	100%	100%	100%
N	236	219	124	167	245	186

Source: Pew Global Attitudes Project, 2005

Notes: Reflects the attitudes of adult Muslims (aged 18 and above)

Table 6: Per-capita income quartile and public attitudes towards the suicide bombing of Westerners in Iraq

	Indonesia	Jordan	Lebanon	Morocco	Pakistan	Turkey
<i>Quartile 1 (poorest):</i>						
Not justified	68.8	40.1	48.1	34.8	60.4	57.1
Justified	25.0	52.3	45.0	61.5	27.7	24.5
Don't know/Refused	<u>6.2</u>	<u>6.6</u>	<u>6.9</u>	<u>3.7</u>	<u>11.9</u>	<u>15.4</u>
	100%	100%	100%	100%	100%	100%
N	356	262	131	187	224	233
<i>Quartile 2 (lower middle):</i>						
Not justified	65.0	41.9	38.4	40.0	60.3	61.2
Justified	29.4	47.9	52.0	55.2	25.9	24.2
Don't know/Refused	<u>5.6</u>	<u>10.1</u>	<u>9.6</u>	<u>4.8</u>	<u>13.8</u>	<u>14.5</u>
	100%	100%	100%	100%	100%	100%
N	160	236	146	165	224	227
<i>Quartile 3 (upper middle):</i>						
Not justified	67.0	41.8	38.5	39.6	65.2	58.3
Justified	27.1	53.3	51.7	56.5	22.2	26.9
Don't know/Refused	<u>5.9</u>	<u>4.9</u>	<u>10.8</u>	<u>3.9</u>	<u>12.6</u>	<u>14.8</u>
	100%	100%	100%	100%	100%	100%
N	221	244	143	154	279	223
<i>Quartile 4 (richest):</i>						
Not justified	62.6	51.1	41.1	35.3	57.5	73.1
Justified	30.0	42.5	46.0	61.1	29.5	17.2
Don't know/Refused	<u>7.4</u>	<u>6.4</u>	<u>12.9</u>	<u>3.6</u>	<u>12.0</u>	<u>9.7</u>
	100%	100%	100%	100%	100%	100%
N	230	219	124	167	245	186

Source: Pew Global Attitudes Project, 2005

Notes: Reflects the attitudes of adult Muslims (aged 18 and above)

Table 7: Means and standard deviations (in parentheses)

	Indonesia		Jordan		Lebanon		Morocco		Pakistan		Turkey	
	Civilians	Iraq										
Civilians	0.499 (0.813)		1.277 (1.005)		1.203 (1.110)		0.414 (0.908)		0.776 (1.045)		0.476 (0.856)	
Iraq		0.292 (0.455)		0.529 (0.500)		0.538 (0.500)		0.640 (0.480)		0.331 (0.471)		0.306 (0.461)
Political dissatisfaction	1.124 (0.726)	1.131 (0.759)	1.148 (0.603)	1.631 (0.660)	1.328 (0.779)	1.424 (0.803)	1.352 (0.665)	1.324 (0.652)	1.043 (0.711)	1.340 (0.678)	1.241 (0.699)	1.381 (0.689)
Below primary	0.099 (0.299)	0.105 (0.307)	0.414 (0.493)	0.423 (0.494)	0.112 (0.316)	0.133 (0.339)	0.273 (0.446)	0.287 (0.453)	0.360 (0.480)	0.390 (0.488)	0.041 (0.198)	0.050 (0.217)
Primary education	0.362 (0.481)	0.375 (0.484)	0.213 (0.410)	0.211 (0.408)	0.365 (0.482)	0.352 (0.478)	0.391 (0.489)	0.387 (0.487)	0.415 (0.493)	0.409 (0.492)	0.398 (0.483)	0.379 (0.486)
Secondary education	0.492 (0.500)	0.471 (0.499)	0.303 (0.460)	0.295 (0.456)	0.365 (0.428)	0.381 (0.486)	0.264 (0.441)	0.246 (0.431)	0.127 (0.333)	0.114 (0.318)	0.469 (0.499)	0.455 (0.498)
Higher education	0.047 (0.212)	0.049 (0.216)	0.070 (0.255)	0.071 (0.258)	0.159 (0.366)	0.135 (0.342)	0.071 (0.257)	0.080 (0.271)	0.099 (0.298)	0.087 (0.212)	0.122 (0.327)	0.116 (0.320)
Income quartile 1	0.335 (0.472)	0.337 (0.473)	0.260 (0.439)	0.267 (0.442)	0.255 (0.437)	0.251 (0.434)	0.266 (0.442)	0.170 (0.444)	0.270 (0.444)	0.284 (0.451)	0.241 (0.428)	0.252 (0.434)
Income quartile 2	0.168 (0.374)	0.171 (0.377)	0.247 (0.431)	0.238 (0.426)	0.266 (0.442)	0.267 (0.443)	0.247 (0.432)	0.248 (0.432)	0.210 (0.408)	0.202 (0.402)	0.237 (0.426)	0.243 (0.429)
Income quartile 3	0.259 (0.427)	0.400 (0.427)	0.262 (0.440)	0.264 (0.441)	0.245 (0.431)	0.258 (0.438)	0.234 (0.424)	0.230 (0.422)	0.258 (0.438)	0.264 (0.441)	0.263 (0.440)	0.255 (0.436)
Income quartile 4	0.258 (0.437)	0.252 (0.434)	0.231 (0.422)	0.231 (0.422)	0.234 (0.424)	0.224 (0.418)	0.253 (0.435)	0.252 (0.434)	0.261 (0.440)	0.249 (0.433)	0.259 (0.434)	0.250 (0.433)
Male	0.533 (0.499)	0.520 (0.500)	0.513 (0.500)	0.512 (0.500)	0.503 (0.501)	0.496 (0.500)	0.583 (0.494)	0.553 (0.498)	0.630 (0.483)	0.605 (0.489)	0.508 (0.500)	0.513 (0.500)
Age 18-29	0.310 (0.463)	0.306 (0.461)	0.366 (0.482)	0.364 (0.482)	0.365 (0.482)	0.341 (0.475)	0.448 (0.498)	0.452 (0.498)	0.406 (0.491)	0.394 (0.490)	0.453 (0.498)	0.444 (0.497)
Age 30-49	0.523 (0.500)	0.520 (0.500)	0.422 (0.494)	0.420 (0.494)	0.432 (0.496)	0.462 (0.499)	0.423 (0.495)	0.422 (0.494)	0.443 (0.497)	0.463 (0.500)	0.420 (0.494)	0.412 (0.493)
Married	0.824 (0.381)	0.831 (0.374)	0.628 (0.484)	0.631 (0.482)	0.599 (0.491)	0.601 (0.490)	0.483 (0.501)	0.482 (0.500)	0.760 (0.444)	0.737 (0.441)	0.580 (0.494)	0.583 (0.494)
Number of children	1.696 (1.209)	1.682 (1.223)	1.526 (1.734)	1.527 (1.748)	0.979 (1.126)	0.971 (1.142)	1.375 (1.351)	1.395 (1.354)	3.440 (2.602)	3.534 (2.618)	0.980 (1.283)	1.013 (1.370)
N	767	818	887	840	384	446	534	564	670	726	590	604

Source: Pew Global Attitudes Project, 2005

Notes: Reflects the attitudes of adult Muslims (aged 18 and above)

Table 8: Ordered probit and binomial probit estimation results on support for suicide bombing among ordinary Muslims in Indonesia, 2005

	Ordered probit: Supports suicide bombing against civilians		Binomial probit: Supports suicide bombing against Westerners in Iraq	
	Basic	Extended	Basic	Extended
Primary education	-0.004 (0.149)	-0.007 (0.148)	-0.049 (0.170)	-0.043 (0.169)
Secondary education	-0.199 (0.153)	-0.204 (0.152)	-0.003 (0.171)	-0.078 (0.174)
Higher education	-0.717** (0.292)	-0.726** (0.291)	0.456* (0.263)	0.375 (0.271)
Income quartile 2	0.064 (0.138)	0.063 (0.138)	0.153 (0.143)	0.093 (0.144)
Income quartile 3	-0.086 (0.135)	-0.087 (0.135)	0.104 (0.136)	-0.015 (0.137)
Income quartile 4	0.134 (0.142)	0.132 (0.143)	0.070 (0.147)	-0.024 (0.153)
<i>Control variables</i>				
Political dissatisfaction		0.019 (0.064)		0.457** (0.068)
Male	0.094 (0.093)	0.093 (0.093)	0.065 (0.096)	0.038 (0.099)
Age 18-29	0.608** (0.164)	0.609** (0.163)	0.059 (0.157)	0.109 (0.159)
Age 30-49	0.553** (0.150)	0.553** (0.150)	0.083 (0.136)	0.142 (0.137)
Married	-0.039 (0.137)	-0.036 (0.136)	-0.113 (0.144)	-0.049 (0.147)
Number of children	0.064 (0.042)	0.062 (0.042)	0.027 (0.043)	-0.025 (0.044)
Constant			-0.729 (0.251)	-1.201 (0.263)
/Cut 1	0.998 (0.237)	1.016 (0.241)		
/Cut 2	1.554 (0.238)	1.573 (0.242)		
/Cut 3	2.569 (0.252)	2.587 (0.263)		
Regional controls	Yes	Yes	Yes	Yes
Pseudo R2	0.031	0.031	0.021	0.069
N	767		818	818

Source: Pew Global Attitudes Project, 2005

Notes: (1) * denotes statistical significance at the 5 percent level; ** denotes statistical significance at the 1 percent level; statistical significance based on z-values; (2) The analysis excludes “Don’t know/ Refused” responses. (3) “Below primary education” and “Income quartile 1 (the poorest)” are the excluded groups.

Table 9: Ordered probit and binomial probit estimation results on support for suicide bombing among ordinary Muslims in Jordan, 2005

	Ordered probit: Supports suicide bombing against civilians		Binomial probit: Supports suicide bombing against Westerners in Iraq	
	Basic	Extended	Basic	Extended
Primary education	0.198* (0.111)	0.206* (0.110)	0.294** (0.133)	0.481** (0.154)
Secondary education	0.359** (0.116)	0.366** (0.116)	0.490** (0.140)	0.411** (0.157)
Higher education	0.293* (0.176)	0.327* (0.173)	0.190 (0.209)	0.323 (0.259)
Income quartile 2	-0.156 (0.114)	-0.183 (0.114)	-0.318** (0.139)	-0.275* (0.153)
Income quartile 3	-0.290* (0.128)	-0.285 (0.127)	-0.482** (0.153)	-0.271 (0.176)
Income quartile 4	-0.562** (0.151)	-0.535 (0.150)	-0.904** (0.178)	-0.488** (0.212)
<i>Control variables</i>				
Political dissatisfaction		0.251** (0.063)		2.047** (0.167)
Male	0.040 (0.072)	0.036 (0.073)	0.084 (0.088)	0.137 (0.102)
Age 18-29	-0.429** (0.147)	-0.440 (0.146)	-0.578 (0.178)	-0.342* (0.199)
Age 30-49	-0.166 (0.103)	-0.172 (0.104)	-0.252 (0.131)	-0.215 (0.150)
Married	-0.219** (0.109)	-0.215 (0.107)	-0.390 (0.134)	-0.180 (0.150)
Number of children	-0.115** (0.028)	-0.111 (0.028)	-0.149 (0.035)	-0.129** (0.039)
Constant			1.054 (0.203)	-3.034 (0.382)
/Cut 1	-1.133 (0.158)	-0.825 (0.173)		
/Cut 2	-0.409 (0.154)	-0.097 (0.169)		
/Cut 3	0.658 (0.149)	0.988 (0.165)		
Regional controls	Yes	Yes	Yes	Yes
<i>Pseudo R2</i>	0.015	0.022	0.043	0.320
<i>N</i>	887	887	840	840

Source: Pew Global Attitudes Project, 2005

Notes: (1) * denotes statistical significance at the 5 percent level; ** denotes statistical significance at the 1 percent level; statistical significance based on z-values; (2) The analysis excludes “Don’t know/ Refused” responses. (3) “Below primary education” and “Income quartile 1 (the poorest)” are the excluded groups.

Table 10: Ordered probit and binomial probit estimation results on support for suicide bombing among ordinary Muslims in Lebanon, 2005

	Ordered probit: Supports suicide bombing against civilians		Binomial probit: Supports suicide bombing against Westerners in Iraq	
	Basic	Extended	Basic	Extended
Primary education	-0.145 (0.195)	-0.177 (0.197)	-0.069 (0.228)	-0.293 (0.276)
Secondary education	-0.139 (0.213)	-0.189 (0.212)	-0.240 (0.212)	-0.521* (0.304)
Higher education	-0.271 (0.260)	-0.343 (0.260)	-0.135 (0.288)	-0.373 (0.377)
Income quartile 2	-0.028 (0.168)	0.028 (0.169)	0.279 (0.179)	0.405* (0.210)
Income quartile 3	0.104 (0.176)	0.125 (0.174)	0.379** (0.188)	0.683** (0.229)
Income quartile 4	-0.052 (0.221)	-0.038 (0.219)	0.406* (0.240)	0.810** (0.308)
<i>Control variables</i>				
Political dissatisfaction		0.299** (0.072)		1.667** (0.132)
Male	-0.111 (0.114)	-0.136 (0.115)	0.182 (0.121)	-0.015 (0.149)
Age 18-29	0.185 (0.178)	0.192 (0.181)	0.221 (0.205)	0.364 (0.249)
Age 30-49	0.239 (0.160)	0.218 (0.159)	0.105 (0.183)	0.307 (0.228)
Married	-0.141 (0.143)	-0.128 (0.145)	0.136 (0.155)	0.106 (0.190)
Number of children	-0.106* (0.057)	-0.098* (0.055)	0.009 (0.062)	0.053 (0.076)
Constant			-0.494 (0.250)	-2.958 (0.380)
/Cut 1	-0.635 (0.212)	-0.302 (0.225)		
/Cut 2	0.112 (0.210)	0.457 (0.223)		
/Cut 3	0.692 (0.213)	1.056 (0.224)		
Regional controls	Yes	Yes	Yes	Yes
<i>Pseudo R2</i>	0.021	0.036	0.036	0.408
<i>N</i>	384	384	446	446

Source: Pew Global Attitudes Project, 2005

Notes: (1) * denotes statistical significance at the 5 percent level; ** denotes statistical significance at the 1 percent level; statistical significance based on z-values; (2) The analysis excludes “Don’t know/ Refused” responses. (3) “Below primary education” and “Income quartile 1 (the poorest)” are the excluded groups.

Table 11: Ordered probit and binomial probit estimation results on support for suicide bombing among ordinary Muslims in Morocco, 2005

	Ordered probit: Supports suicide bombing against civilians		Binomial probit: Supports suicide bombing against Westerners in Iraq	
	Basic	Extended	Basic	Extended
Primary education	-0.122 (0.163)	-0.164 (0.165)	0.072 (0.148)	0.091 (0.149)
Secondary education	-0.102 (0.184)	-0.137 (0.188)	0.180 (0.172)	0.189 (0.173)
Higher education	-0.091 (0.274)	-0.096 (0.272)	0.162 (0.241)	0.150 (0.242)
Income quartile 2	0.153 (0.192)	0.152 (0.195)	-0.162 (0.162)	-0.151 (0.164)
Income quartile 3	0.424** (0.197)	0.400** (0.200)	-0.249 (0.179)	-0.245 (0.182)
Income quartile 4	0.336* (0.214)	0.346 (0.217)	-0.212 (0.203)	-0.191 (0.206)
<i>Control variables</i>				
Political dissatisfaction		0.234** (0.091)		0.284** (0.085)
Male	0.158 (0.126)	0.158 (0.130)	0.212 (0.113)	0.226** (0.113)
Age 18-29	0.298 (0.246)	0.284 (0.244)	0.206 (0.210)	0.239 (0.207)
Age 30-49	0.427* (0.219)	0.456** (0.219)	0.160 (0.183)	0.207 (0.180)
Married	-0.138 (0.169)	-0.167 (0.171)	-0.023 (0.152)	-0.038 (0.151)
Number of children	-0.025 (0.051)	-0.023 (0.050)	-0.032 (0.050)	-0.027 (0.050)
Constant			0.103 (0.263)	-0.341 (0.292)
/Cut 1	1.211 (0.303)	1.511 (0.334)		
/Cut 2	1.451 (0.308)	1.754 (0.338)		
/Cut 3	1.828 (0.314)	2.135 (0.345)		
Regional controls	Yes	Yes	Yes	Yes
Pseudo R2	0.030	0.037	0.033	0.048
N	534	534	551	564

Source: Pew Global Attitudes Project, 2005

Notes: (1) * denotes statistical significance at the 5 percent level; ** denotes statistical significance at the 1 percent level; statistical significance based on z-values; (2) The analysis excludes “Don’t know/ Refused” responses. (3) “Below primary education” and “Income quartile 1 (the poorest)” are the excluded groups.

Table 12: Ordered probit and binomial probit estimation results on support for suicide bombing among ordinary Muslims in Pakistan, 2005

	Ordered probit: Supports suicide bombing against civilians		Binomial probit: Supports suicide bombing against Westerners in Iraq	
	Basic	Extended	Basic	Extended
Primary education	-0.108 (0.110)	-0.144 (0.110)	-0.155 (0.123)	-0.195 (0.124)
Secondary education	-0.154 (0.166)	-0.194 (0.168)	-0.091 (0.192)	-0.106 (0.191)
Higher education	-0.436** (0.179)	-0.488** (0.183)	-0.254 (0.201)	-0.270 (0.201)
Income quartile 2	-0.040 (0.139)	-0.040 (0.138)	-0.089 (0.153)	-0.088 (0.151)
Income quartile 3	-0.179 (0.139)	-0.181 (0.139)	-0.285 (0.153)	-0.278* (0.153)
Income quartile 4	-0.316** (0.154)	-0.332** (0.155)	0.018 (0.181)	0.012 (0.181)
<i>Control variables</i>				
Political dissatisfaction		0.113* (0.069)		0.179** (0.080)
Male	0.280** (0.099)	0.283** (0.099)	0.811** (0.115)	0.783** (0.115)
Age 18-29	-0.096 (0.151)	-0.099 (0.150)	0.102 (0.176)	0.115 (0.177)
Age 30-49	0.085 (0.139)	0.079 (0.139)	0.041 (0.160)	0.035 (0.160)
Married	0.104 (0.123)	0.112 (0.122)	0.245* (0.148)	0.266 (0.149)
Number of children	-0.017 (0.022)	-0.018 (0.022)	-0.023 (0.023)	-0.025 (0.023)
Constant			-0.936** (0.271)	-1.150** (0.286)
/Cut 1	0.003 (0.220)	0.093 (0.225)		
/Cut 2	0.595 (0.219)	0.686 (0.224)		
/Cut 3	1.097 (0.218)	1.190 (0.224)		
Regional controls	Yes	Yes	Yes	Yes
Pseudo R2	0.036	0.038	0.111	???
N	670	670	726	726

Source: Pew Global Attitudes Project, 2005

Notes: (1) * denotes statistical significance at the 5 percent level; ** denotes statistical significance at the 1 percent level; statistical significance based on z-values; (2) The analysis excludes “Don’t know/ Refused” responses. (3) “Below primary education” and “Income quartile 1 (the poorest)” are the excluded groups.

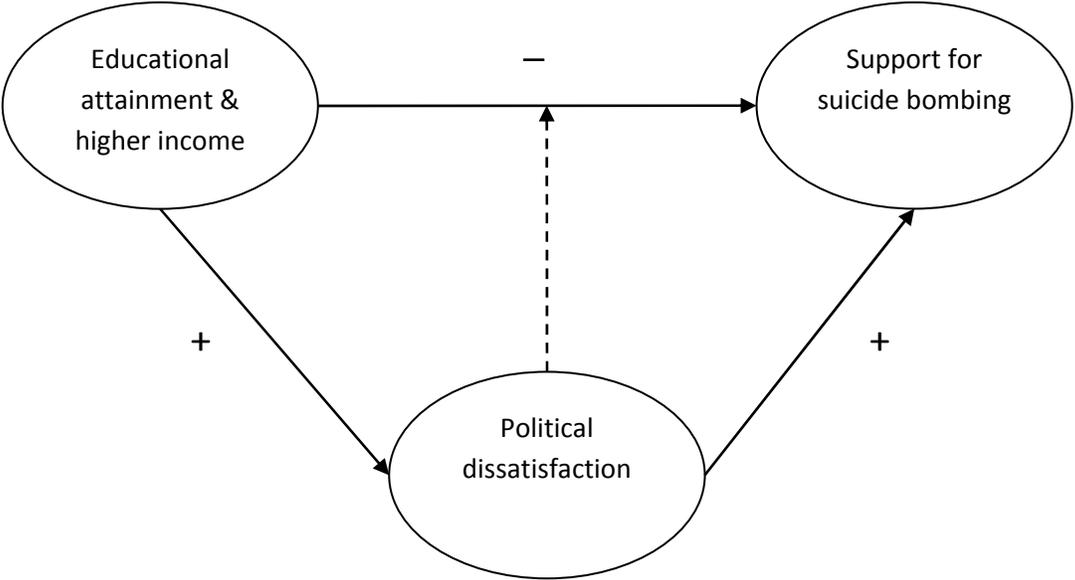
Table 13: Ordered probit and binomial probit estimation results on support for suicide bombing among ordinary Muslims in Turkey, 2005

	Ordered probit: Supports suicide bombing against civilians		Binomial probit: Supports suicide bombing against Westerners in Iraq	
	Basic	Extended	Basic	Extended
Primary education	-0.268 (0.229)	-0.269 (0.230)	0.038 (0.256)	0.095 (0.253)
Secondary education	-0.285 (0.245)	-0.285 (0.245)	0.073 (0.270)	0.093 (0.266)
Higher education	-0.320 (0.295)	-0.321 (0.296)	0.008 (0.322)	0.051 (0.318)
Income quartile 2	0.220 (0.174)	0.220 (0.174)	-0.069 (0.161)	-0.056 (0.161)
Income quartile 3	-0.167 (0.180)	-0.167 (0.180)	0.029 (0.173)	0.037 (0.174)
Income quartile 4	-0.308 (0.222)	-0.309 (0.223)	-0.401* (0.218)	-0.397* (0.217)
<i>Control variables</i>				
Political dissatisfaction		-0.006 (0.077)		0.209** (0.087)
Male	0.170 (0.114)	0.169 (0.114)	0.280** (0.118)	0.263** (0.118)
Age 18-29	0.318 (0.202)	0.319 (0.203)	0.148 (0.202)	0.217 (0.202)
Age 30-49	0.198 (0.185)	0.198 (0.185)	0.169 (0.182)	0.197 (0.180)
Married	0.093 (0.154)	0.092 (0.154)	0.084 (0.157)	0.103 (0.157)
Number of children	-0.023 (0.053)	-0.023 (0.054)	0.041 (0.044)	0.037 (0.044)
Constant			-0.962** (0.339)	-1.302** (0.359)
/Cut 1	0.628 (0.328)	0.621 (0.349)		
/Cut 2	1.020 (0.327)	1.012 (0.349)		
/Cut 3	1.874 (0.319)	1.866 (0.343)		
Regional controls	Yes	Yes	Yes	Yes
Pseudo R2	0.061	0.061	0.074	0.082
N	590	590	604	604

Source: Pew Global Attitudes Project, 2005

Notes: (1) * denotes statistical significance at the 5 percent level; ** denotes statistical significance at the 1 percent level; statistical significance based on z-values; (2) The analysis excludes “Don’t know/ Refused” responses. (3) “Below primary education” and “Income quartile 1 (the poorest)” are the excluded groups.

Figure 1: Conceptual model of the direct and indirect effects of educational attainment and income on support for suicide bombing



Note: Dashed line represents a mediating effect which reduces the extent to which education and income discourage support for suicide bombing.

Appendix Table 1: Ordered probit estimation results on political dissatisfaction among ordinary Muslims, 2005—*civilians* sample

	Indonesia	Jordan	Lebanon	Morocco	Pakistan	Turkey
Primary education	0.271* (0.157)	-0.063 (0.106)	0.131 (0.251)	0.323** (0.137)	0.520** (0.105)	-0.192 (0.259)
Secondary education	0.522** (0.158)	-0.030 (0.115)	0.213 (0.266)	0.339** (0.148)	0.540** (0.143)	0.079 (0.267)
Higher education	0.900** (0.262)	-0.257 (0.196)	0.336 (0.311)	0.144 (0.215)	0.685** (0.180)	0.118 (0.299)
Income quartile 2	0.017 (0.125)	0.200* (0.121)	-0.301* (0.175)	-0.101 (0.144)	-0.021 (0.126)	-0.227 (0.143)
Income quartile 3	0.168 (0.114)	-0.048 (0.136)	-0.167 (0.186)	0.113 (0.168)	0.048 (0.133)	-0.176 (0.150)
Income quartile 4	0.226* (0.131)	-0.221 (0.164)	-0.134 (0.232)	-0.107 (0.184)	0.263* (0.160)	-0.266 (0.189)
<i>Control variables</i>						
Male	0.071 (0.083)	0.015 (0.077)	0.114 (0.123)	-0.019 (0.103)	-0.012 (0.094)	-0.130 (0.099)
Age 18-29	0.078 (0.129)	0.028 (0.151)	0.040 (0.190)	0.170 (0.184)	0.077 (0.147)	0.017 (0.168)
Age 30-49	0.056 (0.114)	0.016 (0.114)	0.100 (0.170)	-0.137 (0.152)	0.096 (0.137)	-0.159 (0.153)
Married	-0.159 (0.129)	-0.046 (0.116)	-0.018 (0.152)	0.211 (0.143)	-0.111 (0.120)	-0.132 (0.136)
Number of children	0.073* (0.038)	-0.041 (0.031)	-0.080 (0.066)	-0.010 (0.049)	0.030 (0.020)	-0.045 (0.041)
/Cut 1	-0.382 (0.227)	-1.460 (0.170)	-0.689 (0.252)	-1.081 (0.227)	-0.370 (0.231)	-1.438 (0.308)
/Cut 2	0.920 (0.228)	0.373 (0.168)	0.187 (0.248)	0.314 (0.230)	1.048 (0.236)	-0.082 (0.303)
Regional controls	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R2	0.034	0.013	0.055	0.027	0.047	0.036
N	767	887	384	534	670	590

Source: Pew Global Attitudes Project, 2005

Notes: (1) * denotes statistical significance at the 5 percent level; ** denotes statistical significance at the 10 percent level; statistical significance based on z-values; (2) The analysis excludes “Don’t know/ Refused” responses. (3) “Below primary education” and “Income quartile 1 (the poorest)” are the excluded groups.

Appendix Table 2: Ordered probit estimation results on political dissatisfaction among ordinary Muslims, 2005—Iraq sample

	Indonesia	Jordan	Lebanon	Morocco	Pakistan	Turkey
Primary education	-0.018 (0.142)	-0.048 (0.129)	0.195 (0.210)	-0.052 (0.135)	0.340** (0.102)	-0.563** (0.223)
Secondary education	0.271* (0.144)	0.295** (0.135)	0.134 (0.219)	0.021 (0.152)	0.110 (0.149)	-0.259 (0.236)
Higher education	0.335 (0.227)	-0.084 (0.192)	0.101 (0.284)	0.124 (0.200)	0.070 (0.166)	-0.467* (0.267)
Income quartile 2	0.190* (0.117)	-0.187 (0.146)	0.001 (0.176)	-0.101 (0.148)	0.037 (0.124)	-0.143 (0.140)
Income quartile 3	0.389** (0.114)	-0.546** (0.168)	-0.082 (0.180)	-0.081 (0.160)	0.014 (0.130)	-0.025 (0.151)
Income quartile 4	0.373** (0.124)	-0.965** (0.189)	-0.144 (0.229)	-0.187 (0.178)	0.178 (0.155)	-0.022 (0.188)
<i>Control variables</i>						
Male	0.112 (0.082)	0.009 (0.091)	0.270** (0.118)	-0.054 (0.099)	0.277** (0.090)	0.186* (0.101)
Age 18-29	-0.073 (0.133)	-0.544** (0.176)	-0.037 (0.207)	-0.180 (0.192)	-0.143 (0.144)	-0.479** (0.169)
Age 30-49	-0.126 (0.116)	-0.115 (0.139)	-0.158 (0.174)	-0.287* (0.175)	0.038 (0.133)	-0.196 (0.158)
Married	-0.214* (0.131)	-0.525** (0.147)	0.087 (0.154)	0.117 (0.127)	-0.184 (0.118)	-0.140 (0.135)
Number of children	0.180** (0.035)	-0.111** (0.034)	-0.021 (0.058)	-0.044 (0.044)	0.039** (0.019)	0.028 (0.039)
/Cut 1	-0.405 (0.225)	-2.438 (0.239)	-0.512 (0.237)	-1.687 (0.226)	-0.843 (0.227)	-1.658 (0.267)
/Cut 2	0.741 (0.226)	-1.745 (0.229)	0.057 (0.238)	-0.220 (0.218)	0.520 (0.224)	-0.351 (0.265)
Regional controls	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R2	0.038	0.044	0.060	0.010	0.037	0.0781
N	818	840	446	564	726	604

Source: Pew Global Attitudes Project, 2005

Notes: (1) * denotes statistical significance at the 5 percent level; ** denotes statistical significance at the 10 percent level; statistical significance based on z-values; (2) The analysis excludes “Don’t know/ Refused” responses. (3) “Below primary education” and “Income quartile 1 (the poorest)” are the excluded groups.

¹ Figures come from The Brookings Institution's monthly report "Iraq Index" for 1 October 2007, available online at <http://www.brookings.edu/saban/iraq-index.aspx> (accessed June 4, 2008).

² We define suicide bombing as events in which terrorists actually killed themselves rather than events in which they fought to death. The private and social costs of suicide bombings are fewer than those of civil wars, homicides or traffic accidents (Englehart and Kurzman 2006).

³ U.S. Presidents George W. Bush and Bill Clinton, First Lady Laura Bush, Former Vice President Al Gore, previous British Prime Minister Tony Blair, and Nobel Laureates Muhammad Yunus, the Dalai Lama and Eli Wiesel all believe that lack of education, low income, or both are the main causes of terrorism. In a literature review titled "What do we really know about (suicide) terrorism?" Goodwin (2006) never mentions education or schooling. Similarly, Hoffman (2006) provides a thorough discussion on how policymakers can respond to suicide bombings but his prescriptions do not involve formal education for the public. Those who deal with education only focus on the education of perpetrators, not the general public (e.g. Hussain 2001; Bergen and Pandey 2005). Nasra Hussain's ethnographic study supports a direct link between education and willingness to participate in suicide bombings. After investigating the profiles of around 250 suicide bombers and their handlers shortly after 9/11, she finds that "none of them were uneducated, desperately poor, simple-minded, or depressed. Many were middle class, and unless they were fugitives, held paying jobs" (Hussain 2001). Reporters Peter Bergen and Swati Pandey conclude after investigating the backgrounds of 75 terrorists involved in attacks against Westerners that 53 percent had attended college ("The Madrassa Myth," *The New York Times*, 14 June 2005, available at <<http://www.nytimes.com/2005/06/14/opinion/14bergen.html>> (accessed June 4, 2008).

⁴ "US image up slightly, but still negative," Report from the Pew Global Attitudes Project, June 2005, Available at < <http://pewglobal.org/reports/display.php?PageID=803>> (accessed June 4, 2008).

⁵ The purchasing power adjusted per-capita incomes in 2005 for the countries are as follows: Indonesia: \$4232; Jordan: \$5542; Lebanon: \$5457; Morocco: \$4956; Pakistan: \$2722; Turkey: \$9107. Source: World Economic Outlook Database for April 2007 (International Monetary Fund 2007). Available at <<http://imf.org/external/pubs/ft/weo/2007/01/data/index.aspx>> (accessed June 4, 2008).

⁶Jonathan Finer and Naseer Mehdawi, "Bombings Kill Over 50 At 3 Hotels In Jordan: Coordinated Attack in Amman Linked to Zarqawi's Network," *Washington Post*, Thursday, November 10, 2005; Page A01, available at <<http://www.washingtonpost.com/wp-dyn/content/article/2005/11/09/AR2005110901185.html>> (accessed June 4, 2008).

⁷ Sources: "Terror blasts rock Casablanca" *BBC News*, Saturday, 17 May, 2003, online at <<http://news.bbc.co.uk/2/hi/africa/3035803.stm>> (accessed June 4, 2008). Two bombers attack U.S. targets in Morocco," *Reuters*, Sat Apr 14, 2007, available online at <<http://www.reuters.com/article/latestCrisis/idUSL14471151>> (accessed June 4, 2008). "Moroccan Village Funnels Suicide Bombers to Iraq," *NPR Morning Edition*, April 25, 2007, available online at <<http://www.npr.org/templates/story/story.php?storyId=9814476>> (accessed June 4, 2008). "Major incidents of Terrorism-related violence in Pakistan, 1988-2008," *SATP*, available at <<http://www.satp.org/satporgtp/countries/pakistan/database/majorincidents.htm>> (accessed June 4, 2008).

⁸ "Major incidents of Terrorism-related violence in Pakistan, 1988-2008," *SATP*, available at <<http://www.satp.org/satporgtp/countries/pakistan/database/majorincidents.htm>> (accessed June 4, 2008).

⁹ "Turkey says suicide bomber carried out attack: Hints of Kurdish involvement as police determine source of Ankara blast," Associated Press, May 23, 2007, available at <<http://www.msnbc.msn.com/id/18817425/>> (accessed June 4, 2008).

¹⁰ A number of political scientists argue that economic development and poverty alleviation reduce public support for violent contention (Burgoon 2006; Gurr 1970; Cragin and Chalk 2003). A closely aligned argument is that free trade and its resulting income gains reduces public support for terrorism (Li and Schaub 2004; McDonald 2004).

¹¹ The specific PGAP dataset is the publicly available *Spring 2005 17-Nation Survey*, including surveys on Canada, China, France, Germany, Great Britain, India, Indonesia, Jordan, Lebanon, Morocco, Netherlands, Pakistan, Poland, Russia, Spain, Turkey, and the United States. We exclude the samples from countries with a small share of Muslims (Canada, China, France, Germany, Great Britain, India, Netherlands, Poland, Russia, Spain, and the United States) because there are no questions on suicide bombing. Instead, we use the samples from predominantly Muslim countries. The data set is available at <<http://pewglobal.org/datasets>>. The PGAP is funded by the Pew Charitable Trusts and the William and Flora Hewlett Foundation. The Pew Research Center describes the PGAP as “a series of worldwide public opinion surveys that encompasses a broad array of subjects ranging from people’s assessments of their own lives to their views about the current state of the world and important issues of the day. More than 150,000 interviews in 54 countries have been conducted as part of the project's work.”

¹² Those without primary education become slightly less represented while those with secondary education are better represented. Those who believe that Islam is under threat are better represented. Women become better represented. Finally, those who have a very favorable opinion of the U.S. are less represented and those with very unfavorable opinion of the U.S. gain. We do not believe that these changes justify the adoption of a weighting scheme. The sample informs us that the countries have a young population with almost 40 percent of adults between 18 and 29. For more descriptive statistics, see the Pew PGAP Report, “Arab and Muslim Perceptions of the United States,” by Andrew Kohut, November 10, 2005, available online at

<<http://pewresearch.org/pubs/6/arab-and-muslim-perceptions-of-the-united-states>> (accessed June 4, 2008).

¹³ The dataset does not code for Muslim sect (Sunni or Shi`a) but the numbers seem to mask a sectarian divide with Lebanese Shi`a supporting such attacks more than their Sunni counterparts. Respondents from regions with more Shi`a than Sunnis (South and Bekaa) believe that suicide bombings targeting civilians are “often justified” in greater numbers (24.4%) than respondents from areas that are mostly Sunni or mixed (North and West Beirut at 13%). While respondents from all Muslim regions are more supportive of bombings against foreigners in Iraq, respondents from Shi`a areas also find such attacks “justifiable” in greater numbers than respondents from mostly Sunni or mixed regions (64.6% versus 48.7%). Sectarian differences are probably at work here as well. The strong Shi`a ideological mobilization under the banner of Hizballah has created a large block of Lebanese Shi`a with a consistent set of attitudes that both view the United States as effectively threatening Islam and identifies with other Shi`a in Iraq and the Islamic Republic of Iran (Hamzeh 2004, Norton 2007).