

# The Effect of Political Violence on Religiosity: Evidence from Israel\*

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## Abstract

This paper studies how politically-motivated violence associated with the Israeli-Palestinian conflict affects religiosity among Jews and Muslims in Israel. Using data from comprehensive social surveys and relying on geographical and temporal variation in violence intensity to identify causal effects, the analysis yields robust evidence that violence makes both Jews and Muslims self-identify as more religious. Based on analysis of data from other surveys, I argue that via its effects on religiosity, politically-motivated violence may adversely influence Arab-Jewish relations inside Israel and the prospects of peace between Israel and its neighbors.

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# 1 Introduction

Religion is a key aspect of individual and group identity which has shaped human relations since the dawn of civilization. A large social science literature demonstrates that religion and religiosity are linked to attitudes, behaviors and outcomes.<sup>1</sup> A separate literature studies the effect of the economic and political environment on religion and religiosity. This literature has tended to focus on long-term forces, such as modernization and economic development, that might lead to a decline in religiosity and even to the disappearance of religion as a major force in human relations.<sup>2</sup>

There has been relatively little rigorous research, however, on the causal effect of shorter term fluctuations in the environment on religiosity (and through it on various outcomes of interest). Studies which credibly estimate such effects include Gruber and Hungerman (2008) who show that the repeal of U.S. state laws that prohibit retail activity on Sunday lead to a fall in religious attendance<sup>3</sup>, Clingingsmith, Khwaja and Kremer (2009) who find that performing the Hajj pilgrimage to Mecca affects the attitudes of Pakistani pilgrims (e.g. increasing belief in peace and in equality and harmony among adherents of different religions), Chen (2007, 2010) who finds that the Indonesian financial crisis in the late 1990s increased religious intensity among Muslims in that country, and Gould and Klor (2012) who find that post-9/11 hate crimes directed at Muslims had an adverse effect on the assimilation of Muslim immigrants in the United States. This paper contributes to this literature by analyzing how variation in the intensity of the Israeli-Palestinian conflict affects religiosity among Jews and Muslims in Israel and highlights some potential implications of this result.

The case of Israel is particularly interesting for several reasons. First, compared to other countries with a similar level of economic development, in Israel religion plays a relatively more important role in shaping culture and politics. Second, for Jews, who make up around eighty percent of the country's population, religion and ethnicity practically overlap; for Muslims, who account for about seventeen percent of the population, there is a very tight relationship between religion and ethnicity: virtually all Muslim Israelis are Arab and more than eighty percent of Arabs are Muslim. Third, the Israeli-Palestinian conflict – and the wider Arab-Israeli conflict – has a strong religious component. For example, the most ex-

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<sup>1</sup>Classic treatments of this subject are contained in Smith (1776) and Weber (1920). For more recent contributions see, for example, Akerlof and Kranton (2010), Barro and McCleary (2003), Guiso, Sapienza, and Zingales (2003), Lehrer (2011) and Sen (2006).

<sup>2</sup>For a discussion of this literature see Iannaccone (1998).

<sup>3</sup>Gruber and Hungerman (2008) go on to show that the laws' repeal lead to an increase in drinking and drug use. Gerber, Gruber, and Hungerman (2008), Cohen-Zada and Sander (2011), and Lee (forthcoming) use the same source of exogenous shock to study causal effects on, respectively, political participation, happiness, and educational attainment.

treme Palestinian organizations involved in the conflict, such as Hamas, have an Islamist agenda. Similarly, as I demonstrate in Section 4, among Jewish Israelis religiosity is strongly associated with hard-line views toward the Palestinians.

The Israeli–Palestinian conflict is characterized by low-intensity warfare. In particular, in the last two decades it mainly involved on the Palestinian side sporadic attacks against civilian and military targets inside Israel and in the Occupied Territories (the West Bank and the Gaza Strip). This paper builds on the exogenous nature of the temporal and geographical variation in the intensity of this form of politically-motivated violence to identify the causal effect of the political environment on religiosity.

The analysis, which covers the period 2002–2010, relies on comprehensive interview-based social surveys conducted by the Israeli Central Bureau of Statistics. The surveys contain, among other things, questions on religion and religiosity. Using (confidential) information on interview date and location, I link the surveys to detailed self-collected data on Israeli fatalities from politically-motivated violence associated with the Israeli-Palestinian conflict.

I find robust evidence that political violence makes both Jewish and Muslim Israelis identify themselves as more religious. The main regression specifications show that, all else being equal, a *single* additional fatality from politically-motivated violence in the vicinity of the survey participant’s locality in the 30 days preceding the interview lowers the likelihood that a Jewish survey participant will self-identify as secular by 0.30 percentage points (0.7 percent); the corresponding figure for Muslims is 0.35 percentage points (3.1 percent). This result is consistent with theory and lab evidence according to which salience of group membership enhances social identification.

To highlight some potential implications of these findings, I analyze data from surveys examining political attitudes in Israel, focusing on the attitudes of Jewish participants. The analysis provides robust evidence that secular survey participants hold more tolerant attitudes toward Arab Israelis and exhibit greater optimism regarding the possibility of a peaceful resolution of the Israeli-Palestinian and Arab-Israeli conflicts. This suggests that via its effect on religiosity, political violence may (1) increase tensions between Israel’s main ethnic groups and (2) heighten hostility between Israel and its neighbors.

The first suggested effect is consistent with recent empirical findings on the effect of violence on inter-ethnic relations in Israel. For example, Shayo and Zussman (2011) study ingroup bias using data from Israeli small claims courts during 2000–2004, where the assignment of a case to an Arab or Jewish judge is essentially random. They find evidence for judicial ingroup bias and demonstrate that the bias is strongly associated with the intensity of politically-motivated violence in the vicinity of the court in the period preceding the ruling. Similarly, analyzing a dataset covering the universe of private owner transactions in the

Israeli market for used cars during 1998-2010, Zussman (2012) finds robust evidence that escalations in politically-motivated violence lead to increased segregation between Israeli Arabs and Jews in the market for used cars.

The second suggested effect may help to shed new light on the nexus between religion and conflict. A large literature studies the role of religion in ethnic conflicts, civil wars, and other forms of politically-motivated violence.<sup>4</sup> This literature generally treats religiosity as exogenously given. However, as this paper demonstrates in the context of the Israeli-Palestinian conflict, religiosity may be endogenous to the level of violence. Thus, the paper's main findings highlight a potential feedback mechanism which could exacerbate violent conflict.

Before moving on, I briefly discuss two potential shortcomings of this paper. First, the main outcome variable in the analysis is the survey participant's self-reported degree of religiosity rather than an objective measure of the participant's religious behavior (e.g. frequency of prayer). Unfortunately, except for the one conducted in 2009, the social surveys do not collect information on objective measures of religiosity. As I report in the next section, however, analysis of the 2009 survey data establishes conclusively that for both Jews and Muslims there is a very tight association between the self-reported degree of religiosity and objective measures of religious behavior.

Second, one might argue that the effect estimated in this paper between violence and religiosity does not reflect changing perceptions of identity but rather fear of death. Indeed, a large literature studies the relationship between religiosity and fear of death using individual level survey data; some of this research finds a non-linear cross-sectional association between the two variables: fear of death is highest for the moderately religious.<sup>5</sup> However, the finding in this paper that the effect of violence on religiosity is stronger for Muslims than for Jews is inconsistent with the fear of death explanation. This is because Palestinian attacks were targeted almost exclusively at Jewish targets. Additional indirect evidence against the fear of death explanation comes from a survey which asked participants to what extent they are concerned about being injured by Arabs; analyzing the data I find no evidence of a relationship between fear of injury and religiosity, either when conditioning on other factors or not.<sup>6</sup>

The rest of the paper is organized as follows. The next section describes the main sources of data used in the analysis. Section 3 examines the effect of political violence on religiosity.

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<sup>4</sup>See, for example, Berman (2009).

<sup>5</sup>See Neimeyer, Wittkowski, and Moser (2004) for a review of this literature.

<sup>6</sup>The analysis is based on the Israeli National Election Study survey of 2009 (described in further details below), which contained the following question "to what extent are you worried that you or your family members may be injured by Arabs in your daily lives?"; since Muslim survey participants were not asked to define their degree of religiosity, the analysis is restricted to Jewish participants.

In Section 4 I use data from additional surveys to explore the relationship between religiosity and attitudes pertaining to inter-ethnic relations in Israel and to relations between Israel and its neighbors. Section 5 provides concluding remarks.

## 2 Data

The main part of the analysis relies on two data sources. The first is Israeli social surveys, currently available for all years from 2002 to 2010. The social survey is conducted throughout the year with an in-person interview by employees of the Israeli Central Bureau of Statistics. It covers annually a randomly-selected sample of roughly 7,000 individuals aged 20 or older who are not institutionalized. The sampled individuals vary by year, i.e. this is not a panel. Like similar cross-sectional surveys in other countries (e.g. the General Social Survey in the United States and the European Social Survey), the Israeli social survey collects detailed data on participants' socio-demographic and economic characteristics as well as on their attitudes on various issues.

For the purposes of this study the most relevant questions in the survey are those that ask the participant about her or his religion and degree of religiosity. In terms of religion, participants can choose among the following five options: Jewish, Muslim, Christian, Druze<sup>7</sup>, and other. According to the latest official figures, the shares of these groups in total population are the following: Jews - 75.6%; Muslims - 16.6%; Christian - 2.1%; Druze - 1.6%; others - 4.1% (almost all members of the last group are immigrants from the former Soviet Union who are not officially recognized as Jews but in practice identify themselves as Jewish).

To describe their degree of religiosity, Jewish survey participants can choose among the following five options: (1) ultra-orthodox ("haredi"); (2) religious ("dati"); (3) traditional ("masorti")/religious; (4) traditional/not particularly religious; (5) not religious/secular ("hiloni"). Muslim survey participants can choose among the following four options: (1) very religious; (2) religious; (3) not particularly religious; (4) not religious. In the analysis that follows I define as secular Jews and Muslims who chose the last option available to them (5 and 4, respectively).

The second main data source used in the analysis is a self-constructed dataset on politically-motivated violence. It contains information on all Israeli civilian and security forces fatalities from politically-motivated violence since January 1, 1997. For each fatality there is information about the date and location of the relevant fatal incident. The fatalities dataset combines information from several sources: B'Tselem, the Israeli Information Center for Hu-

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<sup>7</sup>The Druze religion has its roots in the Ismailism school of Shia Islam; the Druze community in Israel is officially recognized as a separate religious entity.

man Rights in the Occupied Territories; The Israeli Ministry of Foreign Affairs; the Israeli National Insurance Institute; and the Israeli Ministry of Defense.

To link the two datasets I rely on restricted-use data provided by the Central Bureau of Statistics on the date and location in which each of the social survey interviews was conducted. This information enables me to establish the intensity of violence around a particular survey location during a particular period preceding the survey date.

## 3 The Effect of Political Violence on Religiosity

### 3.1 Broad Patterns

I begin the analysis by presenting some broad patterns concerning religiosity and politically-motivated violence. Table 1 displays, for Jews and Muslims separately, the distribution of the self-reported degree of religiosity. The share of secular survey participants out of the total over the entire 2002-2010 period was much higher for Jews (44 percent) than for Muslims (11 percent). Figure 1 displays the share of seculars in each quarter during this period.<sup>8</sup> For both religious groups the share of seculars exhibits a (statistically significant) downward trend: on average, the share declines by 0.18 percentage points per year for Jews and by 0.30 percentage points for Muslims.

[Table 1A]

[Table 1B]

[Figure 1]

This downward trend in secularism, or rise in religiosity, likely reflects long-term demographic factors. For both Jews and Muslims the fertility rate is substantially higher among the non-secular population, a pattern which works to decrease the share of seculars over time. The main goal of this paper is not to account for the observed long-term trend in religiosity but rather to test whether shorter-term, possibly region-specific, fluctuations in the share of seculars are related to temporal and geographical variation in the intensity of violence.

To what extent do the secular and the non-secular differ in their religious practices? Table 2 addresses this question by reporting, for Jews and Muslims separately, the distribution of prayer practices by the self-reported degree of religiosity. Data come from the 2009 social

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<sup>8</sup>The figure does not display the share of seculars among Muslims in the first quarter of 2002 because there were only 15 survey observations for Muslims in that quarter (while on average there were 210 survey observations for Muslims in all other quarters; the minimum number of observations in these quarters was 104).

survey which focused on religion and religiosity. The table establishes that there is a very tight link between the self-reported degree of religiosity and prayer practices. Especially noteworthy is the large difference found for both religious groups between the secular and the “not particularly religious” in the share of those who never pray. This difference is particularly large for Muslims. However, as Appendix Table 1 demonstrates, the secular/non-secular dichotomy among Jews is just as striking when one examines the observance of other key Jewish religious practices.

[Table 2]

Figure 2 reveals substantial temporal variation in the number of Israeli civilian and security forces fatalities from politically-motivated violence. The intensity of violence was especially high in early 2002, at the height of the Second Intifada (which erupted in the fall of 2000), and declined sharply later. The Second Lebanon war (July-August 2006) saw another peak in the number of Israeli fatalities.<sup>9</sup> Overall, from the first quarter of 2002 to the fourth quarter of 2010 there were 1,106 Israeli fatalities – roughly 1.8 fatalities per 100,000 population per year on average – 62 percent of them civilian.<sup>10</sup> As Appendix Table 2 demonstrates, the number of Israeli fatalities was characterized not only by temporal variation but also by geographical variation. During the period under investigation the number of fatalities was especially high in the West Bank and the Gaza Strip and in the Jerusalem area.

[Figure 2]

### 3.2 Econometric Analysis

I now turn to an econometric analysis of the effect of violence intensity, as captured by the number of Israeli fatalities from politically-motivated violence, on religiosity. Relying on the temporal and geographical variation in the number of fatalities to identify the causal effect of political violence on religiosity, I estimate the following model separately for Jews and Muslims:

$$Secular_i = \alpha + \beta Fatalities_{it} + \gamma_l + \delta_t + \Gamma' X_i + \varepsilon_i, \quad (1)$$

where  $Secular_i$  is an indicator variable that takes the value of 1 if survey participant  $i$  self-identified as secular and the value of 0 otherwise;  $Fatalities_{it}$  is the number of civilian

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<sup>9</sup>The Second Lebanon War was not directly related to the Israeli-Palestinian conflict and thus fatalities from this war should possibly be distinguished from other fatalities. I return to this issue below.

<sup>10</sup>To put these figures in perspective, the September 11, 2001 attacks in the United States led to almost 3,000 fatalities, or about 1.1 fatalities per 100,000 population in that year.

Israeli fatalities from politically-motivated violence in the sub-district surrounding the survey participant’s locality in the 30 days preceding the survey date (the number of fatalities was divided by 100 for ease of exposition)<sup>11</sup>;  $\gamma_l$  is a fixed-effect for the sub-district surrounding the survey participant’s locality;  $\delta_t$  includes a linear time trend (to capture long-term demographic factors) and sets of indicators for the month and day of week of the survey interview;  $X_i$  is a vector of participant characteristics which includes sets of indicators for gender, age group, marital status, number of children, highest educational degree, continent of birth, father’s continent of birth, health status, income, and employment status; and  $\varepsilon_i$  is a well-behaved error term. The model is estimated by OLS (i.e. I use a linear probability model). I focus on the coefficient  $\beta$  which measures the marginal effect of an additional fatality on the likelihood that the survey participant will self-identify as secular.

The results presented in column 1 of Table 3 indicate that, all else being equal, a single additional civilian fatality from politically-motivated violence in the sub-district surrounding the survey participant’s locality in the 30 days preceding the interview lowers the likelihood that a Jewish survey participant will self-identify as secular by 0.30 percentage points. Since during the period under investigation 44 percent of Jewish survey participants self-identified as secular, this represents a 0.7 percent decline.

**[Table 3]**

The results presented in column 2 indicate that a single additional civilian fatality from politically-motivated violence in the sub-district surrounding the survey participant’s locality in the 30 days preceding the interview lowers the likelihood that a Muslim survey participant will self-identify as secular by 0.35 percentage points. Since during the period under investigation 11 percent of Muslim survey participants self-identified as secular, this represents a 3.1 percent decline.

Considering that some regions of the country experienced bouts of high-intensity violence during the period under investigation – the maximum value of the main explanatory variable in the analysis is 0.3, i.e. 30 civilian fatalities in a sub-district in a 30 days window – it seems fair to conclude that, for both Jews and Muslims, the effect of violence on religiosity is quite large.

Tables 4A (Jews) and 4B (Muslims) test the robustness of the baseline results to several changes in the specification of Equation (1). To facilitate comparison, column 1 in each table replicates the results of the baseline specification (Table 1). The reaction of Israelis to

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<sup>11</sup>The Israeli Central Bureau of Statistics divides the country into districts and sub-districts. Currently there are 7 districts and 25 sub-districts. The fatalities data are aggregated to the sub-district level, except for the West Bank and the Gaza Strip, where due to data limitations all fatalities are assigned to a single sub-district. I return to this issue below.



security forces fatalities may differ from their reaction to civilian fatalities – e.g. because the latter are perceived as an illegitimate target of politically-motivated violence. To examine this issue, in column 2 of both tables violence intensity is measured with total (civilian and security forces) fatalities instead of civilian fatalities only. The results show a noteworthy difference between Jews and Muslims. For the former group the effect of total fatalities on religiosity is weaker – in both size and statistical significance – than the effect of civilian fatalities. In contrast, for the latter group the two effects are almost identical in size.

[Table 4A]

[Table 4B]

In column 3 of both tables I exclude from the analysis survey participants residing in the West Bank and the Gaza Strip. I do so for two reasons. First, as mentioned above, unlike in other areas, all fatalities in the West Bank and the Gaza Strip were assigned to a single sub-district. Second, as shown in Table 1, the West Bank and the Gaza Strip saw an especially large number of fatalities from politically-motivated violence during the period under investigation; this may have undue influence on the analysis. As the results in column 3 indicate, however, excluding this set of observations from the regressions has only a minor effect on the size and statistical significance of the coefficients of interest.

As shown in Figure 2, the number of fatalities reached two peaks in the period examined here: one in the second quarter of 2002 and the other during the Second Lebanon War in July-August 2006. To examine whether these periods have an undue influence on the results, I exclude them in turn from the analysis. An additional possible reason for the exclusion of the Second Lebanon War period from the analysis is that the war may be viewed as not directly related to the Israeli-Palestinian conflict. On the other hand, the war was part of the wider Arab-Israeli conflict and had a religious aspect to it as it was waged, on the Lebanese side, by Hezbollah, an Islamic militant group. The results (columns 4 and 5 of tables 4A and 4B) indicate that excluding these periods from the analysis has only a small effect on the coefficients of interest.

As an additional robustness check I analyze the effect of violence on religiosity by estimating Equation (1) using Ordered Probit, replacing the indicator variable  $Secular_i$  with an ordinal variable capturing the degree of religiosity. This variable can take five values for Jews and four values for Muslims; in both cases a *lower* value is associated with a *greater* degree of self-identified religiosity. The results, presented in Appendix Table 3, indicate again that violence makes both Jews and Muslims more religious.

Does the effect of politically-motivated violence on religiosity decrease with distance from the location of the fatal incident? So far the analysis has focused on the immediate vicinity

of the seller’s locality – the sub-district. To explore the role of geographical distance, I re-estimate Equation (1) using fatalities suffered in increasingly larger areas surrounding the seller’s locality: sub-district, district, and “country-wide” – the last category includes the West Bank and the Gaza Strip. Results are presented in Table 5.

For both Jewish and Muslim survey participants I find that the effect of conflict intensity on religiosity decays with distance. For Jews, the marginal negative effect of an additional fatality on the likelihood that the survey participant will self-identify as secular declines from 0.30 to 0.09 percentage points when using fatalities suffered country-wide instead of at the sub-district level. For Muslims, the marginal effect of violence on religiosity ceases to be significant. The results therefore suggest that physical distance mitigates the effect of conflict on religiosity. Nevertheless, at least for Jews, the effect does not completely disappear even when using the entire country as the area of reference.

[Table 5]

So far the analysis has examined the effect of violence intensity on religiosity using a short, 30 days, window. This naturally raises the question whether the effect of violence is persistent. To answer this question, I re-estimate Equation (1) using windows of increasing length: the 30, 180, and 360 days preceding the interview date. The results are presented in Table 6.

For both Jewish and Muslim survey participants, I find that the effect of violence on religiosity decays with window length. For Jews, the marginal negative effect of an additional fatality on the likelihood that the survey participant will self-identify as secular declines from 0.30 to 0.05 percentage points when using a 360 days window instead of a 30 days window. For Muslims, the marginal negative effect declines from 0.35 to 0.04 percentage points. The results therefore suggest that temporal distance has a mitigating influence on the effect of violence on religiosity. Nevertheless, the effect does not completely disappear even when using a one year window.

[Table 6]

## 4 Religiosity and Attitudes

What are the implications of the finding that political violence increases religiosity? In this section I explore two possible implications: one concerning inter-ethnic relations inside Israel and the other concerning relations between Israel and its neighbors. Since the social surveys do not collect the relevant information, I need to turn to other surveys in order to perform

the analysis. Unfortunately, none of the surveys that deal with such issues is conducted, like the social surveys, around the year, every year, with such a large number of participants. It is thus impossible to replicate the type of analysis carried out in the previous section – relying on high-frequency temporal variation as well as geographical variation in violence intensity – in order to explore directly the effect of violence on attitudes. Instead, I use two less comprehensive surveys to analyze the cross-sectional association between religiosity and attitudes.

To explore the association between religiosity and attitudes concerning inter-ethnic relations inside Israel, I use survey data from Zussman (forthcoming). The survey, which targeted sellers and buyers in the Israeli market for used cars, was conducted between August 2009 and April 2011 and had two parts. The first collected information on the socio-demographic characteristics of the participants (including religion and religiosity) while the second elicited survey participants’ attitudes toward members of the outgroup. By design, the vast majority of survey participants were Jewish and thus the focus here will be on them. It needs to be emphasized that although the survey targeted participants in the market for used cars, its results were consistent with those obtained in recent surveys exploring Arab-Jewish relations in Israel using a sample representative of the country’s population (e.g. Arian *et al.*, 2010, Smooha, 2010, Ali and Inbar, 2011, and Hermann *et al.*, 2011).

Table 7 displays the distribution of Jewish survey participants’ attitudes and views toward Arab Israelis. Nearly 60 percent of the participants agreed (strongly or otherwise) with the statement that Arabs are more violent than Jews while 36 percent agreed with the statement that Arabs are more likely to cheat than Jews. Around one half agreed with the statements that Arabs have lower natural intelligence than Jews, that they do not want to live in the same building with Arabs, that Jews and Arabs should be separated in recreational areas, and that there should be a law prohibiting cross-ethnicity marriages.<sup>12</sup>

[Table 7]

To find out whether Jewish survey participants’ attitudes vary with their degree of religiosity I estimate, separately for each attitude statement, the following equation:

$$Attitude_i = \alpha + \beta Secular_i + \Theta' Z_i + \delta_t + \mu_i, \tag{2}$$

where  $Attitude_i$  is the extent of agreement – in a scale of 1 to 4, where 1 indicates strong disagreement and 4 indicates strong agreement – expressed by the survey participant with

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<sup>12</sup>Appendix Table 4 displays the distribution of Muslim participants’ attitudes and views toward Jews. These attitudes seem more favorable than those expressed by Jews toward Arabs. However, given the very small number of survey observations these results should be interpreted with care.

a particular (negative) statement concerning Arab Israelis;  $Secular_i$  is an indicator variable that takes the value of 1 if survey participant  $i$  self-identified as secular and the value of 0 otherwise;  $Z_i$  is a vector of other socio-demographic characteristics of survey participant  $i$ ;  $\delta_t$  includes a linear time trend and a set of indicators for month and day of week; and  $\mu_i$  is a well-behaved error term. The equation is estimated using Ordered Probit. In order to facilitate comparison across attitudes, the analysis is restricted to those participants who responded to all the attitude statements.

The results, presented in Table 8, indicate a strong association between religiosity and attitudes: secular survey participants hold significantly more favorable attitudes toward Arab Israelis than non-secular participants. This tight link suggests that political violence may, through its influence on religiosity, have an adverse effect on inter-ethnic relations in Israel. As noted in the introduction, this prediction is consistent with the findings in Shayo and Zussman (2011) and Zussman (2012).<sup>13</sup>

[Table 8]

To explore the association between religiosity and attitudes concerning relations between Israel and its neighbors, I use survey data from the Israel National Election Study survey of 2009.<sup>14</sup> The survey, based on a national sample, was conducted by the Research Institute of Tel Aviv University between January 15, 2009 and February 5, 2009, just prior to the February 10, 2009 Israeli general elections. Among the issues covered by the survey were participants' views toward the Israeli-Palestinian and Arab-Israeli conflicts. The survey also collected some socio-demographic data. Since only Jewish participants were asked to define their degree of religiosity, I restrict the analysis to them.

Table 9 displays the distribution of survey participants' responses to three questions concerning the Israeli-Palestinian and Arab-Israeli conflicts. About 54 percent of the participants thought that Israel should agree to the establishment of a Palestinian state in Judea, Samaria, and the Gaza Strip as part of a permanent peace agreement; however, only 31 of the participants believed that it would be possible to reach such an agreement with the Palestinians. The response to the third question shows that a large share of Israelis expressed

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<sup>13</sup>Appendix Table 5 replicates the analysis for Muslim survey participants. Despite the very limited number of available survey observations, the results provide some evidence that secular Muslims hold more favorable attitudes toward Jews than non-secular Muslims.

<sup>14</sup>Previous research has examined this relationship in the Israeli context. For a comprehensive discussion of this literature see Gould and Klor (2010), who find that terrorism has had a nonlinear effect on the willingness of Israelis to grant territorial concessions to the Palestinians: the effect is positive for low levels of terrorism but negative for high levels of terrorism. Gould and Klor (2010) and other contributions to this literature do not deal with the possibility – explored here – that the effect of violence may be mediated through changes in the strength of religiosity.

a belief that the Arabs (meaning Arab countries) have maximalist goals in their conflict with Israel: fully 54 percent believed that the Arabs' final goal is to conquer the state of Israel and eliminate a significant part of its Jewish population.

[Table 9]

To find out whether survey participants' attitudes toward the Israeli-Palestinian and Arab-Israeli conflicts vary with their degree of religiosity, I estimate, separately for each question, an equation similar to Equation (2). The results, presented in Table 10, indicate again a strong and highly statistically significant association: secular survey participants are more likely than the non-secular to support the establishment of a Palestinian state as part of a peace agreement, are more optimistic than the non-secular regarding the prospects of peace with the Palestinians, and tend to believe less strongly than the non-secular that the Arabs have maximalist goals. These findings suggests that politically-motivated violence may, via its influence on religiosity, have an adverse effect on the prospects of peace between Israel and its neighbors.

[Table 10]

## 5 Conclusion

A vast social science literature studies religion and religiosity. However, there has been relatively little rigorous research on the causal effect of short-term fluctuations in the political environment on religiosity. This paper contributes to the literature by analyzing how variation in the intensity of the Israeli-Palestinian conflict affects the strength of religiosity among Jews and Muslims in Israel.

The analysis, which covers the period 2002-2010, relies on comprehensive social surveys which contain, among other things, questions on religion and religiosity. Using (confidential) information on interview date and location, I link the surveys to detailed self-collected data on Israeli fatalities from politically-motivated violence associated with the Israeli-Palestinian conflict. The exogenous nature of the temporal and geographical variation in violence intensity facilitates credible identification of the causal effect of the environment on religiosity.

I find robust evidence that political violence makes both Jewish and Muslim Israelis identify themselves as more religious. The main regression specifications show that, all else being equal, a *single* additional fatality from politically-motivated violence in the vicinity of the survey participant's locality in the 30 days preceding the interview lowers the likelihood that a Jewish survey participant will self-identify as secular by 0.7 percent; the corresponding

figure for Muslims is 3.1 percent. Considering that some regions of the country experienced bouts of high-intensity violence during the period under investigation, these effects – which are consistent with theory and lab evidence according to which salience of group membership enhances social identification – seem quite large.

To highlight potential implications of these findings, I analyze data from surveys examining political attitudes in Israel. The analysis provides robust evidence that secular survey participants hold more tolerant attitudes toward Arab Israelis and exhibit greater optimism regarding the possibility of a peaceful resolution of the Israeli-Palestinian and Arab-Israeli conflicts. This suggests that via its effect on religiosity, political violence may increase tensions between Israel's main ethnic groups – a prediction which is consistent with recent empirical findings on the effect of violence on inter-ethnic relations in Israel – and may also heighten hostility between Israel and its neighbors. Thus, by demonstrating that religiosity may be endogenous to the level of violence, the paper's main findings point to a potential feedback mechanism which could exacerbate violent conflict.

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**APPENDIX TABLE 1: RELIGIOSITY AND OBSERVANCE OF JEWISH RELIGIOUS PRACTICES**

		Observance of practice				
		Very strict	Strict	Lax	Not observed	
Keep Kosher diet	Ultra-orthodox <sup>*</sup>	1.00	0.00	0.00	0.00	494
	Religious <sup>*</sup>	1.00	0.00	0.00	0.00	716
	Traditional/Religious	0.81	0.17	0.02	0.01	772
	Traditional/Not particularly religious	0.43	0.35	0.14	0.08	1,507
	Not religious/Secular	0.10	0.16	0.18	0.55	2,541
Hold Kiddush on eve of Sabbath	Ultra-orthodox <sup>*</sup>	1.00	0.00	0.00	0.00	494
	Religious <sup>*</sup>	1.00	0.00	0.00	0.00	716
	Traditional/Religious	0.88	0.06	0.02	0.04	771
	Traditional/Not particularly religious	0.56	0.16	0.06	0.21	1,509
	Not religious/Secular	0.16	0.15	0.08	0.61	2,546
Fast on Yom Kippur	Ultra-orthodox <sup>*</sup>	1.00	0.00	0.00	0.00	494
	Religious <sup>*</sup>	1.00	0.00	0.00	0.00	716
	Traditional/Religious	0.91	0.08	0.01	0.01	738
	Traditional/Not particularly religious	0.75	0.14	0.05	0.06	1,372
	Not religious/Secular	0.27	0.13	0.13	0.47	2,370

*Source.* Israeli Central Bureau of Statistics, 2009 Social Survey.

*Notes.* The table reports the distribution of strictness in the observance of three key Jewish religious practices by self-identified degree of religiosity.

<sup>\*</sup> “Ultra-orthodox” and “religious” survey participants were not asked about their observance of these practices.

**APPENDIX TABLE 2: ISRAELI FATALITIES FROM POLITICAL VIOLENCE  
BY DISTRICT AND YEAR**

Year	Type	Jerusalem	North	Haifa	Center	Tel Aviv	South	WB & GS	Lebanon	Total
2002	Civilian	84	18	42	55	16	0	81	0	296
	Total	88	22	75	57	17	7	186	0	452
2003	Civilian	59	6	37	5	28	1	21	0	157
	Total	61	8	39	14	32	2	60	0	216
2004	Civilian	19	0	0	1	3	33	17	0	73
	Total	22	4	0	1	4	33	54	0	118
2005	Civilian	2	0	8	9	5	3	18	0	45
	Total	2	1	8	10	5	3	26	0	55
2006	Civilian	1	28	17	1	11	2	9	0	69
	Total	1	45	17	1	11	4	13	98	190
2007	Civilian	0	0	0	0	0	6	2	0	8
	Total	0	0	0	0	0	6	8	0	14
2008	Civilian	12	0	0	0	0	12	2	0	26
	Total	14	0	0	0	0	18	5	0	37
2009	Civilian	1	1	0	1	0	0	2	0	5
	Total	1	1	0	1	0	0	10	0	13
2010	Civilian	2	0	0	0	0	1	4	0	7
	Total	2	0	0	0	0	1	8	0	11
	Civilian	180	53	104	72	63	58	156	0	684
	Total	191	81	139	84	69	74	370	98	1,106

*Sources.* B'Tselem, the Israeli Information Center for Human Rights in the Occupied Territories; The Israeli Ministry of Foreign Affairs; the Israeli National Insurance Institute; and the Israeli Ministry of Defense.

*Notes.* The table reports civilian and total (civilian and security forces) Israeli fatalities from politically-motivated violence by district and year of each fatal incident. "WB & GS" refers to the West Bank and the Gaza Strip.

**APPENDIX TABLE 3: EFFECT OF POLITICAL VIOLENCE ON RELIGIOSITY – AN ORDERED PROBIT ANALYSIS**

Dependent variable: <i>degree of religiosity</i>		
	Jews	Muslims
Fatalities	-0.639* (0.329)	-3.032*** (1.128)
Sub-district fixed effects	Yes	Yes
Time controls	Yes	Yes
Participant characteristics	Yes	Yes
Pseudo R <sup>2</sup>	0.139	0.099
Observations	54,059	7,392

*Sources.* Israeli Central Bureau of Statistics: Social Surveys, 2002-2010; information on fatalities from politically-motivated violence was collected by the author as described in the text.

*Notes.* “Degree of religiosity” can take 5 values for Jews and 4 values for Muslims; in both cases a *lower* value is associated with a *greater* degree of self-identified religiosity. “Fatalities” is the number of civilian Israeli fatalities from politically-motivated violence in the sub-district surrounding the survey participant’s locality in the 30 days preceding the survey date. Fatalities figures were divided by 100 for ease of exposition. “Time controls” include a linear time trend and sets of indicators for the month and day of week of the survey interview. “Participant characteristics” include sets of indicators for gender, age group, marital status, number of children, highest educational degree, continent of birth, father’s continent of birth, health status, income, and employment status.

Estimated by Ordered Probit. Robust standard errors, clustered by sub-district, in parentheses.

\*, \*\*, \*\*\* represent statistical significance at the 10, 5, and percent levels.

**APPENDIX TABLE 4: DISTRIBUTION OF ATTITUDES OF MUSLIMS TOWARD JEWISH ISRAELIS**

Statement	Share of total				N
	Strongly disagree	Somewhat disagree	Agree	Strongly agree	
	(1)	(2)	(3)	(4)	(5)
The Jews in Israel are more violent than the Arabs	0.438	0.297	0.203	0.063	64
The Jews in Israel are more likely to cheat than the Arabs	0.328	0.359	0.234	0.078	64
The Jews in Israel have lower natural intelligence than the Arabs	0.444	0.413	0.095	0.048	63
I would not want to live in the same building with a Jewish neighbor	0.790	0.113	0.081	0.016	62
Arabs and Jews should be separated in recreational areas <sup>1</sup>	0.771	0.066	0.049	0.115	61
There should be a law prohibiting marriages between Arabs and Jews	0.721	0.213	0.016	0.049	61

*Source.* Zussman (forthcoming); see text for details.

*Notes.* The table reports the distribution of attitudes expressed by Muslim survey participants toward Jewish Israelis.

<sup>1</sup> The original term in Hebrew refers to places such as restaurants, coffee shops, bars and clubs as well as to outdoor venues such as beaches and parks.

**APPENDIX TABLE 5: SECULARITY AND ATTITUDES OF MUSLIMS TOWARD JEWISH ISRAELIS**

Dependent variable	Violence	Cheating	Intelligence	Neighbors	Segregation	Marriage
	(1)	(2)	(3)	(4)	(5)	(6)
Secular	-1.282 <sup>***</sup> (0.385)	-0.943 <sup>**</sup> (0.437)	0.454 (0.374)	-0.462 (0.516)	-0.275 (0.523)	0.503 (0.551)
Other participant characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Time controls	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R <sup>2</sup>	0.228	0.195	0.186	0.223	0.161	0.285
Observations	56	56	56	56	56	56

*Source.* Zussman (forthcoming); see text for details.

*Notes.* The dependent variable in each column is the extent of agreement – in a scale of 1 to 4, where 1 indicates strong disagreement and 4 indicates strong agreement – expressed by Muslim survey participants with a particular (negative) statement concerning Jewish Israelis. See Appendix Table 4 for full text of statements. “Other participant characteristics” include gender, age, an indicator for Bedouin survey participants, a set of indicators for highest educational degree, a set of indicators for marital status, number of children, and a set of indicators for income level. “Time controls” include a linear time trend.

Estimated using Ordered Probit. Standard errors in parentheses.

\*, \*\*, \*\*\* represent statistical significance at the 10, 5, and percent levels.

**TABLE 1A: DISTRIBUTION OF RELIGIOSITY – JEWS**

	Ultra-orthodox	Religious	Traditional/Religious	Traditional/Not particularly religious	Not religious/Secular	N
2002	0.05	0.10	0.13	0.29	0.43	5,744
2003	0.06	0.09	0.12	0.28	0.45	6,074
2004	0.08	0.09	0.12	0.27	0.45	6,356
2005	0.06	0.10	0.13	0.25	0.46	6,090
2006	0.07	0.10	0.14	0.25	0.44	5,911
2007	0.07	0.09	0.13	0.26	0.44	5,962
2008	0.08	0.10	0.14	0.26	0.42	5,885
2009	0.08	0.12	0.13	0.25	0.42	6,037
2010	0.08	0.09	0.13	0.24	0.44	6,000
Total	0.07	0.10	0.13	0.26	0.44	54,059

*Source.* Israeli Central Bureau of Statistics: Social Surveys, 2002-2010.

*Notes.* The table reports the distribution of self-identified degree of religiosity for Jewish survey participants.

**TABLE 1B: DISTRIBUTION OF RELIGIOSITY – MUSLIMS**

	Very religious	Religious	Not particularly religious	Not religious	N
2002	0.11	0.55	0.21	0.13	706
2003	0.13	0.56	0.21	0.09	623
2004	0.10	0.55	0.21	0.14	745
2005	0.10	0.56	0.22	0.12	834
2006	0.06	0.54	0.26	0.14	866
2007	0.05	0.52	0.33	0.09	859
2008	0.07	0.53	0.31	0.10	897
2009	0.10	0.51	0.28	0.11	908
2010	0.10	0.62	0.18	0.10	954
Total	0.09	0.55	0.25	0.11	7,392

*Source.* Israeli Central Bureau of Statistics: Social Surveys, 2002-2010.

*Notes.* The table reports the distribution of self-identified degree of religiosity for Muslim survey participants.

**TABLE 2: RELIGIOSITY AND PRAYER PRACTICES**

		Do you pray?				N
		Always	Once in a while	Infrequently	Never	
Jews	Ultra-orthodox*	1.00	0.00	0.00	0.00	494
	Religious*	1.00	0.00	0.00	0.00	716
	Traditional/Religious	0.37	0.39	0.14	0.10	771
	Traditional/Not particularly religious	0.11	0.27	0.30	0.32	1,508
	Not religious/Secular	0.02	0.08	0.15	0.75	2,546
Muslims	Very religious	0.94	0.02	0.00	0.03	90
	Religious	0.77	0.13	0.03	0.07	471
	Not particularly religious	0.48	0.14	0.16	0.21	263
	Not religious	0.04	0.09	0.05	0.82	99

*Source.* Israeli Central Bureau of Statistics, 2009 Social Survey.

*Notes.* The table reports, for Jews and Muslims separately, the distribution of prayer practices by self-identified degree of religiosity.

\* “Ultra-orthodox” and “religious” Jewish survey participants were not asked about their prayer practices.



**TABLE 3: EFFECT OF POLITICAL VIOLENCE ON SECULARITY**

Dependent variable: <i>secular</i>		
	Jews	Muslims
Fatalities	-0.297*** (0.081)	-0.349** (0.133)
Sub-district fixed effects	Yes	Yes
Time controls	Yes	Yes
Participant characteristics	Yes	Yes
R <sup>2</sup>	0.221	0.142
Observations	54,059	7,392

*Sources.* Israeli Central Bureau of Statistics: Social Surveys, 2002-2010; information on fatalities from politically-motivated violence was collected by the author as described in the text.

*Notes.* “Secular” is an indicator variable that takes the value of 1 if the survey participant self-identified as secular and the value of 0 otherwise. “Fatalities” is the number of civilian Israeli fatalities from politically-motivated violence in the sub-district surrounding the survey participant’s locality in the 30 days preceding the survey date. Fatalities figures were divided by 100 for ease of exposition. “Time controls” include a linear time trend and sets of indicators for the month and day of week of the survey interview. “Participant characteristics” include sets of indicators for gender, age group, marital status, number of children, highest educational degree, continent of birth, father’s continent of birth, health status, income, and employment status.

Estimated by OLS. Robust standard errors, clustered by sub-district, in parentheses.

\*, \*\*, \*\*\* represent statistical significance at the 10, 5, and percent levels.

**TABLE 4A: ROBUSTNESS CHECKS – JEWS**

Dependent variable: <i>secular</i>					
	Baseline	Total fatalities	Excluding WB and GS	Excluding 2 <sup>nd</sup> quarter of 2002	Excluding Lebanon War period
	(1)	(2)	(3)	(4)	(5)
Fatalities	-0.297*** (0.081)	-0.198* (0.106)	-0.334*** (0.077)	-0.221** (0.098)	-0.288*** (0.084)
Sub-district fixed effects	Yes	Yes	Yes	Yes	Yes
Time controls	Yes	Yes	Yes	Yes	Yes
Participant characteristics	Yes	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.221	0.221	0.218	0.221	0.221
Observations	54,059	54,059	52,249	52,527	53,060

*Sources.* Israeli Central Bureau of Statistics: Social Surveys, 2002-2010; information on fatalities from politically-motivated violence was collected by the author as described in the text.

*Notes.* “Secular” is an indicator variable that takes the value of 1 if the survey participant self-identified as secular and the value of 0 otherwise. “Fatalities” is the number of Israeli fatalities from politically-motivated violence in the sub-district surrounding the survey participant’s locality in the 30 days preceding the survey date; in columns 1 and 3-5 the figure refers to civilians only while in column 2 it refers to civilians and members of the security forces. Fatalities figures were divided by 100 for ease of exposition. “Time controls” include a linear time trend and sets of indicators for the month and day of week of the survey interview. “Participant characteristics” include sets of indicators for gender, age group, marital status, number of children, highest educational degree, continent of birth, father’s continent of birth, health status, income, and employment status. In column 3 the analysis excludes survey participants residing in the West Bank and the Gaza Strip. In column 4 the analysis excludes the first quarter of 2002. In column 5 the analysis excludes the period of the Second Lebanon War (July 12, 2006 – August 14, 2006).

Estimated by OLS. Standard errors, clustered by sub-district, in parentheses.

\*, \*\*, \*\*\* represent statistical significance at the 10, 5, and percent levels.

**TABLE 4B: ROBUSTNESS CHECKS – MUSLIMS**

Dependent variable: <i>secular</i>					
	Baseline	Total fatalities	Excluding WB and GS	Excluding 2 <sup>nd</sup> quarter of 2002	Excluding Lebanon War period
	(1)	(2)	(3)	(4)	(5)
Fatalities	-0.349 ** (0.133)	-0.365 *** (0.066)	-0.340 ** (0.132)	-0.341 ** (0.129)	-0.503 ** (0.202)
Sub-district fixed effects	Yes	Yes	Yes	Yes	Yes
Time controls	Yes	Yes	Yes	Yes	Yes
Participant characteristics	Yes	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.142	0.142	0.141	0.140	0.142
Observations	7,392	7,392	7,389	7,371	7,242

*Sources.* Israeli Central Bureau of Statistics: Social Surveys, 2002-2010; information on fatalities from politically-motivated violence was collected by the author as described in the text.

*Notes.* “Secular” is an indicator variable that takes the value of 1 if the survey participant self-identified as secular and the value of 0 otherwise. “Fatalities” is the number of Israeli fatalities from politically-motivated violence in the sub-district surrounding the survey participant’s locality in the 30 days preceding the survey date; in columns 1 and 3-5 the figure refers to civilians only while in column 2 it refers to civilians and members of the security forces. Fatalities figures were divided by 100 for ease of exposition. “Time controls” include a linear time trend and sets of indicators for the month and day of week of the survey interview. “Participant characteristics” include sets of indicators for gender, age group, marital status, number of children, highest educational degree, continent of birth, father’s continent of birth, health status, income, and employment status. In column 3 the analysis excludes survey participants residing in the West Bank and the Gaza Strip. In column 4 the analysis excludes the first quarter of 2002. In column 5 the analysis excludes the period of the Second Lebanon War (July 12, 2006 – August 14, 2006).

Estimated by OLS. Standard errors, clustered by sub-district, in parentheses.

\*, \*\*, \*\*\* represent statistical significance at the 10, 5, and percent levels.

**TABLE 5: EFFECT OF VIOLENCE DECAYS WITH DISTANCE**

Dependent variable: <i>secular</i>						
Area	Jews			Muslims		
	Sub-district	District	Country-wide	Sub-district	District	Country-wide
Fatalities	-0.297*** (0.081)	-0.254*** (0.081)	-0.087*** (0.021)	-0.349** (0.133)	-0.067 (0.132)	0.066 (0.067)
Sub-district fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Time controls	Yes	Yes	Yes	Yes	Yes	Yes
Participant characteristics	Yes	Yes	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.221	0.221	0.221	0.142	0.142	0.142
Observations	54,059	54,059	54,059	7,392	7,392	7,392

*Sources.* Israeli Central Bureau of Statistics: Social Surveys, 2002-2010; information on fatalities from politically-motivated violence was collected by the author as described in the text.

*Notes.* “Secular” is an indicator variable that takes the value of 1 if the survey participant self-identified as secular and the value of 0 otherwise. “Fatalities” is the number of civilian Israeli fatalities from politically-motivated violence in increasingly larger areas surrounding the survey participant’s locality in the 30 days preceding the survey date. Fatalities figures were divided by 100 for ease of exposition. “Time controls” include a linear time trend and sets of indicators for the month and day of week of the survey interview. “Participant characteristics” include sets of indicators for gender, age group, marital status, number of children, highest educational degree, continent of birth, father’s continent of birth, health status, income, and employment status.

Estimated by OLS. Standard errors, clustered by sub-district, in parentheses.

, \*\*, \*\*\* represent statistical significance at the 10, 5, and percent levels.

**TABLE 6: EFFECT OF VIOLENCE DECAYS WITH TIME**

Dependent variable: <i>secular</i>						
	Jews			Muslims		
Window Length (in days)	30	180	360	30	180	360
Fatalities	-0.297*** (0.081)	-0.033 (0.042)	-0.052** (0.022)	-0.349** (0.133)	-0.068* (0.033)	-0.043* (0.023)
Sub-district fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Time controls	Yes	Yes	Yes	Yes	Yes	Yes
Participant characteristics	Yes	Yes	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.221	0.221	0.221	0.142	0.142	0.142
Observations	54,059	54,059	54,059	7,392	7,392	7,392

*Sources.* Israeli Central Bureau of Statistics: Social Surveys, 2002-2010; information on fatalities from politically-motivated violence was collected by the author as described in the text.

*Notes.* “Secular” is an indicator variable that takes the value of 1 if the survey participant self-identified as secular and the value of 0 otherwise. “Fatalities” is the number civilian Israeli fatalities from politically-motivated violence in the sub-district surrounding the survey participant’s locality in windows of increasing length (e.g. the shortest window includes the 30 days preceding the survey date). Fatalities figures were divided by 100 for ease of exposition. “Time controls” include a linear time trend and sets of indicators for the month and day of week of the survey interview. “Participant characteristics” include sets of indicators for gender, age group, marital status, number of children, highest educational degree, continent of birth, father’s continent of birth, health status, income, and employment status.

Estimated by OLS. Standard errors, clustered by sub-district, in parentheses.

\*, \*\*, \*\*\* represent statistical significance at the 10, 5, and percent levels.

**TABLE 7: ATTITUDES OF JEWS TOWARD ARAB ISRAELIS**

Statement	Share of total				N
	Strongly disagree	Somewhat disagree	Agree	Strongly agree	
	(1)	(2)	(3)	(4)	(5)
The Arabs in Israel are more violent than the Jews	0.181	0.222	0.300	0.297	3,584
The Arabs in Israel are more likely to cheat than the Jews	0.345	0.300	0.193	0.163	3,517
The Arabs in Israel have lower natural intelligence than the Jews	0.316	0.202	0.263	0.219	3,534
I would not want to live in the same building with an Arab Israeli neighbor	0.298	0.179	0.207	0.315	3,568
Jews and Arabs should be separated in recreational areas <sup>1</sup>	0.359	0.158	0.198	0.286	3,533
There should be a law prohibiting marriages between Jews and Arab Israelis	0.442	0.089	0.128	0.341	3,576

*Source.* Zussman (forthcoming); see text for details.

*Notes.* The table reports the distribution of attitudes expressed by Jewish survey participants toward Israeli Arabs.

<sup>1</sup> The original term in Hebrew refers to places such as restaurants, coffee shops, bars and clubs as well as to outdoor venues such as beaches and parks.

**TABLE 8: SECULARITY AND ATTITUDES OF JEWS TOWARD ARAB ISRAELIS**

Dependent variable	Violence	Cheating	Intelligence	Neighbors	Segregation	Marriage
	(1)	(2)	(3)	(4)	(5)	(6)
Secular	-0.317*** (0.044)	-0.352*** (0.044)	-0.379*** (0.044)	-0.453*** (0.045)	-0.390*** (0.045)	-0.730*** (0.048)
Other participant characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Time controls	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R <sup>2</sup>	0.040	0.032	0.048	0.039	0.060	0.105
Observations	2,988	2,988	2,988	2,988	2,988	2,988

*Source.* Zussman (forthcoming); see text for details.

*Notes.* The dependent variable in each column is the extent of agreement – in a scale of 1 to 4, where 1 indicates strong disagreement and 4 indicates strong agreement – expressed by Jewish survey participants with a particular (negative) statement concerning Arab Israelis. See Table 7 for full text of statements. “Other participant characteristics” include gender, age, new immigrant status (assigned to those who immigrated to Israel since 1989), a set of indicators for ethnic divisions within the Jewish community (based on continent of origin), a set of indicators for highest educational degree, a set of indicators for marital status, number of children, and a set of indicators for income level. “Time controls” include a linear time trend and a set of indicators for month and day of week.

Estimated using Ordered Probit. Standard errors in parentheses.

\*, \*\*, \*\*\* represent statistical significance at the 10, 5, and percent levels.

**TABLE 9: ATTITUDES OF JEWS TOWARD THE ISRAELI-PALESTINIAN  
AND ARAB-ISRAELI CONFLICTS**

In your opinion, should Israel agree or not agree to the establishment of a Palestinian state in Judea, Samaria, and the Gaza strip as part of a permanent peace agreement?				
1. Definitely should agree	2. I think it should agree	3. I think it should not agree	4. Definitely should not agree	N
0.196	0.345	0.149	0.310	945
In your opinion is it possible to reach a peace agreement with the Palestinians?				
1. Definitely it is	2. I think it is	3. I think not	4. Definitely not	N
0.049	0.264	0.307	0.381	983
In your opinion, what is the Arabs' final goal?				
1. To get back some of the territories that we conquered in the Six-Day War	2. To get back all of the territories that we conquered in the Six-Day War	3. To conquer the state of Israel	4. To conquer the state of Israel and eliminate a significant part of the Jewish population in Israel	N
0.118	0.147	0.196	0.540	928

*Source.* Israeli National Elections Study survey, 2009; see text for details.

*Notes.* The table reports the distribution of attitudes expressed by Jewish survey participants regarding the Israeli-Palestinian and Arab-Israeli conflicts.



**TABLE 10: SECULARITY AND ATTITUDES OF JEWS TOWARD THE ISRAELI-PALESTINIAN AND ARAB-ISRAELI CONFLICTS**

Dependent variable	Establishment of a Palestinian state	Possibility of peace with the Palestinian	Arab countries' goals are maximalist
	(1)	(2)	(3)
Secular	-0.665*** (0.092)	-0.375*** (0.089)	-0.442*** (0.093)
Other participant characteristics	Yes	Yes	Yes
Time controls	Yes	Yes	Yes
Pseudo R <sup>2</sup>	0.109	0.062	0.069
Observations	822	822	822

*Source.* Israeli National Elections Study survey, 2009 (Tel Aviv University); see text for details.

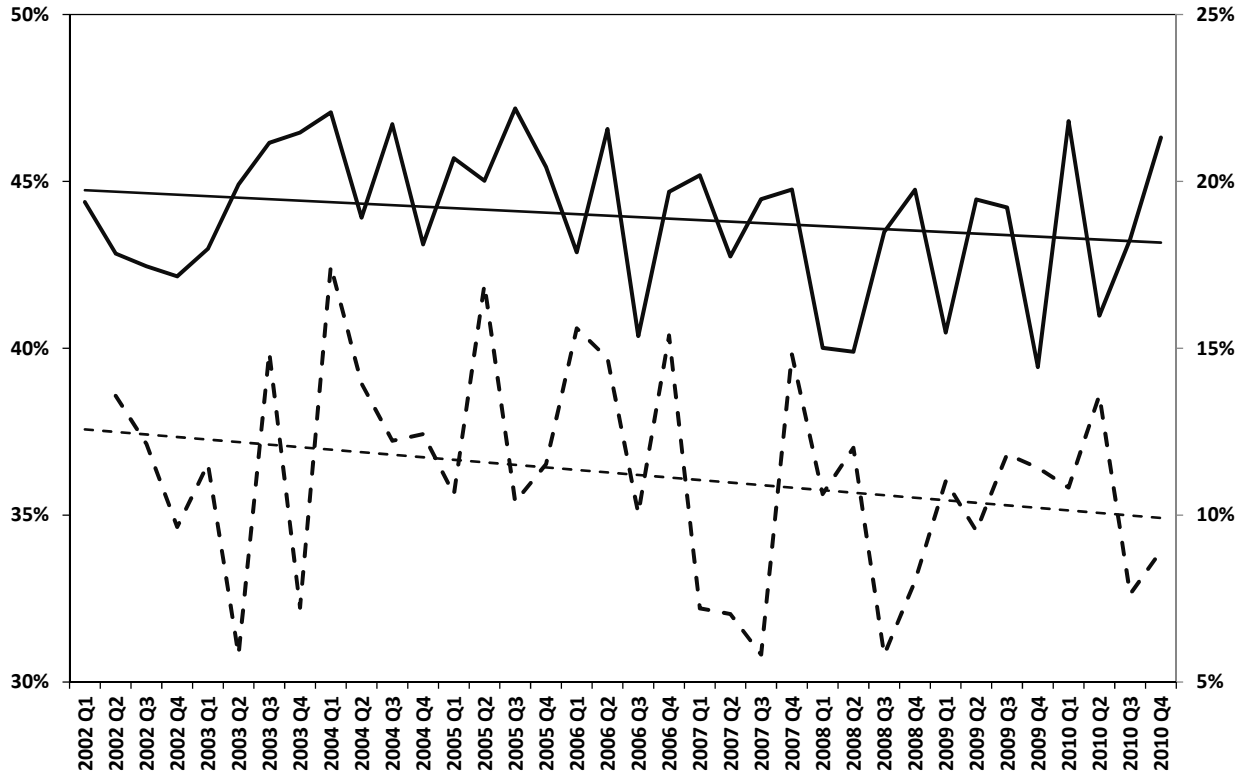
*Notes.* The dependent variable in each column is the survey participant's response to a particular question regarding the Israeli-Palestinian and Arab-Israeli conflicts. In each case there were four response options, where a lower value is associated with a more "pro-peace" attitude. See Table 9 for full text of questions and response options. "Other participant characteristics" include sets of indicators for gender, age group, new immigrant status (assigned to those who immigrated to Israel since 1989), continent of birth, father's continent of birth, education attainment, number of household members and income level. "Time controls" include a set of indicators for month and day of week.

Estimated using Ordered Probit. Standard errors in parentheses.

\*, \*\*, \*\*\* represent statistical significance at the 10, 5, and percent levels.

**FIGURE 1: SHARE OF SECULARS IN ISRAEL, 2002-2010**

— Jews (left axis)    - - Muslims (right axis)



**FIGURE 2: ISRAELI FATALITIES FROM POLITICAL VIOLENCE**

