LONG TERM EFFECTS OF POLITICAL VIOLENCE ON ATTITUDES: EVIDENCE FROM THE SECOND INTIFADA*

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Abstract: This paper studies the long-term effects of politically motivated violence on individuals' political attitudes focusing on the Second Intifada (2000 – 2005). We conduct a large-scale survey that measures Israelis' attitudes today and elicits their places of residence since 1985. The survey allows us to measure individuals' direct exposure to terrorism and to account for potential selective migration. This, in combination with the fact that individuals' characteristics are balanced with respect to their exposure to terrorism, enables us to overcome identification concerns and provide credible estimates of the causal effects of the Intifada on attitudes. The results indicate that exposure to terrorism during the Second Intifada caused a persistent and substantial shift toward right-wing attitudes that is still observable two decades later. Thus, our analysis provides systematic empirical evidence supporting the view that the Second Intifada soured a generation of Israelis on the idea of peace.

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1. Introduction

What are the long-term effects of politically-motivated violence on individuals' political attitudes? If a sudden and sharp increase in violence has only a transitory effect on individuals' attitudes, there is hope that in the future the adversaries may be able to reach a peaceful resolution of their conflict. If, on the contrary, a substantial spike in violence has a persistent effect on individuals' attitudes, a single event may shape the evolution, intensity, and duration of the conflict, potentially making it intractable. This makes systematic research on the long-term effects of violence on attitudes critical to our understanding of the evolution of conflicts around the world. Surprisingly, however, there is little research on this topic.

This paper helps fill the void by analyzing the long-term effects of terrorism on individuals' attitudes. We focus on the Second Palestinian uprising (Second Intifada, 2000-2005) – an event that saw a major surge in violence between Israelis and Palestinians – and study its effects on Israelis' attitudes eighteen years after it ended. Our results indicate that the Second Intifada caused a persistent and substantial shift toward right-wing attitudes that is still observable almost two decades later.

The literature on the impact of politically motivated violence on political attitudes focuses almost exclusively on short-term effects. A large number of these analyses study the Israeli-Palestinian conflict (e.g., Berrebi and Klor, 2006, 2008; Gould and Klor, 2010; Jaeger et al., 2012; Getmansky and Zeitzoff, 2014; Hirsch-Hoefler et al., 2016; Canetti et al., 2017; Elster, 2019). Similar approaches have been used to study the short-term effects of political violence on attitudes and voting behavior in Colombia (Weintraub, Vargas and Flores, 2015), Spain (Bali, 2007; Montalvo, 2011), Sudan (Beber, Roessler and Scacco, 2014), Turkey (Kibris, 2011; Aytaç and Çarkoğlu, 2021), and the U.S. (Karol and Miguel, 2007), among many other countries. Most of

these papers show that political violence tends to shift the population's preferences toward rightwing parties and against concessions to adversaries.¹

A new line of research on the Israeli-Palestinian conflict uses time-series analysis and survey data to study the effects of terrorism on political attitudes over a long period of time. Using data from 1980 until 2011, Peffley, Hutchison, and Shamir (2015) claim that terrorism reduces Israelis' political tolerance. Yakter and Harsgor (2023) study the evolution of attitudes of Israelis using data from 2001 until 2020. They argue that non-violent events, such as failed negotiations, have a more substantial role than violence in shaping attitudes.

There is a subtle yet important difference between the effects of repeated bouts of violence on attitudes over a long period of time and the long-term effects of violence on attitudes. To uncover the latter effect, one needs to estimate the direct link between exposure to violence in the distant past and attitudes today. None of the studies mentioned above establishes such a link.

Lupu and Peisakhin (2017) and Rozenas, Schutte, and Zhukov (2017) provide two notable studies on the long-term effects of violence on attitudes. Lupu and Peisakhin (2017) estimate the effects of the deportation of Crimean Tatars in 1944 on their descendants' attitudes 70 years later. Rozenas, Schutte and Zhukov (2017) analyze the long-term effects of the deportation of Western Ukrainians in the 1940s on election results in affected communities from 2004 to 2014. These studies focus on intergenerational effects of deportation by measuring the attitudes of individuals not directly exposed to the treatment. In contrast, our study estimates the long-term effects of political violence on political attitudes for individuals directly affected by terror attacks.²

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¹ See Godefroidt (2023) for a meta-analysis of this literature which includes about 325 studies from 1985 until 2020.

² While we are unaware of studies on the long-term effects of political violence on political attitudes within the affected individuals' lifetime, there are papers that examine the long-term effects of political violence on other outcomes of interest by linking exposure in the past to current behavior. For example, Shayo and Zussman (2017) find that exposure to terrorism during the Intifada was associated with the discriminatory behavior of judges years after it ended. Fisman et al. (2020) show that exposure to Hindu-Muslim violence leads to discriminatory lending practices by loan officers

The paucity of empirical evidence on the long-term effects of political violence on attitudes is not surprising. Estimating such an effect presents several challenges. Analyses that rely exclusively on time series data cannot credibly identify the long-term effects of spikes in violence on attitudes. This is because later events may also affect individuals' attitudes, casting doubt on the estimated correlation between violence and attitudes measured several years later. An alternative methodology might rely on spatial and temporal variation in exposure to violence. This approach has been applied to estimate the short-term effects of violence on attitudes using surveys or voting data clustered at some sub-national geographical level. The validity of this methodology relies on the assumption that individuals do not change their place of residence after exposure to violence and before their attitudes are measured.3 This assumption becomes tenuous when considering long horizons. A particular concern is related to the selective migration of the population over time. Individuals' migration decisions may be affected by the interaction between their political attitudes and past or anticipated future exposure to violence. If this is the case, a cross-locality correlation between attitudes and past exposure to violence may reflect selective migration rather than a causal long-term effect of violence on attitudes. To address this concern, one needs individual-level information on attitudes and voting patterns today and data on place of residence at the time of exposure (years in the past). Such data are generally unavailable.

In this paper, we overcome the aforementioned empirical challenges by designing a survey that measures individuals' attitudes today and elicits their places of residence from 1985 until 2023. For illustration purposes, we start our analysis using data from the Peace Index: a set of

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in Indian banks many years after exposure. Grossman, Manekin, and Miodownik (2015) show that exposure to combat among Israeli soldiers hardens attitudes toward the Palestinians and makes ex-combatants more likely to vote for hawkish parties some years later.

³ All the studies mentioned above use a window of one year or less between exposure to violence and measurement of attitudes.

public opinion surveys conducted monthly since 1994, which, in the aggregate, contains over 100,000 observations.⁴ These data allow us to capture overall patterns in individuals' attitudes across three main periods: before, during, and after the Second Intifada.

The Peace Index data indicate that the eruption of the Second Intifada in September 2000 brought about an immediate and dramatic increase in Israelis' opposition to peace negotiations with the Palestinians, and in the belief that such negotiations will not bring peace. These changes in individuals' attitudes remained almost unchanged after the end of the Intifada in February 2005, despite the dramatic decrease in violence to pre-Intifada levels. Interestingly, we find little heterogeneity in these patterns based on individual sociodemographic characteristics. The results are the same for subgroups defined by gender, education, ethnicity, religiosity, and age of exposure to violence.

The Peace Index data are in the form of repeated cross-sections; i.e., we observe different individuals in each survey. This means that while we can measure individuals' direct exposure to violence at a given point in time, we cannot follow the evolution of their preferences over time.

For the main causal analysis of this paper, we use the specially designed survey mentioned above. By eliciting individuals' history of locality of residence, the survey allows us to measure whether individuals' direct exposure to violence during the Second Intifada affected their political preferences twenty years later. The survey was conducted in January and February of 2023 and includes over 9,000 Israeli participants.⁵ It measures individuals' views regarding the Israeli-Palestinian conflict, political attitudes, and voting patterns. It also contains detailed information on individual sociodemographic characteristics.

⁴ The Peace Index data has previously been used in several studies in the related literature (e.g., Klor and Zussman, 2021; Yakter and Harsgor, 2023; Yakter and Tessler, 2023).

⁵ To our knowledge, this is the largest single survey ever conducted by independent researchers in Israel.

The survey has two important features for the purposes of this study. First, it allows us to measure individuals' direct exposure to terror fatalities twenty years ago, during the Second Intifada. Second, individuals' observable sociodemographic characteristics are balanced with respect to their exposure to terror fatalities. Hence, it is unlikely that the effects that we estimate are biased by omitted unobserved individuals' characteristics.

The results of the analysis using this survey unequivocally show that exposure to terrorism during the Second Intifada caused a persistent shift toward right-wing attitudes that is still observable almost two decades later. This is the case for all attitudes in the survey. Individuals who resided in localities that suffered from more terror attacks during the Second Intifada are more likely to: (i) oppose negotiations with Palestinians; (ii) believe that such negotiations will not bring peace; (iii) oppose the two-state solution; (iii) have a right-wing political orientation; and (iv) have voted for a right-wing party in the elections of November 2022. The effects are not only statistically significant but also of a substantial magnitude. For example, a one-standard-deviation increase in individuals' exposure to terrorism is associated with an increase of five percent of a standard deviation in opposition to both negotiations and the two-state solution.

The Second Intifada was a watershed event with a profound impact on the Israeli political map. Conventional wisdom holds that its effects reverberate until the present day. For example, *The Economist* (2023) states that the terrorist attacks of the Second Intifada "soured a generation of Israelis on the idea of peace." Our analysis is the first to provide systematic empirical evidence supporting this view.

The Intifada brought about a substantial shift in Israelis' political preferences. Support for leftwing parties dwindled whereas right-wing parties have been part of every government since 2009.

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⁶ The Economist, "Despite the War in Gaza, Talk of a Two-State Solution Persists", December 9, 2023.

Perhaps more importantly, the Intifada led to a paradigm shift in the policies of Israeli governments toward the Palestinians. In the 1990s, there were several attempts to find a peaceful solution to the conflict, including notably the Madrid Conference in 1991 and the Oslo Accords in 1993 and 1995. These attempts culminated in the Camp David Summit in July 2000. The failure of this summit and the outbreak of the Second Intifada proved to be turning points that led the Israeli public to adopt the view that there is no partner for peace (Yakter and Tessler, 2023).

In the post-Intifada years, consecutive Israeli governments gradually adopted a new approach vis-à-vis the conflict with the Palestinians: managing the conflict instead of trying to resolve it. The massive Hamas attack of October 7th, 2023, and the subsequent war in Gaza shattered the status quo. How the conflict with the Palestinians will unfold in the future remains to be seen. That said, the results of our study provide a sobering outlook: it is likely that the war will lead to the radicalization of individuals' attitudes and that these effects will persist over a long period of time.

2. The Evolution of Attitudes since 1994

2.A Data

This section uses the Peace Index data to illustrate general patterns in the long-term evolution of the Israeli public's atti. The Peace Index is a set of surveys conducted by the Israel Democracy Institute.⁷ The surveys' main goal is to track the evolution of public views concerning various aspects of the Israeli-Palestinian conflict and peace process. The surveys have been conducted monthly since June 1994 among a representative sample of Israeli adults.⁸ From 2010 the sample increased from around 500 to around 600 respondents per survey.

⁷ Data courtesy of the Viterbi Family Center for Public Opinion and Policy Research at the Israel Democracy Institute https://dataisrael.idi.org.il/.

⁸ Two surveys were conducted in some months.

The Peace Index surveys have several advantages as a data source on political attitudes. They are conducted by an independent and non-partisan research institute using the same phrasing of the main questions of interest over a long period of time. They have a relatively large number of respondents, contain detailed information on respondents' sociodemographic characteristics (age, gender, education, ethnicity, and religiosity), and are carried out at a high frequency. This allows us to document the immediate effects of the outbreak of the Second Intifada on individuals' attitudes, and follow the evolution of these attitudes over time with great precision.

Our analysis focuses on Jewish respondents. The sample includes approximately 115,000 person-survey observations from 232 surveys spanning the years 1994 to 2018 (the last year for which the data is publicly available). We cannot link individuals' responses over time because respondents are sampled anonymously. Thus, the dataset is structured as repeated cross-sections at the survey level with political attitudes and sociodemographic characteristics at the individual level.

We focus on all survey questions concerning the peace process that are asked continuously with the same wording. Two of the questions relate to the Oslo Accords. The first question is: "What is your stand on the accords signed in Oslo by Israel and the Palestinian Liberation Organization (PLO)?" The six response options are: "Very much in favor," "Quite in favor," "Somewhere in the middle," "Quite opposed," "Greatly opposed," and "Don't know / no opinion." This question was included in the surveys from June 1994 to July 2008. The second question is, "Do you believe, or not believe, that the Oslo Accords between Israel and the PLO will lead to peace between Israel and the Palestinians in the coming years?" The six possible answers to this

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⁹ Although the Peace Index was designed to measure the public's attitudes regarding the Israeli-Palestinian conflict and peace process, over time it started to cover a wide range of topics concerning Israel's social and political environment. Most of the additional questions are irrelevant for the purposes of this study (e.g., perceptions about political leaders and coverage of current events).

question are: "Strongly believe," "Quite believe," "Somewhere in the middle," "Hardly believe," "Do not believe at all," "Don't know / no opinion." This question was included in the surveys from March 1995 to July 2008. The two questions were removed from the survey in 2008 because a sizable share of respondents refused to answer questions that explicitly mentioned the Oslo Accords.

The other two questions used in our analysis appeared in the surveys from mid-2001 onwards. They are almost identical to the questions about the Oslo Accords, with the main differences being that they ask about "peace negotiations" rather than the "Oslo Accords" and that the "Somewhere in the middle" option is not available.

For all the questions above, we replaced the Likert scale measure with a binary indicator equal to one for individuals who indicated opposition to negotiations or a belief that negotiations will not lead to a peace agreement between Israel and the Palestinians.¹⁰

2.B The Evolution of Attitudes Across Three Periods

We start the analysis by dividing the data from the Peace Index into three periods: (i) before the Second Intifada, from 1994 until September 2000; (ii) the Second Intifada, from October 2000 until February 2005; 11 and (iii) after the Intifada, from March 2005 until the end of 2018.

Table 1 presents summary statistics for each period. The top rows of the table show the total and the monthly mean of the number of civilian Israeli fatalities from all Palestinian politically

¹⁰ We exclude survey participants who answered "Don't know / no opinion" from the analysis. The share of individuals choosing these responses is between eight to ten percent for the questions on the Oslo Accords and three to four percent for the questions on peace negotiations.

¹¹ There is no single agreed-upon date for the end of the Second Intifada. We follow the view of most experts that regard the Sharm el-Sheikh Summit, which took place on 8 February 2005, as the relevant date.

motivated attacks. ¹² The data illustrate the dramatic fluctuations in violence intensity across the three periods. 1,125 Israeli civilians were killed in terror attacks from 1994 until 2018. Sixty-five percent of the fatalities occurred during the Second Intifada, which lasted less than four and a half years. The second row shows that the monthly mean number of fatalities exhibits a stark inverse U-shape: it increased from 2.2 in the pre-Intifada period to 13.6 in the Intifada period and then decreased to 1.4 in the post-Intifada period. The differences in violence intensity between the Intifada period and the other two periods are highly statistically significant. The levels of violence in the pre-Intifada period and the post-Intifada periods are not statistically different from each other.

The second panel of the table focuses on the sociodemographic characteristics of the survey respondents. On average, participants are in their 40s, half are female, almost thirty percent have an academic education, about a third are of Sephardic origin, and half are secular. The table shows that participants' sociodemographic characteristics are not balanced across periods. This makes simple comparisons of attitudes across periods problematic because attitudes are correlated with sociodemographic characteristics. In an attempt to address this concern, the econometric analysis below controls for individuals' observable characteristics. ¹³

The bottom panel of the table presents summary statistics for the outcome variables of interest. We find that the share of participants opposed to the Oslo Accords increased substantially following the outbreak of the Second Intifada, from thirty to fifty percent. Strikingly, opposition to the accords remained at almost the same level in the post-Intifada period, despite the dramatic

¹² These figures come from a comprehensive dataset on Israeli fatalities from terror attacks. It combines information from B'tselem (an Israeli human rights organization) and the Israeli National Insurance Institute. For each attack, the dataset contains information on its exact date, location, and number of non-combatants killed. This dataset has been widely used in related research (e.g., Jaeger and Paserman (2008 and 2009), Shayo and Zussman (2011)).

¹³ The next section presents an analysis using our own survey. This analysis does not suffer from the problem highlighted above because, in that survey, individuals' characteristics are balanced based on exposure to violence.

decrease in violence to pre-Intifada levels. A similar pattern is observed for participants' beliefs that the Oslo Accords will not bring peace.

Table 1: Summary Statistics for the Peace Index Survey, by Period

Table 1. Summary	Before		After				
	Intifada	Intifada	Intifada	Differences between periods			
	(1)	(2)	(3)	(2) - (1) (3) - (2) (3) - (1)			
	1/6/1994 -	27/9/2000 -	9/2/2005 -				
	26/9/2000	8/2/2005	1/8/2018				
Fatalities:							
Total	168	733	224				
Monthly mean	2.211	13.574	1.374	11.714*** -12.573*** -0.859 (2.239) (2.169) (0.636)			
Sociodemographic Characteristics:				(2.235) (2.105) (0.030)			
Age	40.125	43.315	47.627	3.189*** 4.313*** 7.502***			
	(16.562)	(17.083)	(17.47)	(0.140) (0.127) (0.109)			
Female	0.506	0.503	0.541	-0.003 0.038*** 0.035***			
	(0.500)	(0.500)	(0.498)	(0.004) (0.004) (0.003)			
Academic education	0.297	0.248	0.394	-0.049*** 0.146*** 0.097***			
	(0.457)	(0.432)	(0.489)	(0.004) (0.003) (0.003)			
Sephardic	0.364	0.334	0.272	-0.03*** -0.062*** -0.092***			
-	(0.481)	(0.472)	(0.445)	(0.004) (0.004) (0.003)			
Secular	0.537	0.524	0.487	-0.014*** -0.037*** -0.05***			
	(0.499)	(0.499)	(0.500)	(0.004) (0.004) (0.003)			
Political Attitudes:							
Opposition to the Oslo Accords	0.304	0.497	0.445	0.192*** -0.051*** 0.141***			
	(0.460)	(0.500)	(0.497)	(0.004) (0.005) (0.005)			
Belief that the Oslo Accords will Not							
Bring Peace	0.402	0.699	0.677	0.297*** -0.022*** 0.275***			
	(0.490)	(0.459)	(0.468)	(0.004) (0.005) (0.005)			
Opposition to Peace Negotiations	N/A	0.31	0.287	N/A -0.0230*** N/A			
		(0.463)	(0.452)	(0.004)			
Belief that Negotiations will Not							
Bring Peace	N/A	0.617	0.675	N/A 0.058*** N/A			
		(0.486)	(0.468)	(0.004)			
Observations	36,061	24,509	70,270				

Notes: Authors calculations using data from B'tselem, The Israeli National Insurance Institute, and the Peace Index Surveys. *, **, *** denote statistical significance at the 10, 5, and 1 percent levels, respectively.

The persistent effect of the Second Intifada on public attitudes is also evident for the two questions on peace negotiations. We hardly observe any change in individuals' attitudes after the end of the Second Intifada. 14

Figures 1 and 2 display a more detailed picture of the evolution of attitudes over time. Figure 1 focuses on the two questions on the Oslo Accords whereas Figure 2 focuses on the two questions on peace negotiations.

Opposition to the Oslo Accords

Belief that Oslo will Not Bring Peace

Opposition to the Oslo Accords

Belief that Oslo will Not Bring Peace

Opposition to the Oslo Accords

Representation to the Oslo Accords

Pre-Intifada Intifada period Post-Intifada Annual fatalities

Pre-Intifada Intifada period Post-Intifada Annual fatalities

Figure 1: Evolution of Attitudes Regarding the Oslo Accords

<u>Notes</u>: The figures display the evolution over time of the respective question indicators (survey-level mean; left axis) and the annual number of fatalities (right axis). The vertical lines indicate the dates of the outbreak of the Second Intifada and its end. The horizontal lines indicate the mean level of the question indicator for each period.

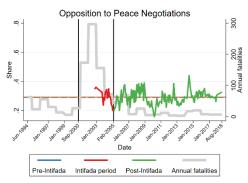
Both figures corroborate the main findings in Table 1: the Second Intifada led to a dramatic increase in opposition to the Oslo Accords and in the belief that they would not result in peace; this increase persisted after the end of the Intifada, despite the decline in violence to pre-Intifada levels. In addition, Figure 1 documents fluctuations in the two Oslo series within each period. Especially noteworthy is the fact that we observe a positive correlation between individuals'

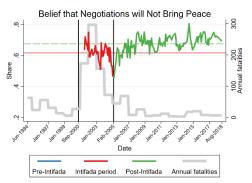
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¹⁴ Interestingly, the table shows that in all three periods, individuals were much less likely to oppose the Oslo Accords than to believe it would not lead to peace. The same pattern holds for the questions on peace negotiations. This suggests that individuals view negotiations as costless but, for the most part, are skeptical that they will lead to a peaceful resolution of the conflict (see also Klor and Zussman, 2021 and Yakter and Tessler, 2023).

attitudes and fatalities until the end of the Second Intifada; the correlation disappears after the end of the Intifada. This lack of correlation in the post-Intifada period is also evident in Figure 2, which shows individuals' attitudes toward peace negotiations until 2018, thirteen years after the end of the Intifada.

Figure 2: Evolution of Attitudes Regarding Negotiations with the Palestinians





<u>Notes</u>: The figures display the evolution over time of the respective question indicators (survey-level mean; left axis) and the annual number of fatalities (right axis). The vertical lines indicate the dates of the outbreak of the Second Intifada and its end. The horizontal lines indicate the mean level of the question indicator for each period.

A potential concern with the evidence presented in Figures 1 and 2 is that, as mentioned above, survey participants' sociodemographic characteristics are not balanced across periods. Therefore, it is possible that the fluctuations in attitudes are driven to some extent by the changing composition of the participant pool. To address this concern, we estimate the annual evolution of attitudes using the following linear probability model:

$$Y_{it} = \alpha_1 X_{it} + \sum_{h \in H} \beta_h \mathbb{1}[year = h] + u_{it}$$
 (1)

where Y_{it} is an indicator variable capturing individual i's attitude (e.g., opposition to the Oslo Accords) as measured in a survey conducted on month t; X_{it} is a vector of i's sociodemographic characteristics (a set of fixed-effects for each level of birth year, gender, education, ethnicity, and

religiosity) at time t; $\mathbb{1}[year = h]$ is an indicator for the calendar year; and u_{it} is a random error term clustered at the survey level.

The focus of interest is the set of coefficients β_h . These coefficients reflect the mean difference in the level of the outcome variable between year h and the baseline period, controlling for all individuals' sociodemographic characteristics. In the case of the questions about the Oslo Accords, the baseline period is the first nine months of the year 2000. For the questions about negotiations with the Palestinians, the baseline period is from January 2004 until January 2005.

Figure 3 plots the estimated coefficients (and the associated 95% confidence intervals) on the year indicators. The figure shows that all the patterns highlighted above are robust to controlling for individual sociodemographic characteristics. ¹⁶ The Second Intifada dramatically increased opposition to the Oslo Accords and strengthened the belief that they would not bring peace. These attitudes did not change even as violence subsided. The lack of response of attitudes to the decline in violence is also evident when we focus on the questions concerning negotiations with the Palestinians.

Opposition to the Oslo Accords

Belief that Oslo will Not Bring Peace

Figure 3: Evolution of Attitudes, Controlling for Sociodemographic Characteristics

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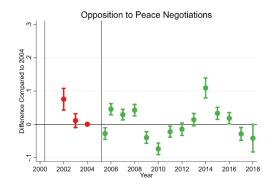
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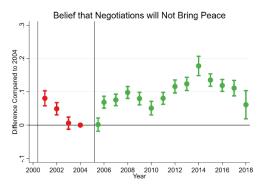
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¹⁵ We combine the observations from the last three months of the year 2000 with those from the year 2001.

¹⁶ The full results of the regressions appear in Appendix Table A.1.





<u>Notes</u>: The figures display the coefficients from estimating equation (1) using a linear probability model. Capped ranges indicate 95% confidence intervals using robust standard errors. The vertical lines indicate the dates of the outbreak of the Second Intifada (September 2000), and the end of the Second Intifada (February 2005).

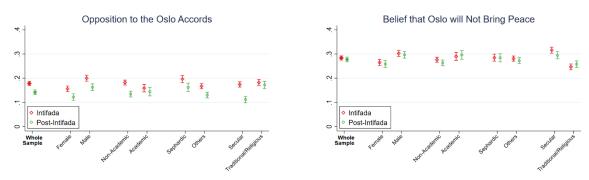
2.C Heterogenous Effects of Violence

The patterns observed in Figures 1 to 3 reflect the evolution of attitudes over time for the entire population. These patterns may mask heterogeneous effects of violence on attitudes across different subgroups. Figure 4 studies this issue. It presents regression coefficients from a model similar to equation (1), estimated for each level of the sociodemographic characteristics. For ease of exposition, we use in the analysis period fixed-effects instead of year fixed-effects. The figure presents the results for the two questions on the Oslo Accords. ¹⁷

The figure shows that the patterns documented in Figures 1 to 3 hold for all categories of gender, education, ethnicity, and religiosity. For all subgroups of the population, the Second Intifada was associated with a significant increase in opposition to the Oslo Accords and in the belief that they would not bring peace; these effects persisted in the post-Intifada period, even as violence decreased. Interestingly, for all subgroups, the estimated effects are not only in the same direction but are also of a similar magnitude.

¹⁷ The results for the questions concerning negotiations with the Palestinians appear in Appendix Figure A.1. These results are qualitatively similar to those presented in Figure 4.

Figure 4: Heterogeneous Effects of Violence by Sociodemographic Characteristics



<u>Notes</u>: The figures display the coefficients on period indicators estimated separately for each level of the sociodemographic characteristics using a model similar to equation (1). Capped ranges indicate 95% confidence intervals using standard errors.

An influential literature argues that exposure to traumatic events at an early age has a particularly strong and lasting effect on attitudes and behaviors. ¹⁸ Following this literature, we study whether violence has a stronger effect on Israelis exposed to the Second Intifada at an early age. This is especially important in our context because heterogeneous age effects may generate the patterns observed above even if the attitudes of each individual reverse to their pre-Intifada level after violence declines. In particular, the overall evolution of attitudes may reflect changes over time in the composition of the survey population: the entry to the survey population of new cohorts with right-wing attitudes due to their early age exposure to violence may countervail a reversion of older cohorts to their pre-Intifada attitudes. This may explain why the attitudes of the "average" Israeli remain affected by the Second Intifada almost twenty years after it ended, even if the effects of this event fade away over time *within* individuals.

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¹⁸ See, for example, Malmendier, Tate, and Yan (2011), Malmendier and Nagel (2011, 2016), Bernile, Bhagwat, and Rau (2017), and Fisman et al. (2020). For the relevant literature in psychology see, for example, Krosnick and Alwin (1989), Nelson (1993), and Raabe and Beelmann (2011).

In order to examine the age-specific effects of the Second Intifada on attitudes, we split the entire sample by birth year. The cohorts are labeled according to their age in the year 2000. Figure 5 presents for each cohort the mean level of the attitude indicators: the blue, red, and green lines represent the surveys conducted before, during, and after the Intifada, respectively.

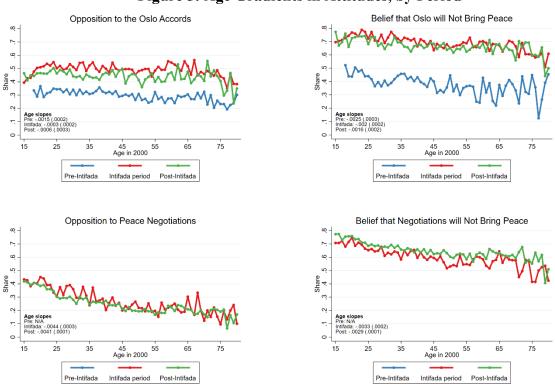


Figure 5: Age Gradients in Attitudes, by Period

<u>Notes</u>: The figures display, separately for each period, the mean value of the respective question indicators by age in 2000.

There are two noteworthy patterns in this figure. First, for all questions and periods, we observe a distinct age gradient. Older cohorts show weaker opposition to the Oslo Accords and to peace negotiations. They are also less likely to believe that the Oslo Accords and peace negotiations would not bring peace. Second, and more importantly, we observe that the effect of the Intifada on attitudes is almost identical for all age groups. This effect persisted in the post-Intifada period, regardless of individuals' age of exposure.

Figure 6 takes a closer look at the heterogeneous effects by age of exposure. For each age group, it presents coefficients from a separate regression similar to equation (1), which includes period fixed effects and all available sociodemographic characteristics. The figure shows that the Second Intifada had a similar persistent effect on individuals' attitudes for all age groups.

Opposition to the Oslo Accords

Belief that Oslo will Not Bring Peace

Opposition to the Oslo Accords

Belief that Oslo will Not Bring Peace

Opposition to the Oslo Accords

Opposition to th

Figure 6: Heterogeneous Effects of Violence by Age of Exposure

<u>Notes</u>: The figures display the coefficients on period indicators estimated separately for each group defined by age in 2000 using a model similar to equation (1). Capped ranges indicate 95% confidence intervals using robust standard errors.

3. Past Exposure to Violence and Attitudes Today

3.A Original Survey Data

While the Peace Index survey has many advantages (e.g., years of coverage, number of respondents, etc.), one of its main drawbacks is that it does not contain information on individuals' personal exposure to terror attacks. This is problematic for two reasons. First, several studies have shown that *direct exposure* to violence has a strong and robust short-term effect on individuals' political attitudes (see, e.g., Bali, 2007; Karol and Miguel, 2007; Berrebi and Klor, 2008; Gould and Klor, 2010; Kibris, 2011; Getmanski and Zeitzoff, 2014; Elster, 2019). The analysis using the Peace Index in the previous section misses this effect. Second, the analysis using the Peace Index relies only on temporal variation. Hence, the observed patterns may be partially driven by time-

varying omitted factors, like political and diplomatic developments, that are correlated with both violence and individuals' political preferences.

We conducted a detailed survey especially tailored to address these concerns. The survey included more than 9,000 Israeli participants; the only restriction we imposed on the sample population was for all respondents to be Jewish adults (at least 18 years old). ¹⁹ The survey was carried out by a professional polling firm using an online platform during January and February 2023.

The survey centered on participants' relevant attitudes and behaviors: views regarding the conflict with the Palestinians, political attitudes, and voting patterns. We designed the survey in such a way as to avoid any bias due to framing or demand effects. Potential participants were informed that the survey aims to study Israelis' political preferences. The survey did not mention at all any issues related to past exposure to terror attacks or the Second Intifada.

We use an indirect method to capture individuals' exposure to terrorism. At the beginning of the survey, we asked participants to report their residential history at the locality level since 1985.²⁰ We then merge the responses to these questions with the dataset on terror fatalities mentioned above by year and natural region of each individual's locality of residence.²¹ Using this method we measure each individual's direct exposure to terror fatalities since 1985 without biasing their answers to the (later) questions on political attitudes. In the analysis below, we focus on individuals' exposure to violence during the Second Intifada, which, as shown above, was characterized by a major spike in violence.

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¹⁹ The survey sample is not representative of the adult Jewish population. For example, in the sample, there is an over-representation of females and individuals with academic education, and an under-representation of ultraorthodox Jews. ²⁰ We chose to start the coverage in 1985 because this year predates the First Intifada (which broke out in 1987) and the beginning of the peace process between Israel and the Palestinians in the early 1990s.

²¹ Israel is divided into 53 natural regions which span the entire country, including one natural region for the West Bank and one for the Gaza Strip (before the 2005 disengagement).

The survey included three questions regarding the conflict with the Palestinians. These questions use similar phrasing to those included in the Peace Index. The first question asks, "What is your opinion regarding peace negotiations between Israel and the Palestinian Authority?" The possible answers are "Very much in favor," "Quite in favor," "Quite against," and "Very much against." The second question of interest is, "Do you, or do you not believe that negotiations between Israel and the Palestinian Authority will lead to peace between Israel and the Palestinians?" The possible answers are "Strongly believe," "Believe," "Do not believe," and "Do not believe at all." The third question is "To what extent do you support a two-state solution to the Israeli-Palestinian conflict, i.e., the establishment of an independent Palestinian State alongside the State of Israel." The possible answers to this question are "Very much in favor," "Quite in favor," "Quite against," and "Very much against."

We ask the following question about political attitudes: "With which political camp do you identify?" The possible answers are "Left," "Moderate left," "Center," "Moderate right," and "Right." In addition, the polling firm provided us with participants' self-reported vote in the November 2022 elections, which took place two months before the survey.

We create an indicator variable for each of these five questions. For the questions concerning the Israeli-Palestinian conflict, the indicators take the value of one for the last two possible responses, i.e., the respondent is against negotiations, does not believe that negotiations will lead to peace, and is against the two-state solution, respectively. With regard to political attitudes, the indicator takes the value of one for those identifying with the "Moderate right" and the "Right." The indicator for the vote in the 2022 elections takes the value of one for those who voted for the parties in the right-wing coalition government formed in December 2022. We also create a summary index of attitudes, which is the simple mean of these five indicators.

In addition to the questions above, we have information on a large set of sociodemographic characteristics of the participants. These include age, gender, education, ethnicity, religiosity, and income.

Table 2 presents summary statistics for the survey. The first column reports statistics for the entire sample (excluding only participants who failed a simple test of attention at the beginning of the survey, did not finish the survey, or were born after the end of the Intifada in 2005). The top panel focuses on individuals' sociodemographic characteristics and the bottom panel summarizes their political attitudes. Participants' average age is 41, 58 percent are female, 62 percent have an academic education, 54 percent are secular, and 66 percent are married. Respondents have on average 1.9 children, 10 percent of them immigrated to Israel since 1989, 38 percent report having a low income, 5 percent are unemployed or out of the labor force, 62 percent are salaried workers, and 12 percent are managers or employers.

Twenty percent of the participants included in Column 1 did not report their place of residence during the Second Intifada. We exclude these individuals from our analysis because we cannot measure their direct exposure to terrorism. Column 2 presents summary statistics for the individuals included in our analysis (the effective sample). A simple comparison of Columns 1 and 2 shows that the characteristics of the individuals in the entire and effective samples are practically identical. This shows that the individuals included in our analysis are not particularly selected.

Table 2: Summary Statistics for the Original Survey by Exposure to Terrorism During the Second Intifada

	Entire Sample (1)	Effective Sample (2)	Below Median Exposure (3)	Above Median Exposure (4)	Difference (4) - (3)
Observations	8,629	6,896	3,443	3,453	(4) - (3)
characteristics:					
Age	41.130	40.743	40.818	40.667	-0.152
Age	(13.190)	(13.143)	(13.372)	(12.911)	(0.317)
Female	0.584	0.581	0.587	0.574	-0.012
Tollier	(0.493)	(0.493)	(0.492)	(0.494)	(0.012)
Academic education	0.616	0.616	0.607	0.624	0.018
ricudenne education	(0.486)	(0.486)	(0.489)	(0.484)	(0.012)
Sephardic	0.306	0.311	0.335	0.288	-0.048***
Sepharate	(0.461)	(0.463)	(0.472)	(0.453)	(0.011)
Secular	0.543	0.537	0.566	0.507	-0.059***
Secular	(0.498)	(0.499)	(0.496)	(0.500)	(0.012)
Married	0.658	0.674	0.668	0.681	0.014
Walled	(0.474)	(0.469)	(0.471)	(0.466)	(0.011)
Number of children	1.884	1.894	1.817	1.971	0.154***
Trained of children	(1.834)	(1.819)	(1.720)	(1.911)	(0.044)
Immigrated after 1989	0.099	0.088	0.083	0.093	0.010
minigrated after 1767	(0.298)	(0.284)	(0.277)	(0.290)	(0.007)
Low income	0.383	0.422	0.417	0.428	0.011
zow mome	(0.486)	(0.494)	(0.493)	(0.495)	(0.012)
Unemployed / not in Labor Force	0.053	0.047	0.049	0.045	-0.005
enompley cur net in Zueer 1 erec	(0.224)	(0.212)	(0.216)	(0.207)	(0.005)
Salaried Worker	0.619	0.628	0.635	0.622	-0.014
	(0.486)	(0.483)	(0.481)	(0.485)	(0.012)
Manager/Employer	0.124	0.128	0.127	0.128	0.001
	(0.329)	(0.334)	(0.333)	(0.335)	(0.008)
Political Attitudes:	(0.0-2)	(*****)	(*****)	(*****)	(0.000)
Opposes Negotiations with					
Palestinians	0.454	0.456	0.436	0.476	0.040***
	(0.498)	(0.498)	(0.496)	(0.499)	(0.012)
Believes that Negotiations will not	(01.50)	(01.50)	(01.50)	(0)	(0.012)
Bring Peace	0.795	0.801	0.796	0.807	0.011
	(0.404)	(0.399)	(0.403)	(0.395)	(0.010)
Opposes the Two-State Solution	0.555	0.562	0.543	0.581	0.038***
epperent in the state solution	(0.497)	(0.496)	(0.498)	(0.494)	(0.012)
Right-Wing Political Orientation	0.536	0.549	0.53	0.568	0.038***
regar mig i oncicui Orientation	(0.499)	(0.498)	(0.499)	(0.495)	(0.012)
Voted for the Current Coalition	0.415	0.426	0.400	0.453	0.053***
Total for the Current Countion	(0.493)	(0.495)	(0.490)	(0.498)	(0.012)
Average Index	0.551	0.559	0.541	0.577	0.036***
11. Trage much	(0.366)	(0.367)	(0.362)	(0.371)	(0.009)

Notes: Authors calculations using data from an original survey. Exposure to terrorism is calculated using data from B'tselem and The Israeli National Insurance Institute. *, **, *** denote statistical significance at the 10, 5, and 1 percent levels, respectively.

Columns 3 and 4 divide the sample according to individuals' exposure to terrorism during the Second Intifada. Specifically, we first calculate for each individual the number of fatalities in the natural region in which she or he resided in each year. We then normalize the fatality counts using the natural regions' Jewish population each year. For our purposes, the critical period is that of the Second Intifada. We thus sum the normalized fatality counts over the years 2000-2005. The resultant measure captures the cumulative direct exposure to exogenous terror shocks at the individual level. This is the main independent variable of interest in our analysis.

Columns 3 to 5 present balancing tests of our sample using a rough indicator of terror exposure. ²² Column 3 provides summary statistics for individuals with exposure to terrorism below the median (which is 20.42 fatalities per 100,000 residents); Column 4 shows summary statistics for individuals with exposure above the median; and Column 5 presents differences in means between Columns 4 and 3. The table shows that our sample is, for the most part, balanced. Most observable characteristics are similar for individuals exposed to a low number of fatalities during the Second Intifada and for individuals exposed to a high number of fatalities.

The bottom panel of the table presents summary statistics for individuals' political attitudes. In general, it seems that the political attitudes of the participants in our survey are similar to those observed in other surveys, including the latest available rounds of the Peace Index. The main advantage of our survey vis-à-vis existing surveys is that we observe individuals' direct exposure to terror attacks and that individuals' observable socioeconomic characteristics are balanced on exposure.

The bottom panel of the table suggests that exposure to terror attacks shifts individuals' attitudes to the right. The differences in the outcome variables are not only statistically significant

²² For ease of exposition, Table 2 divides the sample based on the median level of exposure to terrorism. Our analysis below uses the continuous measure of exposure to terrorism as the main independent variable of interest.

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but also of a substantial magnitude. For example, almost 20 years after the Second Intifada ended, the share of votes for the parties in the right-wing government of 2023 is 13% higher for those exposed to a higher than the median level of terrorism during the Intifada years than for the rest of the participants. The corresponding differences are about 9% for the question on negotiations and 7% for the questions on the two-state solution and right-wing political orientation, as well as for the average index.

3.B The Effects of Exposure to Violence on Individuals' Attitudes

We now turn to a systematic estimation of the effects of direct exposure to violence on individuals' attitudes. For this purpose, we use the continuous measure of exposure to terrorism at the individual level, and control for all individual socioeconomic characteristics. Figure 7 presents estimates of the effect of exposure to terrorism on the outcome variables of interest.

The figure delivers an unambiguous message. Exposure to terrorism during the Second Intifada causes a persistent shift toward right-wing preferences that is still observable two decades later. This is the case for all attitudes in the survey. For example, a one-standard-deviation increase in individuals' exposure to terrorism is associated with an increase of five percent of a standard deviation in opposition to both negotiations and a two-state solution.

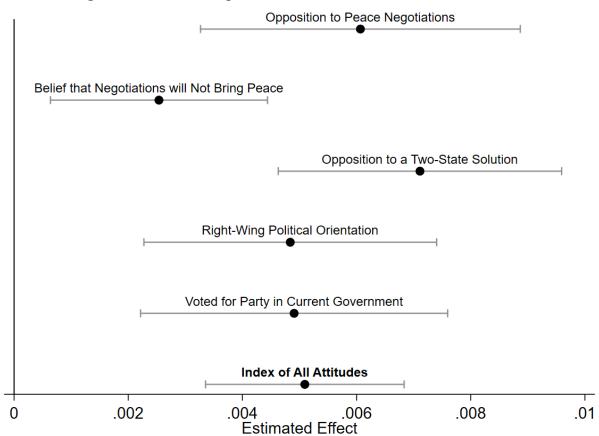


Figure 7: Effects of Exposure to Terrorism on Political Attitudes

<u>Notes</u>: The figure displays the coefficients from OLS regressions of each attitude indicator on exposure to violence during the Second Intifada and a full set of indicators for all sociodemographic characteristics presented in Table 2. Capped ranges indicate 95% confidence intervals using robust standard errors.

A potential concern with the analysis above is that individuals' place of residence may be endogenous to the local intensity of terrorism. Specifically, one may worry that individuals with left-wing preferences moved during the Second Intifada from areas experiencing high levels of terrorism to quieter areas. It is also possible that right-wing individuals did not move, or even moved to more violent areas for ideological or other reasons. Such residential sorting during the Second Intifada could explain, to a certain extent, the patterns observed in Figure 7.

To address this concern, we estimate the effect of exposure to terrorism separately for "stayers" and "movers." We define an individual as a stayer if she resided in the same district in

the years 2000 and 2022 (this amounts to 55% of the effective sample).²³ We define an individual as a mover if she resided in different districts in those two years (30% of the effective sample). The remaining 15% of the survey participants did not report their district of residence in 2022 and therefore are excluded from the analysis below.

If left-wing individuals are more likely than right-wing individuals to move away from violent areas, we would expect that the correlation between terror intensity during the Second Intifada and right-wing attitudes today is stronger for stayers than for movers. We directly test for this possibility in Figure 8. The figure displays, separately for movers and for stayers, the coefficient on terror exposure for all outcome variables. The figure shows that across all outcomes of interest, the estimated coefficients are essentially the same for both groups. That is, the results in Figure 7 cannot be explained by the sorting of the population based on their political preferences.²⁴

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²³ Israel is divided into seven districts.

²⁴ This result echoes those found by Elster, Zussman, and Zussman (2017). They studied the sorting of the Israeli population in reaction to the rocket threat emanating from Hezbollah, a terrorist organization operating in Lebanon. Similar to our results, they also found little evidence supporting the claim that individuals change their place of residence in reaction to local variation in terrorism intensity.

Belief that Negotiations will Not Bring Peace Opposition to Peace Negotiations Movers and Stayers Movers and Stayers Movers Stayers Stayers Opposition to a Two-State Solution Right-Wing Political Orientation Movers and Stayers Movers and Stayers Movers Movers Stayers Stayers Voted for Party in Current Government Index of All Attitudes Movers and Stayers Movers and Stayers Movers Movers Stavers Stavers 0 .005 .01 .015 0 .005 .01 .015 **Estimated Effect**

Figure 8: Testing for Residential Sorting

<u>Notes</u>: The figure displays, separately for "movers" and "stayers," the coefficients from OLS regressions of each attitude indicator on exposure to violence during the Second Intifada and a full set of indicators for all sociodemographic characteristics presented in Table 2. Capped ranges indicate 95% confidence intervals using robust standard errors.

3.C Heterogenous Effects of Violence

Similar to the analysis conducted above using the Peace Index, we study the heterogeneous effects of terrorism across different subgroups. Figure 9 displays estimates of the effects of direct exposure to terrorism on the average index of attitudes for different levels of the main sociodemographic characteristics.²⁵ The figure shows that there is very little heterogeneity in the

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²⁵ The results for the five attitude indicators are similar to those displayed in Figure 9. They are available from the authors upon request.

effects of violence across individuals' socioeconomic characteristics. For all subgroups of the population, direct exposure to terror attacks during the Second Intifada is associated with a significant increase in the index of right-wing attitudes almost two decades later.

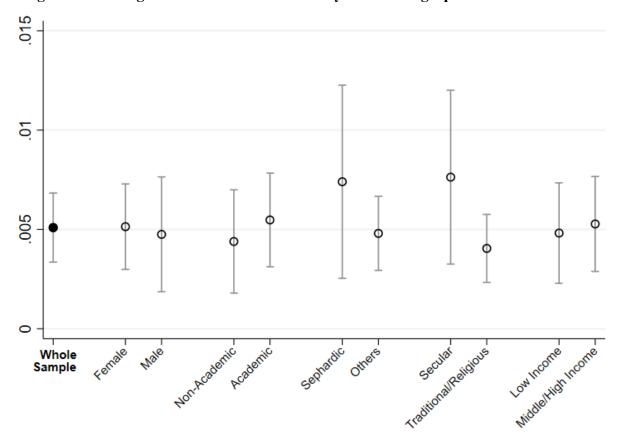


Figure 9: Heterogeneous Effects of Violence by Sociodemographic Characteristics

<u>Notes</u>: The figure displays, separately for each level of the sociodemographic characteristics, the coefficients from OLS regressions of the attitudes index on exposure to violence during the Second Intifada and a full set of indicators for the other sociodemographic characteristics presented in Table 2. Capped ranges indicate 95% confidence intervals using robust standard errors.

Given the salience of the literature on age effects, we study separately the heterogeneous effects of terrorism on attitudes by age of exposure. Compared to the analysis using the Peace Index, the analysis with the current survey is particularly important because it captures direct exposure to traumatic events within small geographical areas. Direct exposure to terrorism may

generate stronger and more lasting effects on attitudes than indirect exposure, especially at a young age.

In order to examine the age-specific effects of direct exposure to terrorism, we split the entire sample by age of exposure. Figure 10 presents the estimated effects for each subgroup, classified by its age in the year 2000. Similar to the results obtained using the Peace Index data, the figure provides little support for the hypothesis that younger individuals are most strongly affected by major events. The estimated coefficients are positive and of a similar magnitude for all age subgroups. In particular, the effect of violence on young individuals is not statistically different from its effect on any of the other groups.

Opposition to Peace Negotiations Belief that Negotiations will Not Bring Peace .01 .015 .01 .005 .005 0 -.005 -.005 Opposition to a Two-State Solution Right-Wing Political Orientation .015 .015 .01 .01 φ .005 .005 -.005 -.005 -Voted for Party in Current Government Index of All Attitudes .01 .015 .01 .005 .005 0 -.005 1-10 11-17 18-25 26+ ΑII 1-10 26+ ΑII 11-17 18-25 Age in 2000

Figure 10: Heterogeneous Effects of Terrorism on Attitudes, by Age of Exposure

<u>Notes</u>: The figures display, separately for each subgroup defined by age in 2000, the coefficients from OLS regressions of each attitude indicator on exposure to violence during the Second Intifada and a full set of indicators

for all other sociodemographic characteristics presented in Table 2. Capped ranges indicate 95% confidence intervals using robust standard errors.

Conclusions

This paper studies the long-term effects of politically motivated violence on individuals' attitudes using the Second Intifada as a case study. Relying on two different surveys, we find that the Second Intifada caused an immediate, substantial, and persistent shift in Israelis' attitudes against a political compromise with the Palestinians that is still observable almost two decades later.

Estimating the long-term effects of political violence on attitudes presents several methodological challenges. These include, among others, the lack of individual-level information on attitudes and voting patterns over a long period of time. Our analysis overcomes these challenges by leveraging a survey design that elicits individuals' attitudes today and their residential history since 1985.

Our analysis thus provides credible empirical evidence for the view that the Second Intifada was a key turning point in the attitudes of Israelis toward the conflict with the Palestinians. The violence experienced by Israelis during the Intifada strengthened the opposition to negotiations with the Palestinians and weakened the belief that negotiations would lead to a peaceful resolution of the conflict.

Instead of trying to resolve the conflict by directly negotiating with the Palestinians, after the end of the Intifada, Israeli governments tried to "manage" the conflict: maintaining the Israeli occupation of the territories and expanding Israeli settlements, while striving to avoid escalation in violence. This strategy was shattered on October 7th, 2023, with the massive surprise attack by Hamas and the ensuing Gaza war. Only time will tell what the long-term consequences of this conflagration will be. Our findings provide a gloomy prediction. The war is going to bring about

a substantial and persistent radicalization in the attitudes of Israelis and Palestinians alike. This will negatively affect the possibility of reaching a peaceful resolution of this conflict for many years to come.

REFERENCES

- Aytaç, S. Erdem, and Ali Çarkoğlu. 2021. "Terror Attacks, Issue Salience, and Party Competence: Diagnosing Shifting Vote Preferences in a Panel Study." *Party Politics*, 27 (4): 755–766.
- **Bali, Valentina A.** 2007. "Terror and Elections: Lessons from Spain." *Electoral Studies*, 26 (3): 669-687.
- **Beber Bernd, Philip Roessler, and Alexandra Scacco.** 2014. "Intergroup Violence and Political Attitudes: Evidence from a Dividing Sudan." *Journal of Politics*, 76 (3): 649–665.
- **Bernile, Gennaro, Vineet Bhagwat, and P. Raghavendra Rau**. 2017. "What Doesn't Kill You Will Only Make You More Risk-Loving: Early-life Disasters and CEO Behavior." *Journal of Finance*, 72 (1): 167-206.
- **Berrebi, Claude, and Esteban F. Klor.** 2006. "On Terrorism and Electoral Outcomes: Theory and Evidence from the Israeli-Palestinian Conflict." *Journal of Conflict Resolution*, 50 (6): 899-925.
- **Berrebi, Claude, and Esteban F. Klor.** 2008. "Are Voters Sensitive to Terrorism? Direct Evidence from the Israeli Electorate." *American Political Science Review*, 102 (3): 279-301.
- Canetti, Daphna, Julia Elad-Strenger, Iris Lavi, Dana Guy, and Daniel Bar-Tal. 2017. "Exposure to Violence, Ethos of Conflict, and Support for Compromise: Surveys in Israel, East Jerusalem, West Bank, and Gaza." *Journal of Conflict Resolution*, 61 (1): 84-113.
- **Elster, Yael.** 2019. "Rockets and Votes." *Journal of Economic Behavior & Organization*, 166: 767-784.
- **Elster, Yael, Asaf Zussman, and Noam Zussman**. 2017. "Rockets: The Housing Market Effects of a Credible Terrorist Threat." *Journal of Urban Economics*, 99: 136-147.

- **Fisman, Raymond, Arkodipta Sarkar, Janis Skrastins, and Vikrant Vig.** 2020. "Experience of Communal Conflicts and Intergroup Lending." *Journal of Political Economy*, 128 (9): 3346-3375.
- **Getmansky, Anna, and Thomas Zeitzoff.** 2014. "Terrorism and Voting: The Effect of Rocket Threat on Voting in Israeli Elections." *American Political Science Review*, 108 (3): 588-604.
- **Godefroidt, Amélie.** 2022. "How Terrorism Does (and Does Not) Affect Citizens' Political Attitudes: a Meta-Analysis." *American Journal of Political Science*, 67 (1): 22-38.
- Gould, Eric D., and Esteban F. Klor. 2010. "Does Terrorism Work?" Quarterly Journal of Economics, 125 (4): 1459-1510.
- Grossman, Guy, Devorah Manekin, and Dan Miodownik. 2015. "The political Legacies of Combat: Attitudes Toward War and Peace among Israeli Ex-Combatants." *International Organization*, 69 (4): 981-1009.
- Hirsch-Hoefler, Sivan, Daphna Canetti, Carmit Rapaport, and Stevan E. Hobfoll. 2016. "Conflict will Harden your Heart: Exposure to Violence, Psychological Distress, and Peace Barriers in Israel and Palestine." *British Journal of Political Science*, 46 (4): 845-859.
- Jaeger, David A., Esteban F. Klor, Sami H. Miaari, and M. Daniele Paserman. 2012. "The Struggle for Palestinian Hearts and Minds: Violence and Public Opinion in the Second Intifada." *Journal of Public Economics*, 96 (3-4): 354-368.
- Jaeger, David A., and M. Daniele Paserman. 2008. "The Cycle of Violence? An Empirical Analysis of Fatalities in the Palestinian-Israeli Conflict." *American Economic Review*, 98 (4): 1591-1604.
- **Jaeger, David A., and M. Daniele Paserman.** 2009. "The Shape of Things to Come? On the Dynamics of Suicide Attacks and Targeted Killings." *Quarterly Journal of Political Science*, 4 (4): 315-342.
- **Karol, David, and Edward Miguel.** 2007. "The Electoral Cost of War: Iraq Casualties and the 2004 US Presidential Election." *Journal of Politics*, 69 (3): 633-648.
- **Kibris, Arzu**. 2011. "Funerals and Elections: The Effects of Terrorism on Voting Behavior in Turkey." *Journal of Conflict Resolution*, 55 (2): 220-247.
- Klor, Esteban F., and Asaf Zussman. 2021. "Defense and the Economy, 1990-2016." In *The Israeli Economy, 1995–2017: Light and Shadow in a Market Economy*, eds. Avi Ben-

- Bassat, Reuben Gronau, and Asaf Zussman, 168-202. Cambridge: Cambridge University Press.
- **Krosnick, Jon A., and Duane F. Alwin.** 1989. "Aging and Susceptibility to Attitude Change." *Journal of Personality and Social Psychology*, 57 (3): 416-425.
- **Lupu, Noam, and Leonid Peisakhin.** 2017. "The Legacy of Political Violence across Generations." *American Journal of Political Science*, 61 (4): 836-851.
- Malmendier, Ulrike, and Stefan Nagel. 2011. "Depression Babies: Do Macroeconomic Experiences Affect Risk Taking?" *Quarterly Journal of Economics*, 126 (1): 373-416.
- **Malmendier, Ulrike, and Stefan Nagel.** 2016. "Learning from Inflation Experiences." *Quarterly Journal of Economics*, 131 (1): 53-87.
- **Malmendier, Ulrike, Geoffrey Tate, and Jon Yan.** 2011. "Overconfidence and Early-Life Experiences: The Effect of Managerial Traits on Corporate Financial Policies." *The Journal of Finance*, 66 (5): 1687-1733.
- **Montalvo, Jose G.** 2011. "Voting after the Bombings: A Natural Experiment on the Effect of Terrorist Attacks on Democratic Elections." *Review of Economics and Statistics*, 93 (4): 1146-1154.
- **Nelson, Katherine.** 1993. "The Psychological and Social Origins of Autobiographical Memory." *Psychological Science*, 4(1): 7-14.
- **Peffley, Mark, Marc L. Hutchison, and Michal Shamir.** 2015. "The Impact of Persistent Terrorism on Political Tolerance: Israel, 1980 to 2011." *American Political Science Review*, 109 (4): 817-832.
- Raabe, Tobias, and Andreas Beelmann. 2011. "Development of Ethnic, Racial, and National Prejudice in Childhood and Adolescence: A Multinational Meta-analysis of Age Differences." *Child Development*, 82 (6): 1715-1737.
- **Rozenas, Arturas, Sebastian Schutte, and Yuri Zhukov.** 2017. "The Political Legacy of Violence: The Long-Term Impact of Stalin's Repression in Ukraine." *Journal of Politics*, 79 (4): 1147-1161.
- **Shayo, Moses, and Asaf Zussman.** 2011. "Judicial Ingroup Bias in the Shadow of Terrorism." *Quarterly Journal of Economics*, 126 (3): 1447-1484.
- **Shayo, Moses, and Asaf Zussman.** 2017. "Conflict and the Persistence of Ethnic Bias." *American Economic Journal: Applied Economics*, 9 (4): 137-65.

- **Weintraub, Michael, Juan F. Vargas, and Thomas E. Flores.** 2015. "Vote Choice and Legacies of Violence: Evidence from the 2014 Colombian Presidential Elections." *Research and Politics*, 2 (2): 1–8.
- **Yakter, Alon, and Liran Harsgor.** 2023. "Long-term Change in Conflict Attitudes: A Dynamic Perspective." *British Journal of Political Science*, 53 (2): 460-478.
- Yakter, Alon, and Mark Tessler. 2023. "The Long-Term Electoral Implications of Conflict Escalation: Doubtful Doves and the Breakdown of Israel's Left-Right Dichotomy." *Journal of Peace Research*, 60 (3): 504-520.

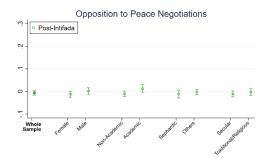
APPENDIX FOR LONG TERM EFFECTS OF POLITICAL VIOLENCE ON ATTITUDES: EVIDENCE FROM THE SECOND INTIFADA

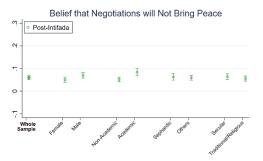
Appendix Table A.1.:
Evolution of Attitudes, Controlling for Sociodemographic Characteristics

Year	Opposition to the Oslo Accords (1)	Belief that Oslo will Not Bring Peace (2)	Year	to Peace	Belief that Negotiations will Not Bring Peace (4)
1994	-0.006	` /	2001	` /	0.081***
	(0.011)				(0.011)
1995	0.024**	-0.042***	2002	0.076***	0.049***
	(0.010)	(0.011)		(0.017)	(0.009)
1996	-0.061***	-0.052***	2003	0.011	0.006
	(0.010)	(0.010)		(0.011)	(0.009)
1997	-0.067***	0.003	2004	Baseline	Baseline
	(0.010)	(0.010)			
1998	-0.009	-0.018	2005	-0.028***	0.002
	(0.012)	(0.012)		(0.009)	(0.010)
1999	-0.078***	-0.082***	2006	0.045***	0.069***
	(0.010)	(0.011)		(0.009)	(0.009)
2000	Baseline	Baseline	2007	0.029***	0.076***
			,	(0.008)	(0.009)
2001	0.121***	0.221***	2008	0.043***	0.098***
	(0.010)	(0.010)		(0.009)	(0.009)
2002	0.188***	0.301***	2009	-0.040***	0.080***
	(0.010)	(0.010)		(0.009)	(0.010)
2003	0.155***	0.243***	2010	-0.074***	0.051***
	(0.010)	(0.011)		(0.009)	(0.010)
2004	0.135***	0.254***	2011	-0.022***	0.080***
	(0.011)	(0.010)		(0.008)	(0.009)
2005	0.092***	0.194***	2012	-0.015	0.116***
	(0.011)	(0.011)		(0.010)	(0.010)
2006	0.118***	0.252***	2013	0.014	0.124***
	(0.011)	(0.011)		(0.010)	(0.010)
2007	0.111***	0.266***	2014	0.109***	0.178***
	(0.010)	(0.010)		(0.015)	(0.015)
2008	0.126***	0.269***	2015	0.033***	0.135***
	(0.019)	(0.018)		(0.009)	(0.009)
	()	(* * *)	2016	0.018**	0.119***
				(0.009)	(0.009)
			2017	-0.029***	0.111***
				(0.010)	(0.012)
			2018	-0.042**	0.061***
				(0.021)	(0.022)

Notes: The figures display the coefficients from estimating equation (1) using a linear probability model with robust standard errors. *, **, *** denote statistical significance at the 10, 5, and 1 percent levels, respectively.

Appendix Figure A1: Heterogeneous Effects of Violence by Sociodemographic Characteristics, Questions about Negotiations





<u>Notes</u>: The figures display the coefficients on period indicators estimated separately for each level of sociodemographic characteristics using a model similar to equation (1). Capped ranges indicate 95% confidence intervals using standard errors.