

# Does International Terrorism affect Public Attitudes toward Refugees?

## Evidence from a Large-scale Natural Experiment

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**Abstract:** Does terrorism affect the public's attitudes toward refugees? Do terrorist attacks increase public pressure on legislators to restrict refugee policy? Are these effects long- or short-lived? To answer these questions, this article presents results from a large-scale natural experiment to investigate the effects of the 2015 Islamic State terrorist attacks in Paris on attitudes toward Syrian refugees. We show that the attacks increased (1) anxiety over refugee resettlement; (2) perceptions of refugees as a security and cultural threat; and (3) opposition to resettlement. Furthermore, the attacks led to increased mobilization among opponents of resettlement. Using large daily samples across a three-week period, however, we demonstrate that each of these effects was decidedly short-lived. The findings are highly relevant to our understanding of public reactions to major terrorist attacks, and the responses of political entrepreneurs in their aftermath.

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Paris changes everything.

— Markus Söder  
Bavarian Finance Minister

## Introduction

On November 13, 2015, nine heavily armed gunmen and suicide bombers affiliated with the terrorist organization Islamic State perpetrated a series of attacks in the heart of Paris, killing 130 civilians and injuring more than 350. The attacks were the largest in the West in more than a decade and they intensified concerns among world leaders and the public about the threat of international terrorism. They also coincided, however, with the Syrian refugee crisis, the largest refugee crisis since the end of the Second World War. Perpetrated by a Syria-based terrorist organization, the Paris attacks would tightly intertwine two of the most salient issues in modern international politics: the fight against terrorism and the large-scale resettlement of refugees.

In the aftermath of the attacks, politicians across Europe and North America sought to mobilize public opposition to refugee resettlement by invoking the perceived threat posed by Syrian refugees to national security. Within a week of the attacks, 30 U.S. governors had voiced opposition to resettlement in their states and the U.S. House of Representatives had passed a bill to suspend the section of the refugee program concerning Syrian and Iraqi refugees (Healy and Bosman, 2015). In Canada, Prime Minister Justin Trudeau postponed a plan to welcome 25,000 Syrian refugees by the end of the year (Canadian Broadcasting Company, 2015a). In Germany, pressure mounted on Chancellor Angela Merkel to end her government's open-arms refugee policy. Perceptions of the effects of the attacks on attitudes and policy were neatly summarized by Bavaria's Finance Minister: "Paris," he said, "changes everything" (Aust, Malzahn, and Vitzhum, 2015).

The Paris attacks and their political aftermath highlight a series of important, but as yet unanswered questions concerning refugees and the effects of large-scale terrorist attacks on attitudes, emotions, and behaviors: What effects does international terrorism have on public attitudes and emotions toward refugees fleeing from countries associated with terrorism? To what degree does terrorism mobilize the public to pressure political representatives to restrict refugee policy? Are these effects long- or short-lived?

To answer these questions, this article presents results from a natural experiment to examine the effects of the Paris terrorist attacks on attitudes and emotions toward Syrian refugees. We use data containing an extensive set of questions concerning Syrian refugees that were asked in a large-scale national survey ( $n = 18,763$ ) fielded in Canada — a major recipient of Syrian refugees — less than 48 hours before the Paris attacks, and subsequently fielded to large samples of respondents each day for three weeks thereafter. To our knowledge, these data provide the first opportunity to examine, with precision, the effects of major terrorist attacks on attitudes and emotions toward refugees; their effect on issue-based political mobilization; and the duration of these effects.

This article makes four major contributions to the literature. First, by examining the effects of terrorism on public attitudes and emotions toward refugees, we broadly investigate an issue that remains understudied despite its substantial international importance. While there is a growing

body of research that investigates the causal effects of terrorist attacks on public opinion, this research has focused heavily on attitudes and behaviors related to voting and partisanship, and on the effects of terrorism in the vicinity of attacks (Bonanno and Jost, 2006; Berrebi and Klor, 2008; Gould and Klor, 2010; Getmansky and Zeitzoff, 2014; Kibris, 2010; Bali, 2007; Montalvo, 2011; Hersh, 2013).<sup>1</sup> Little is known, however, about the effects of large-scale attacks on attitudes toward outgroups such as refugees and the effects on publics that are not the direct targets.<sup>2</sup> Indeed, large-scale terrorist attacks are frequently aimed at international audiences and can have wide-ranging consequences for policy-making.

Second, we address empirical limitations in the literature on terrorism and public opinion. In contrast to studies that examine real-world terrorist attacks, much research has investigated the link between perceptions of the threat of terrorism and an extensive range of attitudes and emotions using cross-sectional surveys and survey experiments (e.g. Davis and Silver, 2004; Huddy et al., 2005; Merolla and Zechmeister, 2009; Hetherington and Suhay, 2011; Malhotra and Popp, 2012; Renshon, Lee, and Tingley, 2015). It remains an open question, however, whether empirical relationships demonstrated in these studies carry over to real-world terrorist events. Using a natural experiment and rich survey data, we examine these relationships in the context of large-scale terrorist attacks and investigate their role as causal mechanisms in affecting opposition to refugee resettlement.

Third, although research into real-world attacks has investigated their effect on voter turnout (Hersh, 2013; Robbins, Hunter, and Murray, 2013; Getmansky and Zeitzoff, 2014), no research, to our knowledge, has examined more immediate forms of mobilization. We help fill this gap in the literature by examining the effect of the Paris attacks on the public's willingness to contact political representatives regarding refugees and resettlement. The evidence we provide suggests that growth in vocal opposition to refugee resettlement in the aftermath of the attacks was more likely due to changes in mobilization than it was due to changes in attitudes: although the effect of the attacks on opposition to refugee resettlement was moderate, their effect on political mobilization was substantial and strongly favored the political opponents of resettlement. The upshot is that large-scale terrorist attacks can result in asymmetrical public pressure on political representatives to implement policy changes, even if the underlying distribution of policy preferences do not meaningfully change. This result has important consequences for our understanding of democratic representation.

Lastly, this article is the first to clearly illustrate the short-term dynamics of public opinion in the aftermath of large-scale terrorist attacks. In past research, investigation of real-world terrorist attacks has relied on survey samples pooled across many days or weeks before and after attacks (e.g. Finseraas and Listhaug, 2013; Legewie, 2013; Schüller, 2016). Samples pooled across wide time intervals, however, can obscure rates of decay. We overcome this problem by using data that include exceptionally large daily samples across a three-week period immediately following the Paris attacks. We show that although the effects of the attacks are both clear and immediate, they were decidedly short-lived. This finding has important implications for our understanding of the size of the window of opportunity open to political entrepreneurs in the aftermath of terrorism and explaining the rapid birth and death of political efforts to enact policy changes following

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<sup>1</sup>One notable recent exception leverages variation in terrorism across time to examine the effects of terrorism on political tolerance in Israel (Peffley, Hutchison, and Shamir, 2016).

<sup>2</sup>Important exceptions include Legewie (2013) and Finseraas and Listhaug (2013), discussed further below.

large-scale acts of violence.

## The Syrian Refugee Crisis and the Paris Terrorist Attacks

By the end of 2015, more than 4 million refugees had fled the civil war in Syria (United Nations, 2015). The resulting refugee crisis led to intense debate in Western democracies, particularly in Europe. The intensity of this debate in Europe at first contrasted starkly with the limited attention given to the issue in North America. This changed in September 2015 when a photo was widely published in the international media of Alan Kurdi, a Syrian child who had drowned in an effort to seek refuge in Europe with his family and whose body was pictured washed ashore on a beach in Turkey. Calls came from across Europe and North America for increased international support for refugees. In the U.S., where 2,500 refugees had been admitted since the beginning of the Syrian civil war, the Obama administration proposed to accept 10,000 more refugees by the end of 2015. In Canada, Alan Kurdi's death occurred in the midst of a federal election campaign, and the Liberal Party, which would eventually form government, committed to accept 25,000 Syrian refugees by the end of 2015.

Two months later, the Paris attacks appeared to drastically change the international political landscape. The attacks led to the deaths of 130 civilians and were the largest in the West since the bombings in Madrid more than a decade earlier. In the wake of the attacks, politicians across Europe and North America publicly expressed strong opposition to Syrian refugee resettlement. In Europe, anti-immigration parties seized on the opportunity to argue for restrictive refugee policies. In the U.S., House Speaker Paul Ryan called for a "pause" in the U.S.'s plan to accept more refugees. "Our nation has always been welcoming," he remarked, "but we cannot let terrorists take advantage of our compassion" (Werner, 2015). In Canada, Saskatchewan Premier Brad Wall became the voice of opposition to resettlement. Wall, who two months earlier had expressed willingness to increase his initial pledge to resettle Syrian refugees, called for the federal government to postpone its plan to admit 25,000 Syrian refugees (Canadian Broadcasting Company, 2015b).

The reactions of politicians and commentators suggested that concerns about national security had become the driver of policy positions on refugee resettlement. The attacks in Paris, it appeared, had led political leaders and the public to replace sympathy for Syrian refugees with heightened fears over national security.

## Terrorism and Attitudes toward Refugees

Do large-scale terrorist attacks affect the public's emotions and attitudes toward refugees? To answer this question, we examine the effects of the Paris terrorist attacks on emotions toward and beliefs about Syrian refugees, and the public's policy preferences regarding resettlement.

## Terrorism and emotion

In the aftermath of terrorist attacks in which refugees are perceived to be indirectly linked to the perpetrators — whether by religion, nationality, or otherwise — two competing emotions are expected to drive attitudes toward refugees and preferences over refugee policy. On the one hand, terrorism may increase perceptions that terrorists will infiltrate refugee flows, raising anxiety over the possibility of future terrorist attacks close to home. On the other hand, increased perceptions of a link between refugees and terrorism may decrease sympathy for refugees themselves.

**Anxiety.** In general, studies that investigate emotional responses to terrorism find a positive relationship between perceptions of the threat of terrorism and anxiety (Huddy et al., 2005; Huddy, Feldman, and Weber, 2007; Merolla and Zechmeister, 2009). These findings are complemented by research in psychology that demonstrates that anxiety is frequently linked to situations that individuals perceive to be out of their immediate control (Lerner and Keltner, 2001; Tiedens and Linton, 2001).

Anxiety also figures prominently in explanations of policy preferences. For example, higher levels of anxiety are associated with preferences for isolationist foreign policies (Huddy et al., 2005) and restrictive immigration policies (Brader, Valentino, and Suhay, 2008; Renshon, Lee, and Tingley, 2015). There is not strong evidence, however, that anxiety concerning the threat of terrorism is associated either with support for restrictive immigration or harsh anti-terrorism policies (Huddy et al., 2005). Yet, empirical investigation into these relationships has not been conducted in the context of real-world terrorist attacks. Indeed, it would be surprising if anxiety toward the presence of outgroups, such as refugees, were not affected by terrorism, or if anxiety were not a predictor of opposition to refugee resettlement. Whether real-world terrorist attacks increase anxiety regarding refugees and resettlement, in other words, remains an open empirical question.

**Sympathy.** The focus in the literature on the ‘negative’ determinants of attitudes toward outgroups, such as anxiety, prejudice, and threat perception has come at the relative neglect of ‘positive’ determinants, such as sympathy or affect. This neglect is unfortunate because ‘positive’ emotions may be important predictors of attitudes toward outgroups. In one of the few studies to address this, for example, survey respondents with higher levels of empathy who are informed of the difficult conditions faced by prospective immigrants are shown to be less likely to favor restrictions on immigration than those not informed of such conditions (Newman et al., 2013; see also Haubert and Fussell, 2006). Furthermore, the reasons for immigration and asylum-seeking have been demonstrated to play a substantial role in preferences over individual migration applications, with those seeking entrance for reasons of persecution being much more likely to be chosen for admittance than those seeking to improve their economic conditions (Hainmueller and Hopkins, 2015; Bansak, Hainmueller, and Hangartner, 2016).

One possible reason underlying sympathy for refugees is that refugees may be perceived to face dire situations as a result of factors outside of their control. Outgroups that are perceived to lack control over outcomes in their lives, for example, have been shown to elicit compassion (Weiner, 2006; Gill and Andreychik, 2007), whereas those who face hardships due to internal factors (e.g. lack of effort) elicit hostility (e.g. Aarøe and Petersen, 2014; Harell, Soroka, and Iyengar, 2017). Terrorist attacks may affect the balance of these factors by implicating refugees

as members of a society perceived responsible for breeding and exporting violence. By shifting perceptions of responsibility onto refugees themselves, terrorism may therefore decrease public sympathy for refugees overall.

## Terrorism and threat perception

Prior to the Paris attacks, opposition to Syrian refugee resettlement frequently centered on the potential threat posed by refugees to Western culture and the economy. Such concerns are central to explanations in the literature regarding attitudes toward immigrants (for a recent review, see [Hainmueller and Hopkins, 2014](#)). However, in contrast to debates over immigration, the growth of the Syrian civil war and the expansion of Islamic State pushed the issue of refugee resettlement toward concerns that Syrian refugees posed a substantial threat to national security.

**Security threat.** Even before the Paris attacks, politicians and commentators expressed concerns that Syrian refugee resettlement would pose a threat to national security. For example, when a series of controversial vetting procedures for Syrian refugees were introduced by the Canadian government, the Prime Minister emphasized the need to keep the “country safe and secure” ([Bailey, Galloway, and Leblanc, 2015](#)), with similar concerns expressed by politicians across the United States and Europe.

This “securitization” of migration is not a new phenomenon ([Messina, 2014](#)), and the claim that migration flows can pose a threat to national security is not without empirical support ([Bove and Böhmelt, 2016](#)). Yet even if refugee flows were not empirically linked to terrorism, we can expect that terrorism will affect *perceptions* of refugees as members of a society, culture, and/or religion thought to bear responsibility. These changes in perceptions may arise from the inherent uncertainty in determining which individuals pose a security threat. This may lead terrorism to be perceived as a group-based threat ([Huddy and Feldman, 2011](#)), where those responsible are defined in homogenizing terms ([Rothgerber, 1997](#)), causing an increase in negative attitudes toward members of an outgroup, broadly defined (e.g. [LeVine and Campbell, 1972](#)). Accordingly, we expect that the Paris attacks, which linked Syrian refugees with the perpetrators by virtue of their shared nationality and religion, increased perceptions of refugees as a threat to national security.

**Cultural threat.** The perceived differences between Western culture and that of Syrian refugees were used before the attacks by opponents of resettlement to represent refugees as a threat to Western norms and practices. Hungarian Prime Minister Viktor Orban exemplified this strain of thought. In closing Hungary’s borders to Syrian refugees, he justified the action by claiming that Hungarians “do not want to see a significant minority among [themselves] that [have] different cultural characteristics and background[s]. ... We would like to keep Hungary as Hungary.” ([Traub, 2015](#)).

In addition to representing a physical threat, Islamic terrorism is also perceived as an attack on the West’s values and culture. As such, terrorism is expected to exacerbate perceptions of cultural differences with refugees. Threats to a group’s identity or culture such as these, often called ‘symbolic’ threats (e.g. [Kinder and Sears, 1981](#); [Stephan, Ybarra, and Bachman, 1999](#)), have been shown to increase the strength of ingroup identity; to raise the salience of ingroup-outgroup differences; and to generate outgroup hostility ([Tajfel, 1982](#); [Brewer, 2001](#)). Negative attitudes

resulting from symbolic threats have, moreover, been shown to have consequences for policy preferences regarding the groups associated with those threats (Sniderman, Hagendoorn, and Prior, 2004; Newman, Hartman, and Taber, 2012; de Rooij, Goodwin, and Pickup, 2015). We expect, therefore, that the Paris attacks increased perceptions of Syrian refugees as culturally incompatible with Western society and, consequently, a potential threat to national culture.

## Terrorism and Political Mobilization

Policy preferences, and the emotions and perceptions that underlie them, represent an important area of public opinion with potential to be affected by terrorism. Yet whether public preferences translate into pressure on legislators may be as consequential for policy as are changes in preferences themselves. Does terrorism mobilize the public to apply pressure on political representatives? And, if so, are opponents of resettlement more politically mobilized than supporters following terrorist attacks?

To begin, there is good reason to expect that terrorism is politically mobilizing because changes in emotions and threat perceptions have both been demonstrated to increase political participation (e.g. Marcus, Neuman, and MacKuen, 2000; Cho, Gimpel, and Wu, 2006; Valentino et al., 2011). For example, increased perceptions of threat in the form of undesired policy changes are shown to mobilize issue publics (Miller and Krosnick, 2004); increases in anxiety, to stimulate mobilization (Marcus, Neuman, and MacKuen, 2000; Brader, Valentino, and Suhay, 2008); and terrorist attacks, to increase voter registration and turnout (Cho, Gimpel, and Wu, 2006; Hersh, 2013; Robbins, Hunter, and Murray, 2013).

There is also reason, however, to expect that terrorism will result in higher mobilization among some groups more than others. Hersh (2013) finds, for instance, that relatives and neighbors of victims of the 9/11 attacks were more likely than otherwise similar individuals to vote in future elections, and Cho, Gimpel, and Wu (2006) find that Arab-Americans mobilized by way of voter registration in response to the debate over and implementation of the Patriot Act.

For the case examined herein, the Paris attacks provided opponents of refugee resettlement with the political opportunity to highlight the potential risks of liberal resettlement policy. The attacks therefore provided opportunities for advocates on one side of the issue to argue for a preferred policy. But terrorism can simultaneously close off opportunities for others. For supporters of resettlement, the Paris attacks appeared to undermine, albeit indirectly, claims that Syrian refugees would pose no or few threats to national security. As a consequence, the attacks are expected to have left the level of mobilization among supporters of resettlement unchanged or to have been de-mobilizing.

## Effect Duration

Lastly, one of the least examined but most theoretically and politically important considerations in the analysis of terrorism is effect duration. Effects that decay rapidly and those that are long-lasting have substantially different political implications. As Gaines, Kuklinski, and Quirk (2007, 2) write, “determining the rates of decay of various treatment effects and deriving the political implications could be one of the most informative tasks” of research design and analysis. Yet,

despite its fundamental importance, effect duration is rarely investigated. Among the few studies that do investigate duration — typically those in the context of political communication survey experiments — effects tend to disappear rapidly (Luskin, Fishkin, and Jowell, 2002; Druckman and Nelson, 2003; Mutz and Reeves, 2005; Gerber et al., 2011; Hill et al., 2013).

Large-scale terrorist attacks, however, have the potential to bring about much more long-lasting emotional and attitudinal responses. Real-world events may also generate more persistent effects than those manipulated in a laboratory or survey-experimental setting. Hersh (2013) shows, for example, that increases in conservatism caused by the 9/11 attacks among relatives and neighbors of victims were observable more than ten years later.

The absence of large-scale survey data to track public opinion with precision immediately following terrorist attacks, however, has meant that the duration of their effects are unknown. On the one hand, the Paris attacks were substantial in their scale, with clear links to the issue of migration and refugee resettlement, suggesting the potential for long-lasting effects. On the other hand, research into the duration of effects on public opinion in other domains has demonstrated their rapid decay. Whether the effects of large-scale terrorist attacks on public opinion are long- or short-lasting thus remains an open question, with important political implications.

## Hypotheses

Given the foregoing discussion, our empirical expectations are the following. First, we hypothesize that the Paris attacks affected emotions in two ways:

**H<sub>1</sub>:** The Paris attacks increased anxiety regarding the presence of Syrian refugees.

**H<sub>2</sub>:** The Paris attacks decreased sympathy for Syrian refugees.

Second, we hypothesize that the attacks affected public perceptions of Syrian refugees as threats to security and culture:

**H<sub>3</sub>:** The Paris attacks increased perceptions of Syrian refugees as threats to national security.

**H<sub>4</sub>:** The Paris attacks increased perceptions of Syrian refugees as threats to national culture.

As a result of these effects, we expect the following:

**H<sub>5</sub>:** The Paris attacks decreased support for Syrian refugee resettlement.

Lastly, we hypothesize that the attacks mobilized the public to advocate for policy change, but with different outcomes for supporters and opponents of resettlement:

**H<sub>6</sub>:** The Paris attacks increased political mobilization concerning refugee resettlement policy.

**H<sub>7</sub>:** Following the Paris attacks, mobilization will be higher among opponents of resettlement than among supporters.



## Research Design

To test the foregoing hypotheses, we rely on the fortunate timing of a large-scale post-election study that contains an extensive range of questions concerning Syrian refugees that was fielded to a national online panel of respondents in Canada by the research firm Vox Pop Labs.<sup>3</sup> The questions were asked as part of a  $3 \times 2$  factorial survey experiment module that was designed to test whether physical proximity to resettled Syrian refugees and refugees' religious affiliation affected support for resettlement and willingness to contact a political representative about the issue.<sup>4</sup> The survey further captured 21 indicators to build indexes measuring feelings of sympathy for Syrian refugees; anxiety regarding Syrian refugee resettlement; and perceptions of Syrian refugees as a potential threat to national security, culture, and the economy. The first wave of the survey was fielded on November 11, 2015. The terrorist attacks in Paris occurred less than 48 hours later.

As a result of the attacks, we modified the fielding schedule of subsequent survey waves. The second wave was fielded to a large sample of respondents less than 48 hours after the attacks and, to anticipate examination of effect duration, fielded to further independent samples of respondents each day for 18 days thereafter. In sum, the data constitute an exceptionally large three-week repeated cross-sectional survey ( $n = 18,763$ ) with the largest samples collected immediately before and after the attacks.

### The Paris attacks as natural experiment

Due to the timing of the survey and the exogeneity of the attacks with respect to survey fielding, we treat the Paris terrorist attacks as an as-if randomly assigned treatment to respondents surveyed within a short time interval (within 2 days) of the attacks. The large daily samples collected thereafter are leveraged to examine effect duration. Because treatment assignment is a function of time, we first address two primary concerns regarding the credibility of our research design.

The first potential concern is that events or processes other than the Paris attacks may have contributed to differences in survey responses between the immediate pre- and post-attack periods. Theoretically, any differences in outcomes across this short fielding interval could be decomposed into the sum of the effect of the attacks and that due to other causes. There is good reason, however, to expect that differences in attitudes and emotions due to other events or processes are implausible. First, the attacks occurred during a period outside of any meaningful news cycle concerning either Syrian refugees or the Syrian conflict in general. Second, as noted variously throughout the literature, public opinion in such cases is slow-moving (e.g. [Page and Shapiro, 1992](#); [Zaller, 1992](#); [Druckman and Leeper, 2012](#)). Finally, as we demonstrate graphically

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<sup>3</sup>The post-election survey was sent to all respondents in the research firm's national online panel, of which roughly a quarter received the questions regarding Syrian refugees. Respondents were therefore not purposefully selected to match the socio-demographic characteristics of the national population. Estimates presented in the results section are therefore statistically adjusted through regression and survey weighting as appropriate to the context. For further details, see the Supplementary material.

<sup>4</sup>Respondents were assigned at random to conditions specifying the religion of Syrian refugees and their potential place of resettlement. For the purposes of this study, these factors are not examined herein, and will be analyzed in a companion paper.

in the Results section, once the effects of the attacks return to the pre-attack baseline, there appears to be little if any change across time. We assume therefore that any differences between the immediate pre- and post- periods result from the occurrence of the attacks, and that if this assumption were violated, that any bias in our estimates would, at most, be slight.

The second and potentially larger threat to causal inference is differential survey non-response. Although the survey was fielded in each wave to randomly selected sets of respondents, and therefore by design the treatment is independent of survey receipt, the composition of the treatment and control samples may differ due to differences in survey non-response. There is reason, however, to reject this as a plausible explanation of differences in observed outcomes. First, the survey invitation itself referred to the post-election survey as such, and did not reference either the Paris attacks or refugees, minimizing the possibility of selection as a consequence of survey content. Second, we conduct a series of pre-treatment covariate balance checks. These checks demonstrate that the immediate pre- and post-attack samples are extremely similar in composition and none of a variety of pre-treatment covariates predict membership in the treatment or control groups. Furthermore, a likelihood-ratio test finds no strong evidence ( $p = 0.74$ ) that the full set of pre-treatment covariates jointly differentiate between respondents in the immediate pre- and post-attack samples (for further details, see the Supplementary Material). We nevertheless statistically adjust for potential differences in the pre- and post-attack samples by including pre-treatment covariates in regression models as appropriate to each outcome of interest. In only one model do the adjusted and unadjusted statistical tests differ, which we discuss explicitly at the relevant point of the text.

## Survey design

The survey was designed to capture two primary outcomes: (1) support for Syrian refugee resettlement and (2) willingness to contact a political representative regarding resettlement. It further captured 21 separate indicators measuring sympathy for and anxiety toward Syrian refugees, and perceptions of Syrian refugees as a threat to security, culture, and the economy. To avoid burdening respondents with large sets of questions, respondents were assigned at random to one of two survey branches containing either questions regarding emotions (sympathy and anxiety), or those regarding threat (security, cultural, and economic).

All respondents read a short paragraph stating that the government was considering admitting more refugees from Syria. Respondents who were assigned to the emotion branch were then asked to specify, on a 0 to 10 scale,<sup>5</sup> the degree to which they felt the following emotions toward Syrian refugees: sympathy, indifference, compassion, sadness, and distress. Responses to these five items were summed to form a sympathy index ( $\alpha = 0.79$ ). Respondents were then asked a similar question regarding their anxieties concerning Syrian refugee resettlement for the following items: anxiety, upset, worry, anger, fear, pride, and hope. Responses to the first five of these items were summed to form an anxiety index ( $\alpha = 0.93$ ).<sup>6,7</sup>

Respondents who were assigned to the threat branch of the survey were asked three sets

<sup>5</sup>Terminal ends of the scale were labeled 'Not at all' and 'A great deal'.

<sup>6</sup> Following Brader, Valentino, and Suhay (2008), we label this index "anxiety", but it may also be interpreted as measuring "negative affect" more generally.

<sup>7</sup>In factor analysis, the loadings for pride and hope were low, and thus these indicators were excluded from the index.

of three questions to measure beliefs concerning the degree to which Syrian refugee resettlement posed a threat to security, culture, and the economy. To create a security threat index, respondents were asked whether they believed that some refugees would have links to terrorism; whether refugees would pose a threat to national security; and whether refugees' presence would lead respondents to fear for their safety. A six-category likert scale, from "Strongly disagree" to "Strongly agree", was used as the response scale. Responses were then summed to form a security threat index ( $\alpha = 0.91$ ). To measure perceptions of refugees as a cultural threat, respondents were asked whether they believed that Syrian refugees would integrate well into society; whether their values would conflict with those of Canadians; and whether their presence would benefit national culture ( $\alpha = 0.81$ ). For the final index, respondents were asked whether Syrian refugees' presence would be economically costly; whether refugees would help grow the economy; and whether refugees would increase competition for jobs ( $\alpha = 0.64$ ). All indexes are standardized to have mean zero and unit variance in the pre-attack period, and estimated effects are therefore presented in standardized units.

Lastly, all respondents were asked whether they favored Syrian refugee resettlement on a 6-category likert scale ("Strongly disagree" to "Strongly agree"), and whether they would consider contacting their Member of Parliament regarding refugee resettlement ("No"/"Yes").

## Results

Before testing each hypothesis statistically, we present each measure graphically across time. As we will see, these graphs tell an exceptionally clear story concerning how emotions and attitudes shifted (or did not shift) between the immediate pre- and post-attack period, and how they changed over time.

### Emotions and attitudes toward refugees and resettlement

**Anxiety and sympathy.** Figure 1 presents the raw data for the indexes measuring anxiety concerning resettlement and sympathy for refugees. To ease visual interpretation, changes across time in this figure and subsequent ones are approximated with a second-degree polynomial regression line. As expected, levels of anxiety concerning refugee resettlement increase sharply in the immediate aftermath of the Paris terrorist attacks. In the days that follow, however, the effect of the attacks on anxiety rebounds rapidly. Within roughly a week and a half after the attacks, levels of anxiety concerning refugee resettlement return to their pre-attack level.

To examine the effect of the attacks on anxiety statistically, we regress the anxiety index on an indicator variable representing the post-attack period and a set of pre-treatment covariates using data collected within 2 days of the attacks. Regression results are presented in Model (1) of Table 1. Consistent with the first hypothesis, and as is visually evident in Figure 1, there is strong evidence ( $p < 0.001$ ) that the attacks caused a substantial increase in the public's anxiety over Syrian refugee resettlement.

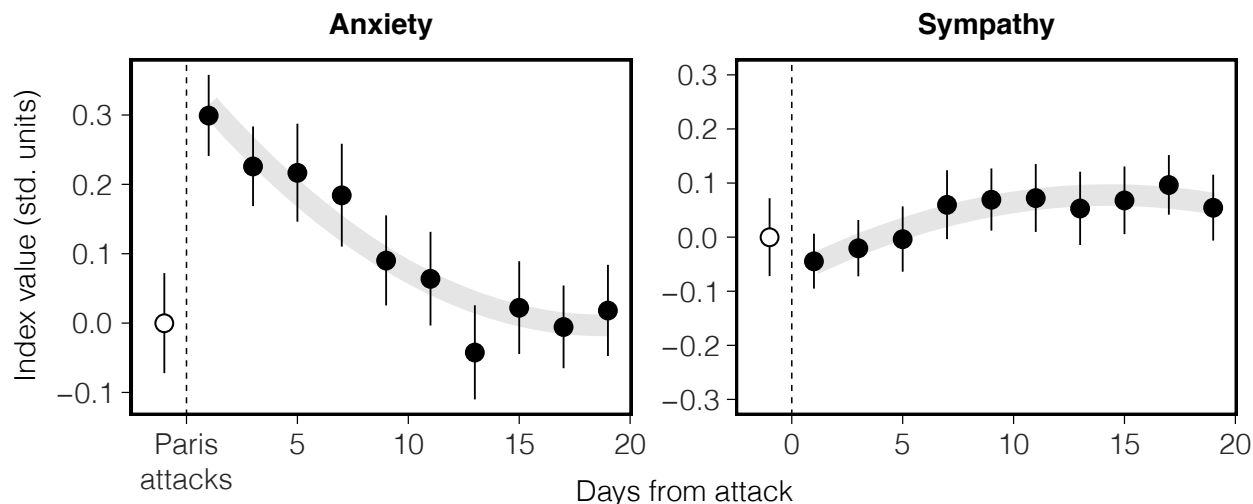
Turning to the second panel of Figure 1, we observe a similarly clear but substantively different picture with respect to the effect of the attacks on sympathy for refugees. In contrast to the pronounced increase in anxiety observable in the first panel, there is no clear indication that the attacks meaningfully affected sympathy for Syrian refugees themselves. Regression results

Table 1: Emotions and perceptions of threat OLS regression results

	<b>Anxiety</b>	<b>Sympathy</b>	<b>Security threat</b>	<b>Cultural threat</b>	<b>Economic threat</b>
	(1)	(2)	(3)	(4)	(5)
Paris attacks	0.265*** (0.054)	-0.033 (0.050)	0.391*** (0.054)	0.190*** (0.051)	0.082 (0.049)
Female	0.050 (0.053)	0.263*** (0.048)	0.022 (0.052)	-0.122* (0.049)	0.082 (0.048)
Age 30-39	0.089 (0.088)	-0.075 (0.080)	0.236** (0.090)	0.119 (0.085)	0.256** (0.083)
Age 40-49	-0.003 (0.095)	0.195* (0.087)	0.093 (0.098)	0.013 (0.092)	0.060 (0.090)
Age 50-64	0.030 (0.081)	0.209** (0.074)	0.126 (0.081)	0.102 (0.075)	0.047 (0.074)
Age 65+	0.107 (0.083)	0.171* (0.076)	0.212* (0.085)	0.140 (0.080)	0.079 (0.078)
College	0.176* (0.086)	-0.192* (0.078)	0.032 (0.084)	-0.042 (0.079)	-0.078 (0.077)
University degree	-0.189* (0.075)	0.169* (0.068)	-0.322*** (0.074)	-0.326*** (0.070)	-0.354*** (0.068)
Francophone	0.120 (0.093)	-0.100 (0.084)	0.025 (0.100)	-0.010 (0.094)	-0.052 (0.092)
Other language	0.056 (0.085)	-0.085 (0.077)	0.016 (0.087)	0.004 (0.081)	-0.052 (0.080)
Ontario	0.221 (0.120)	-0.265* (0.111)	0.158 (0.107)	0.259** (0.100)	0.285** (0.098)
Quebec	0.120 (0.136)	-0.424*** (0.125)	0.282* (0.129)	0.519*** (0.121)	0.357** (0.118)
West	0.169 (0.121)	-0.288** (0.112)	0.043 (0.109)	0.250* (0.102)	0.292** (0.099)
Political ideology	0.199*** (0.011)	-0.140*** (0.010)	0.213*** (0.011)	0.187*** (0.010)	0.191*** (0.010)
Intercept	-0.985*** (0.148)	0.626*** (0.135)	-0.992*** (0.143)	-0.917*** (0.134)	-0.942*** (0.131)
N	1,688	1,685	1,799	1,800	1,802

Standard errors in parentheses. \* p < .05; \*\* p < .01; \*\*\* p < .001

Figure 1: Anxiety toward and sympathy for refugees across time



Each point represents a two-day average, with 90% confidence intervals.

presented in Model (2) of Table 1 bear this out: differences in sympathy for Syrian refugees between the immediate pre- and post-attack period is neither large nor is there strong evidence ( $p = 0.52$ ) that the attacks affected public sympathy for refugees.

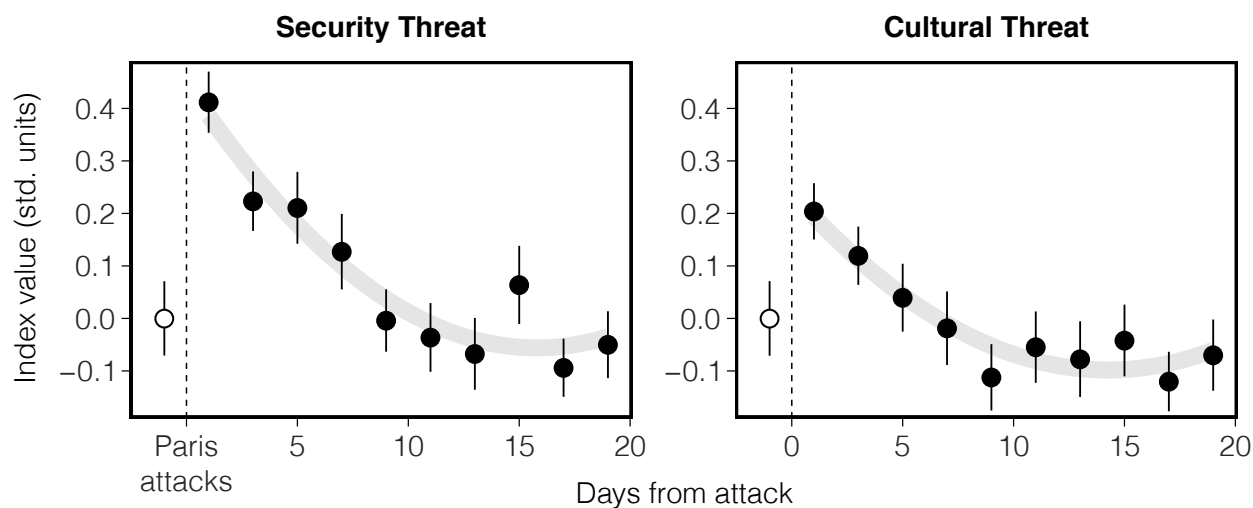
**Security and cultural threat.** Figure 2 presents the raw data for the security and cultural threat indexes. As can be seen in both panels of Figure 2, respondents' beliefs regarding whether refugees pose a security and cultural threat to the country both increase in the immediate aftermath of the Paris terrorist attacks, with a particularly sharp increase in perceptions of refugees as a security threat. Similar to the pattern of change in anxiety following the attacks, however, these changes in threat perceptions rebound rapidly, returning to their pre-attack levels roughly one to two weeks after the attacks.

To examine the effects of the terrorist attacks on threat perceptions statistically, we fit a regression model to each threat index using data collected within 2 days of the attacks. Results from these models are presented in the third and fourth columns of Table 1.<sup>8</sup> The results provide strong evidence that both the perceived threat posed by refugees to security ( $p < 0.001$ ) and to culture ( $p < 0.001$ ) increase in the immediate aftermath of the terrorist attacks.

**Support for refugee resettlement.** To investigate the effect of the Paris terrorist attacks on support for refugee resettlement, we begin by presenting the raw data in Figure 3. As expected, there is a sharp decrease in support for refugee resettlement immediately following the attacks. In a now-familiar pattern, in the days that follow, attitudes toward refugee resettlement rebound rapidly. Within roughly a week after the attacks, support for resettlement rises to its pre-attack level, increasing slightly further before remaining relatively constant during the final week that data were collected.

<sup>8</sup>Results for the economic threat index are shown for completeness (for further detail, see the Supplementary material).

Figure 2: Security and cultural threat indexes across time



Each point represents a two-day average, with 90% confidence intervals.

To examine the effect of the attacks on support for refugee resettlement statistically, we fit an ordinal regression model to the data collected within two days of the attacks. Results from the model are presented in [Table 2](#). They show strong evidence ( $p < 0.001$ ) that the attacks caused a decrease in support for refugee resettlement.

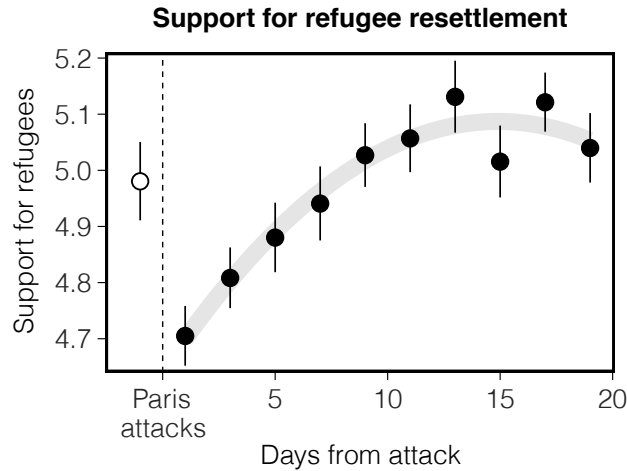
To calculate the magnitude of this effect on the original scale, we use parameter estimates from the fitted model to calculate the probability of support for resettlement for each individual in the dataset, first by setting the `Paris attacks` indicator variable to 0 and then to 1, after which we calculate an average of the differences in these probabilities. Results from this procedure are presented in [Figure 4](#). As the figure shows, the Paris attacks are estimated to have resulted in a 4.4 percentage point decrease in support for refugee resettlement (agree vs. disagree), a relatively moderate effect given the scale of the attacks.

## Evidence of causal mechanisms

The absence of a meaningful effect of the Paris attacks on sympathy for Syrian refugees suggests that the decrease in support for resettlement may have been driven primarily by increased perceptions of refugees as a security threat and anxiety over resettlement, and not due changes to the perceived deservedness of refugees themselves. To investigate this further, we briefly examine the mechanisms involved in the decrease in support for resettlement by turning to recent advancements in methods for the study of causal mechanisms ([Imai et al., 2011](#); [Imai, Tingley, and Yamamoto, 2013](#)).

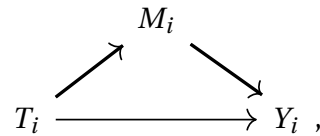
**Definition and estimation.** A causal mechanism represents the process through which a causal variable affects an outcome ([Imai et al., 2011](#), 765). The basic set up for a single mechanism can

Figure 3: Support for refugee resettlement across time



Each point represents a two-day average, with 90% confidence intervals. Response categories to the question concerning agreement that Syrian refugees should be permitted to resettle are coded 1 (“Strongly disagree”) through 6 (“Strongly agree”).

be diagrammed as follows:



where  $T_i$  denotes treatment status,  $M_i$  denotes the mechanism of interest, and  $Y_i$  denotes the outcome.<sup>9</sup> The goal of causal mechanisms analysis is to decompose the effect of a treatment into the effect which operates through a causal mediator of interest ( $T_i \rightarrow M_i \rightarrow Y_i$ ) and that which operates through other channels ( $T_i \rightarrow Y_i$ ).<sup>10</sup>

To calculate the average causal mediation effect (ACME), we use the two-step procedure proposed by Imai et al. (2011).<sup>11</sup> In the first step, two regression models are fit to the data: first, the mediator is modeled as a function of the treatment and pre-treatment covariates; second, the outcome is modeled as a function of the mediator, treatment, and pre-treatment covariates. In the second step, the fitted models are used to predict support for refugee resettlement, first by using the predicted values of the mediator under the treatment condition, and then under

<sup>9</sup>Complications can arise in this basic set up when there is causal dependence between mediators (Imai and Yamamoto, 2013), a concern addressed further below.

<sup>10</sup>A causal mediation effect can be formally defined, using potential outcomes notation (Rubin, 1974), as follows:

$$\tau_i \equiv Y_i(t, M_i(1)) - Y_i(t, M_i(0)), \quad (1)$$

where  $M_i(t)$  denotes the potential value of the mediator for individual  $i$  under treatment status  $t \in \{0, 1\}$ , and  $Y_i(t, m)$  denotes the potential value of the outcome when the treatment status and mediator are set to  $t$  and  $m$  respectively. As Equation 1 indicates, the causal mediation effect represents the difference in the effect of the treatment, holding the value of the treatment constant, and manipulating the value of the mediator as would be realized under conditions  $t = 1$  and  $t = 0$ . For further details, see Imai et al. (2011) and Imai, Tingley, and Yamamoto (2013).

<sup>11</sup>All results provided in this section were generated using the statistical package *mediation* (Tingley et al., 2014).

Table 2: Support for refugee resettlement ordinal logistic regression results

	Support for resettlement	
	Coef	SE
Paris attacks	-0.301***	(0.070)
Female	0.190**	(0.068)
Age 30-39	-0.215	(0.116)
Age 40-49	0.089	(0.126)
Age 50-64	0.102	(0.105)
Age 65+	-0.026	(0.109)
College	-0.197	(0.108)
University degree	0.435***	(0.097)
Francophone	-0.263*	(0.122)
Other language	-0.292**	(0.110)
Ontario	-0.537***	(0.160)
Quebec	-0.918***	(0.180)
West	-0.539***	(0.161)
Political ideology	-0.384***	(0.016)
N	3,531	

Cut-point parameter estimates not shown (see Supplementary Material). \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

the control condition, holding all other variables constant. We then calculate the average in the difference in these two predicted outcomes to estimate the average causal mediation effect.

In the following, we examine anxiety, sympathy, and security and cultural threat as mechanisms. Because two independent branches of the survey were used to capture the two sets of mechanisms (threat and emotion), the models are fit to the relevant subset of the sample collected within 2 days of the attacks. First-stage regression models are those presented in Table 1 and those for the second stage are provided in the Supplementary Material. Because causal mediation analysis relies on the sequential ignorability assumption (see Imai et al., 2011; Imai, Tingley, and Yamamoto, 2013),<sup>12</sup> which is generally considered a strong assumption, we conduct sensitivity analyses for each causal mediation estimate. The sensitivity analysis shows that our primary results are robust to the omission of a relatively strong pre-treatment confounder (see Supplementary Material).<sup>13</sup>

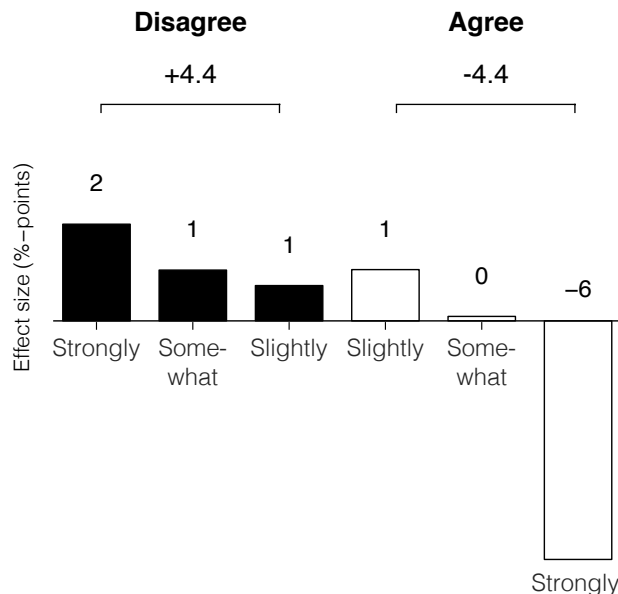
**Causal mechanism results.** Table 3 presents estimates of the effect of the Paris attacks that operate through each mechanism. As the table shows, the model provides evidence that the Paris

<sup>12</sup>This assumption requires first that, conditional on pre-treatment covariates, the treatment is independent of the potential outcome and potential mediator, and second, that the mediator is independent of the potential outcome conditional on pre-treatment covariates and observed treatment status. To make this assumption plausible, we include controls for socio-demographics and political ideology.

<sup>13</sup>As we note in the Supplementary Material, one cannot, however, rule out the potential for post-treatment confounding. As we discuss below, we address this concern directly when examining cultural threat as a causal mechanism.



Figure 4: Estimated effect of terrorist attacks on public support for refugee resettlement



attacks decreased support for refugee resettlement by increasing the public's anxiety about the presence of refugees. The attacks are estimated to have caused a 3.3 percentage point decrease (95% CI: -4.7, -2.0)<sup>14</sup> in support for refugee resettlement by increasing anxiety about the presence of refugees. There is little evidence, on the other hand, that the attacks decreased support for refugee resettlement by decreasing sympathy for refugees themselves.

Turning to the threat measures, we find strong evidence that the effect of the attacks on support for refugee resettlement operated through respondents' concerns about security. The Paris attacks are estimated to have caused a 5.9 percentage point decrease (95% CI: -7.6, -4.3) in support for refugee resettlement by increasing the public's concerns over perceptions of the security threat posed by refugees.<sup>15</sup> An important caveat is that although both anxiety and security appear to be substantial mechanisms through which the Paris attacks operated on public attitudes toward refugee resettlement, these mechanisms may be strongly linked within a longer causal chain, whereby terrorism affects security concerns which in turn affects anxiety or vice versa. However, because the survey was not designed to untangle this relationship and used two independent branches to measure emotion and threat, we cannot investigate this more complex relationship further. Untangling this and other similar relationships is a difficult, but important empirical question that we leave for future research.

Finally, we estimate the average causal mediation effect of the Paris attacks through cultural threat perceptions. To do so, we use a model that relaxes the assumption of causal independence between security and cultural threat. Theoretically, it is unlikely that perceptions of cultural

<sup>14</sup>Confidence intervals are calculated through non-parametric bootstrapping.

<sup>15</sup>Note that this estimate is larger than the estimated (total) average treatment effect of the attacks. This is because the estimate for the direct effect (that not operating through security concerns) is positive, although not significantly so. Changes operating through the security threat channel, in other words, explain the entirety of the effect on support for resettlement.

Table 3: Estimates of causal mechanisms

**A. Emotion branch**

Causal mechanism	ACME	95% CI
Anxiety	-3.3	(-4.7, -2.0)
Sympathy	-0.4	(-1.9, 1.1)

N = 1,828

**B. Threat branch**

Causal mechanism	ACME	95% CI
Security threat	-5.9	(-7.6, -4.3)
Cultural threat	-2.8	(-4.2, -1.3)

N = 1,789

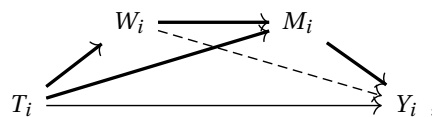
threat are causally independent of the effect that the attacks have on security concerns. We therefore posit a model whereby the Paris attacks cause an increase in perceptions of security threat, which in turn affect perceptions of cultural threat.<sup>16</sup> To fit this model, we use the estimation procedure proposed by Imai and Yamamoto (2013) that allows one to account for post-treatment confounding. Using this model, the Paris attacks are estimated to have caused a 2.8 percentage point decrease (95% CI: -4.2, -1.3) in support for refugee resettlement by increasing the public's perceptions of refugees as a threat to national culture.<sup>17</sup>

## Political mobilization

Lastly, we investigate whether the Paris terrorist attacks politically mobilized the public around the issue of refugee resettlement and whether this effect resulted in differences in mobilization among supporters and opponents of resettlement. To do so, we examine, as a quasi-behavioral measure, respondents' expressed willingness to contact a Member of Parliament (MP) regarding resettlement.

The raw data for this outcome are presented in Figure 5. Unlike data shown in previous figures, the effect of the attacks on the public's willingness to contact a political representative concerning refugee resettlement is less visually apparent. To examine the effect of the attacks

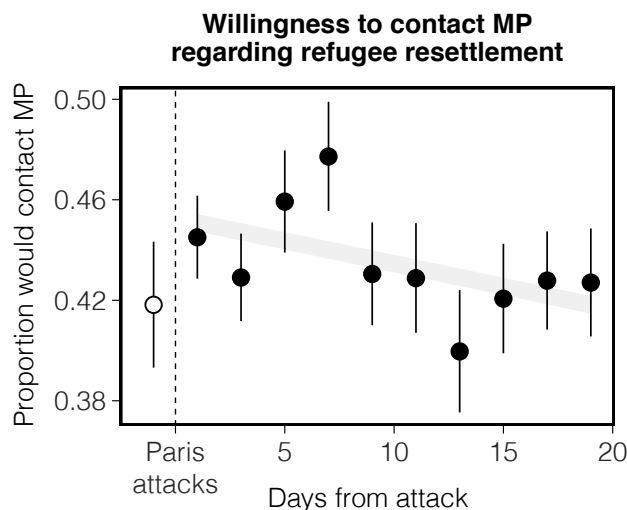
<sup>16</sup>Diagrammatically, this multi-mediator set up can be shown as follows:



where  $W_i$  denotes a post-treatment confounder (security) that causally affects both the mediator of interest  $M_i$  (cultural threat) and the outcome  $Y_i$  (support for refugee resettlement).

<sup>17</sup>If we assume, by contrast, that perceptions of security threat is not a post-treatment confounder, the estimated average causal mediation effect of cultural threat is -3.4 (95% CI: -6.9, -2.1) percentage points.

Figure 5: Willingness to contact Member of Parliament across time



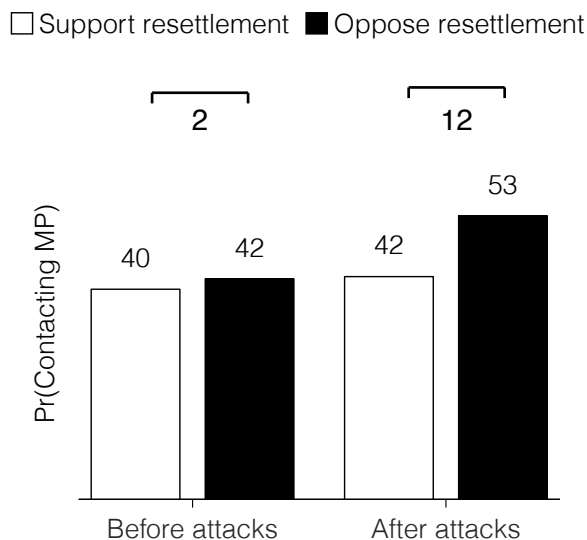
Each point represents a two-day average, with 90% confidence intervals.

on political mobilization statistically, we fit a logistic regression model to the data collected within two days of the attacks, including pre-treatment covariates. Results from this model are presented in Model (1) in Table 4. The model provides evidence that the Paris attacks increased the probability of respondents expressing willingness to contact their MP regarding Syrian refugee resettlement ( $p = 0.048$ ). We note, however, that although the regression-adjusted estimate is statistically significant, evidence from the unadjusted difference (as is evident in Figure 5) is weaker ( $p = 0.14$ ).

More consequential for policy and our understanding of political responses to international terrorism, however, is whether terrorism can lead to *asymmetry* in political mobilization among supporters and opponents of a given policy. Because attitudes toward refugee resettlement is a post-treatment variable, we do not aim to estimate the effect of the attacks on mobilization among those who opposed or supported resettlement before the attacks. Instead, we examine how willingness to contact a political representative about the issue differed between opponents and supporters of refugee resettlement immediately before and after the attacks.

We begin by fitting two models to the data. The first model is fit to evaluate the difference in willingness to contact a political representative between opponents and supporters of refugee resettlement among those surveyed immediately before the attacks; the second, among those surveyed immediately afterward. Results from these models are presented in Models (2) and (3) of Table 4. As Model (2) demonstrates, before the attacks there is little evidence that political mobilization regarding refugee resettlement differed between those who opposed or supported refugee resettlement ( $p = 0.65$ ). In the immediate aftermath of the attacks, however, those opposed to resettlement were substantially more likely to express willingness to contact an MP regarding Syrian refugee resettlement ( $p < 0.001$ ). To examine these differences, Model (4) in Table 4 is fit to the data collected within two days of the attacks, and includes an interaction term between support for resettlement and the Paris attacks indicator. The model demonstrates that the difference in mobilization between supporters and opponents in the post-attack period is different from that in the pre-attack period ( $p < 0.01$ ).

Figure 6: Willingness to contact an MP regarding resettlement before and after Paris attacks



To illustrate the difference in political mobilization between opponents and supporters of refugees before and after the attacks, we generate predicted probabilities of willingness to contact an MP regarding Syrian refugee resettlement using parameter estimates from the models fit separately to the pre- and post-attack data (Models (2) and (3)). Predicted probabilities are calculated using these models for all respondents in the dataset, holding covariates at their observed values.

Figure 6 presents the result of this calculation. As the figure shows, willingness to contact a political representative prior to the attacks is roughly equivalent between opponents and supporters of refugee resettlement: the probability of contacting an MP is slightly higher among opponents (2 percentage points). After the attacks, however, the difference in political mobilization between opponents and supporters is substantial. Among opponents of resettlement, the probability of expressing willingness to contact a political representative regarding refugees is 12 percentage points higher, a substantial difference in political mobilization; among supporters, the difference is 2 percentage points.<sup>18</sup> The difference is thus a substantial 10 percentage points higher among opponents for the model fit to the post-attack data. Large-scale terrorist attacks, in other words, can lead to major differences in political mobilization between opponents and supporters of related policies.

## Discussion and Conclusion

Although research into the effects of terrorism has grown in recent years, few studies have examined the effects of real-world acts of terrorism on public opinion and behavior internationally. Filling this gap in the literature is important because the audiences targeted and affected by

<sup>18</sup>Unadjusted estimates show even larger differences: 0.5 percentage points among supporters of resettlement between the pre- and post-attack periods; 13 percentage points among opponents.

Table 4: Willingness to contact MP regarding resettlement logistic regression results

	<b>Willingness to contact MP regarding Syrian refugee resettlement</b>			
	(1) Within 2 days of attacks	(2) Before attacks	(3) After attacks	(4) Within 2 days of attacks
Paris attacks	0.157* (0.079)			0.046 (0.087)
Oppose refugees		0.092 (0.207)	0.515*** (0.123)	-0.036 (0.193)
Oppose refugees × Paris attacks				0.608** (0.219)
Female	0.187* (0.076)	0.171 (0.141)	0.207* (0.092)	0.194* (0.076)
Age 30-39	0.144 (0.131)	-0.182 (0.242)	0.262 (0.158)	0.120 (0.132)
Age 40-49	0.446** (0.141)	0.527* (0.261)	0.427* (0.170)	0.454** (0.142)
Age 50-64	0.454*** (0.118)	0.231 (0.218)	0.553*** (0.143)	0.455*** (0.119)
Age 65+	0.519*** (0.123)	0.387 (0.229)	0.579*** (0.147)	0.517*** (0.124)
College	0.022 (0.123)	0.100 (0.226)	-0.012 (0.150)	0.029 (0.124)
University degree	-0.090 (0.109)	0.071 (0.198)	-0.085 (0.133)	-0.032 (0.110)
Francophone	-0.498*** (0.144)	-0.243 (0.248)	-0.695*** (0.181)	-0.508*** (0.145)
Other language	-0.345* (0.122)	-0.500* (0.226)	-0.300* (0.147)	-0.359** (0.122)
Ontario	-0.136 (0.155)	0.033 (0.300)	-0.215 (0.183)	-0.154 (0.156)
Quebec	-1.364*** (0.187)	-1.347*** (0.345)	-1.342*** (0.226)	-1.391*** (0.188)
West	-0.130 (0.156)	0.167 (0.305)	-0.259 (0.184)	-0.147 (0.157)
Political ideology	-0.051** (0.016)	-0.125*** (0.034)	-0.054** (0.021)	-0.076*** (0.018)
Intercept	0.015 (0.204)	0.165 (0.371)	0.117 (0.233)	0.110 (0.206)
N	3,535	1,128	2,397	3,525

Standard errors in parentheses. \*p < .05; \*\*p < .01; \*\*\*p < .001

terrorism, and the policy implications, are frequently international.

This study helps fill this gap by examining the effects of the 2015 Paris terrorist attacks on public attitudes, emotions, and mobilization concerning refugees and refugee resettlement. The Paris attacks are a critical case not only because they were the largest in the West in over a decade, but also because they coincided with the Syrian refugee crisis, the largest international refugee crises since the end of the Second World War. Unlike previous attacks in the West, whose policy implications centered primarily on anti-terrorism and national security policy generally, the Paris case is defined by the intersection of national security policy and concerns over international migration. The Paris case represents one of the clearest examples of overlap between national security concerns tied to terrorism and a set of domestic and international policies consequential for a wide range of actors. The implications of this study are therefore many.

**Attitudes and emotions.** To begin, the results suggest that public preferences over policy are highly resilient, even in the face of what were substantial, dramatic, and widely covered terrorist attacks. Although the attacks increased opposition to refugee resettlement as hypothesized, the magnitude of this effect was a moderate 4 percentage point decrease in support for resettlement.

This estimate is particular to a single country (Canada), but it is unlikely that its magnitude differed substantially across Europe or in the U.S. First, as in Europe and the U.S., the Syrian refugee crisis was a sensitive and highly political issue in Canada. As elsewhere, there was substantial debate about refugee resettlement, and the Paris attacks led to concern over the threat posed by refugees to national security and a vocal political backlash against resettlement. Second, the resilience of public opinion to the attacks appears to be mirrored elsewhere in policy. For example, in Germany and Sweden — two major recipients of refugees in Europe — resettlement policy changed little in the aftermath of the attacks despite heated debate. In France, the government promised to accept 30,000 Syrian refugees shortly after the attacks, despite their having occurred in the French capital (Tharoor, 2015). In the United States, the Obama administration maintained its plan to accept 10,000 refugees by the end of 2016.

Our findings also demonstrate that the Paris attacks increased the public's anxiety toward refugees and increased perceptions of refugees as a threat to security and culture. We show, furthermore, that the decrease in support for resettlement operated through each of these channels. One limitation of this study, however, is that the data do not lend themselves well to differentiating between threat perceptions and emotions as competing mechanisms (e.g. Brader, Valentino, and Suhay, 2008) or ones that operate sequentially (e.g. Imai and Yamamoto, 2013). Adjudicating between these possibilities is a difficult empirical problem and an important area for future research.

Contrary to expectations, we find little evidence that the attacks affected sympathy for Syrian refugees themselves. Combined with the clear effects of the attacks on threat perceptions and anxiety, this suggests that although terrorism affects both attitudes and emotions toward refugees and resettlement, it does not necessarily lead the public to paint with a broad brush those who share a national, religious, and/or ethnic identity with the perpetrators. Terrorism may increase security concerns and anxiety about a minority of refugees, but concerns over security appear to increase absent any changes in beliefs in the deservedness of refugees as a whole.

**Political mobilization.** If the effect of the attacks on attitudes toward resettlement policy was moderate, what explains the appearance, in a wide range of countries, of a substantial increase in

vocal opposition to refugees and refugee resettlement in political discourse? Our findings suggest that while attacks terrorism may shift public attitudes on policy only moderately, they can lead to large differences in mobilization among politically important sub-groups of the population. This is suggested by the fact that, whereas before the attacks, supporters and opponents of resettlement were roughly equally likely to contact their MP concerning refugee resettlement, the difference in this form of political mobilization widened substantially in the immediate aftermath of the attacks: among opponents of resettlement, willingness to express attitudes concerning refugees to a political representative increased by 12 percentage points; among supporters, only 2.

These differences in political mobilization highlight a critical complication for the democratic process. In the aftermath of terrorism, the signal received from the public by political representatives will in part be the product of the mobilizing effect of terrorism. If mobilization differs between supporters and opponents of a given policy in the aftermath of an attack, however, then as a measure of public opinion, this signal can be misleading. Theoretically, the growth in *expressions* of opposition to refugees can increase even if the underlying *attitudes* shift little or not at all. Absent attention to information distinguishing expressions of political preference from changes in attitudes, political mobilization may be mistaken for increases in opposition to or support for highly consequential policies. This suggests that observers and political leaders should exercise caution in interpreting increases in expressions of opposition to or support for policies in the aftermath of terrorism or potentially similar acts of violence in other domains, such as mass shootings.

**Duration.** Perhaps the most striking finding from this study is the speed with which the observed effects of the Paris attacks rebound. With large samples collected daily for nearly three weeks after the attacks, we show that despite the severity of the attacks, their effects are surprisingly short-lived. These patterns of decay, furthermore, are both clear and similar across multiple indicators.

The rapid decay in the effects of the attacks raises a series of important questions, and opens up multiple avenues for future research. Because this is the first study to track the effects of a major terrorist attack with precision, whether the effects of comparable events cause similar dynamics is unknown. Although research in political communication also shows that effects can disappear rapidly (e.g. [Druckman and Nelson, 2003](#); [Gerber et al., 2011](#); [Hill et al., 2013](#); [Luskin, Fishkin, and Jowell, 2002](#); [Mutz and Reeves, 2005](#)), it is relatively surprising that the effects of a massive terrorist attack follow a similar pattern. This decay may be due to rapidly decreasing news exposure or be particular to the actions of politicians in the aftermath of the attacks. It is nevertheless important to highlight the scope of the Paris attacks. Because the attacks were the deadliest in the West in more than a decade, these effects, compared to those of other cases, should be those most likely to be substantial and persistent. The results suggest, however, that large-scale events may not have the large and long-term effects on public opinion that are often presented as fact by politicians and political commentators. For public attitudes and emotions toward refugees, the Paris attacks did not “change everything” for long.

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