

RESEARCH NOTE

# The effect of terrorist attacks on attitudes and its duration

Oguzhan Turkoglu<sup>1\*</sup>  and Thomas Chadefaux<sup>2</sup>

<sup>1</sup>Hertie School, Berlin, Germany and <sup>2</sup>Trinity College Dublin, Dublin, Ireland

\*Corresponding author. Email: [turkoglu@hertie-school.org](mailto:turkoglu@hertie-school.org)

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## Abstract

Is terrorism effective as a tool of political influence? In particular, do terrorists succeed in affecting their targets' attitudes, and how long does the effect last? Existing research unfortunately is either limited to small samples or does not address two main difficulties: issues of endogeneity and the inability to assess the duration of the effect. Here, we first exploit the exogeneity to the selection process of the success or failure of an attack as an identification mechanism. Second, we take advantage of the random allocation of survey respondents to interview times to estimate the duration of the impact of terrorist events on attitudes. Using survey data from 30 European democracies between 2002 and 2017, we find first that terrorism affects people's reported life satisfaction and happiness—a proxy for the cost of terrorism in terms of utility. However, we also find that terrorist attacks do not affect respondents' attitude toward their government, institutions, or immigrants. This suggests that terrorism is ineffective at translating discontent into political pressure. Importantly, we also find that all effects disappear within less than two weeks.

**Keywords:** Survey methodology; terrorism; political attitudes

One of the primary goals of terrorist attacks on democracies is to influence political audiences using violence, with the ultimate aim of forcing political change.<sup>1</sup> Yet, we know little about the effectiveness of terrorism in changing people's perceptions and attitudes. Do terrorist attacks really affect their audiences' well-being? In turn, do audiences blame their political institutions for the failure to prevent them or the perceived inadequacy of their response? And, critically, how long do these effects last?

Here, we estimate the effect of terrorism on attitudes using 15 years of survey data from 30 European countries (European Social Survey, 2018). Of particular interest is first whether terrorism succeeds in affecting people's life satisfaction, which is used as a proxy for the overall psychological costs of terrorism. We also estimate whether it affects people's attitudes toward their governments, including the blame, if any, that they may assign to their political institutions as a result of these attacks.<sup>2</sup> This blame is critical to the success of terrorists, who typically hope to affect government policies via costs imposed on audiences.

<sup>1</sup>Terrorism is “the premeditated use or threat to use violence by individuals or subnational groups to obtain a political or social objective through the intimidation of a large audience beyond that of their immediate victims” (Enders and Sandler, 2011, 3).

<sup>2</sup>While changes in attitudes may or may not lead to political change by the government, they are a key first condition for the impact of terrorism. Our interest here therefore lies in changes in the audiences attitudes only—not in whether this translates into actual political change—and on the magnitude and duration of that effect.

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Our contribution to the existing literature is twofold. First, the *duration* of the effect of terrorist attacks on attitudes remains unknown. Existing research mostly relies on data that only allow before and after comparisons. Instead, we exploit here the fact that survey respondents were randomly allocated to an interview date. This means that we can observe responses at different intervals before and after attacks, allowing us to infer the effect of terrorism as a function of the time elapsed since the previous attack. This is important, as the duration of the effect may impact decision makers just as much as its magnitude. A quickly forgotten attack may not matter for re-election as much as a long-lasting one.

Second, existing research on large samples ignores potential issues of selection bias. Because targets and the timing of the attack are selected strategically by terrorists, they are likely to differ from non-targets along important covariates. Such pre-treatment imbalances between the two groups (attack/no attack) may lead to biased estimates. This is a difficult issue to address.<sup>3</sup>

The identification mechanism used here allows us to study the effect of terrorism on a large cross-national sample, and not to limit ourselves to a single attack or a narrow set of cases. This is possible thanks to an identification strategy that exploits the exogenous nature of the success or failure of a particular attack, conditional on its location and timing. This allows us to establish the causal effect of terrorism on people's attitudes in a broad sample and over a large period of time. This methodological approach also has the advantage of being easily generalizable to other contexts and therefore would allow other scholars to extend the analysis to other datasets.

## 1 Identifying the impact of terrorism

Because terrorism aims to create an environment of fear, risk, and uncertainty, we expect it to particularly affect people's satisfaction with their lives. Life satisfaction has been the key indicator of studies on subjective well-being. It is correlated with a wide range of outcomes: physical health, productivity, relationships, reduced mortality, better sleep, lower turnover intentions, reduced loneliness, suicide, and depression, which makes it extremely valuable indicator for subjective well-being (for reviews, see Pavot and Diener (2008) and Proctor et al. (2009)). Furthermore, reports of life satisfaction are a particularly useful method to estimate the cost of a "public bad" (as opposed to a public good).<sup>4</sup> This approach can elicit people's implicit valuation for a hypothetical reduction in terrorism and hence gives us a measure of the welfare loss associated with attacks, while avoiding some of the issues associated with both the revealed preference and the stated preference methods (Frey et al., 2009).

Moreover, changes in life satisfaction evaluations are typically based on information from the context surrounding the survey, rather than representing a deeper evaluation of one's life as a whole (Pavot and Diener, 2008). As such, this indicator is particularly well suited to understand the short-term effects of terrorism on subjective well-being.

We also explore the effect of terrorism on political attitudes such as trust in political institutions, or attitudes toward migrants and satisfaction with the economy. We note that others have focused on terrorists' ability to obtain policy changes, rather than on effects on attitudes (Pape, 2003; Abrahms, 2006; Hoffman, 2011; Abrahms, 2012; Abrahms and Gottfried, 2016; Park and Bali, 2017; Blankenship, 2018). However, these concessions are the end products of a process that first requires domestic audiences to be affected. It is often these domestic audiences that in turn compel the government to react. Terrorism may succeed in affecting attitudes but this might not translate into policy changes; or policy may change regardless of the population's reactions, so both effects require attention.

Two methodological issues need to be solved to identify the impact of terrorism. First, estimating the causal effect of terrorism requires addressing underlying selection biases. Second,

<sup>3</sup>For a detailed discussion of existing studies, see *Online Appendix*.

<sup>4</sup>E.g., Frey et al. (2009) who ask a similar question but with limited spatio-temporal coverage and without accounting for selection biases.

understanding the impact of terrorism also implies learning how long its effects last. While these issues have sometimes been addressed in the context of single attacks, large panel data analyses typically ignore them, preventing us from reaching valid and generalizable conclusions.

### 1.1 Estimating the causal effect

There are two main challenges to the identification of the causal effect of terrorism on perceptions and attitudes. First, bias may arise if the selection of targets by terrorists is not random but instead aims at specific governments, groups, or ethnicities. In our sample, this means that particular countries could be targeted more than others precisely because of the expected reaction these particular attacks would induce, leading to biased inferences about the overall population. Simply put, bias can arise if the attitudes we observe are not a result of terrorism, but rather a cause. We do, in fact, find that “treated” populations—survey respondents in countries that experienced a recent episode of terrorism—differ from non-treated ones (likelihood ratio test of full versus restricted model:  $\chi^2(15) = 133$ ,  $p < 0.001$ ). Details are provided in *Online Appendix B*). This selection bias implies that studies that rely on single cases may not be generalizable beyond the sample at hand.

A second challenge is that terrorism could coincide with contemporaneous shocks or changes such as holidays, elections, or time of the year. These shocks may affect perceptions independently of the occurrence of terrorism.<sup>5</sup> The inferred effect of the attack would then be biased, since the effect attributed to terrorism may, in fact, be caused by the particulars of these dates. We also find evidence of such temporal imbalances ( $\chi^2(11) = 216.18$ ,  $p < 0.001$ ). See *Online Appendix B*).

We address both of these concerns—selection bias arising from target selection and from timing choices—with an identification mechanism that takes advantage of the exogenous allocation of attacks to success or failure. We follow Brodeur (2018) in noting that, although terrorists choose their target strategically and hence the allocation of “treatment” to subjects is not random, the success or failure of an attack is exogenous conditional on that allocation. The rationale for the exogeneity assumption is based on the sequence of events. Terrorists first define a target, and then “Nature” assigns an outcome—success or failure—to that attack. The success or failure depends on possibly unobservable covariates, but ones that are exogenous to the question of attitudes. Since people react more severely to a successful attack than a failed one (an assumption we justify empirically below), the effect of a successful attack, compared to a failed one, is therefore attributable to its success only, and not to any potentially unobservable covariates related to the choice of the target.

Indeed, balance tests show almost no difference between groups treated with a successful attack versus those treated with a failed attack. In other words, while respondents in the “attack” group significantly differ from those in the “no attack” group, there is almost no difference between respondents in the “successful” versus the “failed attack” groups. Similarly, a logistic regression of “success” on temporal variables, in the same way as above, shows little evidence of temporal determinants (*Online Appendix B*, Tables A3 and A4). This again suggests that the use of success as an identification strategy will lead to less biased estimates than one relying on the comparison of attacks to the absence thereof.

Because we are comparing respondents across countries and at different times, another concern is that we may compare groups with different pre-treatment attitudes. However, we find that this is not the case: there are no pre-treatment differences between people’s responses to our main dependent variables (life satisfaction, and satisfaction with various political institutions), whether the attack is a success or a failure. This suggests that these groups are the

<sup>5</sup>The anniversary of past negative events (e.g., past terrorist attacks) or upcoming election may, for example, reduce people’s perceived life satisfaction independently of the terrorist attack. Furthermore, terrorists may, in fact, purposefully time their attacks to coincide with these particular events (e.g., the Madrid train bombings which took place three days prior to Spain’s general elections).

same prior to the treatment and therefore that post-treatment variation can be attributed to the successful attack.

### 1.2 Estimating the duration of the effect

Our second contribution is to estimate the *duration* of the effect of terrorism on attitudes. Here, we take advantage of the random allocation of respondents to an interview date. This allows us to estimate the effect of terrorism on responses as a function of the time since the attack. In particular, logistical challenges are such that respondents (1880 per country-wave on average) cannot all be surveyed at the same time. They are instead typically surveyed over a period of about five months in most countries.

Using that variation in survey dates, we can estimate attitudes at different time intervals around the onset of a terrorist attack. We can, for example, compare responses within the first  $d$  days after an attack to those within the past  $d$  days. Varying  $d$  in turn allows us to map out the duration of the effect of terrorism on attitudes.

*Model.* We estimate the following model:

$$\begin{aligned} \text{Attitude}_i = & \beta_1 \text{Post}_i + \beta_2 \text{Success}_i + \beta_3 (\text{Success}_i \times \text{Post}_i) \\ & + \mathbf{X}\boldsymbol{\theta} + \boldsymbol{\gamma}_k + \boldsymbol{\tau}_y + \boldsymbol{\varepsilon}_i, \end{aligned} \quad (1)$$

where  $i$  denotes an individual respondent.  $\mathbf{X}$  is a matrix of covariates and  $\boldsymbol{\theta}$  its associated vector of coefficients. In our main model, we control for the number of attacks in the past year and the number of attacks in the given time window to account for possible terrorism “fatigue” that would affect the subjects’ reaction to a new attack. We also control for attack characteristics in some specifications.  $\boldsymbol{\gamma}_k$  is a vector of country-level fixed effects for each country  $k$  and  $\boldsymbol{\tau}_y$  a vector of yearly fixed effects for each year during 2002–2017.

$\text{Post}_i$  is coded as 0 in the days preceding an attack in the country of the respondent, and 1 in the following  $d$  days, where  $d$  is a parameter we vary between 1 and 30 days.<sup>6</sup>  $\text{Success}_i$  takes on value one if the attack was successful, zero if it failed, regardless of whether post is 1 or 0. The coefficients can be interpreted as follows:  $\beta_1$  is the effect of a failed attack (i.e., post-attack effect when “success” is zero);  $\beta_2$  is the pre-treatment difference between successful and failed attacks and  $\beta_3$  is the average post-treatment difference between a successful and a failed attack.<sup>7</sup>

## 2 Data

Our analysis relies on two main types of information: data on the timing of terrorist attacks and data on political attitudes across democracies affected by terrorism.<sup>8</sup>

### 2.1 Terrorism

Our data on terrorism comes from the Global Terrorism Database (henceforth GTD). They include a worldwide list of all terrorist attacks over the period of interest (2002–2017), including

<sup>6</sup>With overlapping terrorist attacks, we use the closest terrorist attack in time as the reference. Thus, in the case of an attack on the 10th and the 12th of the month, people surveyed on the 17th of that month are coded as having experienced an attack five days earlier.

<sup>7</sup>In other words,  $\beta_3$  is the difference-in-difference estimator of particular interest here and can be rewritten as  $\hat{\beta}_3 = (\bar{a}_{s,[1,d]} - \bar{a}_{s,[-d,-1]}) - (\bar{a}_{u,[1,d]} - \bar{a}_{u,[-d,-1]})$ , where  $\bar{a}_{o,[t_1,t_2]}$  denotes the average attitude of an attack with outcome  $o \in [u, s]$  between time  $t_1$  and  $t_2$ .  $s$  denotes a successful outcome and  $u$  an unsuccessful one, and  $d$  refers to the meta-parameter chosen to denote the time to/from an attack (e.g.,  $d = 2$  means that we will compare respondents who were interviewed within two days of an attack).

<sup>8</sup>Descriptive statistics for all variables described below are in *Online Appendix* Table A1 (respondent level) and Table A2 (attack level).

the date, location, and description of each attack.<sup>9</sup> Critically for our identification strategy, the GTD includes attempted attacks that were ultimately unsuccessful. “Failure” occurs if an attack was planned and initiated, but failed (e.g., the bomb did not detonate). See *Online Appendix A* for descriptive statistics and time series of these variables.<sup>10</sup>

## 2.2 Political attitudes

The goal of terrorism in democracies is generally to influence a targeted audience in order to reach political goals. A critical first step is to create fear and dissatisfaction in the audience, in the hope that they will pressure their political leaders into making choices that benefit terrorists, whether directly (e.g., via concessions) or indirectly (e.g., retaliation, which may boost recruitment).

Of interest, then, are two main outcomes. First, how much do audiences care about acts of terrorism? Does their well-being decrease as a result of attacks? Second, do terrorist attacks lead them to blame their governments and other institutions? Blame may be assigned either for the failure to prevent the attack—the government may be perceived to have pursued policies conducive to terrorism (e.g., through foreign policy interventions, or domestic repression)—or for an inadequate response to the attack. For both questions we will also seek to estimate the duration of the effect of terrorism.

Europe provides an ideal sample to study the effect of terrorism on attitudes in democracies. It exhibits broad variance in terrorist attacks over time. Moreover, Europe hosts a wide range of political and electoral systems, cultures, and histories, which boosts our results’ external validity.

Data on attitudes were derived from the European Social Survey (ESS 2018), a European cross-national survey.<sup>11</sup> Every two years since 2002, face-to-face interviews have been conducted across Europe with newly selected cross-sectional representative samples. The survey measures the “attitudes, beliefs and behavior patterns” of respondents in over 30 countries.

Two questions from the ESS are of particular interest here. First, respondents were asked: “All things considered, how satisfied are you with your life as a whole nowadays.” This question evaluates the effect of terrorism on people’s general perception of their quality of life—that is, does terrorism work in affecting people’s well-being. A second question: “Now thinking about the [country] government, how satisfied are you with the way it is doing its job?” assesses whether terrorist attacks affect their perception of the government—do they blame political decision makers for failures to prevent terrorism? Both questions were asked in each of the eight waves and in every participating countries.<sup>12</sup> Answers to both questions are on an 11-point scale (0–10).<sup>13</sup> Below we also test the robustness of our result to related questions on other branches of government (the legal system, parliament), attitudes toward the police, immigrants, and perceptions of the economy.

<sup>9</sup>The GTD defines a terrorist attack as “the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation” (see <https://www.start.umd.edu/gtd/>).

<sup>10</sup>We note that the classification of an attack as successful or failed depends on the type of attack. For an assassination to be successful, for example, the target must be killed; but a bombing is successful simply if it detonates. This means that the probability of success or failure may be affected by the type of attack. In specifications below, we therefore control for the attack characteristics (e.g., type of attack, weapons type) but find no substantive difference in results.

<sup>11</sup>Other cross-national surveys are not suited for our current design. First, relevant waves of the International Social Survey Program do not provide enough variation over time. The World Values Survey generally does not include a survey date. Yet, other surveys do not ask any questions related to life satisfaction or satisfaction with the government.

<sup>12</sup>We exclude countries in a civil conflict (per UCDP’s definition; Gleditsch et al., 2002), namely Israel, Turkey, and Russia, for two reasons. From a theoretical perspective, terrorist attacks are likely to have a different meaning in countries that experience conflict than in countries that are not. From a methodological perspective, these countries experience attacks frequently that they exhibit limited variation in terrorist attacks over the period.

<sup>13</sup>Post-stratification weights were applied to reduce sampling error and possible bias due to non-response. See [https://www.europeansocialsurvey.org/docs/methodology/ESS\\_post\\_stratification\\_weights\\_documentation.pdf](https://www.europeansocialsurvey.org/docs/methodology/ESS_post_stratification_weights_documentation.pdf).

### 3 Results

The main quantity of interest here are the estimated  $\beta_3$  coefficients in Equation 1, which correspond to the post-treatment difference between a successful and a failed attack. A negative coefficient would imply that a (successful) terrorist attack decreases the particular variable of interest (e.g., life satisfaction) by  $\beta_3$ . Our main results are reported in Figure 1. Corresponding regression results and alternative specifications are in *Online Appendix Tables A5–A8*.

Figure 1 displays the estimated causal effect of a successful attack compared to a failed attack. The effect is reported for various attitudes and for different operationalizations of the POST variable (i.e.,  $POST = \{1, 2, 3, \dots, 30\}$  days). We note first that a successful terrorist attack has an immediate and large effect on life satisfaction. On the day immediately following the successful attack, reported “life satisfaction” decreases by about 0.25 compared to those exposed to a failed attack.<sup>14</sup> To put this in perspective, this is approximately equivalent to over half of the loss in life satisfaction associated with being unemployed, or to a drop of one decile in a respondent’s income.<sup>15</sup> This result—attacks negatively affect respondents life satisfaction—is in line with what we would expect from studies on the effects of terrorism on mental health (North and Pfefferbaum, 2002; Schlenger et al., 2002; Merari, 2010; Hansen et al., 2017), or consumer sentiment (Brodeur, 2018).

The effect remains statistically significant for 11 days following the attack, after which perceptions of life satisfaction become indistinguishable from those exposed to failed attacks. These results are in line with what we would expect: a strong initial reaction shortly after the shock, followed by a steady recovery back to pre-attack levels. The duration of the effect, however, is short at under two weeks. Somewhat surprisingly, we also find that the number of casualties associated with the attack does not have any significant effect on this result (see Tables A5–A8). This suggests that people are sensitive to the occurrence of a successful attack at all rather than to the magnitude of the attack, as proxied by the number of deaths.

While respondents report a lower overall satisfaction with their lives, we find no effect when it comes to satisfaction with the government (Figure 1). No statistically significant differences were found in the responses of those exposed to a successful attack and those exposed to the control—a failed attack. This suggests that respondents do not appear to blame their government for their failure to either prevent the attack or to respond adequately to it. This result holds for all branches of government.

Terrorism does not affect other attitudes either (Figure 1). Contrary to what might have been expected, terrorist attacks do not affect the attitude of respondents toward migrants. For example, when asked whether their country should allow people “of a different race” to come and live here, interviewees’ responses did not change from their pre-treatment responses, suggesting that migrants were on average not used as scapegoats for the attacks; similarly, when asked whether their country was made “a worse or a better place to live by people coming to live here from other countries,” answers remained constant despite a small initial but statistically insignificant dip.

We also used a question about the respondent’s satisfaction with the economy as an additional test of internal validity (“On the whole, how satisfied are you with the present state of the economy in your country?”). Satisfaction with the current state of the economy should not be affected by terrorist attacks, and hence any effect there would call into question our results on life satisfaction and happiness. Yet, as expected, responses were not affected by the attack and remained stable over time.

Alternative specifications are reported in Tables A5–A8 to ensure the robustness of our results. We first controlled for additional variables: the type of attack (e.g., assassination, bombing) and of

<sup>14</sup>By “exposed” we do not mean that these people experienced terrorism first-hand, but rather that these respondents’ country was the subject of an attack.

<sup>15</sup>Similar results were obtained using a question about happiness rather than life satisfaction (“how happy would you say you are?”).



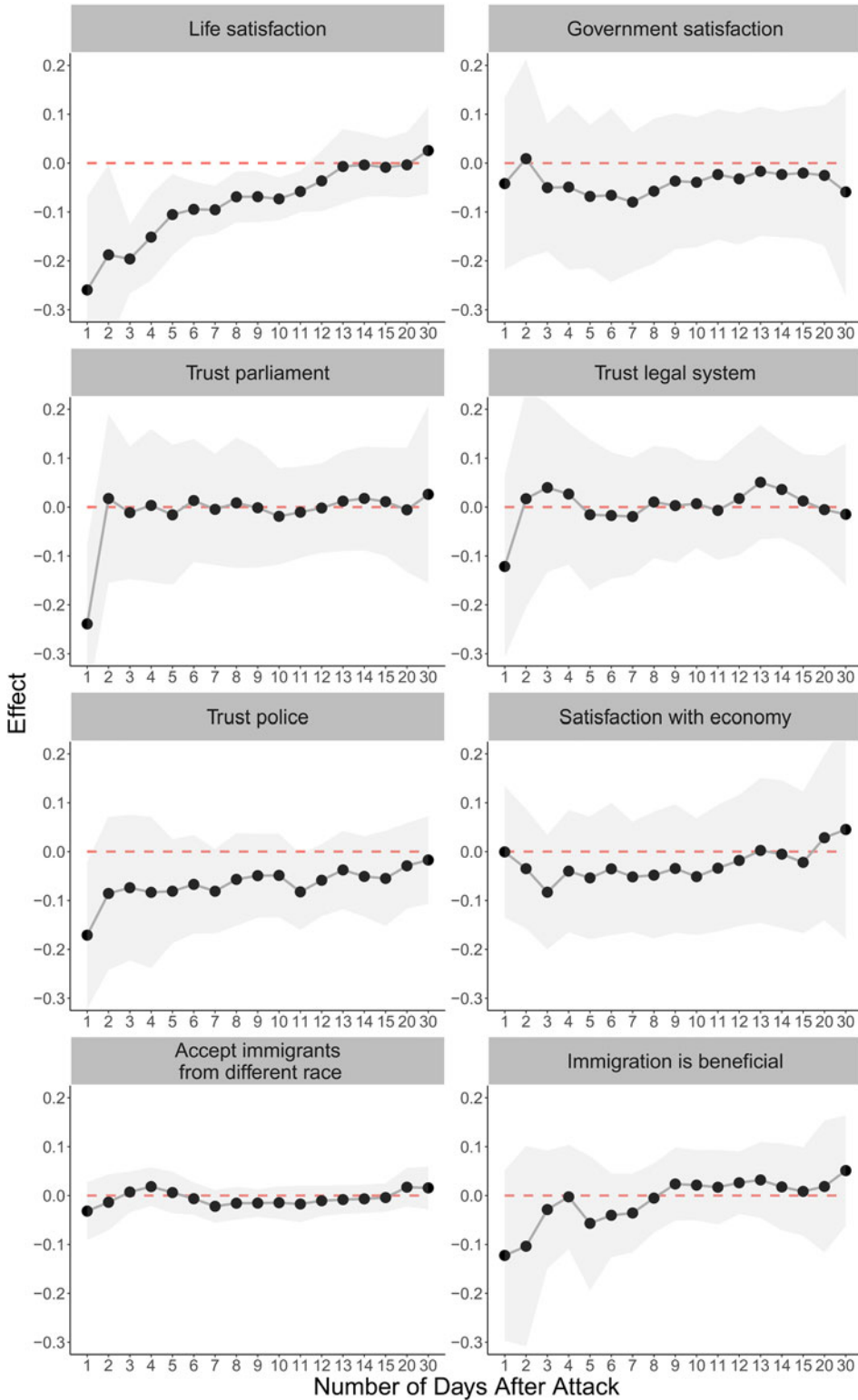


Fig. 1. Post-treatment effect of an attack ( $\beta_3$  in Equation 1) as a function of the time since the attack (OLS estimation). 95% confidence intervals in gray.

weapon (e.g., explosive, firearm), as it may be correlated with the probability of success; whether the attack was carried out by an international or a local group; and whether the attack targeted civilians or military personnel, as these may affect attitudes differently. However, the inclusion of these covariates does not substantively affect our results. Of course, it is still possible that responses may vary as a function of other unobserved (or unavailable) covariates. The type of perpetrator, for example, may affect observers' responses. Unfortunately, the GTD does not provide such variables. However, the fact that we do not observe much of an effect for the variables that we do have is reassuring. Moreover, it is important to note that that additional variables would not challenge the main results. That is because the random allocation to success or failure means that there is no concern of omitted variable bias—controlling for these variables is not necessary, unless we are interested in breaking down the results by category (e.g., by type of perpetrator).

It is also possible that some of the null results, in fact, hide significant country-level effects. We tested this possibility using random slope models (country-level). We find little such evidence, although some variation does occur as would be expected (*Online Appendix*, Figures A3 and A4). We also find no significant difference according to political inclination (left or right): left-leaning respondents do not behave significantly differently from right-leaning ones (Figure A5). The same is true when we disaggregate the results at the country level (Figures A6 and A7). Similarly, we find no difference in responses between those who voted for the current government in the last election and those who did not (Figure A8).

We also address the possibility that failed attacks affect attitudes as well, which would bias our results (*Online Appendix D*). This is a difficult problem. One way to address it is to show that failed attacks do not, in fact, raise nearly as much attention as successful attacks. If that is the case, then it would be highly unlikely that failed attacks, which almost very few pay attention to, would affect attitudes. To see this, we compared search patterns for “Terrorism” and “Terrorist” (in each country's respective language) around the time of a successful attack to the one around a failed attack and the absence of an attack. We find that people's interest in attacks spikes following a successful attack, but does not significantly change following a failed attack. This result is robust to alternative specifications (see regression results in Table A9). This suggests that successful attacks capture people's interest far more than failed ones. In fact, we show an even stronger result: failed attacks do not raise any more interest than the absence of an attack. In other words, there is no significant increase in interest in terrorism following a failed attack, and therefore it is highly unlikely that failed attacks would affect attitudes. Hence, comparing failed and successful attacks is a valid way to estimate the effect of terrorist attacks.

Finally, we consider the issue of the cross-border effects of terrorist attacks. There are two main ways to approach this problem. The first is by defining a network of more or less influential countries—a connectivity matrix. It is not clear, however, what the weights of this matrix should be. Should they be based on geographical distance, or perhaps trade or cultural affinities? There are many possibilities and no obvious choices. A simpler and less arbitrary solution is therefore to remain agnostic as to the weight matrix, and instead to treat all countries as part of a single unit. If attacks in Paris affect attitudes in Berlin or Rome, we should treat terrorist attacks as a European-wide phenomenon. We, therefore, repeated our analysis by pooling all countries together into the analysis, instead of separating each country. Using this approach, we find no effect for any of the variables. This is not all too surprising, since the majority of attacks would, in fact, be of little interest beyond the country targeted. Only large ones are likely lead to attention abroad. This is in line with the findings such as those of Jungkunz et al. (2019), for example, who focus on a major attack.

#### 4 Discussion

Overall, our findings are threefold. First, terrorism affects people's life satisfaction significantly and substantially. In that sense, terrorism is effective at changing people's well-being and is likely



to be correlated with other outcomes such as physical health. This result is derived from a large-*N* study that lends itself well to generalization. This is in our view an important contribution to existing research, which tends to focus on single and typically large attacks. Instead, we show here that the effect of terrorism on life satisfaction is large and applies across a wide variety of European countries. Although the analysis is limited to Europe, the wide range of countries included does suggest that the results are likely to generalize more broadly.

Our second finding is that this effect does not last long—a mere 11 days—at which point post-attack attitudes become indistinguishable from pre-attack ones. This finding is particularly interesting, since it allows us to go beyond a static “before/after” approach. Combined with the large-*N* approach, which is made possible by our identification strategy, we obtain a powerful tool for the estimation of welfare losses. For example, the area under the Life Satisfaction curve (e.g., [Figure 1](#), top left) gives us an estimate of the total welfare loss incurred over the period, rather than a point estimate. This is important, as the duration of the effect may impact decision makers just as much as its magnitude.

Our third finding is that we do not find evidence of a decrease in reported satisfaction with the state’s institutions—government, parliament, legal system, police—satisfaction with the economy, or attitudes toward migrants. We find no meaningful statistical effect of terrorism on any of these variables, which suggests that people may not blame their governments or institutions in general for terrorist attacks, again pointing to a limited effect of terrorism on voters’ political attitudes (as opposed to their subjective well-being). So far, the existing literature had shown mixed results on these questions (see *Online Appendix*). The large-*N* approach adopted here allows us to gain a more general answer.

Together, the results point to a limited effect of terrorism. This is in line with some of the existing research that show no evidence of effects on political attitudes (e.g., Van Hauwaert and Huber, 2020; Larsen et al., 2020). However, the advantage of the current approach is twofold: first, its design allowed us to extend existing causal inference approaches to a large-*N* design, thereby combining the best of a robust approach with a generalizable conclusion. Second, our results are, to our knowledge, the first that give us a sense of the duration of each of these effects.

What we found is that the effect on political attitudes is non-existent and the one on well-being is small. Either way, the total effect over time is small and suggests that it is unlikely to affect voters much. We do not go as far as writing that terrorism is politically ineffective, since our design does not allow us to study the effect of attacks on longer-term political outcomes. However, the results do suggest that, at least when it comes to respondents, the impact is limited and short-lived. Results may be different for decision-makers, but audiences are an important target of terrorists, and understanding the effect of their actions on voters’ reactions is therefore crucial—a question to which this paper aimed to make a methodological and empirical contribution.

**Supplementary material.** The supplementary material for this article can be found at <https://doi.org/10.1017/psrm.2022.2>. To obtain replication material for this article, please visit <https://doi.org/10.7910/DVN/CZBAPT>.

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