

Soldiers' Funerals Increase Nationalism: Evidence from a Natural Experiment in Turkey*

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Abstract

Soldiers' funerals are a powerful symbol of sacrifice with ex-ante ambiguous effects on political attitudes and behavior. These funerals could undermine support for the conflict and government or, alternatively, increase nationalism and galvanize support for the war effort. This has significant implications for leaders' incentives to fight or de-escalate. It is also a thorny empirical question: more hawkish constituencies often send more soldiers to fight, generating selection bias. We provide new causal evidence from Turkey, where compulsory military service and the random assignment of soldiers to posts across the country generate as-if random variation in which districts lose soldiers and host state-organized funerals. We show that soldiers' funerals induce more hawkish attitudes; roughly double public displays of nationalism, such as protests and violent attacks against the pro-Kurdish party; and modestly increase support for the incumbent party. Our results highlight how soldiers' funerals intensify nationalist sentiments and mobilization during civil conflicts.

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State-orchestrated funerals have long served as powerful symbols of sacrifice during wartime, and their effects (if any) on public opinion can shape political outcomes and elected leaders' incentives to fight on or de-escalate. However, there is a long-running debate about the effect of these public rituals. One set of studies, which draws heavily on the US experience, finds that soldiers' deaths undermine support for the incumbent government and its war efforts (e.g., Gartner 2008; Kriner and Shen 2014; Johns and Davies 2019). But another body of work finds that exposure to violence during civil conflicts increases support for nationalist and right-wing actors (e.g., Canetti 2017; Getmansky and Zeitzoff 2014; Hadzic et al. 2020).¹

Crucially, this research faces enduring challenges related to causal identification and measurement. First, pro-government constituencies often enlist more soldiers, generating selection bias. Wartime casualties are not then randomly assigned, and an individual's exposure to violence or soldiers' funerals could be related to their baseline political attitudes. Second, enlistments may be higher from communities close to the front lines. Residents of these front-line communities would, thus, be more likely to directly experience violence and know soldiers killed in action. This makes it difficult to disentangle whether effects are driven by direct or indirect exposure to violence. Finally, past work focuses on voting (e.g., Hinton and Vaishnav 2023); yet, attitudes cannot necessarily be inferred from vote choice. Should declining support for the incumbent be interpreted as a repudiation of that party's ideology or a non-partisan evaluation of that government's wartime performance? This is further complicated by strategic voting.

In order to address these challenges, we leverage a natural experiment in Turkey where military service is mandatory for all adult males, and recruits are randomly assigned to posts across the country. This generates as-if random variation in which districts lose soldiers and host state-organized funerals. Furthermore, we augment our natural experiment with survey data on individual attitudes and event-level data on demonstrations and political violence by nationalist groups, in addition to electoral outcomes.

We find that these public rituals lead to more hawkish, exclusionary and nationalistic attitudes and behaviors. First, funerals increase support for coercive "solutions" to the conflict and undermine support for peace and the political recognition of out-groups. Second, funerals provoke political violence by nationalist groups, who are more than twice as likely to attack the main pro-Kurdish party and stage street protests. Finally, funerals increase electoral support for the incumbent AKP party at the expense of the ultra-nationalist MHP party. The incumbent AKP both tacked right, promising a violent escalation of the conflict and persuaded voters that supporting smaller parties, like the MHP, would hamper the AKP's ability to form a

1. For a more detailed discussion of the literature, please see Appendix Section A.

government and decisively prosecute the conflict. This strategic behavior by parties and voters explains how rising nationalist sentiments need not benefit ultra-nationalist parties and also highlights the difficulty of inferring attitudinal changes from electoral results.

We make two major contributions. First, we provide consistent causal evidence that soldiers' funerals during civil conflicts inflame nationalism. Second, we combine data on attitudes, direct action, and voting to provide a more complete accounting of the funerals' political consequences. Together these findings provide some reconciliation of discrepancies in prior research. Past studies (often due to availability) only investigate electoral outcomes. We show that parties' vote shares can be a misleading proxy for voters' attitudes or policy preferences. Despite heightened nationalism the far-right MHP lost out to the incumbent AKP in 2015, and this shift is more pronounced in districts hosting soldiers' funerals. This result contradicts Kibris (2011) findings on electoral outcomes, which uses a similar research design to analyze voting behavior in the 1990s. Relatedly, we do not interpret the increase in the incumbent party's vote share as a "rally around the flag" as in Umit (2023): our attitudinal and protest data show that soldiers' funerals do not induce unity and solidarity as citizens, but rather an exclusionary ethnic and violent nationalist reaction. Our analysis of multiple outcomes reveals how state commemoration of fallen soldiers can simultaneously inflame nationalist attitudes and violence while generating electoral effects that depend critically on strategic behavior by parties and voters.

1. Natural Experiment in Turkey

The Turkish case allows us to overcome the aforementioned empirical challenges and estimate the causal effect of soldiers' funerals on political attitudes and behavior.² Military service is compulsory for men in Turkey and soldiers are randomly assigned to posts across the country.³ This assignment is carried out by computers and is independent of their hometown characteristics. The Turkish State and PKK, a Kurdish insurgent group, have fought a civil conflict concentrated in the eastern part of the country since 1984.⁴ Security forces randomly assigned to posts in the East are closer the front lines of this conflict and, thus, face a higher probability of being killed in action. When security forces are killed, the government organizes a funeral for them in their home district (not where the attack happens); families do not self-select into these ceremonies.

2. We include funerals for all security forces as in Kibris (2011) and Umit (2023). Our findings are robust to excluding the districts that only host funerals for police officers (whose deployments are also randomized) (see Appendix Section G).

3. Reforms in 2019 restricted deployments for conscripts and permitted individuals to purchase exemptions from service.

4. For a thorough description of the case, please see Tezcür (2016).

The combination of conscription, randomized deployments, geographically concentrated violence, and state-organized funerals results in as-if random exposure to soldiers' funerals across Turkish districts (conditional on the male, service-age population).⁵ Figure A.1 shows the geographic concentration of attacks in eastern Turkey during our study period in 2015, which contrasts with the wide dispersal of funerals.

Funerals for security forces are announced through mosques (similar to a call for prayer) within a soldier's home district. The ceremony is typically held in the largest mosque or the largest square in that district. It includes a prayer, which is often attended by thousands of men.⁶ The ceremony primarily focuses on the sacrifice of the soldier. Importantly, there are no explicitly party-political components. A full description of the ceremonies can be found in the Appendix Section B.

We focus on 2015 for two reasons. First, this period provides unique outcome data, including results from two general elections (in June and November); a poll in September 2015 that asked specifically about individuals' attitudes towards the conflict with the PKK and the political integration of Kurds; and geolocated protests and riots. Second, due to the initiation of peace talks, there was a ceasefire between the government and PKK between March 2013 and July 2015. After two years of peace, these negotiations failed in July 2015, and conflict resumed, leading to a relatively intense number of casualties: 145 members of the Turkish Security Forces died between the general elections in June and November 2015 (see Appendix Figure A.2). The preceding two years of peace limit concerns about carryover effects from past funerals.⁷

2. Research Design

We collect information on security forces' funerals between June and November 2015 (see Appendix Section C.1). Out of 970 districts, 142 experienced at least one funeral ceremony. We code these 142 districts as treated and all others as controls. Funerals always take place in a soldier's hometown, regardless of where they die. There is not enough variation in the number of funerals to estimate dose-response models: over 80 percent of treated districts hosted a single funeral during our study period.⁸

As-if random assignment of treatment to districts is conditional on the number of military conscripts. Following Umit (2023), we account for districts' service-age male population in cross-sectional regressions. Using the procedure recommended by Kerwin et al. (2024), we use randomization inference to conduct an omnibus test of balance. After conditioning on the service-age male population, we cannot reject the null that

5. In Appendix Section H, we discuss external validity and identify possible scope conditions.

6. Only men can attend the prayer. For this reason, we look at heterogeneous effects by gender in Appendix Table A.3.

7. Randomized deployments imply that any carryover effects should be balanced across treatment and control constituencies.

8. We do not have the statistical power to study whether the accumulation of casualties changes attitudes or behavior.

district-level covariates, including several demographic variables, latitude and longitude, and nightlights, do not predict whether a district is treated. We also show that no individual-level characteristics predict treatment status among survey respondents (see Appendix Section D.1 for the details of these balance tests).

Our first set of outcomes is individual attitudes toward the civil conflict and Kurdish political rights measured in a nationally representative poll that was conducted in a subsample of districts in September 2015 (see Appendix Section C.2). The second set of outcomes are behavioral and measure attacks on the pro-Kurdish HDP party (e.g., vandalism of party offices), as well as nationalist protests from Kahvecioğlu et al. (2023). The pro-Kurdish HDP appealed to the Supreme Election Council to cancel the November 2015 elections, citing violent attacks against the party. In briefs, the HDP provided the timing and location of attacks on their property and staff from June to November 2015. We use media sources to extend data back to February 2015 (see Appendix Section C.3). Finally, we analyze district-level election results for the June and November elections from the Supreme Election Council.

3. Results

3.1 Attitudes toward Conflict and Kurdish Rights

We first examine changes in attitudes using survey data from September 2015. We focus on two families of outcomes: (1) support for peaceful or military resolution of conflict with the Kurds and (2) whether they support political recognition and rights for Kurds.⁹ These families aggregate responses to related survey questions by constructing mean-effects indexes (Kling et al. 2007).¹⁰

We leverage the (conditionally) as-if random assignment of funerals across districts, estimating:

$$y_{id} = \alpha + \beta \mathbb{1}(\text{Funeral before Survey})_d + \gamma \mathbf{X}_i + \phi \text{Male Pop.}_d + \varepsilon_{id} \quad (1)$$

where i indexes respondents and d indexes the 123 districts in the survey sample. The “Funeral before Survey” variable indicates whether a funeral took place in a respondent’s district prior to the survey. We include a measure of districts’ service-age male population (following Umit (2023)), because treatment is as-if random conditional on the service-age male population. We also include individual covariates (X_i) to increase precision.¹¹ Standard errors are clustered at the district level, which is the unit of assignment.

9. In Appendix Table A.2, we find that the funerals also significantly increase trust in government. This effect is challenging to interpret, as “government” could be interpreted by the respondent to mean the military and other state bodies.

10. If a respondent only answers some questions in an index, Kling et al. (2007) recommend imputing missingness using the group-specific mean. Each index, thus, has at least as many observations as any sub-component. Table A.1 reports the effects on the indexes and all sub-components.

11. To avoid dropping observations due to missing covariates, we use the procedure recommended by Chang et al. (2023).

Table 1 shows a substantial and statistically significant increase in hawkishness: respondents are 28% more likely to support a coercive “solution” to the conflict with Kurdish insurgents, and support for peaceful approaches falls by a corresponding 25%. The overall index increases by 0.34 (control-group) standard deviations. We also find reduced support for the political recognition of Kurds: this index decreases by 0.22 standard deviations.¹² This change is driven by two sub-components: after soldiers’ funerals, respondents are more likely to deny that the Turkish state treats Kurds unequally, and they are less likely to recommend political equality or recognition as solutions to the conflict. While the whole country is experiencing a renewed civil conflict, respondents in districts hosting funerals experience a much larger shift in their attitudes toward the conflict and Kurdish rights.

Table 1: Attitudes become more hawkish, hostile to Kurdish political recognition

Outcome	Control Mean	$\hat{\beta}$	SE	p	N	Clusters
Supports Military Response*	0.00	0.34	0.08	0.00	3,130	123
Solution requires ‘destroying terrorism’ ^o	3.33	0.40	0.10	0.00	3,082	123
Solution is coercive ^o	0.29	0.08	0.04	0.05	2,701	123
Supports Political Recognition*	0.00	-0.22	0.08	0.01	3,134	123
Solution requires equality/recognition ^o	0.09	-0.04	0.02	0.02	2,701	123
State currently discriminates against Kurds ^o	2.92	-0.45	0.16	0.00	3,077	123

Table 1: Results from Equation 1 with covariate adjustment for age, class, education, gender, past voting, and religion. Appendix Section C.2 describes the survey data. * denotes mean-effects indices constructed per Kling et al. (2007). ^o are selected sub-components of the index. For all sub-components, please see Table A.1. Standard errors are clustered at the district-level.

We find in Appendix Table A.4 that, after soldiers’ funerals, Turks identify less as citizens (-13 p.p.), which is an identity they share with Kurds. They do not express greater solidarity as citizens, which one might expect from a “rally around the flag.” By contrast, Kurds are more likely to identify as citizens (4 p.p.) and downplay their ethnic identities (-10 p.p.), though neither effect is significant in our smaller sample of Kurds. This is more suggestive evidence of the Turks differentiating themselves from the Kurdish minority.

In Appendix Table A.5, we show that there are no differences in attitudes between never-treated districts and nine yet-to-be-treated districts that host soldiers’ funerals *only after* the survey was enumerated. This null finding and the balance test we report in Appendix Section D.1 both bolster our assumption that funerals are unrelated to districts’ demographic or political profiles. In Appendix Table A.6, we rule out meaningful spillovers to treatment-adjacent districts; in theory, spillovers would bias our estimates toward zero.

12. Appendix Table A.3 shows larger effects on both indexes among men. There are many potential explanations. Among them, men are over-represented among funeral attendees, and women cannot participate in parts of the ceremony.

3.2 Attacks against Pro-Kurdish HDP and Nationalist Protests

We next consider direct action by nationalist groups and sympathizers in the form of anti-Kurdish attacks and street demonstrations. The attacks on campaign buildings and vehicles typically involved vandalism and arson, with perpetrators displaying Turkish flags. We do not include non-violent protests (e.g., rallies outside of HDP offices) in our measure of attacks, but instead utilize province-level data from Kahvecioğlu et al. (2023) on nationalist protests to investigate the effect of soldiers’ funerals on nationalist mobilization. While demonstrations sometimes occur at soldiers’ funerals, such events are not included in our measure of protests.

Panel data on attacks and protests events allow us to compare trends in areas with and without funerals — a difference-in-differences with staggered treatment timing. Specifically, we estimate:

$$y_{dt} = \alpha_d + \delta_t + \beta \mathbb{1}(\text{After Funeral})_{dt} + \varepsilon_{dt} \quad (2)$$

where t indexes months and d indexes our cross-sectional units, which are 970 districts for the attacks data and 81 provinces for the protest data. We include unit and time fixed effects and a treatment indicator ($\mathbb{1}(\text{After Funeral})_{dt}$) that turns on after a district hosts a soldier’s funeral. The unit fixed effects absorb features of districts (or provinces) that do not vary during 2015 (e.g., demographics); the time fixed effects account for common shocks that affect the likelihood of attacks or protests across all units, such as national media coverage of the civil conflict. This is a conventional two-way fixed effects model. We use the decomposition devised by Goodman-Bacon (2021) to show that our estimates do not rely on so-called “forbidden comparisons” that use units treated early in the study period as controls (please see Figure A.5). Unsurprisingly then, our estimates are unchanged if we use newer estimators robust to heterogeneous treatment effects (see Appendix Figure A.6). We cluster our standard errors by either district or province.

Table 2 shows a large increase in the likelihood of an attack on the HDP. Prior to funerals, the monthly probability of an attack in treated districts is 0.02. The coefficient in Column 1 implies that this rate more than doubles after a soldier’s funeral, with Figure A.4(a) showing the largest increase in the month of the funeral, when the probability more than triples. It is exceedingly rare to see multiple attacks on the HDP within the same district and month, so our estimates are identical when we use a binary outcome and the count of attacks in Column 2.¹³ We find a similar increase in the likelihood of nationalist protests at the province-level. Prior to funerals, the monthly probability of a nationalist protest in treated provinces is 0.09.

13. In Appendix Table A.7, we find no evidence of spillovers to treatment-adjacent control districts.

Table 2: Security forces’ funerals increase attacks on HDP and nationalist protests

	Attacks on HDP (Binary) (Count)		Nationalist Protests (Binary) (Count)		Student Protests (Binary) (Count)	
After Funeral	0.044** (0.017)	0.043** (0.017)	0.183*** (0.047)	0.539*** (0.136)	-0.033 (0.025)	-0.178 (0.108)
Fixed Effects S.E. clustered by	Month + District District		Month + Province Province			
Control Mean	0.019	0.019	0.085	0.131	0.062	0.169
Observations	9,700	9,700	810	810	810	810

Table 2: Results from Equation 2. Appendix Section C.3 describes the attacks data; protests data come from Kahvecioğlu et al. (2023). The unit is the district-month for attacks and province-month for protests. We cluster on the cross-sectional unit in the panel. The control mean is across not-yet- and never-treated observations. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Our estimate in Column 3 implies that this rate more than doubles after a soldier’s funeral, and Figure A.4(b) shows the rate remains elevated for several months. The count of nationalist protests increases by 0.54 in Column 4, from one protest every six months to more than one every other month.¹⁴

Figure A.4 not only shows how the effects evolve in the months after a soldier’s funeral, but these event-study plots also show that there are no differential pre-trends, which helps to bolster the parallel-trends assumption. We report an additional placebo test in Columns 5 and 6, showing that treatment does not coincide with an increase in the frequency of student protests. This helps to rule out time-varying confounds; treated districts do not experience differential increases in other kinds of protest after funerals.

3.3 Voting Behavior

Finally, we use district-level results from elections in June and November 2015 to examine the effects of soldiers’ funerals on support for the AKP (incumbent), MHP (nationalist), and HDP (pro-Kurdish) parties, as well as voter turnout. Given the space limitations, we report these findings in the Appendix Section F. In summary, hosting at least one funeral leads to around a 1% increase in the AKP’s average vote share, while it results in around a 1% decrease in the vote share of the nationalist MHP.¹⁵ Not only are the effects on the AKP’s and MHP’s support of equal and opposite magnitude, but changes in AKP and MHP support are also strongly negatively correlated (see Appendix Figure A.7), suggesting that the AKP gained at the MHP’s expense. Various robustness checks in the Appendix Section F confirm this finding.

This last set of findings might seem puzzling: we find increases in nationalist sentiment and demonstrations, so why is the Nationalist Party losing more support after soldiers’ funerals? These results are easy

14. We could not carry out the spillover analysis for nationalist protests because data is available at the province level and almost all control provinces are adjacent to treatment provinces. Since we see no indication of spillovers in all other analyses, it is also not likely for the nationalist protests.

15. While hosting at least one funeral increases turnout by around 0.6%, it has no significant effect on the vote share of HDP.

to reconcile when we look at how parties and voters strategically responded to the political context (Onis 2016). The November vote was a snap election. The AKP had won 41% back in June and attempted to form a coalition government. However, the MHP publicly refused to partner with the AKP. The AKP's campaign prior to the November polls stressed the need for "stability" and a majority government that could decisively respond to the country's security crisis.¹⁶ Moreover, the AKP tacked to the right in an effort to peel off MHP supporters, cracking down on the PKK with airstrikes and arrests, even jailing some pro-Kurdish journalists.¹⁷ The incumbent AKP ran a strategic campaign, emphasizing the importance of stability and burnishing their nationalist credentials in the fight against the PKK. In turn, nationalist voters strategically swung from the MHP to the AKP, wanting to avoid the risks associated with coalition bargaining and elect a majority government that would aggressively respond to the PKK. This swing was nationwide, but we find that it was more pronounced in districts that hosted funerals for soldiers killed while fighting insurgents.

4. Discussion

Across the globe and throughout history, polities have publicly recognized the deaths of fallen soldiers. These ceremonies convey the human toll of conflict. They may also be used by politicians to frame the loss as a necessary sacrifice for a greater purpose (Rashid 2020). Whether soldiers' funerals leave voters weary of war or thirsting for battle affects how democracies navigate conflict — whether the public's response to casualties pushes their elected leaders toward peace.

Leveraging a natural experiment in Turkey, we show that soldiers' funerals fuel public support for continued conflict, diminish the desire for peace and political integration, and provoke nationalist political violence. Despite these changes in attitudes and behavior, the soldiers' funerals do not generate a surge in electoral support for the ultra-nationalist MHP; rather, more voters swing to the incumbent AKP. We argue that the AKP was able to peel voters away from the MHP by tacking to the right and appealing to voters' desire for stability. Amid an escalating civil conflict, voters decided against supporting the smaller MHP and risking another uncertain round of coalition bargaining. They rallied instead to the increasingly nationalist AKP, which is consistent with the changes in attitudes and direct action that we document.

More abstractly — but fully consistent with a large literature on strategic voting (Cox 1997) — we argue that electoral competition and party messaging influence voters, who do not always select their most ideo-

16. Beauchamp, Zack, "Why Turkey's election results shocked all the experts," *Vox*, November 2, 2015, <https://www.vox.com/world/2015/11/2/9659540/turkey-election-november-2015>.

17. Pizzi, Mihchael, "AKP Retakes Control of Polarized Turkey," *Al Jazeera*, November 2, 2015, <https://www.aljazeera.com/news/2023/2/8/turkey-earthquake-worse-than-the-bombardment-in>.

logically aligned party. This point highlights the challenge of generalizing the effect on electoral results from our (or any) case: electoral institutions shape voters' reactions to soldiers' funerals. The success or failure of a nationalist party is, thus, an imperfect proxy for nationalist sentiment. Our study reveals and overcomes this inferential challenge by directly examining nationalist attitudes and behaviors using a combination of survey data, nationalist protests, and attacks against the pro-Kurdish party.

Future research might advance this literature in several ways. First, the vast majority of our districts host a single funeral. We cannot say whether multiple funerals amplify the effects we report or, as losses accumulate, begin to undermine support for the war effort. Second, we cannot link funeral attendance to political attitudes and behaviors. We are, thus, unable to investigate how participation in these rites affects social networks and subsequent political behavior, as in Madestam et al.'s (2013) study of protest events. Finally, there are a number of psychological mechanisms that might explain the increase we find in nationalist sentiment and behavior (e.g., threat, vengeance) that we do not have the data to investigate.

References

- Canetti, Daphna. 2017. "Emotional distress, conflict ideology, and radicalization." *PS: Political Science & Politics* 50 (4): 940–943.
- Chang, Chia-Rui, Yue Song, Fan Li, and Rui Wang. 2023. "Covariate adjustment in randomized clinical trials with missing covariate and outcome data." *Statistics in Medicine* 42, no. 22 (July): 3919–3935.
- Cox, Gary W. 1997. *Making votes count: strategic coordination in the world's electoral systems*. Cambridge University Press.
- Gartner, Scott Sigmund. 2008. "The multiple effects of casualties on public support for war: An experimental approach." *American political science review* 102 (1): 95–106.
- Getmansky, Anna, and Thomas Zeitzoff. 2014. "Terrorism and voting: The effect of rocket threat on voting in Israeli elections." *American Political Science Review* 108 (3): 588–604.
- Goodman-Bacon, Andrew. 2021. "Difference-in-differences with variation in treatment timing." Themed Issue: Treatment Effect 1, *Journal of Econometrics* 225 (2): 254–277.
- Hadzic, Dino, David Carlson, and Margit Tavits. 2020. "How exposure to violence affects ethnic voting." *British journal of political science* 50 (1): 345–362.
- Hintson, Jamie, and Milan Vaishnav. 2023. "Who rallies around the flag? Nationalist parties, national security, and the 2019 Indian election." *American Journal of Political Science* 67 (2): 342–357.

- Johns, Robert, and Graeme AM Davies. 2019. "Civilian casualties and public support for military action: Experimental evidence." *Journal of Conflict Resolution* 63 (1): 251–281.
- Kahvecioğlu, Anıl, Tijen Demirel-Pegg, and İlker Aytürk. 2023. "Introducing the Turkey Protest, Repression, and Pro-Government Rally Dataset (TPRPGRD)." *Southeast European and Black Sea Studies* 23 (2): 385–408.
- Kerwin, Jason, Nada Rostom, and Olivier Sterck. 2024. *Striking the Right Balance: Why Standard Balance Tests Over-Reject the Null, and How to Fix It*. Technical report. Institute of Labor Economics (IZA).
- Kibris, Arzu. 2011. "Funerals and elections: The effects of terrorism on voting behavior in Turkey." *Journal of Conflict Resolution* 55 (2): 220–247.
- Kling, Jeffrey R, Jeffrey B Liebman, and Lawrence F Katz. 2007. "Experimental analysis of neighborhood effects." *Econometrica* 75 (1): 83–119.
- Kriner, Douglas L, and Francis X Shen. 2014. "Responding to war on Capitol Hill: Battlefield casualties, congressional response, and public support for the war in Iraq." *American Journal of Political Science* 58 (1): 157–174.
- Madestam, Andreas, D. Shoag, S. Veuger, and D. Yanagizawa-Drott. 2013. "Do political protests matter? evidence from the tea party movement." *The Quarterly Journal of Economics* 128 (4): 1633–1685.
- Onis, Ziya. 2016. "Turkey's two elections: the AKP comes back." *Journal of Democracy* 27:141.
- Rashid, Maria. 2020. *Dying to Serve: Militarism, Affect, and the Politics of Sacrifice in the Pakistan Army*. South Asia in Motion. Stanford University Press. ISBN: 9781503611993.
- Tezcür, Güneş Murat. 2016. "Ordinary people, extraordinary risks: Participation in an ethnic rebellion." *American Political Science Review* 110 (2): 247–264.
- Umit, Resul. 2023. "Rallies around the flag-draped coffins: the electoral effects of security force casualties in terror attacks." *Political science research and methods* 11 (1): 53–62.

Supporting Information

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For online publication

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A. Literature review

Our work relates to two strands of research on the political consequences of conflict. The first studies how soldiers' deaths affect public support for the associated conflict and incumbent government. The second studies how exposure to violence (i.e., victimization or the threat thereof due to proximate fighting) during civil conflicts affects support for the associated conflict and attitudes toward the warring parties. These literatures do not generate a clear prediction as to how the public will react to soldiers' deaths in a civil conflict. On the one hand, the funerals could undermine support for the conflict and government; on the other hand, they could increase antipathy toward out-groups and galvanize support for the campaign.

Sometimes referred to as the “casualties hypothesis”, research finds that soldiers' deaths undermine support for military campaigns and the incumbent government (Burk 1999). While much of this work studies US voters' reactions to soldiers' deaths in overseas conflicts (Gartner 2008b; Gelpi et al. 2009; Rand 2020), similar findings have been reported in other contexts (Gribble et al. 2015; Levy 2012; Getmansky and Zeitzoff 2014). Voters' anti-war and anti-incumbent reactions are stronger in the home districts of fallen soldiers (Gartner and Segura 2000; Karol and Miguel 2007; Gartner 2008a; Kriner and Shen 2012; Johns and Davies 2019).¹⁸ Kriner and Shen (2014) report that politicians in states suffering more casualties stake more anti-war positions.

There is less consensus about how exposure to violence during civil conflict affects voters' attitudes and behavior. Recent studies from Colombia (Tellez 2019; Kreiman and Masullo 2020) and Sudan (Hazlett 2020) suggest that exposure has a pacifying effect. This research comports with the literature on casualties, suggesting that exposure to violence leaves the public war-weary and inclined to support peace. Yet, these studies contrast with findings that greater direct exposure to violence during civil conflict makes individuals more militaristic, reduces support for peace, and increases support for right-wing parties. Canetti (2017) summarize, contending that exposure to violence generates a “conflict-supporting ethos” that delegitimizes the out-group, efforts to find compromise, and peaceful resolutions to the conflict. “Exposure to traumatizing events,” they contend, “prompts a significant conservative ideological shift, which is strongly associated with increased desires for revenge, militarism, racism, and violence” (942). Research on Israeli and Palestinian public opinion supports this claim (Canetti et al. 2017; Getmansky and Zeitzoff 2014; Hirsch-Hoefler et

18. Other research focuses on the public's reaction to the initiation of conflict. Early work reported a “rally around the flag” effect, but Seo and Horiuchi (2022) find that the initiation of disputes reduces support for national leaders.

al. 2016), as does work in Bosnia (Hadzic et al. 2020), Northern Ireland (Hayes and McAllister 2001), Rwanda (Pham et al. 2004), Uganda (Vinck et al. 2007), and Vietnam (Kocher et al. 2011).

Political entrepreneurs also attempt to influence how the public reacts to violence. Most relevant to our study are rituals that honor or memorialize those killed during a conflict, which both remind the public of the conflict's cost, but also present that loss (and the associated military campaign) as a commendable sacrifice (Rashid 2020). Recent studies from India disagree about the electoral consequences of these funerals: Hinton and Vaishnav (2023) find a decline in government vote share in areas closer to funerals, while Arya and Bhatiya (2023) report a sizeable increase. Two studies from Turkey during different times periods also produce mixed findings: Kibris (2011) finds that an incumbent (coalition) government is penalized by voters more exposed to soldiers' funerals, whereas Umit (2023) reports an increase in support for a more recent (and majority) incumbent government. While voting is an important outcome, it does not (as we will show below) necessarily reflect attitudinal changes, especially where electoral institutions and strategic considerations dissuade voters from selecting the party that best reflects their policy preferences.

B. Turkish Case

B.1 Assignment of Soldiers

The Turkish Ministry of Defense and General Staff emphasizes that the process is unbiased; for example, a first cousin of the then Secretary of the State was killed by a PKK attack while on compulsory duty at a high-risk post. Trust in the military, which is among the most revered institutions during our study period, derives in part from the perception that it does not allow status to distort the deployment of soldiers (Kibris and Cesur 2022). Reforms introduced in 2019 make some exceptions however, we examine an earlier period (i.e., 2015). This enables us to estimate the causal effect of funerals on political attitudes and behaviors.¹⁹

Four soldiers' deaths (roughly 2%) during our study period occur in confrontations with the Islamic State in eastern Turkey. The state-organized funeral ceremony is the same for soldiers killed in action with the PKK, Islamic State, or in accidents while on duty, so we include all such funerals when coding our treatment variable (see further details in data discussion, Section C).

19. People with a university degree could serve a shorter time, which might impact our inferences. However, we find no indication in balance checks that districts with funerals and people who were exposed to funerals have different levels of university education.

B.2 Funerals

Martyr funerals involve similar patterns and ceremonies across districts. The security force's father accepts condolences and often gives a brief speech, frequently emphasizing the honor of serving and sacrificing for one's country. Other close family typically sit near the coffin (though female relatives cannot attend the prayer), and children generally wear a military-style uniform. Many districts have a special cemetery for martyrs. After the security force is buried, the family accepts additional condolences from politicians, high-level bureaucrats, and other citizens. Although the ceremony is organized by the governing party — the AKP during our study period — most political parties attend. While ceremonies sometimes receive national media attention, they are more consistently and extensively covered by local news. Turkish Provinces typically have at least one local newspaper.

B.3 Time Period

As noted in the main body of the paper, we focus on a specific period in 2015 due to data availability and the two years ceasefire prior which limited carry-over effects of previous funerals. At other periods of this conflict, it is difficult to find a large number of constituencies that have not recently experienced a security force's funeral, restricting analysis to variation in the recency or number of funerals across districts. We would expect such limited variation in the timing or dosage of treatment to generate smaller differences in attitudes and behavior. It is important to note that the resumption of civil conflict in 2015 generated a common shock that affected all parts of the country. While this does not undermine our identification strategy — both treatment and control districts experience this common shock — it does influence how we interpret our estimates. We are estimating the effect of hosting a soldier's funeral, where civil conflict is a background condition and, thus, incorporated into the attitudes and behaviors we observe in our control districts.

C. Data Sources

C.1 Security Forces Killed in Action

We collected information on funeral ceremonies. We based our data collection efforts on Kibris (2021). More specifically, Kibris (2021) offers the most detailed dataset on the attacks between PKK and Turkish security forces using national newspapers as well as national NGO reports. Considering possible biases in large cross-national datasets such as UCDP stemming from language limitations (Eck 2012), relying on

Turkish resources endows significant advantages to collecting data on a conflict happening in Turkey. This dataset covers time, location, and the number of deaths on both sides separately as well as the resource of the information. The number of attacks and deaths of Turkish security forces in the period of our analysis is reported in Figure A.2. Taking the number of Turkish security forces deaths as our bases, we gathered the location information of martyr funeral ceremonies. We mostly relied on the resource information in Kibris (2021). We consulted national newspapers if the resource in Kibris (2021) does not provide information on the martyr funeral ceremony. For our period of analysis, there were 145 Turkish security forces deaths during the conflict and we gathered information for 144 of them. We could not find information only for one death. We also supplemented this with an extensive Google search of articles that include the terms “martyr” and “funeral” and we found 30 additional funeral ceremonies. Most of these are people who died in accidents on duty. We included them in the analysis because there is a ceremony for these people. However, when we exclude them from the analysis, the results are still very similar and support our findings. Districts that experienced at least one martyr ceremony are reported in Figure A.1.

Unfortunately, we are unable to code the rank of soldiers or funeral size due to data availability and, thus, cannot examine whether these features moderate our treatment effects.

Figure A.1: Locations of attacks and soldiers’ funerals (Jun–Nov 2015)

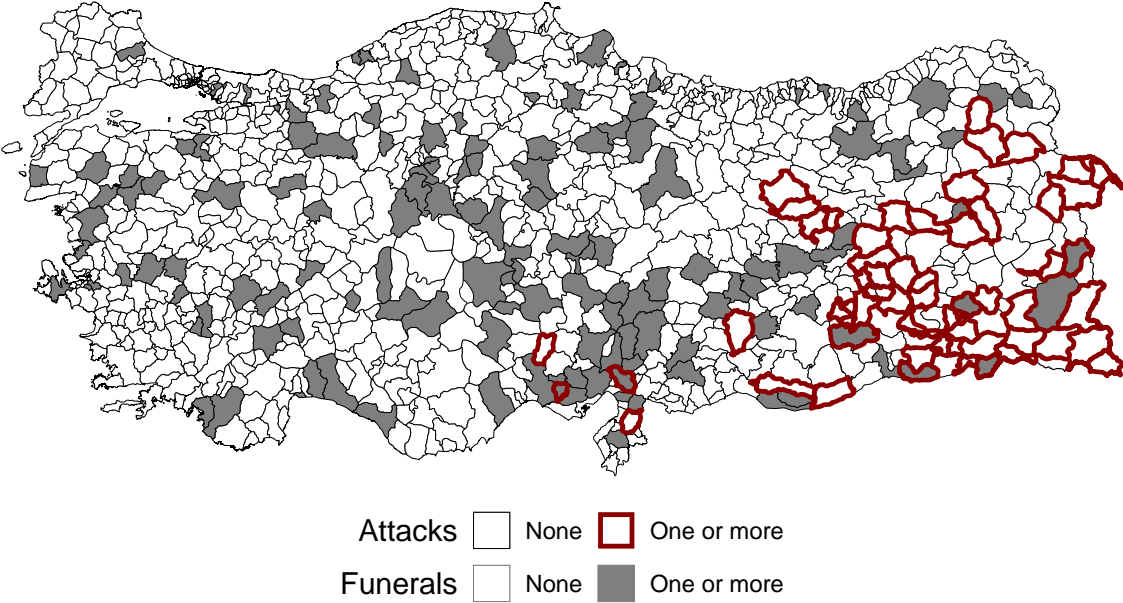
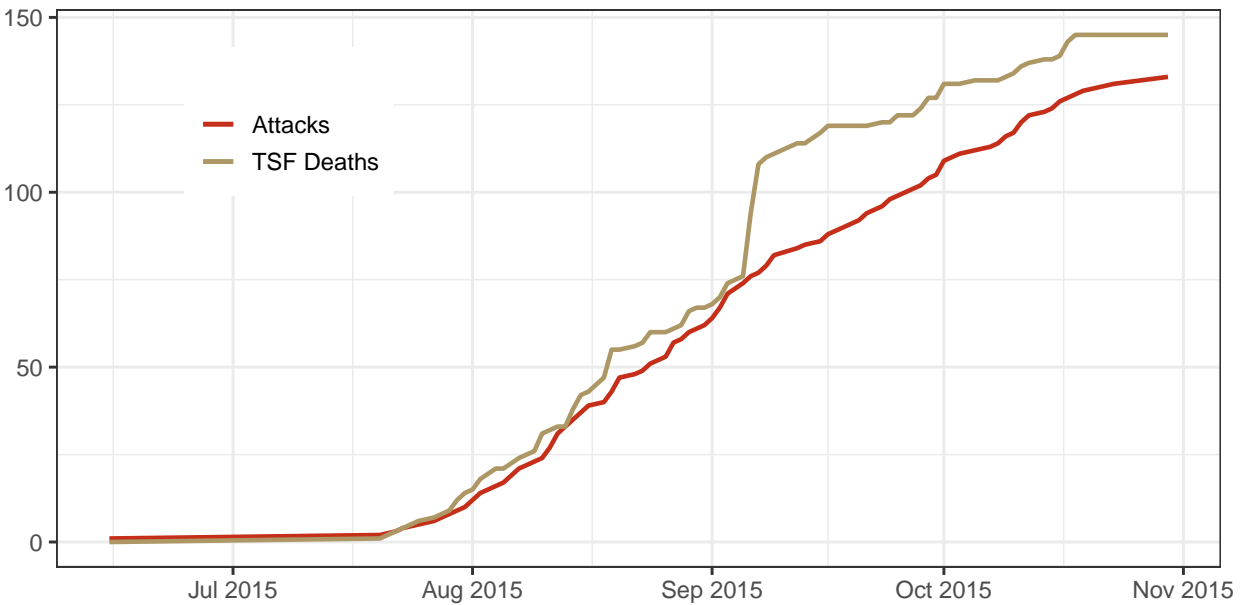


Figure A.1: Displays districts across Turkey. Those with dark red outlines experienced attacks by Kurdish Insurgents during our study period. Districts filled with grey hosted one or more funerals for soldiers killed in these attacks. Appendix Section C.1 describes how we compiled these data.

Figure A.2: Attacks and Deaths of Turkish Security Forces



C.2 Survey Data

Survey data that we use comes from Konda Research and Consultancy, which is a leading survey and consultancy company in Turkey. Every year Konda carries out eleven face-to-face monthly surveys (excluding Ramadan). These are nationally representative surveys gathered with a stratified approach. While some basic questions such as demographics and vote preferences are asked every time, each survey also has a specific focus ranging from economics to environment. Konda makes these surveys available to researchers.²⁰ We use the survey data from September 2015, which focuses on attitudes toward the Kurdish issue. The questionnaire includes questions on attitudes toward conflict resolution and recognition of political rights, which are the main focus of our analysis. The survey includes a representative subset of districts, with 123 out of 970 total districts sampled. In both the entire country and the surveyed districts, approximately 14.6% of districts held at least one martyr ceremony, which is a testament to the representativeness of the survey.

We created an index of attitudes toward conflict resolution via three items as suggested by Kling et al. (2007). The first item is the participant's agreement with the statement "The only way to solve the Kurdish problem is to destroy terrorism" on a 1 (strongly disagree)-5 (strongly agree) scale. The second and third items are binary indicating whether the participant prefers a coercive or peaceful solution. Konda asked participants what should be done to solve the Kurdish problem and offered 31 different options. We

20. For a list of papers that use Konda surveys, please see <https://konda.com.tr/yayinlar?l=en>.

categorized these options as coercive, peaceful, and other. PKK must be ended is an example of the coercive solution, there should be no discrimination is an example of the peaceful solution, and religion is an example of the other solution. While around 31% of participants preferred a coercive solution, around 42% of them preferred a peaceful resolution. For the index, higher values denote stronger preferences for coercive solutions.

For the political recognition of the Kurdish rights index, we used four items and adopted the same approach. Three items are the participant's agreement with the following statements on a 1 (strongly disagree)-5 (strongly agree) scale: The existence of Kurdish identity should be defined constitutionally by making changes to the constitution; There is a serious difference between Turks and Kurds in the eyes of the state in this country; and There should be no differences between Turks and Kurds in terms of rights, power and wealth. The final item is based on the question about the participant's preferences for the question of what should be done to solve the Kurdish problem. We created a binary variable for participants who preferred a solution that favored the political recognition of Kurdish rights (e.g., identity recognition/granting rights). For the index, higher values denote support for the recognition of Kurdish rights.

Konda mostly interviews participants on the weekend. The September 2015 survey was mostly conducted on the 5th and 6th of September. However, the exact date information is not available. On the 6th of September, there was a significant attack resulting in 16 Turkish soldier casualties. The attack was covered the whole day in the media and included information on the hometown of soldiers and planned funeral ceremonies. To prevent any possible contamination in the control condition, we excluded security forces deaths between the 6th and 11th of September. This way, we can ensure that participants in the control condition were not actually exposed to conflict casualties. However, when we also include these cases in the analysis, the results are still similar and supportive of the main argument.

C.3 Attacks on HDP

We collected information on attacks against HDP. Our starting point was HDP's appeal to the Supreme Election Council for the cancellation of the November elections. Because of the attacks against HDP prior to the November elections, HDP argued that they were disadvantaged and elections were not fair. In their appeal to the Supreme Election Council, they listed attacks against their party. This list is the base of our dataset. This list mostly covers attacks after the June and before the November elections. We complemented this list with an extensive Google search by limiting the timeframe to February-October 2015. We checked

all the articles that include the terms “HDP”, “attack”, and “building”. Most of the time, HDP offices were vandalized and arson, windows were broken, and Turkish flags were displayed. We did not consider cases when people gathered around in front of an HDP office chanting and protesting without any physical harm as an attack against HDP. We also considered attacks against HDP vehicles as attacks against HDP. Since our period of analysis is an election period, vehicles also carried party flags and posters of candidates. Thus, party vehicles were easily noticeable. To be considered as an attack, it was not necessary for someone to die or be injured. However, sometimes attacks against HDP offices are accompanied by attacks against HDP officials and even Kurds. We attempted to collect information on attacks against Kurds. However, reporting bias turned out to be a significant impediment for valid inferences on this measure.

D. Analysis of Survey Data

D.1 Balance Tests

Districts Using the procedure recommended by Kerwin et al. (2024), we use randomization inference to conduct an omnibus balance test with the full set of 970 districts. We permute the treatment vector and then regress the re-randomized assignment on pre-treatment covariates, including the literacy rate, university graduate rate, average household size, birth rate, sex ratio, divorce rate, total area, agricultural area, latitude, longitude, a binary indicator for at least one natural disaster in the last six months, number of deaths in natural disasters in the last six months, and night lights as a proxy for economic development. We always condition on the service-age, male population. (The list of covariates is determined by the availability of data.) We repeat this procedure 1,000 times and, in each iteration, test the joint null hypothesis that, conditional on the service-age, male population, the other covariates do not predict treatment assignment. We then regress the actual treatment assignment on this same set of covariates. Comparing the test statistic from this last regression to the distribution recovered through re-randomization, we compute an RI p-value of 0.140. At conventional levels we cannot reject the null that district-level covariates do not predict treatment assignment after conditioning on the service-age male population.

Survey Respondents We run a similar omnibus balance for our sample of survey respondents. These are sampled from a subset of 123 districts. We also have richer individual-level data that we can use to assess balance. We regress our treatment indicator on pre-treatment covariates, including age, gender, education, father’s education, household income, lifestyle (modern, traditional conservative, religious conservative), religion, ethnicity, rural or urban, vote choice in June 2015, and the size of the service-age male population

in the district. Where covariates are missing, we implement the missing-indicator method described in Chang et al. (2023), centering all covariates, imputing the median, and including in the regression both an indicator for missingness and the interaction of that indicator with our treatment variable. We cluster our standard errors on district which is the unit of assignment. We fail to reject the joint null hypothesis ($p = 0.92$), indicating that the covariates do not jointly predict which districts are treated. We also fail to reject ($p = 0.99$) if we do not employ the missing-indicator approach and only analyze the sample of respondents with complete covariate data.

D.2 Effects on Individual items

Table A.1: Attitudes become more hawkish, hostile to Kurdish political recognition

Outcome	Control Mean	$\hat{\beta}$	SE	p	N	Clusters
Supports Military Response*	0.00	0.34	0.08	0.00	3,130	123
Solution requires ‘destroying terrorism’	3.33	0.40	0.10	0.00	3,082	123
Solution is coercive	0.29	0.08	0.04	0.05	2,701	123
Solution is peaceful	0.44	-0.11	0.03	0.00	2,701	123
Supports Political Recognition*	0.00	-0.22	0.08	0.01	3,134	123
Support changing constitution	2.76	0.05	0.18	0.77	3,069	123
Solution requires equality/recognition	0.09	-0.04	0.02	0.02	2,701	123
State currently discriminates against Kurds	2.92	-0.45	0.16	0.00	3,077	123
State should treat Turks and Kurds equally	3.77	-0.07	0.08	0.43	3,082	123

Table A.1: Results from Equation 1 estimated with OLS and covariate adjustment for age, class, education, gender, past voting, and religion. $\hat{\beta}$ is the ATE of residing in a district that hosted a soldier’s funeral before the September 2015 survey. Appendix Section C.2 describes the survey data and questions. * denotes mean-effects indices constructed per Kling et al. (2007). Standard errors are clustered at the district-level.

D.3 Effects on Trust in Institutions

Table A.2: Trust in institutions increases

Outcome	Control Mean	Estimate	SE	p	N	Clusters
Trust in Institutions*	0.00	0.32	0.13	0.01	3,124	123
Trust in Government	2.53	0.31	0.09	0.00	3,114	123
Trust in Political Parties	2.20	0.19	0.12	0.12	3,114	123
Trust in Media/Press	2.01	0.41	0.20	0.04	3,111	123

Results with covariate adjustment using missing-indicator approach.

*: Mean-effects index per Kling et al.

D.4 Heterogeneous Effects by Gender

In Appendix Table A.3, we see that men’s attitudes shift more dramatically in response to security forces’ funerals. For our outcome families related to political recognition and trust in institutions, we can reject the

null hypothesis that the effects are the same for men and women. There are many potential explanations for heterogeneous effects by gender. Among them, men are over-represented among funeral attendees, and women cannot participate in parts of the ceremony.

Table A.3: Heterogeneous effects by gender

		Supports Military Response	Supports Political Recognition	Trust in Institutions
One or more funerals	Female	0.265*** (0.090)	-0.134 (0.086)	0.214* (0.116)
	Male	0.401*** (0.093)	-0.298*** (0.085)	0.420*** (0.152)
Equivalence test p value ($H_0 : \beta^{\text{Female}} = \beta^{\text{Male}}$)		0.187	0.011**	0.035**
Covariate Adjustment		✓	✓	✓
S.E. clustered by Observations		District 3,130	District 3,134	District 3,124

* p < 0.1, ** p < 0.05, *** p < 0.01

D.5 Heterogeneous Effects on Identity

Overall, we do not find that security forces' funerals affect whether respondents identify firstly as a Turkish citizen — an identity that Turks and Kurds share — or with their ethnic group. However, this masks divergent responses among Turks and Kurds. In Appendix Table A.4, we show suggestive evidence that Turks are 13 percentage points less likely to identify as citizens. By contrast, Kurds are 10 points less likely to identify firstly as Kurds, though this effect is not significant at conventional levels ($p = 0.15$).

Table A.4: Heterogeneous effects on identity for Turks and Kurds

Outcome	Control Mean	Estimate	SE	p	N	Clusters
<i>Q: Which identity of yours comes before all of them?</i>						
Turks						
Citizen Identity	0.69	-0.13	0.06	0.03	2,380	115
Ethnic Identity	0.09	0.07	0.05	0.15	2,380	115
Religious Identity	0.22	0.06	0.05	0.23	2,380	115
Kurds						
Citizen Identity	0.28	0.04	0.09	0.64	557	68
Ethnic Identity	0.40	-0.10	0.07	0.15	557	68
Religious Identity	0.31	0.06	0.11	0.60	557	68

D.6 Placebo Test

The survey we analyze was conducted on approximately 5 September 2015. To avoid miscoding our treatment variable, we drop districts that are first treated between September 4 and 11. There are 9 districts

that are treated after this window: these districts will be affected but had not been when the survey was enumerated. We conduct a placebo test, comparing these 9 not-yet treated districts to districts that never experience a security force’s funeral.

Table A.5: Placebo test using security forces’ funerals after the survey

Outcome	Control Mean	Placebo Estimate	SE	p	N	Clusters
Supports Military Response*	0	0.02	0.09	0.82	2,629	105
Supports Political Recognition*	0	-0.09	0.12	0.43	2,633	105
Trust in Institutions*	0	-0.07	0.11	0.52	2,622	105

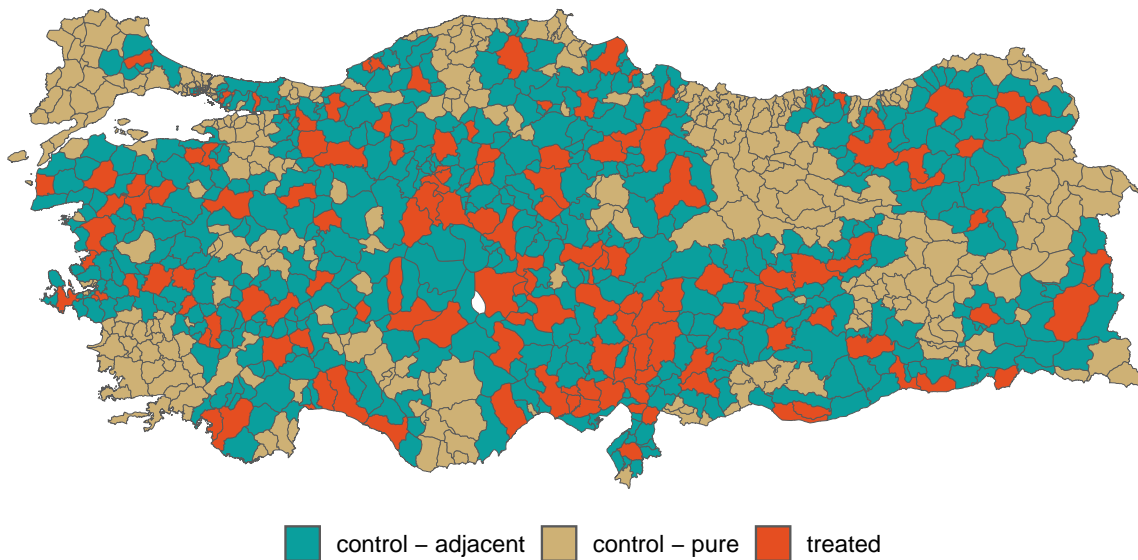
Results with covariate adjustment using missing-indicator approach.
 *: Mean-effects index per Kling et al.

In Appendix Table A.5, we show that there is not meaningful change in attitudes using this placebo treatment. While this analysis supports our causal claims, we note that this analysis does not have the same statistical power as our main analysis, as there are fewer units that receive the placebo than our actual treatment.

D.7 Spatial Spillovers

Appendix Figure A.3 differentiates two types of control districts: those adjacent to treated districts and those that are not. If there are (spatial) spillovers, we would expect them to be larger in adjacent controls.

Figure A.3: Differentiating control districts based on adjacency to treated districts



We re-estimate Equation 1 and include an indicator for whether a control district is treatment-adjacent. In Appendix Table A.6, we find no sizeable or statistically significant difference in attitudes between treatment-adjacent control districts and other (arguably “purer”) control units.

Table A.6: Negligible spillovers to treatment-adjacent control districts

	Supports Military Response	Supports Political Recognition	Trust in Institutions
One or more funerals	0.367*** (0.087)	-0.243** (0.096)	0.320** (0.136)
Treatment-adjacent	0.051 (0.068)	-0.037 (0.078)	-0.004 (0.076)
Covariate Adjustment	✓	✓	✓
S.E. clustered by Observations	District 3,130	District 3,134	District 3,124

E. Analysis of Riots and Protests

Figure A.4: Event-study plots for attacks on HDP and nationalist protests

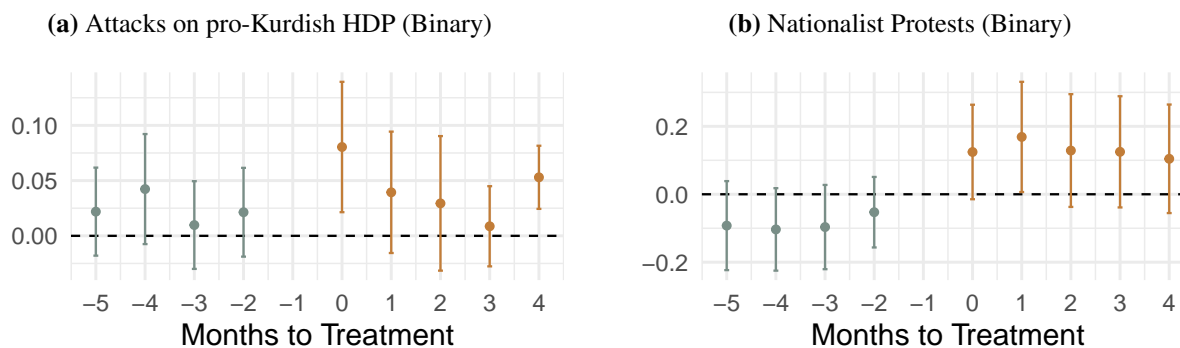


Figure A.4: Event-study plots from models that include leads and lags of the treatment variable. Standard errors clustered on district in A.4a and province in A.4b. These use two-way fixed effects models to estimate anticipatory and dynamic effects of treatment; we implement the approach recommended by Sun and Abraham (2021) in Appendix Figure A.6.

E.1 Alternative Estimators

E.2 Spatial Spillovers

For control districts, we determine the first month that any adjacent treatment districts hold funerals. We then code a time-varying indicator that takes a one after any adjacent district is treated. Appendix Table A.7 shows no differential change in these control districts after an adjacent unit is treated, which

Figure A.5: Goodman-Bacon (2021) Decomposition

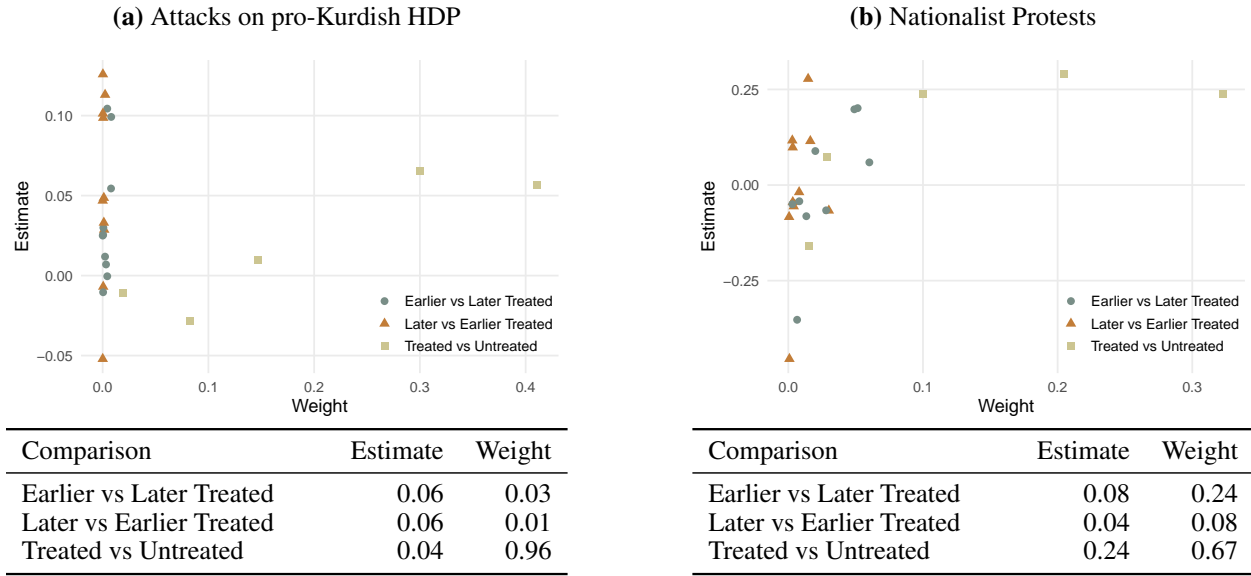
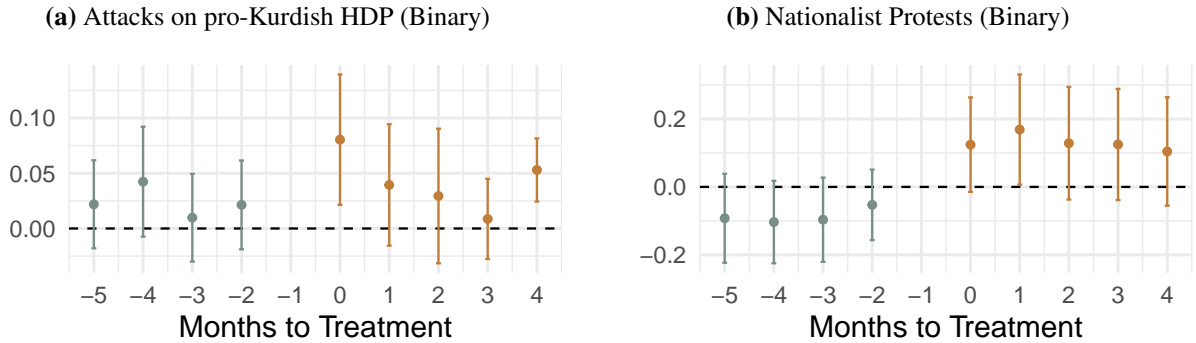


Figure A.6: Event-study plots a la Sun and Abraham (2021)



suggests negligible spatial spillovers. Since the protest data is available at the province level and almost all control provinces are adjacent to treatment provinces, we are not able to carry out spillover analysis for the protest outcome.

F. Analysis of Voting Behavior

We use district-level results from elections in June and November 2015 to examine the effects of soldiers' funerals on support for the AKP (incumbent), MHP (nationalist), and HDP (pro-Kurdish) parties, as well as voter turnout. With only two time periods in this panel, we cannot take advantage of the staggered timing of

Table A.7: Security forces' funerals increase attacks on HDP

	Attacks on HDP	
	(Binary)	(Count)
After security force's funeral	0.044** (0.018)	0.043** (0.018)
Treatment-adjacent	0.000 (0.006)	0.000 (0.006)
Month FE	✓	✓
District FE	✓	✓
S.E. clustered by	District	District
Observations	9,700	9,700

* p < 0.1, ** p < 0.05, *** p < 0.01

funerals. We estimate a two-group, two-period difference-in-differences using the following model:

$$y_{dt} = \alpha_d + \delta_t + \beta \mathbb{1}(\text{One or More Funerals})_{dt} + \varepsilon_{dt} \quad (3)$$

where d indexes the 970 districts and t indexes elections in June and November 2015. The variable $\mathbb{1}(\text{One or More Funerals})_{dt}$ is a binary treatment indicating whether the district had at least one funeral between the two elections. Standard errors are clustered on district.

Similar to Umit (2023), we find that the AKP's vote share increases by an additional point in districts that hosted at least one funeral. In never-treated districts, the AKP's average vote share increases by 8.5 points (from 44.2 to 52.7) between the June and November elections. The differential increase caused by soldiers' funerals is modest relative to that nationwide swing. Unlike Umit (2023), we find in Column 2 that the nationalist MHP saw a statistically significant differential decline in their support. Not only are the effects on the AKP's and MHP's support of equal and opposite magnitude, but changes in AKP and MHP support are also strongly negatively correlated (see Appendix Figure A.7), suggesting that the AKP gained at the MHP's expense. These effects are not larger in districts that host funerals closer to the November election (see Appendix Figure A.8). We see no effect on support for the pro-Kurdish HDP and a modest, if statistically significant, effect on turnout, which averaged above 85% in both elections.

Conditional on the number of recruits, each district has the same treatment propensity. As robustness checks, we interact each district's male, service-age population with our election fixed effect (Appendix Table A.9). We also use entropy balancing, reweighting our control districts to have the same average male, service-age population as treated districts (Appendix Table A.10).²¹ Both checks reaffirm our conclusions,

21. Appendix Table A.11 shows results when we entropy balance using a larger set of baseline variables, including province.

Table A.8: Modest increase in support for the incumbent AKP

	AKP (Incumbent) Center right	MHP (Nationalist) Far right	HDP (pro-Kurdish) Left	Turnout
At least one soldier's funeral	0.997** (0.384)	-1.045** (0.380)	0.032 (0.285)	0.642*** (0.194)
District FE	✓	✓	✓	✓
Election FE	✓	✓	✓	✓
Control Mean	48.2	14.9	11.7	85.7
S.E. clustered by Observations	District 1,940	District 1,940	District 1,940	District 1,940

Table A.8: Results from Equation 3 estimated with OLS using vote shares and turnout on a scale from 0-100 from the Supreme Election Council. Coefficients are the ATT of having hosted at least one soldier's funeral between the June and November 2015 elections. Standard errors are clustered on district. The control mean is across all not-yet-treated and never-treated observations. Significance: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

with the effect on MHP vote share appearing slightly more negative in these models. Again, we see no indication of spatial spillovers when we compare treatment-adjacent districts to less proximate untreated districts (Appendix Table A.12).

This last set of findings might seem puzzling: we find increases in nationalist sentiment and demonstrations, so why is the Nationalist Party losing more support after soldiers' funerals? These results are easy to reconcile when we consider the political context, party messaging, and voters' strategic choices (Onis 2016). The November vote was a snap election. The AKP won 41% in June and attempted to form a coalition government. However, the MHP publicly refused to partner, including "so many 'poison pills' in its coalition demands of the AKP that it negated any hope of compromise" (Stein 2015). MHP's leader earned the moniker Dr. No, and the AKP's campaign prior to the November polls stressed the need for "stability" and a majority government that could decisively respond to the country's security crisis.²² Moreover, the AKP tacked to the right in an effort to peel off MHP supporters, cracking down on the PKK with airstrikes and arrests, even jailing some pro-Kurdish journalists.²³ And this worked: Koplow summarizes, "nationalist voters figured that they may as well vote for the suddenly ultra-nationalist [AKP] that will be the largest party rather than the ultra-nationalist [MHP] that will come in third."²⁴ This indicates that the incumbent AKP ran a strategic campaign, emphasizing the importance of stability and burnishing their nationalist credentials in the fight against the PKK. In turn, nationalist voters strategically swung from the MHP to the

22. Beauchamp, Zack, "Why Turkey's election results shocked all the experts," *Vox*, November 2, 2015, <https://www.vox.com/world/2015/11/2/9659540/turkey-election-november-2015>.

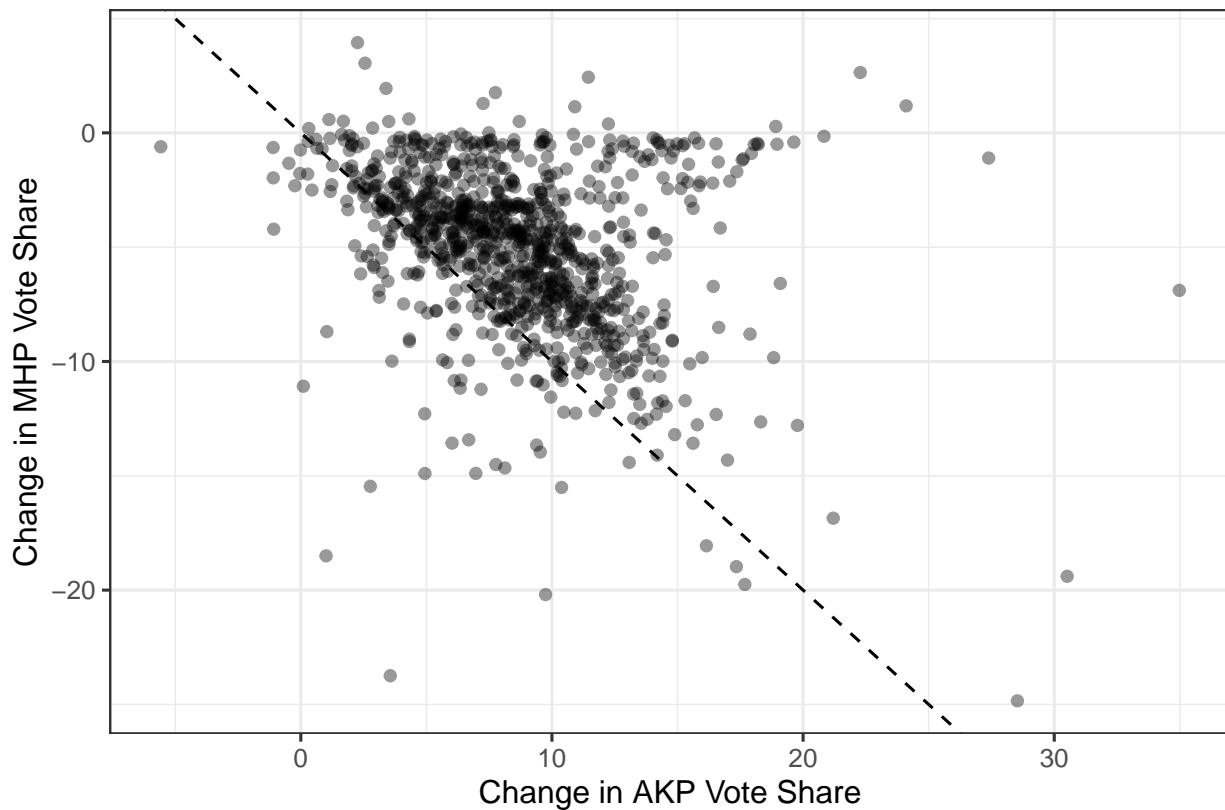
23. Pizzi, Mihchael, "AKP Retakes Control of Polarized Turkey," *Al Jazeera*, November 2, 2015, <https://www.aljazeera.com/news/2015/11/2/turkey-earthquake-worse-than-the-bombardment-in>.

24. Koplow, Michael, "A Quick Reaction to the AKP Victory," November 1, 2015, <https://ottomansandzionists.com/2015/11/01/a-quick-reaction-to-the-akp-victory/>.

AKP, wanting to avoid the risks associated with coalition bargaining and elect a majority government that would aggressively prosecute civil conflicts with the PKK and Islamic State. This swing was nationwide, but we find that it was more pronounced in districts that hosted funerals for soldiers killed while fighting those insurgent groups. This interpretation comports earlier work by Kibris (2011), who finds that voters turn against the members of a coalition government in response to insurgent violence.

F.1 Descriptives

Figure A.7: Change in AKP and MHP Vote Share from June to November 2015



F.2 Robustness Checks

Conditional on the population of military recruits, each district has a similar treatment propensity. We follow Umit (2023), who uses each district’s male population ages 20-29 to approximate the population of recruits.

The baseline population of recruits is absorbed by the district fixed effects in our main analysis in Table A.8. As a robustness check, we interact that population measure with our election fixed effect, and our

estimates are unchanged (see Appendix Table A.9). Our results look the same if we interact the election fixed effect with dummies for population decile, which permits the temporal shocks to vary non-linearly by district population size.

Table A.9: Including interaction of recruitment pool with election fixed effect

	AKP (Incumbent) Center right	MHP (Nationalist) Far right	HDP (pro-Kurdish) Left	Turnout
One or more security forces' funerals	0.997** (0.395)	-1.401*** (0.395)	0.241 (0.303)	0.518** (0.202)
District FE	✓	✓	✓	✓
Election FE	✓	✓	✓	✓
Recruitment Pool × Election FE	✓	✓	✓	✓
S.E. clustered by Observations	District 1,940	District 1,940	District 1,940	District 1,940

* p < 0.1, ** p < 0.05, *** p < 0.01

We also use entropy balancing (Hainmueller 2012) to re-weight our untreated districts. First, we reweight such that untreated districts have the same average population of recruits as treated districts. Prior to weighting, treated districts have an average of 12,400 men ages 20-29; untreated districts, just 5,570. After reweighting, the average among untreated districts is the same as the treated group. Appendix Table A.10 shows that our results are qualitatively similar when we incorporate these weights.

Table A.10: Including weights from entropy balancing on male population ages 20-29

	AKP (Incumbent) Center right	MHP (Nationalist) Far right	HDP (pro-Kurdish) Left	Turnout
One or more security forces' funerals	0.914** (0.391)	-1.340*** (0.386)	0.227 (0.284)	0.479** (0.195)
District FE	✓	✓	✓	✓
Election FE	✓	✓	✓	✓
Control Group Re-weighted	✓	✓	✓	✓
S.E. clustered by Observations	District 1,940	District 1,940	District 1,940	District 1,940

* p < 0.1, ** p < 0.05, *** p < 0.01

We then entropy balance using a larger set of baseline variables, reweighting such that untreated districts have the same average population of recruits, distribution across provinces, sex ratio, and divorce rates (see Appendix Table A.11). Matching on these variables achieves good balance on other district-level covariates, including literacy rates, household size, marriage rates, agricultural area, luminosity, longitude, and latitude. The effect of funerals on the AKP's vote share attenuates slightly, and the p-value increases to 0.12.

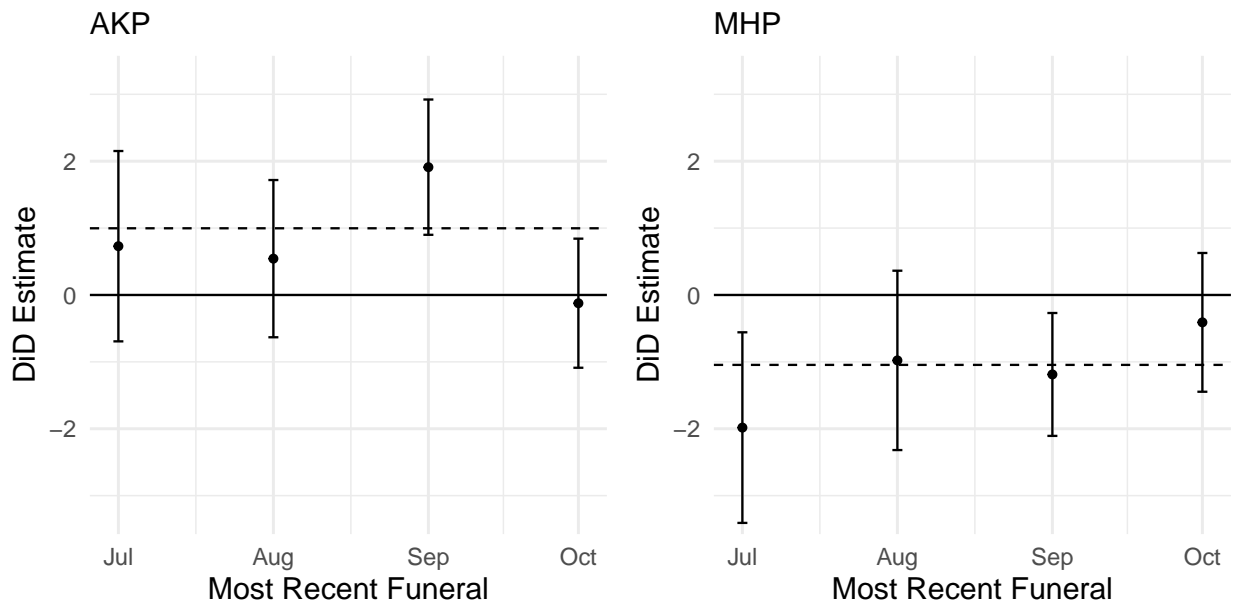
Table A.11: Including weights from entropy balancing on province and other baseline variables

	AKP (Incumbent) Center right	MHP (Nationalist) Far right	HDP (pro-Kurdish) Left	Turnout
One or more security forces' funerals	0.704 (0.453)	-1.028** (0.415)	-0.107 (0.307)	0.239 (0.205)
District FE	✓	✓	✓	✓
Election FE	✓	✓	✓	✓
Control Group Re-weighted	✓	✓	✓	✓
S.E. clustered by Observations	District 1,940	District 1,940	District 1,940	District 1,940

* p < 0.1, ** p < 0.05, *** p < 0.01

F.3 Proximity to Election

We interact our treatment indicator with the month of the (most recent) casualty to assess whether funerals closer to the November 2015 have different effects on voting behavior. We combine June and July given the small number of funerals in June. Appendix Figure A.8 shows the estimated effect on AKP and MHP vote shares based on the timing of the funeral. We do not see much evidence of effect heterogeneity: most of the point estimates are similar to the overall effects reported in Table A.8, which are represented in Appendix Figure A.8 by the dashed lines.

Figure A.8: Effect on electoral outcomes by the month of most recent funeral

F.4 Spatial Spillovers

We look for differential changes in voting behavior in control districts adjacent to districts with security forces' funerals versus other control districts (see Appendix Figure A.3). In Appendix Table A.12, we see a slightly larger swing toward the AKP and away from the MHP in treatment-adjacent districts. Neither effect is substantively large or significant; if anything, these suggest that spillovers push our main effects toward zero.

Table A.12: No differential change in voting in treatment-adjacent control districts

	AKP (Incumbent) Center right	MHP (Nationalist) Far right	HDP (pro-Kurdish) Left	Turnout
One or more security forces' funerals	1.201*** (0.423)	-1.165*** (0.407)	0.226 (0.323)	0.892*** (0.227)
Treatment-adjacent × Nov. 2015	0.364 (0.287)	-0.214 (0.241)	0.347 (0.240)	0.448** (0.179)
District FE	✓	✓	✓	✓
Election FE	✓	✓	✓	✓
S.E. clustered by Observations	District 1,940	District 1,940	District 1,940	District 1,940

* p < 0.1, ** p < 0.05, *** p < 0.01

G. Excluding Police Funerals

The main analysis examines the effects of security forces' funerals on various outcomes. Although a significant majority of funerals are for soldiers, there are also funerals for police officers.

The location of service of police forces is randomized, but police officers cannot serve in their hometown with exceptions. While every Turkish man has to serve in the army, they do not have to serve in the police force. While previous studies include both police and soldier funerals in their analysis (Kibris 2011; Umit 2023), one might be concerned about the inclusion of police funerals in the analysis. We replicate the main analysis by excluding districts that hosted funerals for police officers but not soldiers. The results are reported in Tables A.13, A.14, and A.15 and Figure A.9. Our conclusions are unchanged.

Table A.13: Attitudes become more hawkish and hostile to Kurdish rights - Police funerals are excluded

Outcome	Control Mean	Estimate	SE	p	N	Clusters
Supports Military Response*	0.00	0.35	0.08	0.00	3,062	121
Solution requires 'destroying terrorism'	3.34	0.51	0.10	0.00	3,015	121
Solution is coercive	0.30	0.06	0.04	0.14	2,651	121
Solution is peaceful	0.43	-0.10	0.03	0.00	2,651	121
Supports Political Recognition*	0.00	-0.22	0.09	0.02	3,066	121
Support changing constitution	2.75	0.13	0.19	0.49	3,006	121
Solution requires equality/recognition	0.09	-0.03	0.02	0.07	2,651	121
State currently discriminates against Kurds	2.91	-0.52	0.17	0.00	3,012	121
State should treat Turks and Kurds equally	3.77	-0.11	0.09	0.23	3,015	121

Results with covariate adjustment using missing-indicator approach.
 *: Mean-effects index per Kling et al.

Table A.14: Security forces' funerals increase attacks on HDP and nationalist protests - Police funerals are excluded

	Attacks on HDP (Binary)	Attacks on HDP (Count)	Nationalist Protests (Binary)	Nationalist Protests (Count)	Student Protests (Binary)	Student Protests (Count)
After security force's funeral	0.035*	0.034	0.205***	0.702***	-0.039	-0.217
	(0.021)	(0.021)	(0.048)	(0.169)	(0.029)	(0.132)
Month FE	✓	✓	✓	✓	✓	✓
District FE	✓	✓				
Province FE			✓	✓	✓	✓
S.E. clustered by Observations	District	District	Province	Province	Province	Province
	9230	9230	710	710	710	710

* p < 0.1, ** p < 0.05, *** p < 0.01

Figure A.9: Event-study plots for attacks on HDP and nationalist protests - Police funerals are excluded

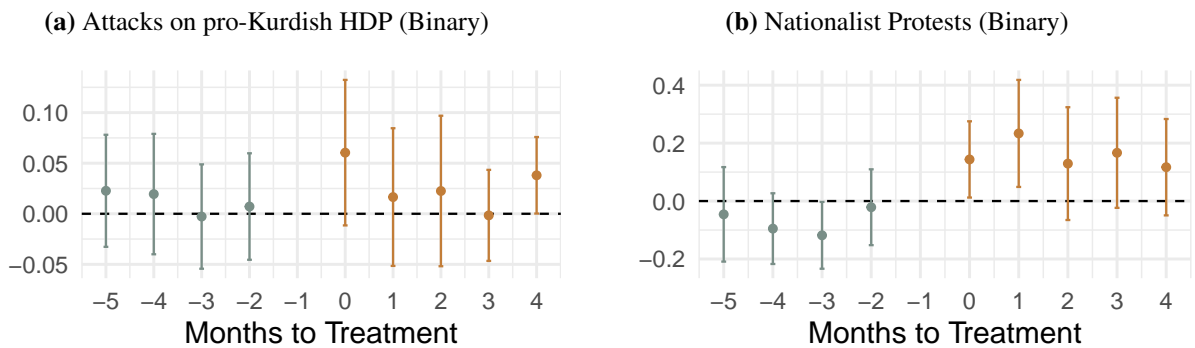


Table A.15: Modest increase in support for the incumbent AKP - Police funerals are excluded

	AKP (Incumbent) Center right	MHP (Nationalist) Far right	HDP (pro-Kurdish) Left	Turnout
One or more security forces' funerals	0.980** (0.486)	-1.107** (0.463)	0.011 (0.317)	0.606*** (0.231)
District FE	✓	✓	✓	✓
Election FE	✓	✓	✓	✓
S.E. clustered by Observations	District 1,846	District 1,846	District 1,846	District 1,846

* p < 0.1, ** p < 0.05, *** p < 0.01

H. External Validity

Our study credibly estimates the effect of commemorating fallen soldiers on attitudes and political behavior in Turkey in 2015. The nationalistic response we uncover reinforces findings from other contexts (e.g., Canetti 2017), suggesting that our results are not unique to the Turkish case.

Focusing on a single case, we are able to offer internally valid estimates of the effect of soldiers' funerals on multiple outcomes: attitudes, political violence, and voting. Yet, this focus limits our ability to empirically assess possible scope conditions. We speculate about a few factors that likely shape our findings. First, soldiers' funerals in Turkey are large, public ceremonies organized by the state and covered by the media. Politicians attend these ceremonies and use them as platforms to persuade and mobilize constituents. More private or less overtly political ceremonies may generate more muted effects. Second, fighting with the Kurdish insurgents activates an extant cleavage within Turkish society between Turks and Kurds. Anger about soldiers' funerals could be directed toward a well-defined and politically organized minority group. Having such a clear target may have enabled more rapid mobilization and demonstrations by nationalists. Third, conscription may shape the public's reaction; where soldiers volunteer, their deaths may be perceived as a foreseeable risk of enlisting and, thus, provoke less anger. Finally, as we have noted above, the funerals we study happen against a backdrop of renewed conflict between the Turkish state and PKK. One might find larger effects in settings where attitudes have not been reified by past fighting or, alternatively, where control constituencies are fully insulated from the conflict.

Appendix References

- Arya, Yatish, and Apurav Yash Bhatiya. 2023. "Political Messages and Voting: Evidence from India."
- Burk, James. 1999. "Public support for peacekeeping in Lebanon and Somalia: Assessing the casualties hypothesis." *Political science quarterly* 114 (1): 53–78.
- Canetti, Daphna. 2017. "Emotional distress, conflict ideology, and radicalization." *PS: Political Science & Politics* 50 (4): 940–943.
- Canetti, Daphna, Julia Elad-Strenger, Iris Lavi, Dana Guy, and Daniel Bar-Tal. 2017. "Exposure to violence, ethos of conflict, and support for compromise: Surveys in Israel, East Jerusalem, West Bank, and Gaza." *Journal of conflict resolution* 61 (1): 84–113.

- Chang, Chia-Rui, Yue Song, Fan Li, and Rui Wang. 2023. "Covariate adjustment in randomized clinical trials with missing covariate and outcome data." *Statistics in Medicine* 42, no. 22 (July): 3919–3935.
- Eck, Kristine. 2012. "In data we trust? A comparison of UCDP GED and ACLED conflict events datasets." *Cooperation and Conflict* 47 (1): 124–141.
- Gartner, Scott Sigmund. 2008a. "Secondary casualty information: Casualty uncertainty, female casualties, and wartime support." *Conflict Management and Peace Science* 25 (2): 98–111.
- . 2008b. "The multiple effects of casualties on public support for war: An experimental approach." *American political science review* 102 (1): 95–106.
- Gartner, Scott Sigmund, and Gary M Segura. 2000. "Race, casualties, and opinion in the Vietnam War." *Journal of Politics* 62 (1): 115–146.
- Gelpi, Christopher, Peter D. Feaver, and Jason Reifler. 2009. *Paying the human costs of war: American public opinion and casualties in military conflicts*. Vol. 4. Princeton University Press.
- Getmansky, Anna, and Thomas Zeitzoff. 2014. "Terrorism and voting: The effect of rocket threat on voting in Israeli elections." *American Political Science Review* 108 (3): 588–604.
- Goodman-Bacon, Andrew. 2021. "Difference-in-differences with variation in treatment timing." Themed Issue: Treatment Effect 1, *Journal of Econometrics* 225 (2): 254–277.
- Gribble, Rachael, Wessley Simon, Klein Susan, Alexander David, Dandeker Christopher, and Fear Nicola. 2015. "British Public Opinion After a Decade of War: Attitudes to Iraq and Afghanistan." *Politics* 35 (2): 128–150.
- Hadzic, Dino, David Carlson, and Margit Tavits. 2020. "How exposure to violence affects ethnic voting." *British journal of political science* 50 (1): 345–362.
- Hainmueller, Jens. 2012. "Entropy Balancing for Causal Effects: A Multivariate Reweighting Method to Produce Balanced Samples in Observational Studies." *Political Analysis* 20 (1): 25–46. <https://doi.org/10.1093/pan/mpr025>.
- Hayes, Bernadette C., and Ian McAllister. 2001. "Sowing dragon's teeth: Public support for political violence and paramilitarism in Northern Ireland." *Political Studies* 49 (5): 901–922.
- Hazlett, Chad. 2020. "Angry or weary? How violence impacts attitudes toward peace among Darfurian refugees." *Journal of Conflict Resolution* 64 (5): 844–870.

- Hintson, Jamie, and Milan Vaishnav. 2023. "Who rallies around the flag? Nationalist parties, national security, and the 2019 Indian election." *American Journal of Political Science* 67 (2): 342–357.
- Hirsch-Hoefler, S., D Canetti, C. Rapaport, and S. E Hobfoll. 2016. "Conflict will harden your heart: Exposure to violence, psychological distress, and peace barriers in Israel and Palestine." *British Journal of Political Science* 46 (4): 845–859.
- Johns, Robert, and Graeme AM Davies. 2019. "Civilian casualties and public support for military action: Experimental evidence." *Journal of Conflict Resolution* 63 (1): 251–281.
- Karol, David, and Edward Miguel. 2007. "The electoral cost of war: Iraq casualties and the 2004 US presidential election." *The Journal of Politics* 69 (3): 633–648.
- Kerwin, Jason, Nada Rostom, and Olivier Sterck. 2024. *Striking the Right Balance: Why Standard Balance Tests Over-Reject the Null, and How to Fix It*. Technical report. Institute of Labor Economics (IZA).
- Kibris, Arzu. 2011. "Funerals and elections: The effects of terrorism on voting behavior in Turkey." *Journal of Conflict Resolution* 55 (2): 220–247.
- . 2021. "The geo-temporal evolution of violence in civil conflicts: A micro-analysis of conflict diffusion on a new event data set." *Journal of Peace Research* 58 (5): 885–899.
- Kibris, Arzu, and Resul Cesur. 2022. *Does War Foster Cooperation or Parochialism? Evidence from a Natural Experiment among Turkish Conscripts*. Technical report. National Bureau of Economic Research.
- Kling, Jeffrey R, Jeffrey B Liebman, and Lawrence F Katz. 2007. "Experimental analysis of neighborhood effects." *Econometrica* 75 (1): 83–119.
- Kocher, Matthew, Thomas Pepinsky, and Stathis Kalyvas. 2011. "Aerial bombing and counterinsurgency in the Vietnam War." *American Journal of Political Science* 55 (2): 201–218.
- Kreiman, Guillermo, and Juan Masullo. 2020. "Who shot the bullets? Exposure to violence and attitudes toward peace: Evidence from the 2016 Colombian referendum." *Latin American Politics and Society* 62 (4): 24–49.
- Kriner, Douglas L, and Francis X Shen. 2012. "How citizens respond to combat casualties: the differential impact of local casualties on support for the war in Afghanistan." *Public Opinion Quarterly* 76 (4): 761–770.
- . 2014. "Responding to war on Capitol Hill: Battlefield casualties, congressional response, and public support for the war in Iraq." *American Journal of Political Science* 58 (1): 157–174.

- Levy, Yagil. 2012. *Israel's death hierarchy: Casualty aversion in a militarized democracy*. Vol. 4. NYU Press.
- Onis, Ziya. 2016. "Turkey's two elections: the AKP comes back." *Journal of Democracy* 27:141.
- Pham, Phuong N, Eric Stover, Harvey M. Weinstein, and Timothy Longman. 2004. "Trauma and PTSD symptoms in Rwanda: implications for attitudes toward justice and reconciliation." *Jama* 298 (5): 602–612.
- Rand. 2020. *Casualties and consensus: The historical role of casualties in domestic support for US military operations*. Technical report 1.
- Rashid, Maria. 2020. *Dying to Serve: Militarism, Affect, and the Politics of Sacrifice in the Pakistan Army*. South Asia in Motion. Stanford University Press. ISBN: 9781503611993.
- Seo, TaeJun, and Yusaku Horiuchi. 2022. "Natural Experiments of the Rally Round the Flag Effects Using Worldwide Surveys." *Journal of Conflict Resolution* 64 (1).
- Stein, Aaron. 2015. "The Collapse of Turkey's Nationalist Movement Party." *Atlantic Council*.
- Sun, Liyang, and Sarah Abraham. 2021. "Estimating dynamic treatment effects in event studies with heterogeneous treatment effects." Themed Issue: Treatment Effect 1, *Journal of Econometrics* 225 (2): 175–199. ISSN: 0304-4076. <https://doi.org/https://doi.org/10.1016/j.jeconom.2020.09.006>.
- Tellez, Juan Fernando. 2019. "Worlds apart: Conflict exposure and preferences for peace." *Journal of Conflict Resolution* 63 (4): 1053–1076.
- Umit, Resul. 2023. "Rallies around the flag-draped coffins: the electoral effects of security force casualties in terror attacks." *Political science research and methods* 11 (1): 53–62.
- Vinck, Patrick, Phuong N Pham, Eric Stover, and Harvey M Weinstein. 2007. "Exposure to war crimes and implications for peace building in northern Uganda." *Jama* 298 (5): 543–554.