Online Appendix

A Descriptive

Table A.1 shows the summary statistics of the variables employed in the aggregate-level analysis.

Table A.1: Summary statistics (municipality-level data)

Statistic	N	Mean	St. Dev.	Min	Max
Turnout*	947	79.72	55.09	0	792.50
Turnout* (subset–turnout lower than 330%)	938	76.37	41.17	0.00	307.00
Police interventions	6.12% Yes; 93.88% No				
Type of intervention	93.88% (No intervention); 2.32% (Intervention: no violence); 3.80% Intervention: violence				
Confiscation electoral material	93.88% (No intervention); 3.06% (Intervention: no confiscation); 3.06% Intervention: confiscation				
Adjacent municipalities	23.76% Yes; 76.24% No				
Buffer (5km)	29.46% Yes; 70.54% No				
Buffer (10km)	53.01% Yes; 46.99% No				
N. of police officers per 10,000 inhabitants	947	2.79	12.79	0	150
N. of police officers (categorical)	93.98% (No intervention); 1.79% (Between 10-30); 4.22% More than 30				
(Log) Distance to nearest affected polling station	947	2.56	0.87	0.07	4.71
Mayor 2015	45.41% (CiU); 27.98% (ERC); 12.88% (PSC); 13.73% (Others)				
Percentage not born in Catalonia (2015)	947	10.40	6.01	0.76	37.63
Percentage support secessionist parties (2015)	947	59.59	13.97	13.00	82.72
Population density (2017)	947	443.19	1575.61	0.70	20754.00
(Log) Population (2017)	947	7.10	1.72	3.29	14.29
Elevation (in m)	947	369.0	319.45	2	1539

We consider the following as secessionist parties: JxS and CUP.* Turnout shown here corresponds to the unweighted average. The weighted average is equal to 41.2%

As we mention in the manuscript, the information on police interventions was compiled from different sources. We mainly used the website www.catmemoria.cat and Altesa.[1] We double-checked all of them using social media (Twitter, Facebook, etc.) and the https://spanishpolice.github.io/ platform, which provides several videos and graphical information. In cases where there were doubts (6 locations), we contacted people residing in the municipality to confirm the information.

[1] Altesa, Carmina. 2017. "Actuacions policials. Lâ€™1 dâ€™octubre en xifres". https://catmemoria.cat/wp-content/uploads/2017/10/1-octubre-Actuacions-Policials-en-xifres.pdf

We calculated the number of police officers sent to each polling station in the following way. The Spanish *Policia Nacional* and *Guardia Civil* formed police squads of different sizes that were distributed across the territory. Based on the fact that each police van could carry, on average, a total of 12-13 police officers (including the driver), we calculated the approximate number of police officers sent to each polling station (the number of police cars was extracted from the videos of the police interventions). Although this indicator might be affected by measurement error, it provides us with a more nuanced view of the intensity of police interventions in different places.

Finally, it is important to clarify a few points about police interventions. First, 64% of violent police actions ended with the police confiscating the ballot boxes. In some occasions, however, the police took ballot boxes filled in with empty ballots or blank papers. It is unfortunately not possible to identify where this occurred in a systematic and rigorous way. Second, taking the ballot boxes, or other electoral material, does not imply that the participation was not counted. In almost all cases, election officials recorded the participation rates at the time of police interventions.

Figure A.1 shows the distribution of turnout in the Catalan referendum. The left-panel boxplot includes all the Catalan municipalities (947). The boxplot in the right-panel only includes those municipalities where turnout was lower than 330% (938). As we explain in section E, we use the latter to run our main analyses.

Figure A.1: Turnout in the Catalan referendum on independence (boxplots)

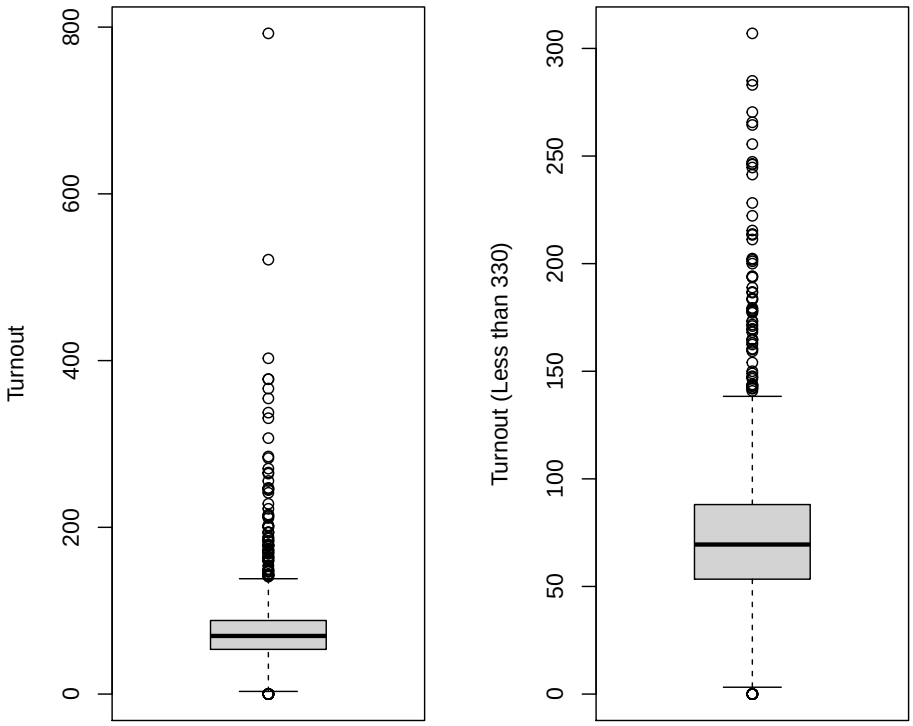


Table A.2 shows the summary statistics for the variables employed in the individual-level analysis. Data comes from the survey number 863 (third wave of the annual Barometer) conducted by the *Centre d'Estudis d'Opinió* (CEO). Fieldwork took place between 16-29 October 2017. Data can be downloaded at the institute's website (http://ceo.gencat.cat/).[2] The survey is representative of the Catalan population (Spanish citizens of 18 years of age and more who live in Catalonia) and it was face-to-face. The sampling procedure was stratification by province and town size, with selection of last sample units (individuals) using sex, age and place of birth crossed quotas.

[2] We are grateful to the CEO for sharing the respondent's geo-coordinates with us.

Table A.2: Summary statistics (individual-level data)

Statistic	N	Mean	St. Dev.	Min	Max
Turnout (unweighted municipalities mean)	1,266		60.98% Yes; 39.02% No		
Respondents in municipalities where police intervened	1,266		30.72% Yes; 69.28% No		
Number of police officers / Population	1,266	0.47	1.00	0.00	4.04
(Log) Distance to nearest affected polling station	1,266	1.70	1.28	0.00	4.25
(Log) Population (2017)	1,266	11.05	2.14	5.75	14.30
Respondent's national identification	1,266	9.16% "Only Spanish and More Spanish than Catalan"; 34.91% "Equally Spanish and Catalan"; 23.70% "More Catalan than Spanish"; 32.23% "Only Catalan"			
Decision to vote on the referendum day	771	91.05% Yes; 8.95% No			
Recall vote Catalan elections 2015*	1,266	32.86% Other parties or abstention; 15.01% Parties against the referendum; 43.05% Parties in favour of the referendum; 9.08% Ambivalent parties			
Respondent was born in...	1,266	71.72% Catalonia; 28.28% Outside Catalonia			
Age	1,266	20.85% 18-34 years old; 27.88% 35-49 years old; 25.75% 50-64 years old; 25.51% Older than 64			
Gender	1,266	52.69% Women; 47.31% Men			
Education	1,266	37.76% Primary education; 36.97% Secondary education; 25.28% University education			
Barcelona	1,266	19.98% sample lives in Barcelona; 80.02% Rest of Catalonia			

Parties included in each category are the following: parties against the referendum [PP, PSC, C's]; parties in favour [JxS, CUP]; an ambivalent party [CeC]; and other parties and abstention. For further information, see Table A.3.

Table A.3 lists the main Catalan parties and their position on the independence referendum.

Table A.3: Parties and their positions on the independence debate

Party	Position on the referendum
Junts pel Sí [Together for the Yes] - JxS	In favour
Candidatura d'Unitat Popular [Popular Unity Candidature] - CUP	In favour
Ciudadanos [Citizens] - C's	Against
Partit dels Socialistes de Catalunya [Catalan Socialist Party] - PSC	Against
Partido Popular [Popular Party] - PP	Against
Catalunya en Comú [Catalonia in Common] - CeC	Ambivalent

In the aggregate-level analysis, one of the controls captures the party that governed in the municipality following the result of the 2015 local election. This variable distinguishes between two additional parties: CiU (Convergència i Unió [Convergence and Union] and ERC (Esquerra Republicana de Catalunya [Republican Left of Catalonia]). These two parties formed a pre-electoral coalition for the 2015 Catalan election (Junts pel Sí) with the promise of organizing a referendum on Catalan secession and, if the Yes won, declare independence from Spain.

Figure A.2 shows those municipalities adjacent to municipalities that witnessed a police intervention. We have only considered as adjacent those municipalities that share a border with municipalities where the Spanish police intervened (contiguous municipalities). This information is used in Table B.1.

Figure A.2: Municipalities adjacent to affected municipalities

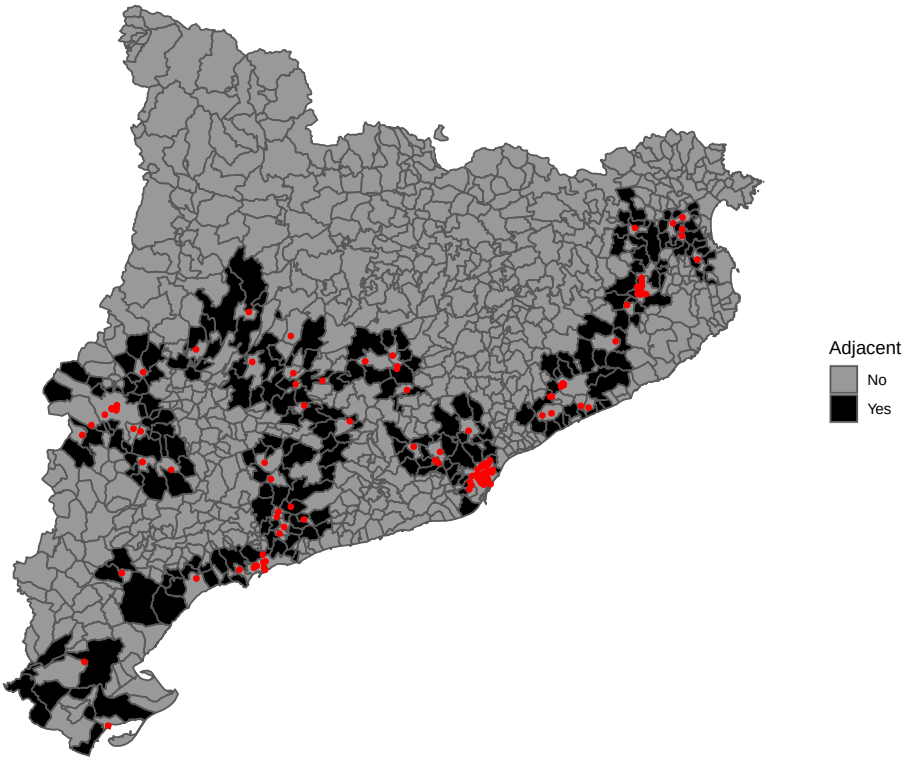


Figure A.3 and Figure A.4 respectively show the 5 km and 10 km buffer around the polling stations raided by the police. Using this information, we dichotomise whether a municipality falls within the 5/10 km buffer (1) or not (0). This information is employed in Table B.1.

Figure A.3: 5 km buffer around municipalities raided by the police

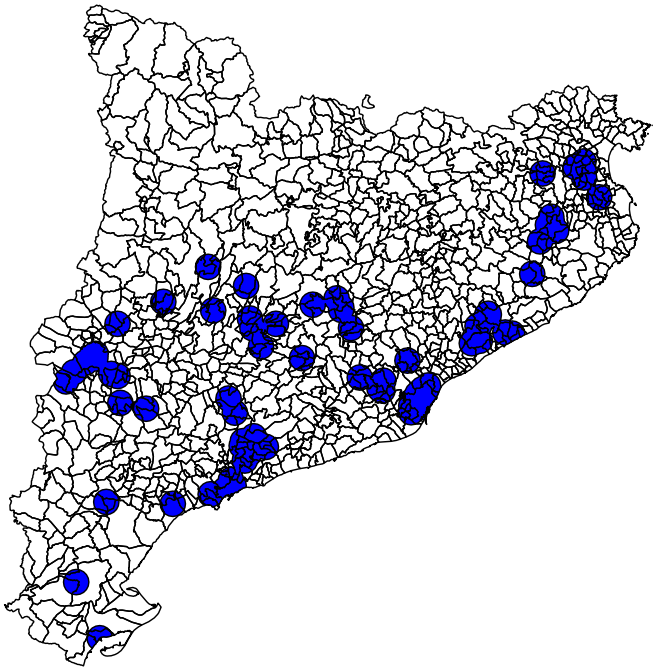


Figure A.4: 10 km buffer around municipalities raided by the police

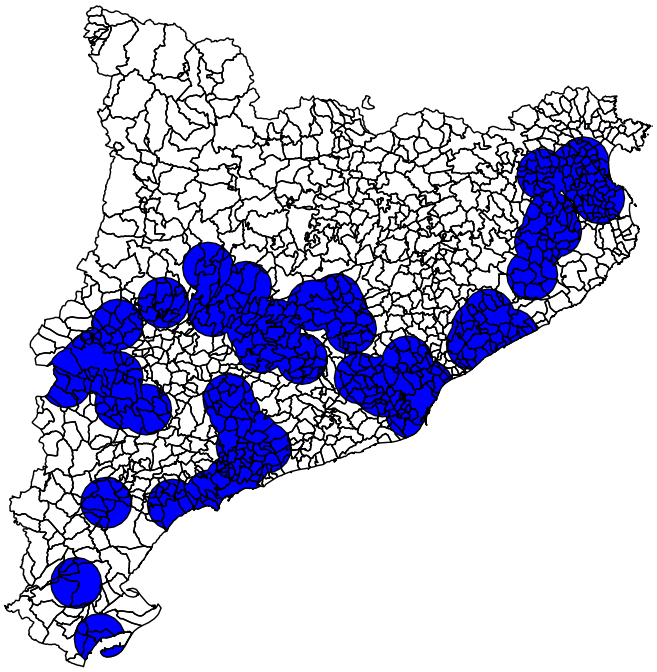
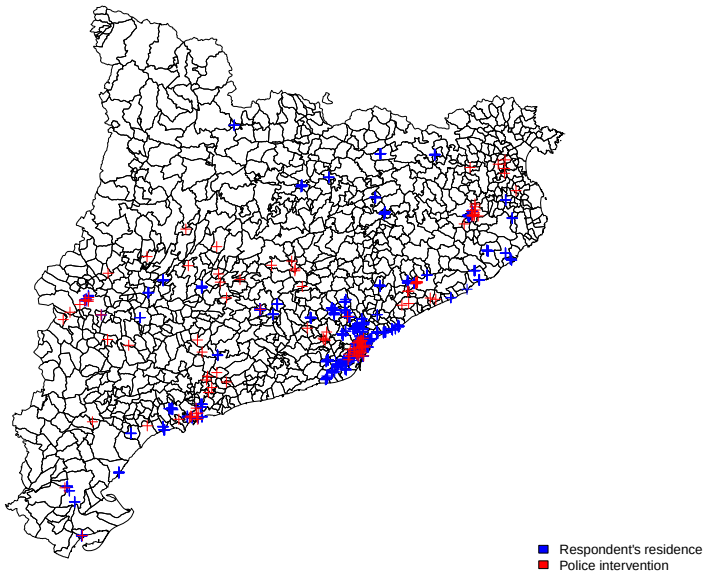


Figure A.5 shows the location of the interviews in the CEO survey. It also shows the spatial distribution of police interventions during the day of the referendum.

Figure A.5: Spatial distribution of interviews and police interventions



B Aggregate-level models

Table B.1 shows the main models in the aggregate-level analysis. These estimates have been employed to create the figures included in the main text. Models 1-4 analyse the local effect of police interventions on turnout, while models 5-8 focus on the spatial dimension by examining the turnout dynamics as a result of police raids.

Table B.1: The effect of police violence on turnout

	Police intervention	Violence intensity	N. police officers	Confiscation	Distance	Adjacent	Buffer 5km	Buffer 10km
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Police intervention	−16.981***							
	(4.427)							
Intensity of violence (No violence, rc)								
Moderate violence		−18.770***						
		(7.040)						
Intense violence		−15.864***						
		(5.593)						
No. of police officers/10,000 inhabitants (No intervention, rc)								
Between 10-30			−22.143***					
			(7.938)					
More than 30			−15.134***					
			(5.300)					
Confiscation electoral material (No intervention, rc)								
No confiscation of electoral material				−9.966				
				(6.131)				
Confiscation of electoral material				−24.156***				
				(6.199)				
Distance to nearest affected polling station					26.172***			
					(5.862)			
Distance to nearest affected polling station^2					−5.655***			
					(1.218)			
Adjacent municipality						4.792*		
						(2.561)		
Municipality in 5km (buffer)							4.776*	
							(2.437)	
Municipality in 10km (buffer)								4.360**
								(2.133)
Party holding the mayoralty (other parties, rc)								
Mayor 2015:CiU	1.593	1.552	1.618	1.898	2.566	2.337	2.217	2.366
	(3.273)	(3.277)	(3.274)	(3.275)	(3.258)	(3.285)	(3.287)	(3.283)
Mayor 2015: ERC	−1.638	−1.718	−1.640	−1.352	−1.692	−1.140	−1.343	−1.093
	(3.494)	(3.504)	(3.494)	(3.495)	(3.483)	(3.512)	(3.514)	(3.510)
Mayor 2015: PSC	4.357	4.318	4.318	4.643	5.630	5.505	5.375	5.457
	(4.294)	(4.298)	(4.299)	(4.294)	(4.288)	(4.312)	(4.311)	(4.310)
Percentage born in other AC (2017)	0.271	0.274	0.250	0.261	0.346	0.318	0.313	0.300
	(0.336)	(0.336)	(0.336)	(0.336)	(0.336)	(0.339)	(0.338)	(0.338)
Percentage support secessionist parties (2015)	1.112***	1.111***	1.112***	1.115***	1.084***	1.157***	1.152***	1.156***
	(0.147)	(0.147)	(0.147)	(0.147)	(0.147)	(0.148)	(0.148)	(0.148)
Population density (2017)	0.003***	0.003***	0.003***	0.003***	0.003***	0.003***	0.003***	0.003***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
(Log) total population (2017)	−9.584***	−9.623***	−9.595***	−9.468***	−9.537***	−9.598***	−9.585***	−9.443***
	(0.942)	(0.950)	(0.942)	(0.944)	(0.944)	(0.948)	(0.948)	(0.949)
Elevation (in m)	−0.001	−0.001	−0.001	−0.001	0.014**	0.002	0.002	0.001
	(0.004)	(0.004)	(0.004)	(0.004)	(0.006)	(0.004)	(0.004)	(0.004)
Constant	74.743***	75.143***	75.133***	73.521***	42.513***	68.134***	68.031***	66.425***
	(14.064)	(14.124)	(14.074)	(14.071)	(15.350)	(14.198)	(14.194)	(14.286)
Observations	938	938	938	938	938	938	938	938
R^2	0.393	0.393	0.394	0.395	0.397	0.386	0.386	0.386

*p<0.1; **p<0.05; ***p<0.01

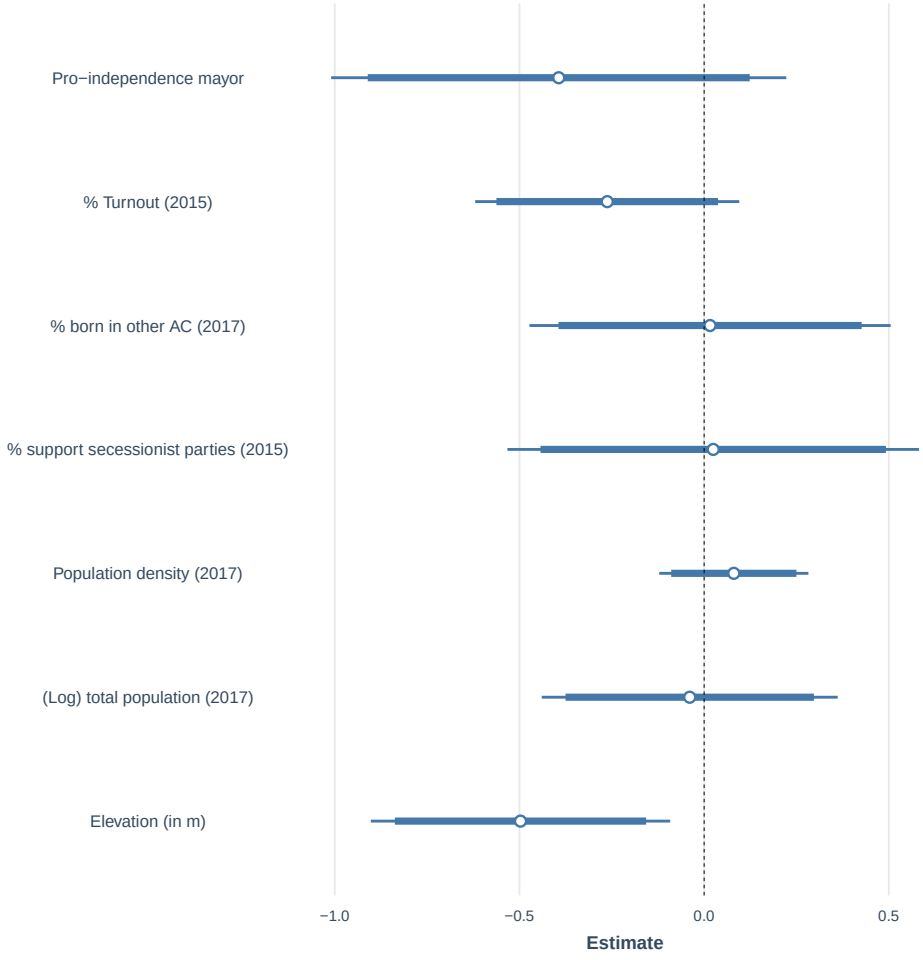
C Why did the police intervene in some places and not in others?

Did the police systematically intervene in places where pro-secession support was higher? Or did they intervene in larger municipalities in order to allocate their resources more efficiently? As we explain in the manuscript, this question is crucial as our analysis partly hinges upon the idea that police interventions had a degree of randomness. As we show next, this was indeed the case.

A first approach to explore the logic of police interventions is by empirically testing whether the decision to intervene in some places is systematically associated with the characteristics of the municipality. This is what Figure C.1 does. More concretely, it shows the coefficients of a logit model using police interventions as an outcome (1, the municipality witnessed a police intervention; 0, the rest). As explanatory variables, we include the rest of the variables employed in the empirical models. As can be seen, except for the elevation coefficient, none is significant. In other words, police actions were not more likely to take place in municipalities with higher support for pro-independence parties, with larger levels of previous mobilization or where the mayor belonged to a pro-independence party. Overall, this reinforces the idea that police interventions across space followed a quasi-random logic.[3]

[3] If we repeat the analysis using adjacent municipalities as if they had received the police intervention, coefficients are also non-significant.

Figure C.1: The determinants of police interventions



This plot shows the coefficients of different explanatory variables on the probability of being subjected to a police intervention. Estimates are based on a logistic regression model. The thick line denotes the 90% CI and the narrow line the 95% CI.

A second approach is to try to understand the logic of police interventions across space in a qualitative manner. According to the information we extracted from several interviews, we are confident to assert that the police interventions followed a quasi-random logic. Moreover, the interviews helped us in understanding some police decisions. Interviews were carried out over the phone between April and June 2018. We followed a snowball method whereby one police officer provided the contact of another one. We contacted 12 police officers, but we interviewed 8. Six of them belonged to the Spanish police, while two to the Catalan police. Since the topic was contentious and, in fact, many judicial processes were at that time opened against Catalan politicians and other members of the civil society, all of them preferred to

be kept anonymous. However, most of the information provided by the interviewees was later expressed in very similar terms by many police officers (both from the Spanish and the Catalan police) that testified during the trial of the Catalan independence leaders that took place during 2019.[4] The interviews, as well as the information provided during the trial, revealed that the Spanish police had three general instructions: First, the police's intention the day before the referendum was to seek a media victory by sealing off polling stations where some key members of the Catalan executive were supposed to vote (in the end they did so in only three cases). The second part of the initial plan was that each police squad was supposed to seal off around 40-60 polling stations. Third, the police had instructions to not go to places where pro-unionist parties have a relatively high level of support.[5]

However, police plans radically changed on the very morning of the referendum. As the informants recognise, two events forced the police to alter the initial plans. First, from the very early hours of the morning of the referendum day, large crowds gathered in front of polling stations to protect them. This made it difficult for the police to enter polling stations, confiscate electoral material, and seal off the polling station in an efficient and safe manner. Second, the police were not expecting the implementation of a universal voting system, which gave people the freedom to vote at any polling station.[6] This was crucial as the initial goal of preventing large amounts of voters from casting their ballots suddenly became practically unfeasible.

As a result of these two events, the Spanish central police command gave each police squad permission to choose whether to follow the initial plan or to seek an alternative strategy. While some attempted–and, in some cases, succeeded–in closing polling stations in the areas they had been assigned, others left the urban areas and went to smaller cities and towns. As the informants recognised, each police squad decided whether it was more efficient to go, first, to 'easy' polling stations and, second, to the 'difficult' ones, or the other way around.

[4] The trial can be retrieved online, for instance in the Youtube channel of *El País* or, also in Youtube, with the hashtag *#JuicioAlProcés* Follow, for example, this link.

[5] Yet, even these general instructions were not always followed. For instance, the police early on went to L'Hospitalet de Llobregat, the second largest city in Catalonia and a unionist stronghold.

[6] Before an individual was allowed to vote, his/her national ID number had to be uploaded to a central system, which validated whether the voter was registered and had not voted before. This guaranteed that a voter could not vote more than once.

The frustration of not reaching the goal of sealing off 40-60 polling stations even led some police squads to go to very small towns, which were never part of the initial plan. The fact that the majority of police officers were brought from other parts of Spain complicated the decision[7], as their local knowledge was poor. Finally, there is an additional key aspect that made the police interventions look as if they were random across space. After the change of plans, the police interventions took place until around 2 p.m. For a reason that is still unclear, the majority of police squads ceased their activities around that time[8]. As an informant explains, if police interventions had not stopped, the final map would have shown several more interventions in and around large cities. Yet, as the empirical and qualitative evidence of this section shows, the pattern of police interventions followed a quasi-random pattern.

To sum up, the police did obviously not design a plan of random interventions. They indeed had a plan of action with specific instructions of where each police squad had to intervene. However, for all the reasons explained above, the police ended up changing their plan and acting in different places than those initially planned. As a result, police interventions became quasi-random, a pattern that we empirically confirm in the next section.

[7] Catalonia and the Basque Country are the only two Spanish regions that have their own police force.

[8] Since the 1 October referendum, there has been much speculation about why the Spanish government decided to stop police interventions when they did. Two tentative explanations have been suggested: first, some have argued that the Spanish government realized that the police interventions were not preventing the majority of voters from casting their ballots. Second, others point to the crucial role played by the German Chancellor Angela Merkel, who may had contacted the Spanish Prime Minister Mariano Rajoy to tell him Europe did not like the images of police officers beating voters. In any case, the majority of police interventions occurred during the course of the morning and only a few took place after 2 p.m. According to the Catalan executive, the police prevented around 700,000 people from voting at their *originally assigned* polling station.

D Placebo

We have shown before that police interventions across Catalonia did not follow a systematic pattern based on the demographic, economic or political characteristics of the municipalities. Additionally, qualitative evidence corroborates that the police finally acted in a non-random manner. To reiterate: the police did indeed have a plan based on some factors. Namely, go to places with high population concentration, where they could score a “mediatic" victory and places they could easily access–it is important to note that police squads ranged between 4-10 vans, which means they needed a fair amount of space to park. However, the events that took place in the referendum day changed their behaviour and made it quasi-random.

A further test to prove this logic is by conducting a series of placebo checks, that is, by examining the effect of police interventions on outcomes measured before the referendum. If the police did not follow a political logic, the decision to intervene in some places should not be related to pro-independence support or turnout at t-1.

This is what we explore in this section. Table D.1 includes seven different models, with seven different outcomes. Model (1) uses as a dependent variable the support received by pro-independence parties in 2015 (that is, secessionist support at t-1). Model (2) uses as an outcome the increase in support for secessionist parties between 2006 and 2015. Model (3)’s outcome is the secessionist support in 2012. Moreover, and in order to explore whether police interventions followed pre-existing trends in political mobilization, Model (4) and Model (5) use as a dependent variable turnout in 2015 and 2012, respectively. As it can be seen up until Model (5), the coefficient of police intervention is not significant in any of the models, thereby indicating that police interventions did not follow pre-existing trends, both in terms of support for secessionist parties and turnout.

Models 6-7 deserve further note. As briefly explained in the manuscript, in 2014 the Catalan government organized a non-binding Catalan self-determination referendum. The 2014 referendum was conceived as a “Popular Consultation” organized by the Catalan government with the support of volunteers. The “Popular consultation” was however suspended by the Constitutional Court on 29 September 2014, and on 14 October 2014, the Catalan government

decided that it would become a "Citizen participation process". The question and the day of the referendum did not change. On 4 November 2014, the Constitutional Court suspended again the participation process, despite the Catalan government decided that the consultation would be held anyway. The participation process entailed that the members of the electoral tables would be volunteers (previously registered online). In practical terms, the most important difference between the 9 November 2014 process of participation and the 1 October 2017 referendum was the expected consequence of the consultation. From the very beginning, the 2014 participation process was meant to be a non-binding consultation, with no legal effects. In other words, the goal was to measure the popular support for secession. In contrast, the October 2017 consultation was announced as an official referendum that would lead to the proclamation of independence in case of a Yes victory.

Despite this difference, we believe that the incentives to vote in the two consultations were ex-ante equivalent, thus making the comparison adequate.[9] Proof of this is that in both consultations turnout was very similar and most of the votes were in favor of secession.

In 2014 a total of 2,305,290 votes were cast, out of 5.4M eligible voters. Turnout estimates published range between 37.0% and 41.6%.[10] Therefore, the 2014 consultation gives us a good indicator to examine whether the police went to places with (relatively) high secessionist support. One might argue that the 2014 consultation acted as an informational signal that informed the police on where they needed to intervene. However, as Table D.1 shows, this does not seem to be the case, as both the coefficient in secessionist support and turnout in

[9] In both cases, the consultation faced the opposition of the Spanish government, the main Spain-wide political parties (also their regional branches in Catalonia), and the Courts. In addition, on both occasions most Catalans against secession boycotted the consultation. On the side of those favoring the referendum, there were secessionist parties, the pro-secession social organizations, pro-secession voters as well as ambivalent voters who support the celebration of a referendum in Catalonia–mainly those identified in the paper as the voters from *Catalunya en Comú*). The fact that the 9 November 2014 referendum was the one that foresaw fewer legal arrangements and had no expected consequences–and thus could have entailed fewer incentives to vote–can be counteracted by the fact that it was the first time in Catalonia that people could vote about the future status of the region. Indeed, a substantial amount of pro-secession individuals turned out to vote. If exactly the same 2014 arrangement had been used in 2017, the referendum would have probably been less successful in mobilizing voters. Yet, in 2017 both the legal arrangements and the political consequences expected from the referendum created high incentives for pro-secession individuals to participate.

[10] The electoral census is managed by the Spanish government and, since the consultation was suspended, the Spanish government did not provide the exact census numbers. Therefore, each municipality's census was calculated using different estimations based on the census numbers published in previous elections and the demographic composition of each municipality.

2014 are not significant.

Finally, tables D.2, D.3 and D.4 replicate the analysis in D.1 by using alternative measures of police intervention, as done in the main manuscript. Hence, table D.2 uses as a placebo a categorical variable that allows distinguishing whether police intervention was violent or not; table D.3 uses the number of police officers per 10,000 inhabitants; and table D.4 employs a categorical measure identifying whether the police confiscated the ballot boxes. In all cases, results are in line with those reported in D.1 and show that police intervention on the 1 October referendum, irrespective of how is measured, does not have an impact on previous outcomes. Overall, the evidence is highly confirmatory of the quasi-random character of police interventions on referendum day.

Table D.1: Placebo test: The effect of police violence on secessionist support before the referendum

	Dependent variable:						
	Secessionist support 2015	Increase secessionist support 2006-2015	Secessionist support 2012	Turnout 2015	Turnout 2012	Secessionist support 2014	Turnout 2014
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Police intervention	−0.701	0.620	−0.751	−0.815	−1.267*	0.557	−1.657
	(1.014)	(0.884)	(1.115)	(0.569)	(0.724)	(0.625)	(1.247)
Percentage born in other AC (2015)	−1.686***	0.226***		−0.358***			
	(0.055)	(0.068)		(0.031)			
Percentage support secessionist parties (2015)		0.617***					
		(0.029)					
Population density (2015)	−0.0004**	0.0003**		0.0002**			
	(0.0002)	(0.0002)		(0.0001)			
(Log) Population (2015)	−0.808***	0.647***		−0.757***			
	(0.215)	(0.189)		(0.120)			
Percentage born in other AC (2012)			−1.783***		−0.514***		
			(0.059)		(0.038)		
Population density (2012)			−0.001***		0.0004***		
			(0.0002)		(0.0001)		
(Log) Population (2012)			−0.833***		−0.738***		
			(0.241)		(0.156)		
Percentage born in other AC (2014)						−0.753***	−1.488***
						(0.034)	(0.068)
Population density (2014)						−0.001***	−0.0002
						(0.0001)	(0.0002)
(Log) Population (2014)						0.215	−0.566**
						(0.134)	(0.267)
Elevation	0.003***	−0.004***	0.005***	−0.001	−0.001	0.002***	−0.003***
	(0.001)	(0.001)	(0.001)	(0.0005)	(0.001)	(0.001)	(0.001)
Constant	81.926***	−35.196***	94.516***	91.071***	85.066***	92.932***	72.566***
	(1.470)	(2.668)	(1.649)	(0.825)	(1.071)	(0.916)	(1.827)
Observations	938	938	934	938	934	935	935
R^2	0.720	0.499	0.734	0.337	0.345	0.546	0.526

*p<0.1; **p<0.05; ***p<0.01

Table D.2: Placebo test: The effect of violence intensity on secessionist support before the referendum

	Dependent variable:						
	Secessionist support 2015	Increase secessionist support 2006-2015	Secessionist support 2012	Turnout 2015	Turnout 2012	Secessionist support 2014	Turnout 2014
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Intervention: no violence	−1.792	−0.542	−1.357	−1.025	−1.322	0.727	−2.042
	(1.611)	(1.405)	(1.772)	(0.904)	(1.151)	(0.994)	(1.984)
Intervention: violence	−0.017	1.348	−0.371	−0.683	−1.232	0.451	−1.416
	(1.282)	(1.118)	(1.411)	(0.720)	(0.916)	(0.791)	(1.578)
Percentage born in other AC (2015)	−1.682***	0.229***		−0.357***			
	(0.055)	(0.068)		(0.031)			
Percentage support for secessionist parties (2015)		0.616***					
		(0.029)					
Population density (2015)	−0.0004**	0.0003**		0.0002**			
	(0.0002)	(0.0002)		(0.0001)			
(Log) population (2015)	−0.833***	0.619***		−0.762***			
	(0.217)	(0.190)		(0.122)			
Percentage born in other AC (2012)			−1.781***		−0.514***		
			(0.059)		(0.038)		
Population density (2012)			−0.001***		0.0004***		
			(0.0002)		(0.0001)		
(Log) population (2012)			−0.847***		−0.739***		
			(0.243)		(0.158)		
Percentage born in other AC (2014)						−0.754***	−1.487***
						(0.034)	(0.068)
Population density (2014)						−0.001***	−0.0002
						(0.0001)	(0.0002)
(Log) population (2014)						0.219	−0.575**
						(0.135)	(0.269)
Elevation	0.003***	−0.004***	0.005***	−0.001	−0.001	0.002***	−0.003***
	(0.001)	(0.001)	(0.001)	(0.0005)	(0.001)	(0.001)	(0.001)
Constant	82.073***	−34.968***	94.597***	91.099***	85.074***	92.909***	72.618***
	(1.480)	(2.676)	(1.660)	(0.830)	(1.078)	(0.922)	(1.840)
Observations	938	938	934	938	934	935	935
R^2	0.720	0.500	0.734	0.337	0.345	0.546	0.526

*p<0.1; **p<0.05; ***p<0.01

Table D.3: Placebo test: The effect of violence intensity (II) on secessionist support before the referendum

	Dependent variable:						
	Secessionist support 2015	Increase secessionist support 2006-2015	Secessionist support 2012	Turnout 2015	Turnout 2012	Secessionist support 2014	Turnout 2014
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Between 10-30	−1.688	0.262	−2.215	−0.268	−1.276	0.022	−2.149
	(1.823)	(1.591)	(2.005)	(1.023)	(1.303)	(1.123)	(2.243)
More than 30	−0.090	0.595	0.084	−1.101	−1.302	0.978	−1.467
	(1.214)	(1.059)	(1.335)	(0.681)	(0.867)	(0.748)	(1.494)
Percentage born in other AC (2015)	−1.689***	0.226***		−0.357***			
	(0.055)	(0.068)		(0.031)			
Percentage support for secessionist parties (2015)		0.617***					
		(0.029)					
Population density (2015)	−0.0004**	0.0003**		0.0003**			
	(0.0002)	(0.0002)		(0.0001)			
(Log) population (2015)	−0.810***	0.646***		−0.756***			
	(0.215)	(0.189)		(0.120)			
Percentage born in other AC (2012)			−1.787***		−0.515***		
			(0.059)		(0.038)		
Population density (2012)			−0.001***		0.0004***		
			(0.0002)		(0.0001)		
(Log) population (2012)			−0.836***		−0.737***		
			(0.241)		(0.156)		
Percentage born in other AC (2014)						−0.754***	−1.491***
						(0.034)	(0.068)
Population density (2014)						−0.001***	−0.0002
						(0.0001)	(0.0002)
(Log) population (2014)						0.214	−0.567**
						(0.134)	(0.267)
Elevation 0.003***	−0.004***	0.005***	−0.001	−0.001	0.002***	−0.003***	
	(0.001)	(0.001)	(0.001)	(0.0005)	(0.001)	(0.001)	(0.001)
Constant	81.983***	−35.155***	94.597***	91.045***	85.073***	92.957***	72.601***
	(1.473)	(2.672)	(1.652)	(0.826)	(1.073)	(0.917)	(1.831)
Observations	938	938	934	938	934	935	935
R^2	0.720	0.499	0.734	0.337	0.345	0.546	0.526

*p<0.1; **p<0.05; ***p<0.01

Table D.4: Placebo test: The effect of violence intensity (III) on secessionist support before the referendum

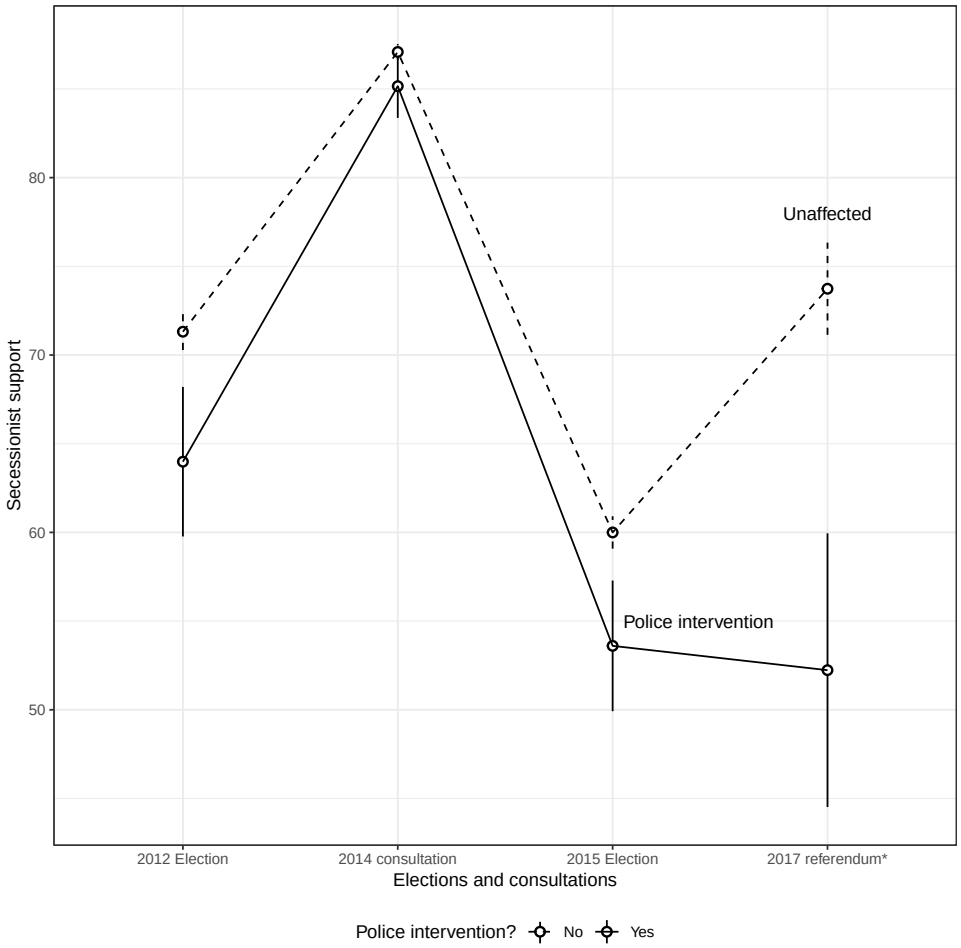
	Dependent variable:						
	Secessionist support 2015	Increase secessionist support 2006-2015	Secessionist support 2012	Turnout 2015	Turnout 2012	Secessionist support 2014	Turnout 2014
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Police: no confiscation	−0.729	−0.619	−0.103	−0.956	−1.564	1.046	−1.084
	(1.404)	(1.223)	(1.545)	(0.788)	(1.003)	(0.866)	(1.728)
Police: confiscation	−0.673	1.899	−1.420	−0.668	−0.960	0.053	−2.248
	(1.426)	(1.242)	(1.569)	(0.800)	(1.019)	(0.879)	(1.754)
Percentage born in other AC (2015)	-1.686^{***}	0.229^{***}		-0.358^{***}			
	(0.055)	(0.068)		(0.031)			
Percentage support for secessionist parties (2015)		0.617^{***}					
		(0.029)					
Population density (2015)	-0.0004^{**}	0.0003^{*}		0.0002^{**}			
	(0.0002)	(0.0002)		(0.0001)			
(Log) population density (2015)	-0.808^{***}	0.625^{***}		-0.760^{***}			
	(0.215)	(0.189)		(0.121)			
Percentage born in other AC (2012)			-1.785^{***}		-0.513^{***}		
			(0.059)		(0.038)		
Population density (2012)			-0.001^{***}		0.0004^{***}		
			(0.0002)		(0.0001)		
(Log) population (2012)			-0.822^{***}		-0.743^{***}		
			(0.242)		(0.157)		
Percentage born in other AC (2014)						-0.754^{***}	-1.490^{***}
						(0.034)	(0.068)
Population density (2014)						-0.001^{***}	−0.0002
						(0.0001)	(0.0002)
(Log) population (2014)						0.224^{*}	-0.556^{**}
						(0.134)	(0.268)
Elevation	0.003^{***}	-0.004^{***}	0.005^{***}	−0.001	−0.001	0.002^{***}	-0.003^{***}
	(0.001)	(0.001)	(0.001)	(0.0005)	(0.001)	(0.001)	(0.001)
Constant	81.929^{***}	-35.063^{***}	94.452^{***}	91.086^{***}	85.096^{***}	92.883^{***}	72.508^{***}
	(1.474)	(2.668)	(1.653)	(0.827)	(1.073)	(0.918)	(1.832)
Observations	938	938	934	938	934	935	935
R^2	0.720	0.500	0.734	0.337	0.345	0.546	0.526

*p<0.1; **p<0.05; ***p<0.01

An additional way to corroborate that police interventions were quasi-random is to explore the panel structure of the data and examine whether affected and unaffected municipalities behaved differently before the referendum. We have briefly developed this in the Data and Methods section in the main manuscript, but let us now expand it a bit more. Our assumption is that, in the absence of the “treatment" (i.e. police intervention) the difference between the treated and untreated municipalities should be constant over time. Equality of pre-treatment trends is an important pre-condition to extract unbiased estimates, while violation of parallel trend assumption will lead to biased estimation of the effect of police interventions.

In the main text, we visually show that, when it comes to turnout in previous contests, municipalities that witnessed a police intervention evolved similarly than those that did not witness a police action. In other words, the evolution was similar up until October 2017, when the police interventions took place. A similar exercise can be undertaken using secessionist support as an outcome. One might argue, for instance, that the police only intervened in places where secessionist support was growing. Yet, if police interventions followed a quasi-random logic, we should observe that the share of the votes received by secessionist parties evolved in parallel in affected versus unaffected municipalities. This is precisely what Figure D.1 shows. Once again, the parallel trends assumption holds.

Figure D.1: Support for secession in municipalities with and without a police intervention–parallel trends



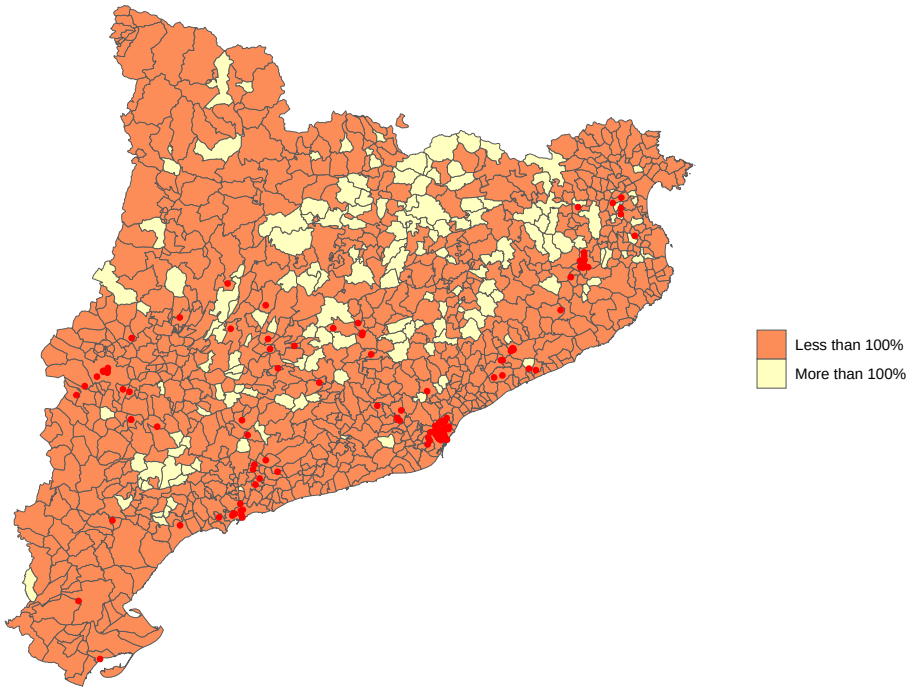
This plot shows the average support for secession in municipalities that experienced (or not) a police intervention. Whiskers denote the 95% CI. 2012 & 2015 elections correspond to the support received by pro-independence parties. 2014 consultation refers to the turnout rate in the "Citizen Participation Process on the Political Future of Catalonia" that took place in November 2014.

E Sensitivity analysis

As we explain in the article, a few minutes after the vote began, the Catalan executive changed the rules by establishing a universal census (a single, central electoral register). The universal census system implied that, in several municipalities, turnout was higher than 100%. For example, in the municipality of *La Quar* the official turnout rate was 792.5%–there were 317 voters in a municipality with 57 inhabitants. In fact, there are 10 municipalities where turnout was higher than 300%

Figure E.1 displays the municipalities where turnout was higher than 100% (158 municipalities or 16% of the total). However, if we take those municipalities in which turnout was higher than 100%, estimate an average turnout rate, take the difference over the real number of votes and calculate the percentage of the 'remainder' over the total number of votes, we observe that they represent a small percentage of the total number of votes cast (0.44% of the total).

Figure E.1: Municipalities where turnout was higher than 100%

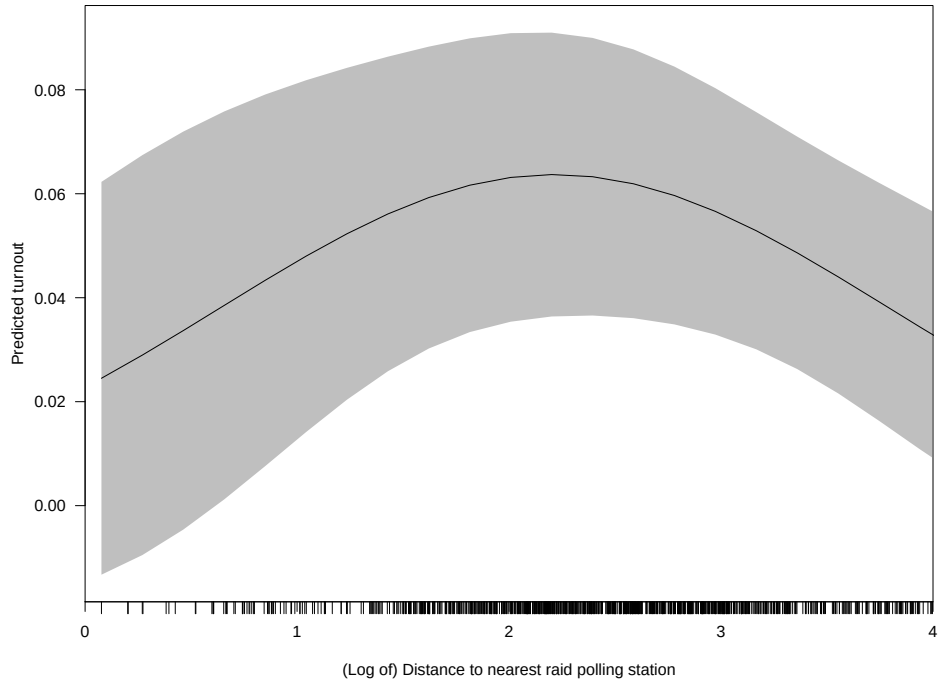


It is first important to clarify that those municipalities with more than 100% turnout are not the only ones that experienced an increase in turnout because of the implementation of the universal census. In other words, a municipality could register a turnout of, for instance 80%, but this value could still be larger than what it would have been, if the universal census had not been implemented.

To further inspect the logic behind turnout rates larger than 100%, we next run a logistic regression model using as an outcome whether the municipality registered more than 100% turnout or otherwise. The main independent variable is the logarithm of the distance (in km) to the nearest raid polling station, and its quadratic term. We also included the same controls than in our models in the aggregate-level analysis. We then generated and graphed the predicted probabilities of the likelihood of registering a participation above 100% across the different values of the log of the distance. Figure E.2 shows that this inverted u-shape pattern

persists: in other words, municipalities located near places where the police intervened were more likely to report a turnout higher than 100% compared to municipalities located further away. The results of the model also show that these municipalities are more likely to be small and in elevated areas–for example, in the Pyrenees. This means that several municipalities with more than 100% of participation had idiosyncratic characteristics: they represent once again very small municipalities far away from a populated urban point. Only the presence of a small number of people in their second home could easily push turnout up to more than 100%.

Figure E.2: The effect of distance to a polling station intervened by the police on registering more than 100% turnout



The implementation of the universal census brings about a concern of whether and how outliers might affect our estimates.

To detect outliers, several methods are normally employed. The most common is to exclude those observations that lie outside 1.5*IQR, where IQR, the 'Inter Quartile Range', is the difference between the 75th and the 25th quartiles. Yet, declaring an observation as an outlier

based on one feature can lead to unrealistic inferences. Moreover, considering the relatively high dispersion of values, when we apply this strategy we end up excluding a fair amount of observations (120) and thus run the risk of selecting on the dependent variable (sample selection bias)[11].

Accordingly, we have run a multivariate approach based on a Bonferroni Outlier Test. This test, considered a conservative outlier test, provides p-values for studentised residuals in linear models. Thus, after calculating the largest absolute studentised residual, we identified ten outliers, which we dropped from the main dataset (this in effect means that we removed nine municipalities that reported a turnout higher than 330%. Figure E.3 shows the outliers in a Quantile Comparison Plot.

Figure E.3: QQ Plot - outlier detection

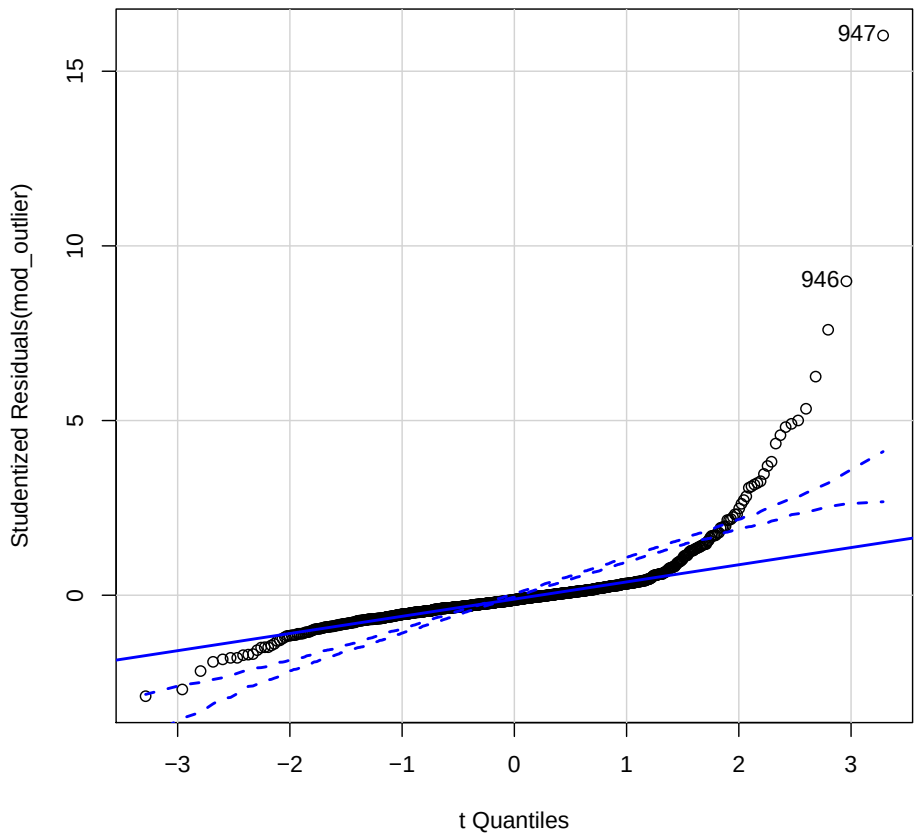


Table E.1 tests the sensitivity of the results by running the same model on different subsets of

[11] Results are also consistent even if we follow this approach.

data. We first keep all municipalities and then run the same model on municipalities where turnout was lower than 200%, 150%, 125% and 100%. Results show that the coefficient is remarkably stable across models.

Table E.1: The effect of police violence on voting in favour of and against independence - sensitivity to outliers

	All	< 200	< 150	< 125	< 100
	(1)	(2)	(3)	(4)	(5)
Police intervention	−18.109***	−14.835***	−14.742***	−15.589***	−13.956***
	(6.431)	(3.325)	(2.572)	(2.176)	(1.872)
Party holding the mayoralty (other parties, rc)					
Mayor 2015:	4.580	1.032	−0.931	−0.852	−0.291
	(4.750)	(2.481)	(1.924)	(1.633)	(1.473)
Mayor 2015: ERC	−0.005	−1.043	−1.826	−1.302	−1.338
	(5.070)	(2.645)	(2.051)	(1.738)	(1.572)
Mayor 2015: PSC	12.227**	0.843	−2.132	−2.872	−3.229*
	(6.211)	(3.265)	(2.531)	(2.136)	(1.876)
Percentage born in other AC (2017)	0.734	−0.036	0.068	0.030	−0.117
	(0.486)	(0.255)	(0.199)	(0.169)	(0.150)
Percentage support secessionist parties (2015)	1.199***	0.931***	0.959***	0.978***	0.856***
	(0.213)	(0.112)	(0.087)	(0.074)	(0.066)
Population density (2017)	0.004***	0.002***	0.002***	0.001***	0.001**
	(0.001)	(0.001)	(0.0005)	(0.0004)	(0.0003)
(Log) Population (2017)	−11.918***	−6.894***	−5.124***	−3.873***	−2.703***
	(1.360)	(0.719)	(0.561)	(0.476)	(0.423)
Elevation (in m)	0.008	0.002	−0.002	−0.003*	−0.006***
	(0.006)	(0.003)	(0.002)	(0.002)	(0.002)
Constant	78.495***	66.107***	50.667***	39.637***	38.304***
	(20.387)	(10.665)	(8.317)	(7.021)	(6.185)
Observations	947	916	884	853	788
R^2	0.284	0.453	0.518	0.579	0.581

*p<0.1; **p<0.05; ***p<0.01

F Matching estimation

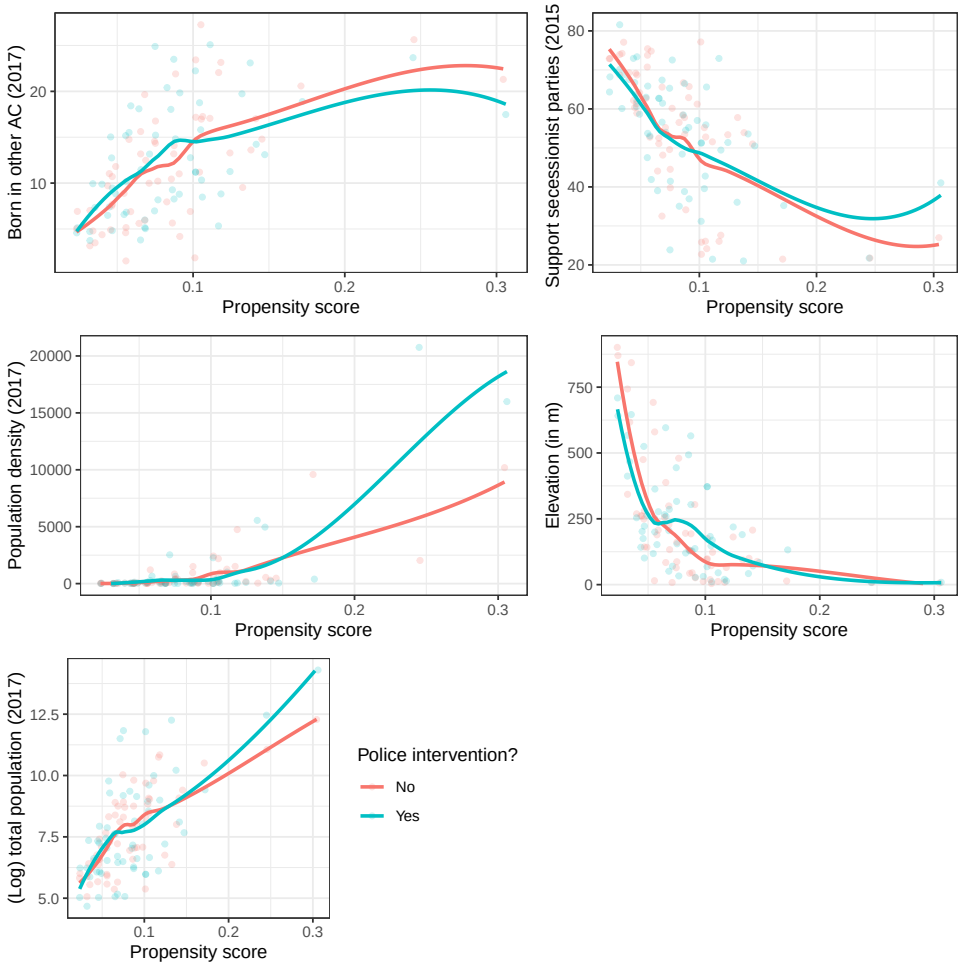
In this section, we replicate our main model using a matching estimation.[12] Matching allows us to obtain “treated" and control groups with similar covariate distributions and to compare the effect of police violence on the former with the latter.[13]

Following standard practice, matching estimation is implemented in several steps. We first estimate the propensity score for each unit, that is, the probability of being *treated* given a set of pre-treatment covariates. After examining the region of common support (estimated propensity scores by treatment status), we execute the nearest neighbour propensity score matching algorithm. In this sense, it is useful to plot the mean of each covariate against the estimated propensity score, separately by treatment status. If matching is performed correctly, the treatment and control groups will have (near) identical means of each covariate at each value of the propensity score. This is precisely what Figure F.1 shows (here we use a loess smoother to estimate the mean of each covariate, by treatment status, at each value of the propensity score). T-tests show that we do not reject the null hypothesis of no mean difference for each covariate, which indicates that we have attained a high degree of balance of the covariates included in the model.

[12] Iacus, Stefano M., Gary King and Giuseppe Porro. 2012. “Causal Inference Without Balance Checking: Coarsened ExactMatching." *Political Analysis* 20(1): 1-24.

[13] Although matching does not provide us with the causal effect of police violence on turnout, it provides balance–the similarity between the multivariate distributions of the treated and control units–and an appropriate size of the matched data set.

Figure F.1: Mean of each covariate used in matching against the estimated propensity score by treatment status



Thus, we first estimated a propensity score matching by running a logit model where the outcome variable is a binary variable indicating treatment status (police intervention versus no police intervention). Given the predicted probability of the municipalities being treated (based on the estimates from the logit model), we used the *nearest* method to create a dataframe in which the treatment and control groups have (near) identical means for each covariate at each value of the propensity score.

Table F.1 shows the effect of police intervention on turnout using the matched sample. As the coefficient of interest illustrates, both the significance and the direction of the effect persist: municipalities that witnessed a police intervention registered significantly lower turnouts than the rest. The coefficient is larger than in our main models thereby implying that, when we consider a balance sample, the effect of police interventions were much higher.

Table F.1: The effect of police violence on turnout (matching estimation)

	Matched municipalities
Police intervention	−24.030***
	(6.524)
Party holding the mayoralty (other parties, rc)	
Mayor 2015: CiU	7.328
	(9.298)
Mayor 2015: ERC	8.875
	(9.214)
Mayor 2015: PSC	2.821
	(11.640)
Percentage born in other AC (2017)	−2.301*
	(1.340)
Percentage support secessionist parties (2015)	−0.036
	(0.568)
Population density (2017)	0.002
	(0.002)
(Log) Population (2017)	−2.830
	(3.082)
Elevation (in m)	0.062***
	(0.018)
Constant	104.851**
	(50.955)
Observations	116
R^2	0.417

*p<0.1; **p<0.05; ***p<0.01

G Additional outcomes (aggregate-level analysis)

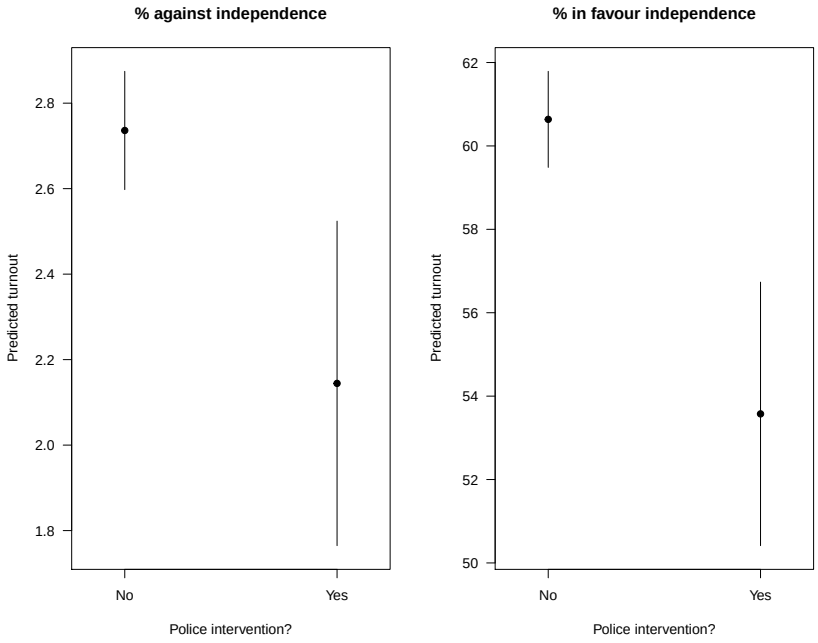
Table G.1 shows the effect of police interventions on the levels of support for and rejection of independence. As shown in Figure G.1, in places affected by a police raid, the percentage of people that voted 'No' in the referendum decreased by 25% (from 2.8% to 2.1%), while the percentage of support for the 'Yes' option decreased by 11.5% (from 60.6% to 53.6%).

Table G.1: The effect of police violence on voting in favour and against independence

	Voted Yes	Voted No
	(1)	(2)
Police intervention	−7.063***	−0.592***
	(1.587)	(0.191)
Party holding the mayoralty (other parties, rc)		
Mayor 2015: CiU	−0.125	−0.017
	(1.193)	(0.143)
Mayor 2015: ERC	−1.754	0.0001
	(1.272)	(0.153)
Mayor 2015: PSC	−2.789*	−0.434**
	(1.524)	(0.183)
Percentage born in other AC (2017)	−0.170	0.012
	(0.124)	(0.015)
Percentage support secessionist parties (2015)	0.829***	−0.057***
	(0.057)	(0.007)
Population density (2017)	0.001*	0.00000
	(0.0003)	(0.00003)
(Log) Population (2017)	−3.114***	−0.204***
	(0.345)	(0.041)
Elevation (in m)	−0.005***	−0.0002
	(0.001)	(0.0002)
Constant	39.258***	7.519***
	(5.234)	(0.629)
Observations	776	776
R^2	0.685	0.212

*p<0.1; **p<0.05; ***p<0.01

Figure G.1: Predicted support for and against independence



H Police deployment time

Previous literature on the effect of violence on political behaviour has focused on the timing of violence.[14] The idea behind this literature is that the timing of police actions is important for the consequences it triggers, also from a spatial point of view. In addition, and according to this line of thinking, governments time police violence rationally in order to control the consequences or unleashed unintended consequences. Although the latter is not a concern for our article, the former might be. In other words, the timing of police interventions across the Catalan geography might have heterogeneously affected the subsequent mobilization patterns. We explore this logic next.

Most police squads were deployed in the morning of the referendum day. 70% of the units arrived at a polling station between 9am, when the polling stations officially opened, and 12am. After 2 p.m. we only observe 14 police interventions. As we explained before, police forces had instructions to go to polling stations very early on election day as their main goal was to act quickly and prevent the referendum from happening. Therefore, and taking into account that police charges were largely unexpected, it was difficult for voters to coordinate ahead and after police deployment. Yet, it remains an empirical concern whether different deployment times are affecting our estimates.

Next, we check for this possibility. We have been able to include an estimate of the police time of arrival to each polling station, information that has been extracted from one of the reports written by the police that is part of the judicial evidence that the Spanish government gathered against the Catalan leaders that organized the referendum.[15] Despite offering additional information on police interventions, the data might be problematic due to three reasons. First, data were extracted from official police reports. It specifies when they arrived, but not when they left. As we know from the events of that day, some police squads arrived, acted swiftly, and left. For instance, in the municipality of *Sant Julià de Ramis*, the police arrived a few minutes before the opening of the polling station and left after about an hour.

[14] Rasler, Karen. 1996. “Concessions, Repression, and Political Protest in the Iranian Revolution." *American Sociological Review* 61(1): 132-152.

[15] In October 2019 the Spanish Supreme Court sentenced convicted Catalan separatist leaders to a total of about 100 years for their roles in a 2017 secession bid.

In other municipalities, the police attempted several charges against protesters or remained in front of the protesters during a longer period of time. In other words, some police squads stayed at a polling station for a relatively long time (for instance, deciding whether to intervene or not), while others rapidly intervened and left the place as soon as they found the electoral material. Unfortunately, we do not know when they left, which makes our time indicator an imperfect proxy of the time of exposure to the police. Second, bearing in mind that they are official reports, the time of arrival was in theory annotated by some officer himself. We double-checked the information and found some errors and inaccuracies. According to our sources, this might be due to the fact that specific instructions were not given to police officers as to how the time of arrival should be considered. Thus, while some police officers annotated the time of the first interaction with protesters, others annotated the time they arrived at the municipality. And, crucially, both times are not the same: in some occasions police squads arrived at the municipality, stayed at a reasonable distance of the polling station, and only decided to act (or not) after a few officers checked the entrance of the polling station. Finally, some police officers did not report the time of arrival and hence we lose a few observations.

Bearing in mind these caveats, we calculated the number of hours left between the police arrival and the closure of the polling station. The expectation is that turnout should be higher in those places where the police arrived relatively late during the day, as voters might have had more time to vote. Results are presented in H.1. As can be seen, the time indicator is not statistically significant. This implies that turnout was not statistically different in those places where the police arrived early versus those where the police arrived late. Crucially, further analyses do not show different spatial spillover effects as a function of deployment times.

Table H.1: The effect of police deployment time on turnout

	M1
Time left after police deployment arrival	−1.241
	(1.203)
Mayor 2015: CiU	10.423
	(8.832)
Mayor 2015: ERC	0.969
	(9.293)
Mayor 2015: PSC	−4.958
	(11.320)
Percentage born in other AC (2017)	−0.406
	(1.400)
Percentage support secessionist parties (2015)	0.579
	(0.686)
Population density (2017)	0.001
	(0.001)
(Log) Population (2017)	1.315
	(2.771)
Elevation (in m)	0.042**
	(0.020)
Constant	6.492
	(61.367)
Observations	55
R^2	0.362

*p<0.1; **p<0.05; ***p<0.01

I Expectation of police violence

As mentioned in the manuscript, the Spanish government sent around 10,000 policemen to Catalonia. They mostly belonged to the national police and the civil guard. Yet, a small contingent of the secret service also worked around the clock to find and seize the ballot boxes. Before the referendum day, the uncertainty about whether the referendum would take place was high. As explained, the Spanish police was able to find and seize the electoral material that is normally sent to electoral officers and to citizens that had to be in polling stations. As a response, many individuals occupied the polling stations–mostly schools–on Friday, two days before the referendum. This occupation was largely channeled through parents' associations, which asked the schools' board permission to organize different activities in the schools' facilities. The goal of these activities (sports tournaments, extra-curricula activities...) was to keep the schools opened on Saturday and especially on Sunday 1 October, when the referendum was expected to take place.

Given this mobilization, one might highlight two potential threads to our analysis. The first potential argument tells that people went to those municipalities, or occupied those schools, in expectation that they would receive a police intervention. We have no evidence that confirms this expectation. First, in the trial against the Catalan pro-independence leaders or in several trials against police officers, it was revealed that police groups knew where they would intervene only 24 hours before the referendum day, that is, on Saturday. Most polling stations were already occupied on Friday after the last educational activity–which takes place on the evening. Therefore, polling stations were occupied before the police itself knew where it was going to act. As it was also mentioned during the trials, the selection of schools was made on the basis of access–for instance, whether the school could be accessed through one or several streets, how wide these streets were and whether it was possible to park the different police vans.[16]

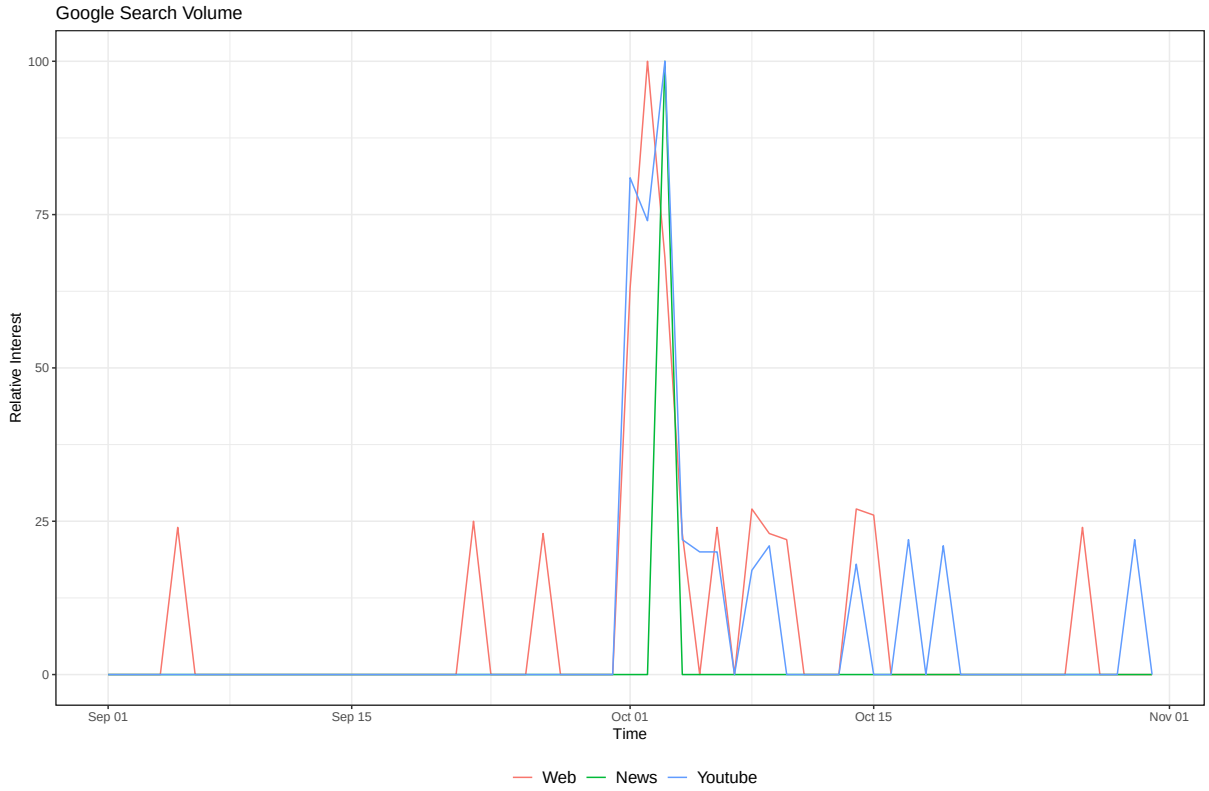
The second potential argument is that people occupied the schools–or even participated in

[16]This information can be read, for instance, on the following two links https://www.ara.cat/es/sociedad/mandos-policiales-1-0-referendum-colegios-barcelona-operativo_0_2359564200.html or https://www.lavanguardia.com/politica/20191210/472151795101/referendum-1-octubre-actuacion-policial-detalles.html

the referendum–in expectation that the police violence would occur. As explained before, citizens did not know where the police would intervene and, therefore, it was not possible to know if some polling stations would be more affected than others. Thus, if this expectation was true, it means that everyone was expecting the violence, which would not affect our results, but only our interpretation of them. However, all the empirical evidence we gathered confirms that no one expected the intensity of violence as it occurred. It is fair to say that, if anything, people expected the police to intervene, but not to undertake violent actions in many polling stations and with intensity they did. For instance, if we trace politicians discourse before the referendum, hardly anyone mentions the possibility of police violence or violent actions during the referendum day. Or, if we look at the front-cover of the different newspapers of the country–or even all the pieces of news related to the referendum, there is hardly any no mention of violence.

To empirically prove our point, we have collected and analyzed data from Google Trends searches during September and October 2017. In particular, we collected data on the keywords "violencia policial" [police violence]. We did it distinguishing three different channels: Web, Images and Youtube. We plot the searches in Figure I.1. The Y axis represents the relative interest indicator. This indicator ranges from 0 to 100 on the basis of a topic's popularity and normalized based on geography and time. 0 means that there is (almost) no data for the searched terms. 100 means that these terms have reached their highest popularity (during the period under consideration, and regardless of how population other items are). As it can be clearly seen in the Figure, the popularity of the terms "police violence" before the referendum day is almost negligible. This means that, at least when it comes to Google searches (in terms of news, Youtube videos or searches in general), almost no one talked about violence. These terms only increased in popularity during and a few days after the 1 October, when the police interventions had already taken place.

Figure I.1: Google search volume of terms related to violence in September and October 2017



J Individual-level models

In this subsection, we use the CEO survey and replicate the aggregate-level results shown in the manuscript. The idea is to validate the main results presented in the paper, but employing individual-level data. Our outcome is whether the respondent recalled voting in the referendum (1) versus abstained (0).[17] We run a series of logistic regression models that examine the probability of voting/abstaining as a function of whether the municipality where the respondent lives witnessed a police intervention, the number of police officers sent to each location, and the curvilinear distance between the (log of the) respondent's exact place of residence and the closest polling station raided by the police. Results can be seen in Table J.1.

[17] The exact writing of the question is as follows: Participating in public affairs is a right that everyone has, as the right of assembly or the right to demonstrate, and nobody can be forced to participate if he/she does not want to. Specifically, which of the following sentences fits better what you did last Sunday 1 October? 1. I did not vote because I was not able to do it (work, disease); 2. I did not vote because I did not want to; 3. I did not vote because someone impeded it; 4. I am convinced I voted.

As both the significance and the sign of the coefficients illustrate, the individual-level analysis confirms the patterns shown in the aggregate-level part: police interventions drove down turnout and increased it in the immediate surroundings. Thus, in affected municipalities individuals were about 6 percentage points less likely to turn out to vote than in places where the police did not intervene. In addition, results show a spatial spillover dynamic, whereby people whose place of residence was relatively close to an affected polling station were more likely to turnout.

Table J.1: The effect of police violence on turnout

	Police intervention	N. Police officers	Distance
Police intervention	-0.601**		
	(0.105)		
N. of police officers/10,000 inhabitants		-0.189**	
		(0.030)	
(Log) Distance to nearest affected polling station			0.509**
			(0.161)
(Log) Distance to nearest affected polling station^2			-0.116*
			(0.058)
Constant	-1.446	-1.465	-1.683*
	(0.928)	(0.954)	(0.835)
Controls	✓	✓	✓
Cluster (Province)	✓	✓	✓
Observations	1266	1266	1266

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

Logit model. Standard errors clustered at the Province level. All models control for recall vote, respondent's national identification, place of birth, age, gender, education, size of the municipality and a dummy variable for Barcelona.

One methodological concern in the individual-level analysis is over-reporting. It might be that some individuals were more likely to answer the survey than others and that this decision is related to police interventions. For instance, if some identity-groups located near a police intervention were more likely to answer the questions than others, then over-reporting might be biasing our results. However, our data shows that over-reporting is not correlated with police interventions. A t-test of the difference between the participation in the 1 October referendum and the declared (mean) participation in the survey by municipality shows that differences are not statistically significant (p=0.288). A regression model including conventional controls provides even more non-significant results (p=0.983).

K Police interventions and an individual's national identity

A final concern in the individual-level analysis has to do with a potential post-treatment bias between a police intervention and an individual's national identity. In other words, a police intervention could have unevenly affected the identity of respondents, so that those individuals living in raided municipalities would show more a pro-Catalan identity after police actions took place than those living in non-raided municipalities.

Our data shows that this pattern did not take place. In order to check it, we use the CEO's survey conducted in June-July 2017, before the 1 October 2017 referendum, which we merge with our post-referendum dataset.[18] We create a dichotomous variable distinguishing respondents that live in municipalities raided by the police during the referendum day versus the rest. Next, we run an OLS regression model in which the dependent variable is the National-regional identity (4 categories, ranging from only and more Spanish than Catalan (1), to Only Catalan (4)). We are interested in assessing whether the 1 October referendum had an effect on an individual's identity, and whether this effect is particularly strong in raided municipalities. For this, we interact the raided municipality variable with a dichotomous measure identifying whether the interviewee belongs to the pre-referendum or post-referendum sample. We include in the model all the control variables that we use in the individual-level analysis (party identification, origin, age, sex, education, as well as population and a dummy variable for Barcelona). Since the dependent variable in this model–an individual's national identity–is a control in our original models, we substitute it by a dichotomous measure identifying the individual's language (Catalan or else).

Figure K.1 plots the predicted values for the national-regional identity in raided and non-raided municipalities, before and after the 1st October. The left-hand side of the slope shows that municipalities that received a police intervention versus those that did not had the same identity before the 1st October referendum. As for the interaction term between the raided municipalities and the post-referendum survey, this has a negative but not statistically significant coefficient, thus indicating that the slope for the raided municipalities in the

[18] The fieldwork took place between 26 June-11 July 2017. CEO-REO 857.

post-referendum sample is identical (or, at most, smaller) than the one observed in raided municipalities.

Hence, results show that the 1st October referendum did not have an uneven impact on identity. If anything, the evidence seems to point to the fact (yet, recall, not statistically significant) that police interventions increased the number of people that feel more Catalan precisely in places where police actions did *not* take place. Overall, we are confident that the observed effect in the main manuscript cannot be attributable to a heterogeneous change in the identities of the individuals.

Figure K.1: Change in identity before and after the Referendum by raided and non-raided municipality