

The past, Brexit, and the future in Northern Ireland: A
quasi-experiment*
Online Appendix

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*All replication files, including the R Markdown script to render this Online Appendix, are available on: <https://dataverse.harvard.edu/dataverse/godefroidt>; **Corresponding author:** amelie.godefroidt@ntnu.no.

A. Additional Information on Post-conflict Attitudes for Peace Data

A.1. Sampling and Representativeness

In order to obtain a representative sample of the Northern Irish population, we used a two-stage probability sampling mechanism. More specifically, the Northern-Irish Postcode Address File was used as a sampling frame, from which households were randomly drawn. One individual, in turn, was selected within the households based on the ‘next birthday’ rule. In Table 1 below, we double-check whether this sampling mechanism resulted in a sample that adequately represents the Northern Irish population. To do so, we compare our full sample (i.e., before listwise deletion) with the 2011 Census.

As Table 1 shows, all descriptive statistics on both the 2016 Post-conflict Attitudes for Peace (PAP) survey and the 2011 Census are highly comparable. There are two minor exceptions, however. First, our sample includes more divorced people. Yet, there were more divorces granted in Northern Ireland in 2016 (i.e., 2572) compared to 2011 (i.e., 2343) (Clark 2019). Hence, we believe our data still properly reflects the Northern Irish population in 2016. Second, the census covers the population aged 16-74, while the PAP sample includes persons aged 18 and older. The census age distribution excludes residents aged 16-17, but the other statistics include younger respondents as well. This may partly explain the differences in share of students.

Table 1: Comparison between PAP Data and 2011 Census

		2016 PAP (%)	2011 Census (%)
Gender	Male	47	49
	Female	53	51
Age	18-24	14	13
	25-34	17	18
	35-44	17	18
	45-54	19	18
	55-64	15	14
	65 and above	18	19
Marital status	Single	35	36
	Married/civil partner	42	48
	Widowed	8	7
	Divorced/separated	15	9
Religion	Catholic	43	45
	Protestant	50	48
	Other/None	7	7
Employment	Employed	51	57
	Unemployed	14	5
	Pensioner	20	20
	Homemaker	9	4
	Student	6	10
	Other	-	3

A.2. Question Wordings and Response Options for PAP Indicators

In Table 2, we report the exact question wordings of all indicators included in this paper. The indicators have been used as independent, dependent, or control variables in the main or supplementary analyses. We also report the original response options but, as you can see in the table, some variables have been recoded.¹ We have listed the items in the order they were asked to the respondents. For all questions, respondents could indicate “Do not know” or “Do not want to answer this question” in addition to the response options listed in the table.

Table 2: Additional Information on Used PAP Indicators

Label	Question Wordings, Response Options, and Recoding Information
Date	<i>Note: Date of interview coded by interviewer</i>
Brexit	<i>Note: Coded based on Date variable</i> 0 = Interviewed pre-Brexit 1 = Interviewed post-Brexit 2 = Interviewed on the day of EU Referendum -> recoded to 0 in main analyses; excluded in robustness check (see Section D.1 below)
Gender (Male)	<i>Note: Respondent’s sex coded by interviewer observation</i> 1 = Male 2 = Female -> recoded to 0
Age	Can you tell me your age, please? Age in completed numbers of years
Education	What is your highest level of education? 1 = Primary school or below (P1-P7) 2 = Post-primary (year 8 to year 12) 3 = Post-primary (year 13-14/A level) 4 = Further education (vocational/trade schools/apprenticeship) 5 = Higher education (university, Bachelor or above)
Employment (Employed)	What is your employment status? 1 = Employed (incl. casual laborers, part-time work, and self-employed) 2 = Unemployed -> recoded to 0 3 = Pensioner -> recoded to 0 4 = Homemaker -> recoded to 0 5 = Student -> recoded to 0
Urbanization (Rural)	<i>Note: Type of town coded by interviewer observation</i> 1 = Rural -> recoded to 1 2 = Semi urban -> recoded to 1 3 = Urban -> recoded to 0 4 = District/department capital -> recoded to 0 5 = Capital city -> recoded to 0
Community (Catholic)	Which of the following communities were you brought up as part of? 1 = No religion -> excluded 2 = Catholic -> recoded to 1 3 = Protestant -> recoded to 0 4 = Jewish -> excluded 5 = Hindu -> excluded 6 = Sikh -> excluded 7 = Muslim -> excluded 8 = Other -> excluded

¹The corresponding Stata script to clean the dataset is available on the first author’s Harvard Dataverse. Yet, the raw and full dataset to run this script is not publicly available due to data sharing and privacy restrictions.

Label	Question Wordings, Response Options, and Recoding Information
Religiosity	<p>Apart from weddings and funerals, about how often do you attend religious services or rituals these days?</p> <p>1 = Every day -> recoded to 7 2 = More than once a week -> recoded to 6 3 = Once a week -> recoded to 5 4 = Once a month -> recoded to 4 5 = Only on special holy days -> recoded to 3 6 = Once a year -> recoded to 2 7 = Never, practically never -> recoded to 1</p>
Pol. interest	<p>How interested would you say you are in politics?</p> <p>1 = Very interested -> recoded to 4 2 = Somewhat interested -> recoded to 3 3 = Not very interested -> recoded to 2 4 = Not at all interested -> recoded to 1</p>
Vote	<p>If there were assembly elections today, who would you vote for?</p> <p>1 = Democratic Unionist Party (DUP) 2 = Sinn Féin 3 = Ulster Unionist Party (UUP) 4 = Social Democratic and Labour Party (SDLP) 5 = Alliance Party 6 = Green Party 7 = Traditional Unionist Voice 8 = NI21 9 = UKIP 10 = Other 11 = I would not participate in the elections</p>
No Vote	<p><i>Note: Recoded from Vote variable</i></p> <p>1 = No political participation; if no intention to vote or “I don’t know” 0 = Political participation; if intention to vote for any of the political parties</p>
Reside	<p>Did you reside in Northern Ireland during The Troubles?</p> <p>1 = Yes 2 = No -> recoded to 0 3 = Not applicable (not born yet) -> recoded to 0</p>
Exposure	<p>Disregarding events like accidents, did you experience any of the following events during “the Troubles?” Were you / did you (have)...</p> <p>...displaced? ...goods or property stolen? ...house destroyed? ...threatened with violence or death? ...arbitrarily detained [detained without reason]? ...attacked, beaten, tortured, or otherwise injured? ...forced to commit violence? ...victim of sexual violence? ...witnessed violence? ...family member displaced? ...family member injured? ...family member killed? ...family member forcibly disappeared? ...family member arbitrarily detained [detained without reason]?</p> <p><i>Note: This list is further dichotomized.</i></p> <p>0 = Not exposed; if respondent answered “No” on incidents. 1 = Exposed; if respondent answered “Yes” on at least one incident.</p>

Label	Question Wordings, Response Options, and Recoding Information
PTSD	<p>I am going to read you a list of problems that people sometimes have. For each one I am going to ask you how much you have experienced each one IN THE LAST MONTH, including today.</p> <ul style="list-style-type: none"> —Repeated, disturbing memories, thoughts, or images of a stressful experience from the past? —Feeling very upset when something reminded you of a stressful experience from the past? —Avoid activities or situations because they remind you of a stressful experience from the past? —Feeling distant or cut off from other people? —Feeling irritable or having angry outbursts? —Having difficulty concentrating? <p><i>Note: All items were measured on a 5-point scale ranging from “1=Not at all” to “5=Extremely.” A mean score is used in the analysis ($\alpha = .94$)</i></p>
Conflict narratives	<p>People have different views on what caused “the Troubles.”</p> <p>I will now read a few statement about possible causes, or reasons, for the conflict, and I would like you to tell me how important you think each of them was.</p>
Cause_1	—Economic inequalities and poverty
Cause_2	—Inequalities related to community background or religion
Cause_3	—Government repression and discrimination
Cause_4	—Lack of real democracy in Northern Ireland
Cause_5	—Extremist Republicans
Cause_6	—Extremist Loyalists
Cause_7	—Illegitimate rule from Westminster
Cause_8	—The partition of Ireland
	<p><i>Note: All items were measured on a 5-point scale ranging from “1=Very important” to “5=Not at all important.” Reversed items are used in the analyses so a higher value entails higher importance attached to that particular conflict cause.</i></p>
Future	<p>If the UK leaves the EU, do you think Northern Ireland should ...</p> <ul style="list-style-type: none"> 1 = Remain part of the UK with devolved rule 2 = Remain part of the UK with direct rule 3 = Become an independent state 4 = Unify with the rest of Ireland 5 = Other [specify]: _____ 88 = Don't know <p><i>Note: From this variable, we created three dummies:</i></p>
Remain	<ul style="list-style-type: none"> 1 = Remain part of the UK with devolved or direct rule 0 =All else
Independence	<ul style="list-style-type: none"> 1 = Become an independent state 0 =All else
Unification	<ul style="list-style-type: none"> 1 = Unify with the rest of Ireland 0 =All else

A.3. Descriptive Statistics and Bivariate Correlations

In the Table 3 below, we report the descriptive statistics for the covariates use to check the balance and, consequently, correct for imbalances. The descriptive statistics for the outcome variables are available in Table 1 in the main manuscript, whereas the correlation matrix between our variables of interest can be found in Table 4.

Table 3: Summary Statistics

Variable	N	Mean	SD	Min	Max
Gender	813				
... Male	431	53%			
... Female	382	47%			
Age (in years)	813	46.258	18.212	18	96
Level of education	811				
... Primary school or below	40	4.9%			
... Post-primary (year 8 to year 12)	271	33.4%			
... Post-primary (year 13-14/A level)	136	16.8%			
... Further education	149	18.4%			
... Higher education	215	26.5%			
Employed (in %)	811	0.508	0.5	0	1
Living in a rural neighborhood (in %)	813	0.423	0.494	0	1
Religiosity	805	2.883	1.817	1	7
Community/Religion	813				
... Protestant	405	49.8%			
... Catholic	352	43.3%			
... None/other	56	6.9%			
Political interest	811	2.153	1.008	1	4
Political participation (% non-voters)	813	0.332	0.471	0	1
Resided in NI during the Trouble (in %)	813	0.85	0.357	0	1
Exposure to violence (in %)	813	0.391	0.488	0	1
Post-traumatic stress symptoms	811	1.248	0.649	1	5

Table 4: Correlation Matrix between Variables of Interest

	referendum	cause_1	cause_2	cause_3	cause_4	cause_5	cause_6	cause_7	cause_8	unification	independence
referendum											
cause_1	0.03										
cause_2	0.01	0.60***									
cause_3	0.03	0.51***	0.52***								
cause_4	0.03	0.45***	0.47***	0.60***							
cause_5	0.02	-0.01	0.12**	-0.03	0.01						
cause_6	0.00	0.00	0.11**	0.05	0.11**	0.81***					
cause_7	0.09*	0.33***	0.34***	0.58***	0.46***	-0.06	0.05				
cause_8	0.10**	0.23***	0.35***	0.40***	0.39***	0.09*	0.13***	0.44***			
unification	0.10**	0.20***	0.20***	0.23***	0.28***	-0.07*	-0.02	0.25***	0.25***		
independence	-0.02	0.02	0.01	0.03	0.05	-0.06	-0.02	0.13***	0.05	-0.12***	
remain	-0.12***	-0.18***	-0.15***	-0.25***	-0.25***	0.11**	0.03	-0.32***	-0.21***	-0.58***	-0.35***

B. Testing Assumptions and Threats to Causal Identification

B.1. Balance between Pre- and Post-Brexit Groups

Tables 5 to 8 assess whether there is any discontinuity with regards to key socio-demographic, political, and conflict-related variables. A significant post-Brexit dummy indicates that the respective variable significantly differs before and after the EU Referendum. In general, the sample is quite balanced across treatment and control groups when considering key socio-demographic (Table 5), political (Table 6), and conflict-related variables (Tables 7-8). There are some exceptions, however.

First, older people were more likely to be interviewed before the EU referendum. As a result, the level of education and unemployment also differs between pre- and post-samples. Second, there are slightly more people in the pre-Brexit sample that indicated to have been exposed to violence during the troubles—which is probably also a result of the age imbalance. Following best practices in quasi-experimental studies, we include these variables in our models as they might confound our estimate of interest (Keele and Minozzi 2013; Muñoz, Falcó-Gimeno, and Hernández 2020). Importantly, there is no imbalance between our pre- and post-groups regarding people’s religious background, which was the main fault line of the conflict.

Table 5: Balance Tests for Socio-Demographic Variables

	<i>Dependent variable:</i>				
	<i>logistic</i> Gender	<i>OLS</i> Age	<i>OLS</i> Education	<i>logistic</i> Employed	<i>logistic</i> Rural
Brexit	-0.009 (0.158)	-7.091*** (1.417)	0.103 (0.103)	0.724*** (0.163)	0.201 (0.159)
Constant	-0.118 (0.082)	48.177*** (0.737)	3.253*** (0.054)	-0.159* (0.082)	-0.365*** (0.084)
Observations	813	813	811	811	813
R ²		0.030	0.001		
Adjusted R ²		0.029	-0.00001		
Log Likelihood	-562.049			-551.913	-553.085
Akaike Inf. Crit.	1,128.099			1,107.827	1,110.170

Note:

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

Table 6: Balance Tests for Political Variables

	<i>Dependent variable:</i>	
	<i>OLS</i> Political Interest	<i>logistic</i> Political Participation
Brexit	0.047 (0.080)	-0.202 (0.171)
Constant	2.140*** (0.041)	-0.645*** (0.086)
Observations	811	813
R ²	0.0004	
Adjusted R ²	-0.001	
Log Likelihood		-516.082
Akaike Inf. Crit.		1,036.163

Note: *p<0.1; **p<0.05; ***p<0.01

Table 7: Balance Tests for Conflict-Related Variables (I)

	<i>Dependent variable:</i>		
	<i>logistic</i> Reside in NI During The Troubles	<i>logistic</i> Conflict Exposure	<i>OLS</i> PTSD
Brexit	-0.143 (0.216)	-0.404** (0.167)	-0.026 (0.051)
Constant	1.774*** (0.117)	-0.337*** (0.083)	1.255*** (0.027)
Observations	813	813	811
R ²			0.0003
Adjusted R ²			-0.001
Log Likelihood	-343.535	-541.093	
Akaike Inf. Crit.	691.069	1,086.187	

Note: *p<0.1; **p<0.05; ***p<0.01

Table 8: Balance Tests for Conflict-Related Variables (II)

	<i>Dependent variable:</i>	
	<i>OLS</i> Religiosity	<i>logistic</i> Catholics (ref. protestants)
Brexit	0.090 (0.145)	0.240 (0.158)
Constant	2.859*** (0.075)	-0.057 (0.082)
Observations	805	813
R ²	0.0005	
Adjusted R ²	-0.001	
Log Likelihood		-562.375
Akaike Inf. Crit.		1,128.749

Note: *p<0.1; **p<0.05; ***p<0.01

B.2. Self-Selection into Control/Treatment Group

In the main paper, we argue that it was not possible for respondents to self-select into the treatment or control condition because interview dates were set beforehand by the researchers irrespective of the referendum or respondent’s characteristics. In addition, we posit that respondents could not have known the outcome in advance given the closeness of the polls. Figure 1 corroborates this argument.

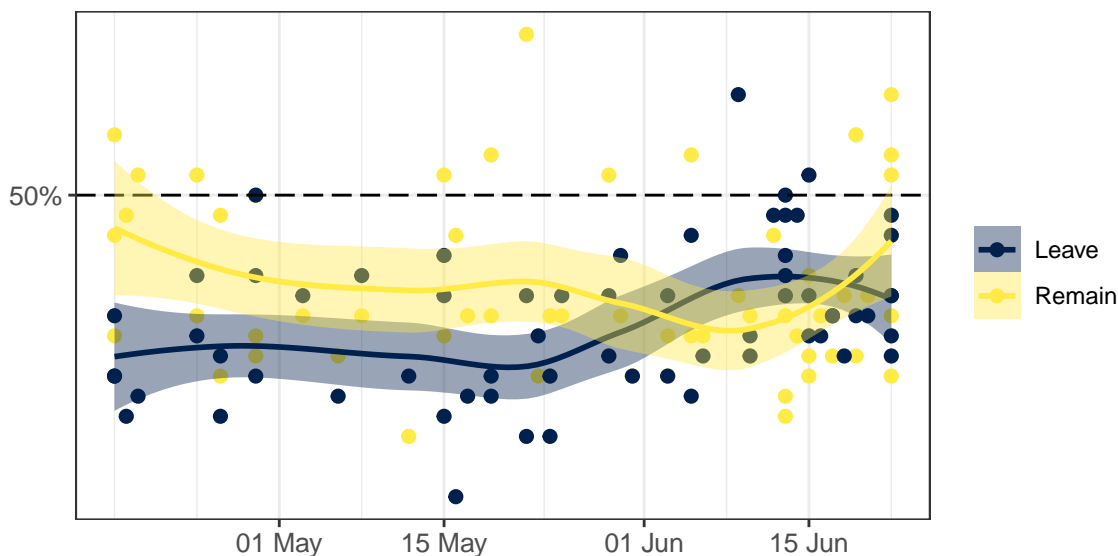


Figure 1: Poll results leading up to the referendum. Note: This Figure is made using the replication data and code kindly shared by Resul Umit (see <https://osf.io/vzcrf/>)

B.3. Selective Attrition

The key identifying assumption of temporal ignorability (i.e., the potential outcomes must be independent from the moment of the interview; see Muñoz, Falcó-Gimeno, and Hernández 2020) could be violated if respondents become more (or less) willing to answer our dependent variables after knowing the EU referendum result (i.e., selective attrition). We measured attrition by counting the number of missing values on all outcome variables used. As Table 9 shows, differences in attrition are statistically insignificant.

Table 9: Test of Attrition

	<i>Dependent variable:</i> Number of Missings on Outcome Variable
Brexit	-0.037 (0.169)
Constant	0.882*** (0.088)
Observations	813
R ²	0.0001
Adjusted R ²	-0.001
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

B.4. Placebo Outcome Test

To further increase the confidence in our results, we conducted a placebo outcome test. That is, we replaced the outcome variable by an item which should not be substantially affected by the Brexit outcome. For this test, we have selected respondents' self-assessment of their physical health measured with the following question: *Thinking about your general physical health [illness, injury], how would you describe your overall physical health today?* We believe it is virtually impossible to identify a plausible relationship between the Brexit outcome and physical illness/injuries. As a result, a significant post-Brexit dummy using physical health as the outcome variable suggests we might be picking up a spurious relationship. Table 10, however, confirms that the treatment effect is insignificant for the placebo outcome variable.

Table 10: Placebo Outcome Test

	<i>Dependent variable:</i> Physical Health
Brexit	0.142 (0.503)
Constant	3.617*** (0.262)
Observations	813
R ²	0.0001
Adjusted R ²	-0.001
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

C. Numerical Results

On the pages below, we report all numerical results corresponding to

- Figure 1 (see Section C.1),
- Figure 3 (see Section C.2),
- Figure 4 (see Section C.3),
- Figure 5 (see Section C.4),
- and to the results on the causal mediation analysis (see Section C.5).

C.1. Numerical Results Corresponding to Figure 1

Table 11: Effect of Brexit on Perceiving a Economic Inequality and Poverty as a Conflict Cause

	Economic Inequality and Poverty		
	(1)	(2)	(3)
Brexit	0.077 (-0.107, 0.261)	0.067 (-0.121, 0.255)	0.083 (-0.097, 0.263)
Age		-0.002 (-0.007, 0.003)	
Employed		0.062 (-0.116, 0.241)	
Conflict Exposure		0.176 ⁺ (0.006, 0.347)	
Constant	3.838** (3.742, 3.935)	3.846** (3.547, 4.145)	3.833** (3.738, 3.927)
Correction for Imbalances?	None	Covariates	Matching Matching
Observations	733	732	733
R ²	0.001	0.008	0.001
Adjusted R ²	-0.0004	0.003	-0.0003
<i>Note:</i>		* p<0.05; ** p<0.01; *** p<0.001	

Table 12: Effect of Brexit on Perceiving a Community/Religious Inequality as a Conflict Cause

	Community/Religious Inequality		
	(1)	(2)	(3)
Brexit	0.025 (-0.127, 0.177)	0.008 (-0.147, 0.164)	-0.002 (-0.149, 0.146)
Age		-0.004* (-0.009, -0.0003)	
Employed		-0.011 (-0.158, 0.136)	
Conflict Exposure		0.123 (-0.018, 0.264)	
Constant	4.152*** (4.073, 4.232)	4.319*** (4.074, 4.565)	4.179*** (4.101, 4.256)
Correction for Imbalances?	None	Covariates	Entropy Matching
Observations	742	741	742
R ²	0.0001	0.009	0.00000
Adjusted R ²	-0.001	0.004	-0.001
<i>Note:</i>		* p<0.05; ** p<0.01; *** p<0.001	

Table 13: Effect of Brexit on Perceiving a Discrimination and Repression as a Conflict Cause

	Discrimination and Repression		
	(1)	(2)	(3)
Brexit	0.070 (-0.112, 0.252)	0.037 (-0.149, 0.223)	0.037 (-0.138, 0.211)
Age		-0.006* (-0.011, -0.001)	
Employed		0.018 (-0.158, 0.194)	
Conflict Exposure		0.193* (0.025, 0.361)	
Constant	3.762*** (3.668, 3.857)	3.981*** (3.687, 4.274)	3.796*** (3.705, 3.887)
Correction for Imbalances?	None	Covariates	Entropy Matching
Observations	727	726	727
R ²	0.001	0.015	0.0002
Adjusted R ²	-0.001	0.010	-0.001

Note: * p<0.05; ** p<0.01; *** p<0.001

Table 14: Effect of Brexit on Perceiving a Lack of Democracy as a Conflict Cause

	Lack of Democracy		
	(1)	(2)	(3)
Brexit	0.073 (-0.116, 0.261)	0.059 (-0.133, 0.250)	0.022 (-0.162, 0.205)
Age		-0.008** (-0.013, -0.003)	
Employed		-0.011 (-0.192, 0.170)	
Conflict Exposure		0.273** (0.100, 0.446)	
Constant	3.727*** (3.629, 3.826)	3.988*** (3.683, 4.293)	3.778*** (3.682, 3.875)
Correction for Imbalances?	None	Covariates	Entropy Matching
Observations	716	715	716
R ²	0.001	0.023	0.0001
Adjusted R ²	-0.001	0.017	-0.001

Note: * p<0.05; ** p<0.01; *** p<0.001

Table 15: Effect of Brexit on Perceiving a Extremist Republicans as a Conflict Cause

	Extremist Republicans		
	(1)	(2)	(3)
Brexit	0.055 (-0.126, 0.235)	0.100 (-0.084, 0.285)	0.093 (-0.085, 0.272)
Age		0.002 (-0.003, 0.007)	
Employed		-0.063 (-0.237, 0.110)	
Conflict Exposure		0.140 (-0.026, 0.305)	
Constant	4.011*** (3.918, 4.104)	3.866*** (3.579, 4.153)	3.972*** (3.879, 4.065)
Correction for Imbalances?	None	Covariates	Entropy Matching
Observations	739	738	739
R ²	0.0005	0.008	0.001
Adjusted R ²	-0.001	0.003	0.0001

Note: * p<0.05; ** p<0.01; *** p<0.001

Table 16: Effect of Brexit on Perceiving a Extremist Loyalists as a Conflict Cause

	Extremist Loyalists		
	(1)	(2)	(3)
Brexit	0.004 (-0.191, 0.200)	0.046 (-0.154, 0.246)	0.031 (-0.163, 0.225)
Age		0.001 (-0.005, 0.006)	
Employed		-0.101 (-0.289, 0.088)	
Conflict Exposure		0.150 (-0.029, 0.330)	
Constant	3.844*** (3.743, 3.945)	3.787*** (3.475, 4.098)	3.817*** (3.716, 3.919)
Correction for Imbalances?	None	Covariates	Entropy Matching
Observations	737	736	737
R ²	0.00000	0.006	0.0001
Adjusted R ²	-0.001	0.001	-0.001

Note: * p<0.05; ** p<0.01; *** p<0.001

Table 17: Effect of Brexit on Perceiving a Illegitimate Rule of Westminster as a Conflict Cause

	Illegitimate Rule of Westminster		
	(1)	(2)	(3)
Brexit	0.269* (0.051, 0.487)	0.225* (0.003, 0.447)	0.220* (0.009, 0.431)
Age		-0.009** (-0.015, -0.003)	
Employed		-0.044 (-0.253, 0.165)	
Conflict Exposure		0.056 (-0.144, 0.255)	
Constant	3.166*** (3.053, 3.278)	3.586*** (3.236, 3.936)	3.215*** (3.105, 3.325)
Correction for Imbalances?	None	Covariates	Entropy Matching
Observations	691	690	691
R ²	0.008	0.021	0.006
Adjusted R ²	0.007	0.015	0.005
<i>Note:</i>		* p<0.05; ** p<0.01; *** p<0.001	

Table 18: Effect of Brexit on Perceiving ‘The Partition of Ireland’ as a Conflict Cause

	Partitioning of Ireland		
	(1)	(2)	(3)
Brexit	0.262** (0.067, 0.457)	0.254* (0.056, 0.451)	0.232* (0.043, 0.420)
Age		-0.008** (-0.013, -0.002)	
Employed		-0.033 (-0.223, 0.156)	
Conflict Exposure		0.295** (0.116, 0.475)	
Constant	3.602*** (3.499, 3.704)	3.857*** (3.536, 4.177)	3.632*** (3.532, 3.732)
Correction for Imbalances?	None	Covariates	Entropy Matching
Observations	710	709	710
R ²	0.010	0.032	0.008
Adjusted R ²	0.008	0.026	0.007
<i>Note:</i>		* p<0.05; ** p<0.01; *** p<0.001	

C.2. Numerical Results Corresponding to Figure 3

Table 19: Effect of Brexit on Preferring to Remain in the UK after Brexit

	Remain Part of the UK		
	(1)	(2)	(3)
Brexit	-0.131*** (0.038)	-0.115** (0.039)	-0.117** (0.038)
Age		0.004*** (0.001)	
Employed		0.072* (0.036)	
Conflict Exposure		0.030 (0.035)	
Constant	0.663*** (0.020)	0.445*** (0.059)	0.649*** (0.020)
Correction for Imbalances?	None	Covariates	Entropy Matching
Observations	813	811	813
R ²	0.014	0.033	0.011
Adjusted R ²	0.013	0.028	0.010
<i>Note:</i>	* p<0.05; ** p<0.01; *** p<0.001		

Table 20: Effect of Brexit on Preferring to Become Independent after Brexit

	Become an Independent State		
	(1)	(2)	(3)
Brexit	-0.013 (0.020)	-0.017 (0.021)	-0.018 (0.020)
Age		-0.001 (0.001)	
Employed		-0.019 (0.019)	
Conflict Exposure		-0.004 (0.019)	
Constant	0.073*** (0.010)	0.134*** (0.032)	0.077*** (0.011)
Correction for Imbalances?	None	Covariates	Entropy Matching
Observations	813	811	813
R ²	0.001	0.006	0.001
Adjusted R ²	-0.001	0.001	-0.0003
<i>Note:</i>	* p<0.05; ** p<0.01; *** p<0.001		

Table 21: Effect of Brexit on Preferring to Unify with Ireland after Brexit

	Unify with the Rest of Ireland		
	(1)	(2)	(3)
Brexit	0.087** (0.029)	0.091** (0.030)	0.081** (0.030)
Age		-0.003*** (0.001)	
Employed		-0.072* (0.028)	
Conflict Exposure		0.105*** (0.027)	
Constant	0.145*** (0.015)	0.268*** (0.046)	0.151*** (0.015)
Correction for Imbalances?	None	Covariates	Entropy Matching
Observations	813	811	813
R ²	0.011	0.041	0.009
Adjusted R ²	0.009	0.036	0.008
<i>Note:</i>	* p<0.05; ** p<0.01; *** p<0.001		

C.3. Numerical Results Corresponding to Figure 4

Table 22: Regression Discontinuity Estimates for Perceptions of Conflict Causes I

	<i>Dependent variable:</i>			
	cause_1	cause_2	cause_3	cause_4
Campaign	0.011** (0.004)	0.006* (0.003)	0.009* (0.003)	0.011** (0.004)
Brexit	-0.016 (0.179)	-0.089 (0.148)	-0.106 (0.173)	-0.155 (0.180)
Campaign*Brexit	-0.027* (0.013)	-0.011 (0.011)	-0.016 (0.013)	-0.019 (0.013)
Constant	4.093*** (0.100)	4.321*** (0.082)	4.005*** (0.095)	4.044*** (0.100)
Observations	732	741	726	715
R ²	0.016	0.006	0.010	0.014
Adjusted R ²	0.012	0.002	0.006	0.010
<i>Note:</i>	* p<0.05; ** p<0.01; *** p<0.001 Entropy matching applied.			

Table 23: Regression Discontinuity Estimates for Perceptions of Conflict Causes II

	<i>Dependent variable:</i>			
	cause_5	cause_6	cause_7	cause_8
Campaign	-0.014*** (0.003)	-0.015*** (0.004)	0.008 (0.004)	0.010** (0.004)
Brexit	0.302 (0.176)	0.348 (0.191)	0.216 (0.210)	-0.006 (0.187)
Campaign*Brexit	0.030* (0.013)	0.022 (0.014)	-0.025 (0.016)	-0.007 (0.014)
Constant	3.616*** (0.096)	3.441*** (0.105)	3.394*** (0.113)	3.855*** (0.104)
Observations	738	736	690	709
R ²	0.026	0.022	0.013	0.019
Adjusted R ²	0.022	0.018	0.009	0.015
<i>Note:</i>	* p<0.05; ** p<0.01; *** p<0.001 Entropy matching applied.			

C.4. Numerical Results Corresponding to Figure 5

Table 24: Regression Discontinuity Estimates for Future Preferences

	<i>Dependent variable:</i>	
	unification	remain
	(1)	(2)
Campaign	0.003* (0.001)	-0.004* (0.001)
Brexit	0.058 (0.058)	-0.058 (0.074)
Campaign*Brexit	-0.007 (0.004)	0.007 (0.005)
Constant	0.218*** (0.032)	0.559*** (0.041)
Observations	813	813
R ²	0.017	0.020
Adjusted R ²	0.014	0.016
<i>Note:</i>	* p<0.05; ** p<0.01; *** p<0.001 Entropy matching applied.	

C.5. Results of the Average Causal Mediation Effects

In what follows, we fit mediation models for the two conflict causes found to be changed by Brexit in the first step of our analysis. As both causes are correlated to a significant extent $r(671) = .44$, $p < .001$, we fit both mediation models separately. For fitting of the mediation models, we closely follow Imai et al. (2010; 2013) and for the sake of transparency, we have also printed the corresponding R scripts below.

In the first step, we apply a linear regression fit with least squares for the mediator variables and a probit regression for the dichotomous outcomes. We include the same pre-treatment covariates as before to correct for imbalances.

```
### Cause_8: Partitioning of Ireland ###
cause.8.fit <- lm(cause_8 ~ referendum + age + employment_1 + exposure,
                 data = Brexit) #cause_8 mediator
unify.8.fit <- glm(unification ~ cause_8 + referendum + age + employment_1 + exposure,
                  data = Brexit, family = binomial("probit")) #unification outcome
remain.8.fit <- glm(remain ~ cause_8 + referendum + age + employment_1 + exposure,
                   data = Brexit, family = binomial("probit")) #remain outcome

### Cause_7: Illegitimate rule of Westminster ###
cause.7.fit <- lm(cause_7 ~ referendum + age + employment_1 + exposure,
                 data = Brexit) #cause_7 mediator
unify.7.fit <- glm(unification ~ cause_7 + referendum + age + employment_1 + exposure,
                  data = Brexit, family = binomial("probit")) #unification outcome
remain.7.fit <- glm(remain ~ cause_7 + referendum + age + employment_1 + exposure,
                   data = Brexit, family = binomial("probit")) #remain outcome
```

In the second step, we use the *mediate* function to estimate the Average Causal Mediation Effects and Average Direct Effects. We use the default of 1000 simulations to calculate the uncertainty estimates.

```
### Cause_8: Partitioning of Ireland ###
cause.8.unify <- mediate(cause.8.fit, unify.8.fit,
                       treat = "referendum", mediator = "cause_8",
                       robustSE = TRUE, sims = 1000)
cause.8.remain <- mediate(cause.8.fit, remain.8.fit,
                         treat = "referendum", mediator = "cause_8",
                         robustSE = TRUE, sims = 1000)

### Cause_7: Illegitimate rule of Westminster ###
cause.7.unify <- mediate(cause.7.fit, unify.7.fit,
                       treat = "referendum", mediator = "cause_7",
                       robustSE = TRUE, sims = 1000)
cause.7.remain <- mediate(cause.7.fit, remain.7.fit,
                         treat = "referendum", mediator = "cause_7",)
```

As one can see below, all estimated ACMEs are statistically significantly different from zero. In addition, the estimated average direct and total effects are also statistically significantly different from zero. These results suggest that Brexit may have activated particular conflict narratives, which in turn made citizens more likely to favor unify with the rest of Ireland at the expense of remaining part of the UK. However, over and beyond the conflict narratives, other mediators are still at play. Finally, since both outcomes are binary all estimated effects are expressed as the increase in probability that the respondents favors unify or remaining in the UK, respectively.

```
summary(cause.8.unify)
```

```
##
## Causal Mediation Analysis
##
## Quasi-Bayesian Confidence Intervals
##
##           Estimate 95% CI Lower 95% CI Upper p-value
## ACME (control)      0.01996    0.00605    0.04  0.004 **
## ACME (treated)      0.02489    0.00807    0.05  0.004 **
## ADE (control)       0.07408    0.01482    0.13  0.008 **
## ADE (treated)       0.07901    0.01620    0.14  0.008 **
## Total Effect        0.09897    0.03491    0.16  0.006 **
## Prop. Mediated (control) 0.20233    0.05634    0.57  0.010 **
## Prop. Mediated (treated) 0.25553    0.08048    0.61  0.010 **
## ACME (average)      0.02243    0.00713    0.04  0.004 **
## ADE (average)       0.07655    0.01559    0.14  0.008 **
## Prop. Mediated (average) 0.22893    0.06926    0.59  0.010 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Sample Size Used: 709
##
##
## Simulations: 1000
```

```
summary(cause.8.remain)
```

```
##
## Causal Mediation Analysis
##
## Quasi-Bayesian Confidence Intervals
##
##           Estimate 95% CI Lower 95% CI Upper p-value
## ACME (control)     -0.0204    -0.0383   -0.01  0.002 **
## ACME (treated)     -0.0219    -0.0412   -0.01  0.002 **
## ADE (control)      -0.0935    -0.1738   -0.01  0.018 *
## ADE (treated)      -0.0949    -0.1772   -0.01  0.018 *
## Total Effect       -0.1153    -0.1940   -0.04  0.006 **
## Prop. Mediated (control) 0.1699    0.0537    0.56  0.008 **
## Prop. Mediated (treated) 0.1827    0.0583    0.57  0.008 **
## ACME (average)     -0.0211    -0.0399   -0.01  0.002 **
## ADE (average)      -0.0942    -0.1755   -0.01  0.018 *
## Prop. Mediated (average) 0.1763    0.0560    0.57  0.008 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Sample Size Used: 709
##
##
## Simulations: 1000
```

```
summary(cause.7.unify)
```

```
##
## Causal Mediation Analysis
##
## Quasi-Bayesian Confidence Intervals
##
##           Estimate 95% CI Lower 95% CI Upper p-value
## ACME (control)      0.01543    0.00120      0.03  0.032 *
## ACME (treated)      0.01923    0.00160      0.04  0.032 *
## ADE (control)       0.07607    0.01010      0.14  0.030 *
## ADE (treated)       0.07987    0.01045      0.15  0.030 *
## Total Effect        0.09530    0.01954      0.16  0.006 **
## Prop. Mediated (control) 0.15862    0.00719      0.59  0.038 *
## Prop. Mediated (treated) 0.20176    0.01124      0.63  0.038 *
## ACME (average)      0.01733    0.00148      0.04  0.032 *
## ADE (average)       0.07797    0.01035      0.14  0.030 *
## Prop. Mediated (average) 0.18019    0.00922      0.61  0.038 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Sample Size Used: 690
##
##
## Simulations: 1000
```

```
summary(cause.7.remain)
```

```
##
## Causal Mediation Analysis
##
## Quasi-Bayesian Confidence Intervals
##
##           Estimate 95% CI Lower 95% CI Upper p-value
## ACME (control)     -0.02404   -0.04974      0.00  0.034 *
## ACME (treated)     -0.02582   -0.05310      0.00  0.034 *
## ADE (control)      -0.08789   -0.16942     -0.01  0.030 *
## ADE (treated)      -0.08967   -0.17312     -0.01  0.030 *
## Total Effect       -0.11370   -0.19964     -0.03  0.010 **
## Prop. Mediated (control) 0.20527    0.00299      0.69  0.044 *
## Prop. Mediated (treated) 0.22148    0.00329      0.70  0.044 *
## ACME (average)     -0.02493   -0.05137      0.00  0.034 *
## ADE (average)      -0.08878   -0.17084     -0.01  0.030 *
## Prop. Mediated (average) 0.21337    0.00314      0.70  0.044 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Sample Size Used: 690
##
##
## Simulations: 1000
```

D. Additional Analyses

D.1. Applying Listwise Deletion

In the models in the main paper, we decided to not use listwise deletion given that non-response on our outcome measures was relatively high, especially when combined. As a result, applying listwise deletion entails discarding many valid responses. This not only leads to the loss of valuable information, but also increases the likelihood of selection bias (King et al. 2001). By including as many respondents as possible, we reduce such bias within each model while simultaneously increasing power. Nevertheless, we replicate Figures 1 and 3 of the main manuscript but now applying listwise deletion. Figures 2 and 3 show that this does not affect the substantive meaning of the results reported in the main text.

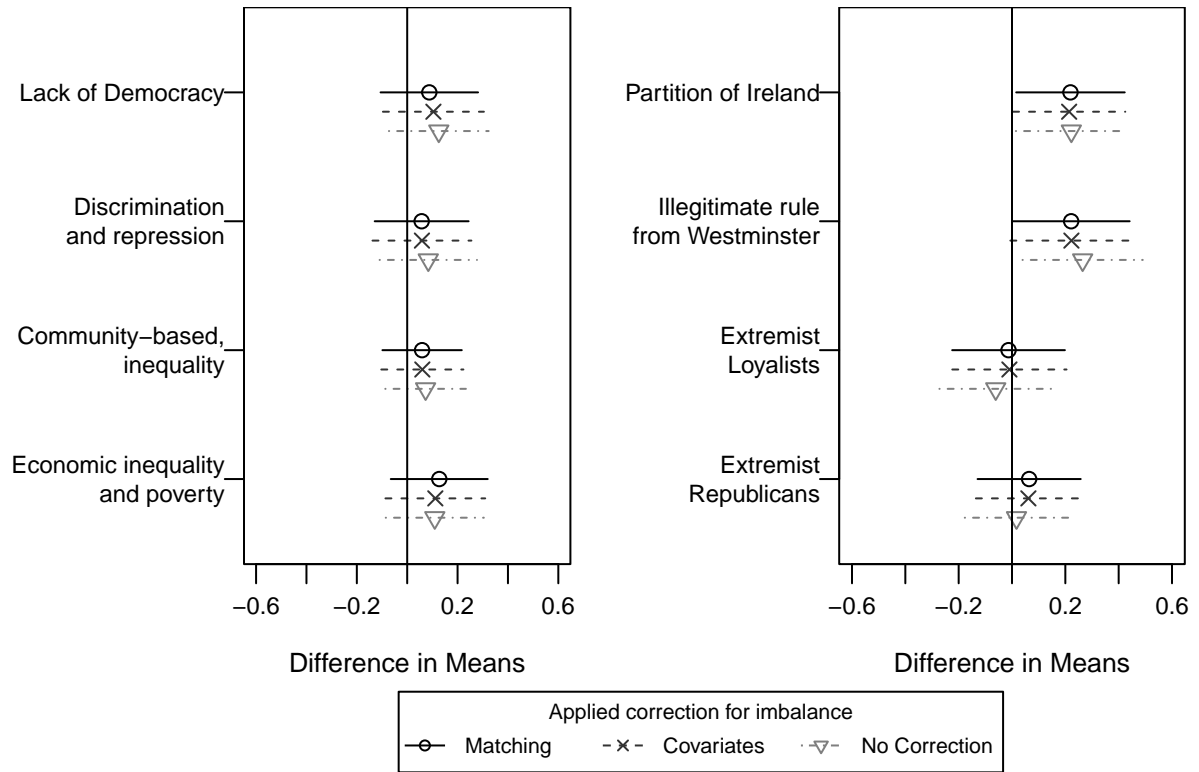


Figure 2: Replication of Figure 1, Applying Listwise Deletion

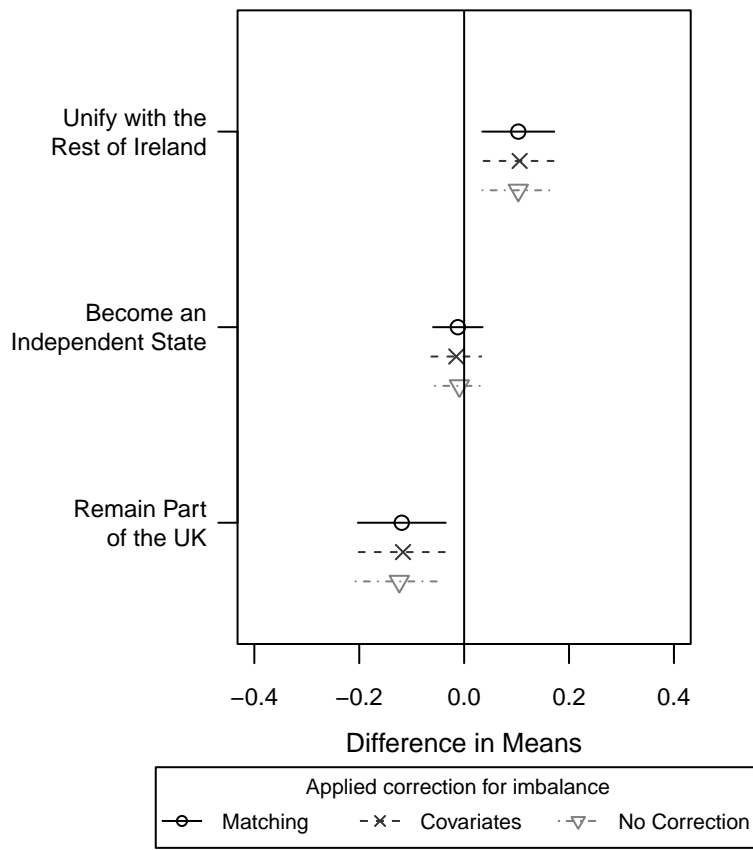


Figure 3: Replication of Figure 3, Applying Listwise Deletion

D.2. Excluding Respondents Interviewed on June 23

In the models in the main paper, the individuals interviewed on the day of the EU referendum are included in the control condition. Below, we replicate Figures 1 and 3 of the main manuscript but now excluding those respondents given particularities of the Referendum day. Figures 4 and 5 show that this does not affect the substantive meaning of the results reported in the main text.

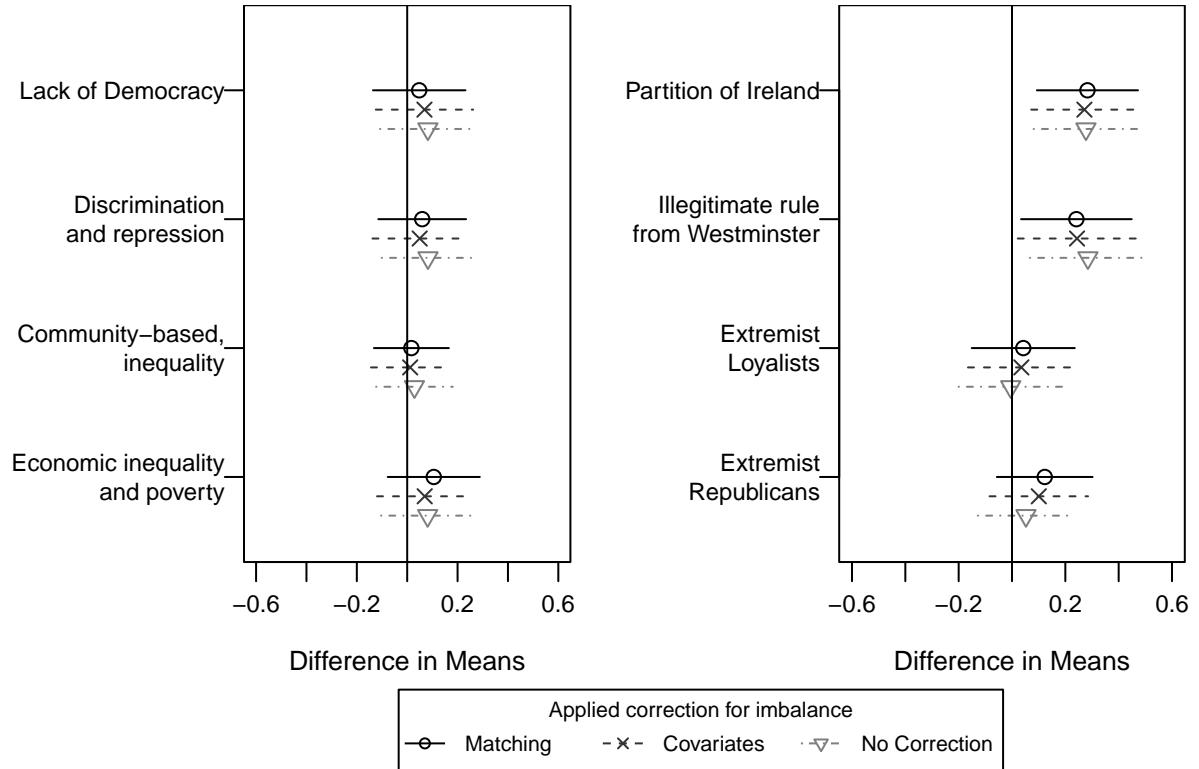


Figure 4: Replication of Figure 1, Excluding Respondents Interviewed on June 23

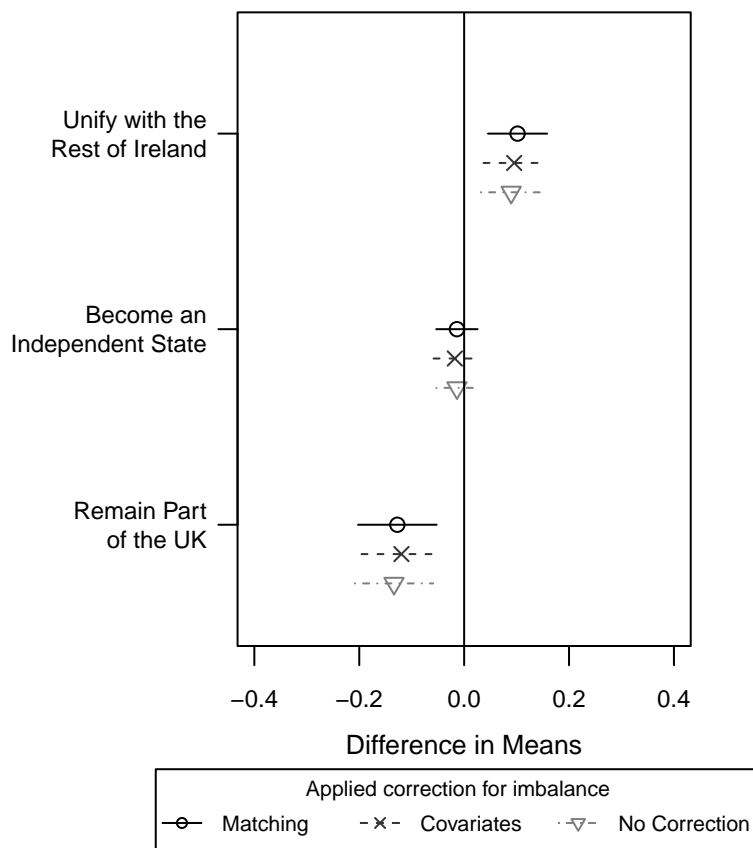


Figure 5: Replication of Figure 3, Excluding Respondents Interviewed on June 23

D.3. Additional Analyses for Mediation Results

D.3.1. Sensitivity Analysis

In this section, we conduct a formal sensitivity analysis for the possible existence of unobserved pre-treatment covariates. The sensitivity parameter, ρ , denotes the correlation between the residuals of the mediator-outcome relationship. As explained by Imai and Yamamoto (2013), “a large value of ρ indicates the existence of strong confounding between the mediator and the outcome, and thus serious violation of the sequential ignorability.” By contrast, a ρ of zero suggests that no confounders influence the mediator-outcome relationship.

All ρ ’s reported in Table 25 are smaller than the ones reported in, for instance, Imai and Yamamoto (2013), which were interpreted as “moderately robust.” This indicates that the results of our study are slightly more robust to the sequential ignorability violation than those in Imai and Yamamoto (2013).²

Table 25: Sensitivity Analysis for Both Mediators on Both Outcomes

	Unify with Ireland	Remain part of UK
Mediator: Partitioning of Ireland as a conflict cause		
Rho at which ACME for Control Group = 0	0.3	-0.2
Rho at which ACME for Treatment Group = 0	0.3	-0.2
Mediator: Illegitimate rule of Westminster as a conflict cause		
Rho at which ACME for Control Group = 0	0.3	-0.3
Rho at which ACME for Treatment Group = 0	0.3	-0.3

²At the moment of writing, we were unaware of formally recommended cut-off thresholds for what qualifies as a small, medium, or high values of ρ to assess robustness. Therefore, we opted to compare our ρ with the original studies introducing this quantity of interest (in particular with Imai and Yamamoto, 2013).

D.3.2. Relationship between Mediators and Preferences for the Future of Northern Ireland

Table 26 shows the association between the mediators (as independent variables) and the likelihood to desire to unify with the rest of Ireland or to remain part of the UK (as dependent variables). Both models are estimated including the full range of conflict cause perceptions, with the exception of one of both actor-based causes since they are strongly correlated to the extent they cause multicollinearity issues (see also Figure 4).

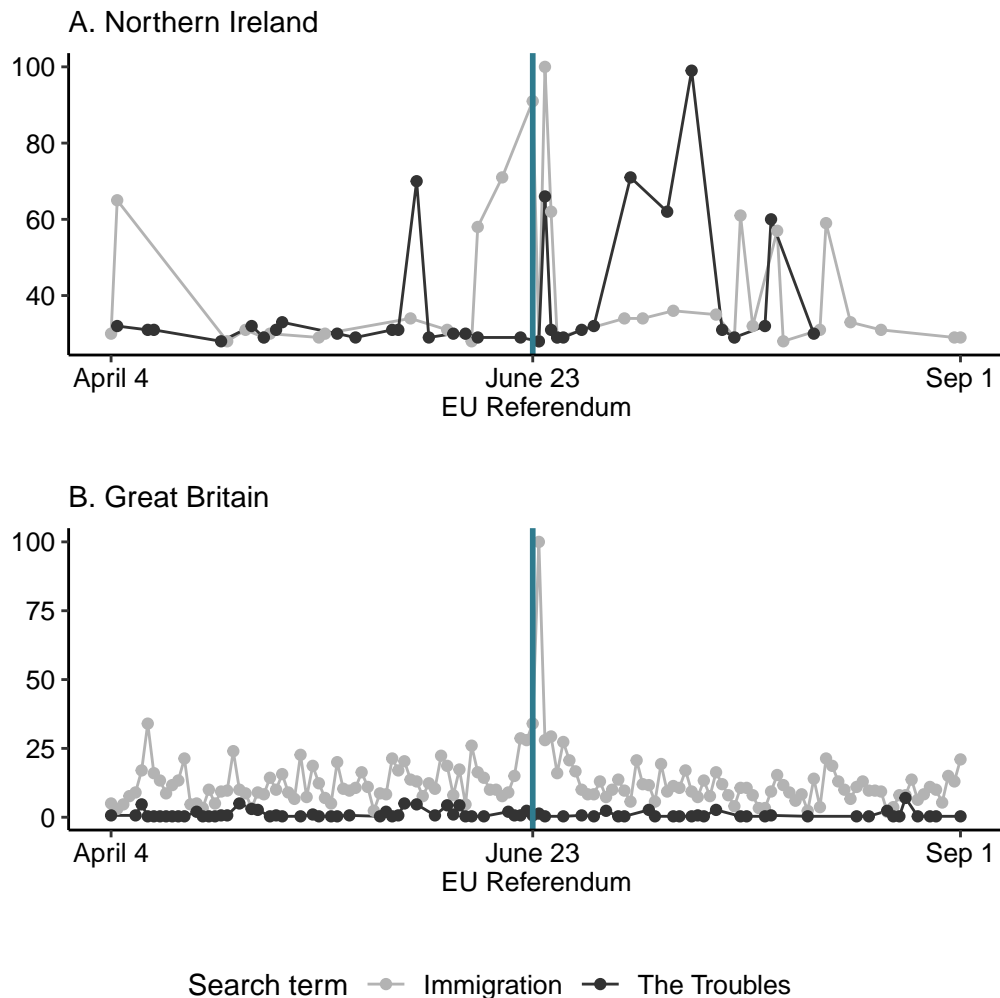
Table 26: Relationship between Mediators and Preferences for the Future of Northern Ireland

	<i>Dependent variable:</i>			
	unification		remain	
cause_1	0.017 (0.017)	0.026 (0.017)	-0.018 (0.020)	-0.027 (0.021)
cause_2	0.019 (0.021)	0.008 (0.022)	-0.013 (0.026)	-0.001 (0.027)
cause_3	-0.005 (0.019)	0.005 (0.018)	-0.014 (0.023)	-0.044 ⁺ (0.022)
cause_4	0.064 ^{***} (0.016)	0.060 ^{***} (0.016)	-0.044* (0.020)	-0.048* (0.020)
cause_5	-0.031* (0.013)	-0.032* (0.013)	0.044** (0.016)	0.046** (0.016)
cause_7	0.047 ^{***} (0.014)		-0.086 ^{***} (0.017)	
cause_8		0.054 ^{***} (0.014)		-0.051** (0.017)
Constant	-0.207* (0.086)	-0.250** (0.088)	1.099 ^{***} (0.104)	1.098 ^{***} (0.107)
Observations	655	662	655	662
R ²	0.118	0.119	0.137	0.105
Adjusted R ²	0.110	0.111	0.129	0.097

Note: + p<0.1; * p<0.05; ** p<0.01; *** p<0.001

D.4. Google Trends Data in Northern Ireland vs. Great Britain

In the paper, we argue that feelings of neglect, alongside media priming and uncertainty about the future, help explain post-Brexit public opinion in Northern Ireland. To provide some empirical evidence of this theoretical claim, Figure 6 plots the search interests of the general public in the UK before and after Brexit. Specifically, we examine how prominent issues related to the Troubles and Peace Protocol were compared to issues related to immigration (i.e., another prominent issue in the Brexit campaign) in both Northern Ireland and Great Britain. Figure 6 shows that during the entire Brexit campaign and aftermath, people in Great Britain barely searched for issues related to the Troubles (i.e., the black line always hovers around a value of 0 in the lower graph). In contrast, the Troubles were salient and overshadowed the more general issue of immigration in Northern Ireland at several occasions and especially in the direct aftermath of Brexit. This suggests that people in Northern Ireland were worried about the Troubles in the aftermath of Brexit, even more than about immigration, but that this was not the case for people in the rest of the UK.



Data source: Google Trends

Numbers represent search interest relative to the highest point on the chart for the given region and time.

A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular.

A score of 0 means there was not enough data for this term.

Figure 6: Relative Google Trends for Searches Related to Immigration and the Troubles in Northern Ireland Versus Great Britain Before and After Brexit

D.5. Comparing Preferences for the Future across Different Surveys

When asking about people’s preferences for the constitutional future of Northern Ireland, we followed the question and answer options of the Northern Ireland Life and Times Survey (NILT Survey 2016). By doing so, we included what we saw as all theoretically interesting and politically relevant options for Northern Ireland: remain part of the UK with direct or devolved rule, unify with Ireland, or become independent. However, as noted in the manuscript, if the Northern Irish are ever presented with a referendum on their constitutional future, both the Good Friday Agreement and Northern Ireland Act 1998 stipulate only two options: remain part of the UK or form part of a united Ireland. To examine the effect of including more response options than legally plausible, we compare the distribution of our survey (conducted before and after the referendum) and of the NILT 2016 (conducted only after the referendum), with the distribution in Garry et al. (2018). In their 2018 survey, Garry and colleagues restricted themselves to the options legally stipulated by the Good Friday Agreement and the UK’s Northern Ireland Act 1998 (i.e., to remain part of the UK or form a united Ireland) and added a “would not vote” option.

As Table 27 shows, the share of people who want to remain part of the UK further is substantially lower in the Garry et al. (2018) data and the share of people who prefer a united Ireland is slightly higher. However, it is also important here to keep in mind the timing of the various surveys. The Garry et al. survey did not only differ in the response options provided to respondents, but it was also conducted more than two years after our survey. It is, therefore, plausible that these differences are not just a result of different response options, but also indicate a long-term trend. As we briefly mention in the manuscript, our results suggest that the Brexit campaign has made people less enthusiastic about remaining part of the United Kingdom. If the same narratives that were dominant during the campaign are also alluded to in the post-Brexit period (and there are indications that this is the case), then this may also help to explain this decline. Finally, respondents in the Garry et al. (2018) study were also more likely to report not knowing what to vote for. Again, both differences in the response options and time trends may help explain this (among other possible explanations). In terms of response options, omitting independence might have made the question harder to answer in the Garry et al. (2018) study, given that independence is seen as a valid option by 4% to 7% of the Northern Irish in the NILT 2016 or our study, respectively. In terms of trends over time, the uncertainty and controversy surrounding Brexit may have also made this a more difficult question in 2018 and caused people to question their initial opinions.

Table 27: Comparison in Preferences for the Future across Different Surveys

	Our 2016 survey	NILT 2016 survey	Garry et al. (2018) survey
Remain part of the UK, with direct rule	10.10%	12%	50.30%
Remain part of the UK, with devolved rule	52.60%	54%	
Reunify with the rest of Ireland	16.90%	19%	21.10%
Become an independent state	6.90%	4%	NA
Other/Don’t know	13.50%	11%	18.90%
Would not vote	NA	NA	9.70%

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