Did COVID-19 Boost Right-Wing Populism? Evidence from Early Super Spreader Events

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^aRutgers University—New Brunswick ^bTechnical University of Munich ^cUniversity of Oxford The COVID-19 pandemic resulted in profound social, economic, and political changes.

- Rally around the flag effect (Baekgaard et al., 2020; Schraff, 2021; Bol et al., 2021)
- Declines in interpersonal and institutional trust (Daniele et al., 2020; Brück et al., 2020)
- Increased social media usage (Engesser et al., 2017; Guriev, Melnikov, and Zhuravskaya, 2020)
- Higher demand for more technocratic or authoritarian government (Amat et al., 2020)

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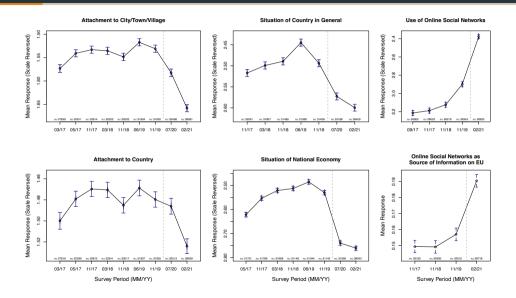
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Research Question: Did COVID-19 boost support for right-wing populism (RWP) in Western Europe?

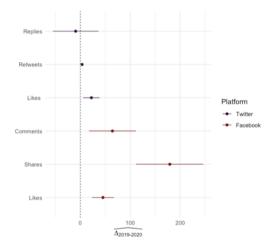
Several salient dimensions of right-wing populism:

- Anti-elitism (Mudde, 2004)
- Lack of trust and animosity towards experts, including scientists (Brubaker, 2021)
- Adoption of conspiracy theories (Stecula and Pickup, 2021)
- Direct connections between leader and people, bypassing media and other intermediaries (Weyland, 2001)

Large shifts in public opinion in Europe



Populist parties experienced increases in social media engagement in 2020



Country FE and controls for ideology, incumbency, most recent vote share, and whether elections held in 2019 or 2020. Twitter N = 230 and Facebook N = 338.

Novel panel on right-wing populist engagement on Twitter

- Five countries in Europe (DE, IT, NL, UK, FR) from February 1 until June 30, 2020
- Used Academic Twitter API (Barrie and Ho, 2021) to collect all tweets that mentioned a right-wing populist politician or political party, along with likes and retweets of their tweets
- Location field provided by users extracted using Google API and matched to NUTS-3 region (Eurostat, 2020)
- We merge this data with official COVID-19 statistics (Naqvi, 2021)

We begin with an OLS approach:

$$Y_{it} = \beta_0 + \beta_1 \text{COVID-19}_{it} + X'_{c(i)t}\gamma + \delta_t + \phi_c + \epsilon_{it}$$
(1)

where

- Y_{it} is either mentions, likes, or retweets for populists on Twitter in NUTS-3 region i and country c(i) on day t
- COVID-19_{it} are log daily new cases per 10,000 inhabitants
- $X_{c(i)t}$ is a time-varying control variable for lockdown stringency
- + δ_t and ϕ_c are day and country fixed effects respectively

OLS Results: COVID-19 cases predict increases in engagement with RWP on Twitter

	(1)	(2)	(3)	(4)	(5)	(6)	
Panel A: Dependent Var	Panel A: Dependent Variable: Mentions of Populist Leaders, mean 0.19						
Log Daily New Cases per 10,000 population	0.172***	0.115***	0.065*	0.113***	0.113***	0.432***	
p	(0.032)	(0.034)	(0.034)	(0.035)	(0.042)	(0.152)	
Observations	119520	119520	119520	119520	119520	107747	
Panel B: Dependent Var	iable: Retwe	eets for Pop	ulist Leade	ers, mean 3.	98		
Log Daily New Cases per 10.000 population	3.996***	2.352	2.881*	4.394**	5.046**	0.932***	
p p - p - p	(1.459)	(1.486)	(1.498)	(1.811)	(2.101)	(0.258)	
Observations	119520	119520	119520	119520	119520	119520	
Panel C: Dependent Var	iable: Likes	for Populis	t Leaders, i	mean 6.90			
Log Daily New Cases per 10,000 population	7.339***	5.196**	4.079	5.758*	9.034**	0.890***	
·····	(2.607)	(2.639)	(2.656)	(3.171)	(3.706)	(0.233)	
Observations	119520	119520	119520	119520	119520	94955	
Lockdown Control		\checkmark	\checkmark	\checkmark			
Country FE			\checkmark	\checkmark			
Day FE				\checkmark			
Country × Day FE					\checkmark	\checkmark	
Poisson						\checkmark	

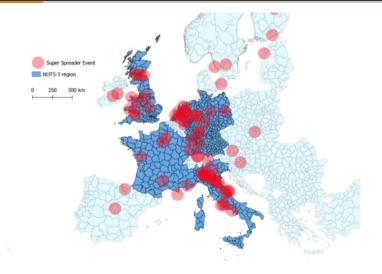
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The OLS results are likely to suffer from endogeneity: Unobserved confounders might impact both COVID-19 cases and support for populism

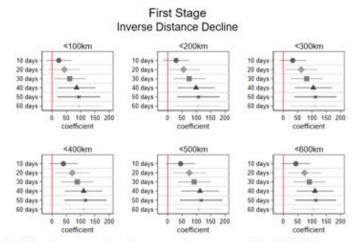
Innovative instrumental variable strategy (Avetian et al., 2021)

- Crowd-sourced data on super spreader events (Swinkels et al., 2021)
- Plausible exogeneity of timing of early super spreader events *in nearby NUTS-3 regions*
- We construct an exposure variable measuring proximity to super spreader events and run IV regression using two-stage least-squares
- Results are robust to various different proximity and functional forms of timing

Super spreader events (Swinkels et al., 2021)

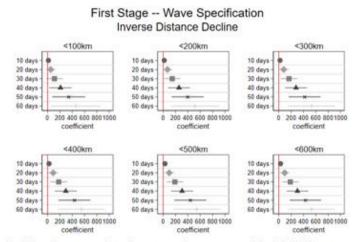


First stage results are robust to instrument specification



Coefficients from regressions of super spreader exposure on daily COVID-19 cases. All regressions with NUTS-3 and day fixed effects. Standard errors clustered at the NUTS-3 level.

First stage results are robust to instrument specification



Coefficients from regressions of super spreader exposure on daily COVID-19 cases. All regressions with NUTS-3 and day fixed effects. Standard errors clustered at the NUTS-3 level.

IV Result: Local COVID-19 cases and engagement with right-wing populists

	(1) Mentions of Populists	(2) Retweets for Populists	(3) Likes for Populists
Panel A: Party Leaders			
Log Daily New Cases per 10,000 population	0.310**	11.459***	6.896**
	(0.145)	(2.954)	(2.697)
Lockdown Control	\checkmark	\checkmark	\checkmark
NUTS-3 FE	\checkmark	\checkmark	\checkmark
Day FE	\checkmark	\checkmark	\checkmark
Observations F-Statistic Mean Dep.Var.	119520 17.50 0.19	119520 33.19 3.98	119520 42.78 6.90
Panel B: Parties			
Log Daily New Cases per 10,000 population	0.179*	2.388***	2.265***
	(0.106)	(0.788)	(0.641)
Lockdown Control	\checkmark	\checkmark	\checkmark
NUTS-3 FE	\checkmark	\checkmark	\checkmark
Day FE	\checkmark	\checkmark	\checkmark
Observations F-Statistic Mean Dep.Var.	119520 2.56 0.08	119520 7.74 1.13	119520 6.50 1.10

IV Result: Country heterogeneity

	(1) Mentions of Populist Leaders	(2) Retweets for Populist Leaders	(3) Likes for Populist Leaders
COVID-19 × Germany	0.545***	15.642***	22.194***
	(0.124)	(4.109)	(5.332)
COVID-19 × England	0.873***	23.192***	43.461***
	(0.150)	(5.801)	(8.605)
COVID-19 × France	2.369***	85.837***	105.982***
	(0.666)	(18.394)	(24.058)
COVID-19 × Italy	0.506*	16.636***	22.487***
	(0.266)	(3.469)	(4.665)
COVID-19 × Netherlands	0.232	32.891***	48.518***
	(0.509)	(6.498)	(8.875)
COVID-19 × Scotland	0.678***	16.760***	25.264***
	(0.213)	(4.222)	(5.175)
Lockdown Control	\checkmark	\checkmark	\checkmark
NUTS-3 FE	\checkmark	\checkmark	\checkmark
Day FE	\checkmark	\checkmark	\checkmark
Observations	119520	119520	119520

Robustness: The effect is not driven by a general increase in Twitter usage

	(1)	(2)	(3)
	Mentions of	Mentions of	Relative Mentions
	Populists	Non-Populists	of Populists
Panel A: Party Leaders			
Log Daily New Cases per 10.000 population	0.310**	-5.579***	0.560***
	(0.145)	(1.092)	(0.118)
Lockdown Control	\checkmark	\checkmark	\checkmark
NUTS-3 FE	\checkmark	\checkmark	\checkmark
Day FE	\checkmark	\checkmark	\checkmark
Observations	119520	119520	119520
F-Statistic	17.50	22.81	17.12
Mean Dep.Var.	0.19	1.04	0.97
Panel B: Parties			
Log Daily New Cases per 10,000 population	0.179*	-0.447*	0.832***
	(0.106)	(0.242)	(0.195)
Lockdown Control	\checkmark	\checkmark	\checkmark
NUTS-3 FE	\checkmark	\checkmark	\checkmark
Day FE	\checkmark	\checkmark	\checkmark
Observations	119520	119520	119520
F-Statistic	2.56	2.75	9.15
Mean Dep.Var.	0.08	0.29	1.00

Robustness: Consistent results within-user

Mentions

Retweets

	(1)	(2)
Log Daily New Cases per 10,000 population	0.128***	0.123***
p	(0.032)	(0.031)
Lockdown Control	\checkmark	\checkmark
Region FE	\checkmark	
Day FE	\checkmark	\checkmark
Author FE		\checkmark
Observations	1258222	1258222
F-Statistic	9.71	10.65
Mean Dep.Var.	0.03	0.03

	(1)	(2)
Log Daily New Cases per 10,000 population	0.438***	0.391***
	(0.147)	(0.132)
Lockdown Control	\checkmark	\checkmark
Region FE	\checkmark	
Day FE	\checkmark	\checkmark
Author FE		\checkmark
Observations	7540079	7540079
F-Statistic	14.03	16.06
Mean Dep.Var.	0.08	0.08

Did COVID-19 also lead to changes in voting intention or behaviour?

Did COVID-19 also lead to changes in voting intention or behaviour?

- \rightarrow Three pieces of evidence:
 - 1. French municipal election results in March 2020
 - 2. British Election Study (BES)
 - 3. Dutch Longitudinal Internet studies for the Social Sciences (LISS)

- We use data from French communes that held elections in March 2020
- We predict the vote share for the right-wing populist *Rassemblement National* (formerly *Front National*) in the March 2020 election
- $\cdot\,$ Commune-level COVID-19 data unavailable so we use our instrument as a predictor
- Result: Communes closer to super spreader events exhibit significantly higher right-wing populist vote shares

(1)	(2)	(3)
0.014 (0.010)		
	0.001 ^{**} (0.001)	
		0.006 ^{**} (0.003)
0.357*** (0.048)	0.356 ^{***} (0.048)	0.356 ^{***} (0.048)
\checkmark	\checkmark	\checkmark
\checkmark	\checkmark	\checkmark
9,306	9,306	9,306
0.313	0.313	0.313
	0.005	0.005
	0.014 (0.010) 0.357*** (0.048) ✓ 9,306	0.014 (0.010) 0.357*** (0.048) 0.356*** (0.048) 0.356*** (0.048) 0.356*** 0.048)

Twitter engagement with national party predicts local RN vote share

Outcome Variable: RN Vote Share 2020	(1)	(2)	(3)
Panel A. Treatments: Twitter Engagement	with RN		
Per Capita Mentions of RN	0.0002		
	(0.001)		
Per Capita Retweets of RN		0.00002**	
		(0.00001)	
Per Capita Tweet-Likes of RN			0.00003**
			(0.00001)
Front National Vote Share 2014	0.367***	0.367***	0.367***
	(0.044)	(0.044)	(0.044)
Panel B. Treatments: Unique Twitter Users	Engaging V	vith RN	
Per Capita Mentions of RN	0.001		
	(0.001)		
Per Capita Retweets of RN		0.00006**	
		(0.00003)	
Per Capita Tweet-Likes of RN			0.00005**
			(0.00002)
Front National Vote Share 2014	0.367***	0.367***	0.367***
	(0.049)	(0.049)	(0.048)
NUTS-3 FE	√	\checkmark	\checkmark
			· · · ·
Demographic & Socioeconomic Controls	\checkmark	\checkmark	\checkmark
Demographic & Socioeconomic Controls Observations	√ 9,306	√ 9,306	√ 9,306

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COVID-19 cases associated with RWP voting intention in UK

	(1) Likelihood to vote	(2) Likelihood to vote UKIP or Reform
Log Cases per 10,000 population	-0.0233***	0.0578***
	(0.0072)	(0.0111)
Wave FE	\checkmark	\checkmark
Individual FE	\checkmark	\checkmark
Local Authority FEs	\checkmark	\checkmark
Observations	67162	89342
R Squared	0.71	0.42
Mean Dep.Var.	0.82	0.03

BES, waves 15-21 (March 2019 - May 2021)

Outcome variable: Populist Voting Intention	(1)	(2)
Infected with COVID-19	1.975 ^{**} (0.987, 3.744)	
Family or Household Affected by COVID-19		1.882** (1.055, 3.230)
Demographic Controls (Age, Gender, Education, Occupation, Household Role)	\checkmark	\checkmark
Observations	1,310	1,459
Log Likelihood	-393.414	-449.323
Akaike Information Criterion	840.827	952.646
Mean Outcome Variable	0.109	0.114

LISS (July 2020)

What are the mechanisms through which COVID-19 impacted support for RWP?

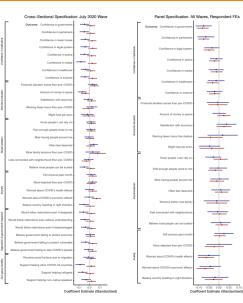
What are the mechanisms through which COVID-19 impacted support for RWP?

- \rightarrow Individual-level survey data:
 - 1. British Election Study (BES)
 - 2. Dutch Longitudinal Internet studies for the Social Sciences (LISS)

	(1) Life anxious scale [std.]	(2) Personal depression today [std.]	(3) Life satisfaction scale [std.]	(4) Life worthwile scale [std.]	(5) Life happy scale [std.]
Worry: catching COVID [0-10]	0.044 ^{***} (0.007)	0.038 ^{***} (0.010)	-0.007 (0.007)	0.000 (0.008)	-0.006 (0.007)
Worry: economic impact of COVID [0-10]	-0.013 (0.010)	-0.010 (0.014)	0.021** (0.010)	0.013	0.009
Worry: COVID's impact on way of life [0-10]	(0.010) 0.073 ^{***} (0.009)	(0.014) 0.048 ^{***} (0.011)	-0.078*** (0.009)	-0.044 ^{***} (0.009)	-0.071*** (0.009)
Controls	\checkmark	(0.011) V		\checkmark	(0.007)
Region FEs	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Observations	3095	1676	3105	3066	3112
R Squared	0.08	0.05	0.05	0.02	0.04

	(1)	(2)	(3)
	Time follows politics	Time follows politics	Time follows politics
	in newspapers [std.]	in radio [std.]	on the internet [std.]
Worry: catching COVID [0-10]	0.036***	0.001	0.013***
	(0.003)	(0.003)	(0.003)
Worry: economic impact of COVID [0-10]	0.038***	0.026***	0.024***
	(0.005)	(0.005)	(0.005)
Worry: COVID's impact on way of life [0-10]	0.012***	0.002	0.011***
	(0.004)	(0.004)	(0.004)
Controls	\checkmark	\checkmark	\checkmark
Region FEs	\checkmark	\checkmark	\checkmark
Observations	12290	12290	12290
R Squared	0.09	0.03	0.06

COVID-19, confidence in institutions, and interpersonal trust (LISS)



- Onset of the COVID-19 pandemic presented a window of opportunity for right-wing populists
- Increases in local COVID-19 cases led to more engagement with right-wing populist parties and leaders on Twitter.
- French municipal elections in March 2020 exhibit higher right-wing populist vote shares in proximity to super spreader events and national survey data from UK and Netherlands show associations between COVID-19 and populist voting intentions
- Increased social media usage, declining confidence in institutions, and higher levels of anxiety are potential explanatory mechanisms

Thank you for listening.

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	(1)	(2)	(3)	(4)	(5)
	Mean	Std.Dev.	Min	Max	Obs.
Panel A: Twitter outcomes					
Mentions populist leaders	0.19	1.10	0	89	119520
Retweets populist leaders	3.98	14.75	0	952	119520
Likes populist leaders	6.90	30.52	0	4042	119520
Mentions populist parties	0.08	0.70	0	60	119520
Retweets populist parties	1.13	5.34	0	642	119520
Likes populist parties	1.10	5.68	0	222	119520
Mentions non-populist leaders	1.04	5.82	0	530	119520
Mentions non-populist parties	0.29	1.51	0	126	119520
Relative mentions of populist leaders	0.97	0.80	0	45	119520
Relative mentions populist parties	0.99	0.58	0	32	119520
PANEL B: COVID-19 RELATED VARIABLES					
Lockdown Stringency	56.22	27.20	0.00	93.52	119520
Log Daily New Cases per 10,000 population	0.13	0.22	0.00	2.91	119520
Super Spreader Exposure	2.10	1.75	0.00	7.65	119520

OLS Results

Lockdown stringency (potential confounder)

	(1)	(2)	(3)
	Mentions of	Retweets	Likes
	Populists	for Populists	for Populists
Panel A: Party Leaders			
Lockdown Stringency	0.006***	0.140***	0.188***
	(0.001)	(0.018)	(0.020)
NUTS-3 FE	\checkmark	\checkmark	\checkmark
Day FE	\checkmark	\checkmark	\checkmark
Observations	124948	124948	124948
R Squared	0.19	0.61	0.46
Mean Dep.Var.	0.19	4.16	7.19
Panel B: Parties			
Lockdown Stringency	0.001	0.009**	-0.001
	(0.001)	(0.004)	(0.004)
NUTS-3 FE	\checkmark	\checkmark	\checkmark
Day FE	\checkmark	\checkmark	\checkmark
Observations	124948	124948	124948
R Squared	0.20	0.49	0.70
Mean Dep.Var.	0.09	1.17	1.20

Link between official statistics to individual pandemic impacts (BES)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Suspect	Suspect	Suspect	Acquaintant		Severity	Severity	Severity
	you	family member	close friend	died from	Vaccinated	COVID	COVID	COVID
	had COVID	had COVID	had COVID	COVID	(0-1)	self	family member	close friend
	(0-1)	(0-1)	(0-1)	(0-1)		(std.)	(std.)	(std.)
Log Cases per 10,000 population	0.040***	0.069***	0.039***	0.053***	0.004	0.273**	-0.035	0.038
	(0.012)	(0.018)	(0.014)	(0.015)	(0.011)	(0.112)	(0.069)	(0.090)
Controls	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Region FEs	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Observations	7752	7752	7752	8253	8579	1107	2067	988
R Squared	0.04	0.02	0.01	0.02	0.18	0.06	0.03	0.04