

# Can Grassroots Organizations Reduce Support for Right-Wing Populism via Social Media?

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## Can Grassroots Organizations Reduce Support for Right-Wing Populism via Social Media?

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#### Abstract

The rise of right-wing populism throughout Western democracies coincided with an increasing adoption of social media – both among supporters and opponents of right-wing populism alike. In light of these trends, we assess whether grassroots organizations are effective in combating right-wing populism via social media. We study this question using a tightly controlled online field experiment embedded in the Facebook campaign of a German grassroots organization. Leveraging geo-spatial variation in where the organization disseminated its Facebook ads targeting Germany's leading right-wing populist party (AfD), we find that the campaign did not significantly affect the AfD's vote share and turnout. Drawing on data from a complementary online experiment, we show that insufficient outreach on Facebook together with the absence of individual-level responses of attitudes and behavior explains why the campaign did not meaningfully shape aggregate election outcomes.

Keywords: TBD JEL Classification:

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## I Introduction

Right-wing populism has been on the rise throughout Western democracies. The academic literature studying this trend has pointed to a number of contributing factors and, in particular, to economic and cultural grievances.<sup>1</sup> Other scholars suggest that the growing importance of social media spurred the rise of right-wing populism, for example, via the spread of fake news or the creation of "echo-chambers".<sup>2</sup> At the same time, due to their "low barriers to entry and reliance on user-generated content" (Zhuravskaya, Petrova and Enikolopov, 2020, p. 416), social media has reduced the costs for grassroots movements to enter the political arena and achieve significant outreach (Zhuravskaya, Petrova and Enikolopov, 2020). Indeed, we observe a growing number of grassroots efforts exploiting social media to contend against right-wing populism across Western countries.<sup>3</sup> In light of these trends, the question emerges whether grassroots organizations can reduce support for right-wing populism via social media.<sup>4</sup>

We study this question in the context of an experimentally controlled, randomized Facebook campaign by a German grassroots organization during a series of recent elections. The campaign aimed to reduce electoral support for the "*Alternative for Germany*" (AfD); a German right-wing populist party which has enjoyed considerable electoral success since 2016.<sup>5</sup> Similar to right-wing populists elsewhere, the AfD campaigns on a national-conservative, antiimmigrant, and at times even xenophobic platform (Cantoni, Hagemeister and Westcott, 2020; Häusler, 2018; Schellenberg, 2018). Exploiting experimental variation as to where the organization disseminated its Facebook ads, we find that the organization's campaign did not significantly affect the AfD's vote share and turnout: our treatment effect estimates are small in magnitude, precisely estimated, and robust to an array of empirical specifications. In combination with the high statistical power of our experiment, our estimates are thus more likely to reflect the "true" absence of any meaningful treatment effects than insufficient statistical power. Using a complementary online survey experiment, we show that this finding can be explained by insufficient outreach on Facebook and the lack of individual-level responses of attitudes and behavior to the campaign. We further demonstrate that the campaign's effectiveness could not have been increased by highlighting common

<sup>1.</sup> Anelli, Colantone and Stanig (2019) study the consequences of the loss of jobs in manufacturing; Autor et al. (2020), Colantone and Stanig (2018) and Dippel et al. (2021) analyze the effect of trade exposure; Halla, Wagner and Zweimüller (2017) and Steinmayr (2021) study the role of immigration; Cantoni, Hagemeister and Westcott (2020) assess the impact of changes in the supply of political platforms; and Inglehart and Norris (2016) and Margalit (2019) discuss the role of cultural grievances.

<sup>2.</sup> Allcott and Gentzkow (2017), Tufekci (2018), or Zhuravskaya, Petrova and Enikolopov (2020) offer different perspectives on this hypothesis.

<sup>3.</sup> This phenomenon is, e.g., covered in the following media articles: Mayer (2017, *Huffington Post*), Manjoo (2017, *New York Times*), and *The Guardian*, and Tsakiridis (2021, *BR24*).

<sup>4.</sup> In his account of the political far right, Mudde (2019), for example, concludes that it is unclear whether grassroots efforts such as protests are successful in reducing support for right-wing populists.

<sup>5.</sup> The AfD satisfies several of the criteria the political science literature has developed to classify parties as "rightwing populist" (Golder, 2016; Mudde, 2004; 2019; Häusler, 2018): first, the AfD takes typical right-wing stances on immigration, security, and foreign policy. Second, the AfD frequently employs the stylized antagonisms of the "the true people" vs. "the corrupt elite", a key characteristic of populists. Other studies referring to the AfD as a rightwing populist party include, for example, Cantoni, Hagemeister and Westcott (2020). See Häusler (2018) for a detailed description of the rise of the AfD.

identity traits between the organization and its audience.

We conducted these experiments in collaboration with the organization "*Kleiner Fünf*" (K5), which is part of a broader grassroots movement contending against right-wing populism in Germany. K5 tries to reduce the AfD's vote share and, simultaneously, to increase turnout of non-AfD partisans by the means of distributing political advertisements on Facebook directly placed on users' feeds (hereafter called campaign ads). We embedded a pre-registered field experiment in K5's Facebook campaign during the run-up to the 2019 state elections in Brandenburg, Saxony, and Thuringia, for which polls predicted that the AfD could emerge as the strongest political force.

Our field experiment leverages the detailed geographical targeting options for Facebook advertisements to distribute K5's campaign ads only to a random subset of postal districts in Brandenburg, Saxony, and Thuringia. We first stratified postal districts into groups of four, based on predetermined characteristics, and then assigned exactly half of postal districts in each stratum to the treatment group and the remainder to the control group. While Facebook users in treated postal districts were exposed to K5's campaign ads, no such ads were disseminated in control postal districts. Campaign ads consisted of short videos, illustrations, and texts addressing various aspects of the AfD's political agenda. Hence, by comparing election outcomes between treatment and control postal districts, we can assess the causal impact of K5's Facebook campaign on electoral support for the AfD and turnout.

We find that K5's Facebook campaign did not meaningfully affect election outcomes: contrary to K5's aims, we estimate that the AfD's vote share was 0.05 percentage points *higher* and turnout was 0.26 percentage points *lower* in postal districts exposed to K5's Facebook campaign. Our estimates are robust to the inclusion of stratum fixed effects and computing treatment effects using differences in means. Standard errors are of the same magnitude as point estimates and Fisher exact p-values are virtually identical to p-values derived from cluster-robust standard errors, suggesting that our estimates are fairly precise. To assess the magnitude of treatment effects, we follow DellaVigna and Gentzkow (2010) and compute persuasion rates of 0.74 to 2.14 percent for AfD voting and turnout, respectively. This puts K5's campaign at the lower end of the distribution of persuasion rates observed in similar contexts (e.g. DellaVigna and Gentzkow, 2010). In combination with the fact that our experiment was designed to detect effect sizes starting at about 3 percent of a standard deviation 80 percent of the time, our estimates are thus more likely to reflect "true" zero effects than insufficient statistical power.

We further explore whether these average treatment effects hide systematic heterogeneities: ex ante, we expected stronger treatment effects in areas with a large pool of citizens at the margin of voting at all and of voting for the AfD in particular. To assess this hypothesis, we compare treatment effects on AfD voting between postal districts with a strong history of AfD voting and high turnout and those with low AfD support and turnout. Yet, regardless of the outcome considered, we find no statistically significant treatment effects for this particular set of postal districts either.

Using a complementary online survey experiment conducted with a sample of around 1,700

voting-age individuals from the same three states, we explore potential explanations for the absence of significant treatment effects. This experiment yields three sets of results: first, by comparing the share of survey participants who had seen K5's campaign ads before commencing with the survey, we document that the effective outreach of K5's campaign on Facebook was insufficient to induce changes in aggregate voting behavior. This finding is most likely the result of K5's main donor withdrawing its funding right before the launch of the campaign, resulting in a campaign budget one order of magnitude smaller than expected.

Second, by exposing a random subset of participants to K5's campaign ads during our survey experiment, we find that individual-level treatment effects on attitudes and self-reported voting behavior only weakly point toward reduced support for right-wing populism. Our estimates are, at best, modest in size, short-lived, and most importantly, insignificant most of the time. We further document the absence of significant treatment effects on two revealed preference outcomes (donations and intended signatures of a petition), implying that K5's campaign ads were not able to meaningfully shape individual-level outcomes.

Third, we test whether highlighting identity traits that K5 and its audience share boosts the impact of K5's campaign ads. In investigating this strategy we follow a recent strand of the literature arguing that populists' frequent usage of the antagonism between "the true people" and "the elites" is key to understanding their success.<sup>6</sup> In this stylized view of the world, grassroots organizations such as K5, with their many college-educated supporters from urban centers, are part of "the elites" and as such, their identities overlap only little with a considerable fraction of AfD supporters.<sup>7</sup> This raises the question whether K5's campaign ads exhibit stronger effects if shared identity traits are highlighted. In our online survey experiment, we thus varied participants' perceptions of K5's (regional) identity by informing half of participants that K5 is based in Berlin and the remainder that K5 has many supporters in the participants' state of residence. We find that this additional treatment does not boost the impact of K5's campaign ads on attitudes and (self-reported) behavior. In sum, our individual-level results suggest that – even in a scenario where K5 generated sufficient outreach on Facebook – its campaign ads would most likely not have been able to significantly affect aggregate election outcomes, irrespective of whether shared identity traits are highlighted or not.

Our study relates to several research agendas in economics and political science: first, our paper adds a new perspective to the burgeoning literature on the rise of (right-wing) populism. A prominent view in this literature is that growing economic insecurity resulting from the demise of traditional manufacturing and the threats posed by increasing globalization and immigration together account for a significant portion of the rise of right-wing populism.<sup>8</sup> Other scholars instead highlight the role of cultural factors: Inglehart and Norris (2016) and Margalit (2019), for

<sup>6.</sup> For variants of this argument please see, e.g., Golder (2016), Mudde (2019) and Müller (2017).

<sup>7.</sup> Decker (2016) and 2020 and Hambauer and Mays (2018) provide detailed accounts of which segments of society support the AfD.

<sup>8.</sup> Scholars advocating this view include Anelli, Colantone and Stanig (2019), Autor et al. (2020), Halla, Wagner and Zweimüller (2017) and Rodrik (2021).

example, argue that the recent populist successes can be best understood as a backlash against progressive cultural change. In our study, we focus on the flip-side of this development by asking how civil society responds to the rise of right-wing populism. In particular, we observe an increasing number of grassroots efforts to contend against right-wing populism, both in the streets and online.<sup>9</sup> Yet, what remains unclear is whether these grassroots efforts are successful in reducing support for right-wing populism. We provide new field experimental evidence on this question by studying one such grassroots campaign, which leverages Facebook ads to limit electoral support for Germany's main outlet of right-wing populism, the AfD. As such, our results also inform a growing body of literature examining the impact of the arrival of social media on politics more generally (Bond et al., 2012; Bursztyn et al., 2019; Zhuravskaya, Petrova and Enikolopov, 2020).

Second, our study contributes to the long-standing debate on the effectiveness of political advertisements in shaping election outcomes (DellaVigna and Gentzkow, 2010; Gentzkow, 2006; Gerber, Karlan and Bergan, 2009; Pons, 2018; Spenkuch and Toniatti, 2018). The closest to our own paper is Hager (2019), who examines a large national field experiment in Europe and shows that online ads can indeed have an impact on aggregate election results. Our own results, however, are more in line with a recent review by Kalla and Broockman (2018), who conclude that, on average, advertising does not affect candidate choice in general elections in the US. Beyond adding another set of estimates, we extend this literature by studying a different type of political interest group: grassroots organizations. While we find no evidence that the particular campaign we study was able to shape election outcomes, other campaigns may generate larger effects.

The remainder of this paper is organized as follows: in the next section, we discuss the design and results from our field experiment on Facebook. Then, in Section III, we describe the design and summarize the results from the complementary online survey experiment, which we employ to explain our findings from the field experiment. Section IV concludes this paper.

## **II** Field Experiment

## **II.A** Context and timeline

We conducted a pre-registered field experiment on Facebook during the run-up to the 2019 state elections in Brandenburg, Saxony, and Thuringia.<sup>10</sup> The experiment was split into two waves: the first wave ran in Brandenburg and Saxony in the last week of August until the state elections on September 1, 2019; the second wave took place in Thuringia in the week leading up to the elections on October 27, 2019.

<sup>9.</sup> In 2018, an estimated 250,000 people protested against the far right in Berlin and between 3 and 5 million participated in the Women's Marches against Donald Trump across the United States in 2017 which followed a viral campaign on Facebook (Mudde, 2019; Mayer, 2017).

<sup>10.</sup> We pre-specified all features of our experimental design in our pre-analysis plan, which we stored at the AEA RCT registry under RCT ID AEARCTR-0004622 before the experiment commenced. The Ethics Committee of the Department of Economics at LMU Munich approved the experimental design outlined in this section, protocol 2019-13.

To carry out this experiment, we partnered with Kleiner Fünf (K5), which is part of a larger network of grassroots organizations contending against right-wing populism in Germany.<sup>11</sup> K5 is a civil-society organization and as such, is predominantly financed by donations. K5's active supporters number in the hundreds; most of them are students and young professionals living in urban centers throughout Germany.<sup>12</sup> K5's main objective is to limit electoral support for Germany's most successful right-wing populist party, the Alternative for Germany (Alternative für Deutschland, AfD). While in its early years the AfD predominantly pursued a fiscally conservative agenda centering around the European currency crisis (2012–2014), the party has increasingly adopted a national-conservative, anti-immigrant, and at times even xenophobic platform starting in 2015 (Cantoni, Hagemeister and Westcott, 2020; Häusler, 2018). As such, the AfD's platform is similar to right-wing populist parties in other European countries including the UK, France, or the Netherlands (Schellenberg, 2018). Following the spike in immigration from non-European countries in 2015 and 2016, the AfD enjoyed several consecutive electoral successes both at the state and the national level (Häusler, 2018): the most significant of which was when the AfD emerged as the third strongest force in parliament in the 2017 federal elections. The AfD was particularly successful in the eastern states, including Brandenburg, Saxony, and Thuringia where it obtained more than 20 percent of the vote (Bundeswahlleiter, 2017). The 2019 state elections in these three states were thus of considerable importance for K5, especially because several polls even predicted that the AfD could emerge as the strongest force in at least two out of the three newly elected state parliaments.<sup>13</sup> Against this background, K5 decided to evaluate the effectiveness of its campaign by the means of a randomized experiment.

K5 estimated that its budget would be sufficient to distribute its campaign ads to a significant share of Facebook users in these states at a considerable frequency. Yet, only days before the campaign was scheduled to go live in Brandenburg and Saxony, K5's main donor for this particular campaign withdrew its funds, resulting in a fall in the campaign budget by one order of magnitude. Despite this, K5 decided against limiting its campaign to certain areas in either of the three states, and instead uniformly decreased the frequency at which its ads were displayed to Facebook users in the areas selected for the campaign.

<sup>11.</sup> Other organizations that are part of this (informal) network include, for example, Amadeu Antonio Stiftung, Aufstehen gegen Rassismus, and Offene Gesellschaft.

<sup>12.</sup> We conducted an additional survey among members of K5 to collect data on members' socioeconomic background and their political preferences. Please see K5's website to learn more about the organization: https://bit.ly/3knIRzo (last accessed August 24, 2021).

<sup>13.</sup> Wikipedia lists the predictions by a wide array of polls for each of the three state elections: Brandenburg (https://bit.ly/3C32PqE, last accessed September 10, 2021), Saxony (https://de.wikipedia.org/wiki/Landtagswahl\_ in\_Sachsen\_2019, last accessed September 10, 2021), and Thuringia (https://bit.ly/3E72XHl, last accessed September 10, 2021).

## **II.B** Experimental design

#### II.B.1 Treatment

K5's campaign for the 2019 state elections was designed to reduce electoral support for the AfD and, simultaneously, to increase turnout of non-AfD partisans. To dissuade citizens from casting their votes for the AfD, K5 developed campaign ads centered around the idea of what would happen if the AfD managed to successfully implement its preferred policies:<sup>14</sup> (i) impose tighter restrictions on migration; (ii) implement policies fostering national identity; and (iii) roll back climate change mitigation policies. For example, to address the AfD's goal of reducing efforts to mitigate climate change, K5 listed the adverse consequences of global warming for that particular region, which would include a marked increase in the frequency of droughts and floods.<sup>15</sup> K5's campaign ads used similar projections to draw attention to the potential consequences of the AfD entering the government in the domains of migration and national identity. To increase turnout, K5's campaign tried to leverage social multipliers – that is, to specifically target non-AfD partisans who, they suspected, would be willing to motivate their peers to vote in the election.<sup>16</sup>

#### **II.B.2** Sample and data

Postal districts constitute both the unit of observation and randomization in our experiment. We chose postal districts because they constituted the lowest geographical level to which Facebook advertisements could be targeted at the time of the experiment. We employed 760 postal districts from Brandenburg, Saxony, and Thuringia in our experiment.<sup>17</sup> Their locations, alongside their treatment status, are shown in Figure 1, which documents that the postal districts are evenly spaced throughout the three states, ensuring that the estimated treatment effects are not driven by regional peculiarities.

For each postal district, we collected data on the 2017 federal elections ("*Bundestagswahlen*") and the 2019 state elections ("*Landtagswahlen*") from the respective election authorities in charge.<sup>18</sup> This includes the total number of eligible voters, the number of valid votes, and the total number of valid votes for each party. While we use results from the 2017 federal elections to stratify our sample before conducting the actual randomization, we employ the results from the 2019 state

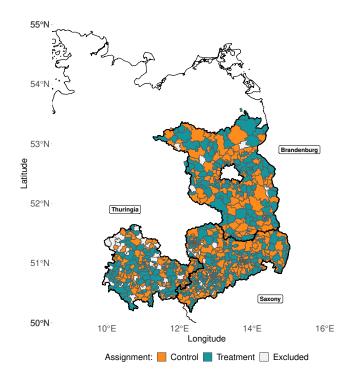
<sup>14.</sup> The following three links forward to the AfD's manifestos for the 2019 state elections: Brandenburg ( (https://bit.ly/3xYt3rD, last accessed August 20, 2021), Saxony (https://bit.ly/3syLmTk, last accessed August 20, 2021), and Thuringia (https://bit.ly/2UzDzYX, last accessed August 20, 2021).

<sup>15.</sup> A collection of K5's campaign ads disseminated during this particular campaign can be found here: https://bit. ly/3AVCJVH (last accessed August 20, 2021).

<sup>16.</sup> For more details on K5's strategy to increase turnout, please see K5's campaign website: https://bit.ly/2WeGgQe (last accessed August 20, 2021).

<sup>17.</sup> In total, the three states contain 815 postal districts. However, we had to drop postal districts not fully contained in either of the three states, plus a few more due to our randomization strategy which required that the total number of postal districts must be divisible by four.

<sup>18.</sup> We collected the official municipality-level results for the 2017 federal elections from Regionalstatistik (2017) and for the 2019 state elections from the Landeswahlleiter für Brandenburg (2019), Landeswahlleiter des Freistaates Sachsen (2019) and Thüringer Landeswahlleiter (2019).



**Figure 1: Spatial distribution of treatment and control postal districts** *Notes: Notes:* Location of all 760 postal districts in our sample, alongside their treatment status, reported. Facebook users living in treatment districts were exposed to K5's campaign ads, while users in control districts were not.

elections to construct our main dependent variables of interest: (i) the AfD's vote share and (ii) turnout.<sup>19</sup> We combined election data with additional postal district characteristics (e.g. area or population) from an online service provider.<sup>20</sup>

German election authorities do not publish election results at the postal district level. Instead, results are reported at the municipality or precinct level, which do not, however, necessarily map on postal districts. Outside of larger, densely populated cities, postal districts can cover several adjacent municipalities. Yet, under the assumption that voters are homogeneously distributed across these municipalities, we can aggregate election results to the postal district level by overlaying the geospatial vectors of municipalities with those of the postal districts. For each postal code *i* and each municipality *j*, we calculated the share of the area of *i* that is covered by *j*. We use the resulting  $I \times J$  matrix to aggregate data to the postal district level.<sup>21</sup> Municipalities with above 50,000 inhabitants required a different approach as they contain several adjacent postal districts. Thus, we employed data on the electoral precinct level to obtain election results on the postal district level. To this end, we first matched electoral precincts to postal districts using the street address of the precincts' polling stations. Second, we apportioned precinct-level results using the number of eligible voters and then aggregated the results to the postal district level.

The summary statistics for our sample of postal districts are presented in Table 1. The average

<sup>19.</sup> To construct these statistics, we focus on voters' list vote "Zweitstimme" which governs the distribution of parlia-

Statistic	Mean	St. Dev.	Min	Max	Ν
ZIP code characteristics					
Area (in sqkm)	79.11	96.39	1.65	891.89	760
Population (x 1000)	10.91	8.43	0.52	44.35	760
In Brandenburg	0.28	0.45	0.00	1.00	760
In Saxony	0.48	0.50	0.00	1.00	760
In Thuringia	0.25	0.43	0.00	11.00	760
Results previous election (2017 f	ederal ele	ections)			
Number of valid votes (x 1000)	5.07	4.75	0.19	33.90	760
Turnout (in %)	64.65	7.10	46.49	84.50	760
CDU vote share (in %)	27.67	4.15	13.64	49.40	760
AfD vote share (in %)	26.44	6.47	9.09	44.46	760
SPD vote share (in %)	12.76	3.77	5.81	24.55	760
GRUENE vote share (in %)	3.70	2.40	0.98	18.76	760
FDP vote share (in %)	7.48	1.56	3.71	13.14	760
LINKE vote share (in %)	15.48	3.40	5.20	32.03	760

Table 1: Summary statistics on postal districts

*Notes:* Election results on the postal district level were imputed either from the municipality level (municipalities with less than 50,000 inhabitants) or the precinct level (municipalities with more than 50,000 inhabitants).

postal district in our sample exhibits a strong history of AfD voting: in the 2017 federal elections, the AfD obtained, on average, 26.4 percent of the vote in Brandenburg, Saxony, and Thuringia, which is considerably higher than the national average of 12.6 percent (Bundeswahlleiter, 2017). In Saxony, the AfD even emerged as the strongest force in 2017. When comparing the results from our postal district aggregation to the official state election statistics, we find that the resulting vote share of the AfD is only 0.1 percentage points shy of the party's official result across all three states, implying that the aggregation method performed well. More generally, our sample is suitably representative of the full set of postal districts in terms of election results, area, and population including the distribution of districts across states.<sup>22</sup>

#### **II.B.3** Randomization

Our design randomly assigned each of the 760 postal districts either to the treatment or the control group. Following Athey and Imbens (2017), we stratified postal districts into groups of four based on predetermined characteristics, which has three main advantages over a non-stratified design: first, this stratified design limits the scope for differences in predetermined characteristics between the treatment and control group, which is especially relevant in our setting where postal

mentary seats to parties and thus, which parties form the state government.

<sup>20.</sup> We obtained this data from Suche-Postleitzahl.org (https://bit.ly/3kigQcK, last accessed August 24, 2021).

<sup>21.</sup> This approach was previously used by Hager (2019).

<sup>22.</sup> The average postal district in our sample covers an area of 79 square kilometers (ca. 30 square miles) and has a population of 11,000 inhabitants. Roughly half of postal districts in our sample are in Saxony, reflecting the fact that Saxony has about the same number of inhabitants as Brandenburg and Thuringia combined.

districts differ markedly in terms of population size and past election outcomes. Second, ex ante stratification allows us to incorporate covariates in the analysis, while still being able to employ simple differences in means as an alternative to conventional regression estimates.<sup>23</sup> Third, and most importantly, stratification boosts the statistical power of our design: our power calculations yield that our experiment would detect effect sizes of approximately 3 percent of a standard deviation in 80 percent of iterations, corresponding to approximately a 0.25-percentage point change in the AfD's vote share.

To conduct the stratification, we built pairs of postal districts, which minimize the bilateral differences in predetermined characteristics between postal districts using the optimal matching algorithm provided by the R package *nonbimatch*.<sup>24</sup> Then, we used the same algorithm to generate pairs of pairs - that is, we matched each pair of postal districts with the pair which was the most similar in terms of the average of the predetermined characteristics.<sup>25</sup> We used the vote share of the AfD and of the CDU ("Christian Democratic Union") in the 2017 federal elections, as well as population size, to build strata of four postal districts. We included the AfD's past vote share because previous election results exhibited substantial persistence across election cycles. Under the assumption that this relationship carried over to the 2019 elections, the AfD's vote share in the 2017 federal elections was likely to constitute a good predictor of the AfD's electoral performance in 2019.<sup>26</sup> We included the vote share of the CDU in the 2017 federal elections, because exit polls after previous elections have revealed that many former CDU voters switched to the AfD, and we expected similar dynamics for the 2019 elections. Finally, we also incorporated population size in our list of stratification variables, because the distribution of population size across postal districts is heavily skewed, with only a few very large postal districts. As a result, imbalance in population size between the treatment and control group may arise despite random assignment of postal districts. In the third and final step of our randomization procedure, we randomly assigned exactly two postal districts within each stratum of four postal districts to the treatment group, while the remainder was assigned to the control group.<sup>27</sup>

<sup>23.</sup> Athey and Imbens (2017) remind us that differences in means are generally preferable over regression analysis in terms of the accuracy of treatment effects and statistical inference when analyzing data drawn from randomized experiments. Specifically, Athey and Imbens (2017, p. 94) emphasize that if researchers use regressions to analyze randomized experiments, they may "end up with analyses that rely on a difficult-to-assess mix of randomization assumptions, modeling assumptions, and large sample approximations." Hence, both estimated treatment effects and inference results based on standard regression assumptions may be misleading. Therefore, we supplement our main regression estimates with simple differences in means and report Fisher exact p-values derived from permutation tests as an alternative approach to statistical inference.

<sup>24.</sup> For more information on the *nonbimatch* function and the *nbpMatching* package, please see the package vignette at https://bit.ly/3BsJFKu.

<sup>25.</sup> We chose this strategy as it performed slightly better in our power calculations than algorithms minimizing within-stratum differences for groups of four.

<sup>26.</sup> As we document in Table 9 in the Appendix VI, the AfD's vote share in the 2017 federal elections indeed constituted an important predictor of AfD voting in the 2019 state elections.

<sup>27.</sup> Assigning a pre-specified *number* of experimental units in each stratum to either the treatment or the control group ("*complete randomization*") is preferable over a procedure in which experimental units are assigned with a pre-specified *probability* to either of the two group for two reasons. First, complete randomization avoids imbalanced treatment-control shares which may weaken statistical power. Second, complete randomization does not require a re-weighting with the inverse probability weights when conducting statistical inference. For more information please see Athey

	Grou	Group means Test for equ			
	Control	Treatment	$\Delta$ (stand.)	p-value (4)	
	(1)	(2)	(3)		
ZIP code characteristics					
Area (in sqkm)	78.33	79.9	1.57	0.82	
Population (x 1000)	10.97	10.86	-0.11	0.86	
In Brandenburg	0.28	0.27	-0.01	0.75	
In Saxony	0.48	0.47	-0.01	0.83	
In Thuringia	0.24	0.26	0.02	0.56	
Results last election (2017 federa	l elections)				
Number of valid votes (x 1000)	5.11	5.03	-0.08	0.82	
Turnout (in %)	64.57	64.74	0.17	0.74	
CDU vote share (in %)	27.65	27.68	0.04	0.90	
AfD vote share (in %)	12.78	12.74	-0.05	0.87	
SPD vote share (in %)	3.72	3.69	-0.04	0.83	
GRUENE vote share (in %)	7.52	7.44	-0.08	0.49	
FDP vote share (in %)	15.46	15.50	0.04	0.88	
LINKE vote share (in %)	26.44	26.44	-0.01	0.99	
Test for joint significance					
joint organiteurice				1.00	

Table 2: Predetermined characteristics compared across experimental conditions

*Notes:* Means of each predetermined characteristic reported by treatment condition. Facebook users living in treatment postal districts were exposed to K5's campaign ads, while those living in control districts codes were not.  $\Delta$  captures the mean difference between the treatment and the control group, which we estimate using the following regression model: *characteristic<sub>i</sub>* =  $\alpha + \beta \cdot treat_i + \epsilon_i$ , where *treat<sub>i</sub>* is a dummy variable taking value 1 if postal district *i* was assigned to the treatment group, and 0 otherwise. To enhance comparability of estimates across characteristics, all estimated differences ( $\Delta$ ) are standardized using the mean and standard deviation in the control group. p-values testing for equal means derived from robust standard errors reported. Significance levels: \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

## **II.B.4** Sample balancing

In Table 2, we compare the means of thirteen predetermined characteristics between the treatment and control group. All pairwise comparisons yield no significant differences between postal districts in the treatment and control group, implying that our randomization was successful in balancing pre-determined characteristics. This finding thus minimizes the risk of wrongly attributing any potential differences in voting behavior detected for the 2019 state elections to K5's Facebook campaign instead of predetermined differences.<sup>28</sup>

#### **II.B.5** Implementation on Facebook

Approximately one week before each election, K5 started to disseminate its campaign ads in treatment postal districts via Facebook's business manager. To guarantee comparable treatment in-

and Imbens (2017) and the DeclareDesign.org blog post on randomization techniques (https://bit.ly/3xXFm7G, last accessed August 20, 2021).

<sup>28.</sup> In Table 2, we also report the p-value for a test of joint-significance of all predetermined characteristics that confirms this finding.

tensities across postal districts, the funds for the campaign were assigned in proportion to the population size of the given postal district. Considering that Hager (2019) points out that Facebook commonly reallocates funds between postal districts on the basis of users' engagement and other performance metrics, we follow Hager's (2019) strategy and generated 760 individual Facebook campaigns, each with an individual fixed budget which was proportional to the postal district population. Therefore, treatment intensities were uniform across treatment postal districts, alleviating potential concerns about effect heterogeneities arising from systematic differences in effective treatment intensities across postal districts.

## **II.C** Results

#### **II.C.1** Empirical strategy

To identify the causal effect of K5's Facebook campaign on election outcomes, we estimate the following regression model:

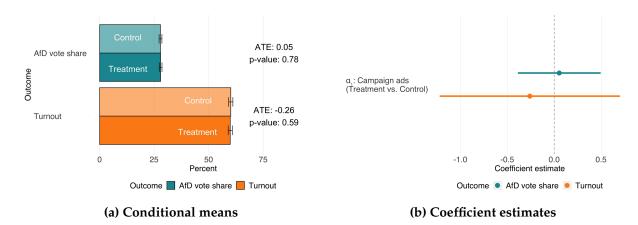
(1) 
$$y_{is} = \alpha_0 + \alpha_1 \cdot \text{Campaign ads}_i + \delta_s + \epsilon_{is}$$

where  $y_i$  is either the share of list votes ("Zweitstimmen") cast for the AfD or turnout in postal district *i* in stratum *s*; Campaign ads<sub>i</sub> is an indicator taking value 1 if a given postal district *i* in stratum *s* was exposed to K5's campaign ads on Facebook, and 0 otherwise; and  $\delta_s$  are stratum fixed effects capturing predetermined heterogeneity in terms of population size and voting behavior. We employ standard errors clustered at the postal district level throughout our analysis.<sup>29</sup> We complement our regression estimates with simple differences in means and Fisher exact p-values, reflecting recent advances in the analysis of data drawn from randomized experiments (Athey and Imbens, 2017). We obtain Fisher exact p-values by randomly re-assigning postal districts to placebo treatment groups for 5,000 times and calculating the share of "placebo treatment effects" that exceed the "true treatment effect" in (absolute) magnitude.

#### **II.C.2** Main results

Figure 2 summarizes our main findings from the field experiment: the left-hand panel reports the postal-district-level average treatment effect derived from comparing the average share of votes cast for the AfD and turnout between the treatment and control group – that is, between postal districts exposed to K5's campaign ads on Facebook and those unexposed. Contrary to K5's aims, we calculate that the AfD's vote share in treatment postal districts *exceeds* that in control districts

<sup>29.</sup> We observe our outcomes at the same level of aggregation at which randomization was conducted, so we do not face a standard clustering problem in our context. One may nevertheless prefer clustered standard errors in this context for two reasons. First, one may worry about spatial dependence. Second, we are using a subset of all postal districts, so some of the uncertainty in our estimates does not arise from the random assignment into experimental conditions (design-based uncertainty) but from the sampling process (Abadie et al., 2020). Thus, to be conservative, we report cluster-robust standard errors and complement these with Fisher exact p-values.



#### Figure 2: Treatment effects on aggregate election outcomes

*Notes:* Notes: Panel (a) plots the mean vote share of the AfD and the mean turnout in the 2019 state elections, in percent, for both treatment conditions, alongside the corresponding 95-percent confidence intervals. The average treatment effect (ATE) and Fisher exact p-values testing for the equality of means are also reported. Panel (b) depicts coefficient estimates derived from regressions with stratum fixed effects as laid out in Equation 1, where we employ the same outcomes. 95-percent confidence intervals derived from robust standard errors clustered at the postal district level reported.

by 0.05 percentage points (Fisher exact p-value = 0.78), whereas turnout in treatment districts is 0.26 percentage points *lower* (Fisher exact p-value = 0.59).<sup>30</sup>

Following Athey and Imbens (2017), we complement the postal-district-level average treatment effect with the cluster-average treatment effect to leverage the full potential of ex ante stratification, which we obtain by running Equation 1 with stratum fixed effects. We report our point estimates for  $\alpha_1$  alongside the cluster-robust 95-percent confidence intervals in Figure 2, right panel:<sup>31</sup> we obtain an estimate of 0.05 percentage points (S.E. = 0.20) when employing the AfD's vote share as the dependent variable and of -0.26 percentage points (S.E. = 0.47) when using turnout, which are both insignificant. The cluster-average treatment effects and the postaldistrict-level treatment effects thus virtually coincide. Cluster-robust standard errors are of the same magnitude as point estimates and are almost to identical Fisher p-values, which suggests that our estimates are fairly precise. We thus conclude that K5's Facebook campaign did not, on average, exhibit any significant impact on the AfD's vote share and turnout.

To further assess the magnitude of our estimates, we employ *persuasion rates* introduced by DellaVigna and Gentzkow (2010), which they define as follows:

(2) 
$$f = 100 \times \frac{y_T - y_C}{e_T - e_C} \times \frac{1}{1 - y_0}$$

where  $y_T$  and  $y_C$  correspond to the AfD's vote share and turnout in the treatment group and

<sup>30.</sup> We present the full distribution of placebo estimates and corresponding Fisher exact p-values in Figures 9, 10, and 11 in Appendix V.

<sup>31.</sup> We provide full regression results in Table 8 in Appendix VI.

control group, respectively;  $e_T$  captures the share of the population in the treatment group that saw K5's campaign ads, which we approximate using the number provided by Facebook – that is, around four percent;<sup>32</sup> we follow Hager (2019) and assume that the respective share in the control group ( $e_C$ ) is zero and that the AfD's vote share and turnout in the control group are a suitable proxy for  $y_0$ . Using our point estimates depicted in Table 8 in Appendix VI and abstracting from the unintended sign of the estimates, we calculate persuasion rates of 0.74 percent for AfD voting and of 2.14 percent for turnout. Compared to the distribution of persuasion rates observed in similar contexts (DellaVigna and Gentzkow, 2010; Hager, 2019; Pons, 2018), our estimates rank at the bottom end of the distribution. Even when employing the upper end of the respective 95percent confidence intervals, we find persuasion rates of 6.55 and 15.61 percent, implying that the impact of K5's campaign was, at best, moderate. Combined with the fact that our experiment was designed to detect effect sizes starting at about 3 percent of a standard deviation 80 percent of the time, this suggests that our findings reflect the absence of any meaningful treatment effects and are not the result of insufficient statistical power.

## **II.C.3** Heterogeneity

We now evaluate whether treatment effects are larger in postal districts where K5's campaign was more likely to reach certain demographics more susceptible to its ads. We expected K5's campaign to exhibit stronger effects in areas with a history of low voter turnout and strong AfD support, because this may coincide with a larger pool of individuals at the margin of either voting at all or of voting for the AfD in particular. We therefore test whether the impact of K5's Facebook campaign systematically varied by the AfD's vote share and turnout in the preceding 2017 federal elections.<sup>33</sup> To this end, we run the following regression model:

(3)

$$y_{is} = \alpha_0 + \alpha_1 \cdot \text{Campaign ads}_i + \alpha_2 \cdot (\text{Past Turnout} > \text{median})_i$$
  
+  $\alpha_3 \cdot (\text{Campaign ads} \times \text{Past Turnout} > \text{median})_i + \delta_s + \epsilon_{is}$ 

where  $y_i s$ , Campaign  $ads_i$ , and  $\delta_s$  are defined as in Equation 1; (Past Turnout > median)<sub>i</sub> is an indicator taking value 1 if postal district *i* exhibited above-median turnout in the 2017 federal elections, and 0 otherwise.<sup>34</sup>

In Table 3, Columns 1 and 2, we report treatment effect heterogeneities with respect to past turnout when employing the AfD's vote share in the 2019 elections as the dependent variable. We obtain an estimate of -0.26 (S.E. = 0.29) for our treatment indicator and 0.63 (S.E. = 0.43)

<sup>32.</sup> As we document in Section III.E, the share of the voting-age population in the treatment group that recalled K5's campaign ads a few days before the election is around 0.7 percent. Yet, the share in the control group was almost identical, suggesting that  $e_T - e_C$  was in reality probably much closer to zero than what Facebook's statistics suggest. To ensure that our estimated persuasion rates are nevertheless comparable to Hager (2019), we abstract from any spillovers to control districts and compute persuasion rates using the statistics provided by Facebook.

<sup>33.</sup> We pre-registered both of these heterogeneities in our pre-analysis plan.

<sup>34.</sup> We replace (Past Turnout > median)<sub>*i*</sub> for (Past AfD > median)<sub>*i*</sub> in Equation 3 when assessing treatment effect heterogeneities with respect to past AfD voting.

for the interaction effect (Column 2). Taken at face value, the coefficients would thus suggest that K5's campaign reduced the AfD's vote share only in districts with a history of low turnout, while it increased AfD voting in high-turnout districts. However, neither the treatment indicator nor the interaction effect surpass conventional levels of statistical significance. The same pattern emerges when employing turnout in the 2019 elections as the dependent variable (Columns 3 and 4). Again, we obtain a negative estimate for our treatment indicator (-0.84; S.E. = 0.70) and a positive interaction effect (0.99; S.E. = 0.97) which are, however, both insignificant (Column 4). When turning to heterogeneities with respect to past AfD voting, the reverse pattern emerges: we obtain positive estimates for our treatment indicator and negative interaction effects (Columns 2 and 4 in Table 4). If we abstracted from statistical significance, these estimates would suggest that K5's campaign had a tentative, negative effect on turnout but not on AfD voting in districts with a history of strong support for the AfD. However, neither of the coefficients of interest is statistically significant.

Taken together, our results imply that K5's Facebook campaign during the run-up to the 2019 state elections in Brandenburg, Saxony, and Thuringia did not exhibit a significant impact on AfD voting and turnout, not even in areas which we, ex ante, expected to be more susceptible to K5's campaign. We devote the next section to exploring potential explanations for the absence of significant treatment effects.

	AfD's vote share		Turn	out	
	(1)	(2)	(3)	(4)	
Campaign ads	$0.05 \\ (0.20)$	$-0.26 \\ (0.29)$	$-0.35 \\ (0.44)$	-0.84 (0.70)	
Past turnout > median	$\begin{array}{c} 0.31 \ (0.28) \end{array}$	$-0.01 \\ (0.35)$	$5.41^{***}$ (0.61)	$\begin{array}{c} 4.91^{***} \\ (0.76) \end{array}$	
Campaign ads x Past turnout > median		0.63 (0.43)		0.99 (0.97)	
Stratum FE	Yes	Yes	Yes	Yes	
Mean dep. var., 'Control'	27.92	27.92	60.18	60.18	
SD dep. var., 'Control'	6.47	6.47	9.4	9.4	
Observations R <sup>2</sup>	760 0.86	760 0.86	760 0.68	760 0.68	

Table 3: Heterogeneities with respect to turnout in the 2017 federal elections

*Notes:* Results are derived from regressions as laid out in Equation 3. We employ two different dependent variables: (Columns 1 and 2) the AfD's vote share; and (Columns 3 and 4) Turnout. Robust standard errors clustered at the postal district level reported in parentheses. Significance levels: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

		D's share	Turr	nout
	(1)	(2)	(3)	(4)
Campaign ads	$0.05 \\ (0.20)$	0.13 (0.28)	$-0.26 \\ (0.47)$	0.07 (0.66)
Past AfD vote share > median	$\begin{array}{rrr} 1.38^{**} & 1.46^{**} \\ (0.61) & (0.64) \end{array}$		$0.81 \\ (1.57)$	$1.12 \\ (1.61)$
Campaign ads x Past AfD vote share > median		-0.17 (0.40)		-0.67 (0.98)
Stratum FE	Yes	Yes	Yes	Yes
Mean dep. var., 'Control'	27.92	27.92	60.18	60.18
SD dep. var., 'Control'	6.47	6.47	9.4	9.4
Observations R <sup>2</sup>	760 0.86	760 0.86	760 0.63	760 0.63

## Table 4: Heterogeneities with respect to the AfD's vote share in the 2017 federal elections

*Notes:* Results are derived from regressions as laid out in Equation 3. We employ two different dependent variables: (Columns 1 and 2) the AfD's vote share; and (Columns 3 and 4) Turnout. Robust standard errors clustered at the postal district level reported in parentheses. Significance levels: \* p < 0.10, \*\* p < 0.05, \* \*\* p < 0.01.

## **III** Online Survey Experiment

## III.A Context and timeline

We conducted a complementary, anonymous online survey experiment in parallel to the field experiment.<sup>35</sup> The goal of this additional experiment is two-fold: first, to explore explanations for the absence of significant treatment effects of K5's Facebook campaign on aggregate election outcomes; and second, to test whether K5's campaign ads could have been successful in shaping election outcomes if K5 highlighted that it shares certain identity traits with the campaign audience. The survey experiment comprised two waves: a pre-election survey conducted in late August (Brandenburg and Saxony) and in mid-October (Thuringia) and a post-election survey fielded about two weeks after each election. Eligibility for the post-election survey was limited to individuals who completed the pre-election survey. All experimental manipulations took place in the pre-election survey.

## **III.B** Setting and sample

We recruited a sample of 1,728 voting-age individuals through *respondi*, an online panel provider. Participation in the experiment was subject to living in either Brandenburg, Saxony, or Thuringia, explicitly consenting to answering questions on political views, and passing a simple attention check. We present summary statistics of participants' characteristics in Table 5: 87 percent of participants reported that they had voted in the 2017 federal elections and 17 percent replied that they had cast their vote for the AfD. These figures are broadly consistent with official statistics and are also fairly similar to those elicited by the *German General Social Survey*, "*ALLBUS*" (GESIS – Leibniz-Institut für Sozialwissenschaften, 2019).<sup>36</sup> The remaining participant characteristics are also suitably representative of the population of Brandenburg, Saxony, and Thuringia.<sup>37</sup>

## **III.C** Survey design

**Pre-treatment module** After signing an online consent form, participants answered a set of baseline demographic questions (age, gender, state of residence, etc.), followed by a series of survey items eliciting participants' political attitudes and beliefs in the domains of migration, iden-

<sup>35.</sup> We pre-specified all features of this additional experiment in our pre-analysis plan, which we – together with the full survey instrument – stored at the AEA RCT registry under RCT ID AEARCTR-0004623. The Ethics Committee of the Department of Economics at LMU Munich approved the experimental design outlined in this section, protocol 2019-14. We employed the open-source software oTree (Chen, Schonger and Wickens, 2016) for the technical implementation of our survey experiment.

<sup>36.</sup> To compare self-reported to official statistics, we employ data published by the election authorities ("Landeswahlleiter") discussed in Section II. We present summary statistics obtained from the 2018 ALLBUS wave, limited to participants from Brandenburg, Saxony, and Thuringia, in Table 10 in Appendix VI.

<sup>37.</sup> Approximately half of our sample is female; 3 percent report being currently unemployed; mean age and monthly net income per person are 44.7 years and €1,060, respectively, compared to averages of 54.34 years and €1,470 in 2018 (GESIS – Leibniz-Institut für Sozialwissenschaften, 2019).

Statistic	Mean	St. Dev.	Min	Max	Ν
Demographics					
Age	44.69	15.03	24.00	80.00	1,728
Monthly net income (x 1000)	1.06	0.49	0.46	1.83	1,728
Female	0.56	0.50	0.00	1.00	1,728
Unemployed	0.03	0.17	0.00	1.00	1,728
Lives in Brandenburg	0.25	0.43	0.00	1.00	1,728
Lives in Saxony	0.53	0.50	0.00	1.00	1,728
Lives in Thuringia	0.21	0.41	0.00	1.00	1,728
Treatment Status Field					
Exposed to Facebook campaign	0.51	0.50	0.00	1.00	1,728
Political Attitudes					
Political Self Assessment	0.00	1.00	-2.65	2.31	1,728
Trust in Institutions	0.00	1.00	-2.14	2.61	1,728
Attitudes towards migration	0.00	1.00	-2.23	3.30	1,728
Attitudes towards climate change	0.00	1.00	-2.88	1.36	1,728
Attitudes towards 'identity'	0.00	1.00	-3.11	2.98	1,728
Attitudes towards political system	0.00	1.00	-3.27	2.80	1,728
Moral values					
Morality Score	0.00	1.00	-3.52	4.05	1,728
Past voting behavior					
Voted in 2014	0.74	0.44	0.00	1.00	1,728
Voted AfD in 2014	0.08	0.28	0.00	1.00	1,728
Voted in 2017	0.87	0.33	0.00	1.00	1,728
Voted AfD in 2017	0.17	0.37	0.00	1.00	1,728

#### Table 5: Survey participants' characteristics

*Notes:* Summary statistics of survey participants' characteristics. *Political Attitudes* constitute equally weighted indices computed as laid out in Kling, Liebman and Katz (2007). The *Morality Score* is computed as laid out in Enke (2020) and subsequently standardized.

tity, and climate change. For instance, we asked participants whether they think that Germany benefits from immigration, whether they preferred stricter policies to mitigate climate change, or whether the government should enact policies strengthening national identity.<sup>38</sup> We further measured participants' trust in political institutions and in the media, collected measures of participants' political interest and knowledge, and elicited participants' views on morality using the Moral Foundations Survey questionnaire introduced to the economics literature by Enke (2020).<sup>39</sup> In the next section of the survey, we measured the effective outreach of K5's campaign on Facebook to obtain a measure of the first stage of our field experiment. To this end, we presented participants with a selection of campaign ads by K5, political parties, and other grassroots organizations that were also disseminated during the run up to the 2019 state elections. Subsequently, we asked them to indicate which of the campaign ads they had seen. We also included campaign ads by fictive organizations to detect flawed answers. Before participants entered the treatment stage of our experiment, we administered a short attention check to ensure that they were paying sufficient attention to our instructions.

<sup>38.</sup> We provide the full survey instrument, including the exact wording of our experimental instructions. in Appendix VIII.

<sup>39.</sup> We included questions from the Moral Foundations Survey, since Enke (2020) has shown, in the US context, that citizens' views on morality predicted their tendency to vote for Donald Trump.

**Campaign ads treatment** Next, we randomly assigned participants to one of two main experimental conditions: participants in the treatment condition were exposed to the same campaign ads K5 placed on Facebook users' timeline addressing AfD's stances on migration, identity, and climate change. We focused on ads aimed at reducing AfD voting, because a primary, initial objective of this survey was to assess whether K5's ads work via persuasion or mobilization.<sup>40</sup> Participants in the control group were not exposed to any of K5's campaign ads. Instead, to limit experimenter demand effects arising from different perceptions of the social desirability of expressing support for the AfD, participants in the control group received a placebo treatment highlighting the work of grassroots organizations contending against right-wing populism in general. We employed a series of survey items eliciting participants' attitudes in the domains of migration, identity, and climate change to evaluate whether the *campaign ads treatment* induced shifts in the latter that could plausibly manifest in changes in voting behavior. We refer to this as the first-stage effect of the *campaign ads treatment*.

Identity treatment Among participants in the treatment group, we further cross-randomized whether participants learned that K5 is based in Berlin or whether K5 has many supporters from participants' state of residence to obtain variation in participants' perceptions of K5's (regional) identity.<sup>41</sup> This additional layer allows us to address the question of whether grassroots organizations' social media campaigns induce stronger individual-level responses if the organization shares certain identity traits with its audience. We employed a series of (incentivized) survey items to test for the presence of a sufficiently strong first-stage effect – that is, whether informing participants about K5's support in their state of residence induced changes in participants' perceptions of K5, and in particular, to what extent participants identified with K5. To this end, we first asked participants to state their beliefs about K5's political orientation on a standard left/right (liberal/conservative) scale, for which we offered participants additional remuneration.<sup>42</sup> Given the risk of contaminating participants' beliefs in the control group by asking them about K5, we employed a similarly phrased survey item to elicit their best guess about the political orientation of grassroots organizations campaigning against right-wing populism in general. Subsequently, we elicited the extent to which participants identify with K5 and its goals, measured their perceptions of K5's competence, and asked them what they think other survey takers replied to these questions.

**Outcomes** We collected two sets of main outcomes: (i) self-reported voting behavior in the upcoming 2019 state elections and (ii) revealed preference measures of opposition to right-wing populism. We elicited two such outcomes: first, we informed participants that we would be giving away  $\notin$ 10 vouchers and then asked them, in case they won, how much of the  $\notin$ 10 they would

<sup>40.</sup> We provide examples of the specific campaign ads used in the survey experiment in Appendix VII.

<sup>41.</sup> We administered an additional survey among members of K5 to obtain factually true information about the strength of local support for K5 in each of the three states.

<sup>42.</sup> Participants could win up to €100 in this task.

be willing to donate to an organization contending against right-wing populism.<sup>43</sup> Second, we provided participants the opportunity to sign a real petition demanding greater political representation for Muslims in Germany.<sup>44</sup> For privacy reasons, we are limited to observing whether participants clicked on the link forwarding them to the petition. Arguably, clicking the petition link may nevertheless constitute a more credible signal of opposition to right-wing populism than self-reported attitudes or behavior.

**Post-election survey** About two weeks after the elections, we administered a post-election survey re-eliciting a subset of outcomes from the pre-election survey. We asked participants whether they voted and who they voted for, as well as eliciting their attitudes in the domains of migration, identity, and climate change. In addition, we collected a set of more detailed demographic characteristics and elicited participants' economic preferences using the *Global Preferences Survey* developed by Falk et al. (2018).<sup>45</sup>

## **III.D** Experimental assignment and sample balancing

In total, our design features three experimental conditions: the *Control* condition which received a placebo instead of K5's campaign ads; the *Campaign ads* – *Berlin* condition, in which participants were exposed to K5's campaign ads and learned that K5 is based in Berlin; and finally, the *Campaign ads* – *Local* condition, in which participants saw K5's campaign ads and learned that K5 has many supporters from their state of residence. We assigned participants to each of the three groups with equal probabilities. We report the resulting assignment of participants to conditions in Table 6.<sup>46</sup>

Condition	Treatments	Brandenburg	Saxony	Thuringia	Total
(1) Control	Campaign ads = 0 Identity = 0	140	285	131	556
(2) Campaign ads – Berlin	Campaign ads = 1 Identity = 0	150	329	126	605
(3) Campaign ads – Local	Campaign ads = 1 Identity = 1	145	310	112	567

Table 6: Number of participants assigned to each experimental condition

To assess whether participants' pre-treatment characteristics are balanced across experimental conditions, we conducted pairwise comparisons of 22 predetermined characteristics across all

<sup>43.</sup> We offered participants the opportunity to donate to the German civil society organization *Initiative Offene Gesellschaft e.V.*.

<sup>44.</sup> We used an already existing petition and did not create the petition for the purpose of this experiment. The petition is archived at https://bit.ly/3mEeCHu (last accessed August 27, 2021).

<sup>45.</sup> We provide the full survey instrument employed in the post-election survey in Appendix IX.

<sup>46.</sup> We observed deviations in the share of participants assigned to either condition from the target share of one third is an artifact of the "on the fly" randomization we used.

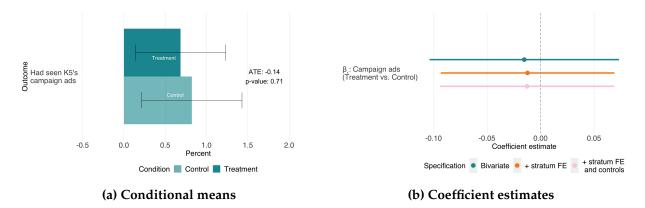
three experimental conditions using bivariate regressions.<sup>47</sup> In Table 7, we report the differences in means between each of the experimental conditions alongside the corresponding p-values. Out of the 88 estimates reported in Table 7, nine are significant at the ten-percent level. While predetermined characteristics seem to be suitably balanced in general, we nevertheless present results where we employ the full set of participant characteristics listed in Table 5 as controls to further limit the risk of wrongly attributing potential treatment effects to pre-existing differences.

	Campaign vs. Control		Local	Local vs. Berlin Loca		6. Control	Berlin vs. Control		
	Δ (1)	p-value (2)	Δ	p-value	Δ	p-value	Δ (7)	p-value	N (9)
			(3)	(4)	(5)	(6)		(8)	
Attrition									
Completed 1st wave	0.02	0.26	0.01	0.11	$0.01^{*}$	0.09	0.00	0.91	1817
Started 2nd wave	0.04	0.11	-0.01	0.69	0.02	0.44	0.03	0.24	1817
Completed 2nd wave	0.65	0.40	0.00	0.91	0.03	0.18	0.04	0.14	1817
Demographics									
Age	0.05**	0.04	-0.64	0.47	0.32	0.72	0.96	0.28	1728
Monthly net income (x 1000)	-0.01	0.63	$0.05^{*}$	0.08	0.08***	0.01	0.03	0.33	1728
Female	-0.02**	0.02	0.00	0.94	-0.01	0.71	-0.01	0.65	1728
Unemployed	0.00	1.00	0.01	0.24	-0.02*	0.10	-0.03***	0.01	1728
Lives in Brandenburg	0.03	0.20	0.01	0.76	0.00	0.88	0.00	0.88	1728
Lives in Saxony	-0.03	0.13	0.00	0.92	0.03	0.25	0.03	0.29	1728
Lives in Thuringia	-0.02	0.53	-0.01	0.65	-0.04	0.12	-0.03	0.26	1728
Treatment status field									
Exposed to Facebook campaign	-0.09*	0.09	-0.03	0.38	-0.03	0.32	0.00	0.89	1728
Political attitudes									
Political Self Assessment	0.03	0.57	0.06	0.29	-0.06	0.36	-0.12**	0.05	1728
Trust in Institutions	0.00	0.97	0.00	0.99	0.03	0.62	0.03	0.62	1728
Attitudes towards migration	-0.05	0.36	-0.04	0.47	-0.02	0.68	0.02	0.74	1728
Attitudes towards climate change	-0.01	0.82	0.05	0.41	-0.02	0.69	-0.07	0.24	1728
Attitudes towards 'identity'	-0.04	0.49	0.05	0.40	0.01	0.83	-0.04	0.54	1728
Attitudes towards political system	-0.03	0.57	-0.09	0.13	-0.08	0.18	0.01	0.92	1728
Morality									
Morality Score	0.02	0.30	-0.02	0.76	-0.04	0.52	-0.02	0.72	1728
Past voting behavior									
Voted in 2014	0.01	0.34	0.01	0.63	0.03	0.25	0.02	0.50	1728
Voted AfD in 2014	0.02	0.20	0.02	0.34	0.02	0.20	0.01	0.73	1728
Voted in 2017	0.01	0.74	-0.02	0.19	0.01	0.63	0.03*	0.08	1728
Voted AfD in 2017	0.01	0.74	0.01	0.56	0.01	0.57	0.00	1.00	1728
Test for joint significance									
		0.27		0.14		0.34		0.09	

Table 7: Respondents' predetermined characteristics compared across conditions

Notes: Mean differences in participants' predetermined characteristics ( $\Delta$ ), alongside p-values testing for equal means, reported by experimental condition. We estimate  $\Delta$  using the following regression model: *characteristic*<sub>i</sub> =  $\alpha + \beta \cdot treat_i + \epsilon_i$  where  $treat_i$  is an indicator variable either corresponding to condition *Campaign ads - Berlin, Campaign ads - Local*, or both conditions simultaneously when comparing characteristics between the *Campaign ads* and the *Control condition* (Column 1). For each pairwise comparison between the *Campaign ads - Berlin, Campaign ads - Local*, and the *Control* condition we drop the remaining third condition from the sample. p-values testing for equal means are derived from robust standard errors. Significance levels: \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

47. To compare participants' predetermined characteristics across conditions, we run the following regression model: *characteristic*<sub>i</sub> =  $\alpha + \beta \cdot treat_i + \epsilon_i$  where *treat*<sub>i</sub> is an indicator variable either corresponding to condition *Campaign ads* - *Berlin, Campaign ads* - *Local,* or both conditions simultaneously when comparing characteristics between the treatment and control condition.



#### Figure 3: Treatment effects on Facebook penetration rates

*Notes:* Notes: Panel (a) plots the share of survey participants who reported that they had seen K5's campaign ads before, in percent, for both treatment conditions, alongside the corresponding 95-percent confidence intervals. The average treatment effect (ATE) and Fisher exact p-values testing for equal means are also reported. Panel (b) depicts coefficient estimates from regressions as laid out in Equation 4, where the employ the same outcome variable. We provide results from three types of specifications: (i) bivariate; (ii) with stratum fixed effects; and (iii) with stratum fixed effects plus the full set of participant controls listed in Table 5. 95-percent confidence intervals derived from robust standard errors clustered at the postal district level reported.

#### **III.E** Outreach on Facebook

We start exploring potential explanations for the absence of significant treatment effects on aggregate election outcomes by assessing whether K5's campaign generated sufficient outreach on Facebook. To this end, we compare the share of participants in our survey who reported that they had previously seen K5's campaign ads on Facebook outside of the survey between those living in treatment and control postal districts. This provides us with an estimate of the first stage of our field experiment, which captures the effective penetration of the population with K5's campaign ads.

**Empirical specification** To assess this, we estimate the following regression model:

(4) 
$$y_{ips} = \beta_0 + \beta_1 \cdot \text{Campaign ads}_p + \delta_s + X_i \phi' + \epsilon_{ips}$$

where  $y_i$  is an indicator taking value 1 if participant *i* reported that s/he had seen K5's campaign ads outside of the experiment before, and 0 otherwise; Campaign ads<sub>p</sub> is a dummy variable taking value 1 if participant *i* lives in a given postal district *p* in stratum *s* where K5's campaign ads were disseminated on Facebook, and 0 otherwise;  $\delta_s$  are stratum fixed effects; and  $X_i$  is a vector of participant characteristics containing the full set of variables displayed in Table 5. Because we assigned entire postal districts instead of individual participants to the treatment and control group in the field experiment, we report robust standard errors clustered at the postal district level, which we complement with Fisher exact p-values.

**Results** We summarize the results from this analysis in Figure 3. In its left-hand panel, we depict the share of participants who reported that they had previously seen K5's campaign ads outside of the experiment separately by treatment conditions. We find that, on average, only 0.8 percent of participants had seen the ads before, which is considerably smaller than the share of the population that Facebook reports was *exposed* to K5's ads ( $\approx$  4 percent). Considering the fact that our sample is broadly representative of the voting-age population in these three states, our own estimate is more likely to reflect the effective penetration of the population with K5's ads, since it measures the share of the population that could recall K5's ads right before the election. However, effective penetration rates do not significantly differ between participants living in treatment and control postal districts (Fisher exact p-value = 0.71), which is confirmed by our regression estimates for  $\beta_1$  depicted in Figure 3, right-hand panel.<sup>48</sup> Irrespective of the specification – that is, bivariate, with stratum fixed effects, or with stratum fixed effects and participant controls we obtain very small and statistically insignificant estimates for  $\beta_1$ .<sup>49</sup> Given the likely presence of spillovers on control districts resulting from imperfect spatial targeting of ads by Facebook (Hager, 2019), the penetration of Facebook users in treatment districts was apparently insufficient to generate significant differences in ad exposure. Hence, the absence of significant treatment effects on aggregate election outcomes can, at least partly, be explained by insufficient outreach on Facebook.

#### **III.F** Effectiveness of campaign ads

Next, we analyze whether K5's Facebook campaign could have significantly affected aggregate election outcomes under the assumption of sufficient outreach on Facebook. To this end, we analyze the effects of the *campaign ads treatment* implemented in our survey, which exposed a random subset of survey participants to K5's campaign ads. We consider three sets of outcomes. First, to obtain an estimate of the first stage of the *campaign ads treatment*, we assess whether K5's campaign ads induced a shift in attitudes in domains addressed in K5's ads. Second, we test whether K5's campaign ads affected self-reported voting behavior. Finally, we evaluate whether any potential treatment effects carry over to revealed preference outcomes.

**Empirical specification** To conduct these analyses, we run the following regression model:

(5) 
$$y_i = \gamma_0 + \gamma_1 \cdot \text{Campaign ads}_i + X_i \phi' + \epsilon_i$$

where  $y_i$  either captures participant *i*'s attitudes, her/his self-reported voting behavior, or one of our revealed preference outcomes; Campaign  $ads_i$  is a dummy variable taking value 1 if participant *i* was exposed to K5's campaign ads as part of the survey experiment and 0 otherwise;  $X_i$ 

<sup>48.</sup> We report results in regression format in Table 11 in Appendix VI. In this table, we also report the corresponding Fisher exact p-values depicted in the left-hand panel of Figure 3.

<sup>49.</sup> As we document in Table 11 in Appendix VI, this result also holds when studying the interaction effect of reporting to be a Facebook user and living in a treatment postal district.

is the same vector of participant characteristics as employed in Equation 4. We employ robust standard errors throughout.

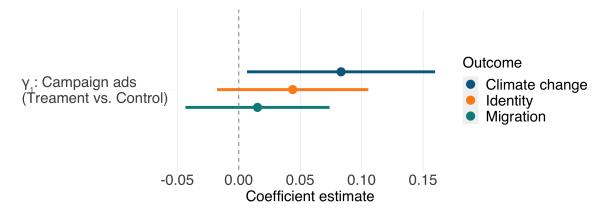


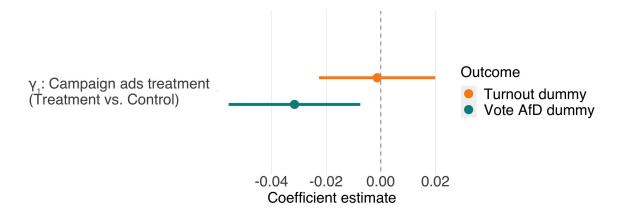
Figure 4: Treatment effects on posterior attitudes elicited *pre* election day

*Notes: Notes:* Coefficient estimates from regressions as laid out in Equation 5 with the full set of control variables listed in Table 5 reported. We employ the following dependent variables: participants' posterior attitudes in the domains of (i) *Climate change*, (ii) *Identity*, and (iii) *Migration*. All attitudes were elicited in our pre-election survey and are standardized (mean = 0, sd = 1). 95-percent confidence intervals reported.

**First stage – Attitudes** We begin by discussing treatment effects on participants' posterior attitudes in the domains of migration, identity, and climate change as measured by equally weighted, standardized indices with mean zero and standard deviation one.<sup>50</sup> Coefficient estimates can thus be interpreted as changes in standard deviations. We present coefficient estimates for  $\gamma_1$  using our full set of control variables and corresponding 95-percent confidence intervals in Figure 4.<sup>51</sup> We obtain small and statistically insignificant estimates when analyzing attitudes in the domains of migration and identity. In contrast, we estimate that participants exposed to K5's campaign ads exhibit an eight-percent of a standard deviation (S.E. = 0.04) higher support for climate change mitigation policies which is significant at the 5-percent level. The magnitude of this effect is well in line with effect sizes detected in related survey experiments (Haaland, Roth and Wohlfart, 2021). However, as we document in Figure 12 in Appendix V, this effect is only short-lived: when employing the same index elicited in our post-election survey as the dependent variable, we can no longer detect any significant differences regarding this particular set of attitudes. K5's campaign ads thus did not exhibit a sufficiently strong first-stage effect on attitudes that would be likely to translate into changes in actual behavior.

<sup>50.</sup> To obtain these indices, we follow Kling, Liebman and Katz (2007) and sum up participants' numeric answers to each survey item and scaled the resulting index using its mean and standard deviation.

<sup>51.</sup> We report results in regression format in Table 12 in Appendix VI.



**Figure 5: Treatment effects on** *intended* **voting behavior in the 2019 state elections** *Notes: Notes:* Coefficient estimates from regressions as laid out in Equation 5 with the full set of control variables listed in Table 5 reported. We employ two different dependent variables: (i) a dummy variable taking value 1 if a participant reported to be planning to vote (*Turnout dummy*); (ii) a dummy variable taking value 1 if a participant reported to be planning to vote for the AfD (*Vote AfD dummy*). Both variables were elicited in our pre-election survey and thus, capture *intended* voting behavior. 95-percent confidence intervals reported.

**Voting behavior** We present our treatment effect estimates of K5's campaign ads on self-reported voting behavior in Figure 5.<sup>52</sup> We obtain very small and statistically insignificant treatment effects on participants' self-reported tendency to vote in the 2019 state elections, which might, however, reflect the focus of the campaign ads on reducing support for the AfD. On the contrary, we estimate that exposure to K5's campaign ads reduces participants' self-reported likelihood to vote for the AfD by 3 percentage points (S.E. = 0.01) when elicited before the election, corresponding to a 9-percent of a standard deviation decrease relative to the control group. This effect does, however, not persist until our post-election survey conducted shortly after the election as we show in Figure 13 in Appendix V and Table 14 in Appendix VI. We further explore the impact of K5's campaign ads on self-reported voting behavior in Tables 13 and 14 in Appendix VI using alternative outcomes such as the candidate vote (*"Erststimme"*), and specific subsamples (e.g., only Thuringia). These tables broadly support the notion that K5's campaign ads had no impact on self-reported turnout decisions and, at best, a moderately negative impact on participants' stated tendency to vote for the AfD.

**Revealed preference outcomes** Considering the risk of experimenter demand inflating treatment effect estimates (de Quidt, Haushofer and Roth, 2018), we now analyze the effect of K5's campaign ads on our revealed preference measures of opposition to right-wing populism. We employ two such measures: first, a dummy variable taking value 1 if participant *i* clicked a link forwarding her/him to a website where s/he could sign a petition demanding greater political representation for Muslims in Germany; and second, a dummy variable taking value 1 if participant *i* was willing to donate to another grassroots organization campaigning against right-wing

<sup>52.</sup> The corresponding regression results are reported in Table 13 and 14 in Appendix VI.

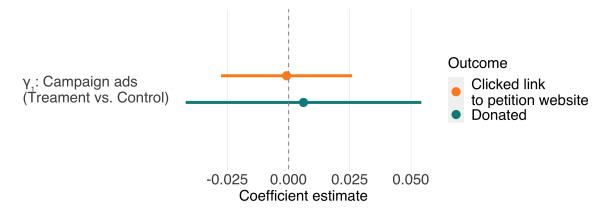


Figure 6: Treatment effects on revealed preference outcomes

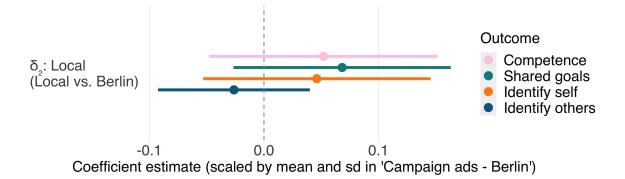
*Notes: Notes:* Coefficient estimates from regressions as laid out in Equation 5 with the full set of control variables listed in Table 5 reported. We employ two types of revealed preference outcomes: (i) a dummy variable taking value 1 if a participant clicked on the link forwarding her/him to a website where s/he could sign a petition demanding greater political representation for Muslims in Germany (*Clicked link to petition website*); and (ii) a dummy variable taking value 1 if a participant donated a positive amount to another grassroots organization campaigning against right-wing populism (*Donated*). 95-percent confidence intervals reported.

populism. We summarize corresponding results in Figure 6 and provide full regression results alongside alternative outcomes in Table 15 in Appendix VI. Regardless of which outcome we consider, we only find very small and statistically insignificant effects. This implies that the significant estimates we obtained for a selection of posterior attitudes and participants' self-reported tendency to vote for the AfD are more likely to reflect experimenter demand effects than actual changes in attitudes and behavior.<sup>53</sup> In sum, the main insight from this subsection is that even with sufficient outreach on Facebook, K5's campaign ads would most likely not have been able to shape aggregate election outcomes.

## **III.G** The role of identity

In this final subsection, we now discuss whether highlighting certain shared identity traits between K5 and its audience could have magnified the impact of K5's campaign. To assess this hypothesis, we exploit variation in participants' perceptions of K5's regional identity induced by cross-randomizing additional information on the strength of local support for K5 in participants' state of residence (*identity treatment*).

<sup>53.</sup> An alternative explanation would be multiple hypothesis testing, suggesting that a certain number of regression estimates surpasses conventional levels of statistical significance despite the absence of any "true" effect if the number of hypothesis tests conducted is considerably large.



#### Figure 7: Treatment effects of the *identity treatment* on first stage

*Notes: Notes:* Coefficient estimates from regressions as laid out in Equation 6 with the full set of control variables listed in Table 5 reported. We employ participants' answers to the following questions as dependent variables: (i) "Do you think K5 is competent?" (*Competence*); (ii) "Do you share K5's goals?" (*Shared goals*); (iii) "Do you identify with K5?" (*Identify self*); and (iv) "Do you think other survey takers identify with K5?" (*Identify others*). All outcomes are standardized using the corresponding mean and standard deviation in the "*Campaign ads – Berlin*" condition. 95-percent confidence intervals reported.

**Empirical specification** To carry out this analysis, we estimate the following regression model:

(6) 
$$y_i = \delta_0 + \delta_1 \cdot \text{Campaign ads}_i + \delta_2 \cdot \text{Local}_i + X_i \phi' + \epsilon_i$$

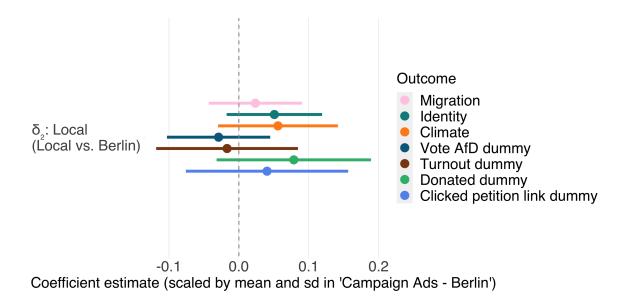
where  $y_i$  captures participant *i*'s identification with K5 or her/his (self-reported) attitudes and behavior such as her/his willingness to vote for the AfD. The dummy variables Campaign  $ads_i$  and Local<sub>i</sub> capture the impact of our two experimental manipulations in the survey: Campaign  $ads_i$ takes value 1 for all participants who were exposed to K5's campaign ads during the survey, and 0 otherwise – that is, for those participants in the *Campaign Ads* – *Berlin* and *Campaign Ads* – *Local* condition. In contrast, Local<sub>i</sub> takes value 1 only if participant *i* was assigned to the *Campaign* ads – *Local* condition who, instead of learning that K5 is based in Berlin, were informed that K5 has many supporters from participants' state of residence. Because we are primarily interested in the additional effect of aligning regional identities, our discussion focuses on  $\delta_2$ , which captures differences in participants' outcomes in the *Campaign Ads* – *Berlin* and *Campaign Ads* – *Local* conditions.

**First stage** To test for the presence of a first-stage effect, we analyze participants' responses to the following survey items: (i) "Do you think K5 is competent?"; (ii) "Do you share K5's goals?"; (iii) "Do you identify with K5?"; and (iv) "Do you think other survey takers identify with K5?" We summarize the results from this exercise in Figure 7, where we scaled coefficient estimates for  $\delta_2$  using the corresponding mean and standard deviation in the "*Campaign ads – Berlin*" condition.<sup>54</sup> We obtain small and statistically insignificant estimates for all outcomes, suggesting that

<sup>54.</sup> Results in regression format are reported in Table 16 in Appendix VI.

informing participants that K5 has many supporters in participants' state of residence did not significantly increase participants' identification with K5.

**Main result** Finally, we compare posterior attitudes, self-reported voting behavior, and revealed-preference outcomes between participants in the *Campaign ads* – *Local* and the *Campaign ads* – *Berlin* conditions. We summarize our estimates for  $\delta_2$  in Figure 8, where we again use the corresponding mean and standard deviation in the *'Campaign ads* – *Berlin'* condition to scale estimates.<sup>55</sup> All of our estimates are small and statistically indistinguishable from zero. This implies that highlighting that K5 has many supporters in participants' state of residence did not boost the individual-level impact of K5's campaign ads. We can thus conclude that even in a scenario with sufficient outreach on Facebook and a campaign highlighting shared identity traits, K5 would most likely not have been able to shape election outcomes.



## Figure 8: Treatment effects of the *identity treatment* on all outcomes

*Notes: Notes:* Coefficient estimates from regressions as laid out in Equation 6 with the full set of control variables listed in Table 5 reported. We employ the following three sets of outcomes defined in previous figures: (i) posterior attitudes (*Climate change, Identity,* and *Migration*) elicited in our pre-election survey; (ii) self-reported voting behavior in the 2019 state elections elicited in our pre-election survey (*Vote AfD dummy* and *Turnout dummy*); (iii) revealed preference measures of opposition to right-wing populism (*Donated dummy* and *Clicked petition link dummy*). All outcomes are standardized using the corresponding mean and standard deviation in the "*Campaign ads – Berlin*" condition. 95-percent confidence intervals reported.

<sup>55.</sup> We provide full regression results in Table 17 in Appendix VI.

## **IV** Conclusion

We provide experimental evidence on the question of whether grassroots organizations can reduce support for right-wing populism using social media. We derive this evidence from a field experiment embedded in the Facebook campaign of K5; a German grassroots organization which aims to reduce electoral support for Germany's most successful right-wing populist party, the AfD. Exploiting the detailed geographic targeting options for advertisements available on Facebook, we distributed K5's campaign ads to a random subset of postal districts during a series of recent elections in Germany and subsequently, compared election outcomes between treated and untreated postal districts. We find no statistically significant differences in the AfD's vote share and turnout between treatment and control districts. Our estimates are small in magnitude, precisely estimated, and robust to several different empirical specifications. Thanks to the statistical power of our stratified design, we can rule out with high probability that treatment effects on the AfD's vote share and turnout are larger than 3 percent of a standard deviation. Further analyses confirm the absence of significant treatment effects also for subsets of postal districts with an ex ante higher susceptibility to campaigns against right-wing populism as well.

Drawing on data from an additional online survey experiment, we provide two complementary explanations for why K5 was not successful in leveraging social media to contend against right-wing populism: first, we document that K5's outreach on Facebook was insufficient to exhibit a detectable impact on aggregate election results. Second, we show that even under the assumption of sufficient outreach on Facebook, K5's campaign ads are unlikely to have significantly altered voting behavior. The same holds if we combine K5's campaign ads with an additional treatment highlighting identity traits K5 and its audience share.

We view the results discussed in this paper as one piece of evidence but not as a definitive answer to the question of whether grassroots organizations can successfully leverage social media to reduce support for (right-wing) populism, because they are based on one campaign in one particular context. Hence, the absence of significant treatment effects documented for this campaign does not imply that K5 or any other organization are generally not effective in contending against right-wing populism using social media. In contrast, we require more evidence to draw more definitive conclusions. First and foremost, we see the following main open questions for future research: do campaigns on other social media platforms with different target audiences exhibit larger effects? What types of campaign ads are most effective? In particular, does Hager's (2019) finding that programmatic ads perform better than ads featuring specific individuals carry over to campaigns by grassroots organizations?

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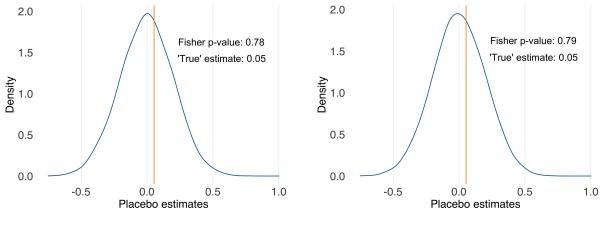
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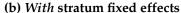
## Appendix

## **V** Additional Figures

## V.A Field experiment

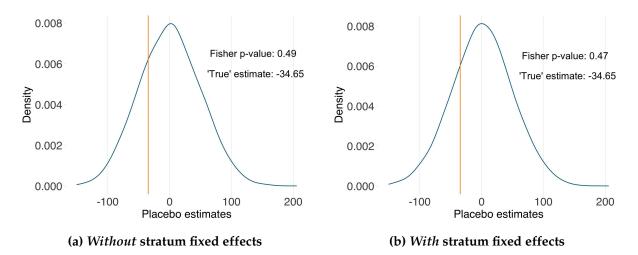


(a) Without stratum fixed effects



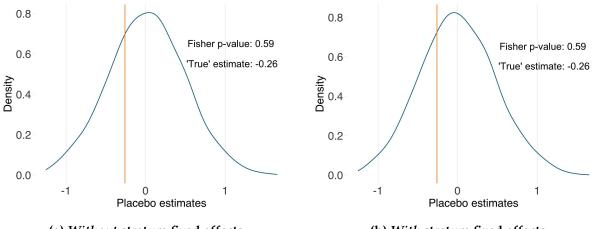


*Notes: Notes:* Distribution of placebo estimates derived from randomly re-assigning postal districts to placebo treatment groups for 5,000 times and calculating the share of "placebo treatment effects" that exceed the "true treatment effect" in (absolute) magnitude reported. Panel (a) depicts the resulting distribution and Fisher exact p-value when running Equation 1 *without* stratum fixed effects and Panel (b) *with* stratum fixed effects. The outcome in both panels is the *AfD's vote share* in the 2019 state elections.



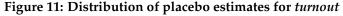


*Notes: Notes:* Distribution of placebo estimates derived from randomly re-assigning postal districts to placebo treatment groups for 5,000 times and calculating the share of "placebo treatment effects" that exceed the "true treatment effect" in (absolute) magnitude reported. Panel (a) depicts the resulting distribution and Fisher exact p-value when running Equation 1 *without* stratum fixed effects and Panel (b) *with* stratum fixed effects. The outcome in both panels is the *absolute number of votes for the AfD* in the 2019 state elections.



(a) Without stratum fixed effects

(b) With stratum fixed effects



*Notes: Notes:* Distribution of placebo estimates derived from randomly re-assigning postal districts to placebo treatment groups for 5,000 times and calculating the share of "placebo treatment effects" that exceed the "true treatment effect" in (absolute) magnitude reported. Panel (a) depicts the resulting distribution and Fisher exact p-value when running Equation 1 *without* stratum fixed effects and Panel (b) *with* stratum fixed effects. The outcome in both panels is *turnout* in the 2019 state election.

#### V.B Survey experiment

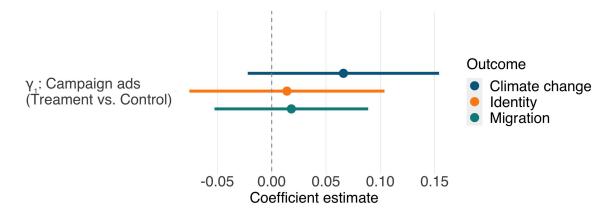
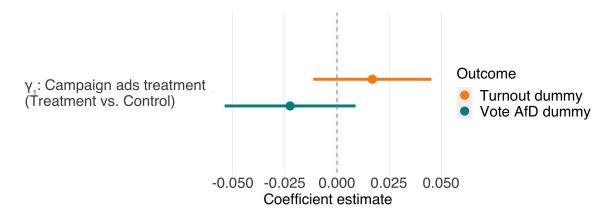


Figure 12: Treatment effects on posterior attitudes elicited after the elections

*Notes: Notes:* Coefficient estimates from regressions as laid out in Equation 5 with the full set of control variables listed in Table 5 reported. We employ the following dependent variables: participants' posterior attitudes in the domains of (i) *Climate change*, (ii) *Identity*, and (iii) *Migration*. All attitudes were elicited in our post-election survey and are standardized (mean = 0, sd = 1). 95-percent confidence intervals reported.



#### Figure 13: Treatment effects on self-reported voting behavior elicited after the elections

*Notes: Notes:* Coefficient estimates from regressions as laid out in Equation 5 with the full set of control variables listed in Table 5 reported. We employ two different dependent variables: (i) a dummy variable taking value 1 if a participant reported that s/he had votd (*Turnout dummy*); (ii) a dummy variable taking value 1 if a participant reported that s/he had votd for the AfD (*Vote AfD dummy*). Both variables were elicited in our post-election survey and thus, capture *self-reported*, retrospective voting behavior. 95-percent confidence intervals reported.

## **VI** Additional Tables

#### VI.A Field experiment

	AfD's vote share			number D votes	Turnout		
	(1)	(2)	(3)	(4)	(5)	(6)	
Campaign ads	$0.05 \ (0.46) \ p = 0.78$	$0.05 \ (0.20) \ p = 0.79$	-34.65 (71.81) p = 0.49	-34.65 (49.55) p = 0.47	-0.26 (0.68) p = 0.59	-0.26 (0.47) p = 0.59	
Stratum FE Mean dep. var., 'Control' SD dep. var., 'Control'	27.92 6.47	Yes 27.92 6.47	1187.45 1018.31	<i>Yes</i> 1187.45 1018.31	60.18 9.4	Yes 60.18 9.4	
Observations R <sup>2</sup>	760 0.00	760 0.86	760 0.00	760 0.64	760 0.00	760 0.63	

#### Table 8: Treatment effects on AfD voting and turnout

*Notes:* Results from regressions as laid out in Equation 1 reported. We employ three different dependent variables: (Columns 1 and 2) the *AfD's vote share*; (Columns 3 and 4) the *absolute number of AfD votes*; and (Columns 5 and 6) *turnout*. Robust standard errors clustered at the postal district level reported in parentheses and p-values obtained from Fisher permutation tests beneath. Significance levels: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

							Af	D vote	e share						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Area (in sqkm)	0.05 (0.03)														0.03*** (0.01)
Population (x 1000)		-0.27*** (0.04)													(0.01) -0.01 (0.02)
In Brandenburg		(0.04)	-0.19*** (0.04)												(0.02) 0.21*** (0.02)
In Saxony				0.35*** (0.03)											(0.02) -0.01 (0.02)
In Thuringia					-0.20*** (0.03)										(0.02)
Nr. valid votes (x 1000)						-0.37*** (0.04)									-0.02 (0.05)
Turnout (in %)						(0.04)	-0.09** (0.04)								-0.05*** (0.01)
CDU vote share (in %)							(0.04)	-0.00 (0.05)							-0.09** (0.04)
SPD vote share (in %)								(0.03)	-0.49*** (0.03)						(0.04) -0.06* (0.04)
GRUENE vote share (in %)									(0.03)	-0.72*** (0.03)					(0.04) -0.25*** (0.03)
FDP vote share (in %)										(0.03)	-0.22*** (0.04)				-0.06*** (0.02)
LINKE vote share (in %)											(0.04)	-0.53***			-0.05
AfD vote share (in %)												(0.04)	0.91***		(0.04) 0.76***
Number of valid votes for AfD													(0.02)	-0.10*** (0.03)	(0.06) -0.03 (0.05)
Observations R <sup>2</sup>	760 0.00	760 0.07	760 0.04	760 0.12	760 0.04	760 0.14	760 0.01	760 0.00	760 0.24	760 0.52	760 0.05	760 0.28	760 0.82	760 0.01	760 0.91

Table 9: Determinants of the AfD's vote share in the 2019 state elections

*Notes:* Results from regressions of AfD's vote share on all predetermined postal district characteristics listed in Table 1 reported. All explanatory variables are standardized using their mean and standard deviation. Robust standard errors clustered at the postal district level reported in parentheses. Significance levels: \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

Statistic	Mean	St. Dev.	Min	Max	Ν
Demographics					
Age	54.34	16.79	18.00	94.00	698
Female	0.50	0.50	0.00	1.00	699
Montly net income (x 1000)	1.47	1.01	0.09	15.00	524
Unemployed	0.03	0.17	0.00	1.00	684
Lives in Brandenburg	0.30	0.46	0.00	1.00	699
Lives in Saxony	0.44	0.50	0.00	1.00	699
Lives in Thuringia	0.25	0.44	0.00	1.00	699
Political attitudes					
Political self assessment	4.27	3.36	-9.00	10.00	699
Past voting behavior					
Voted in 2017	0.87	0.34	0.00	1.00	699
Voted AfD in 2017	0.12	0.33	0.00	1.00	699

Table 10: Characteristics of participants in the 2018 ALLBUS survey

*Notes:* Selection of characteristics of participants in the 2018 ALLBUS survey who live in Brandenburg, Saxony, or Thuringia.

		Had seen K	5 campaign ac	ls before surve	ey
	(1)	(2)	(3)	(4)	(5)
Campaign ads	-0.001 (0.004) p = 0.713	-0.001 (0.004) p = 0.795	-0.001 (0.004) p = 0.793	-0.001 (0.004) p = 0.792	-0.003 (0.007) p = 0.548
Facebook user			$0.002 \\ (0.005)$	0.001 (0.005)	-0.00002 (0.008)
Campaign ads x Facebook user	r				$0.002 \\ (0.009)$
Stratum FE		Yes	Yes	Yes	Yes
Participant controls				Yes	Yes
Mean dep. var., 'Control'	0.008	0.008	0.008	0.008	0.008
SD dep. var., 'Control'	0.090	0.090	0.090	0.090	0.090
Observations R <sup>2</sup>	1,729 0.0001	1,729 0.111	1,729 0.111	1,729 0.118	1,729 0.118

#### Table 11: Treatment effects on Facebook outreach

*Notes:* Results from regressions as laid out in Equation 4 reported. We employ a dummy variable taking value 1 if a participant in our survey reported that s/he had seen K5's campaign ads before the survey commenced as the dependent variable. Robust standard errors clustered at the postal district level reported in parentheses and p-values obtained from Fisher permutation tests beneath. The Fisher exact p-value testing whether the coefficients for *Campaign ads* in Columns (4) and (5) are identical is 0.72. Participant controls include the full set of variables reported in Table 5. Significance levels: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

		Pre elect	tion	Post election			
	Migration	Identity	Climate change	Migration	Identity	Climate change	
	(1)	(2)	(3)	(4)	(5)	(6)	
Campaign ads	$0.02 \\ (0.03)$	$0.04 \\ (0.05)$	$0.08^{**}$ (0.04)	$0.02 \\ (0.04)$	$0.00 \\ (0.06)$	0.07 (0.04)	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	
Mean dep. var., 'Control'	0.00	0.00	0.00	0.00	0.00	0.00	
SD dep. var., 'Control'	1.00	1.00	1.00	1.00	1.00	1.00	
Observations R <sup>2</sup>	1,728 0.67	1,728 0.00	1,728 0.45	1,312 0.66	1,312 0.00	1,312 0.45	

Table 12: Treatment effects on posterior attitudes

*Notes:* Results are derived from regressions as laid out in Equation 5, where we employ participants' posterior attitudes in the domains of *climate change* (Columns 1 and 4), *identity* (Columns 2 and 4), and *migration* (Columns 3 and 6) as dependent variables. We report results based on the pre- and the post-election survey. All outcomes have a mean of zero and a standard deviation of one. Controls include the full set of variables reported in Table 5. Robust standard errors reported in parentheses. Significance levels: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

	Ever vote for AfD		AfD Voting Intended candidate vote		Intended list vote		Turnout Intended to vote	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Full Sample								
Facebook treatment	-0.00	-0.01	-0.01	-0.02	-0.03	-0.03**	0.01	-0.00
	(0.02)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)
Mean dep. var., 'Control'	0.26	0.26	0.18	0.18	0.19	0.19	0.93	0.93
SD dep. var., 'Control'	0.39	0.39	0.39	0.39	0.39	0.39	0.25	0.25
Observations R <sup>2</sup>	1,728	1,728	1,728	1,728	1,728	1,728	1,728	1,728
	0.00	0.65	0.00	0.59	0.00	0.60	0.00	0.27
Panel B: Brandenburg &	Saxony							
Facebook treatment	-0.01	-0.02	-0.02	-0.03*	-0.04*	-0.05***	-0.00	-0.01
	(0.02)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)
Mean dep. var., 'Control'	0.28	0.28	0.20	0.20	0.21	0.21	0.94	0.94
SD dep. var., 'Control'	0.40	0.40	0.40	0.40	0.41	0.41	0.23	0.23
Observations	1,359	1,359	1,359	1,359	1,359	1,359	1,359	1,359
R <sup>2</sup>	0.00	0.66	0.00	0.59	0.00	0.61	0.00	0.26
Panel C: Thuringia								
Facebook treatment	0.03	0.02	0.03	0.01	0.03	0.01	0.04	0.02
	(0.04)	(0.02)	(0.04)	(0.02)	(0.04)	(0.02)	(0.03)	(0.02)
Mean dep. var., 'Control'	0.20	0.20	0.11	0.11	0.13	0.13	0.90	0.90
SD dep. var., 'Control'	0.35	0.35	0.32	0.32	0.34	0.34	0.30	0.30
Observations R <sup>2</sup>	369	369	369	369	369	369	369	369
	0.00	0.62	0.00	0.64	0.00	0.62	0.01	0.38
Controls		Yes		Yes		Yes		Yes

Table 13: Treatment effects on AfD voting and turnout in the 2019 state elections elicited *before* the elections

*Notes:* Results are derived from regressions as laid out in Equation 5. We employ the following dependent variables elicited in our pre-election survey: (Columns 1 and 2) participants' self-reported likelihood to ever vote for the AfD (0-1) (*Ever vote for AfD*); (Columns 3 and 4) a dummy variable taking value 1 if a participant reported that s/he is planning to vote for an AfD candidate (*Intended candidate vote*); (Columns 5 and 6) a dummy variable taking value 1 if a participant reported that s/he is planning to vote for an AfD candidate (*Intended candidate vote*); (Columns 5 and 6) a dummy variable taking value 1 if a participant reported that s/he is planning to vote for the AfD (*Intended list vote*); and (Columns 7 and 8) a dummy variable taking value 1 if a participated reported that s/he is planning to vote in the elections (*Intended to vote*). Controls include the full set of variables reported in Table 5. Robust standard errors reported in parentheses. Significance levels: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

	Ever vote for AfD		AfD Voting Self-reported candidate vote			eported vote	Turnout Voted	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Full Sample								
Facebook treatment	0.01	-0.00	-0.02	-0.03*	-0.02	-0.02	0.03	0.02
	(0.02)	(0.01)	(0.03)	(0.02)	(0.03)	(0.02)	(0.02)	(0.01)
Mean dep. var., 'Control'	0.27	0.27	0.21	0.21	0.22	0.22	0.91	0.91
SD dep. var., 'Control'	0.39	0.39	0.41	0.41	0.41	0.41	0.29	0.29
Observations R <sup>2</sup>	1,312	1,312	1,212	1,212	1,212	1,212	1,312	1,312
	0.00	0.64	0.00	0.57	0.00	0.61	0.00	0.25
Panel B: Brandenburg &	Saxony							
Facebook treatment	0.00	-0.01	-0.03	-0.04**	-0.05	-0.05**	0.02	0.01
	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.02)	(0.02)
Mean dep. var., 'Control'	0.28	0.28	0.23	0.23	0.24	0.24	0.92	0.92
SD dep. var., 'Control'	0.4	0.4	0.42	0.42	0.43	0.43	0.28	0.28
Observations	1,016	1,016	942	942	942	942	1,016	1,016
R <sup>2</sup>	0.00	0.64	0.00	0.57	0.00	0.60	0.00	0.26
Panel C: Thuringia								
Facebook treatment	0.03	0.02	0.02	-0.00	0.08	0.05**	0.05	0.04
	(0.04)	(0.03)	(0.05)	(0.03)	(0.05)	(0.03)	(0.04)	(0.03)
Mean dep. var., 'Control'	0.22	0.22	0.14	0.14	0.15	0.15	0.88	0.88
SD dep. var., 'Control'	0.36	0.36	0.35	0.35	0.36	0.36	0.33	0.33
Observations R <sup>2</sup>	296	296	270	270	270	270	296	296
	0.00	0.69	0.00	0.62	0.01	0.70	0.01	0.26
Controls		Yes		Yes		Yes		Yes

## Table 14: Treatment effects on AfD voting and turnout in the 2019 state elections elicited *after* the elections

*Notes: Notes:* Results are derived from regressions as laid out in Equation 5. We employ the following dependent variables elicited in our post-election survey: (Columns 1 and 2) participants' self-reported likelihood to ever vote for the AfD (0-1) (*Ever vote for AfD*); (Columns 3 and 4) a dummy variable taking value 1 if a participant reported that s/he had voted for an AfD candidate (*Self-reported candidate vote*); (Columns 5 and 6) a dummy variable taking value 1 if a participant reported that s/he had voted for the AfD (*Self-reported list vote*); and (Columns 7 and 8) a dummy variable taking value 1 if a participant reported that s/he had voted in the elections (*Voted*). Controls include the full set of variables reported in Table 5. Robust standard errors reported in parentheses. Significance levels: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

	Clicked donation link		Donated		Amount donated		Clicked petition link	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Campaign ads	-0.01 (0.01)	-0.01 (0.01)	0.01 (0.02)	0.01 (0.02)	-0.05 (0.18)	-0.05 (0.18)	0.00 (0.02)	0.00 (0.02)
Controls Mean, untreated SD, untreated	0.08 0.27	Yes 0.08 0.27	0.61 0.49	Yes 0.61 0.49	3.31 3.58	Yes 3.31 3.58	0.1 0.29	Yes 0.1 0.29
Observations R <sup>2</sup>	1,511 0.02	1,511 0.02	1,511 0.19	1,511 0.19	1,511 0.23	1,511 0.23	1,511 0.09	1,511 0.09

Table 15: Treatment effects on revealed preference outcomes

*Notes:* Results are derived from regressions as laid out in Equation 5. We employ the following revealed preference outcomes: (Columns 1 and 2) a dummy variable taking value 1 if a participant clicked on the link forwarding her/him to the website of another grassroots organization contending against right-wing populism for which s/he could donate during the survey (*Clicked donation link*); (Columns 3 and 4) a dummy variable taking value 1 if a participant donated a positive amount to this grassroots organization (*Donated*); Columns 5 and 6) the amount a participant donated to this organization (*Amount donated*); and (Columns 6 and 9) a dummy variable taking value 1 if a participant clicked on the link forwarding her/him to a website where s/he could sign a petition demanding greater political representation for Muslims in Germany (*Clicked petition link*). Controls include the full set of variables reported in Table 5. Robust standard errors reported in parentheses. Significance levels: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

Table 16: Treatment effects of identity treatment	on first-stage attitudes and beliefs about K5
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	Competence	Shared goals	Identify self	Identify others
	(1)	(2)	(3)	(4)
Campaign ads	-0.35*** (0.13)	-0.04 (0.14)	-0.17 (0.16)	1.71 (1.66)
Local	0.14 (0.14)	0.21 (0.15)	0.14 (0.16)	-1.42 (1.83)
Controls	Yes	Yes	Yes	Yes
Mean dep. var., 'Control'	4.52	5.04	4.02	5.33
SD dep. var., 'Control'	2.63	2.96	3.3	3.27
Observations R <sup>2</sup>	1,729 0.33	1,729 0.35	1,729 0.31	1,728 0.02

*Notes:* Results from regressions as laid out in Equation 6 reported. We employ participants' answers to the following questions as dependent variables: (Column 1) "Do you think K5 is competent?" (*Competence*) (Column 2) "Do you share K5's goals?" (*Shared goals*); (Column 3) "Do you identify with K5?" (*Identify self*); and (Column 4) "Do you think other survey takers identify with K5? (*Identify others*)". Controls include the full set of variables reported in Table 5. Robust standard errors reported in parentheses. Significance levels: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

		Attitudes		Voting b	ehavior	Revealed	d preference
	Migration	ligration Climate I		Vote AfD dummy	Turnout dummy	Donated dummy	Clicked petition link
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Campaign ads	0.00 (0.03)	0.06 (0.04)	0.02 (0.04)	-0.02* (0.01)	0.00 (0.01)	-0.01 (0.03)	-0.01 (0.02)
Local	0.02 (0.03)	0.05 (0.04)	0.05 (0.04)	-0.01 (0.01)	-0.00 (0.01)	0.04 (0.03)	0.01 (0.02)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean, untreated	0	-0.02	-0.02	0.19	0.93	0.61	0.08
SD, untreated	1	1.03	0.97	0.39	0.25	0.49	0.28
Observations	1,729	1,729	1,729	1,729	1,729	1,512	1,729
R <sup>2</sup>	0.67	0.45	0.64	0.60	0.27	0.19	0.08

#### Table 17: Comparison of treatment effects of *identity treatment* across outcomes

*Notes:* Results from regressions as laid out in Equation 6 reported. We employ the following three sets of outcomes defined in previous tables: (i) posterior attitudes (*Climate change* in Column 1, *Identity* in Column 2, and *Migration* in Column 2) elicited in our pre-election survey; (ii) self-reported voting behavior in the 2019 state elections elicited in our pre-election survey (*Vote AfD dummy* in Column 4 and *Turnout* dummy in Column 5); (iii) revealed preference measures of opposition to right-wing populism (*Donated dummy* in Column 6 and *Clicked petition link dummy* in Column 7). Controls include the full set of variables reported in Table 5. Robust standard errors reported in parentheses. Significance levels: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

## VII Campaign Adds



Kleiner Fünf Gepostet von Sophie Anton [?] · 21. August um 18:43 · 🕥

#### #Brandenburg #Landtagswahlen

"Wir wollen unser traditionelles brandenburgisches Brauchtum bewahren und setzen uns daher entschieden dafür ein, dass dieses nicht von fremdem Brauchtum verdrängt wird." So schürt die AfD in Brandenburg Angst, dass verschiedene Kulturen und deren Brauchtümer brandenburgische Traditionen verdrängen könnten. Doch warum sollte das so sein? Schließlich bereichern bereits jetzt verschiedene Brauchtümer die brandenburgische Gesellschaft, wie die der sorbischen und wendischen Minderheiten, die die AfD übrigens explizit fördern will. Bevölkerungsgruppen und deren Brauchtümer werden von der AfD gegeneinander ausgespielt.

...

Wir fragen: Willst du das?



Figure 14: K5's campaign ad addressing identity



Augen verschließen vor dem Klimawandel! Willst du das?

Sowohl in Sachsen als auch in Brandenburg vertritt die AfD die These, dass "wissenschaftlich nicht gesichert [sei], dass Klimaveränderungen vorwiegend menschengemacht" sind. Damit begründen sie, die bisher getroffenen Maßnahmen für den Klimaschutz zurück nehmen zu wollen. Dabei sind sich fast alle Wissenschaftler einig, dass das menschliche Verhalten Auswirkungen auf das Klima hat. Und auch die Bürger\*innen in Sachsen und Brandenburg spüren mit Dürren, Waldbränden und Unwettern schon jetzt die dramatischen Folgen des Klimawandels. Unsere Kinder werden noch stärker unter solchen Auswirkungen leiden. Wir fragen: Willst du das?

...



Figure 15: K5's campaign ad addressing climate change

## VIII Survey Instrument Pre-Election Survey

#### VIII.A Basic demographics

**Question:** How old are you? **Answer options:** Under 18, 18-29, 30-44, 45-59, 60-74, 75+.

**Question:** What is your zip code?

**Question:** What was your own GROSS income in the last year (i.e. before deduction of taxes, contributions to pension, health, long-term care and unemployment insurance)? **Answer options**: less than 10.000€, 10.000€-24.999€, 25.000-39.999€, 40.000€ and more

**Question:** Which gender do you identify with? **Answer options**: Male, Female

Question: In which federal state do you live?

\_\_\_\_\_ new page \_\_\_\_\_

**Question:** Are you eligible to vote in the upcoming state elections in Brandenburg? **Answer options**: Yes, No

\_\_\_\_\_\_ new page \_\_\_\_\_\_

**Question:** How would you rate your current household income? With the current income I/we (can)...

**Answer options**: Live comfortably, get by, have a hard time getting by, have a very hard time getting by.

**Question:** Which of the following categories applies to your current employment? **Answer options:** Full time employed, Part time employed, Self-employed, In vocational training or student, Not employed, Registered as unemployed.

**Question:** What is the name of the place (city/town) you live in?

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#### VIII.B Moral Foundations Survey

**Question:** When deciding whether something is right or wrong, to what extent are the following considerations important to you? Please rate each statement using a scale. "Not at all relevant" means: This consideration has absolutely nothing to do with my judgment of whether something is right or wrong. "Extremely relevant" means: This is one of the most important factors when I decide whether something is right or wrong. You can use the options in between to grade your opinion.

**Answer options**: Not at all relevant, not very relevant, a little relevant, fairly relevant, very relevant, extremely relevant.

- 1. Whether someone's feelings are hurt.
- 2. Whether some people are treated differently than others.
- 3. Whether actions are done out of love of country.
- 4. Whether someone has shown a lack of respect for authority.
- 5. Whether someone has violated decency and purity.
- 6. Whether someone has performed well in mathematics.
- 7. Whether someone stands up for another vulnerable and weak person.
- 8. Whether someone acts unjustly.

new page .

- 1. Whether someone has done something to betray his or her group and deceive them.
- 2. Whether someone has adhered to the traditions of society.
- 3. Whether someone has done something disgusting.
- 4. Whether someone was cruel.
- 5. Whether someone was denied his or her rights.
- 6. Whether someone shows a lack of loyalty.
- 7. Whether someone's actions have caused chaos and disorder.
- 8. Whether someone has acted in a way that God would approve of.

**Task:** Please also read through the following statements and indicate how much you agree or disagree with them.

Answer options: Disagree at all, Somewhat disagree, Somewhat agree, Totally agree.

- 1. Compassion for those who suffer is the most important virtue.
- 2. When the government makes laws, they should always be designed so that everyone is treated fairly.
- 3. I am proud of my country's history.
- 4. All children should learn respect for authority.
- 5. People should not do things that are disgusting, even if no one is disturbed or hurt in the process.
- 6. It is better to do good things than bad things.
- 7. Hurting a defenseless animal is one of the worst things a person can do.
- 8. Justice is the most important cornerstone for a society.

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- 1. People should be loyal to their family members even if they have done something wrong.
- 2. Men and women should take on different roles in society.
- 3. I would call certain acts wrong because they are unnatural.
- 4. It can never be right to kill a human being.
- 5. I find it morally reprehensible that rich children inherit a lot of money while poor children inherit nothing.
- 6. It is more important to be a good team player than to self actualize.
- 7. As a soldier, if I disagreed with my superior's orders, I would still follow them out of duty.
- 8. Chastity is an important and valuable virtue.

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#### VIII.C Political attitudes, beliefs, and knowledge

In this section of our survey, we will ask you some questions about politics.

**Question:** How interested are you in politics? Are you...

Answer options: Very interested, fairly interested, not very interested, not interested at all.

Question: Who of the following people is the current German Minister of Interior?

**Question:** In general, how often do you talk about politics with your peers (family, friends, acquaintances)?

Answer options: Very often, often, sometimes, rarely, never

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**Question:** Please use the scale below to indicate how much you trust each of the public institutions or groups of people listed. 0 means that you do not trust the respective institution or group at all, and 10 means that you trust them completely.

- 1. ... the German Parliament
- 2. ... the politicians
- 3. ... the police
- 4. ... the parties
- 5. ... the judiciary
- 6. ... the Federal Government
- 7. ... the state government
- 8. ... the state parliament

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**Question:** We will now present you several statements about politics in Germany. Please tell us in each case to what extent you agree or disagree with this statement.

Answer options: Fully agree, tend to agree, partly/partly agree, tend to disagree, fully disagree.

1. Overall, the people agree on what must happen politically.

- 2. Politicians only care about the interests of the rich and powerful.
- 3. Parties are necessary to represent the interests of the various social demographics.
- 4. German democracy gives people like me a say in what the government does.

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#### VIII.D Past voting behavior

**Question:** Nowadays, some people do note vote for various reasons. How about you? Did you vote in the previous federal elections in September 2017?

**Question:** You could to cast two votes in the last federal elections. With the first vote you could vote for a candidate from your constituency (candidate vote) and with the second vote you could vote for a party (list vote). A member of which party was the candidate you voted for?

Question: Which party did you vote for?

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Question: Did you vote in the previous state elections in Brandenburg in 2014?

**Question:** Also in the previous state elections, you had two votes. With the first vote you could vote for a candidate from your constituency (candidate vote) and with the second vote you could vote for a party (list vote). Which *candidate* did you vote for? **Question:** And which *party* did you vote for ?

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**Question:** Have you ever voted to signal your protest (this includes not voting or casting an invalid ballot)?

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**Question:** What was your protest directed against? You can select multiple answer options. **Answer options**: Government, Politics, Elites, Old parties, Social injustices, Lack of climate policy, Immigration, Refugee policy, Too much interference of the EU in national politics, Other Question: Looking back, do you still support your protest-related voting decision?

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**Question:** Many people use the terms "left" and "right" when referring to different political attitudes. Where on the scale would you classify yourself if 0 stands for left and 10 for right?

**Question:** Parties are also often classified as "left" or "right. How would you classify the following parties on a scale? 0 again stands for left and 10 for right.

- FDP
- CDU/CSU
- SPD
- The Greens
- The Left
- AfD (Alternative for Germany)

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**Question:** When you choose a party in the election, how important are the party's positions on the following issues?

**Answer options**: very important, rather important, neutral, rather unimportant, not at all important

- 1. Labor market policy (e.g. unemployment benefits, part-time employment, minimum wage, automation)
- 2. Tax policy (e.g. solidarity contribution, top tax rates, taxation of international companies)
- 3. Climate policy (e.g. expansion of renewable energies, reduction of CO2 emissions)
- 4. Pension policy (e.g. securing pension levels, retirement age)
- 5. Family policy (e.g. child benefits, parental leave, childcare)
- 6. Health and care (e.g. health insurance contributions, care of relatives)
- 7. Migration and integration (e.g. immigration policy, language and integration courses)
- 8. Education and culture (e.g. school system, universities, financial support for cultural institutions)

9. Homeland and customs (e.g. protection of traditions, strengthening of rural areas, religion)

10. Transport and infrastructure policy (e.g. electrical cars, driving bans, local public transport)

11. Digital policy (e.g. expansion of fiber-optic network, digitization of municipal services)

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#### VIII.E Eliciting first stage for field experiment

**Question:** State elections will be held in Brandenburg in a few days. During the election campaign, political parties and initiatives try to reach voters with the help of election campaigns, e.g. via online advertising, commercials, posters or events.

Have you seen online advertising, commercials, posters or events by [*name of initiative*] in the last few weeks?

IMPLEMENTATION: SHOW A SERIES OF IMAGES WHERE THE SURVEY PARTICIPANT CAN AN-SWER WITH YES OR NO.

\_\_\_\_\_ new page \_\_\_\_\_ **Question:** Have you talked to other people about these campaigns? **Answer options**: Yes, No \_\_\_\_\_ new page \_\_\_\_\_ Which campaign did you talk about? Multiple answers are possible. Question: \_\_\_\_\_ new page \_\_\_\_\_ Question: To which group of people did the person(s) you talked to about these campaigns belong? options: Friends, Colleagues, Answer Family, Known, Strangers, Other. \_\_ new page \_\_

# VIII.F Pre-treatment attitudes and beliefs in the domains of climate change, identity, and migration

**Question:** What percentage of people living in Germany do you think were born outside Germany?

This refers to places of birth outside the current territory of the Federal Republic of Germany.

Please enter a number between 0 and 100.

**Question:** How sure are you about your answer to the previous question? **Answer options**: Very certain, certain, fairly certain, uncertain, very uncertain.

**Question:** What percentage of people living in Germany do you think are Muslims? Please give a percentage between 0 and 100.

**Question:** What do you think the percentage of people of the Muslim faith living in Germany was before the so-called refugee crisis in the summer of 2015? Please give a percentage between 0 and 100.

\_\_ new page \_\_

**Question:** Now we want to hear your opinion regarding whether someone who was born and raised outside of Germany should be allowed to come to Germany and live here. How important should the following things be for this decision - in your opinion? **Answer options:** 0 = extremely important, 10 = extremely unimportant

That this person...

... has a good school education and vocational training?

... is willing to accept the way of life in Germany?

...can speak German?

...adheres to the Christian faith?

\_\_\_\_ new page \_\_\_

**Question:** The following questions have these answer options: strongly connected, fairly connected, little connected, not connected at all

- 1. How strongly do you feel connected to your community (city) and its citizens?
- 2. How strongly do you feel connected to your state and its citizens?
- 3. How strongly do you feel connected to Germany as a whole and its citizens?
- 4. How strongly do you feel connected to the European Union and its citizens?

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**Question:** There are people who come to Germany and apply for asylum because they are afraid of persecution in their own country. How strongly do you agree or disagree with the following statement?

The state should be generous when considering asylum applications. **Answer options:** strongly agree, agree, partly agree, disagree, strongly disagree.

\_\_\_\_ new page \_\_\_\_\_

**Question:** A much-discussed topic in Germany is climate change. How much do you agree or disagree with the following statements?

Answer options: Strongly agree, agree, partly agree, disagree, strongly disagree.

- 1. Climate change is one of the biggest problems of our time
- 2. The lignite phase-out is essential for climate protection. It must therefore be implemented quickly, even if it costs jobs.
- 3. It is the task of politicians to drive climate protection forward with legislation.
- 4. Climate change is a man-made problem.

\_\_\_ new page \_\_\_

**Question:** Another intensely debated topic is the role of customs and tradition in Germany. How much do you agree or disagree with the following statements? **Answer options**: Strongly agree, agree, partly agree, disagree, strongly disagree.

- 1. Politicians should make an active effort to preserve local and national German customs.
- 2. Minority customs should be promoted in Germany.
- 3. It is better for a country if almost everyone has the same customs and traditions.

\_\_\_\_\_ new page \_\_\_\_\_

Question: How much do you agree or disagree with the following statements?

- 1. The German economy gains from immigration.
- 2. Germany loses its national identity through immigration.

\_\_\_ new page \_\_

**Question:** How do you think the following factors will affect prosperity in Germany in the future?

**Answer options**: Positive influence, rather positive influence, no influence, rather negative influence, negative influence, no influence.

- 1. ...intelligent machines replacing human labor.
- 2. ...outsourcing of jobs abroad.
- 3. ...immigration of workers to Germany.

\_\_\_\_ new page \_\_

### VIII.G Media consumption

**Question:** The media play an important role in the political context in Germany. In the following, we therefore ask you some questions about media use. For each of the media listed below, please indicate how much or how little you trust them.

Answer options: very high trust, high trust, medium trust, low trust, very low trust.

- Public television and radio
- Private television and radio
- Print media and online portals of print media
- Social media

\_\_\_\_ new page \_\_\_

**Question:** Which of the following sources do you use most to find out about political events in Germany? Please select a maximum of three options.

- Public television
- Private television
- Public radio
- Private radio
- Print media
- Online portals of print media
- Social media
- Other

\_\_\_\_ new page \_

**Question:** What influences you the most in your use of various media?

- Cost
- Convenience
- Political slant in news coverage
- Digital availability
- Comprehensibility
- Other

\_\_\_\_\_ new page \_\_\_\_\_

**Question:** Do you use Facebook? **Question:** Do you use Twitter?

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#### VIII.H Attention check

**Question:** The next question is about the following problem. In surveys like this, there are sometimes participants who do not read the questions carefully and just "click" quickly through the questionnaire. As a result, there are many random answers that distort the results of the study. Therefore, to signal that you read our questions carefully, we ask that you indicate "Very interested" and "Not at all interested" as your answers to the next question.

How interested are you in politics?

**Answer options**: Very much interested, Very interested, A little interested, Almost not interested, Not at all interested.

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SUBSEQUENTLY, WE RANDOMIZED PARTICIPANTS IN ONE OF THE THREE EXPERIMENTAL CONDITIONS: "CAMPAIGN ADS – BERLIN", "CAMPAIGN ADS – LOCAL", AND "CONTROL"

#### Campaign ads – Berlin

**Question:** Did you know that there are civil society organizations in which citizens join together to oppose right-wing populism? **Answer options:** Yes, No

\_\_\_\_\_\_ new page \_\_\_\_\_\_

**Question:** We will now show you examples of an online initiative against right-wing populism by the organization "Kleiner Fünf" from Berlin. Have you ever seen content by "Kleiner Fünf" outside of this survey?

Answer options: Yes, No

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Here you can see examples of this content:

- 1. Turn a blind eye to climate change! Do you want that? Right-wing populists\* in Brandenburg claim that climate change is not man-made and want to roll back measures taken so far for climate protection. Yet citizens in Brandenburg are already feeling the dramatic consequences of climate change with droughts, forest fires and storms. Our children will suffer even more from such effects.
- 2. My customs beat your customs! Is that what you want? Right-wing populists in Brandenburg want to promote traditional state customs, but question the practice of other customs. Yet various customs already enrich our society, such as those of the Sorbian and Wendish minorities. Customs should not be played off against each other.
- 3. Policies at the expense of the "little people"! Is that what you want? Right-wing populists in Brandenburg are campaigning for the wealth tax to remain abolished. This was not paid by the "little people" but by people with greater wealth. This tax revenue is then missing from the state budget, from which the benefits for the "little people" are financed. In this way, the rich are to be relieved at the expense of people with fewer assets.

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**Question:** Have you ever seen any of the above content by "Kleiner Fünf" outside of this survey? **Answer options:** Yes, No

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**Question:** Please indicate here the channels through which you have already encountered "Kleiner Fünf". Multiple answers are possible.

• Flyers

- Posters
- Social media (e.g. Facebook)
- Demonstrations
- Campaign events

- Friends or acquaintances
- Family
- Others

\_\_\_\_\_ new page \_\_

**Question:** Have you been in contact with other organizations of this type? **Answer options**: Yes, No

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**Question:** Please indicate the channels through which you have come into contact with such organizations. Multiple answers are possible.

- Flyers
- Posters
- Social media (e.g. Facebook)
- Demonstrations
- Campaign events
- Friends or acquaintances
- Family
- Others

\_\_\_\_\_ new page \_\_\_\_\_

Next up is a guessing question where you can win money. Among the survey participants whose guesses are closest to the correct value, we will give away additional mingle points worth €100. We also asked members of "Kleiner Fünf" where they would rank themselves on a political "left-right" scale if 0 stood for left and 10 for right. Please estimate the average response of these members to one decimal place (i.e., "8.5").

#### Numerical entry field

Note: it may take up to 4 weeks to determine the winners and pay out the additional mingle points.

\_\_\_\_ new page \_\_

**Question:** Do you identify with "Kleiner Fünf"? **Answer options**: 0 = I don't identify at all, 10 = I fully identify

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#### Campaign ads - Local

**Question:** Did you know that there are civil society organizations in which citizens join together to oppose right-wing populism? **Answer options:** Yes, No

\_ new page \_

We will now show you examples of an online initiative against right-wing populism by the organization "Kleiner Fünf," which many people from Brandenburg support. **Question:** Have you ever become aware of content from "Kleiner Fünf" outside of this survey? **Answer options:** Yes, No

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Here you can see examples of this content:

- Turn a blind eye to climate change! Do you want that? Right-wing populists\* in Brandenburg claim that climate change is not man-made and want to roll back measures taken so far for climate protection. Yet citizens in Brandenburg are already feeling the dramatic consequences of climate change with droughts, forest fires and storms. Our children will suffer even more from such effects.
- 2. My customs beat your customs! Is that what you want? Right-wing populists in Brandenburg want to promote traditional state customs, but question the practice of other customs. Yet various customs already enrich our society, such as those of the Sorbian and Wendish minorities. Customs should not be played off against each other.
- 3. Politics at the expense of the "little people"! Is that what you want? Right-wing populists in Brandenburg are campaigning for the wealth tax to remain abolished. This was not paid by the "little people" but by people with greater wealth. This tax revenue is then missing from the state budget, from which the benefits for the "little people" are financed. In this way, the rich are to be relieved at the expense of people with fewer assets.

**Question:** Have you ever seen any of the above content by "Kleiner Fünf" content outside of this survey?

Answer options: Yes, No

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**Question:** Please indicate the channels through which you have come into contact with such organizations. Multiple answers are possible.

• Flyers

- Posters
- Social media (e.g. Facebook)
- Demonstrations
- Campaign events
- Friends or acquaintances
- Family
- Others

\_\_\_\_\_ new page \_\_\_\_\_

Next up is a guessing question where you can win money. Among the survey participants whose estimate comes closest to the value, we will give away additional mingle points worth €100.

We also asked members of "Kleiner Fünf" the question where they would place themselves on a political "left-right" scale if 0 stood for left and 10 for right.

Please estimate the average answer of these members to one decimal place (i.e., "8.5").

#### Numerical entry field

Note: it may take up to 4 weeks to determine the winners and pay out the additional mingle points.

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#### Control

**Question:** Did you know that there are civil society organizations in which citizens join together to oppose right-wing populism?

Answer options: Yes, No

\_\_\_\_\_ new page \_\_\_\_\_

**Question:** Have you ever come into contact with organizations of this type? **Answer options:** Yes, No

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**Question:** Please indicate here the channels through which you have come into contact with such organizations. Multiple answers are possible.

- Flyers
- Posters
- Social media (e.g. Facebook)
- Demonstrations
- Campaign events
- Friends or acquaintances
- Family
- Others

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For the remainder of the survey, we used the same survey items for all participants, yet replaced "Kleiner Fünf" with "civil-society organizations contending against right-wing populism" in the control group.

#### VIII.I First stage of identity treatment

Next up is another guessing question in which you can win extra money. Among the survey participants whose estimates are closest to the correct value, we will draw additional mingle points worth €100.

**Question:** Estimate how other survey participants from Brandenburg answered the question about the identification with ["Kleiner Fünf" / civil society organizations contending against right-wing populism]. Please estimate the average answer to one decimal place (i.e. "8.5", for example).

The question was: Do you identify with '["Kleiner Fünf" / civil society organizations contending against right-wing populism]? The value 0 represents "no identification at all", the value 10 represents full identification.

#### Numerical entry field

Note: it can take up to 4 weeks until the winners are determined and the additional mingle points are paid out.

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**Question:** Do you agree with ["Kleiner Fünf" / civil society organizations contending against right-wing populism] and [its/their] goals, as far as you can assess them? **Answer options**: 0 = no identification at all, 10 = full identification

**Question:** Do you consider ["Kleiner Fünf" / civil society organizations contending against right-wing populism] to be competent when it comes to correctly assessing the political, social and economic problems and needs in Brandenburg?

**Answer options**: 0 = no identification at all, 10 = full identification

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**Question:** According to what you know so far: Do many people from Brandenburg support ["Kleiner Fünf" / civil society organizations contending against right-wing populism]? **Answer options**: Yes, No, I don't know

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#### VIII.J Intended voting behavior in the 2019 state elections

**Question:** State elections will be held in [*federal estate*] on September 1. Are you planning to vote in the upcoming state elections?

Answer options: Yes, rather yes, rather no, no

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**Question:** In the upcoming election you can again cast two votes: With your candidate vote you can vote for a candidate from your constituency and with your list vote you can vote for a party. A member of which party is the candidate you intend to vote for? **Answer options**: FDP, The Left, CDU/CSU, Other, AfD, The Greens, SPD.

**Question:** And which party will you vote for? **Answer options**: FDP, The Left, CDU/CSU, Other, AfD, The Greens, SPD

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**Question:** There are several political parties in Germany. Each of them would like to get your vote in elections. For each of the following parties, please indicate how likely it is that you will ever vote for that party. Please use the scale below each party. **Answer options:** 0 = very unlikely, 10 = very likely

- FDP
- The Left Party
- CDU/CSU
- AfD
- The Greens
- SPD

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**Question:** How would you rate the CDU's expertise in the following policy domains? **Answer options**: 0 = no expertise at all, 10 = very good expertise THIS SET OF QUESTIONS IS REPEATED FOR THE AFD.

- 1. Labor market policy (e.g. unemployment benefits, part-time employment, minimum wage, automation)
- 2. Tax policy (e.g. solidarity contribution, top tax rates, taxation of international companies)
- 3. Climate policy (e.g. expansion of renewable energies, reduction of CO2 emissions)
- 4. Pension policy (e.g. securing pension levels, retirement age)
- 5. Family policy (e.g. child benefits, parental leave, childcare)
- 6. Health and care (e.g. health insurance contributions, care of relatives)
- 7. Migration and integration (e.g. immigration policy, language and integration courses)
- 8. Education and culture (e.g. school system, universities, financial support for cultural institutions)
- 9. Homeland and customs (e.g. protection of traditions, strengthening of rural areas, religion)
- 10. Transport and infrastructure policy (e.g. electromobility, driving bans, local public transport)
- 11. Digital policy (e.g. expansion of fiber-optic network, digitization of municipal services)

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#### VIII.K Posterior attitudes in the domains of climate change, identity, and migration

**Question:** Now think of immigrants who come to Germany and belong to a different ethnic group than most Germans: How much would it bother you if such person... **Answer options**: 0 = would not bother me at all, 10 = would bother me a lot

- ... was your neighbor?
- ... got married to a person closely related to you?

**Question:** What do you think: How are immigrants who have recently arrived in Germany treated by the government compared to people who were born in Germany? **Answer options:** much better, a little better, the same, a little worse, much worse

**Question:** Are Germany's crime-related problems increasing or decreasing due to immigrants?

**Answer options**: 0 = problems with crime increase, 10 = problems with crime decrease

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**Question:** Please indicate to what extent you agree or disagree with the following statements. **Answer options:** strongly agree, agree, partly agree, disagree strongly disagree

- Those who protect polluting industries as they are afraid of job losses underestimate the threat that climate change poses to our society.
- Policymakers should raise taxes on flights to protect the environment, even if it makes traveling more expensive.

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Question: What do you think about...

- ... introducing Islamic religious education in German schools?
- ... renaming Christmas markets to winter markets?
- ... mosques being built in German cities?
- Immigration enriches German culture. What do you think of this statement?
- Current politics in Germany endanger German customs. What do you think of this statement?

• The national identity of the Germans should be promoted more by policy makers. What do you think of this statement?

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**Question:** What do you think about the following question: Do immigrants who come here generally take away jobs from workers in Germany or do they generally help to create new jobs? **Answer options**: 0 = take away jobs, 10 = create new jobs

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#### VIII.L Sign petition

You now have the opportunity to sign the following petition (collection of signatures): *"Time for a commissioner against Islamophobia and Muslimophobia."* This petition calls for the establishment of a department in the Federal Ministry of the Interior for a commissioner against Islam and Muslim hostility.

**Question:** Would you like to sign this petition? **Answer options**: Yes, No

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You have indicated that you would like to sign the petition. To do so, simply click on the link below, which will open in a new window. Please then return to this survey immediately. You can sign the petition after this survey.

Petition: Time for a Commissioner against Islamophobia and Muslimophobia

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#### VIII.M Donation task

Ten participants of this study will be randomly selected and can receive additional mingle points worth  $\notin 10$  each. The selected participants must decide how much of these  $\notin 10$  they would like to keep for themselves and how much they would like to donate to the following initiative: Initiative Offene Gesellschaft e.V.

The "Initiative Offene Gesellschaft" campaigns for freedom of opinion, freedom of belief and equal rights, e.g. with debates and art actions in various cities and communities throughout Germany.

If you would like to learn more about the "Initiative Offene Gesellschaft", click on the following link: Initiative Offene Gesellschaft e.V.

**Question:** If you are selected, how much of the €10 would you like to donate to the "open society"?

Numeric entry field [0-10€]

Note: We will keep the indicated amount and donate this amount directly to the "Initiative Offene Gesellschaft". It may take up to 4 weeks for the additional mingle points you wish to keep to be paid out.

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## VIII.N Share content by "Kleiner Fünf"

In this section of our survey, you have the opportunity to share the content of the organization "Kleiner Fünf", which contends against right-wing populism. Here you can see examples of this content again:

- 1. Turn a blind eye to climate change! Do you want that? Right-wing populists\* in Brandenburg claim that climate change is not man-made and want to roll back measures taken so far for climate protection. Yet citizens in Brandenburg are already feeling the dramatic consequences of climate change with droughts, forest fires and storms. Our children will suffer even more from such effects.
- 2. My customs beat your customs! Is that what you want? Right-wing populists in Brandenburg want to promote traditional state customs, but question the practice of other customs. Yet various customs already enrich our society, such as those of the Sorbian and Wendish minorities. Customs should not be played off against each other.
- 3. Politics at the expense of the "little people"! Is that what you want? Right-wing populists in Brandenburg are campaigning for the wealth tax to remain abolished. This was not paid by the "little people" but by people with greater wealth. This tax revenue is then missing from the state budget, from which the benefits for the "little people" are financed. In this way, the rich are to be relieved at the expense of people with fewer assets.

You can find more content from "Kleiner Fünf" here: Kleiner Fünf

**Question:** Would you like to share the above link to more content from "Kleiner Fünf" with other people?

Answer options: Yes, No

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**Question:** With which group of people would you like to share the link to the content of "Kleiner Fünf"? Multiple selection is possible.

Answer options: Family, friends, acquaintances, others

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You have indicated that you would like to share the link to the other content of "Kleiner Fünf". To do this, simply click on the link below. This will open your email program and you can enter the email addresses of the people you want to send the "Kleiner Fünf" content to. We do not record your email addresses or the email addresses you enter. Click to share: Email

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#### VIII.O Final questions and wrap up

**Question:** I have filled out this questionnaire very carefully and paid lots of attention throughout. **Answer options**: completely, to a large extent, partially, not at all **Question:** What do you think was the purpose of this survey?

Once we have collected all the data, we will determine the winners of the estimation questions. It can take up to 4 weeks before the winners are determined and the mingle points are paid out. We may wish to survey you again in a few weeks. If you answer the second survey completely, you will receive a special payment of 50 cents in addition to the usual payment.

**Question:** I have read the notice about the repeat survey with special compensation. **Answer options:** Yes, No

If you have any comments about this survey, please note them here.

Close survey.

END OF SURVEY

## IX Survey Instrument Post-Election Survey

#### IX.A Basic demographic information

- 1. **Question:** In which state do you live?
- 2. **Question:** Which educational degree did you obtain? Please report only your highest degree.

**Answer options**: Still a student, School finished without graduation, Elementary school / secondary modern school or polytechnic secondary school with 8th or 9th grade certificate, Intermediate school certificate, Realschule certificate or polytechnic secondary school with 10th grade certificate, Advanced technical college certificate (certificate from a technical secondary school, etc.), Abitur certificate or extended secondary school with 12th grade certificate (higher education entrance qualification), Other school certificate If you indicated "other school-leaving qualification" in the previous question, please note its designation.

3. **Question:** Which vocational training degree did you obtain? Note: You can also select more than one answer.

**Answer options**: Vocational-in-company training period with certificate of completion (but no apprenticeship), Partial skilled worker's certificate, Completed industrial or agricultural apprenticeship, Completed commercial apprenticeship, Vocational internship / traineeship, Vocational school certificate, Technical school certificate, Master craftsman's certificate, Technician's certificate or equivalent technical school certificate, Technical college certificate (also certificate from an engineering school), University degree, No vocational training certificate, Other training certificate, namely (please enter in the following field).

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#### IX.B Self-reported voting behavior in the 2019 state elections

State elections were held in Brandenburg on September 1, 2019. We would like to ask you a few questions about this.

**Question:** Did you vote in the state election in Brandenburg on September 1, 2019? **Answer options:** Yes, No.

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ONLY DISPLAYED FOR PARTICIPANTS WHO REPLIED "YES" TO THE PREVIOUS QUESTION We would like to understand why you voted in the state elections in Brandenburg on September 1, 2019.

**Question:** To what extent do the following statements apply to you?

**Answer options**: fully applies, tends to apply, partly applies, tends not to apply, does not apply at all

- 1. I voted because I expected a close election outcome.
- 2. I voted because I always vote.

Only displayed for participants who replied "No" to the previous question

We would like to understand why you did not vote in the state election in Saxony on September 1, 2019.

**Question:** To what extent do the following statements apply to you?

**Answer options**: fully applies, tends to apply, partly applies, tends not to apply, does not apply at all

- 1. I did not vote because I do not feel represented by any of the parties running.
- 2. I didn't vote because I don't think it matters whether I vote or not.
- 3. I voted because I consider it my duty as a citizen.
- 4. I voted because people around me also voted.
- 5. I did not vote because I wanted to set a sign of protest.
- 6. What was your protest against that made you not vote? Note: You can select multiple answer options here.

**Answer options:** The government, politics, the elites, the old parties, social injustice, lack of climate policy, immigration, refugee policy, too much interference of the EU in national politics, other reason, namely (please enter in the following field).

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ONLY DISPLAYED FOR PARTICIPANTS WHO REPLIED "YES" TO THE PREVIOUS QUESTION In the state election on September 1, 2019 in Brandenburg, you could cast two votes: With the first vote you could vote for a candidate from your constituency and with the second vote for a party. **Answer options**: AfD, SPD, Die Linke, CDU, FDP, Die Grünen, Other.

- 1. **Question** 1: A member of which party is the candidate you voted for?
- 2. **Question** 2: Which party did you vote for?

**Question:** To what extent do the following statements regarding your decision which party to vote for apply?

**Answer options:** fully applies, tends to apply, partly applies, tends not to apply, does not apply at all

- 1. I voted for the FDP on the basis of its election or party platform.
- 2. I voted for the FDP because I always vote for this party.
- 3. I voted for the FDP because of its election campaign.
- 4. I voted for the FDP because of the election campaign of another party.
- 5. I voted for the FDP because of conversations with people from my personal environment (e.g. family, friends or colleagues).
- 6. I voted for the FDP to show support for one or more parties.
- 7. I voted for the FDP to set a sign of protest.

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**Question:** The election campaign of which other party was partly responsible for you to vote FDP?

**Answer options**: CDU, The Greens, SPD, AfD, The Left, FDP, Other (please enter in the following field).

**Question:** Which people in your personal environment influenced your decision to vote FDP in conversations? Note: You can select multiple answer options here.

**Answer options**: Family, Close friends, Acquaintances, Colleagues, Other people, namely (please enter in the following field).

**Question:** What were you protesting against that made you vote for FDP? Note: You may select more than one answer choice.

**Answer options**: The government, politics, the elites, the old parties, social injustice, lack of climate policy, immigration, refugee policy, too much interference of the EU in national politics, other reason, namely (please enter in the following field).

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There are quite a few political parties in Germany. Each of them would like to get your vote in elections.

**Question:** For each of the following parties, how likely is it that you will ever vote for that party? Please use the scale shown below each party. Scale value 0 means this is "very unlikely"

for you, scale value 10 means this is "very likely" for you. You can use the options in between to grade your judgment.

**Answer options**: 0 = very unlikely, 10 = very likely

- CDU
- The Greens
- SPD
- AfD
- The Left
- FDP

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Many people use the terms "left" and "right" when referring to different political attitudes.

- Question: Where on the scale do you see yourself if 0 stood for "left" and 10 for "right"? You can use the values between 0 and 10 to grade your political orientation. Answer options: 0-10
- Now imagine a person whose political views are typical of your family and close friends. Answer options: 0-10 Question: What do you think this person's political orientation on the political left-right scale would be?
- 3. Now imagine a person whose political views are typical of your community or city. **Answer options:** 0-10

**Question:** What do you think this person's political orientation on the political left-right scale would be?

4. Now imagine a person whose political views are typical for Brandenburg. **Answer options:** 0-10

**Question:** What do you think this person's political orientation on the political left-right scale would be?

Now imagine a person whose political views are typical for Germany.
Question: What do you think the political orientation of this person on the political left-right scale would be? Answer options: 0-10

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Now think of immigrants who come to Germany and belong to a different ethnic group than most Germans. Please use this scale to answer the following questions. The scale value 0 means that something would "not bother you at all", the scale value 10 means that something would "bother you at all", the scale value 10 means that something would "bother you a lot". You can use the values in between to grade your judgment.

- 1. **Question:** How much would it bother you if such an immigrant was your neighbor?
- 2. **Question:** How much would it bother you if such an immigrant married someone closely related to you?

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#### IX.C Posterior attitudes in the domains of climate change, identity, and migration

Please continue to think about immigrants who come to Germany and belong to a different ethnic group than most Germans.

- Question: How are such immigrants, who have come to Germany only recently, treated by the government and the state compared to people who were born in Germany? Answer options: much better, a little better, the same, a little worse, much worse
- 2. **Question:** Do such immigrants increase or decrease Germany's problems with crime? **Answer options**: 0 = problems with crime decrease, 10 = problems with crime increase

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**Question:** To what extent do you agree or disagree with the following statements/measures? **Answer options**: strongly agree, tend to agree, partly agree, tend to disagree, strongly disagree.

- 1. Those who protect environmentally harmful industries out of fear of job losses underestimate the danger that climate change poses to our society.
- 2. Politicians should increase taxes on flights to protect the environment, even if it makes traveling more expensive.
- 3. Immigration enriches German culture.
- 4. Current politics in Germany endanger German customs.
- 5. The national identity of Germans should be promoted more strongly by politics.
- 6. Measure: Introduce Islamic religious instruction in German schools.
- 7. Measure: Rename Christmas markets to winter markets.

8. Measure: Build mosques in German cities.

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**Question:** What would you say, do immigrants coming here generally take away jobs from workers in Germany OR do they generally help create new jobs? **Answer options:** 0 = take away jobs, 10 = create new jobs

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#### IX.D Re-elicit familiarity with K5's content

**Question:** Are you familiar with the civil society organization "Kleiner Fünf"? **Answer options**: Yes, No

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You indicated that you have seen the previous content by "Kleiner Fünf". **Question:** Where did you first see it?

**Answer options:** Social media (Facebook, Instagram, or Twitter), Campaign events or demonstrations, Inside another poll, Elsewhere, namely (please fill in the box below).

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**Question:** What do you think, do many people from Brandenburg support "Kleiner Fünf"? **Answer options**: Yes, No, I don't know

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#### IX.E Perceived polarization

**Question:** To what extent do you agree or disagree with the following statements? **Answer options**: strongly agree, tend to agree, partly agree, tend to disagree, strongly disagree.

- 1. The conflicts between the various interest groups in our society have become more extreme in recent years.
- 2. In recent years, it has become increasingly difficult to find compromises on important political issues.

- 3. Political discussions should take scientific findings into account more often.
- 4. The disputes between the various interest groups in our society and their demands on the government are detrimental to the common good.
- 5. The people agree in principle on what needs to happen politically.

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#### IX.F Personality traits

**Question:** To what extent do the following characteristics apply to you? **Answer options**: strongly agree, tend to agree, partly agree, tend to disagree, strongly disagree.

- 1. Trait: I am rather restrained, reserved.
- 2. Trait: I trust others easily, believe in the good in people.
- 3. Trait: I am comfortable, tend to be lazy.
- 4. Trait: I am relaxed, do not let stress upset me.
- 5. Trait: I have little artistic interest.
- 6. Trait: I am outgoing, am sociable.
- 7. Trait: I tend to criticize others.
- 8. Trait: I complete tasks thoroughly.
- 9. Trait: I get nervous and insecure easily.
- 10. Trait: I have an active imagination.

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PARTICIPANTS ENTER THE **GLOBAL PREFERENCES SURVEY** (GPS) MODULE BY FALK ET AL. (2018). WE EMPLOYED THE FULL GPS QUESTIONNAIRE IN GERMAN AVAILABLE AT HTTPS://WWW.BRIQ-INSTITUTE.ORG/GLOBAL-PREFERENCES/DOWNLOADS

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#### IX.G Final questions and wrap-up

To conclude our survey, we would like to ask you a few general questions about our survey. **Question:** How much attention did you pay and how carefully did you complete this question-naire?

Answer options: completely, to a large extent, partially, not at allQuestion 1: What do you think was the purpose of this survey?Question 2: How did you perceive the political outset of this survey?Answer options: left-wing, rather left-wing, neutral, rather right-wing, right-wing

Please briefly mention here the parts of the survey that you perceived as politically left/right leaning.

In the first round of this survey, which took place a few weeks ago, you answered a series of estimation questions. answered. Those guessing questions have been tied to the opportunity to win an additional incentive. Once we have compiled all the data, we will determine the winners of the guessing questions. This can take up to 4 weeks. Subsequently, the winners will be credited with their additional incentive. The type of credit is subject to the individual regulations of respondi AG and its partners. If you have any comments about the survey, you can note them here. Comments on the survey:

Close survey. End of Survey