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Abstract

Elite and mass level politics in many Western democracies is increasingly characterised by the expression of negative feelings towards political out-groups. While the existence of these feelings is well-documented, there is little evidence on the consequences of activating political identities during election campaigns. We test whether fundraising emails containing negative or positive political identity cues lead party supporters to donate money via a large pre-registered digital field experiment conducted in collaboration with a British political party. We find that emails containing negative as opposed to positive identity cues lead to a higher number and frequency of donations. We also find that negative identity cues were only effective when paired with an issue identity rather than a traditional party identity cue, resulting in a 15% increase in the probability of donating over the untreated control. Our results provide novel experimental evidence on the behavioural effects of activating identities in real-world political campaigns.

Keywords: political identity, field experiment, campaigns, negative partisanship

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Introduction

Strong feelings of dislike towards specific political parties are commonplace among the mass public in many democracies (Iyengar et al., 2019; Gidron, Adams, and Horne, 2019; Wagner, 2021). Alongside partisan polarisation, recent research has shown that negative affect can also extend towards issue-based out-groups defined by issues as diverse as COVID vaccines (Wagner and Eberl, 2022; Bor, Jørgensen, and Peterson, 2023), a state's membership of the European Union (Hobolt, Leeper, and Tilley, 2020), abortion rights (Crawford et al., 2021), or secessionism (Balcells and Kuo, 2022). These negative feelings can develop into fully fledged negative identities, whereby individuals not only dislike an out-group, but increasingly define themselves as being against the other side, e.g. as *anti-Conservative*, *anti-vaxxer*, or *anti-Brexit*. Negative identities can play an important role in structuring individual-level political preferences (Abramowitz and Webster, 2016; Bankert, 2021; Wagner and Eberl, 2022; Bor, Jørgensen, and Peterson, 2023). However, we know little about the potential of negative political identities to mobilise individuals into taking costly political action. This paper examines whether campaigns can use political identities to mobilise supporters into making a donation, and what types of identity cues are most effective in encouraging donations. Are negative identity cues more effective than positive identity cues in mobilising supporters? Is shared out-group hatred more easily mobilised than in-group love?

While a rich experimental literature on negative campaigning has investigated whether going negative against one's opponent is an effective political strategy (Gerber, Green, and Green, 2003; Niven, 2006; Arceneaux and Nickerson, 2010; Barton, Castillo, and Petrie, 2016), we investigate a specific type of negative campaigning in this paper: negative identity campaigning. Negative identity campaigning is focused on tapping into supporters' visceral dislike and shared identity against an out-group, rather than attacking an opponent on their competence, performance or issue positions. As cues relating to individual-level negative identities tap into highly emotional conflicts between in- and out-groups, negative identity campaigning should prove to be a powerful form of negative campaigning.Parties and campaigns increasingly deploy negative identity cues in their fundraising emails to supporters (Kim, Zilinsky, and Brew, 2022). This increase in the use of negative identity cues in campaign fundraising goes hand-in-hand with a steep increase in do-

nations from small donors, both in the US and Europe (Bouton et al., 2022; Bouton, Castanheira, and Drazen, 2018). Understanding what consequences negative identity campaigning has on the political behaviour of party supporters is important because it might both be a cause and a consequence of the growing arms-race in donor solicitation from campaigns. Besides the overall donation amount, the number of small donors is considered an important metric because it suggests that a campaign has wide public backing. By focusing on negative political identities alongside positive ones, we also contribute to the literature investigating the role that political identity cues play in the solicitation of campaign donations (Hassell and Monson, 2014; Cyphers, Hassell, and Ou, 2022; Perez-Truglia and Cruces, 2017) and political mobilisation more generally (Foos and de Rooij, 2017; Panagopoulos, 2009). We also contribute to the negative partisanship and affective polarisation literature by showing that negative identity activation has consequences for political behaviour that can be distinct from those of positive identity activation. This attests to the importance of understanding negative identities as a driver of political behaviour. Most studies on negative partisanship and affective polarisation investigate the link between negative partisanship and political participation using observational data (Michael McGregor, Caruana, and Stephenson, 2015; Bankert, 2021; Mayer, 2017). By studying the implications of negative identity cues in a digital field experiment using validated donations to a political party, our study adds robust empirical evidence about the implications of negative partisanship activation for behaviour. Finally, we extend the literature on affective polarisation and negative partisanship by theorising and testing how negative political identities interact with salient political issues and how they can be mobilised by political parties. While voters and activists have traditionally structured their political beliefs around party loyalties, voters' political identification with a particular issue (e.g. identification as *pro-choice*, an *anti-vaxxer*, or as a *Brexiteer*) has come to play an increasingly important role in structuring political attitudes and behaviours (Hobolt, Leeper, and Tilley, 2020; Wagner and Eberl, 2022). We provide evidence that a negative identity appeal increased the number of donations among party supporters, if and only if it referenced an issue identity rather than a party identity. This finding advances our understanding of issue identities, and suggests scope conditions under which they can be mobilised by campaigns to affect political behaviour.

To test the effects of negative party identity cues and negative issue identity cues on donations,

we conducted a large digital field experiment in collaboration with a British political party during the 2019 general election campaign. We randomly assigned around 90,000 party supporters to receive either no campaign email, or a campaign email that contained a combination of a negative or a positive identity cue, with an issue or a party identity cue. We then identify the effect of these cues on validated time-stamped donations to the political party as a measure of costly (i.e., *financial*) political behaviour. The 2019 UK general election provides an excellent case for studying the effects of different identity cues on costly political action. The UK is characterised by medium to high levels of affective polarisation compared to other European democracies (Gidron, Adams, and Horne, 2019), rendering it a case where negative party identities could affect political action among party supporters. At the same time, Brexit-related issue identities were prevalent and highly salient during the 2019 election (Ford et al., 2021). This makes it an ideal case for comparing the power of issue and party identities, as well as negative and positive identity appeals. In line with our theoretical expectations, we find that emails containing negative identity cues are more effective than positive cues in relation to the number and frequency of donations. We also find that negative identity cues are only effective versus the control when paired with an issue identity, rather than a traditional party identity. Even in the noisy context of a general election campaign, a single campaign email containing negative issue identity cues drove up donations by 15%, compared to not receiving any campaign email at all. This is a sizeable treatment effect and demonstrates that activating negative political identities in real world-campaign settings can have powerful consequences. However, while the negative identity cue emails mobilised party supporters, they did not significantly raise the overall donation amount received by the political party. Exploratory analysis suggest that this is likely due to null effects among prior high value donors. Our results therefore speak to the trade-off between building a small donor base and raising funds overall. While negative identity campaigning appeared to help the party grow their donor base and signal mass support, it was not unequivocally a winning strategy for boosting fundraising.

Negative identity campaigning

While early canonical research found that negative campaigning can demobilise the electorate (Ansolabehere et al., 1994), more recent experimental research is mixed, ranging from null effects (Arceneaux and Nickerson, 2010) to positive effects on turnout (Niven, 2006; Barton, Castillo, and Petrie, 2016). Our paper contributes to the negative campaigning literature in two ways. First, we study the effects of political parties' negative messages on the mobilisation of (their own) party supporters, rather than the electorate at large. Negative identity campaigning aimed at in-partisans should lead to positive mobilisation effects, and reduce the risk of potential backlash that may be present in the general electorate. Second, we study a specific type of negative message, focusing on identities, rather than issues, traits or competence, that is used by political parties but that has not received as much scholarly attention in the experimental literature. Political parties can rally their supporters around a shared in-group identity or a shared opponent identity. We argue that in contexts of high polarisation, "negative identity campaigning" can have stronger effects on mobilisation than positive identity campaigning. By combining insights from the negative campaigning literature and the literature on political identities, we investigate how political identities are activated and mobilised into political action.

Social identities are a fundamental feature of society. Individuals adopt social identities to satisfy higher psychological needs like belonging and creating a sense of self-worth (Tajfel and Turner, 1979). Defining who we are through the groups we belong to can provide an impetus for behaviour favouring the in-group, but can also engender strong negative attitudes and behaviour towards out-groups (Brewer and Brown, 1998; Hogg and Abrams, 1988). Across different contexts, research has argued that in-group attachment encourages individuals to take action on behalf of their group (van Zomeren, Postmes, and Spears, 2008). These fundamental insights also apply to the realm of politics. Party identities are a key structuring force of political behaviour and preferences (Green, Palmquist, and Schickler, 2002; Mason, 2018). Party identity can affect whether citizens choose to take political action. Strong partisans react emotionally to the prospect of losing or winning an election, and are motivated to get involved in campaigning efforts to defend the status of their partisan in-group (Huddy, Mason, and Aaroe, 2015). Building on this insight, and

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the recent experimental literature on the efficacy of online campaign efforts (Han, 2016; Turnbull-Dugarte et al., 2022; Cyphers, Hassell, and Ou, 2022), we expect that a campaign message from a political party will mobilise supporters to donate to the campaign:

H1 Mobilisation hypothesis: Contact from the party will mobilise supporters to donate to the campaign.

Individuals who feel a strong sense of attachment to a party in-group can also develop strong negative affect towards other parties as a way of protecting and expressing their party identity (Bankert, Huddy, and Rosema, 2017; Medeiros and Noël, 2014; Abramowitz and Webster, 2016). Negative partisanship has been described as "affective repulsion", or a strong dislike and disdain for a political party (Caruana, McGregor, and Stephenson, 2015). These negative feelings towards out-parties can develop into fully-fledged negative political identities, where voters may identify just as much as being against a specific party (e.g. an anti-Democrat), as they think of themselves as a party supporter (e.g. a Republican) (Bankert, 2021).

We expect that mobilising negative political identities has stronger effects on behaviour than mobilising positive in-group identities because humans tend to weight negative preferences and experiences more heavily than positive experiences (Tversky and Kahneman, 1992). Applied to political behaviour, negativity bias has been documented in affective responses to political rhetoric (Bakker, Schumacher, and Rooduijn, 2021), in responses to news content (Soroka, Fournier, and Nir, 2019), and in candidate evaluation (Holbrook et al., 2001). Miller and Krosnick (2004) suggest that loss aversion might provide a powerful motivation for citizens to become politically active and to engage in costly political participation, such as donations. Grounded in these insights from psychological and behavioural research, the partisanship literature has argued that negative party identity has a mobilising effect whereby voters with negative partisanship are more likely to turn out to vote (Caruana, McGregor, and Stephenson, 2015; Mayer, 2017). Voters who have a bigger gap in their affect towards their in-party and their out-party are also more likely to say they would campaign for a candidate or party, contact an elected official, take part in a protest or be involved in a social or political cause (Wagner, 2021). In line with these theoretical considerations, we expect messages that activate negative identities to have a stronger mobilising effect than positive identity primes.

H2 Negative identity hypothesis: Messages that prime negative political identities will have a larger positive effect on donations than messages that use positive identity cues.

Hypothesis 2 is also underpinned by research on negative partisanship and affective polarisation that connects changes in elite-level behaviour to changes in individual-level behaviour. For example, increases in elite affective polarisation have been linked with increases in individual-level affective polarisation among partisans (Banda and Cluverius, 2018). Elite-level communications containing negative political identity cues should increase supporter mobilisation because they make the cued identity more salient to supporters. Research on affective polarisation shows that the salience of negative partisanship matters for political behaviour (Iyengar et al., 2019; Lelkes, Sood, and Iyengar, 2017). In Figure 1 we provide a schematic description of how political identity campaigning can vary in relation to its direction and target. We now turn towards discussing the target of identity campaigning and how it interacts with the positivity or negativity of political identification.

Table 1: Political identities can vary in terms of their direction (positive/negative), and their target (party/issue).

	Positive	Negative
Party	Positive party identity *Example: Labour*	Negative party identity *Example: anti-Conservatives*
Issue	Positive issue identity *Example: pro-choice, Remainer*	Negative issue identity *Example: anti-vaxxer, anti-Brexit*

Issue versus party identity activation

Political campaigns often aim to mobilise political identities to further political activities such as volunteering or donations (Cyphers, Hassell, and Ou, 2022). While these activities, especially in polarised contexts, can serve as signals of group membership, these signals are not uniquely targeted at party identities. They can also prime issue-based identity groups.[1]

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[1] While we refer to identities such as "Remainer" and "Leaver" as issue identities, similar social identities based on individual and group-based identification with salient political issues have also been referred to as "opinion-based groups" (McGarty et al., 2009).

Political issue identities can sometimes emerge orthogonally to political partisanship[2] and are born out of inter-group conflict on concrete policy issues: a divide between individuals who *identify* as proponents or opponents of a certain issue (Bliuc et al., 2007). Simply holding an opinion on an issue does not constitute membership of an issue identity group. Whilst harbouring a clear (pro versus anti) stance on a concrete policy issue is a core prerequisite for issue identities, political identities only emerge when individuals consciously and actively identify with the issue, differentiate themselves from those who harbour opposing identities, and when the individuals engage in evaluative bias that regards in-group status and penalises out-group status (McGarty et al., 2009; Mason, 2018).

Issue identities are prevalent across a number of countries. In the US one of the most salient issue identities to emerge are what Crawford et al. (2021) identify as the "abortion identities" of *pro-life* and *pro-choice* individuals. As detailed by Killian and Wilcox (2021) these abortion-based issue identities often become "irresistible forces" that can result in the abandonment of conventional partisan loyalties. More recently during the Covid-19 pandemic, a vocal proportion of society has increasingly sought to identify itself as "anti-vaccine" (Wagner and Eberl, 2022; Abrams, Lalot, and Hogg, 2021). Motta et al. (2023) demonstrate that the anti-vaxxer label is not only a descriptive characteristic of these individuals' shared view on vaccination programmes, but rather serves as an issue social identity that anti-vaxxers use to distinguish themselves from others. Additional examples can be found in those states where multidimensional conflicts lead to the emergence of issue identities that are independent of partisanship. Secessionist movements in Scotland (UK) and Catalonia (Spain), for example, have engendered issue identities around constitutional preferences that often trump partisan preferences at the ballot box. In Scotland where voters have been manoeuvred into two constitutional dichotomies on both membership of the UK as well as membership of the EU, voters have adopted tribe-like identities (Mitchell and Henderson, 2020) that predict electoral preferences that cut across party loyalties (Johns, 2021).

The UK's 2016 Brexit referendum, which coerced citizens of diverse ideological and party

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[2]Independent issue identities are becoming less frequent in the US context where, as a result of social sorting, intra-party heterogeneity of issue positions has dramatically declined and been replaced with strongly polarised inter-party distinctiveness (Mason, 2018).

colours[3] to coalesce on either side of the *Remain vs. Leave* dichotomy, is a prime example of how concrete events can catalyse the emergence of salient and consequential issue identities (McGarty et al., 2009). Empirically, Hobolt, Leeper, and Tilley (2020) demonstrate that issue identities reflecting individual attachment to positions on Brexit have materialised as salient political identities amongst the British electorate. Not only have these Brexit identities - an affective attachment and rejection of individuals based on their identity as *Leavers* or *Remainers* - become more prevalent than party identities but these attachments have also become *stronger* than conventional political (party) identities (Hobolt, Leeper, and Tilley, 2020).

Issue-based political identities that were encapsulated by the Brexit referendum also have consequential implications for how citizens evaluate information. A common observation in the literature on party-based identities is the emergence of a "perceptual screen" that serves to moderate how partisans receive, process and digest information. A tough test of the importance of issue identities in shaping political preferences, therefore, is the extent to which these identities replicate partisan-like processes of motivated reasoning. Sorace and Hobolt (2020) demonstrate that, above and beyond partisanship, salient issue identities can trigger a perceptual screen that moderates how individuals process and evaluate political information such as the performance of the economy. The authors' combination of observational and experimental evidence highlights affective attachment to political identities other than partisan can be as influential as partisan attachments when it comes to how individuals view the world.

If, as argued by Klandermans et al. (2002), strong attachments to issue-based group identities make political participation that favours the interest of the group more likely, then we would expect priming individuals on salient and electorally sensitive issue identities to induce them to participate in costly campaign activity. Existing experimental evidence suggests that this is indeed the case. Turnbull-Dugarte et al. (2022) present evidence from an experiment fielded in collaboration with the anti-Brexit campaign organisation, *The People's Vote*, demonstrating that informing anti-Brexit donors of the pro-Brexit position of their parliamentary representative significantly increased

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[3]As detailed extensively elsewhere, a lack of intra-party cohesion was a common feature of political parties in the UK in both the lead up to and during the aftermath of the Brexit referendum (Trumm, Milazzo, and Townsley, 2020). This is significant as it signals the issue of Brexit as one disconnected from any clear party line at least, that is, until the Conservatives' positioning as the *de facto* Brexit party was solidified under the leadership of Boris Johnson (Ford et al., 2021).

their propensity to lobby their representative in favour of a second referendum on the issue. This experiment provides causal evidence from a naturalistic setting which demonstrates that priming individuals on opposing issue positions can, in addition to signalling issue stances, also mobilise individuals with issue-based *identities* by activating negative attachments that exhibit an influential mobilising effect on supporters' political behaviour (Turnbull-Dugarte et al., 2022).

Given the rise of issue (Brexit) identities in the UK, their increased *relative* importance vis-à-vis party identities, as well as the focus on and salience of Brexit in the 2019 general election (Ford et al., 2021), our *pre-registered* hypothesis is that messages that prime individuals on issue identities would be more effective at driving donations than messages priming conventional (party) identities. The increased efficacy of issue identities vis-à-vis party identities in activating political action is, however, a function of the relative salience of issue- and party-identities within a given temporal window. As detailed by Hobolt, Leeper, and Tilley (2020) – and as we show in the descriptive data reported in Appendix A.12 – issue identities in the UK currently boast a significantly higher level of prevalence than party identities. Should these patterns reverse and party identities enjoy a greater level of dominance than issue identities, our expectations related to the relative efficacy of priming these identities would also be the reverse.

H3 Issue identity mobilisation hypothesis: Messages that prime Brexit identities will be more effective at encouraging campaign donations than messages that prime traditional party identities.

Negative issue identities

Finally, combining theories on issue vs party identities and negative vs positive identities, we expect negative issue cues to elicit stronger mobilisation than negative party identity cues. We argue that this is the case because negativity constitutes an even more central element of issue identity formation than party identity formation. While previous research has argued that out-group animosity and negative stereotyping of out-group members is an important feature of issue identities (Elsbach and Bhattacharya, 2001; Hobolt, Leeper, and Tilley, 2020; Wagner and Eberl, 2022), we explicitly hypothesise and test that issue identity cues framed around out-group dislike are more effective than issue identity cues framed around in-group love in mobilising activists to donate. In doing so, our paper advances the literature on issue and partisan mobilisation, clarifying the

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scope conditions under which issue identities affect political behaviour. Previous research has shown that out-group animosity is a central feature of issue identities (Hobolt, Leeper, and Tilley, 2020). For example, both Remainers and Leavers engage in negative out-group stereotyping, describing individuals on the other side as less honest, intelligent and more hypocritical and selfish (Hobolt, Leeper, and Tilley, 2020). From a theoretical perspective, issue identities are particularly suited to the development of strong negative identities. Issue identities often emerge in response to deeply divisive, binary opinion divides, such as referenda, where two opposing sides are pitted against one another in a winner-takes-it-all scenario (see also Hobolt, Leeper, and Tilley (2020)). Compared to negative partisanship in multi-party settings, issue identities are thus more focally structured around just one disliked out-group. Animosity towards other political parties may be spread over multiple disliked parties in multi-party systems. In contrast, the binary nature of issue identity conflict concentrates all negative feelings on one single political out-group. We therefore argue that out-group animosity should have more powerful effects on behaviour when combined with a salient issue identity, than a party identity. This expectation is also underpinned by foundational research on social movements. Issue identities often emerge within social movements, such as the climate change movement (Vesely et al., 2021). People are not just in favour of climate change mitigating policies, they also actively define themselves as "environmentalists" – which has consequences for their intention to take action on these issues (Vesely et al., 2021). Negativity plays a central part even in these positively formulated identities: for example, environmentalist movements are often framed in opposition to the status quo, e.g. "Stop climate change", "Ban fracking", "Anti-nuclear energy". As social movements are rooted in grievances, strong negative feelings such as illegitimacy and injustice (van Stekelenburg, Jacquelien and Klandermans, Bert, 2017), the resulting identities also contain a strong negative affective component. These highly negative, "hot cognitions" of moral indignation and anger are a key part of the collective action frames that social movements use when building movement identities (Gamson, 1992). Recent work has shown that there is a link between citizens' tendency to moralize politics, and their levels of affective polarization and out-group animosity (Garrett and Bankert, 2020). Negative identities are thus not an optional, late addition to collective in-group identities, but an essential part of the formulation of positive in-group identities for social movements: the "identity component refers to the process of defining this

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we, typically in opposition to some *they* who have different interests or values" (Gamson, 1992a:7). For example, movements as different as *Occupy Wall Street*, the anti-nuclear energy movements, but also the recent anti-vaxxer movement seek to mobilise and unite a diverse set of individuals around a shared dislike. Applying these insights from social movement theory to issue identities, negativity should constitute a central element of issue identities. In comparison, party identities can more easily be constructed and maintained in exclusively positive ways. Feelings of attachment and belonging to a partisan in-group can exist without a simultaneous hatred of rival political parties and partisans. While many partisans also hold negative out-group feelings, due to the importance of negativity in issue identity formation, we expect negative issue identity cues to have the most powerful effects on costly mobilisation, trumping the effects of negative party identity cues.

H4 Interaction hypothesis: *Messages that prime negative identities will be more effective when combined with issue identities rather than traditional party identities.*

Methods

To test these hypotheses, we conducted a pre-registered[4] digital field experiment in collaboration with a British political party during the 2019 UK general election campaign. What sets our experimental design apart is that we were able to assign the entire membership universe of a mainstream political party to different experimental conditions, allowing us to detect small, but meaningful effect sizes in a naturalistic setting. During a high stakes election campaign, citizens, and especially party members, are exposed to many different campaign emails. This means that in this setting, the effects of emails on donation behaviour are likely small. But small effects are still important because emails are easily scalable. While a party member might be more readily mobilised than the average voter, donation rates among party members are relatively low in the UK. The action of donating solicits costs beyond making a financial contribution in that it requires potential donors to complete an online form, and pay using an online payment method, such as credit card.

In this study, we have access to validated donation data, that we obtained from the political

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[4]PAP registered prior to fielding at 11/11/2019, available online at: https://osf.io/nzvku, and included in the Appendix, Section A.14. The experiment was reviewed and approved by the LSE institutional research ethics committee under REC ref. 1005. As per our collaboration agreement, we are unable to explicitly name the collaborating political party involved in the experiment.

party and matched to our experimental assignment. It is well known that there are discrepancies between self-reported data on donation behaviour and actual behaviour, with subjects likely to overestimate their donation when asked in surveys (Cyphers, Hassell, and Ou, 2022). Overreporting is of particular concern in our case because it could be a function of activating positive or negative political identities. Similarly to Perez-Truglia and Cruces (2017) and Cyphers, Hassell, and Ou (2022), we overcome this challenge by relying on validated data on donations.

Context

The 2019 election marked the end of the tumultuous 2017-19 parliament characterised by political instability and parliamentary deadlock over Brexit (Ford et al., 2021; Sobolewska and Ford, 2020). The incumbent Conservative party campaigned under the banner "Get Brexit Done". Labour, the main opposition party, proposed to renegotiate the withdrawal agreement before putting it to the public in a second referendum. In England and Wales, the Liberal Democrats joined with Plaid Cymru and the Greens to form the "Unite to Remain" electoral pact, where candidates stood down in 60 constituencies where it was believed one of their candidates stood the best chance of defeating a pro-Brexit incumbent (Cutts, Russell, and Townsley, 2023; Ford et al., 2021). "Unite to Remain" represents a concrete example where the joint dislike of a specific issue position (i.e. a negative issue identity) is driving real world political activity: anti-Brexit candidates were coordinating in order to block the electoral viability of a specific pro-Brexit candidate.

Experimental Design

We test the effects of positive and negative, issue and party identity cues on donation behaviour via a field experiment, which follows a 2x2 plus control factorial design. The experimental sample is based on the 98,206 individuals who were registered in the political party's membership database as of October 2019. After removing entries without verifiable email addresses and individuals below the age of 18, we arrive at the experimental sample of 89,941 subjects. Using complete random assignment blocked on past donation behaviour (whether an individual had ever donated to the party, or not), we randomly assigned subjects with a probability of .2 to control (no email), and with a probability of .2 to one of four email conditions (see Table 2). With equal probabilities, we

randomly varied two factors in this email, 1) if the email used positive or negative identity cues and 2) if the email referenced party or issue identities. The fully-crossed factorial design enables us to examine what effects negative vs positive identity cues have on mobilisation, as well as what effects issue vs party identity cues have on mobilisation. Crucially, this design also allows us to test if the effect of the issue identity cue is conditional on the negativity of the identity invoked. Having a pure control condition (no email) is important because it allows us to test whether receiving a campaign email, regardless of content, has an effect on donations.[5] The resulting assignment is displayed in Table 2.

Table 2: Assignment of subjects to experimental conditions

Group	Factor 1: Positivity	Factor 2: Identity	Assignment
Control	n/a	n/a	20%
T1	Positive	Party identity cue (pro in-party)	20%
T2	Negative	Party identity cue (anti out-party)	20%
T3	Positive	Issue identity (pro remain in EU)	20%
T4	Negative	Issue identity (anti Brexit)	20%

As we would expect under random assignment, the experimental groups are well balanced on pre-treatment covariates. Appendix Table A.2 shows that the vast majority of covariates are not significantly associated with treatment assignment. Appendix Figure A.1 displays the results of a balance check of joint significance based on randomisation inference. All covariates taken together are no more predictive of treatment assignment than what we would expect under the sharp null distribution.

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[5]Orthogonally, we also randomly assigned whether the email contained an additional ask to volunteer, or not. Unfortunately, we could not collect valid outcome data on volunteering activities. We therefore do not consider this assignment in the analysis. The entire assignment is displayed in Table A.1. For the main results, we pool the volunteering and donation only ask conditions, and include this as a covariate in our models. We also report the (null) results of double ask treatment on donation behaviour in the Appendix, Section A.11.

Treatments

Figure 1 displays the different treatment emails sent to subjects. The first, left-most email shows the positive party identity cue, the second email the negative party identity cue, the third email the positive issue identity and the last email the negative issue identity cue. The goal of all emails
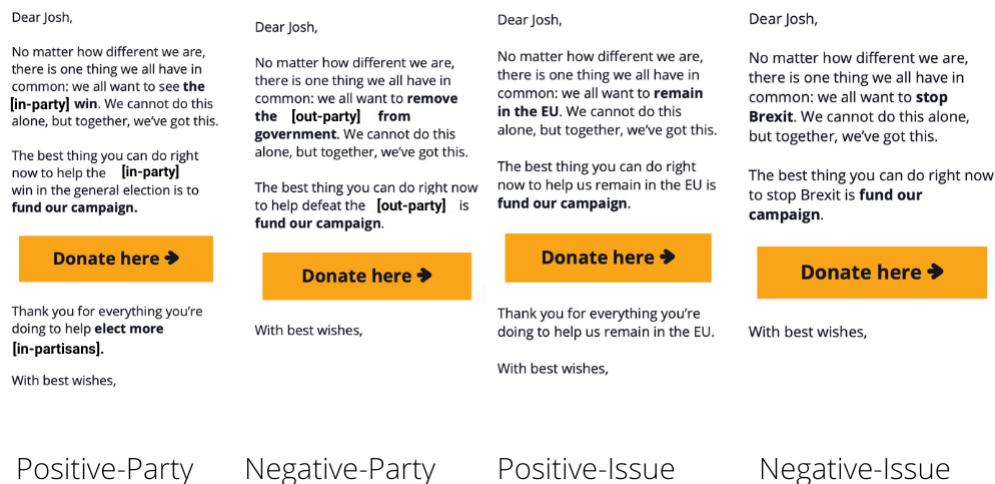

Figure 1: Treatment emails

was to prime a political identity. To achieve this, all email texts stated that "there is one thing we all have in common" and that "we cannot do this alone, but together we've got this". There is thus a strong emphasis on a shared identity through the use of pronouns and adverbs ("we", "together"), shared group goals ("we all want to"), and shared group characteristics ("we all have in common"). This language is meant to make group identification salient to email recipients. The text across all the treatment conditions then links this group identity to a specific action: making a donation, visible as a large "Donate here" button at the bottom of the email.

The content that varied between the email is the negativity and the specific identity invoked in the email text. The emails invoked either a positive party identity ("help the [in-party] win"), a negative party identity ("defeat the [out-party]"), a positive issue ("remain in the EU") or a negative issue ("stop Brexit"). Importantly, the email subject lines also varied along with the assigned cue. The positive party treatment headline was: "Let's win as [in-partisans] - together", the negative party headline was: "Let's win against the [out-partisans] – together", the positive issue headline was: "Let's win as Remainers - together", and the negative issue headline was: "Let's Stop Brexit

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- together". The purpose of the varying subject line was to maximise the effect of the treatment. While this design choice might have led to differential opening rates, we see this as an integral part of the mechanism, negative vs positive, and partisan vs issue cue mobilisation, that we intend to test. We conducted an additional online survey experiment among supporters of the party that
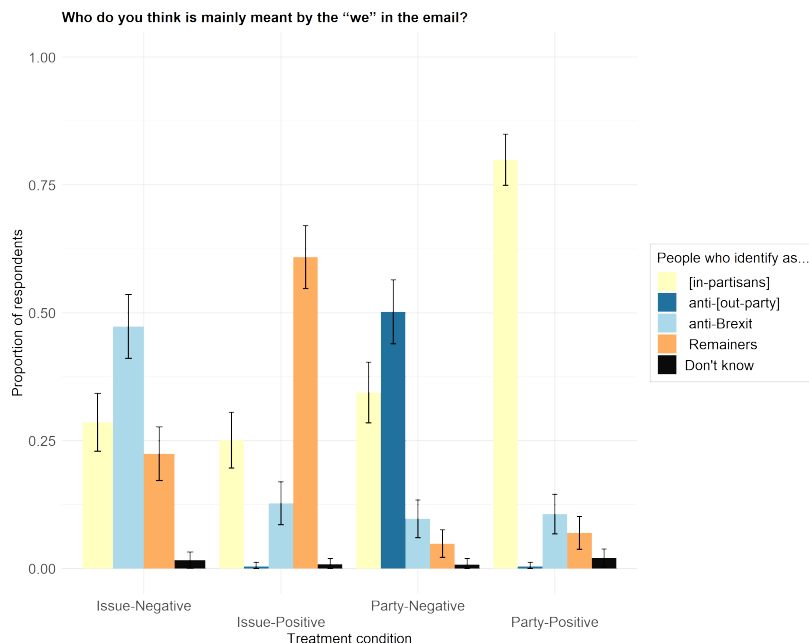
Figure 2: Do party supporters perceive the identity cue as intended? Yes.

conducted the email campaign in 2019 to test whether our treatment manipulation worked. We find strong evidence that participants are able to pick up on the identity primes contained in each treatment. We provide an extensive set of manipulation checks and a detailed discussion of results in the Appendix, Section A.13. Figure 2 shows the key result of the manipulation check. Online survey respondents (N=987) were randomly assigned to see one of the four original treatment emails, and then asked which specific identity (of the four) the campaign email was mainly appealing to. Figure 2 shows that for all of our treatment conditions, a relative majority of respondents are able to correctly identify which identity group was meant by the "we" in the email. For the Issue-Negative email which was designed to appeal to an anti-Brexit identity, the answer option with the largest share of responses is "people who identify as anti-Brexit". For the Issue-Positive email which was designed to appeal to a Remainer identity, over 60% of respondents in that condition correctly identify the email as appealing to Remainers. The same corresponding pattern emerges for the

Party-Negative and Party-Positive email. A relative majority of respondents are able to correctly identify the identity prime in all treatment conditions. Together with the comprehensive results of the additional manipulation checks we report in Section A.13 in the Appendix, this provides strong evidence that our treatment manipulation was perceived as intended by participants in the field experiment.

Data and outcome measures

We identify the effects of the differently worded emails on three outcome variables: number of donations, frequency of donating and donation amount. The first outcome is binary and defined as the successful submission of a donation via the party's online payment platform. It takes on the value 1 if a verified donation from the participant was received, and the value 0 if no donation was received. The second outcome is a count variable and indicates how many times an individual donated to the party in the post-treatment period. It takes on the value 0 if the subject did not donate. Finally, the third outcome is the value amount (in £) of the donations received, with no donation being registered as £0. All outcomes are measured using the database retrieved from the organisation's payment platform, 2, 7 and 14 days after the treatment emails were sent. As pre-registered, in our analyses we normally privilege the measure taken 7 days after the treatment, but where appropriate and for robustness, we also display the measures taken 2 days and 14 days after the treatment. We expect that it takes a couple of days for financial transactions to be completed and compiled in the database and expect that the party sent out other fundraising emails to supporters in subsequent days. 7 days hence appears to be the sweet spot between donation transactions being processed and wash-out from subsequent fundraising emails. When individuals make a payment, they provide their email address and name, which is then used to link their donation to the original member database used for the assignment. By matching identifiers for each donation made in the post-treatment period to the identifiers of individuals in our sample, we are able to assess which individuals donated to the party after the treatment. Matching individuals across databases is not without complications. However, the political party holds identifying details including numerous email addresses, physical addresses and names that were used to match subjects.

Estimation strategy

We estimate Intent-to-Treat (ITT) and Conditional Intent-to-Treat Effects[6], based on linear regression of donation behaviour on assignment to receive any campaign email (1), or no email (0), or on the two experimental factors, negative (1) vs positive identity cue (0) and issue-based (1) vs party-based identity cue (0). We use heteroscedasticity-consistent standard errors (HC2) throughout. In what follows, we always display the unadjusted ITT estimates first. Since covariate-adjustment can reduce sampling variability further (Gerber and Green, 2012), we then use the covariate-adjusted ITT estimator[7], and, as pre-registered, report the covariate-adjusted ITT estimates in the Appendix. The choice of estimator does not alter the statistical or substantive interpretation of our findings. As pre-registered, we will use the following covariates for covariate-adjustment: region, membership status (individual is a member of the party=1, otherwise=0), membership payment amount (regular membership payment amount in GBP), past volunteering (individual has volunteered for the party=1, otherwise=0), past donation (individual has donated in the last 12 months=1, otherwise=0) and fundraising (individual has fundraised for the party=1, otherwise=0). We also include the double vs single ask treatment indicator in the covariate-adjusted model. We use two-tailed hypothesis tests throughout.

Results

Evaluating the effect of the emails versus the control group (Hypothesis 1), Figure 3 visualises the mean probability of making a donation across the five experimental conditions: control (no email), negative issue identity prime email, negative party identity prime email, positive issue prime email, and positive party identity prime email at time t+7 days (the pre-registered post-treatment measurement point). The visualised results do not condition on covariates. Did the email increase verifiable donations to the political party at the height of a general election campaign? Vis-à-vis those in the control condition, the propensity of making a donation is only significantly ($p < .1$) greater for one group: those exposed to a negative issue message. In substantive terms, those in

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[6]We cannot estimate the Complier Average Causal Effect (CACE) because we do not have information on whether the subject received or opened the email. While it is certainly possible to measure whether an email was received or opened, the party was not able to share this information with us.

[7]See Appendix A.3 for a formalisation of estimation strategies.

receipt of a negative issue cue were 0.3 percentage-points more likely to make a donation relative to the control group. Given a baseline probability of 2%, a 0.3-point increase equates to an increase of around 15% compared to those in receipt of no email (control). To contextualise these results, at seven days post-treatment, a total of 352 individuals in the control condition had made a donation to the party. In comparison, a total of 398 individuals in the Negative-Issue condition had made a donation. The negative issue message thus led to a sizeable increase in donations compared to not receiving an email at all. These results are not congruent with our pre-registered H1: email contact has a mobilising effect, but *only* if it contains a negative issue cue. Next we test whether
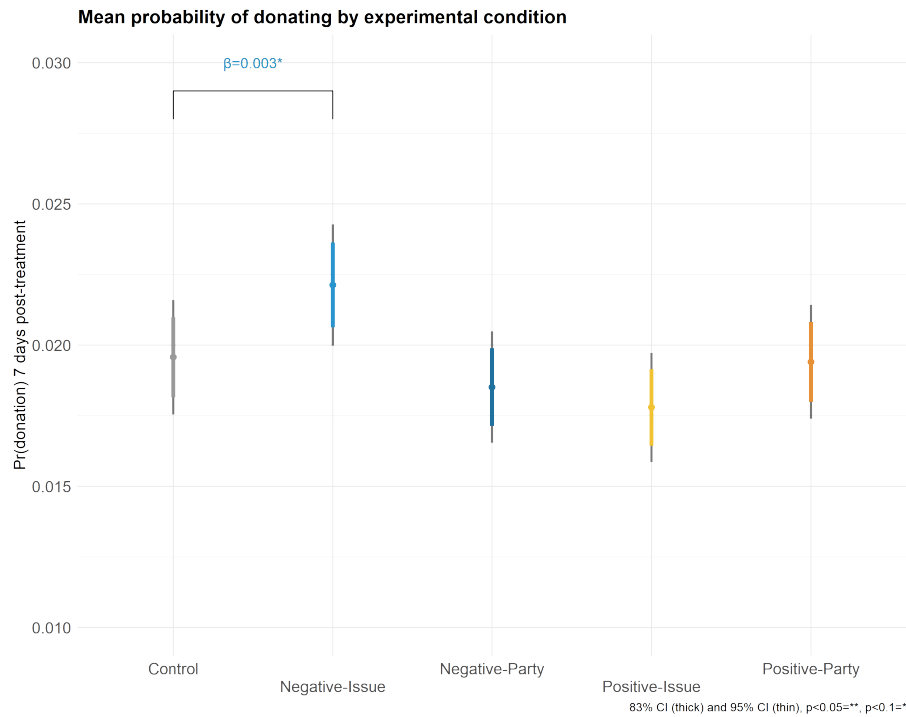
Figure 3: Negative issue identity cue increases donations: Mean probability of donating by experimental condition, 95% confidence intervals (83% CIs in colour)

emails containing negative identity primes are more effective at soliciting donations than emails containing positive identity primes (Hypothesis 2). To examine this, and as pre-registered, we pool the Negative-Issue and the Negative-Party conditions, and we pool the Positive-Issue and the Positive-Party conditions. The effects of the negative identity primes are presented in Figure 4: the left-hand panel visualises the probability of making a donation among those in the control group as well as those in in receipt of either the negative and positive cue at t+7 days, and the right-hand panel reports the marginal effect of assignment to the negative cue vs. the positive cue across
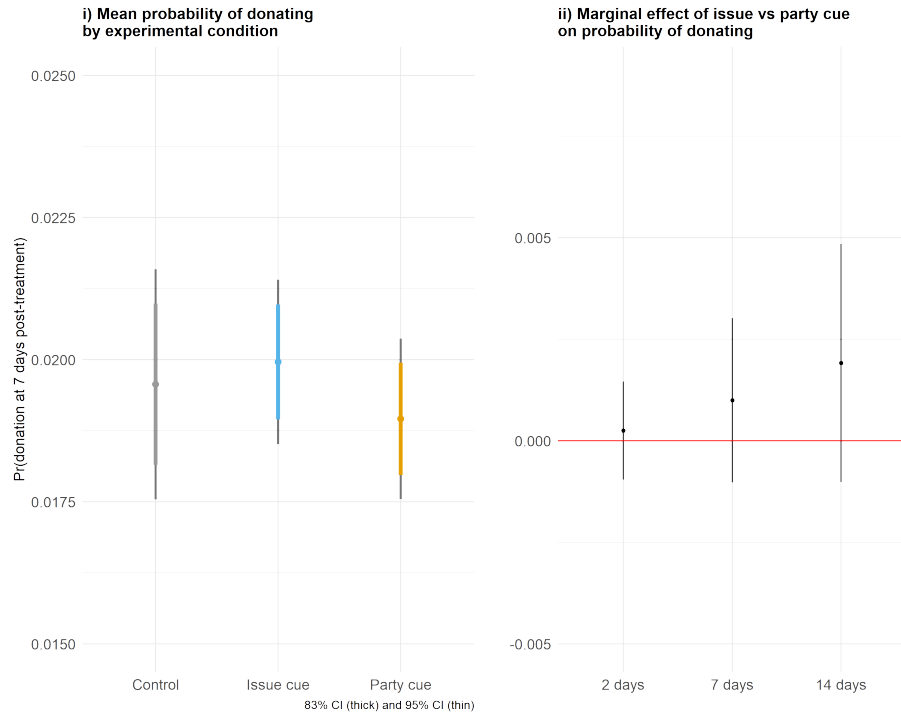
18

different post-treatment time bandwidths.
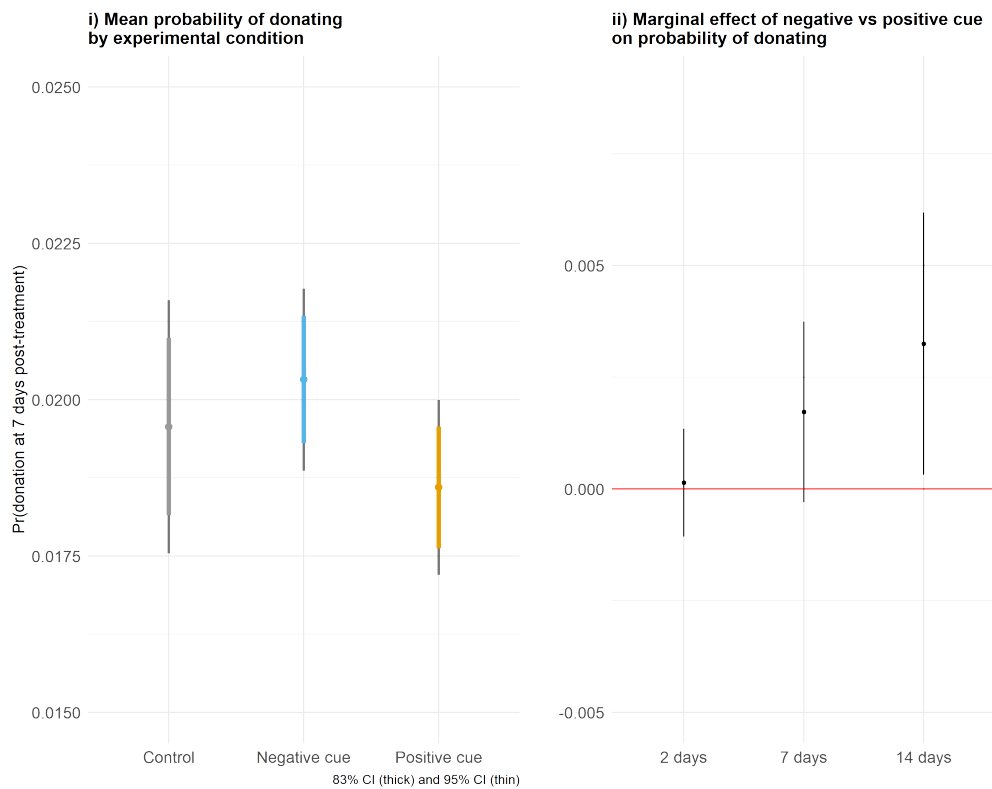
Figure 4: Negative identity cue is more effective than positive identity cue: Treatment vs treatment comparison on donation at different post treatment time-points

Figure 4 shows that we cannot reject the null hypothesis that there is no difference in donation behaviour between the (combined) negative or positive emails and the control condition (Hypothesis 1). However, Figure 4 (panel ii) also indicates that receiving a negative identity cue *does* increase the probability of making a donation compared to the positive identity cue. This is consistent with Hypothesis 2: negative identity cues are more effective than positive identity cues in mobilising supporters. The negative cue also increases the number of times an individual donates, compared to the positive cue (see Figure A.2 (panel ii) in the Appendix). The effect of the negative vs positive identity cue on both the number and frequency of donations strengthens over time: at 7 days post-treatment, the effect size is 0.2%-points while it increases to 0.3%-points at 14 days post-treatment. The latter corresponds to a 15% increase over the baseline of around 2%. This is a sizeable increase in donations, given that we are estimating the effects of changing a few words in a single campaign email on high-cost political activity (actually spending money) in the run-up to a general election.

These results are significant, no matter whether we estimate the ITT with or without adjusting for pre-treatment covariates or using alternative model specifications (see Appendix Tables A.3, A.4, A.6, A.7). It is clear that negative cues are more effective than positive cues when it comes to whether an individual donates to the party, and how many times they do so. This provides strong evidence in favour of Hypothesis 2.

Figure 5: Issue identity cue is not significantly more effective than party identity cue: Treatment vs treatment comparison on donation at different post-treatment time points

We also explore what type of party supporters are driving these results. Only individuals who have never donated before have a positive reaction to the negative issue identity cue. Party supporters who have donated in the past do not show a significant change in their donation behaviour when exposed to the negative identity cue emails (see Appendix, Figure A.7). We now turn to evaluate the effect of party versus issue cues (Hypothesis 3). Overall, subjects who received an email that primed an issue identity were no more likely to donate than subjects who received the party-based cue, or subjects who were assigned to control (see Figure 5). This (null) finding is consistent across all models and is not sensitive to the inclusion or exclusion of pre-treatment covariates. We therefore do not find support for Hypothesis 3. However, as pre-registered, we test whether negative and positive identity messages are more effective when paired with an issue or a

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traditional party identity cue (Hypothesis 4). Figure 6 visualises the marginal effect of the negative cue when combined with an issue identity or party identity cue.

Marginal effect of negative vs positive cue on probability of donating conditional on issue identity cue
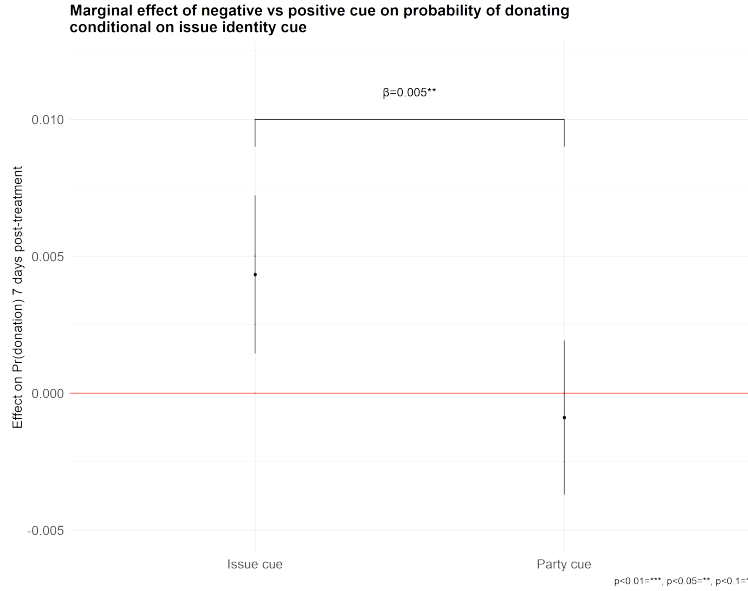
Figure 6: Negative issue identity cue is more effective than negative party identity cue: Conditional ITTs

We find that negative prompts are significantly more effective when accompanied by an issue identity (CITT=.5 %-points) as opposed to a party identity (CITT=-.1%-points). This provides evidence in favour of Hypothesis 4. Whilst a negative party identity cue exhibits no incremental effect on donations, a negative issue identity cue results in a significant 0.5 percentage-point increase in the probability of making a donation. Given a baseline donation rate of 2% this 0.5-point increase is not trivial, equating to a rise of 25% relative to the positive issue identity condition. Negative issue identities are also more effective than negative party identities at increasing the number of times an individual donates (see Appendix, Figure A.2, panel iii and Models 2 & 4, Table A.4).

Further results: Donation timing and donation amount

In Figure 7 we visualise the ITT in the pre- and post-treatment periods by day, for each email versus control comparison. Reassuringly, Figure 7 shows that there are no notable pre-treatment differences in donation behaviour between the control and treatment groups. It is clear from the figure that it is the Negative-Issue message which is the campaign email driving the results on the decision to donate. The effect of the Negative-Issue identity email seems to kick in around 7

days post-treatment, and then persists until 14 days post-treatment. The 7-day delay could be due to delays in when donation payments are registered in the party's online system. Another reason the treatment effect only becomes significant at the 7-day mark could be the overall small baseline number of donations. Averaging donations over a longer time period allows us to estimate more well-powered treatment effects. It is encouraging that the treatment effect of the Negative-Issue email persists for the next seven days (albeit slightly noisier), and does not wash out immediately. Finally,
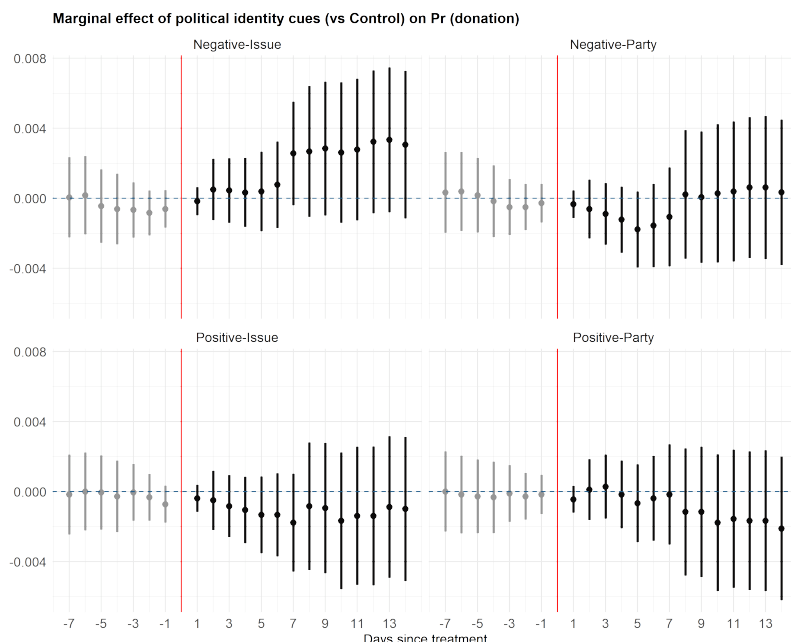
Figure 7: ITTs of various identity-cue emails on Pr(donation) versus control from 1 to 14 days post-treatment, and 1 to 7 days pre-treatment

in addition to the propensity to donate and the overall number of donations from an individual, we also test if the treatments affect the amount that party supporters donate. Assignment to different treatment conditions did not significantly increase the donation amount (see Appendix, Figure A.3, Table A.8). Even though the total amount raised in the negative issue identity condition is 2% higher than the total raised in the control group, this difference does not reach conventional significance levels. While the negative issue identity message did not significantly increase funds for the party, there is also no evidence that it was costly for the party to send the email. The negative issue identity email would have had to cause at least 15 supporters to cancel their membership, before it would lead to a direct financial cost for the party. While the negative issue identity email

failed to raise more funds for the party, it did activate members into donating, and donating more often.

Conclusion

Results from a pre-registered large-scale digital field experiment show that campaign messages priming a negative identity are more effective than those priming a positive identity in encouraging party activists to take costly political action. Consistent with our expectations, being assigned a campaign email with a negative identity message compared to a positive identity message makes party activists more likely to donate, as well as to donate more often to a political party. We also find that negative identity cues have a greater effect on donations when they are paired with an issue identity cue than when paired with a party identity cue. A campaign email rallying party supporters around a disliked issue out-group increases the number and frequency of donations compared to not sending an email. However, an email containing any negative identity cue is no more effective than sending no email in soliciting donations: messages containing out-party hostility do not increase donations compared to not sending an email. Furthermore, while negative identity cues increase donation behaviour in the short-term, they do not raise more money for the political party compared to not sending an email at all. We also find that, in general, priming issue identities is no more effective than priming party identities. Only messages that convey a shared sense of *dislike* towards an issue based out-group are effective in increasing the number and frequency of donations. The magnitude of the effects we observe are far from trivial: priming a negative issue identity led to a 15% increase in donation activity relative to the control group. This paper offers robust, real-world evidence that the activation of negative political identities through political campaigns has consequences for costly political behaviour that are different from those of activating positive political identities. Our study also highlights the importance of including issue identities in accounts of political mobilisation, and advances our understanding of when issue identities become relevant to individual-level decision-making about political actions. Our concrete empirical test comes from the UK where issue identities around Brexit are both stronger and more prevalent than party identities (Hobolt, Leeper, and Tilley, 2020). The specific political context of our experiment notwithstanding, we anticipate that in political systems where diverse issue identities are salient,

parties may well be able to effectively mobilise supporters based on their shared dislike of an issue out-group. Evidence of this strategy has already emerged in response to the US Supreme Court ruling that repealed *Roe v. Wade*, the jurisprudence that federally established abortion rights in the US. Media reporting highlights the extensive fundraising efforts that the ruling triggered among pro-abortion politicians. A number of candidates for the 2022 US Midterm election focused their campaign messaging on the issue in order to mobilise and attract women voters across the partisan divide.[8]

Our study makes several contributions to the literature on negative political identities, the literature on affective polarisation, and that on negative campaigning. The majority of studies on the implications of negative partisanship for political participation are observational. This makes it difficult to disentangle whether negative political identities lead to greater mobilisation or vice-versa. Other studies on this topic have used lab or survey experiments to address this issue but can only test for the short-term effects of the activation of a particular identity on expressed attitudes or preferences. Our study makes a unique and important empirical contribution to this literature. We conduct a field experiment in collaboration with a political party to assess what the effects of negative and positive identity activation on actual donation behaviour are. The results of this experiment show that the activation of negative identities, compared to positive identities, has observable effects on costly real-world behaviour within a naturalistic, unobtrusive study setting.

Building on recent innovations in the affective polarisation literature (Hobolt, Leeper, and Tilley, 2020), our findings also speak to the relevance of issue identities like those constructed around abortion (Crawford et al., 2021; Killian and Wilcox, 2021) or vaccination status (Wagner and Eberl, 2022; Bor, Jørgensen, and Peterson, 2023), compared to traditional party identities, in structuring political behaviour. While most previous work on negative identities towards political out-groups is focused on negative partisanship, we show that negative issue identity primes can have stronger effects on donation behaviour than priming traditional negative party identities. This finding advances our understanding of negative political identities, and shows that the implications of defining ourselves as being against an out-group are not limited to hating another political party.

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[8]See, for example, https://www.nbcnews.com/meet-the-press/meetthepressblog/democratic-women-launch-abortion-ads-post-roe-v-wade-rcna36122

This paper also contributes to the literature on issue identities by clarifying under which conditions appeals to issue identities are likely to translate into political action. While positive issue identity cues failed to mobilise party supporters, negative issue identity cues increased political mobilisation. This could also have broader implications for how we understand issue identities. As they often tap into intense political conflicts that materialise suddenly, issue identities might be built more heavily on negative out-group affect than partisan identities that evolve through slow socialisation processes.

Finally, by focusing on campaign messages that invoke negative identities, beyond issue-, trait- or competence-based attacks, this study also contributes to the negative campaigning literature. Attacks against political opponents are not just confined to their policy or qualifications, but can go to the core of "who we are" and "who we are not". Bringing the literature on negative identities into the negative campaigning literature therefore offers a fruitful addition to research on campaigning. We also empirically expand the negative campaigning literature by moving our focus from the electorate at large to party supporters, who should be most susceptible to respond to identity cues. The effects of negative identity campaigning on donations that this paper documents also have implications for larger questions of societal cohesion and democratic norms. Elite communications that reinforce negative political out-group sentiments could further entrench political divides, and strengthen affective polarisation. Affective polarisation has been linked to worrisome implications for democratic functioning, ranging from reduced support for democratic norms (Kingzette et al., 2021) to an increased potential for political violence (Mason and Kalmoe, 2022). The use of negative identity campaigning may therefore, in the long-run, harm the institutions that political parties compete and operate under. Yet, the use of negative identity campaigning will likely proliferate as long as negative identity cueing appears as an effective fundraising strategy to political parties in the short term. On this consideration, our paper shows that negative identity messaging is not uniformly a winning strategy for political parties. The negative identity cue, compared to the positive cue, made activists more likely to donate and to donate more often. However, only the email that contained the negative issue identity positively affected whether and how often an individual donated versus the control group. Moreover, although the coefficient size is positive, we cannot reject that the overall amount donated was equal to the amount in the control group. This finding

is in line with Hersh (2020)'s argument that activists often engage in expressive, symbolic behaviour online. They might respond in the heat of the moment to a fundraising email, but not increase their overall donation amount over and above what it would have been had they not received the appeal. At the same time, many campaigns and parties care about growing their base of small donors. Negative identity cue messages, compared to positive identity cue messages, were effective at increasing the donor pool, and activating a larger number of supporters. However, this grassroots mobilisation also comes at a potential cost to political parties: as our exploratory analyses show, supporters' reaction to negative identity campaigning may depend on their previous donation behaviour. Negative identity campaigning can spur inactive supporters into taking political action for the first time. In contrast, individuals who have previously donated to the party did not increase their probability of donating, frequency of donating or their donation amount in response to the negative issue cue message. This shows that negative identity campaigning may fail to mobilise highly committed, invested party supporters. Taken together with the potentially harmful consequences for democracy at large, political parties would be well-advised to consider the trade-offs and draw-backs involved in using negative identity campaigning. Alternative campaign strategies beyond "going negative" may prove a more effective fundraising strategy for highly committed supporters, and may also have positive downstream effects on reducing affective polarisation, and therefore strengthening democratic functioning in polarised societies.

Acknowledgements

References

Abramowitz, Alan I., and Steven Webster. 2016. "The rise of negative partisanship and the nationalization of U.S. elections in the 21st century." *Electoral Studies* 41.

Abrams, Dominic, Fanny Lalot, and Michal A Hogg. 2021. "Intergroup and intragroup dimensions of COVID-19: A social identity perspective on social fragmentation and unity." *Group Processes and Intergroup Relations* 24 (2): 201–209.

Ansolabehere, Stephen, Shanto Iyengar, Adam Simon, and Nicholas Valentino. 1994. "Does Attack Advertising Demobilize the Electorate?" *American Political Science Review* 88: 829–838.

Arceneaux, Kevin, and David W. Nickerson. 2010. "Comparing Negative and Positive Campaign Messages." *American Politics Research* 38 (1): 54–83.

Bakker, Bert N., Gijs Schumacher, and Matthijs Rooduijn. 2021. "Hot Politics? Affective Responses to Political Rhetoric." *American Political Science Review* 115 (1): 150–164.

Balcells, Laia, and Alexander Kuo. 2022. "Secessionist conflict and affective polarisation." *Journal of Peace Research* Online First.

Banda, Kevin K., and John Cluverius. 2018. "Elite polarization, party extremity, and affective polarization." *Electoral Studies* 56: 90–101.

Bankert, Alexa. 2021. "Negative and Positive Partisanship in the 2016 U.S. Presidential Elections." *Political Behavior* 43: 1467–1485.

Bankert, Alexa, Leonie Huddy, and Martin Rosema. 2017. "Measuring Partisanship as a Social Identity in Multi-Party Systems." *Political Behavior* 39: 103–132.

Barton, Jared, Marco Castillo, and Ragan Petrie. 2016. "Negative campaigning, fundraising, and voter turnout: A field experiment." *Journal of Economic Behavior and Organization* 121: 99–113.

Bliuc, Ana Maria, Craig McGarty, Katherine Reynolds, and Daniela Muntele. 2007. "Opinion-based group membership as a predictor of commitment to political action." *European Journal of Social Psychology* 37: 7–23.

Bor, Alexander, Frederik Jørgensen, and Michael Bang Peterson. 2023. "Discriminatory attitudes against unvaccinated people during the pandemic." *Nature* 613: 704–711.

Bouton, Laurent, Julia Cagé, Edgard Dewitte, and Vincent Pons. 2022. Small Campaign Donors. Technical report National Bureau of Economic Research.

Bouton, Laurent, Micael Castanheira, and Allan Drazen. 2018. A theory of small campaign contributions. Technical report National Bureau of Economic Research.

Brewer, Marilynn B, and Rupert J Brown. 1998. "Intergroup relations." In *The handbook of social psychology.* Vol. 2 McGraw-Hill pp. 554–594.

Caruana, Nicholas J., R. Michael McGregor, and Laura B. Stephenson. 2015. "The Power of the Dark Side: Negative Partisanship and Political Behaviour in Canada." *Canadian Journal of Political Science* 48 (4): 771–789.

Crawford, Brandon L, Kristen N. Jozkowski, Ronna C Turner, and Wen-Juo Lo. 2021. "Examining the Relationship Between *Roe v. Wade* Knowledge and Sentiment Across Political Party and Abortion Identity." *Sexuality Research and Social Policy* Online First.

Cutts, David, Andrew Russell, and Joshua Townsley. 2023. *The Liberal Democrats: From Hope to Despair to Where?* Manchester: Manchester University Press.

Cyphers, Karen H., Hans J.G. Hassell, and Kai Ou. 2022. "Racial and Partisan Identities Prompt Campaign Giving: Evidence from a Field Experiment." *Working paper* .

Elsbach, Kimberly D, and C B Bhattacharya. 2001. "Defining Who You Are by What You're Not: Organizational Disidentification and the National Rifle Association." *Organization Science* 12 (4): 393–413.

Foos, Florian, and Eline A de Rooij. 2017. "The role of partisan cues in voter mobilization campaigns: Evidence from a randomized field experiment." *Electoral Studies* 45: 63–74.

Ford, Robert, Tim Bale, Will Jennings, and Paula Surridge. 2021. "Get Brexit Done: The National Campaign." In *The British General Election of 2019*, ed. Robert Ford, Tim Bale, Will Jennings, and Paula Surridge. Basingstoke: Palgarve MacMillan.

Gamson, W. A. 1992. *The Social Psychology of Collective Action*. Yale University Press pp. 53–76.

Garrett, R. Kelly, and Alexa Bankert. 2020. "The Moral Roots of Partisan Division: How Moral Conviction Heightens Affective Polarization." *British Journal of Political Science* 50 (2): 621–640.

Gerber, Alan S, and Donald P Green. 2012. *Field Experiments: Design, Analysis, and Interpretation*. W W Norton and Company.

Gerber, A.S, D.P Green, and M Green. 2003. "Partisan mail and voter turnout: results from randomized field experiments." *Electoral Studies* 22 (4): 563–579.

Gidron, Noam, James Adams, and Will Horne. 2019. "Toward a Comparative Research Agenda on Affective Polarization in Mass Publics." *APSA Comparative Politics Newsletter* 29: 30–36.

Green, Donald P, Bradley Palmquist, and Eric Schickler. 2002. "Introduction." In *Partisan Hearts and Minds: Political Parties and the Social Identities of Voters*.

Han, Hahrie. 2016. "The Organizational Roots of Political Activism: Field Experiments on Creating a Relational Context." *American Political Science Review* 110 (2): 296–307.

Hassell, Hans JG, and J Quin Monson. 2014. "Campaign targets and messages in direct mail fundraising." *Political Behavior* 36 (2): 359–376.

Hersh, Eitan. 2020. *Politics is for Power. How to Move Beyond Political Hobbyism, Take Action, and Make Real Change*. New York: Scribner.

Hobolt, Sara B., Thomas J. Leeper, and James Tilley. 2020. "Divided by the Vote: Affective Polarization in the Wake of the Brexit Referendum." *British Journal of Political Science* 54 (1): 1476–1459.

Hogg, Michael A, and Dominic Abrams. 1988. *Social identifications: A social psychology of intergroup relations and group processes.* Routledge.

Holbrook, Allyson L., Jon A. Krosnick, Penny S. Visser, Wendi L. Gardner, and John T. Cacioppo. 2001. "Attitudes toward Presidential Candidates and Political Parties: Initial Optimism, Inertial First Impressions, and a Focus on Flaws." *American Journal of Political Science* 45 (4): 930.

Huddy, Leonie, Lilliana Mason, and Lene Aaroe. 2015. "Expressive Partisanship: Campaign Involvement, Political Emotion, and Partisan Identity." *American Political Science Review* 109 (1): 1–17.

Iyengar, Shanto, Yphtach Lelkes, Matthew Levendusky, Neil Malhotra, and Sean J. Westwood. 2019. "The Origins and Consequences of Affective Polarization in the United States." *Annual Review of Political Science* 22 (1): 129–146.

Johns, Rob. 2021. "As You Were: The Scottish Parliament Election of 2021." *The Political Quarterly* 92: 493–499.

Killian, Mitchell, and Clyde Wilcox. 2021. "Do Abortion Attitudes Lead to Party Switching?" *Political Research Quarterly* 61 (4): 561–573.

Kim, Seo-young Silvia, Jan Zilinsky, and Brian Brew. 2022. "Donate To Help Us Fight Back: Mobilization Rhetoric in Political Fundraising.".

Kingzette, Jon, James N Druckman, Samara Klar, Yanna Krupnikov, Matthew Levendusky, and John Barry Ryan. 2021. "How Affective Polarization Undermines Support for Democratic Norms." *Public Opinion Quarterly* 85: 663–677.

Klandermans, B, J M Subecedo, M Rodriguez, and M de Weerd. 2002. "Identity processes in collective action participation: Farmers' identity and farmers' protest in the Netherlands and Spain." *Political Psychology* 23: 235–251.

Lelkes, Yphtach, Gaurav Sood, and Shanto Iyengar. 2017. "The Hostile Audience: The Effect of Access to Broadband Internet on Partisan Affect." *American Journal of Political Science* 61 (1): 5–20.

Mason, Liliana, and Nathan Kalmoe. 2022. *Radical American Partisanship Mapping Violent Hostility, Its Causes, and the Consequences for Democracy.* Chicago Studies in American Politics.

Mason, Liliiana. 2018. *Uncivil Agreement. How Politics Became our Identity.* Chicago: University of Chicago Press.

Mayer, Sabrina Jasmin. 2017. "How negative partisanship affects voting behavior in Europe: Evidence from an analysis of 17 European multi-party systems with proportional voting." *Research & Politics* 4 (1): 205316801668663.

McGarty, Craig, Ana Maria Bliuc, Emma F Thomas, and Renata Bongiorno. 2009. "Collective Action as the Material Expression of Opinion-Based Group Membership." *Journal of Social Issues* 65 (4): 839–857.

Medeiros, Mike, and Alain Noël. 2014. "The Forgotten Side of Partisanship: Negative Party Identification in Four Anglo-American Democracies." *Comparative Political Studies* 47 (7): 1022–1046.

Michael McGregor, R., Nicholas J. Caruana, and Laura B. Stephenson. 2015. "Negative Partisanship in a Multi-party System: The Case of Canada." *Journal of Elections, Public Opinion and Parties* 25 (3): 300–316.

Miller, Joanne M., and Jon A. Krosnick. 2004. "Threat as a motivator of political activism: A field experiment." *Political Psychology* 25 (4): 507–523.

Mitchell, James, and Ailsa Henderson. 2020. "Tribes and Turbulence: The 2019 UK General Election in Scotland." *Parliamentary Affairs* 73: 142–156.

Motta, Matt, Timothy Callaghan, Steven Sylvester, and Kristin Lunz-Trujillo. 2023. "Identifying the prevalence, correlates, and policy consequences of anti-vaccine social identity." *Politics, Groups and Identities* 11 (1): 108–122.

Niven, David. 2006. "A Field Experiment on the Effects of Negative Campaign Mail on Voter Turnout in a Municipal Election." *Political Research Quarterly* 59 (2): 203–210.

Panagopoulos, Costas. 2009. "Partisan and nonpartisan message content and voter mobilization: field experimental evidence." *Political Research Quarterly* 62 (1): 70–76.

Perez-Truglia, Ricardo, and Guillermo Cruces. 2017. "Partisan interactions: Evidence from a field experiment in the United States." *Journal of Political Economy* 125 (4): 1208–1243.

Sobolewska, Maria, and Robert Ford. 2020. *Brexitland.* Cambridge University Press.

Sorace, Miriam, and Sara B. Hobolt. 2020. "A tale of two peoples: Motivated reasoning in the aftermath of the Brexit Vote." *Political Science Research and Method* 9 (4): 675–692.

Soroka, Stuart, Patrick Fournier, and Lilach Nir. 2019. "Cross-national evidence of a negativity bias in psychophysiological reactions to news." *Proceedings of the National Academy of Sciences* 116 (38): 18888–18892.

Tajfel, Henri, and John C Turner. 1979. "An Integrative Theory of Intergroup Conflict." In *The social psychology of intergroup relations.*

Trumm, Siim, Caitlin Milazzo, and Joshua Townsley. 2020. "The 2016 EU Referendum: Explaining Support for Brexit Among Would-Be British MPs." *Political Studies* 68 (4): 819–836.

Turnbull-Dugarte, Stuart J, Joshua Townsley, Florian Foos, and Denise Baron. 2022. "Mobilising support when the stakes are high: Mass emails affect constituent-to-legislator lobbying." *European Journal of Political Research* 61 (2): 601–619.

Tversky, Amos, and Daniel Kahneman. 1992. "Advances in prospect theory: Cumulative representation of uncertainty." *Journal of Risk and Uncertainty* 5: 297–323.

van Stekelenburg, Jacquelien and Klandermans, Bert. 2017. *Individuals in Movements: A Social Psychology of Contention.* Cham: Springer International Publishing pp. 103–139.

van Zomeren, Martijn, Tom Postmes, and Russell Spears. 2008. "Toward an Integrative Social Identity Model of Collective Action: A Quantitative Research Synthesis of Three Socio-psychological Perspectives." *Psychological Bulletin* 134 (4): 504–535.

Vesely, Stepan, Torsten Masson, Parissa Chokrai, Anna M. Becker, Immo Fritsche, Christian A. Klöckner, Lorenza Tiberio, Giuseppe Carrus, and Angelo Panno. 2021. "Climate change action as a project of identity: Eight meta-analyses." *Global Environmental Change* 70: 102322.

Wagner, Markus. 2021. "Affective polarization in multiparty systems." *Electoral Studies* 69: 102199.

Wagner, Markus, and Jakob-Moritz Eberl. 2022. "Divided by the Jab: On the Nature, Origins, and Consequences of COVID-19 Vaccination Identities." *OSF Pre-Print* .

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A   Appendix

Contents

A.1 Design

Table A.1: Assignment of experimental subjects to treatment condition

Group	Positivity	Identity	Ask	Assignment
Control	n/a	n/a	n/a	20%
T1	Positive	In-party	donation	10%
T2	Negative	Out-party	donation	10%
T3	Positive	Pro remain in EU	donation	10%
T4	Negative	Anti Brexit	donation	10%
T5	Positive	In-party	donation volunteer	5%
T6	Negative	Out-party	donation volunteer	5%
T7	Positive	Pro remain in EU	donation volunteer	5%
T8	Negative	Anti-Brexit	donation volunteer	5%
T9	Positive	In-party	volunteer donation	5%
T10	Negative	Out-party	volunteer donation	5%
T11	Positive	Pro remain in EU	volunteer donation	5%
T12	Negative	Anti Brexit	volunteer donation	5%

A.2 Balance checks

A.2.1 Balance check of joint significance

We use randomization inference (Gerber and Green, 2012; Aronow and Samii, 2012) to re-assign subjects to the four treatment groups and to control under the sharp null of no individual level treatment effect for any subject. Here we first use multinomial logistic regression to regress treatment assignment on an X-by-k matrix of pre-treatment covariates listed in Table A.2. We then extract the log-likelihood statistic, use blocked random assignment to re-assign subjects to treatments and control 5000 times, regress treatment assignment on

pre-treatment covariates, and each time extract the log-likelihood statistic. A higher log-likelihood or one which is closer to 0 means a comparatively better model fit. We then count the number of log-likelihoods that are at least as large (closer to 0) as the log-likelihood statistic that we obtained from our experimental sample. The p-value of 0.463 indicates that 2315 simulated log-likelihoods were at least as large (as close or closer to 0) as the statistic we obtained from our experiment. Where the log-likelihood statistic that we obtain from the experiment we conducted falls within the sampling distribution of the 5000 simulated log-likelihood statistics under the sharp null is displayed in Figure A.1.

Sampling distribution of simulated log–likelihoods
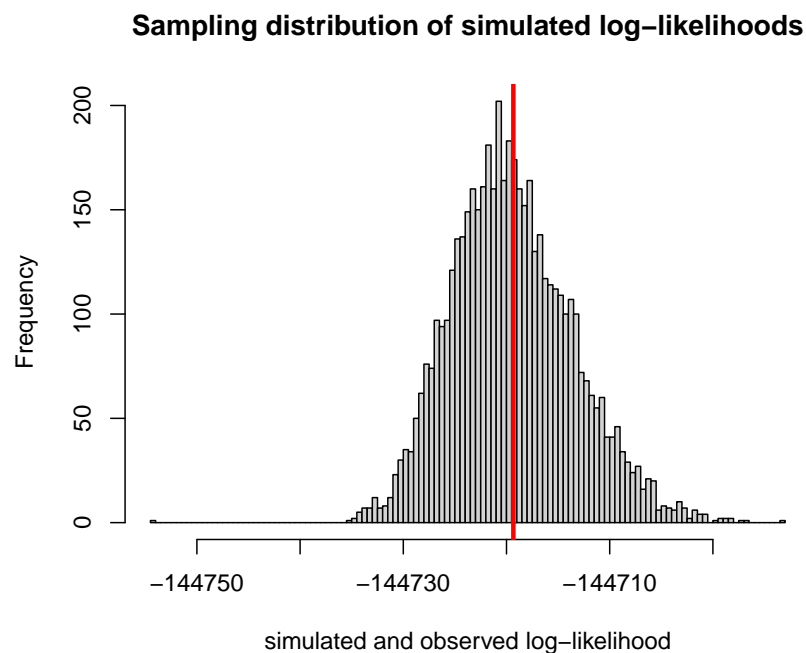
Figure A.1: Covariates are well-balanced: 46% of assignments under the sharp null produce a log-likelihood as large or larger than the one obtained from the experiment

Table A.2: Balance on pre-treatment covariates

Variable	Control	Neg-Issue	Neg-Party	Pos-Issue	Pos-Party	P-value
Member	0.88 (0.3)	0.88 (0.3)	0.88 (0.3)	0.89 (0.3)	0.88 (0.3)	0.381
Fundraiser	0.03 (0.2)	0.03 (0.2)	0.03 (0.2)	0.03 (0.2)	0.03 (0.2)	0.162
Volunteer	0.08 (0.3)	0.08 (0.3)	0.08 (0.3)	0.08 (0.3)	0.08 (0.3)	0.461
Membership amount	28.06 (33.8)	27.98 (34.4)	27.7 (33.9)	28.02 (35.5)	28.02 (34.5)	0.673
Donor	0.21 (0.4)	0.21 (0.4)	0.21 (0.4)	0.21 (0.4)	0.21 (0.4)	0.929
Region: Euro	0.05 (0.2)	0.04 (0.2)	0.04 (0.2)	0.04 (0.2)	0.05 (0.2)	0.518
Region: East Midlands	0.05 (0.2)	0.05 (0.2)	0.05 (0.2)	0.05 (0.2)	0.05 (0.2)	0.936
Region: South West	0.12 (0.3)	0.12 (0.3)	0.13 (0.3)	0.12 (0.3)	0.12 (0.3)	0.023
Region: North West	0.07 (0.2)	0.07 (0.3)	0.07 (0.2)	0.07 (0.2)	0.07 (0.2)	0.942
Region: Wales	0.03 (0.2)	0.03 (0.2)	0.03 (0.2)	0.03 (0.2)	0.02 (0.2)	0.564
Region: missing	0.05 (0.2)	0.05 (0.2)	0.05 (0.2)	0.04 (0.2)	0.05 (0.2)	0.03
Region: Scotland	0.03 (0.2)	0.03 (0.2)	0.03 (0.2)	0.03 (0.2)	0.03 (0.2)	0.764
Region: London	0.19 (0.4)	0.19 (0.4)	0.19 (0.4)	0.19 (0.4)	0.19 (0.4)	0.618
Region: South East	0.2 (0.4)	0.2 (0.4)	0.2 (0.4)	0.2 (0.4)	0.2 (0.4)	0.639
Region: Eastern	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.11 (0.3)	0.1 (0.3)	0.258
Region: Yorkshire	0.05 (0.2)	0.06 (0.2)	0.05 (0.2)	0.05 (0.2)	0.05 (0.2)	0.005
Region: North East	0.02 (0.1)	0.02 (0.1)	0.02 (0.1)	0.02 (0.1)	0.02 (0.1)	0.96
Region: West Midlands	0.05 (0.2)	0.05 (0.2)	0.05 (0.2)	0.05 (0.2)	0.05 (0.2)	0.944
Region: Northern Ireland	0.002 (0.04)	0.002 (0.04)	0.001 (0.04)	0.002 (0.04)	0.001 (0.04)	0.91

Mean and (SD) for key covariates. P-value from Pearson's chi-square test.

A.3 Estimations

Our estimation strategies are summarised in the following linear regression models where $'X_i$ is the N-by-k vector of pre-treatment covariates.

$$Y_i = \alpha + \beta_1 Email_i + \gamma' X_i + \epsilon_i \tag{1}$$

$$Y_i = \alpha + \beta_1 Negative_i + \beta_2 IssueCue_i + \gamma' X_i + \epsilon_i \tag{2}$$

$$Y_i = \alpha + \beta_1 Negative_i + \beta_2 IssueCue_i + \beta_3 Negative * IssueCue_i + \gamma' X_i + \epsilon_i, \tag{3}$$

A.4 Main results: Additional figures

i) Mean number of donations by experimental condition

β=0.003*

Number of donations (7 days post-treatment)

Control   Negative-Issue   Negative-Party   Positive-Issue   Positive-Party

83% CI (thick) and 95% CI (thin)

ii) Marginal effect of negative vs positive cue on number of donations

2 days   7 days   14 days

Days since treatment email

iii) Marginal effect of negative vs positive cue on number of donations 7 days post-treatment conditional on issue identity cue

β=0.005**

Issue cue   Party cue

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

Figure A.2: Number of donations by experimental condition and marginal effect of negative versus positive identity cue: Negative issue identity cue increases number of donations versus control. Negative identity cue increases donations, compared to positive identity cue.
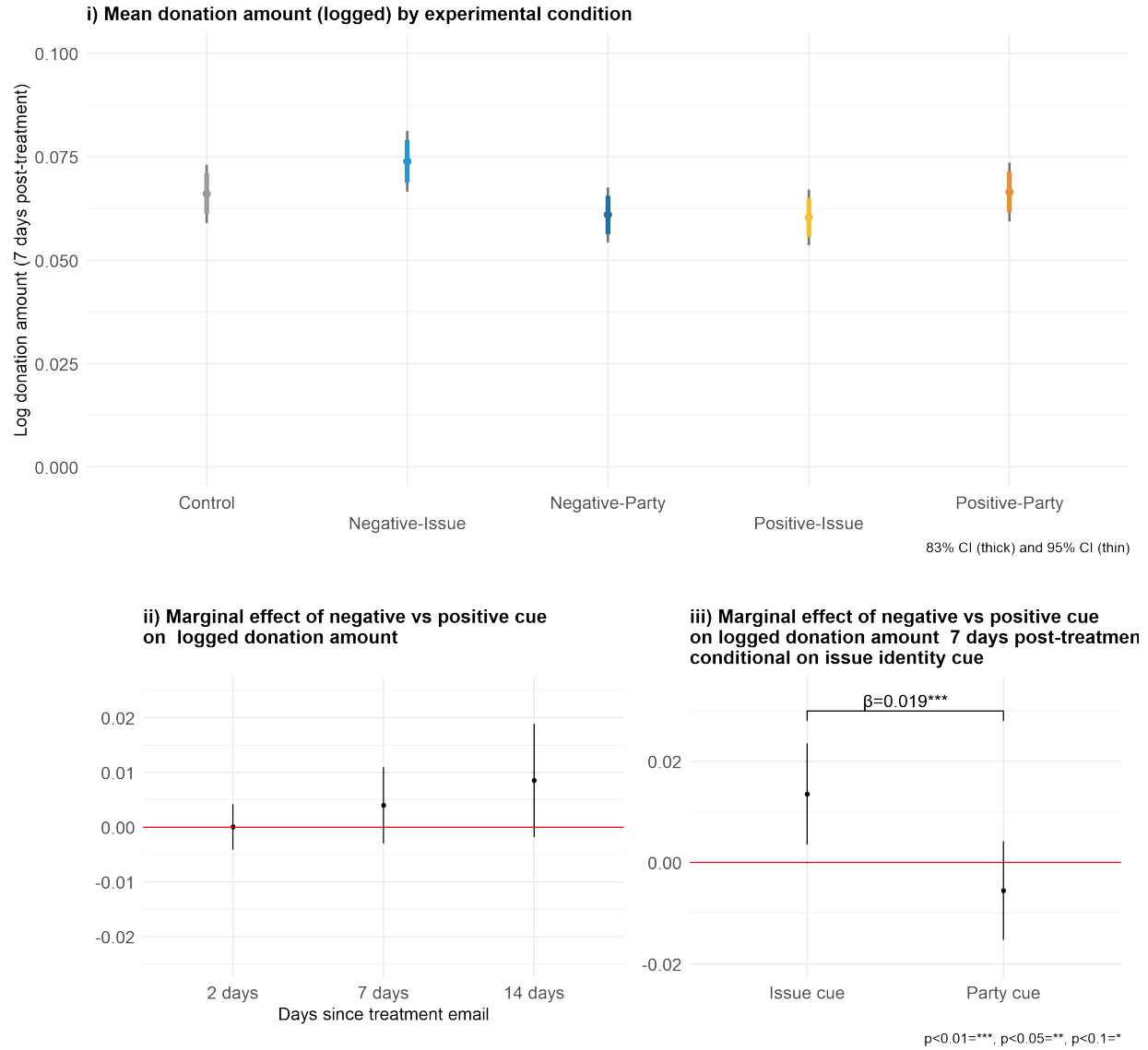
Figure A.3: Logged donation amount by experimental condition and marginal effect of negative versus positive identity cue: Negative identity cue does not significantly increase donation amount compared to positive identity cue.

A.5   Main results: Regression tables

	M1	M2	M3	M4
Intercept	0.018***	0.019***	−0.004	−0.002
	(0.001)	(0.001)	(0.003)	(0.003)
Negative cue	0.002*	−0.001	0.002*	−0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Issue cue	0.001	−0.002	0.001	−0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Negative*Issue		0.005**		0.005**
		(0.002)		(0.002)
Covariates?	No	No	Yes	Yes
R^2	0.000	0.000	0.031	0.031
Adj. R^2	0.000	0.000	0.030	0.031
Num. obs.	71952	71952	71952	71952

***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.
Covariates include double ask, region, membership status and amount, past volunteering, fundraising and donations behaviour

Table A.3: Marginal effect of political identity cues on DV: Donated (=1), did not donate (=0), 7 days post-treatment

	M1	M2	M3	M4
Intercept	0.018***	0.020***	−0.004	−0.003
	(0.001)	(0.001)	(0.003)	(0.003)
Negative cue	0.002*	−0.001	0.002*	−0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Issue cue	0.001	−0.001	0.001	−0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Negative*Issue		0.005**		0.005**
		(0.002)		(0.002)
Covariates?	No	No	Yes	Yes
R^2	0.000	0.000	0.031	0.031
Adj. R^2	0.000	0.000	0.030	0.030
Num. obs.	71952	71952	71952	71952

***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.
Covariates include double ask, region, membership status and amount, past volunteering, fundraising and donations behaviour

Table A.4: Marginal effect of political identity cues on DV: How many times did an individual donate? 7 days post-treatment

	M1	M2	M3	M4
Intercept	0.062***	0.066***	−0.014	−0.009
	(0.003)	(0.004)	(0.009)	(0.009)
Negative cue	0.004	−0.006	0.004	−0.005
	(0.004)	(0.005)	(0.004)	(0.005)
Issue cue	0.003	−0.006	0.004	−0.006
	(0.004)	(0.005)	(0.004)	(0.005)
Negative*Issue		0.019***		0.018***
		(0.007)		(0.007)
Covariates?	No	No	Yes	Yes
R^2	0.000	0.000	0.031	0.031
Adj. R^2	0.000	0.000	0.031	0.031
Num. obs.	71952	71952	71952	71952

***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.
Covariates include double ask, region, membership status and amount, past volunteering, fundraising and donations behaviour

Table A.5: Marginal effect of political identity cues on DV: Logged DV: How much did an individual donate? (in GBP) 7 days post-treatment

A.6   Robustness checks

	M1	M2	M3	M4
Mean(Positive party cue)	−3.993***	−3.923***	−5.492***	−5.425***
	(0.048)	(0.054)	(0.183)	(0.185)
Negative cue	0.090*	−0.048	0.099*	−0.041
	(0.054)	(0.077)	(0.055)	(0.079)
Issue cue	0.052	−0.088	0.060	−0.083
	(0.054)	(0.078)	(0.055)	(0.079)
Negative*Issue		0.270**		0.276**
		(0.108)		(0.110)
Covariates?	No	No	Yes	Yes
AIC	13805.511	13801.267	12155.892	12151.610
BIC	13833.063	13838.002	12357.934	12362.837
Log Likelihood	−6899.756	−6896.634	−6055.946	−6052.805
Deviance	13799.511	13793.267	12111.892	12105.610
Num. obs.	71952	71952	71952	71952

***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.
Covariates include double ask, region, membership status and amount, past volunteering, fundraising and donations behaviour

Table A.6: Logit model: Marginal effect of political identity cues on DV: Donated (=1), did not donate (=0), 7 days post-treatment. Coefficients represent Log odds.

	M1	M2	M3	M4
Intercept	0.013***	0.013***	−0.003	−0.002
	(0.001)	(0.001)	(0.002)	(0.002)
Negative cue	0.001*	−0.001	0.001*	−0.000
	(0.001)	(0.001)	(0.001)	(0.001)
Issue cue	0.001	−0.001	0.001	−0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Negative*Issue		0.004**		0.003**
		(0.001)		(0.001)
Covariates?	No	No	Yes	Yes
R^2	0.000	0.000	0.031	0.031
Adj. R^2	0.000	0.000	0.031	0.031
Num. obs.	71952	71952	71952	71952

***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.
Covariates include double ask, region, membership status and amount, past
volunteering, fundraising and donations behaviour

Table A.7: Marginal effect of political identity cues on DV: Logged: How many times did an individual donate? 7 days post-treatment

	M1	M2	M3	M4
Intercept	0.805***	0.870***	−0.109	−0.050
	(0.068)	(0.078)	(0.325)	(0.319)
Negative cue	−0.011	−0.140	−0.005	−0.127
	(0.082)	(0.110)	(0.082)	(0.110)
Issue cue	0.036	−0.093	0.038	−0.084
	(0.082)	(0.114)	(0.082)	(0.114)
Negative*Issue		0.258		0.244
		(0.164)		(0.164)
Covariates?	No	No	Yes	Yes
R^2	0.000	0.000	0.013	0.013
Adj. R^2	−0.000	−0.000	0.012	0.012
Num. obs.	71952	71952	71952	71952

$^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$.
Covariates include double ask, region, membership status and amount, past
volunteering, fundraising and donations behaviour

Table A.8: Marginal effect of political identity cues on DV: How much did an individual donate? (in GBP) 7 days post-treatment

A.7 Main results at different post-treatment time period cut-offs: regression tables

	2 days	2 days	7 days	7 days	14 days	14 days
Mean(Positive party cue)	0.007***	0.007***	0.018***	0.019***	0.039***	0.040***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Negative cue	0.000	−0.001	0.002*	−0.001	0.003**	0.002
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Issue cue	0.000	−0.001	0.001	−0.002	0.002	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Negative*Issue		0.002		0.005**		0.002
		(0.001)		(0.002)		(0.003)
Covariates?	No	No	No	No	No	No
R^2	0.000	0.000	0.000	0.000	0.000	0.000
Adj. R^2	−0.000	−0.000	0.000	0.000	0.000	0.000
Num. obs.	71952	71952	71952	71952	71952	71952

$^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$.
The 14 days model shows the results 14 days post-treatment.
The 7 days model shows the results 7 days post-treatment.
The 2 days model shows the results 2 days post-treatment.

Table A.9: Marginal effect of political identity cues on DV: Donated (=1), did not donate (=0)

	2 days	2 days	7 days	7 days	14 days	14 days
Mean(Positive party cue)	0.007***	0.007***	0.018***	0.020***	0.041***	0.041***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Negative cue	0.000	−0.001	0.002*	−0.001	0.003**	0.003
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)
Issue cue	0.000	−0.001	0.001	−0.001	0.002	0.002
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)
Negative*Issue		0.002		0.005**		0.001
		(0.001)		(0.002)		(0.003)
Covariates?	No	No	No	No	No	No
R^2	0.000	0.000	0.000	0.000	0.000	0.000
Adj. R^2	−0.000	−0.000	0.000	0.000	0.000	0.000
Num. obs.	71952	71952	71952	71952	71952	71952

***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.
The 14 days model shows the results 14 days post-treatment.
The 7 days model shows the results 7 days post-treatment.
The 2 days model shows the results 2 days post-treatment.

Table A.10: Marginal effect of political identity cues on DV: How many times did an individual donate?

	2 days	2 days	7 days	7 days	14 days	14 days
Mean(Positive party cue)	0.022***	0.024***	0.062***	0.066***	0.136***	0.139***
	(0.002)	(0.002)	(0.003)	(0.004)	(0.005)	(0.005)
Negative cue	0.000	−0.003	0.004	−0.006	0.009	0.004
	(0.002)	(0.003)	(0.004)	(0.005)	(0.005)	(0.007)
Issue cue	0.001	−0.003	0.003	−0.006	0.006	0.002
	(0.002)	(0.003)	(0.004)	(0.005)	(0.005)	(0.007)
Negative*Issue		0.007*		0.019***		0.009
		(0.004)		(0.007)		(0.011)
Covariates?	No	No	No	No	No	No
R^2	0.000	0.000	0.000	0.000	0.000	0.000
Adj. R^2	−0.000	−0.000	0.000	0.000	0.000	0.000
Num. obs.	71952	71952	71952	71952	71952	71952

***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.
The 14 days model shows the results 14 days post-treatment.
The 7 days model shows the results 7 days post-treatment.
The 2 days model shows the results 2 days post-treatment.

Table A.11: Marginal effect of political identity cues on DV: Logged DV: How much did an individual donate? (in GBP)

A.8 Main results at different post-treatment time period cut-offs: figures

Marginal effect of negative vs positive political identity cue on Pr(donation)
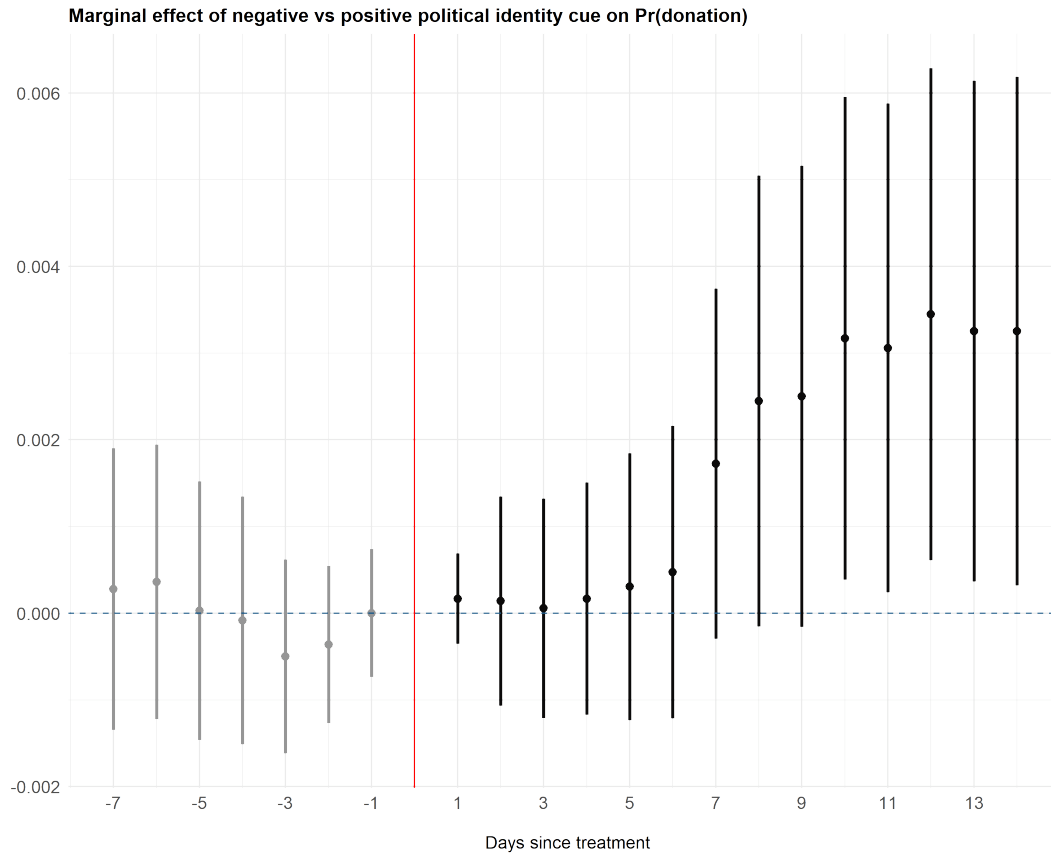
Figure A.4: ITT of negative vs positive identity cue on Pr(donation) at different post-treatment time periods
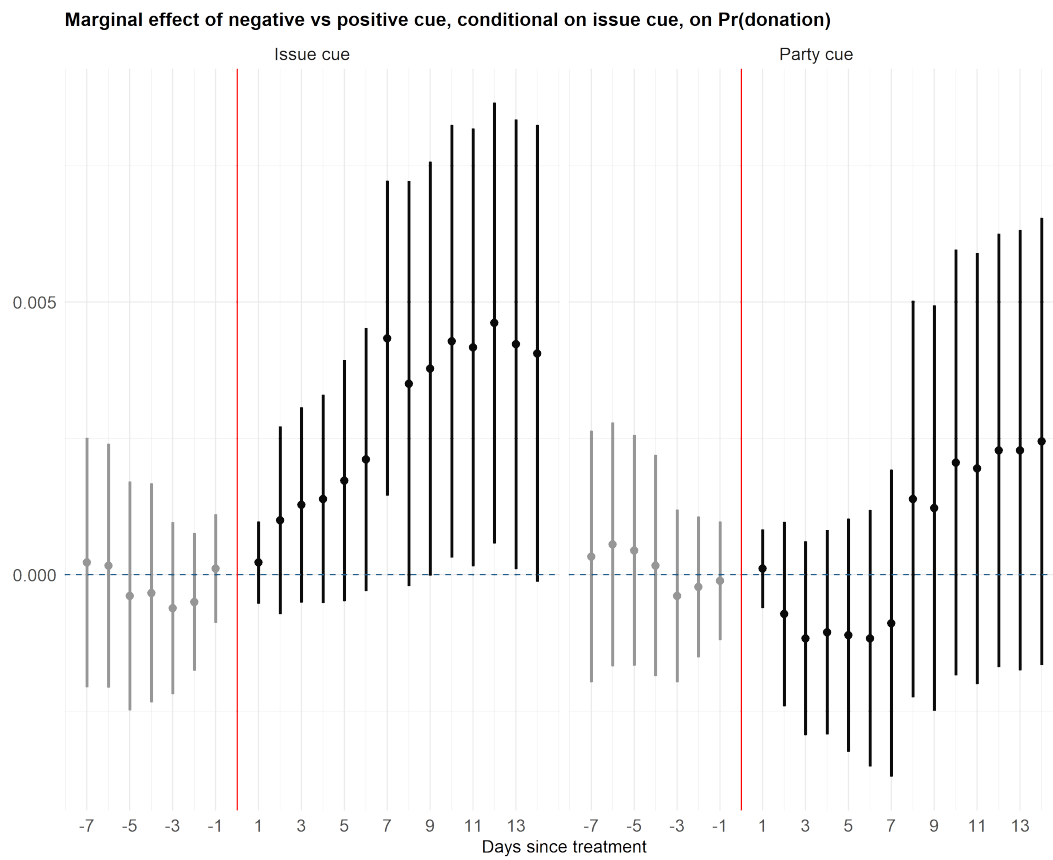
Figure A.5: ITT of negative vs positive identity cue, conditional on issue cue, on Pr(donation) at different post-treatment time periods

A.9 Additional results: Treatment-Control comparisons
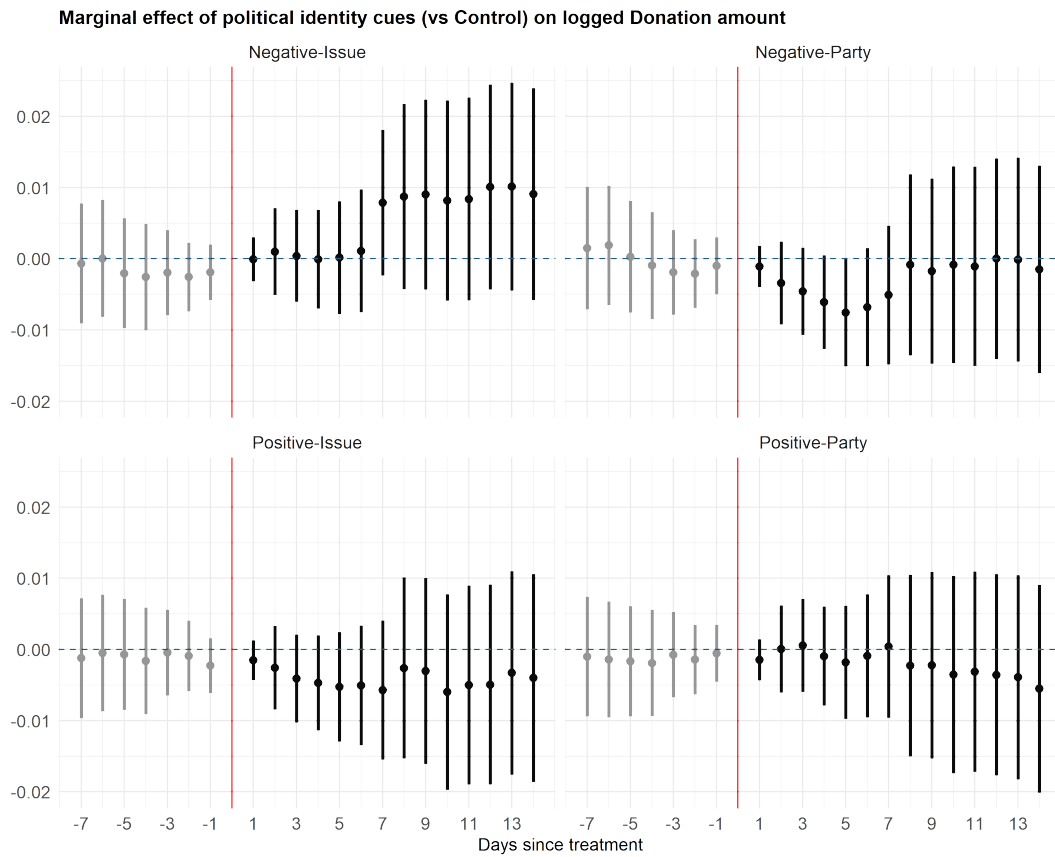
Figure A.6: ITT versus control condition on logged donation amount from 1 to 14 days post-treatment

A.10 Additional results: Interaction with pre-treatment donor type
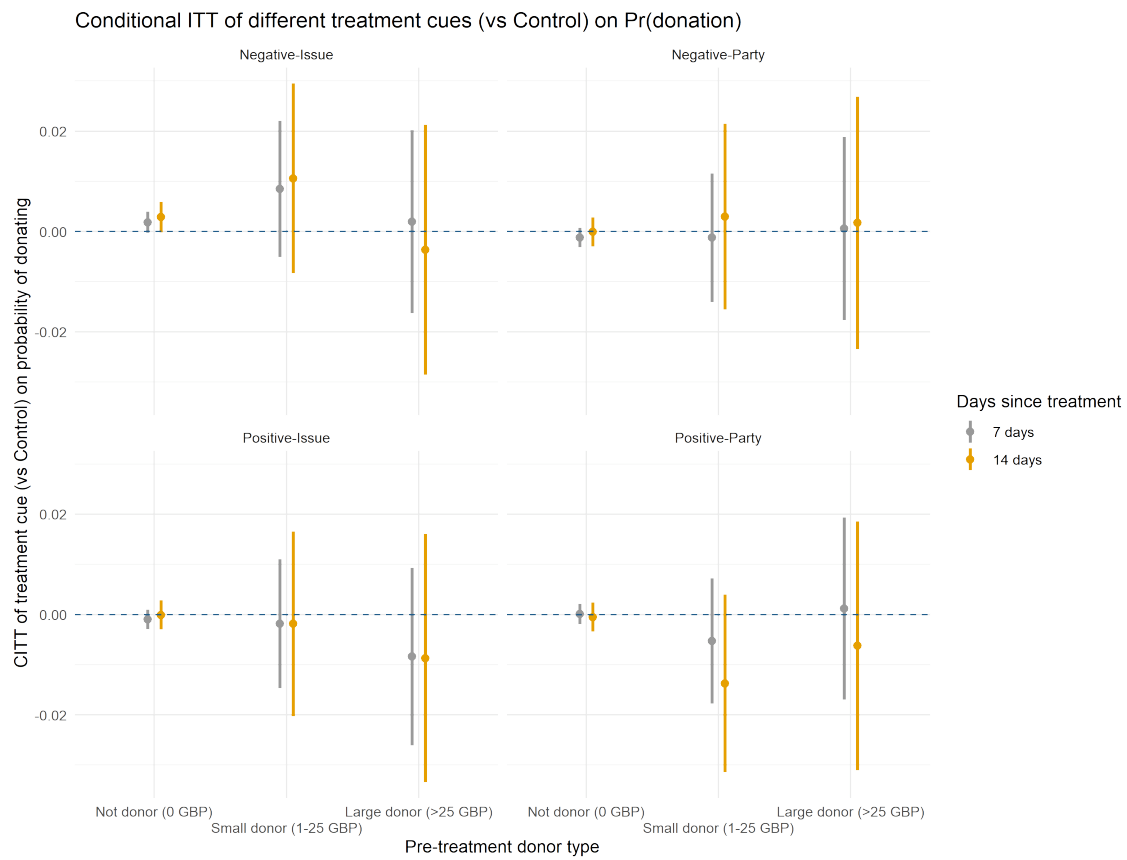
Figure A.7: Conditional ITT of treatment cues on Pr(donation), by pre-treatment donor type
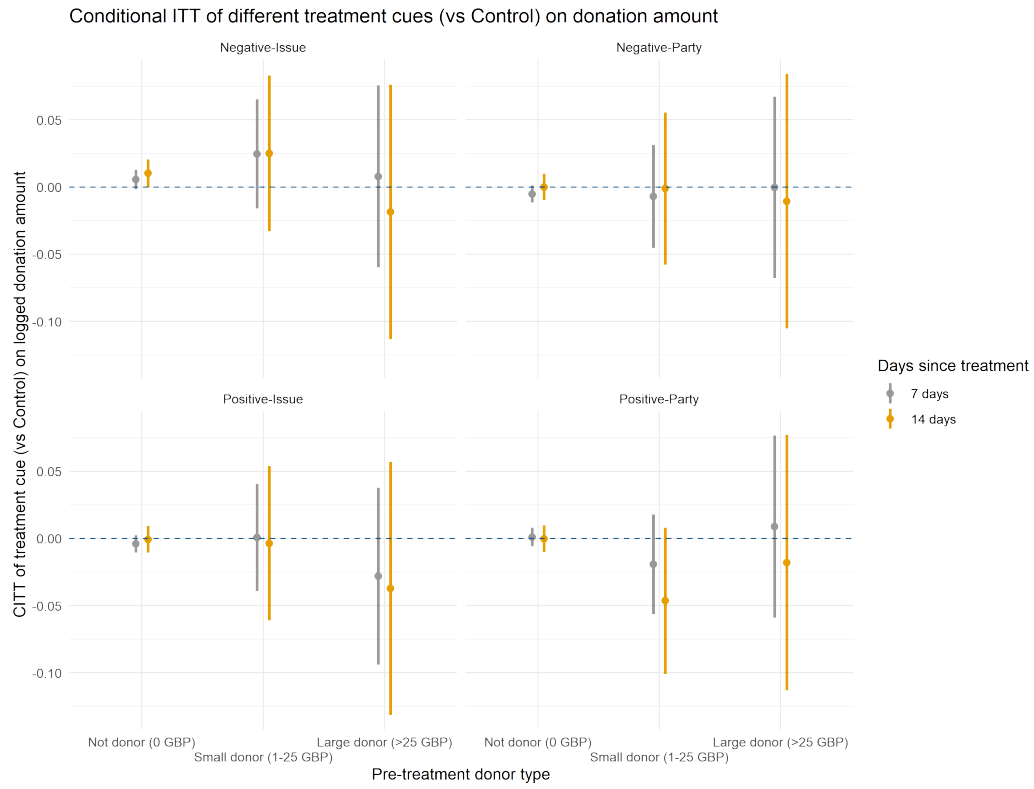
Figure A.8: Conditional ITT of treatment emails by cue-type on donation amount, by pre-treatment donor type

A.11 Additional results: double ask treatment

In addition to the political identity treatments, we also randomly assigned individuals to either receive a single mobilisation ask (an invitation to donate to the political party), or to receive two mobilisation asks in the campaign email (an invitation to donate to the political party, as well as an invitation to sign up to volunteer for the political party). Half of the participants exposed to an email received the single ask, and half received the double ask. In line with our pre-registered hypothesis 5, we expected that the double ask would lead party supporters to substitute time for donations. Unfortunately, we were not able to obtain valid volunteering sign-up data and therefore cannot assess what effect this treatment, or the political identity treatments, have on volunteering. However, we can test whether the double vs single ask had an effect on donation behaviour. We report the marginal effect of the double vs single ask in Tables A.12, A.13, A.14. We do not find evidence in favour of H5. Supporters exposed to the double ask are not more or less likely to donate than supporters exposed to the single ask.

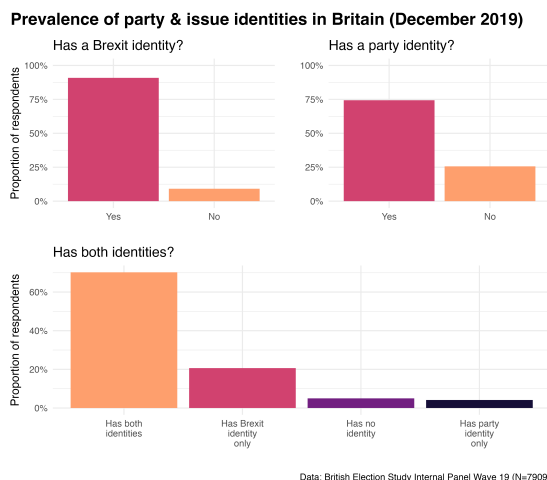|	M1	M2
Mean(Only donation ask)	0.020***	−0.002
	(0.001)	(0.002)
Donation and volunteering ask	−0.000	−0.000
	(0.001)	(0.001)
Covariates?	No	Yes
R²	0.000	0.031
Adj. R²	−0.000	0.030
Num. obs.	71952	71952

***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.
Covariates include region, membership status and amount, past volunteering, fundraising and donations behaviour

Table A.12: Marginal effect of Double vs single ask on DV: Donated (=1), did not donate (=0), 7 days post-treatment

	M1	M2
Mean(Only donation ask)	0.020***	−0.002
	(0.001)	(0.002)
Donation and volunteering ask	−0.000	−0.000
	(0.001)	(0.001)
Covariates?	No	Yes
R²	0.000	0.031
Adj. R²	−0.000	0.030
Num. obs.	71952	71952

***$p < 0.01$; **$p < 0.05$; *$p < 0.1$.
Covariates include region, membership status and amount, past volunteering, fundraising and donations behaviour

Table A.13: Marginal effect of Double vs single ask on DV: How many times did an individual donate? 7 days post-treatment
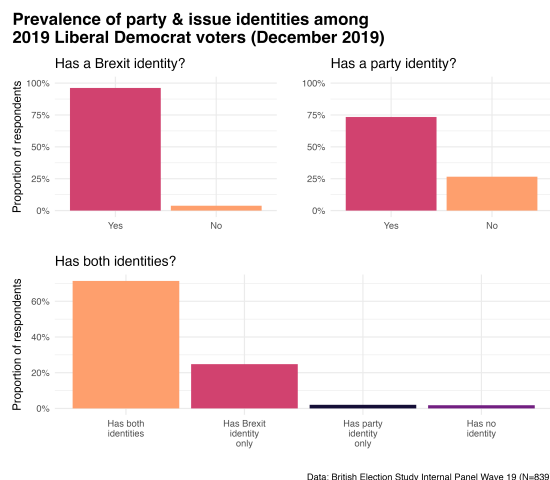
	M1	M2
Mean(Only donation ask)	0.066***	−0.010
	(0.003)	(0.009)
Donation and volunteering ask	−0.001	−0.001
	(0.004)	(0.004)
Covariates?	No	Yes
R^2	0.000	0.031
Adj. R^2	−0.000	0.031
Num. obs.	71952	71952

$^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$.
Covariates include region, membership status and amount, past volunteering, fundraising and donations behaviour

Table A.14: Marginal effect of Double vs single ask on DV: Logged DV: How much did an individual donate? (in GBP) 7 days post-treatment

A.12   Descriptive data: issue identities in Britain

We rely on data from the British Election Study (BES) to illustrate the significantly greater prevalence of Brexit based issue identities over partisan identities among British citizens in the 2019 general election.

As shown in Figure A.9 – and consistent with the evidence presented by Hobolt, Leeper, and Tilley (2020) – at the time of fielding our experiment in December 2019 91% of BES respondents reported a Brexit-based issue identity whilst only 73% reported to be party identifiers. The relative importance of issue identities over party identities is not only observed for the electorate as a whole, but is present among the voters of the the UK's three largest parties: Conservatives, Labour, and the Liberal Democrats. In Figure A.10, we also demonstrate voters' diverging preferences on revisiting the Brexit question. With the exception of Conservative party voters, voters from the Labour party, the Liberal Democrats, and the Green party were all– at the time the experiment was fielded – substantively in favour of a second referendum (the so-called *People's Vote*). If one such referendum were to have
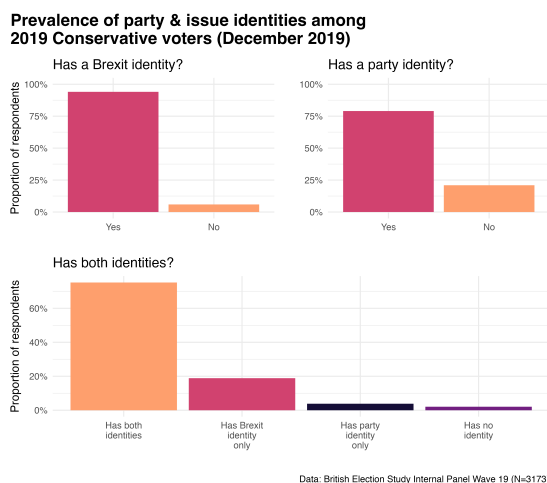
Figure A.9: Issue and party identities at time of fielding experiment (December 2019)

taken place, a sizeable proportion of the parties' supporters expressed a willingness to vote to remain by a substantive margin.

The prevalence and dominance of these issue identities has not yet subsided. In Figure A.11, utilising data from the twenty-third wave of the BES (fielded in May 2022), we show that six years after the referendum, and two years and five months after we fielded our experiment, issue identities remain more commonplace than party identities among British citizens.
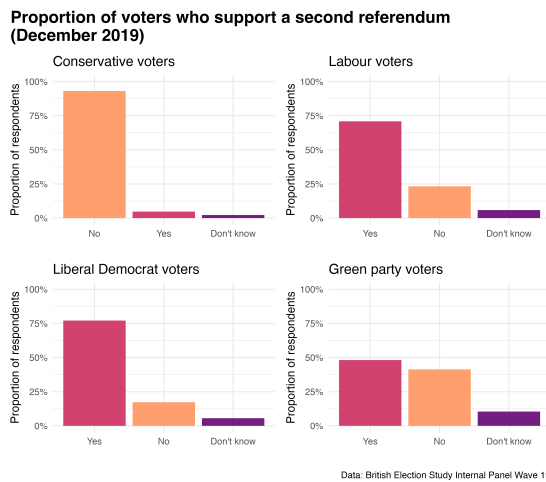
(a) Support for second referendum
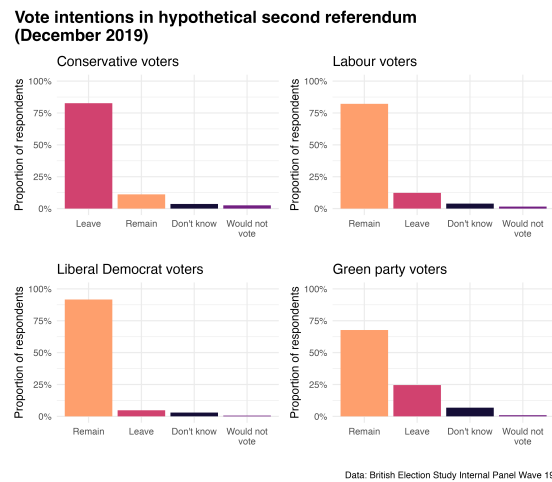
(b) Vote intention in hypothetical second referendum

Figure A.10: Prevalence of pro-Remain preferences (December 2019)
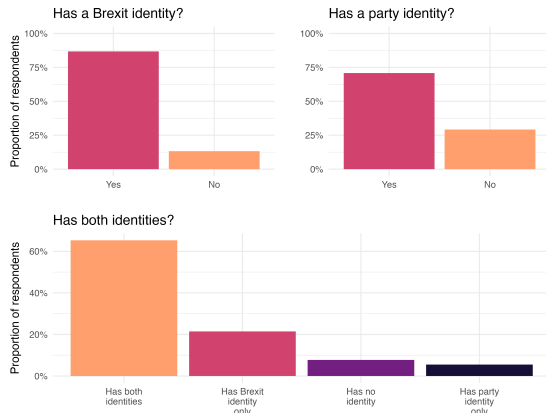
(a) All respondents

(b) Liberal Democrat voters

(c) Labour voters
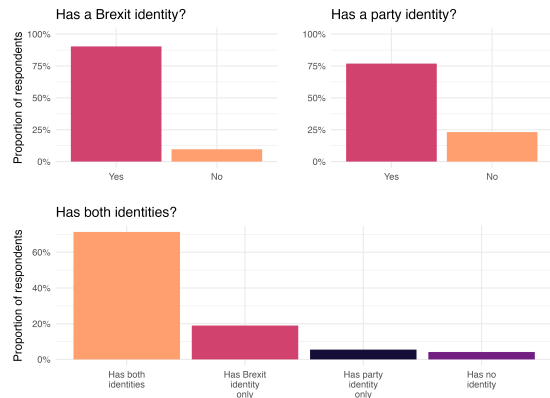
(d) Conservative voters

Figure A.11: Permanence of issue identities: issue and party identities two years after fielding the experiment (May 2022)

A.13 Manipulation check: additional survey

To probe whether our treatment campaign emails delivered the intended identity primes, we carried out an additional survey experiment. The main objective of the survey was to conduct a manipulation check: to check whether participants perceived the treatment primes as intended. We find strong evidence that this is the case. The treatment emails primed different political identities.

We fielded the survey experiment from the 17th to the 29th of March 2023 on Prolific UK, a participant recruitment platform for academic studies. The study received Ethics approval at [redacted], ref: 192023. A total of 979 participants completed the 3-4 minute survey. Participants were remunerated at the rate of the English living wage for their time (10.40 GBP per hour). We only recruited participants who are over the age of 18, live in the UK, and say that they voted for the political party that we conducted our field experiment with in the 2019 UK general election. We chose these exclusion criteria to recruit a sample which is as similar as possible to the original sample of party supporters in the field experiment.

We acknowledge that in an ideal scenario, the manipulation check survey would have been fielded to the party supporters in the original sample at the time of the field experiment. This was not possible because of the practical constraints around conducting a field experiment with a political party. However, if anything, the sample and timing makes the following analysis a conservative manipulation check. Firstly, the survey was fielded to a sample of relatively weaker party supporters, compared to the original sample. Our manipulation check survey sample said that they voted for the party in 2019, while party supporters in our original sample are individuals who are interested enough in signing up to the party's email list. Weaker party supporters might find it more difficult to detect political identities they do not identify with as strongly as party members. This should therefore stack the odds against finding treatment effects. Furthermore, the manipulation check survey was conducted at a time when Brexit identities were less salient in party rhetoric than during the original field period of the 2019 general election campaign. This might make it harder for participants to

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pick up on these identities in our campaign emails. The survey thus provides a hard test for the effectiveness of our treatment manipulation.

In the manipulation check survey, participants were randomly assigned with a probability of 0.25 to see one of our four original treatment campaign emails: the negative issue cue email, the positive issue cue email, the positive party email, or the negative party email. Treatment groups were balanced on age and gender (see Table A.15). After seeing one of the four campaign emails, participants then answered a series of outcome questions about the email.

Table A.15: Survey: Balance on key pre-treatment covariates

Variable	Issue-Negative	Issue-Positive	Party-Negative	Party-Positive
Age	43.03 (13.96)	43.14 (13.62)	43.61 (13.78)	43.25 (13.14)
% Female	0.52 (0.5)	0.5 (0.5)	0.53 (0.5)	0.5 (0.5)
% Full-time employed	0.57 (0.5)	0.56 (0.5)	0.5 (0.5)	0.6 (0.49)
Total N	245	243	247	244

Mean and (SD) for key covariates.

We constructed the outcome measures to match our 2x2 factorial design. As a reminder, we varied two factors in our design: the direction of the identity prime (negative or positive identity), and the target of identity prime (issue-based or party-based identity).

There are four main outcome variables. The first outcome measures whether the perceived topic of the campaign email is political parties. The second outcome measures whether the perceived topic of the campaign email is the political issue (Brexit). The first and second outcome are measured with the following question: "To what extent does the campaign email make you think about each of the following? Please answer on a scale from 0 (Not at all) to 10 (A lot)." Participants rated each of the following answer options, presented in a randomized order, on a scale from 0-10: "Political parties (e.g. Liberal Democrats,

Conservatives, Labour)/Brexit or EU membership/NHS reform/Political protest movements (e.g. Just Stop Oil)". The last two answer options were distractor items.

The third outcome measures whether participants perceive the campaign email as mainly appealing to a negative or positive political identity. Participants were asked: "In politics, people sometimes talk about 'political identities'. People can have a positive political identity, meaning people think of themselves as being a supporter of a group or 'for' something. People can also have a negative political identity, meaning people think of themselves as being opposed to a group or 'against' something. Would you say the campaign email is more appealing to people with a positive or negative political identity? [randomized order, forced choice] Appeals to people with a positive political identity/Appeals to people with a negative political identity/Don't know".

The fourth outcome measures which of the four possible identities participants perceive as being most primed in the email. Participants are asked: "Who do you think is mainly meant by the 'we' in the email? [order randomized, only one choice allowed] People who identify as [in-partisans]/People who identify as anti-[out-party]/People who identify as Remainers/ People who identify as anti-Brexit/ Don't know".

The results of the manipulation check survey are presented in Figures A.12, A.13, A.14, and A.15.

Figure A.12 visualises the results for the first outcome, to what extent a respondent thought the campaign email was about political parties. As expected, respondents who see the Party-Negative email or the Party-Positive email think to a significantly greater extent that the email was about political parties than individuals who saw an Issue campaign email. The right-hand panel of Figure A.12 shows that the pooled marginal effect of the party vs issue cue is large, statistically significant and in the expected direction. Individuals who see a campaign email that primes party identity, rather than issue identity, are significantly more likely to say that the campaign email is about political parties. This is a large effect of around 0.47 of a standard deviation in the outcome, and thus provides compelling evidence

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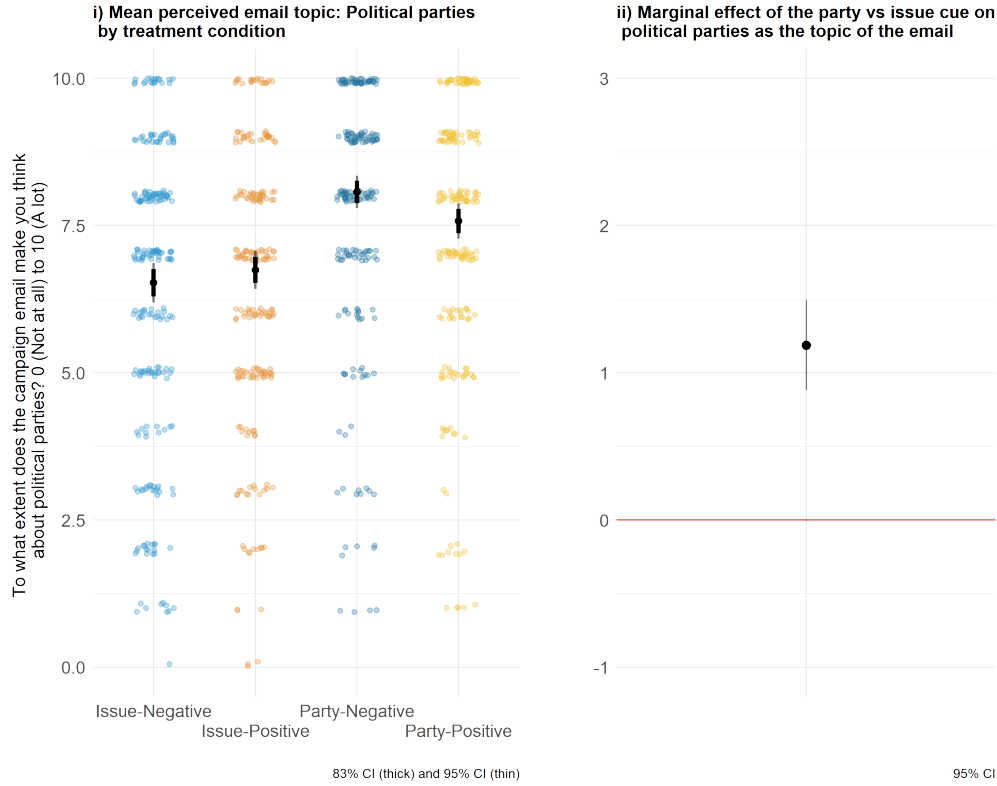
Figure A.12: Does a larger proportion of subjects in the party identity cue condition perceive the topic of the email to be about parties? Yes.

that our treatment manipulation of party vs issue identity worked.

Figure A.13 depicts the results for the second outcome, to what extent a respondent thought the campaign email was about Brexit. Respondents who see the Issue-Negative email or the Issue-Positive email are more likely to think that their email was about the issue (Brexit) than individuals who saw a Party campaign email. The right-hand panel of Figure A.13 shows that the pooled marginal effect of the issue cue vs party cue is large, statistically significant and in the expected direction. Individuals who see a campaign email that primes issue identity, rather than party identity, are significantly more likely to say that the campaign email is about the Brexit issue. This is a large effect of around 1 standard deviation in the outcome, and thus provides strong evidence that our treatment manipulation of issue vs party identity worked.

Figure A.14 shows the results for the third outcome, whether a respondent thought the
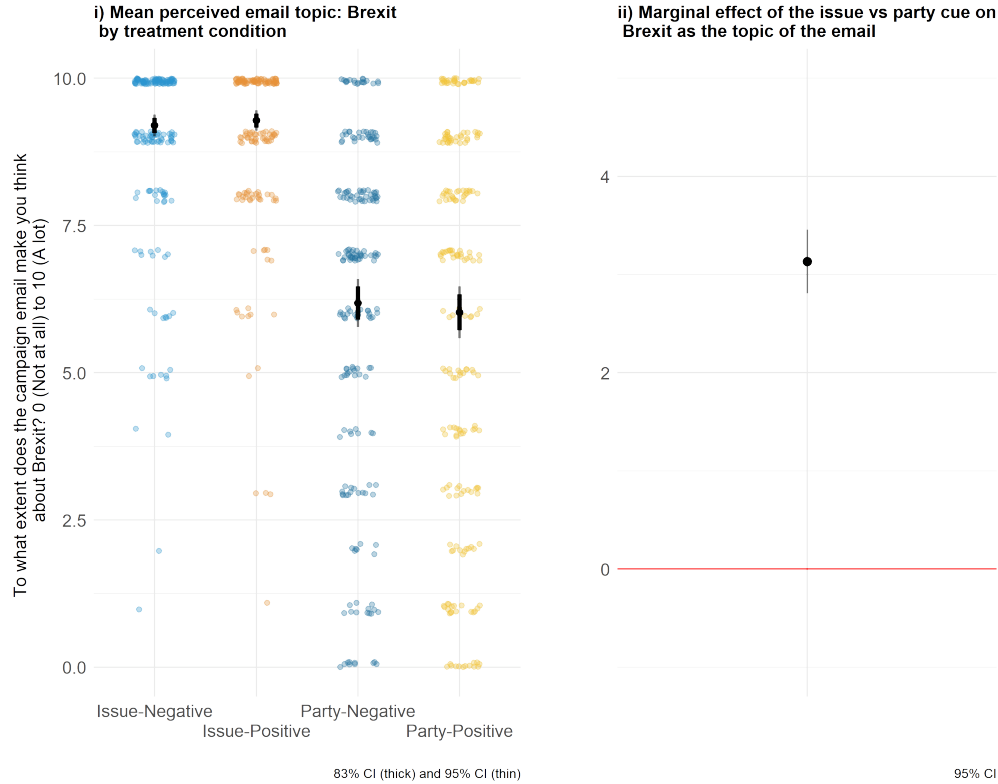
Figure A.13: Does a larger proportion of subjects in the Brexit cue condition perceive the topic of the email to be about Brexit? Yes.

campaign email was appealing to a negative political identity. Respondents who see the Issue-Negative email or the Party-Negative email are more likely to identify the email as appealing to a negative political identity than individuals who saw a positive campaign email. The right-hand panel of Figure A.14 shows that the pooled marginal effect of the negative vs positive treatment is statistically significant and goes in the expected direction. Individuals who see a campaign email that primes a negative political identity, rather than a positive political identity, are significantly more likely to say that the campaign email appeals to people with a negative political identity. This is a large effect of around 40 percentage points. These results show that the treatment manipulation of negative vs positive political identity was successful.

Finally, Figure A.15 shows the results for the fourth outcome, which specific identity (of the four) a respondent thought the campaign email was mainly appealing to. Figure A.15
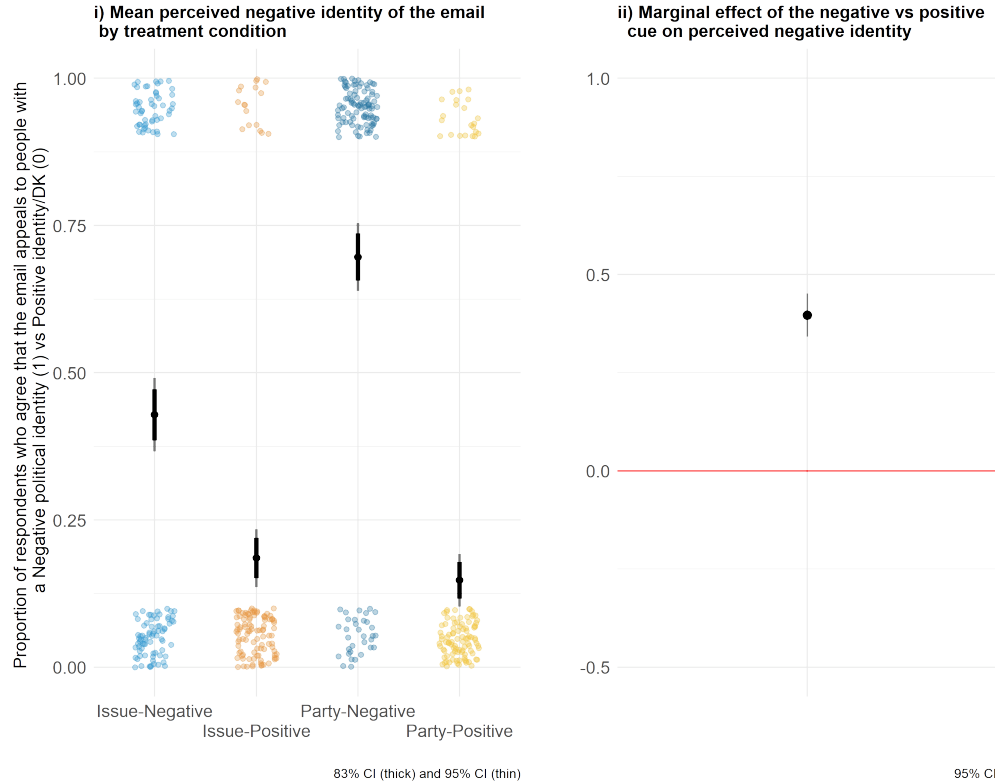
Figure A.14: Does a larger proportion of subjects in the negative identity condition perceive the identity invoked in the email to be negative? Yes.

shows that for all of our treatment conditions, a relative majority of respondents are able to correctly identify which identity group was meant by the "we" in the email. For the Issue-Negative email which was designed to appeal to an anti-Brexit identity, the answer option with the largest share of responses is "people who identify as anti-Brexit". For the Issue-Positive email which was designed to appeal to a Remainer identity, over 60% of respondents in that condition correctly identify the email as appealing to Remainers. The same pattern emerges for the Party-Negative and Party-Positive email.

Comparing across conditions also shows that respondents are able to pick up on the correct identities in each email, compared to the other treatments. For example, even though some respondents in the Party-Negative condition think that their email also appeals to people with a positive partisan identity, the treatment condition with by far the largest relative share of perceived positive in-party identity is the (corresponding) Party-Positive

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Who do you think is mainly meant by the "we" in the email?
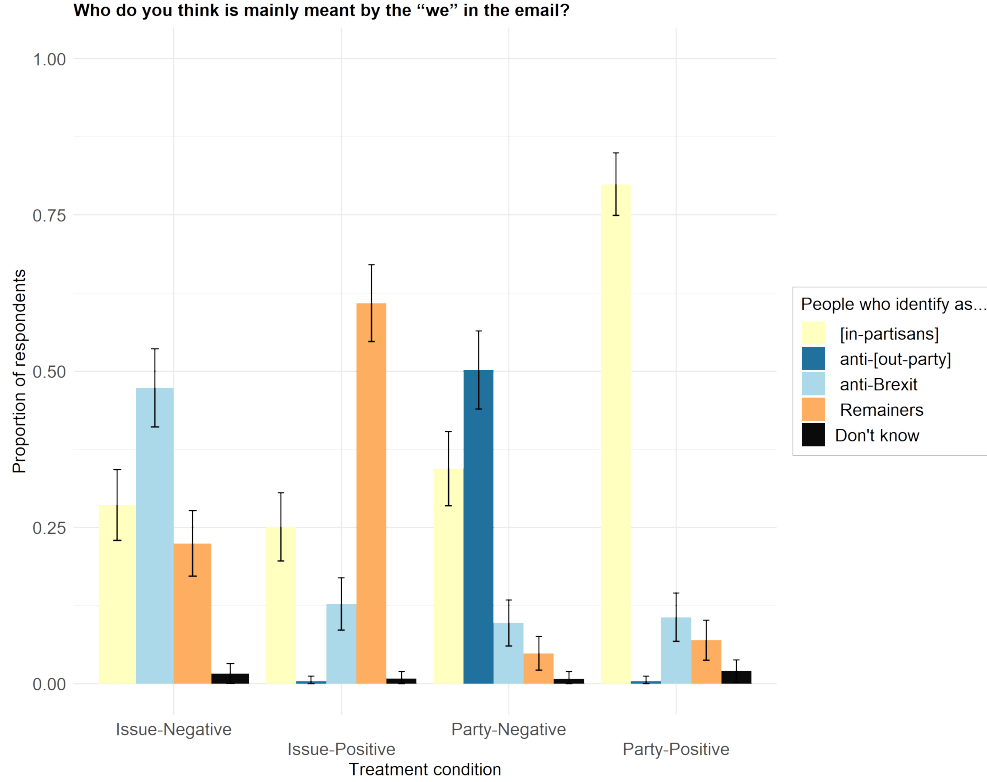
Figure A.15: If asked to choose, do subjects perceive the identity cue as intended? Yes.

condition. The same pattern is visible for the other identities.

In summary, the survey results provide compelling evidence that our treatment manipulation worked. Across four different measures of manipulation checks, we find large, statistically effects of the treatment emails on perceptions of both of our treatment factors, the first factor of the issue vs party treatment, as well as the second factor of the negative vs positive treatment. Respondents are able to pick up on the correct political identity primed in each email. These results should inspire confidence that the treatment effects on donation behaviour reported in the main paper can indeed be interpreted as causal effects of the identity primes.

A.14 Pre-Analysis Plan

Pre-Analysis Plan: Changing Political Identities and Campaign Activism

November 4th, 2019

Rationale

Changing shape of political identities in the UK

Recent work has begun to establish a consensus regarding the growing importance of Brexit-based identities (Hobolt, Leeper and Tilley, 2018). Whilst UK voters have traditionally structured their political beliefs around party loyalties, partisan identities have become increasingly replaced by voters' political attitudes towards Brexit. This involves a transformation of the dimensional space of British politics away from left-right party competition within a multi-party system towards a dichotomous identification as either a Remainer or a Brexiteer. In other words, it matters less whether one is a Labour voter or a Liberal Democrat voter, and more whether one stands on the most salient political debate of the day: Brexit.

The displacement of partisan identities by those structured around voter views on Brexit present parties with a dilemma. Given that partisan cues have traditionally played a major role in the UK in shaping political preferences and electoral behaviour, the emergence of new Brexit-based identities disrupts the status quo. In such circumstances, when parties seek to mobilise and activate their supporters to take political action, should they emphasise these new identities or traditional party ones in order to maximise supporter mobilisation?

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While many theories of political behaviour have traditionally focused on positive in-group attachments as foundations for political identities, there has recently been a renewed interest in negative partisanship, a strong dislike of political parties and groups. For example, the affective polarisation literature from the US has shown that strong negative feelings towards political parties and their supporters have been on the rise (Iyengar et al. 2019). This can have important implications for behaviour inside and outside of politics, such as party loyalty (Abramowitz and Webster 2016), political participation (Iyengar and Krupenkin 2018) and job market discrimination (Gift and Gift 2015). Recent research has shown that negative affect towards political parties is also an important feature of political behaviour in countries other than the US. In the run up to the European elections 2019, a study has found that while only a small share of voters across the EU have positive party attachments, many report consistent negative partisan identities (Wratil, Rovira Kaltwasser, and Vehrkamp 2019). In the UK, Leavers and Remainers harbour strong negative feelings towards individuals "from the other side", describing them on average as less honest and intelligent (Hobolt, Leeper and Tilley, 2018). How do such strong negative feelings affect political activism, and do they have stronger mobilising effects than positive attachments?

Research Questions

i) Are Brexit-based identity cues more effective at encouraging supporters to donate to or to volunteer for a political party than partisan-based identity cues?

ii) Are negative partisanship cues more effective than positive cues at encouraging voters to donate to or to volunteer for a political party?

iii) Are negative partisanship cues more effective when combined with Brexit-based identity cues than with partisan-based identity cues?

iv)   Are two asks to donate and to volunteer supplementary or complimentary at encouraging supporters to volunteer their money and time?

Hypotheses

H1 (baseline): Email contact from the party will mobilise its supporters to donate to the campaign/to volunteer.

H2 (Brexit identity thesis): Messages that prime Brexit-based identities will be more effective at encouraging volunteering/campaign donations than messages that prime traditional party identities.

H3 (Negative partisanship thesis): Messages that prime negative partisan cues will be more effective than messages that prime positive partisan cues.

H4 (Interaction hypothesis): Messages that prime negative partisan cues will be more effective when combined with Brexit-based identities rather than traditional party identities.

H5 (substitution hypothesis): Messages that include two asks will influence supporters to substitute time for donations.

Sample

Experimental subjects are pre-identified members of the UK Liberal Democrat party with a valid email address. The total sample consists of **98,206** individuals.

The sample size of **98,206** provides us with sufficient N to identify ITTs of 0.7 percentage-points against a control condition with a 5% control mean.

Random Assignment of Treatment

Using complete random assignment, subjects will be assigned to thirteen groups: Control (.2), and Treatments T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11 and T12. To avoid ordering effects, we assign T5-T8 (with p=.05) to receive the additional volunteer ask after the donation ask, and assign T9-T12 (with p=.05) to receive the volunteer ask before the donation ask.

Treatment

C: Individuals assigned to C will receive no email from the party.

T1: Individuals assigned to T1 will receive an email asking them to donate to the party in the lead up to a general election campaign. The T1 email will prompt party members with a number of positive partisan cues towards the Liberal Democrats.

T2: Individuals assigned to T2 will receive an email asking them to donate to the party in the lead up to a general election campaign. The T2 email will prompt party members with a number of negative partisan cues against the Conservatives.

T3: Individuals assigned to T3 will receive an email asking them to donate to the party in the lead up to a general election campaign. The T3 email will prompt party members with a number of positive cues based on their identity as Remainers.

T4: Individuals assigned to T3 will receive an email asking them to donate to the party in the lead up to a general election campaign. The T4 email will prompt party members with a number of negative cues based on their opposition to Leave/Leavers.

T5-T8: Repeat treatment messages of T1-T4 respectively with addition of ask in the form of volunteering. The donation ask comes before the volunteering ask.

T9-T12: Repeat treatment messages of T1-T4 respectively with addition of ask in the form of volunteering. The volunteering ask comes before the donation ask.

Table 1: Distribution of subject by treatment allocation

Group	Positivity	Identity	Ask	Assignment
Control	n/a	n/a	n/a	20%
T1	Positive	Lib Dem	donation	10%
T2	Negative	Conservative	donation	10%
T3	Positive	Remainer	donation	10%
T4	Negative	Leaver	donation	10%
T5	Positive	Lib Dem	donation volunteer	5%
T6	Negative	Conservative	donation volunteer	5%
T7	Positive	Remainer	donation volunteer	5%
T8	Negative	Leaver	donation volunteer	5%
T9	Positive	Lib Dem	volunteer donation	5%
T10	Negative	Conservative	volunteer donation	5%
T11	Positive	Remainer	volunteer donation	5%
T12	Negative	Leaver	volunteer donation	5%

Data and Outcome Measures

This study includes three outcome variables.

Outcome 1 is binary and defined as the successful submission of a donation from Liberal Democrat supporters via the party's online mask. It takes on the value 1 if a donation from the party member was received, and the value 0 if no donation was received. The outcome is measured via a traceable URL that tracks the successful submission of pre-designed emails of supporters using the organisation's platform.

Outcome 2 is a continuous variable and indicates the value amount (£) of the donations received, with no donation being registered as £0.

Outcome 3 measures volunteer sign up. This is indicated via a binary variable that records those supporters who decide to communicate their interest in volunteering for the party. It takes the value 1 if email recipients sign up to volunteer and the value 0 if they do not.

The outcome variable will be collected 1 day before, 2 days after and **7 days from the delivery** of the treatment.

Estimands

We will estimate seven Intent-to-Treat Effects on the main outcomes. The ITTs are defined as:

$$ITT_a = \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 1,5,9) - \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 0)$$

$$ITT_b = \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 2,6,10) - \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 0)$$

$$ITT_c = \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 3,7,11) - \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 0)$$

$$ITT_d = \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 4,8,12) - \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 0)$$

$$ITT_e = \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 1,2,5,6,9,10) - \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 3,4,7,8,11,12)$$

$$ITT_f = \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 2,4,6,8,10,12) - \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 1,3,5,7,9,11)$$

$$ITT_g = \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 1,2,3,4) - \frac{1}{N}\sum_{i=1}^{N} Y_i(z = 5,6,7,8,9,10,11,12)$$

Y_i (z) is the potential outcome for individual i under assignment to any of the treatment groups 1-8, $Y_i(z=1)$ is the potential outcome for individual i under assignment to treatment 1, $Y_i(z=2)$ is the potential outcome for individual i under assignment to treatment 2, and so forth, and Y_i (z=0) is the potential outcome for individual i under assignment to control.

Think of our experiment as a 2x2x2 factorial + control:

	Donation	Donation + volunteer	Donation	Donation + volunteer
	Traditional party identities		Brexit identities	
Positive	.1	.1	.1	.1
Negative	.1	.1	.1	.1
Control	.2			

We estimate the following equations:

$$YDonation_i = \alpha + \beta_1 Brexit_i + 'X_i + \epsilon_i \ (1)$$

$$YDonation_i = \alpha + \beta_2 Negative_i + 'X_i + \epsilon_i \ (2)$$

$$YDonation_i = \alpha + \beta_1 Brexit_i + \beta_2 Negative_i + \beta_3 Brexit \ x \ Negative_i + 'X_i + \epsilon_i \ (3)$$

$$YDonation_i = \alpha + \beta_3 2asks + 'X_i + \epsilon_i \ (4)$$

$$YVolunteer_i = \alpha + \beta_3 2asks + 'X_i + \epsilon_i \ (5)$$

where $+'X$ is an N-by-k vector of pre-treatment covariates; Brexit is a binary variable that cues Brexit ID (1) or Party ID (0), Negative is a binary variable which cues a negative(1) or positive (0) identity, and 2asks is a binary variable that includes 2 asks= donation and volunteering (1) or 1 ask=donation only (0)

We will use the difference-in-proportions estimator to estimate the ITTs, and the covariate-adjusted OLS estimator to estimate the covariate-adjusted ITTs. We will use the following covariates for adjustment: gender, age, parliamentary constituency, past volunteering, past donation, and membership activity.

If data on email bounce-backs is available, we will also estimate and report the corresponding Complier Average Causal Effects (CACE). For all treatment vs control comparisons, we will use 2sls with robust standards errors (HC2), instrumenting whether an email was delivered (d) with treatment assignment z. For all treatment vs treatment comparisons we will condition on compliance, if we cannot find any evidence for differential non-compliance across treatment conditions. Since bounce-backs are mechanical compliance should not be a function of treatment assignment.

We use two-tailed hypothesis tests and alpha=0.05 throughout.

A.15 Deviations from the Pre-Analysis Plan

In the manuscript, we closely follow the pre-registered hypotheses and analyses. However, we made some minor deviations from the pre-analysis plan where necessary. We discuss these deviations in this section.

Firstly, we pre-registered that our sample consists of 98,206 individuals. Our final sample consisted of 89,941 individuals, after removing individuals below the age of 18 and removing entries without a verifiable email address.

Secondly, we pre-registered a third outcome, volunteering sign-ups. We were not able to obtain valid outcome data on volunteer sign-ups from the political party, so are unable to report results on this outcome.

Thirdly, we pre-registered that we would present covariate-adjusted results, including the following covariates for adjustment: gender, age, parliamentary constituency, past volunteering, past donation, and membership activity. In the Appendix, we do present covariate adjusted models including the following covariates: region, past volunteering, past donation, membership status, membership payment amount and fundraising activity. To adjust for geographic location, we use region instead of parliamentary constituency because there are few observations in over half of the constituencies (in 350 constituencies, there are fewer than 100 observations). There is high missingness on gender (missing for 80% of observations) and age (missing for 95% of observations), which is why we do not adjust for these covariates.

Fourth, in regards to the wording of the hypotheses, the wording of H1 in the pre-registration was more specific to reflect the context of our field experiment: "Email contact from the party will mobilise supporters to donate to the campaign.". Finally, we pre-registered that if data on email bounce-backs is available, we would report the Complier Average Causal Effects. Data on email bounce-backs or opening rates was not made available to us, and we are therefore not able to report CACE estimates.

Appendix References

Aronow, Peter M, and Cyrus Samii. 2012. "ri: R package for performing randomization-based inference for experiments.".

Gerber, Alan S, and Donald P Green. 2012. *Field Experiments: Design, Analysis, and Interpretation.* W W Norton and Company.