\$50 CH ELSEVIER

# Contents lists available at ScienceDirect

# **Electoral Studies**

journal homepage: www.elsevier.com/locate/electstud





# Do text messages increase voter registration? Evidence from RCTs with a local authority and an advocacy organisation in the UK

Vanessa Cheng-Matsuno a,1, Florian Foos a, Peter John b,\*, Asli Unan c

- <sup>a</sup> Department of Government, London School of Economics & Political Science, United Kingdom
- <sup>b</sup> Department of Political Economy, King's College London, United Kingdom
- <sup>c</sup> Department of Social Sciences, Humboldt University of Berlin, Germany

#### ARTICLE INFO

#### Keywords: Voter registration SMS-messages RCTs

# ABSTRACT

In the wake of the Covid-19 pandemic, text messages have become an increasingly attractive tool of voter registration. At the same time, in countries without automated registration, advocacy organisations play a more prominent role in supplementing the efforts of official bodies in registering voters. However, most available, robust evidence on whether voter registration campaigns work is based on campaigns conducted by official bodies charged with electoral registration. We present the results of two RCTs that aimed to increase voter registration in the UK using SMS-text messages, relying mainly on behavioural messaging. One was conducted by a local authority, while the other was implemented by an issue advocacy organisation that had no prior involvement in voter registration. In line with previous findings, the local authority's text messages resulted in an increased registration rate of eight percentage-points, which translates into a three percentage-point increase in voter turnout. However, the advocacy organisation's text messages neither increased voter registration, nor turnout, no matter whether the text message offered a personal follow-up conversation, or not. Given that many voter registration campaigns are run by advocacy organisations and text messages are an increasingly important mobilisation tool, this raises questions about the scope conditions of existing findings.

### 1. Introduction

The social stratification of voter registration is increasingly of concern in the UK (Fieldhouse et al., 2021; Mitchell, 2018), highlighting the persistent exclusion of social groups that already have limited access to economic, social, and political resources in wider society. These trends reflect similar debates in other countries, where automated voter registration has not been implemented (Holbein and Hillygus, 2020; Braconnier et al., 2017). In many countries voter registration is automated or done at the polling booth, which generates the worry that Anglo-American democracies are not as inclusive as they could be by deterring citizens who perceive higher costs of registering, often low-SES citizens (Brians and Grofman, 1999). Over the past decade in the UK, the switch from household to individual voter registration and the future introduction of voter identification requirements (James and Bernal, 2020) have put a spotlight on how behavioural interventions

can be used by governmental and non-governmental actors to counteract adverse effects on groups that are likely to be impacted. At the same time, text messages have become an increasingly important mobilisation tool during the Covid-19 pandemic due to their advantage that, while not requiring face-to-face contact, they are known to be more noticeable than leaflets or e-mails (Dale and Strauss, 2009; Malhotra et al., 2011).

Despite the demand for behavioural interventions that avoid face-to-face contact, the evidence-base regarding the effectiveness of interventions to increase voter registration in the UK is relatively sparse (see John et al. (2015), Sweeney et al. (2021) for existing studies), and none of these studies employ SMS-text messages to register voters. Most of the existing evidence on behavioural interventions to increase voter registration comes from the USA (Nickerson, 2015; Mann and Bryant, 2019; Bennion and Nickerson, 2016, 2011; Bryant et al., 2022), and many interventions that have been shown to be effective at increasing

<sup>\*</sup> Corresponding author.

E-mail addresses: V.Cheng-Matsuno@lse.ac.uk (V. Cheng-Matsuno), f.foos@lse.ac.uk (F. Foos), peter.john@kcl.ac.uk (P. John), asli.unan@hu-berlin.de (A. Unan).

<sup>&</sup>lt;sup>1</sup> We thank the UK Democracy Fund for funding the study. We thank our partners in the local authority and advocacy organisation without whom we could have not done these trials. We also thank the Electoral Commission, in particular Phil Thompson, for support over access to the registration and voter turnout data. We are grateful to Theresa Bischof, Tereza Holubová, Adam Keyworth, Sara Luxmoore, Len Metson, Johannes Rosenbusch, Olea Rugumayo, Yasmina O'Sullivan, and Joey Wolfbauer for excellent research assistance.

voter registration across different countries focus on in-person activities, such as canvassing (Nickerson, 2015; Braconnier et al., 2017) or classroom-based activities (Bennion and Nickerson, 2016).

In contrast, most field experiments on the effects of e-mails on voter registration show null effects on registrations and turnout (Bennion and Nickerson, 2011; Nickerson, 2007; Bennion and Nickerson, 2021). There are only a couple of experiments that have tested whether SMS-text messages can increase voter registration. Bennion and Nickerson (2011) show that "warm" text messages, sent to individuals who received registration forms by e-mail before, can increase voter registration in the USA, while Harris et al. (2021) find mixed results in Kenya: text message reminders did not increase voter registrations on their own, but had a small effect when delivered alongside an intervention that made registrations more easily accessible locally. Based on Get-Out-The-Vote (GOTV) experiments that identify positive effects of text messages on turnout (Malhotra et al., 2011; Dale and Strauss, 2009; Schein et al., 2020; Bergh et al., 2016), there are good reasons to believe that they should also be effective at increasing registration, given that voter registration in the UK can be completed online in less than five minutes.

The source of voter registration messages is potentially important as citizens have prior views about the legitimacy and role of organisations seeking to mobilise them to register. Moreover, the populations that issue advocacy organisations can target with text messages differ from those that can be reached by official bodies. While official bodies can potentially target the entire universe of local residents who are not yet on the voter rolls, GDPR rules prevent issue advocacy organisations from texting individuals who have not opted into contact.

In this paper, we report the results from two voter registration trials using SMS-text messages which we conducted in collaboration with a local authority and an issue advocacy organisation during the 2021 local elections in the UK. These trials share a common context and message design, but the sites, messengers, and samples differ.2 In our study, messages sent by the state-run local authority to unregistered residents generated an approximate eight percentage-point treatment effect on voter registration and a three percentage-point effect on turnout, whereas messages sent by the advocacy organisation to their members did not increase voter registration, or turnout. We hence provide the first UK-based evidence on the effectiveness of a voter registration campaign conducted by an issue advocacy organisation, and evidence on the effectiveness of text messages at increasing voter registration across different organisation types. In contrast to Braconnier et al. (2017), who tested NGO-led canvassing in France, we find that text messages coming from a non-governmental organisation did not increase voter registration or turnout. Given the lack of use of SMS-messages for voter registration in the UK, our findings have policy relevance for local governments, even though there needs to be further testing beyond one local authority and one advocacy organisation.

#### 2. Expectations about the effectiveness of text messages

A registration encouragement from an outside source may be delivered in different ways that offer information and motivation to the unregistered citizen. In the classic literature on GOTV (Gerber and Green, 2000), mode matters because the delivery of the message varies in intensity and degree of personalisation, with face-to-face messages, such as door knocks, generating the largest effect sizes (Green et al., 2013). Modes that are conducive to conversations, such as telephone canvassing, tend to beat more impersonal forms of communication, like mailshots and e-mails. This hierarchy can also be seen in voter registration studies: while it appears that, in line with GOTV research, personal methods are effective at increasing registration (Nickerson, 2015; Braconnier et al., 2017; Nickerson, 2007; Bennion and Nickerson, 2011; Harris et al., 2021), evidence on impersonal methods is mixed Bennion and Nickerson (2011), Harris et al. (2021), Mann and Bryant (2019). Mann and Bryant (2019) find that postcards from election officials can increase voter registration and turnout, while Nickerson (2007) and Bennion and Nickerson (2011) record negative effects of

From a theoretical perspective, Dale and Strauss (2009) hypothesised that text messages should be more effective at increasing turnout than e-mails or leaflets because they are more noticeable than other impersonal methods of voter mobilisation. In line with Dale and Strauss' (2009) early finding, there is evidence that text messages can mobilise citizens to turn out (Malhotra et al., 2011). Beyond noticeability, text messages that include an offer of a personal conversation should tap into that interaction benefit and also provide more personalised help to navigate the online registration process. We therefore expected text messages that include an offer of a personal conversation to perform better than text messages that did not. However, this expectation rested on the assumption that the offer would be taken up by participants.

# 2.1. Behavioural messaging approaches

Research on GOTV interventions initially found minimal effects of varying message content (Gerber and Green, 2000). Subsequent research using behavioural science has been more promising, especially if the social side of voting is stressed, with social pressure having a strong effect (Gerber et al., 2008), and also good impacts for behavioural-focused interventions, such as social norms (Gerber and Rogers, 2009), plan-making (Nickerson and Rogers, 2010), and gratitude (Panagopoulos, 2011). Messages that give incentives for registration (John et al., 2015) or stress penalties (Kölle et al., 2020) also appear to be effective as do letter and envelope redesigns, using behavioural insights, on response rates (Sweeney et al., 2021). Recent research in the USA has sought to fashion messages more closely to the specific nature of the task. Holbein and Hillygus (2020) introduce the theoretical distinction between cognitive messages targeted toward empowerment and raising motivation and non-cognitive messages that are more task-orientated and geared toward increasing the capacity of the respondent to complete the task at hand, presenting a great deal of laboratory studies and interviews to back up their case. It is plausible to infer that behavioural follow-through messaging, when appropriately crafted, should positively affect individuals' voter registrations. We therefore hypothesised that behavioural messages focused on helping citizens to follow-through with the registration process and highlighting the social norms surrounding registration would be more effective at increasing turnout than messages that focus on noncognitive messages targeted at empowerment. We utilise behavioural messaging across both campaigns, and explicitly randomise whether messages use behavioural or non-cognitive messages in the first trial that we conduct with the local authority.

<sup>&</sup>lt;sup>2</sup> It would have been infeasible for the same sample to be randomly assigned to either contact from the issue advocacy organisation or the local authority because of GDPR restrictions, which prevent the sharing of personal data between organisations without the explicit consent of subjects. This means that each organisation has access to different samples, depending on their pool of beneficiaries. Appendix table A.1 shows the populations from which the samples were drawn, compared to the average values for England. Both areas are younger, but with a lower age by ten years for the advocacy organisation; both areas have high ethnic minority representation, greater in the advocacy organisation area; and the local authority area has more university graduates. At the individual level, tables B.2 and C.5 in the appendices report estimates derived from R packages rethnicity (Xie, 2022) and predictrace (Tzioumis, 2018) for the covariates ethnicity and gender. The local authority sample is 41.1% white, whereas the figure is 45.5% for the issue advocacy organisation. The former has 54% women, whereas the latter experiment is 48% female. The key difference between the samples is that the local authority only targeted unregistered people, while the registration rate was 63% in the local authority control group.

#### 2.2. Advocacy organisations and their role in voter registration

The field of voter registration is different from turnout-focused campaigns because governmental actors play an important role not only in the administration of the voting process, but also in registering individuals in the first place. In the UK, the work of the local government Electoral Registration Officers (EROs) is supplemented by other officers engaged in community registration. Notable examples of RCTs conducted with official campaigns in the registration field are the campaigns evaluated by Harris et al. (2021), where the authors worked with the Electoral Commission in Kenya, and the experiments by John et al. (2015) and Sweeney et al. (2021) who worked with local councils, the local government authority responsible for voter registration in the UK. Moreover, Mann and Bryant (2019) conducted a successful experiment in partnership with election officials in two US states. Bennion and Nickerson's (2016) study, which also showed significant effects on voter registration, was conducted with US university officials, which has similar features to a campaign conducted by official messengers. Bryant et al.'s (2022) postcard experiment was carried out on lists with the Pennsylvania Department of Transportation, and in partnership with the Pennsylvania Department of State's Office. The advantage of having a state body deliver the messages is that it may be regarded as more legitimate than other bodies because of its connection to the formal democratic process, as shown in studies of attitudes to e-voting (Solvak et al., 2014; Fisher and Savani, 2022).

At the same time, the importance of advocacy organisations in voter registration has increased over time and has received attention from funders in this space, such as the Joseph Rowntree Reform Trust. Advocacy organisations, which have grassroots membership, may have credibility with groups of voters that are marginalised from electoral politics. In many countries, that the field of voter registration is increasingly shared by non-governmental actors invites the question if some of the positive effects observed in trials conducted with official bodies replicate when campaigns are conducted by and explicitly associated with advocacy organisations. Advocacy organisations and the voter registration campaigns run by them differ on multiple dimensions from efforts pursued by official bodies. First, the messenger is potentially important as a source of the registration request as citizens have prior views about the legitimacy and role of organisation seeking to mobilise them to register. Organisations' pre-existing relationships with subjects differ, including the degree of trust and confidence that individuals have in the organisation. Indeed, public authorities, such as local government in the UK, are known to carry out voter registration campaigns and citizens expect communications from this source. Based on GOTV experiments, where the goal is to increase turnout, studies show some differential responsiveness of citizens, based on their partisan predispositions, if the mobilising agency is clearly partisan (Foos and John, 2018; Foos and De Rooij, 2017).

Second, the populations targeted by different organisations differ. While issue advocacy organisations mostly target their members and supporters whose contact details they hold and which include a mix or registered and unregistered citizens, many of whom may be mobilised and hence registered in any case, local government authorities can explicitly restrict their targeting to local residents who are not yet on the voter rolls. In doing so, government authorities can rely on up to date lists of who is not registered for targeting. In contrast, the experimental evidence based on the effectiveness of advocacy organisations on voter registration is currently relatively sparse and does not allow us to conclude if they are effective at mobilising citizens to register to vote via text messages. Braconnier et al. (2017) is a notable exception, where the authors worked with NGOs and a political party, successfully encouraging voter registration in France using door-to-door canvassing.

#### 3. Methods

#### 3.1. Context

We were commissioned by the UK Democracy Fund to carry out a set of field experiments, in collaboration with different actors in the field of voter registration, to test if impersonal campaign methods targeted at low registration groups can increase voter registration in the context of the 2021 UK local elections. The field experiments shared common messages, which were designed and then applied across the studies, so as to be comparable. Messages mainly focused on walking citizens through the online voter registration process. Voter registration in the United Kingdom is done online on a governmental website and, on average, should take no more than five minutes to complete. The registration process is therefore directly accessible to individuals, who can complete it on their phones or on their computer once they receive a text message. The intervention hence fulfils a key requirement to be effective, as identified by Harris et al. (2021): individuals need to have the opportunity to directly act on the message they receive.

Based on research by Holbein and Hillygus (2020), we developed three types of behavioural messages, as well as a set of two cognitive messages. The first behavioural type was denominated the "follow-through" message, focused on accompanying the person in the registration process, helping them surpass challenges and obstacles to complete online registration. The second type, the "anti-sludge" message, had the objective of informing subjects about the economic benefits of registration including better credit ratings. Finally, the "dynamic norm" type appealed to social norm compliance by indicating that friends and neighbours were registering to vote. The non-cognitive messages focused on empowerment and not missing out.

While the messages and the mode of delivery across the two field experiments were similar, there were some differences: in the local authority trial we randomly assigned whether subjects were exposed to our set of behavioural or cognitive mobilisation messages, while in the issue advocacy trial, we only provided behavioural messages to subjects. In the issue advocacy organisation trial, we randomly assigned whether subjects were provided with a textback/callback option, with the offer to speak to a friendly volunteer to help them complete the registration process. The textback/callback option was intended to provide practical help with registration, but also to introduce an element of personal contact.

# 4. Experiment 1: Behavioural and cognitive messages from a local government authority

The first trial was based on SMS-text messages sent by an English local authority based in a small city in the east of England. In England, local authorities are the official body that registers citizens to vote, and have a statutory duty to encourage voter registration. They carry out yearly registration campaigns, often coordinating with the Electoral Commission, the regulatory body.

The council was involved in all aspects of the trial: the design and selection of text content for the SMS, the identification of all unregistered citizens suitable to participate in the experiment, as well as the actual delivery of SMS texts in two waves.<sup>4</sup>

There were three randomly assigned experimental conditions: (1) a cognitive SMS treatment arm, a (2) behavioural SMS treatment arm,

 $<sup>^3</sup>$  These messages were piloted with focus groups and also in an online survey experiment. We chose messages that appeared to work best in these pilots.

<sup>&</sup>lt;sup>4</sup> Both the local government authority and the issue advocacy organisation field experiment received ethical approval from the London School of Economics Research Ethics Committee on 29 March 2021, reference numbers respectively 22216 and 21816.

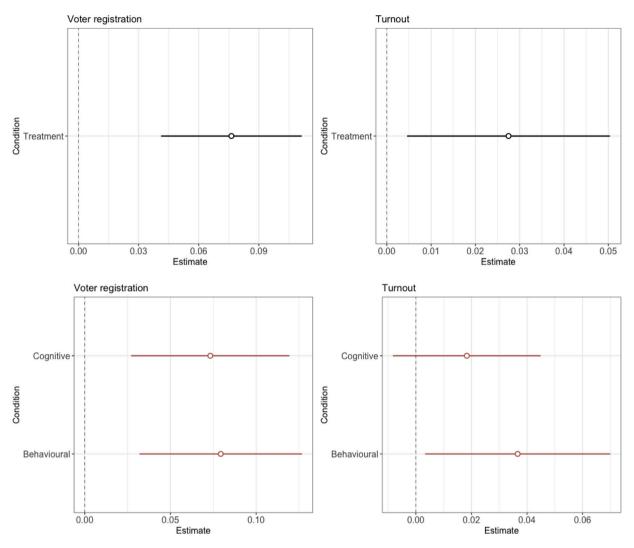


Fig. 1. Local Authority Trial: Coefficient plots with 95% CI; (N = 493).

and (3) a pure control group. Groups 1 and 2 received messages, in waves. The treatment texts are displayed in Appendix D. Cognitive messages refer to the standard message that provides a reason (or reasons) for the relevance of reminding citizens to registering to vote i.e. the importance of voting. On the contrary, behavioural messages do not appeal to the reasons to get engaged, but aim to nudge the same objective via non-cognitive elements. We carefully designed the behavioural messages to convey a specific non-cognitive nudge: (1) a dynamic norm type of message that appeals to social pressure when given information about what other individuals in the same community are doing; (2) an anti-sludge type, which aims to vary the perception about the costs of voting and; (3) a follow-through type, which aims to nudge individuals by strengthening their sense of grit to tackle obstacles.

All the text messages were sent by the local council authority, clearly identifying itself as the sender in the SMS texts. The first SMS wave was sent on the week of Monday 12 April 2021 and the second wave was sent on the week of Thursday 15 April, the week directly preceding the voter registration deadline on 19 April. The total number of participants was 493, none of whom was registered to vote at the time of the experiment. They were randomly assigned to one of the three conditions, with equal probability of assignment. We report Intention-to-Treat (ITT) effects. Specifically, we use the OLS estimator, and heteroskedasticity-consistent (HC2) standard errors:

$$Y_i = \alpha + \beta_1 Assignment_i + \epsilon_i \tag{1}$$

where Y is one of our three validated binary outcome variables: 1) whether the online registration form was submitted, 2) whether the voter provided all necessary information to be registered and hence appeared on the voter register, and 3) whether they turned out to vote in the local elections on 6 May 2022.

We collected registration and turnout data from the local council premises. The local authority had information on which individuals in the experiment submitted the form to register, registered and when it happened. Turnout data was collected from the register during a second visit to the local council premises in September 2021. The summary statistics can be found in Appendix Table B.2.

Fig. 1 and Appendix Table B.3 show that SMS messages had a large positive and statistically significant effect of around 10 percentage points on submitted applications to register. We find that there is a small drop-off between submitted online registration forms and completed voter registrations of around two percentage-points, which points to administrative hurdles in the voter registration process. Cognitive messages increased voter registration by 7.3 percentage-points, while behavioural messages increased voter registration by 7.9 percentage-points. The small difference between the impact of the two messages could be explained by sampling variability alone. Appendix Table B.3 shows the results in detail.

Appendix Table B.3 and B.4 also reports the downstream effect of the text messages on voter turnout, which amounts to 2.7 percentage-points overall and is significant with p<0.05. This means there is an

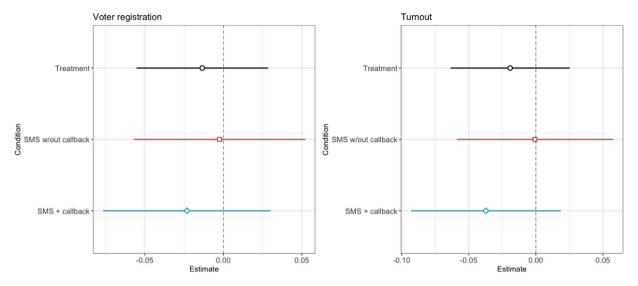


Fig. 2. Advocacy Organisation Trial: Coefficient plots with 95% CI; Tables C.6 and C.7 display corresponding regression tables; N = 2396 (registration) and N = 2035 (turnout).

attenuation of the treatment at each stage of the process. Note that this pooled treatment effect comprises a statistically significant 3.7 percentage-point increase for the behavioural messages, whereas the effect for the cognitive messages is estimated to be 1.8 percentage-points and is not significantly different from zero. While we cannot reject that the treatments were equally effective, the significant effect of the behavioural messages provides some tentative support for the Holbein and Hillygus (2020) thesis that behavioural messages are effective at increasing turnout.

# 5. Experiment 2: Behavioural messages from an issue advocacy organisation

The aim of the second experiment was to test if SMS-text messages sent by an issue advocacy organisation positively affect voter registration and electoral turnout. The sample consists of individual members and supporters of the issue advocacy organisation, whose main purpose is to provide affordable and decent housing to low income people who struggle finding housing and jobs. When beneficiaries provided their phone numbers to the organisation, they also consented to be contacted by them to receive other types of information. Individuals in this sample live in mostly urban areas, where the advocacy organisation is active, and these areas are well distributed across different regions in England.

The association which is focused on private sector renters held phone numbers for around 9,460 individuals, and 3,313 members took part in the SMS experiment.<sup>5</sup> Subjects were block (by county) and cluster-randomly assigned (by household) to either receive a SMS message, a SMS message with a textback/callback option, or to receive no contact (control group). The treatment texts are displayed in Appendix D. In this experiment, we treated individuals only with behavioural SMS messages.

Appendix Table C.9 shows covariate balance between treatment and control groups. As expected given random assignment, there are no significant differences between experimental groups. We again use the OLS estimator and estimate cluster-robust standard errors (CR2) at the household level:

$$Y_{ij} = \alpha + \beta_1 SMS_{ij} + \gamma County_{ij} + \epsilon_{ij}$$
 (2)

$$Y_{ij} = \alpha + \beta_1 SMS_{ij} + \beta_2 Callback_{ij} + \gamma County_{ij} + \epsilon_{ij}$$
 (3)

where Y is whether individual i located in household j registered to vote/turned out to vote, SMS is whether individual i in household j was assigned to receive voter registration SMS messages, Callback is whether the individual was assigned to receive messages offering volunteer textbacks/callbacks and County are county fixed effects that were used as blocks for randomisation. The issue-advocacy trial was pre-registered on OSF (Foos et al., 2021).

Registration and outcome data were collected from individual local authorities. Student assistants visited the offices to collect data on whether the individuals on their assigned lists registered to vote and whether they voted. Form submission was not available as an outcome for collection in this trial. Out of 3,313 participants who were assigned to one of the SMS treatment arms or to control, we were able to collect registration outcomes for 2,396 participants and turnout outcomes for 2,035 participants. The summary statistics can be found in Appendix Table C.5. Appendix Table C.10 checks attrition by coding missing outcome data as 1, and as 0 if the observation's outcomes were observed. There are no significant differences in missing outcome data across experimental conditions, meaning attrition is not a function of treatment assignment.

Fig. 2 reports the pooled ITT estimates (corresponding to Eq. (2) and the dis-aggregated ITT effects for the SMS including and excluding the textback/callback option (Eq. (3)). The left panel plots the ITT effect of the SMS and the SMS+callback message versus the control on voter registration, and the right panel displays the aggregated and disaggregated ITTs on turnout. Tables C.6 and C.7 show the corresponding regression tables. We also report the ITTs based on the covariateadjusted OLS estimator in these tables. The results consistently show that the effect of the SMS message on both voter registration and turnout is close to zero and the 95% confidence intervals are narrow enough that a positive effect larger than 1.5 percentage-points on registrations would lie outside. Moreover, against expectations, including a callback/textback option did not increase the effectiveness of the text messages. Point estimates are negative for the text message with the callback option, but not significantly different from the standard text message and not significantly different from zero.

# 6. Discussion and conclusion

In this paper, we provide the first field experimental evidence on the effectiveness of text messages on voter registrations in the United

 $<sup>^5</sup>$  The remaining members participated in an experiment that delivered messages via Facebook ads. We report the results elsewhere. They are consistent with the null results reported for SMS messages.

<sup>&</sup>lt;sup>6</sup> Pre-registration document is located on OSF: https://osf.io/dt76p/.

Kingdom. With the two trials reported in this paper, we also contribute to the sparse international evidence base on whether text messages work to increase voter registration (Bennion and Nickerson, 2011; Harris et al., 2021), and we add to our understanding of what works to increase voter registration in the United Kingdom (John et al., 2015; Sweeney et al., 2021). Impersonal methods, such as text messages, have increased in prominence since the onset of the COVID pandemic and have been used widely by different types of organisation, both governmental and non-governmental over the past two years. We find that text messages sent by a local authority were effective at registering citizens to vote and that around one third of the effect translated into higher turnout. The magnitude of the downstream effect is slightly larger than the effect of text message reminders recorded by Bennion and Nickerson (2011) and contrasts with the null finding on turnout in Harris et al. (2021).

While the positive downstream effects on turnout in the local authority trial as a function of behavioural mobilisation messages are consistent with our hypothesis and theory (Holbein and Hillygus, 2020), given sampling variability, we would need further experiments to establish whether their effects differ significantly from cognitive messages. One limitation of the advocacy organisation trial is that we only relied on behavioural messages, and did not assign cognitive messages for direct comparison. However, we think that it is unlikely that assigning an additional cognitive message group would have yielded different results, given our findings from the local authority trial.

Within the issue advocacy experiment, we randomly assigned whether subjects received an offer of personal help to complete the registration process, with the use of dedicated volunteers. Based on the well-known finding from the GOTV literature that more personal methods are more effective (Green and Gerber, 2015), we expected that subjects would use the textback/callback option and that volunteers would be able to walk individuals through the registration process. However, this was not the case. If at all, the SMS that included the option of personal contact was less effective than the standard SMS. What are the potential explanations for this null finding?

First of all, it is important to recognise that this is a finding from one advocacy organisation in one country only. It is possible that individuals in other geographic contexts may vary in their receptiveness to mobilisation messages, for instance based on their prior registration probability, the demographic composition of the population that is targeted, or their trust towards the organisation that initiates the voter registration drive. In the UK, there are strict limitations on the data that issue advocacy organisation can obtain on members of the public. Citizens who are on the contact lists of issue advocacy organisations, for instance because they are members of that organisation, will, on average, be more likely to be politically engaged than the unregistered population that can be contacted by local authorities. This is true even for organisations that cater to underprivileged groups, like the organisation we worked with, where the voter registration rate in control was 63%. This baseline registration rate, of course, still left room for a treatment effect to materialise, but it speaks to the challenges of targeting interventions at those individuals who could benefit from them, since the organisation did not have access to validated registration and turnout data. It also speaks to the limitations of generalising from our case, the UK, to other countries such as the United States, where better targeting data are available for such groups. The UK context is also particular because local authorities still play an out-sized role in voter registration and have done so for a long time.

One further interpretation of the null finding in our case arises from the qualitative coding of messages received in response to the textback/callback treatment (see Appendix E), where some subjects expressed surprise at the organisation contacting them about electoral processes. For example, one individual replied, 'Hi, I am interested in the community and grass-root actions of [blinded] but I would rather

if you stop sending me information about elections [...]<sup>77</sup> In this way, some contacted participants might have perceived a clash between their own motivation for joining the organisation and the messaging on registration. Such a potential conflict in perceived goals is much less likely to arise for a local authority, which organises local elections, and has the explicit goal of registering citizens to vote. It is also unlikely to arise in the case of established voting and civil rights organisations such as "Operation Black Vote" in the UK or in other countries, where contact is initiated by organisations that have a history of participating in voter registration efforts.

We hope that these results can help build hypotheses about the scope conditions which might be conducive to effective voter registration. We trust that the findings will stimulate future research with different types of organisations that are active in the voter registration space. Studies comparing modes using the same or proximate locations and samples, as well as in other electoral contests, are needed to corroborate these results.

#### **Author contributions**

Authors are placed in alphabetical order. Each makes an equal contribution.

# Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

# Data availability

Data and replication code are available from OSF: https://osf.io/dt76p/

## Supplementary materials

Supplementary material related to this article can be found online at https://doi.org/10.1016/j.electstud.2022.102572.

# References

Bennion, Elizabeth A., Nickerson, David W., 2011. The cost of convenience: An experiment showing E-mail outreach decreases voter registration. Polit. Res. Quart. 64 (4), 858–869. http://dx.doi.org/10.1177/1065912910382304.

Bennion, Elizabeth A., Nickerson, David W., 2016. I will register and vote, if you teach me how: A field experiment testing voter registration in college classrooms. PS: Polit. Sci. Polit. 49 (4), 867–871.

Bennion, Elizabeth A., Nickerson, David W., 2021. Decreasing hurdles and increasing registration rates for college students: An online voter registration systems field experiment. Polit. Behav. 1–22.

Bergh, Johannes, Christensen, Dag Arne, Matland, Richard E., 2016. Getting Out the Vote: Experiments in Voter Mobilization Among Immigrants and Natives in Norway. Institutt for samfunnsforskning.

Braconnier, Céline, Dormagen, Jean-Yves, Pons, Vincent, 2017. Voter registration costs and disenfranchisement: Experimental evidence from France. Am. Polit. Sci. Rev. 111 (3), 584–604. http://dx.doi.org/10.1017/S000305541700003X, URL https://www.cambridge.org/core/journals/american-political-science-review/article/voter-registration-costs-and-disenfranchisement-experimental-evidence-from-france/CAA4ADFFA50811B3CFAA68F1D809CAB9.

Brians, Craig Leonard, Grofman, Bernard, 1999. When registration barriers fall, who votes? An empirical test of a rational choice model. Publ. Choice 99 (1–2), 161–176, URL https://EconPapers.repec.org/RePEc:kap:pubcho:v:99:y:1999:i:1-2:p:161-76.

Bryant, Lisa, Hanmer, Michael, Safarpour, Alauna, McDonald, Jared, 2022. The power of the state: How postcards from the state increased registration and turnout in pennsylvania. Polit. Behav. 44, 1–15. http://dx.doi.org/10.1007/s11109-020-09625-2.

 $<sup>^7</sup>$  See Appendix E for inter-coder reliability checks and more details on the qualitative analysis of SMS replies from participants in the textback/callback option.

Dale, Allison, Strauss, Aaron, 2009. Don't forget to vote: Text message reminders as a mobilization tool. Am. J. Polit. Sci. 53 (4), 787–804. http://dx.doi.org/10.1111/j. 1540-5907.2009.00401.x, URL https://onlinelibrary.wiley.com/doi/abs/10.1111/j. 1540-5907.2009.00401.x.

- Fieldhouse, Edward A., Prosser, Christopher, Bailey, Jack, Mellon, Jonathan, 2021. Who lacks voter identification? The electoral implications of the UK elections bill 2021. SSRN Scholarly Paper ID 3966155, Social Science Research Network, Rochester, NY, http://dx.doi.org/10.2139/ssrn.3966155, URL https://papers.ssrn. com/abstract=3966155.
- Fisher, Justin, Savani, Manu M., 2022. Who's in charge? The impact of delivery and perception of risk on the willingness to voting online. Br. J. Polit. Inte. Relat. 13691481221120143. http://dx.doi.org/10.1177/13691481221120143.
- Foos, Florian, Cheng-Matsuno, Vanessa, John, Peter, Unan, Asli, 2021. Register to Vote '21 Digital and SMS field experiment. http://dx.doi.org/10.17605/OSF.IO/YGHK2, URL https://osf.io/yghk2.
- Foos, Florian, De Rooij, Eline A., 2017. The role of partisan cues in voter mobilization campaigns: Evidence from a randomized field experiment. Elect. Stud. 45, 63–74.
- Foos, Florian, John, Peter, 2018. Parties are no civic charities: Voter contact and the changing partisan composition of the electorate\*. Polit. Sci. Res. Methods 6 (2), 283–298. http://dx.doi.org/10.1017/psrm.2016.48, URL https://www.cambridge.org/core/journals/political-science-research-and-methods/article/parties-are-no-civic-charities-voter-contact-and-the-changing-partisan-composition-of-the-electorate/569E7C8D80B9F5B3D37B90AF205730BF.
- Gerber, Alan S., Green, Donald P., 2000. The effects of canvassing, telephone calls, and direct mail on voter turnout: A field experiment. Am. Polit. Sci. Rev. 94 (3), 653–663. http://dx.doi.org/10.2307/2585837, URL https://www.cambridge.org/core/journals/american-political-science-review/article/abs/effects-of-canvassing-telephone-calls-and-direct-mail-on-voter-turnout-a-field-experiment/E7C645533F3B750E599BAFE710B477BF.
- Gerber, Alan S., Green, Donald P., Larimer, Christopher W., 2008. Social pressure and voter turnout: Evidence from a large-scale field experiment. Am. Polit. Sci. Rev. 102 (1), 33–48. http://dx.doi.org/10.1017/S000305540808009X, URL https://www.cambridge.org/core/journals/american-political-science-review/article/social-pressure-and-voter-turnout-evidence-from-a-largescale-field-experiment/11E84AF4C0B7FBD1D20C855972C2C3EB.
- Gerber, Alan S., Rogers, Todd, 2009. Descriptive social norms and motivation to vote: Everybody's voting and so should you. J. Polit. 71 (1), 178–191. http:// dx.doi.org/10.1017/S0022381608090117, URL http://www.journals.uchicago.edu/ doi/abs/10.1017/S0022381608090117.
- Green, Donald P., Gerber, Alan S., 2015. Get Out the Vote: How To Increase Voter Turnout. Brookings Institution Press, Google-Books-ID, kpIqCgAAQBAJ.
- Green, Donald P., McGrath, Mary C., Aronow, Peter M., 2013. Field experiments and the study of voter turnout. J. Elect. Publ. Opin. Part. 23 (1), 27–48. http://dx.doi.org/10.1080/17457289.2012.728223.
- Harris, J. Andrew, Kamindo, Catherine, Van der Windt, Peter, 2021. Electoral administration in fledgling democracies: Experimental evidence from Kenya. J. Polit. 83 (3), 947–960.
- Holbein, John B., Hillygus, D. Sunshine, 2020. Making Young Voters: Converting Civic Attitudes Into Civic Action. Cambridge University Press, Cambridge, http://dx. doi.org/10.1017/9781108770446, URL https://www.cambridge.org/core/books/making-young-voters/D8A982E9E7C9DAAAE3DF9685F1DFC037.
- James, Toby S., Bernal, Paul, 2020. Is it time for automatic voter registration in the UK?, Joseph Rowntree Reform Trust and University of East Anglia, York and Norwich.. URL https://www.jrrt.org.uk/wp-content/uploads/2020/04/Is\_ it\_time\_for\_AVR\_in\_the\_UK.pdf.

- John, Peter, MacDonald, Elizabeth, Sanders, Michael, 2015. Targeting voter registration with incentives: A randomized controlled trial of a lottery in a London borough. Elect. Stud. 40, 170–175. http://dx.doi.org/10.1016/j.electstud.2015.08.007, URL http://www.sciencedirect.com/science/article/pii/S0261379415001638.
- Kölle, Felix, Lane, Tom, Nosenzo, Daniele, Starmer, Chris, 2020. Promoting voter registration: the effects of low-cost interventions on behaviour and norms. Behav. Publ. Policy 4 (1), 1–24. http://dx.doi.org/10.1017/bpp.2019.10, URL https://www.cambridge.org/core/journals/behavioural-public-policy/article/promoting-voter-registration-the-effects-of-lowcost-interventions-on-behaviour-and-norms/F12DF9C3B67D902F1A2C9A0D4A5D2909.
- Malhotra, Neil, Michelson, Melissa R., Rogers, Todd, Valenzuela, Ali Adam, 2011.
  Text messages as mobilization tools: The conditional effect of habitual voting and election salience. Am. Polit. Res. 39 (4), 664–681. http://dx.doi.org/10.1177/1532673X11398438.
- Mann, Christopher B., Bryant, Lisa A., 2019. If you ask, they will come (to register and vote): Field experiments with state election agencies on encouraging voter registration. Elect. Stud. 63 (Feb), 102021. http://dx.doi.org/10.1016/j.electstud. 2019 02 012
- Mitchell, Joe, 2018. Who's Missing, and Why?. Technical Report.
- Nickerson, David W., 2007. Does email boost turnout. Quart. J. Polit. Sci. 2 (4), 369–379.
- Nickerson, David W., 2015. Do voter registration drives increase participation? For whom and when? J. Polit. 77 (1), 88–101. https://dx.doi.org/10.1086/678391, URL https://www.journals.uchicago.edu/doi/10.1086/678391.
- Nickerson, David W., Rogers, Todd, 2010. Do you have a voting plan?: Implementation intentions, voter turnout, and organic plan making. Psychol. Sci. 21 (2), 194–199. http://dx.doi.org/10.1177/0956797609359326.
- Panagopoulos, Costas, 2011. Thank you for voting: Gratitude expression and voter mobilization. J. Polit. 73 (3), 707–717. http://dx.doi.org/10.1017/S0022381611000405, URL https://www.journals.uchicago.edu/doi/abs/10.1017/S0022381611000405.
- Schein, Aaron, Vafa, Keyon, Sridhar, Dhanya, Veitch, Victor, Quinn, Jeffrey, Moffet, James, Blei, David M., Green, Donald P., 2020. A digital field experiment reveals large effects of friend-to-friend texting on voter turnout. Available At SSRN 3696179.
- Solvak, Mihkel, Vassil, Kirstjan, Vinkel, Priit, 2014. Why vote if it takes me more than 30 minutes? The impact of internet voting on reducing the cost of electoral participation, Conference Paper: ECPR 2014 General Conference, Glasgow, UK. URL https://www.researchgate.net/publication/281348189\_Why\_vote\_if\_it\_takes\_me\_more\_than\_30\_minutes.
- Sweeney, Martin, John, Peter, Sanders, Michael, Wright, Hazel, Makinson, Lucy, 2021. Applying behavioural science to the annual electoral canvass in England: Evidence from a large-scale randomised controlled trial. Elect. Stud. 70, 102277. http://dx.doi.org/10.1016/j.electstud.2020.102277, URL https://www.sciencedirect.com/science/article/pii/S0261379420301554.
- Tzioumis, Konstantinos, 2018. Demographic aspects of first names. Sci. Data 5, 180025. http://dx.doi.org/10.1038/sdata.2018.25, URL https://europepmc.org/articles/PMC5839157.
- Xie, Fangzhou, 2022. Rethnicity: An r package for predicting ethnicity from names. SoftwareX 17, 100965. http://dx.doi.org/10.1016/j.softx.2021.100965, URL https://www.sciencedirect.com/science/article/pii/S2352711021001874.