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GREEDY OR GRATEFUL?
ASKING FOR MORE WHEN THANKING DONORS

By

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June 2019

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Greedy or Grateful?
Asking for More when Thanking Donors

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June 2019

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Greedy or Grateful?

Asking for More when Thanking Donors

Charities often send annual "thank you letters" to express gratitude to donors, but seek to defray these costs by inviting additional donations or engagement. However, the additional asks may backfire if potential donors see the thank you message as "insincere" or "manipulative." We test this trade-off by conducting a field experiment in cooperation with a leading charity in India. We find that an explicit ask for additional donations or even a request to follow the organization on Facebook reduces giving. However, these effects are not only heterogeneous, but asymmetric by past giving behavior. Recent, frequent, and higher monetary value donors react negatively to additional asks by reducing giving, but lapsed, infrequent, and lower monetary value donors react positively by giving more. Our results highlight that findings based on purely cross-sectional experiments may offer incomplete insight. We estimate that differentially targeted ask messages based on past donation behavior, data readily available to charities, can increase donations overall by 6-11%.

Keywords: gratitude, field experiments, reactance, fundraising, donor relationship management, nonprofits, altruism

JEL Codes: L31, M31, M37, C93

INTRODUCTION

Efficient fundraising is critical for the success of mission-driven nonprofits focused on the greater good. As private individual giving and in particular small donations from a large number of donors has gained in importance for nonprofits, understanding the role of traditional marketing and persuasion techniques on donor behavior has become increasingly relevant. Traditional marketing concepts like customer relationship management (CRM) can help nonprofits in their donor relationship management (DRM) efforts. Just as CRM encourages ongoing customer engagement to enhance customer retention, cross-sell, and up-sell, DRM encourages ongoing donor engagement for the goal of more regular donations of increasing magnitude (Sargeant 2008, Netzer et al. 2008). The motivation for both for-profit and nonprofit organizations is the same: it is more cost-effective to keep an existing customer or donor than to attract new ones (Sargeant 2001).

Further, nonprofits receive much greater scrutiny of their operational expenditures compared to for-profits. Nonprofits need to keep fundraising/marketing costs low not simply to keep such costs down, but also because nonprofits are often penalized for having a high share of donations going into fundraising overheads, even if they are extremely efficient at using those funds to deliver on their cause (Rose-Ackerman 1982, Gneezy et al. 2014). For example, Charity Navigator, an organization that evaluates nonprofit performance, recommends that nonprofits spend less than 10% of its budget on fundraising. Thus, nonprofits face extra pressure relative to for-profit organizations to keep marketing costs minimal, and leverage the funds for maximal efficiency in fundraising.

In this paper, we consider how to manage this pressure in the context of a common donor relationship management activity—the annual "thank you" letter to past donors.[1] While thank you letters aid in donor retention, they are also costly and contribute to a nonprofit's "marketing" and fundraising costs. Nonprofits, therefore, often combine letters of gratitude with additional asks to defray some of the costs from the "thank you" campaign. However, there is a trade-off in pursuing both goals within the single letter.

[1] While prior industry studies have analyzed thank you letters sent shortly after a donation, our focus is on annual thank you letters. One such industry study found that nearly 80% of donors receive thank you messages for their donations (Dietz et al. 2015).

Traditional advertising practice suggests that advertising needs to remind the recipient of the desired action for the message to be effective (Eisenberg et al. 2010, Niblick 2013). In particular, marketing practitioners recommend providing a clear call to action (CTA) to encourage customers to take a more immediate action (e.g., "click here", "call now"). To that end, an explicit fundraising request can generate additional funds in support of the nonprofit's mission.

On the other hand, simultaneously thanking and asking for more can be off-putting to the donor. The gratitude literature suggests that gratitude on its own may induce prosocial behavior from the message recipient towards the person expressing gratitude (Clark et al. 1988, Grant and Gino 2010) and thus generate donations. As a result, the thank you letter alone may induce donations from the recipient. But when accompanied by an ask, the recipient may perceive the expression of gratitude to be calculated to elicit a desired behavior (the ask). This can not only result in firm effort being completely discounted (Morales 2005), but also even result in the temptation to punish. The negative reaction can stem from a variety of causes, such as changing beliefs about the firm's type (e.g., greedy rather than grateful), annoyance, crowding out of self-driven motivation, or feelings of insincerity. For ease of exposition, we characterize the disutility from receiving messages of gratitude perceived to be persuasion-motivated as "reactance".[2] While it has been shown in for-profit settings that persuasion-motivated effort can be counterproductive, it is not clear whether the same phenomenon will occur in a nonprofit setting. In the nonprofit context, an ask is for a cause the donor previously engaged with. Therefore, rather than induce reactance an ask may actually amplify the message of gratitude by encouraging consistent behavior in engaging with the cause (Heider 1946). The trade-off between a CTA and potential reactance suggests that it is ambiguous whether asking for more in thank you letters helps or hurts the nonprofit; it is therefore an empirical question.

Beyond the decision of whether to ask, nonprofits must also decide how to ask. We consider

[2] "Psychological reactance" is a concept that originates from the the social psychology literature. It was first defined by Brehm (1966) to capture the motivational arousal that emerges when individuals experience a threat to or loss of their freedom. Recently, reactance has been more broadly used to explain resistance to persuasive messages (Dillard and Shen 2005) and consumer aversion to targeted ads (White et al. 2008, Tucker 2012) and product recommendations (Fitzsimons and Lehmann 2004). Just as reactance can lead consumers to resist an ad's appeal or an expert's product recommendation, we believe it can lead donors to resist an ask embedded in a message of gratitude.

three types of asks: 1) an explicit donation request, 2) an explicit request to follow the nonprofit on Facebook, and 3) an implicit ask using a mail-in donation form. An explicit donation request (e.g., "Please donate.") is a stronger and more direct CTA than a Facebook like request (e.g., "Please follow us on Facebook."). While a donation request may generate more donations immediately, it may also be more likely to induce reactance since it is clearly persuasion-driven. A Facebook like request, on the other hand, is a more subtle ask and therefore likely to generate less reactance than a donation request. Further, engaging donors through Facebook has benefits for nonprofits as a low-cost channel to attract attention and disseminate information and evidence of its activities to increase engagement (Waters 2011). However, there are also some risks; while some studies have found that Facebook and other social media reinforce offline civic engagement (Christensen 2011, Lee and Hsieh 2013), other studies have found that Facebook engagement may lead to "slacktivism"—in that it replaces more impactful action like donating and volunteering (Cornelissen et al. 2013, Kristofferson et al. 2013). Finally, one common method to implicitly ask for a donation is to provide a mail-in donation form. While some donors may view the form as an ask, others may view it as a friction-reducing tool that enables giving or as a mere donation reminder. While an explicit CTA provides instructions to donors regarding next steps, an implicit request may generate higher donations because of decreased reactance. It is therefore an empirical question as to whether each of these asks helps or hurts donations.

To answer these empirical questions, we conduct a large-scale natural field experiment in cooperation with one of India's leading charities, HelpAge. HelpAge has provided assistance to the elderly who lack social security for over four decades. In FY17-18, the nonprofit received ₹102.9 crores ($14.5M) in donations, 48% of which came from individual donors. We alter the asks sent in HelpAge's annual thank you letter to roughly 200,000 warm list donors (i.e., donors who have previously given to the charity within the last 5-7 years). The letter typically sent includes a donation reminder using a mail-in donation form but makes no explicit donation request. We use a fractional factorial between-donors design with the factors being a donation CTA, a Facebook like request, and a mail-in donation form.

We find that including an explicit donation request lowers the average donation per mailer sent but that this average effect is not statistically significant. To our surprise, a request to like HelpAge on Facebook significantly reduces giving while failing to generate Facebook likes. Finally, we find that the mail-in donation form decreases giving substantially when not included. Taken altogether, these average effects suggest that nonprofits should not *explicitly* ask for more, whether for an additional donation or a Facebook like, from donors when expressing gratitude for their past donations. On the other hand, an implicit ask using a mail-in donation form encourages giving.

However, one key advantage of the experiment is the use of warm list donors, enabling the use of past giving data to assess whether there is heterogeneity in the impact of the treatments. Whereas behavioral studies are typically cross-sectional studies (the case for most of the gratitude papers) and therefore can only focus on average treatment effects our setting allows for the analysis of heterogeneous effects based on previous donation behavior. The effect of treatments can be heterogeneous not just in terms of the size of the effect, but also in the sign of the effect. We find that while explicitly asking for more from recent, frequent, and higher monetary value donors greatly reduces donations, asking for more from lapsed, infrequent, and lower monetary value donors actually increases donations. This heterogeneity in treatment response explains the previous insignificance of the donation CTA. The results suggest that differentially targeting the content of messages based on previous donation behavior can increase expected donations. For HelpAge, back-of-the-envelope calculations suggest increased donations of 6-11% depending on the targeting strategy. Finally, where there are multiple theories for the positive and negative impact of asks, past donation data allows us to conduct mechanism checks to determine which of these explanations might be driving the effects.

This paper contributes to the growing literature on effective fundraising (Karlan and List 2007, Winterich et al. 2013, Khodakarami et al. 2015, Sudhir et al. 2016, Dubé et al. 2017, Townsend 2017). Our findings have clear managerial implications. First, nonprofits need to be cognizant of not asking for too much from their most loyal, recent, and high monetary value donors or risk appearing greedy rather than grateful in their thank you letters. Second, asking for Facebook likes

may be more costly than commonly thought and nonprofits should be thoughtful about how to build an online community. Third, using readily available data, nonprofits can increase expected donations by targeting content based on past prosocial behavior. Finally, while many nonprofits send their annual thank you notes to only those who gave in the past year, our research suggests that sending notes of thanks to past donors who have lapsed and requesting them for funds can be a particularly effective fundraising tactic. In particular, the paper contributes to the recent literature that studies the relative effectiveness of alternative content in fundraising requests (Gneezy et al. 2014, Sudhir et al. 2016, Touré-Tillery and Fishbach 2017, Munz et al. 2018).

This paper also contributes to the gratitude literature. While past research in sales settings have shown that expressions of gratitude coupled with persuasion-motivated messages induce reactance (Carey et al. 1976, Morales 2005), it is not clear that such persuasion may induce reactance in donation settings. This is because the persuasion is for additional donations towards the same cause to which the donor is committed. Our research shows that even in donation settings, when an expression of gratitude is paired with additional persuasion to donate, donors experience reactance similar to sales settings. However, we find no evidence of reactance among donors who have not given recently, frequently, or high amounts. These results also suggest that in CRM settings involving selling, a customer who has not recently purchased may also not feel reactance if a thank you note for their past business is accompanied by additional persuasion to buy. Finally, methodologically, this work shows that bridging empirical work in behavioral and quantitative marketing by combining between-subject field experiments with individual-level panel data on these subjects can lead to additional insight due to asymmetric treatment effects based on past behavior that may otherwise be obscured when only focusing on average effects.

RELATED LITERATURE

This paper ties together several threads of literature related to donor relationship management with more traditional advertising and sales practice. Specifically, the paper draws on the gratitude and Facebook engagement literature as they relate to DRM and the advertising call to action literature.

We elaborate on the various lines of literature below.

Donor Relationship Management

Much of the early work exploring charitable giving focused on donor acquisition rather than donor retention. With high donor acquisition costs and high donor attrition rates, there is a strong need to better understand how to maintain and grow existing donor relationships. According to Sargeant (2008), nonprofits will typically spend two to three times more than what they will receive in a first donation to acquire a new donor. After acquisition, 40-50% of noncommitted donors (i.e., those not signed up to give on a recurring basis) do not give again (Sargeant and McKenzie 1998).

Given these bleak statistics on donor retention, there has been recent interest among researchers around donor loyalty. Sargeant (2001), Bennett (2006), and Waters (2011), for example, use surveys to identify factors that influence donor loyalty. They find that competing causes, low quality of service, and limited feedback about donation use are some of the leading causes of donor attrition. Karlan and List (2007) and Khodakarami et al. (2015) have used individual-level donation data and natural field experiments to evaluate various fundraising techniques on warm list donors. Karlan and List (2007) document the effectiveness of a matching grant on charitable giving. Khodakarami et al. (2015) find that nonprofits should encourage warm list donors to support additional initiatives because variety in donation causes can increase expected giving.

Using surveys, Bennett (2006) and Merchant et al. (2010) identify thank you letters as an important donor retention tool. We complement these survey-based stated preference studies with an empirical analysis of donation behavior using a field experiment in combination with individual-level past donation data to evaluate the impact of asking for more in annual thank you letters. We begin by looking to the gratitude literature for theoretical guidance on the role of thanking.

Gratitude

Psychology research has found that not only does gratitude lead to prosocial behavior in the person expressing gratitude, but also in the person receiving gratitude. Adam Smith is credited with

providing one of the first in-depth psychological studies of gratitude. He writes in *The Theory of Moral Sentiments*, "The sentiment which most immediately and directly prompts us to reward, is gratitude" (Smith 1759, p. 154). Since Smith, many researchers have linked gratitude to prosocial behavior (McCullough et al. 2001, Tsang 2006, Bartlett and DeSteno 2006, Algoe et al. 2008, Grant and Gino 2010). In particular, several studies have found that benefactors that are thanked are more likely to engage in prosocial behavior than those who are not thanked. Clark et al. (1988) find that case managers for adolescent clients were more likely to visit their clients more frequently after receiving thank you letters. Rind and Bordia (1995) find that servers who write "thank you" on the back of restaurant bills can receive tips up to 11% higher than those who do not. Merchant et al. (2010) find that acknowledging donor gifts increases donation intentions while failing to thank donors decreases donation intentions. What drives these findings? Algoe et al. (2008) show that the social role of gratitude may be to promote relationship formation and maintenance. Grant and Gino (2010) document that when helpers are thanked, they experience stronger feelings of self-efficacy and social worth, resulting in prosocial behavior.

However, research has also found that expressions of gratitude may not induce additional favorable behavior if the recipient feels the expression of gratitude is insincere and has an ulterior motive. In a field experiment at a small retail store, Carey et al. (1976) found that thanking customers increased sales relative to not thanking customers. But when the thank you note was accompanied by information about a special sale, the increase in sales was lower than when no mention of the sale was made. Relatedly, Morales (2005) finds in lab experiments that consumers are typically grateful to firms for sales effort and reward them with a sale. However, when they perceive the effort to be motivated by persuasion, consumers no longer feel grateful towards the firm and discount the firm effort. Importantly, it is the perception of persuasion, which may not reflect true underlying motives, that triggers the discounting. In line with several other studies (Ames et al. 2004, Tsang 2006), Morales (2005) finds that the perception of intention matters.

Engagement Using Facebook

Waters (2011) finds that "engaging donors in more conversations to let them know they are appreciated will help encourage more loyalty in the relationship." Like the thank you letter, Facebook engagement is another way for nonprofits to develop donor loyalty. According to the 2018 Global NGO Technology Report, Facebook is the most used social media channel with 93% of nonprofits having a Facebook page. Whereas a thank you campaign is run once a year, 85% of nonprofits report posting on Facebook at least once a week. Social media platforms have changed how nonprofits and individuals communicate and interact, introducing new opportunities but also new risks. Therefore, there is a strong need to understand how this new communication channel impacts donor behavior.

On the one hand, Facebook provides a low-cost method to increase donor engagement. Mochon et al. (2017), for example, find that a Facebook page can positively affect offline customer behavior by acting as an advertising platform. On the donor side, it has been documented that most Facebook users believe that likes help promote humanitarian causes (Brandtzaeg and Haugstveit 2014). In addition, Christensen (2011) and Lee and Hsieh (2013) find that online engagement may positively impact offline action. Lee and Hsieh (2013), for example, find that individuals who signed an online petition were also more likely to donate to a related charity, exhibiting consistency. Individuals who did not sign the online petition were subsequently more likely to donate to another cause, exhibiting moral balancing. Enjolras et al. (2013) find that social media mobilizes a different segment of demonstration participants than those mobilized by more traditional media.

On the other hand, researchers have expressed concerns around the substitution of real life activities with limited-impact online action, or "slacktivism." Kristofferson et al. (2013) and Cornelissen et al. (2013), for example, document the observation of this behavior. Kristofferson et al. (2013) demonstrate that the social observability of support for a cause moderates slacktivism. More specifically, the authors find that individuals who first provide publicly observable support for a cause have a lower likelihood of providing subsequent meaningful support. Thus, nonprofits need to be thoughtful about the potential interaction between Facebook likes and donations.

Advertising Call to Action

While the gratitude literature warns against conspicuous persuasion attempts in thank you messages, marketing practitioners have long encouraged the use of a call to action (CTA) to encourage consumers to perform a desired action. A CTA is any instruction to the audience designed to provoke an immediate response (e.g., phrases in a call script, a web page "click here" button). Thousands of pages in practitioners' guides can be found on the importance of a CTA (e.g., Eisenberg et al. 2010, Niblick 2013). In the academic literature, Fossen and Schweidel (2016) find in a study of social TV activity that television ads with a hashtag or Web address CTA are associated with greater online brand WOM. Kronrod et al. (2012) identify conditions under which an assertive environmental message (e.g., "Stop talking. Start planting") versus a gentler message is more effective in terms of consumer compliance. The authors find that when the message recipient values the issue at hand an assertive CTA is more effective but that when the recipient lacks initial conviction a suggestive appeal is more likely to result in consumer compliance.

Combining DRM and CTA

We explore in this paper the effectiveness of a call to action (e.g., "Please donate.", "Please like us on Facebook.") embedded in a message of gratitude on donation and Facebook like behavior. On the one hand, a CTA guides donors on a desired action but on the other hand, a CTA may trigger reactance to the message of gratitude. In fact, Adam Smith's complete quote is: "The sentiment which most immediately and directly prompts us to reward, is gratitude; that which most immediately and directly prompts us to punish, is resentment" (Smith 1759, p. 154). Whether the ask for additional donations or a Facebook like induces resentment or perceptions of insincerity, leading to punishment, is an empirical question.

THEORETICAL TRADE-OFFS

In this section, we build on the above literature to characterize the trade-offs that motivate the experimental design. We investigate the following two questions as they relate to asks accompanying thank you letters: 1) How do the different types of asks impact donation response? 2) Does the response to the asks vary by past giving to the charity?

Responses to Asks

While the literature has highlighted the importance of being sincere in expressing gratitude in the context of encouraging repeat purchases in sales settings, it is unclear if these results should generalize to requests for donations to nonprofits. A thank you with an additional request of support for the cause that the donor believes to be important need not be perceived as insincere. Instead, the ask may be recognized as more of an invitation to further engage with the cause. However, as noted in Morales (2005), the question is not one of motive, but of perception of intent. How the ask for additional donation or a Facebook like is perceived by the recipient of the thank you letter is an empirical question.

We will consider the following three types of asks and their impact on donations: 1) an explicit donation request, 2) an explicit request to like the nonprofit on Facebook, and 3) an implicit ask using a mail-in donation form. Each of these asks may be perceived as invitations to further engage with the cause or as "sales" tactics. As discussed in the literature review, traditional advertising practice suggests that advertising should provide a clear call to action to encourage donors to take a desired action. Therefore, an explicit donation CTA may increase giving when the message is not perceived to be insincere. On the flip side, the gratitude literature finds that reactance to expressions of gratitude perceived to be motivated by persuasion can eliminate the positive intent of the thank you letter. An explicit donation request is a clear ask and induced reactance may decrease giving. Of the three asks, the explicit donation request is the most likely to be seen as a fundraising letter rather than a thank you letter.

Relative to an explicit donation request, donors may be less likely to view a Facebook like request as an ask and instead as an opportunity to further engage with a cause they previously supported, decreasing the concern of reactance. The impact of the Facebook like request on donations is complicated by a potential substitution effect between likes and donations. Consistency of purpose suggests that liking and donating go hand in hand so a Facebook like could increase donations (Heider 1946). The results of Kristofferson et al. (2013), however, suggest that the public observability of liking may result in slacktivism, decreasing donations. It is therefore an empirical question as to whether consistency or slacktivism dominates the interaction between likes and donations.

Another strategy some nonprofits use to request donations in a thank you letter is to provide donors with a mail-in donation form. Among the three types of asks, we believe the mail-in donation form is the least likely to induce reactance because it serves as an implicit reminder rather than an explicit ask. Such a form can also act as a donation channel for offline donors and may simply be seen as a friction-reducing tool provided by the nonprofit to facilitate donations.

For each of the three asks, it is difficult to predict which force dominates and determines the impact of the ask on donations. Table 1 summarizes the opposing forces at play when nonprofits thank donors and ask for more. By conducting a field experiment, we are able to investigate the net effects of these opposing effects. In cases in which there are multiple potential positive or negative forces, we conduct mechanism checks to determine which force might be driving the effect.

Heterogeneous/Asymmetric Responses to Asks based on Past Behavior

Beyond average responses, we expect there to be heterogeneity (and even asymmetry) in how donors react to asks based on their past donation activity. For example, Merchant et al. (2010), Kronrod et al. (2012), Kristofferson et al. (2013) all document results that depend on some measure of the strength of the relationship between the donor and the nonprofit. We characterize donors' past donation activity using the recency, frequency, monetary value (RFM) framework and past donation channel (online or offline) selection.

Table 1: Summary of Trade-offs when Thanking and Asking for More

	Asking for More	Impact on Donation	Supporting Literature
Thank You	Explicit Donation Request	Advertising CTA (+)	Eisenberg et al. (2010), Kronrod et al. (2012), Niblick (2013)
		Reactance (−)	Carey et al. (1976), Morales (2005)
	Facebook Engagement	Consistency of purpose (+)	Christensen (2011), Lee and Hsieh (2013)
		Slacktivism, Reactance (−)	Cornelissen et al. (2013), Kristofferson et al. (2013)
	Mail-in Donation Form	Implicit CTA reminder, Friction-reduction (+)	Eisenberg et al. (2010), Kronrod et al. (2012), Niblick (2013)
		Reactance (−)	Carey et al. (1976), Morales (2005)

Recency. Recency denotes the year the donor last gave prior to 2018. Two potential effects pull the impact of any of the three asks on recent donors in opposing directions. On one side, there may be an intertemporal substitution effect. If a donor recently gave, then reactance to the CTA may lead to a licensing effect (Khan and Dhar 2006) under which donors mentally substitute the previous donation and an immediate donation, decreasing the donation likelihood or donation amount. On the other side, state dependence in donation behavior may increase the donation likelihood (Netzer et al. 2008). So if a donor gave recently then the donor may be more likely to give again when asked, whether explicitly or implicitly. For lapsed donors, an ask may similarly induce reactance, decreasing giving, or it may help elicit the desired action without inducing the licensing effect.

Frequency. Frequency is the best proxy for the strength of the relationship between the donor and the charity. Again, there are opposing forces that can pull the outcome of the ask on frequent donors in either direction. Regarding the explicit donation request, previous research suggests that forceful messages are more effective on those who identify with the cause (Kronrod et al. 2012) so an explicit ask may generate more giving among the most frequent donors. Regarding the Facebook like request, Kristofferson et al. (2013) found that while publicly observable support generally decreases more meaningful support in the form of donations, this behavior does not occur among an organization's most loyal supporters. Instead, loyal supporters who first provide public

support to a cause subsequently provide higher meaningful support than those who first provide private support. Therefore, asking for a Facebook like from frequent donors may generate higher donations when donors like on Facebook. In opposition to these positive forces on frequent donors, Merchant et al. (2010) find that thank you letters improve donation intentions among infrequent donors but not among frequent donors. If frequent donors additionally feel that the nonprofit is taking advantage of their relationship by asking for more, then the frequent donors may react negatively to asks in thank you letters. For less frequent donors, the message of gratitude may increase donation intentions more than for frequent donors (Merchant et al. 2010). The results of Kronrod et al. (2012) suggest that the explicit request may decrease donations while the implicit request may be more effective on infrequent donors.

In both the recency and frequency cases, not only can the magnitudes of the effects differ but also the signs of the effects, implying asymmetric responses among different potential donors based on past giving behavior. Because monetary value reflects an individual's ability to donate rather than the potential donor's investment in the cause we have no prior beliefs about the impact of asks on donors based on their previous giving amounts.

Channel Preference. Another source of heterogeneity in this context may come from donor preference for online or offline donations because of the Facebook like request. Donors who prefer the online channel may react more positively to a Facebook like request than donors who prefer the offline channel. Online donors may view the like as a natural way to engage with the nonprofit. Relative to offline donors, liking on Facebook is also likely less costly to online donors.

Overall, our study highlights the value of using warm donors as a sampling frame for whom we have panel data on past giving behavior to obtain a more nuanced understanding of heterogeneous treatment effects. With the increasing availability of panel data on customer behaviors within firms, we believe that leveraging such data in experimental designs can lead to additional insights, relative to purely cross-sectional between-subject designs focused on average treatment effects.

EXPERIMENT

In this section, we first describe the setting of the field experiment and then describe its design.

The Setting

We run a field experiment in collaboration with HelpAge India, an organization that provides assistance to the elderly who lack social security. The nonprofit provides assistance through a variety of programs, including mobile healthcare, cataract surgery, elder helplines, and elder advocacy. Nearly half of HelpAge's funds for these programs comes from individual donors. Donors receive a 50% income tax deduction for donations.

Every January, HelpAge runs a Thank You campaign by sending a letter of gratitude to all of its roughly 200,000 warm list donors. This letter has historically always thanked donors and served as a donation reminder (Figure 1(a)). In particular, the letter thanks donors for their "continued support," includes a mail-in donation form, and provides a link for online donations. The form contains set suggested donation values that range from ₹4,000 (˜$60) to ₹10,000 (˜$140). A small pocket diary is also sent to the donors during this campaign. Donors have the option to donate offline via the mail-in form by check or credit card or online via HelpAge's website using credit card. Fundraising mailers are sent three other times during the year. The setting of our experiment is the January 2018 Thank You campaign.

Experimental Design

The goal of the experiment is to understand whether it is appropriate to simultaneously thank donors and ask for more. We ask for more in three ways: through an explicit donation request (i.e., a donation CTA), through an explicit ask to follow HelpAge on Facebook, and through an implicit ask for donation using a mail-in donation form. Since the setting is around thank you letters, we do not change the level of gratitude expressed but manipulate the ask.

We describe our between-donors experimental design in Table 2. The mailers corresponding

to the experimental treatments are shown in Figure 1. The first four treatments follow a 2 x 2 full factorial between-donors design in which the factors are the donation CTA and the Facebook like request. Treatment 1 contains neither a donation CTA nor a Facebook like request and can be characterized as a mere donation reminder. Following the format that HelpAge has typically used in the past, the letter portion of the mailer thanks the donor but does not explicitly ask for a donation. The mailer includes a mail-in donation form and provides the website for online donations (Figure 1(a)). Treatment 2 adds to the donation reminder an explicit donation CTA in the letter portion of the mailer (Figure 1(b)). Besides the additional sentence, all other aspects of the mailer remain the same. Treatment 3 adds to the donation reminder a request to like HelpAge's Facebook page in the letter. Treatment 3 also adds a Facebook logo to the top right of the mailer (Figure 1(c)). Treatment 4 includes both an explicit donation CTA and a Facebook like request in the letter and includes a Facebook logo (Figure 1(d)).

We also wanted to assess the effect of the donation reminder by having one treatment where there was neither an ask nor a donation form. While the firm strongly believed that the donation form served as a reminder to donate without an explicit ask, as researchers it was unclear to us whether even the presence of a donation form served as an implicit ask and thus may produce reactance. However, given the organization's strong prior that this would reduce donations, the organization was reluctant to allow us to remove the reminder. As a compromise, they allowed us to to remove the donation form if we included a Facebook like request because of the potential upside from increased Facebook engagement. Hence treatment 5 does not include a mail-in donation form, but asks the donor to follow HelpAge on Facebook (Figure 1(e)).

The experimental design allows for the comparison of the Facebook like rates, donation rates, and average donation amounts among the different conditions to understand the reactance or lack thereof to these asks when embedded in a message of gratitude. To determine whether the CTA or reactance is stronger, we will compare the probit and Tobit regressions of donation decisions and amounts, respectively. If the CTA effect is stronger, we expect to see positive coefficients on the donation CTA manipulation. If reactance occurs and is stronger, we expect to see negative

Figure 1: Thank You Letters

(a) Donation Reminder (Default)



(b) Donation CTA



(c) FB Like Request



(d) CTA + FB



(e) FB, No Form



Table 2: Experimental Treatments

Treatment	Name	Donation CTA	Facebook Like	Mail-in Form	Text Added to Letter
1	Donation Reminder	0	0	1	
2	Donation CTA	1	0	1	"Please donate online or use the coupon below."
3	FB Like Request	0	1	1	"Please like us on Facebook at facebook.com/helpageindiaspage"
4	CTA+FB	1	1	1	"Please like us on Facebook at facebook.com/helpageindiaspage and also donate online or use the coupon below."
5	FB, No Form	0	1	0	"Please like us on Facebook at facebook.com/helpageindiaspage"

coefficients. All 198,775 warm list donors are included in the experiment. The number of donors randomly assigned to each treatment is shown in Table 4. More donors are randomly assigned to the conditions that include a Facebook invitation because of HelpAge's goal of increasing donor engagement. For nonprofits that have historically had an offline relationship with donors, initiating online engagement can be challenging. HelpAge management hoped that donors who like the HelpAge Facebook page will more regularly receive updates about the charity's programs, demonstrating the impact of donors' gifts, and ultimately increase giving.

RESULTS

We begin with summary statistics on the treatments. Then we report the average effects and heterogeneous treatment effects. Finally, we conduct some mechanism checks.

Summary Statistics

We provide two types of summary statistics across treatments. The first set of summary statistics is on past giving behavior across treatments and serves as a randomization check. The second set

of statistics is on the experimental outcomes of donation behavior by treatment.

Past Giving by Treatment. Table 3 shows the average recency, frequency, and past donation amounts within the previous five years by treatment. Recency represents how recently the donor last gave and higher recency indicates more recent giving (1 = 2013, 5 = 2017). Frequency is defined as the number of years a donor gave between 2013 and 2017. Monetary value is the average donation amount previously given (conditional on giving). Because we are comparing mean values, we cap past average donation amounts to ₹50,000 to restrict the influence of outliers. A means comparison test indicates that past donation behaviors do not differ significantly among the treatments, thus confirming the effectiveness of the randomization of treatment.

Table 3: Past Giving by Treatment—Randomization Check

Treatment	Mean Recency	Mean Frequency	Mean Monetary Value (₹'000s)
Donation Reminder	3.31	1.31	4.32
Donation CTA	3.32	1.31	4.29
FB Like Request	3.31	1.32	4.29
CTA+FB	3.32	1.32	4.35
FB, No Form	3.32	1.32	4.31
ANOVA F-value	0.37	0.62	1.16
P-value	0.83	0.65	0.33

Donation Outcomes by Treatment. The summary statistics for the treatment outcomes are shown in Table 4. We limit the time period of recording donations to within five weeks of the Thank You mailers being sent to try to ensure we are only capturing the effects of the various treatments. We also cap extreme outliers in donation amount to ₹50,000 (only four donations were greater). Of the 198,775 warm list donors, 1,019 made a donation during the time period of interest (Jan. 25 to Feb. 28, 2018), resulting in a 0.5% donation rate.[3] We report the average donation per

[3]We note that there were additional donations after Feb. 28, 2018. We restrict our primary analysis up to February 28, because HelpAge initiated a separate Facebook campaign in March 2018 that could have contaminated the donation response. As the number of warm list donors on Facebook is minimal, we expected the contamination to be limited, but out of an abundance of caution, we decided to restrict our analysis prior to when the Facebook campaign was started. However, our conjecture that there is likely to be little contamination is borne out in that when we include March donations, our results are qualitatively identical, with the quantitative estimates mostly adjusting for the additional donations. We report the results including March donations in the appendix. Also note that the full donation rate including March is roughly 1.5% and in line with the 1.2% donation rate in a different campaign on the HelpAge donor warm list (Sudhir et al. 2016).

mailer sent, the percentage of recipients who donated, the average amount given per donation (i.e., the average donation conditional on giving), the median donation conditional on giving, and the number of likes HelpAge received on Facebook.

Table 4: Donation Outcomes by Treatment

Treatment	Number Mailed	Number Donations	₹/ Mailing	Donation Rate (%)	₹/ Donation	Median Donation (₹)	FB Likes
Donation Reminder	19,869	120	44	0.60	7,277	4,000	1
Donation CTA	19,862	115	35	0.58	6,000	4,000	3
FB Like Request	99,414	533	28	0.54	5,139	4,000	10
CTA + FB	39,830	193	24	0.48	4,981	4,000	4
FB, No Form	19,800	58	17	0.29	5,953	4,000	2
Overall	198,775	1,019	28	0.51	5,504	4,000	20

The average donation per mailer is a composite of the intensive and extensive margins and summarizes the ranking of the treatments. The donation reminder, which contained a mail-in donation form but no explicit ask, produced the highest overall average donation per mailer (₹44), followed by the donation CTA (₹35), the Facebook like request (₹28), and then finally the CTA and Facebook like request (₹24). We exclude analysis of the Facebook like, No form treatment for now since the offline donation channel was removed. The donation rates and average donation amounts conditional on giving follow the same ordering. The median donation amount conditional on giving of ₹4,000 for all treatments matches the lowest suggested donation option displayed on the mail-in form. The Facebook treatments appear unsuccessful at generating likes given the low number of Facebook likes obtained. The summary statistics provide motivation in support of reactance to asks being the dominant force because of the lower average donation amounts per mailer in the ask conditions.

Average Effects of Treatments

We begin by reporting the results of the probit and Tobit regressions on whether donations are made and on donation amounts, respectively. The probit coefficients provide information on how a donation CTA, Facebook like request, and donation form impact the decision to donate. The Tobit coefficients provide information on how the asks impact the donation amount, accounting for the

fact that individuals cannot donate negative amounts. The Tobit coefficients are of greater interest to nonprofits because they describe the aggregate effect (response rate and donation amount) of the treatments on charitable giving. We estimate the following specification:

$$\begin{aligned} Outcome_i &= \alpha + \beta_1 DonationCTA_i + \beta_2 FacebookLikeRequest_i + \beta_3 Form_i \\ &\quad + \gamma_1 Recency_i + \gamma_2 Frequency_i + \gamma_3 MonetaryValue_i + \varepsilon_i \end{aligned}$$

$Outcome_i$ represents the donation decision in the case of probit ($Outcome_i$ = 1 if individual i donated) and the donation amount (in ₹'000's) in the case of Tobit. To control for past donation behavior we include RFM variables and define them as in the randomization check. We include the quadratic terms of the RFM variables based on the results of the residual plots. The β coefficients are the main coefficients of interest.

Findings. The regression results are shown in Table 5. The regression results in Columns (1) and (3) indicate that although negative, there is no significant main effect of the donation call to action. In contrast, the Facebook like request significantly decreases donations while the mail-in form has a significant positive impact on donations.

Even after controlling for past donation behavior in Columns (2) and (4), the coefficients remain roughly the same. This is to be expected given the evidence of randomization evidence shown earlier. The positive and significant coefficients on the linear RFM variables and the negative and significant coefficients on the quadratic RFM variables show that giving is monotonically increasing, but concave in the range of the variables. More recent donors, more frequent donors, and donors who have previously given more are more likely to give again and/or give more.

Implications. Given the results above, is it appropriate to ask for more, whether for a donation or a Facebook like, when thanking donors? First, we find that the implicit ask using the mail-in donation form along with the thank you letter does not induce much reactance, but has a strong positive effect on giving, suggesting that it either serves as an implicit reminder, or reduces the friction in making a donation by having a pre-formatted form. In fact, a thank you letter without

Table 5: Regression Results - Main Effects

	Dependent variable:			
	Donated (binary)		Donation Amount	
	Probit		Tobit	
	(1)	(2)	(3)	(4)
Donation CTA	-0.029	-0.029	-0.585	-0.529
	(0.024)	(0.027)	(0.446)	(0.425)
FB Like Request	-0.050^{*}	-0.057^{*}	-1.110^{**}	-1.118^{**}
	(0.027)	(0.029)	(0.486)	(0.463)
Form	0.202^{***}	0.222^{***}	3.580^{***}	3.430^{***}
	(0.045)	(0.050)	(0.828)	(0.787)
Recency		0.237^{***}		4.485^{***}
		(0.065)		(1.033)
Recency^2		-0.027^{***}		-0.541^{***}
		(0.009)		(0.150)
Frequency		1.017^{***}		16.123^{***}
		(0.045)		(0.838)
Frequency^2		-0.134^{***}		-2.125^{***}
		(0.008)		(0.144)
Monetary Value		0.027^{***}		0.523^{***}
		(0.004)		(0.061)
Monetary Value^2		-0.0004^{***}		-0.007^{***}
		(0.0001)		(0.001)
Constant	-2.705^{***}	-4.525^{***}	-49.175^{***}	-72.966^{***}
	(0.051)	(0.129)	(1.690)	(2.839)
Pseudo R^2	0.002	0.140	0.002	0.102
Observations	198,775	198,775	198,775	198,775

Notes:

We find no significant effect of an interaction between the CTA and FB requests.

Significance levels: $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$

the mail-in coupon generates the least giving. Second, an explicit donation request generates a negative but not significant difference in donation behavior relative to a mere donation reminder (mail-in donation form). Third, requesting donors to like HelpAge on Facebook generates significantly less giving than a donation reminder while failing to produce additional Facebook followers, suggesting nonprofits need to be thoughtful about how they build their online community. Taken altogether, the main effects of the treatments find that an implicit ask using a donation form encourages giving but explicit asks decrease giving. These results, however, are only average effects and as hypothesized earlier, there is reason to believe that there is significant heterogeneity among donors, not merely in the size, but even in the signs of the effects based on donation recency and frequency.

Heterogeneous Treatment Effects by Past Giving Behavior

Motivating Evidence. In this section, we address the heterogeneous treatment effects of the explicit asks. We address the impact of the mail-in donation form separately in the mechanism check because of its potential roles as a donation channel for offline donors and/or as an implicit CTA reminder. We begin by providing visualizations of the treatment effects of the donation CTA and FB like request based on donors' past giving behavior.

After discretizing monetary value into quintiles, there are 125 possible segments donors can be in based on their RFM data (five for recency, five for frequency, and five for monetary value). For each segment, the treatment effects can be calculated by comparing the mean donation per mailer of each treatment against that of the control condition, the donation reminder. Figures 2 (donation CTA) and 3 (Facebook like request) display the proportion change in donation per mailer for the various segments by recency, frequency, and monetary value. The proportion changes are capped at negative one and positive one for visualization purposes.

In each graph, the size of the circle represents the number of warm list donors in each segment. The numbers at the top of the graph sum up the number of individuals in the segments positively impacted by the treatment and the numbers at the bottom sum up the number of individuals in

the segments negatively impacted. In comparing the numbers of donors positively and negatively affected and the magnitudes of the effects, a pattern emerges. The graphs in Figure 2 show that the donation request primarily generates reactance among recent donors, frequent donors, and high monetary value donors but encourages greater giving among lapsed donors, infrequent donors, and low monetary value donors. The graphs in Figure 3 display a similar pattern for the Facebook like request treatment effects.

Characterizing Past Donation Behavior. The previous observations suggest that there is heterogeneity in treatment outcomes based on past donation activity, information readily available to nonprofits. Indeed, warm list donors exhibit a wide range of donation behaviors. As can be seen in Figure 4(a), only 10% of warm list donors gave in the fiscal year ending in 2017. Figure 4(b) indicates that 81% of warm list donors only donated one out of five years between 2013 and 2017. Figure 4(c) demonstrates that while the vast majority of donors gave on average less than ₹10,000 ($140) per year, 7% of donors made higher contributions.

Table 6 provides the correlations between the RFM variables. The relatively high positive correlation between recency and frequency of 0.34 is expected since frequent donors will also have given recently. The lower but positive correlation between monetary value (average past donation amount) and frequency of 0.16 reflects practitioner intuition that donors give more over time (Bennett 2006). Among donors who gave more than once, each additional donation on average increased by roughly ₹500 ($7) although donors did not always give every year. Finally, the negative correlation between recency and monetary value is much smaller in magnitude, signifying a weaker relationship between the two variables.

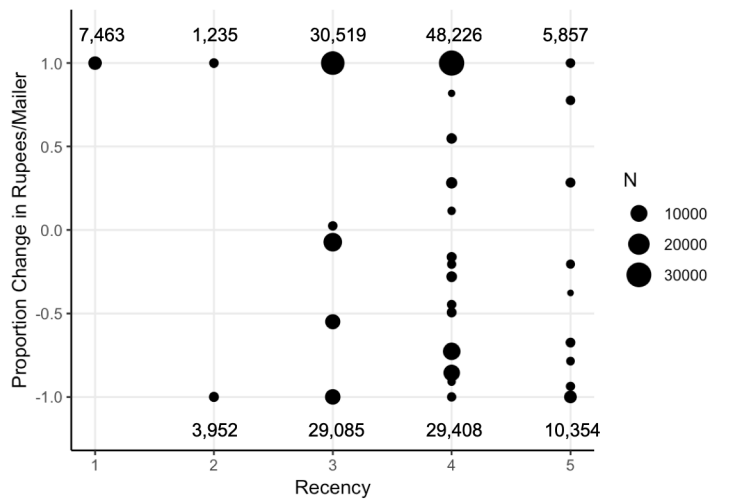
Table 6: RFM Correlations

		Correlation	P-value
Recency	Frequency	0.34	<0.001
Frequency	Monetary	0.16	<0.001
Recency	Monetary	-0.04	<0.001

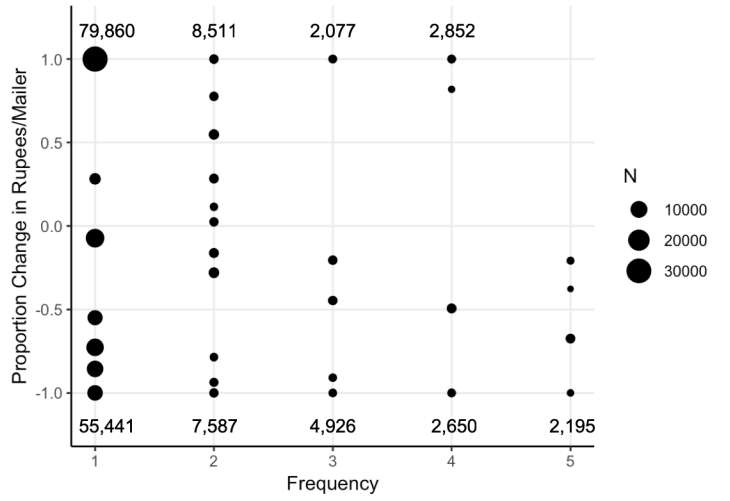
Regression Results Incorporating Heterogeneity. The observations of the treatment effect graphs (Figures 2 and 3) coupled with the significant correlations suggest that the explicit asks

Figure 2: Impact of Explicit Donation Request on Donation

(a) Impact of Donation Request on ₹/Mailer by Recency



(b) Impact of Donation Request on ₹/Mailer by Frequency



(c) Impact of Donation Request on ₹/Mailer by Monetary Value

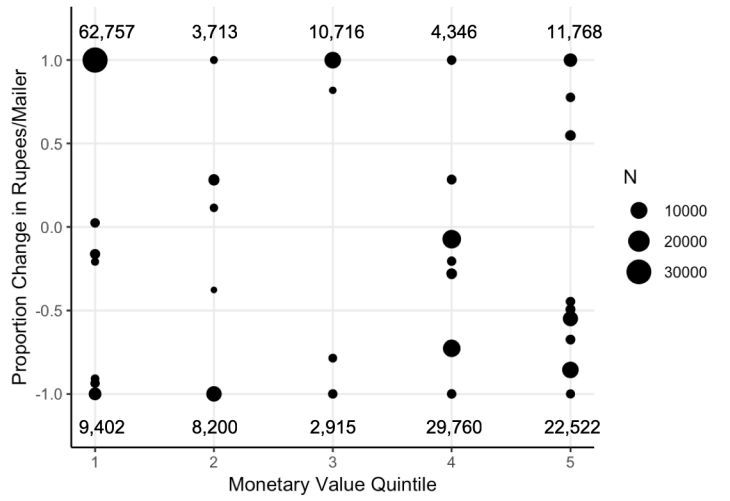
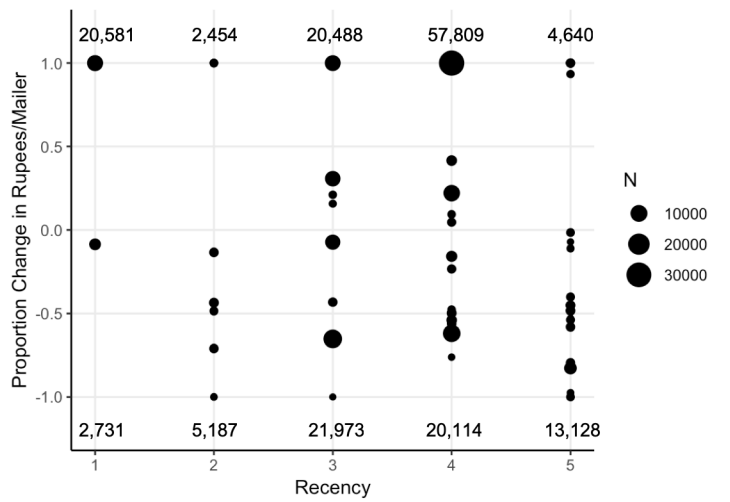
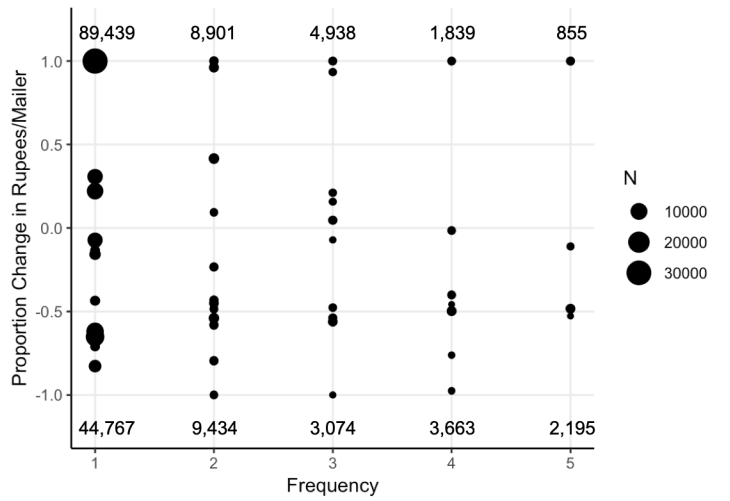


Figure 3: Impact of Facebook Like Request on Donation

(a) Impact of Facebook Like Request on ₹/Mailer by Recency



(b) Impact of Facebook Like Request on ₹/Mailer by Frequency



(c) Impact of Facebook Like Request on ₹/Mailer by Monetary

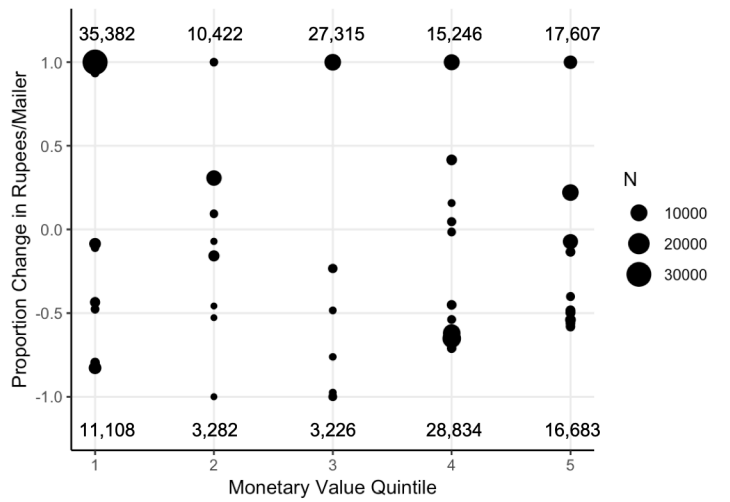
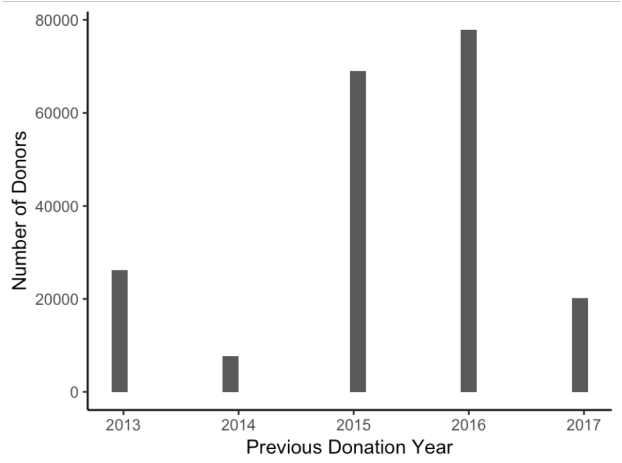
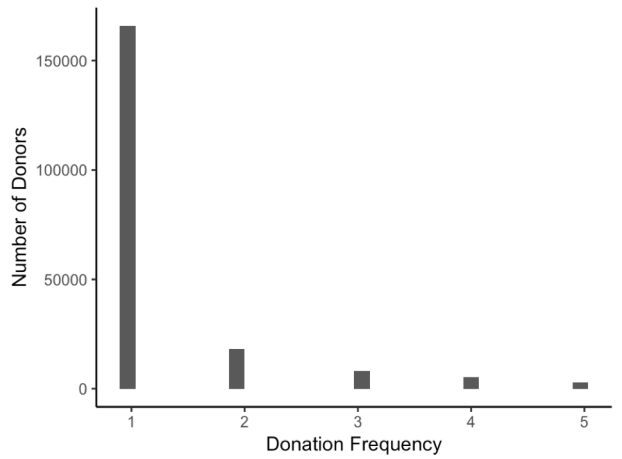


Figure 4: Past Donation Heterogeneity

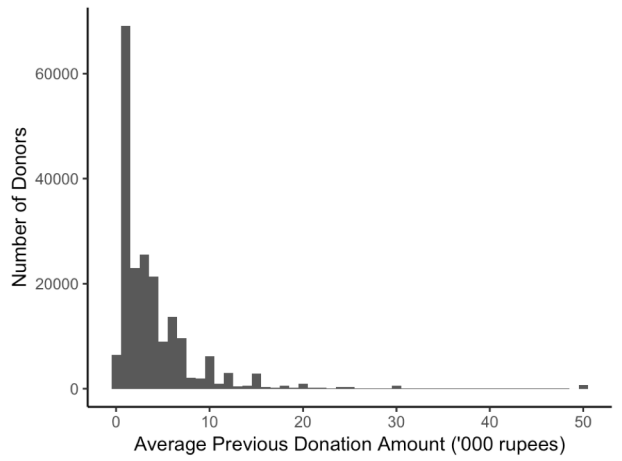
(a) Donation Recency



(b) Donation Frequency



(c) Donation Monetary Value



may differentially affect different segments of donors, lower RFM donors and higher RFM donors. To understand whether there is heterogeneity in treatment outcomes based on past donation behavior, we incorporate interaction effects into the regression and specify the model as follows:

$$\begin{aligned} Outcome_i &= \alpha + \beta_1 DonationCTA_i + \beta_2 FacebookLikeRequest_i + \beta_3 Form_i \\ &\quad + \beta_4 CTA_i \times I(Lapsed_i) + \beta_5 CTA_i \times I(Infrequent_i) \\ &\quad + \beta_6 CTA_i \times MonetaryValue_i \\ &\quad + \beta_7 Facebook_i \times I(Lapsed_i) + \beta_8 Facebook_i \times I(Infrequent_i) \\ &\quad + \beta_9 Facebook_i \times MonetaryValue_i \\ &\quad + \gamma_1 Recency_i + \gamma_2 Frequency_i + \gamma_3 MonetaryValue_i + \varepsilon_i \end{aligned}$$

$Outcome_i$ represents the donation decision (probit) or the donation amount (Tobit). As before, we control for RFM as continuous variables and include squared terms. To allow for heterogeneous responses, we include recency and frequency as binary variables in the interaction terms and monetary value as a continuous variable. While it is natural to define lapsed donors as those who have not given for the last year or two and infrequent donors as those who have only given once or twice, it is not clear how to dichotomize monetary value. We therefore keep monetary value as a continuous variable in the interaction terms to retain the information captured in its wide range of values.

The lapsed and infrequent indicator variables are defined by the major shifts in donation effect from negative to positive in Figures 2 and 3. For example, in Figure 2(a) the donation request primarily negatively impacts donors who gave in 2017 (recency $= 5$) but primarily positively impacts donors who have lapsed in donation (recency ≤ 4). Lapsed donors are therefore defined as those who did not donate the previous year (2017). Infrequent donors are defined as those who gave at most twice between 2013 and 2017. While these definitions are empirically guided by the scatter plots, we will subsequently assess the sensitivity of the results to other classifications. The β coefficients are the main coefficients of interest.

Table 7a reports the results of the heterogeneous treatment effects (the β coefficients) by past giving behavior in the probit regression of the donation decision, while Table 7b reports the coefficients for the RFM variables used as controls in the same probit regression. Tables 8a and 8b are the corresponding results of the Tobit regression for donation amounts.

The first columns of each table consider heterogeneity in treatment outcomes based on previous donation recency, the second columns consider frequency, and the third columns consider monetary value. The fourth columns combine all three RFM variables. The probit and Tobit coefficients are directionally nearly identical so we will focus the discussion on the Tobit results and specify any differences from the probit results.

Regarding recency, the negative coefficients on the donation CTA and Facebook like request indicate that the explicit asks negatively impact donation outcomes on recent donors. While the interaction between the explicit donation request (CTA) and the Facebook like request (FB) was previously insignificant in Table 5 (main effects), Column (1) finds that the effect of asking for both a donation and a like is not as bad as the sum of the individual effects of the asks. As observed in the descriptive statistics, the explicit asks positively impact lapsed donors. To see this, we should compare the donation CTA and FB like request effects with the interaction terms of the explicit asks and the indicator for being a lapsed donor. The sums of the asks with the respective interaction terms are positive, indicating the asks positively impact giving for lapsed donors. The explicit donation request induces greater giving than the Facebook like request. Mirroring the recent donor results, explicitly asking for both a donation and a like from lapsed donors does not provide a positive benefit equal to the sum of the individual effects of the asks. Instead, asking for both from lapsed donors does worse than not including an explicit ask at all.

The frequency and monetary value results follow the same pattern. Regarding frequency, Column (2) shows that the explicit asks negatively impact giving for frequent donors and positively impact giving for infrequent donors. Regarding monetary value, Column (3) shows that the explicit asks negatively impact higher monetary value donors and positively impact lower monetary value donors, matching the descriptive results. While the probit monetary value interactions are

Table 7a: Heterogeneous Treatment Effects on Donation Decision

	Dependent variable: Donated (binary) - Probit			
	(1)	(2)	(3)	(4)
Donation CTA	−0.222**	−0.150**	0.040	−0.291**
	(0.088)	(0.076)	(0.065)	(0.126)
CTA x I(Lapsed)	0.305***			0.385***
	(0.099)			(0.136)
CTA x I(Infrequent)		0.235***		0.298*
		(0.086)		(0.168)
CTA x Monetary Value			−0.007	−0.013
			(0.006)	(0.009)
CTA x I(Infrequent) x I(Lapsed)				−0.258
				(0.179)
CTA x I(Infrequent) x Mon. Value				0.014
				(0.010)
FB Like Request	−0.287***	−0.158***	0.010	−0.345***
	(0.059)	(0.050)	(0.051)	(0.077)
FB x I(Lapsed)	0.340***			0.351***
	(0.063)			(0.073)
FB x I(Infrequent)		0.189***		0.230***
		(0.052)		(0.087)
FB x Monetary Value			−0.008*	−0.004
			(0.005)	(0.005)
FB x I(Infrequent) x I(Lapsed)				−0.080
				(0.085)
FB x I(Infrequent) x Mon. Value				−0.004
				(0.005)
CTA x FB	0.214**	0.082	−0.084	0.223
	(0.109)	(0.092)	(0.077)	(0.155)
CTA x FB x I(Lapsed)	−0.344***			−0.395**
	(0.123)			(0.172)
CTA x FB x I(Infrequent)		−0.187*		−0.150
		(0.108)		(0.220)
CTA x FB x Monetary Value			0.007	0.013
			(0.007)	(0.011)
CTA x FB x I(Infrequent) x I(Lapsed)				0.137
				(0.237)
CTA x FB x I(Infrequent) x Mon. Value				−0.013
				(0.013)
Form	0.225***	0.225***	0.224***	0.225***
	(0.050)	(0.050)	(0.050)	(0.050)
Pseudo R^2	0.142	0.141	0.140	0.144
Akaike Inf. Crit.	10,990	11,001	11,017	10,990
Observations	198,775	198,775	198,775	198,775

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

Table 7b: Heterogeneous Treatment Effects Regression on Donation Decision—Control Variables

	Dependent variable: Donated (binary) - Probit			
	(1)	(2)	(3)	(4)
Recency	−0.058	0.250***	0.236***	−0.025
	(0.081)	(0.066)	(0.065)	(0.082)
Recency^2	0.030**	−0.029***	−0.027***	0.023
	(0.014)	(0.010)	(0.009)	(0.014)
Frequency	1.013***	1.109***	1.017***	1.063***
	(0.046)	(0.050)	(0.045)	(0.054)
Frequency^2	−0.132***	−0.139***	−0.134***	−0.132***
	(0.008)	(0.008)	(0.008)	(0.009)
Monetary Value	0.026***	0.027***	0.034***	0.032***
	(0.004)	(0.004)	(0.006)	(0.006)
Monetary Value^2	−0.0004***	−0.0004***	−0.0004***	−0.0004***
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Constant	−4.299***	−4.727***	−4.583***	−4.473***
	(0.130)	(0.142)	(0.135)	(0.145)

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

largely insignificant, the Tobit interactions exhibit significance. This notable result suggests that the treatments do not greatly impact whether to give based on past donation amounts but do impact the amount of giving.

The main coefficients of interest are those in Column (4) because donors are characterized by recency, frequency, and monetary value. Finer segmentation can enable nonprofits to better target their content. We include the interaction effects between recency and frequency and between frequency and monetary value because of their higher and significant correlations in Table 6. Although we increase the number of terms, the low AIC of Column (4) helps justify their inclusion. The donation CTA and FB like request effects now consider donors of high recency or high frequency. Explicitly asking these donors for a donation or a like induces reactance, decreasing donations. However, explicitly asking recent, infrequent, and lower monetary value donors increases giving. Explicitly asking for a donation from lower RFM donors increases giving more than asking for a Facebook like. Asking for both does worse than asking for either a donation or a like. The mail-in donation form remains significant and positive.

Discussion. The results of Columns (1) and (2) in Tables 7a and 8a speak to the recency and

Table 8a: Heterogeneous Treatment Effects on Donation Amount

	Dependent variable: Donation Amount - Tobit			
	(1)	(2)	(3)	(4)
Donation CTA	−3.822***	−2.630**	1.107	−4.568**
	(1.403)	(1.188)	(1.016)	(1.986)
CTA x I(Lapsed)	4.988***			6.546***
	(1.560)			(2.128)
CTA x I(Infrequent)		3.861***		5.649**
		(1.357)		(2.620)
CTA x Monetary Value			−0.180**	−0.258**
			(0.087)	(0.125)
CTA x I(Infrequent) x I(Lapsed)				−4.960*
				(2.776)
CTA x I(Infrequent) x Mon. Value				0.179
				(0.138)
FB Like Request	−4.956***	−2.725***	0.518	−5.311***
	(0.948)	(0.792)	(0.790)	(1.208)
FB x I(Lapsed)	5.545***			5.760***
	(1.011)			(1.144)
FB x I(Infrequent)		2.954***		4.027***
		(0.821)		(1.371)
FB x Monetary Value			−0.198***	−0.127*
			(0.065)	(0.071)
FB x I(Infrequent) x I(Lapsed)				−1.497
				(1.338)
FB x I(Infrequent) x Mon. Value				−0.117*
				(0.066)
CTA x FB	3.605**	1.576	−1.513	3.938
	(1.730)	(1.444)	(1.203)	(2.432)
CTA x FB x I(Lapsed)	−5.548***			−6.496**
	(1.945)			(2.691)
CTA x FB x I(Infrequent)		−3.213*		−3.672
		(1.699)		(3.452)
CTA x FB x Monetary Value			0.145	0.206
			(0.107)	(0.150)
CTA x FB x I(Infrequent) x I(Lapsed)				2.921
				(3.696)
CTA x FB x I(Infrequent) x Mon. Value				−0.129
				(0.188)
Form	3.464***	3.457***	3.430***	3.435***
	(0.787)	(0.790)	(0.786)	(0.781)
Pseudo R^2	0.104	0.103	0.103	0.106
Akaike Inf. Crit.	16,471	16,485	16,493	16,461
Observations	198,775	198,775	198,775	198,775

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

Table 8b: Heterogeneous Treatment Effects Regression on Donation Amount—Control Variables

	Dependent variable: Donation Amount - Tobit			
	(1)	(2)	(3)	(4)
Recency	−0.383	4.703***	4.457***	0.064
	(1.279)	(1.048)	(1.028)	(1.297)
Recency^2	0.385*	−0.579***	−0.537***	0.284
	(0.216)	(0.152)	(0.149)	(0.219)
Frequency	15.982***	17.534***	16.054***	16.562***
	(0.839)	(0.919)	(0.835)	(0.954)
Frequency^2	−2.091***	−2.207***	−2.116***	−2.062***
	(0.144)	(0.145)	(0.143)	(0.154)
Monetary Value	0.509***	0.520***	0.703***	0.683***
	(0.061)	(0.061)	(0.083)	(0.085)
Monetary Value^2	−0.007***	−0.007***	−0.007***	−0.007***
	(0.001)	(0.001)	(0.001)	(0.001)
Constant	−68.867***	−76.020***	−74.133***	−71.529***
	(2.789)	(3.032)	(2.906)	(2.990)

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

frequency trade-offs. The negative impact of the asks on recent donors in Column (1) suggests that the behavior of the recent donors who gave the previous year may reflect intertemporal substitution. Because they gave the previous year, they feel less inclined to give when explicitly asked due to reactance. In contrast, the donation call to action elicited the desired action from lapsed donors, for whom intertemporal substitution is less of a concern.

The results of Column (2) suggest that the asks induce greater reactance among the most frequent donors. The results run counter to what Kronrod et al. (2012) observed in an environmental context that the more forceful message was less effective on those who are the most loyal to the cause. Meanwhile, the donation call to action was effective at providing guidance to less frequent donors. It may be that the message of gratitude increased donation intentions more among the infrequent donors, as documented by Merchant et al. (2010).

The heterogeneous response results of Column (4) find that explicitly asking for more generates reactance among the recent, frequent, and higher monetary value donors but encourages donations among the lapsed, infrequent, and lower monetary value donors. In other words, the donation CTA elicits the desired behavior of donating among the lower RFM segment. The Facebook ask

generates less giving among this segment than the donation CTA but nevertheless creates some positive spillovers on donations. Therefore, when donors do not view a Facebook like request as greedy, the request to engage positively impacts donations. However, the Facebook call to action failed to elicit the desired action of garnering likes.

Sensitivity to RFM Cutoffs. Next, we vary the cutoffs of the RFM variables in the interaction variables of Column (4) to understand how they impact the results. If we define lapsed donors as those who have not donated within the last two years (rather than just the previous year), the coefficients of the explicit asks lose significance and the interactions of the asks with being a lapsed donor reverse in sign. Consequently, there is no longer a positive effect of explicitly asking lapsed and infrequent donors for more. These results are in accordance with Figures 2 and 3, which show that the most positive effect of an explicit ask comes from those who have lapsed a year in donation. This suggests that an explicit donation or like request is particularly useful for donors who have lapsed a year.

The results are fairly robust to the frequency cutoff since 80% of donors donated only one year between 2013 and 2017. When the cutoff is altered, recent, frequent, and high monetary value donors continue to be negatively affected by the explicit requests while lapsed, infrequent, and low monetary value donors continue to be positively affected. However, the most positive effect from lapsed, infrequent, lower monetary value donors is achieved when the cutoff is set to two.

The results are robust to inclusion of the two-way RFM interaction effects. We include the interaction effects because we believe their omission may overstate the benefit from the explicit requests.

Overall, the sensitivity analysis suggests that understanding the relationship between past donation behavior and fundraising content effectiveness enables managers to target donors with the proper fundraising message. For lapsed, infrequent, and lower monetary value donors, the asks indeed spur the desired action from the donors. In stark contrast, the asks reduce donations among the nonprofit's most loyal, recent, and high monetary value donors.

Mechanism Checks

In cases in which there are multiple theories for the positive and negative effects of asks in Table 1, we conduct additional mechanism checks. First, we test if the mail-in donation form positively impacts giving by serving as an implicit donation reminder or as a friction-reducing tool. Second, we assess whether the reduced giving in response to the Facebook like ask is due to "slacktivism," because the Facebook like substitutes for giving, or whether it is due to reactance. Finally, we assess whether the Facebook like request to engage is ineffective in getting likes (and thus generating online engagement), because it induces reactance to the ask or because warm list donors are not generally online. We address these issues in turn.

1. Is the mail-in form an implicit donation reminder or a friction-reducing tool? As shown in Table 1, the mail-in donation form can have a positive effect on donations by acting as an implicit reminder for a call to action and/or by acting as a friction-reducing donation tool. In order to determine which of these forces contribute to the positive effect, we must separate out the form's use as a channel from its role as a reminder. To do this, we include whether a donor previously gave online (13% of warm list donors) as a moderator because historically online donors are less likely to be restricted to the offline channel. Table 9 shows the comparison of the treatment effects on historically online and offline donors. The form, Facebook invitation, and donation CTA coefficients capture the treatment effects on historically offline donors. The form positively impacts offline donors. While the interaction of form and being historically online is negative, the net effect on online donors remains positive. The results suggest that the form is certainly important as a donation channel for offline donors and that the form also acts as a donation reminder for online donors.

To assess whether there is a heterogeneous response to the form based on past donation activity, we compare only the results of the FB Like Request and FB, No Form conditions since the inclusion of the form is the manipulated factor in these conditions. We also divide the data by previous donation channel to assess the heterogeneous effects of the form as a channel and as a reminder. Table 10 displays the resulting probit and Tobit regression coefficients for historically online and

Table 9: Online vs. Offline Donors

	Dependent variable:	
	Donated (binary)	Donation Amount
	Probit	Tobit
	(1)	(2)
I(Historically Online)	0.782^{***}	12.293^{***}
	(0.120)	(1.849)
Form	0.400^{***}	5.945^{***}
	(0.079)	(1.214)
Form x I(Hist. Online)	-0.303^{***}	-4.411^{***}
	(0.107)	(1.635)
FB Like Request	-0.085^{**}	-1.358^{**}
	(0.037)	(0.561)
FB x I(Hist. Online)	0.065	0.468
	(0.064)	(0.963)
Donation CTA	-0.026	-0.362
	(0.034)	(0.520)
CTA x I(Hist. Online)	-0.007	-0.415
	(0.058)	(0.879)
Recency	0.246^{***}	4.599^{***}
	(0.065)	(1.013)
Recency^2	-0.034^{***}	-0.650^{***}
	(0.010)	(0.149)
Frequency	0.996^{***}	15.232^{***}
	(0.047)	(0.820)
Frequency^2	-0.128^{***}	-1.960^{***}
	(0.009)	(0.141)
Monetary Value	0.023^{***}	0.444^{***}
	(0.004)	(0.060)
Monetary Value^2	-0.0004^{***}	-0.006^{***}
	(0.0001)	(0.001)
Constant	-4.718^{***}	-73.765^{***}
	(0.143)	(2.962)
Pseudo R^2	0.173	0.126
Observations	198,775	198,775

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

offline donors.

Table 10: Heterogeneous Response to Form

	Online		*Offline*	
	Donated (binary)	Donation Amount	Donated (binary)	Donation Amount
	Probit	Tobit	Probit	Tobit
	(1)	(2)	(3)	(4)
Form	−0.110	−2.618	0.238*	2.645
	(0.146)	(2.213)	(0.145)	(1.997)
Form x I(Lapsed)	0.293**	5.510**	0.274**	3.798**
	(0.149)	(2.211)	(0.115)	(1.579)
Form x I(Infrequent)	0.255*	4.488**	−0.058	−0.342
	(0.151)	(2.259)	(0.145)	(1.977)
Form x Monetary Value	−0.006	−0.037	−0.007	−0.035
	(0.009)	(0.122)	(0.014)	(0.177)
Form x I(Infrequent) x I(Lapsed)	−0.153	−3.198	0.010	0.065
	(0.143)	(2.151)	(0.136)	(1.847)
Form x I(Infrequent) x Mon. Value	−0.003	−0.093	0.006	0.008
	(0.007)	(0.098)	(0.008)	(0.107)
Recency	0.013	1.035	0.098	1.564
	(0.217)	(3.231)	(0.135)	(1.840)
Recency^2	0.017	0.152	−0.007	−0.131
	(0.035)	(0.527)	(0.023)	(0.317)
Frequency	1.079***	15.582***	1.033***	13.874***
	(0.118)	(1.921)	(0.095)	(1.465)
Frequency^2	−0.134***	−1.935***	−0.135***	−1.810***
	(0.020)	(0.310)	(0.016)	(0.240)
Monetary Value	0.045***	0.725***	0.012	0.292
	(0.011)	(0.158)	(0.015)	(0.191)
Monetary Value^2	−0.001***	−0.008***	−0.0004	−0.007**
	(0.0002)	(0.003)	(0.0002)	(0.003)
Constant	−4.191***	−64.006***	−4.636***	−63.440***
	(0.348)	(6.080)	(0.235)	(4.525)
Pseudo R^2	0.158	0.109	0.126	0.093
Observations	16,003	16,003	103,211	103,211

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

For historically online donors, the mail-in donation form does not significantly impact recent, frequent, and higher monetary value donors although the coefficient is negative. For historically offline donors, the form does significantly impact the decision to donate for higher RFM donors. As a friction-reducing tool and as a reminder, the form encourages giving among lapsed donors.

As a reminder, the form also encourages giving among infrequent donors. Overall, lapsed and infrequent donors react positively to the implicit CTA, much like the explicit asks, but recent and infrequent donors do not react negatively to the implicit ask, unlike the explicit asks. Therefore, as HelpAge believed, including a mail-in donation form in a thank you letter is a good strategy to implicitly ask for additional giving.

2. Does the Facebook like ask reduce giving due to reactance or slacktivism? Slacktivism cannot explain the behavior in the Facebook-related treatments given the small number of likes. During our observation period, the HelpAge India Facebook page received 750 likes. Through a manual inspection of the names, we can say with reasonable certainty that only 20 warm list donors liked HelpAge on Facebook during this time. However, differences in Facebook and legal names and common names made the matching of names challenging so the number of donors identified is only an approximation. Given that nearly 160,000 individuals were sent a mailer requesting a Facebook like and only 20 liked HelpAge on Facebook, it does not appear that the invitation to follow HelpAge on Facebook was effective. Furthermore, there was no significant difference in the proportion of likes among treatments. Due to the extremely small number of Facebook likes, we can rule out the possibility of substitution between likes and donations as the source of reduced giving. This suggests instead that donors viewed the request to join the Facebook community negatively. The negative reaction to the Facebook invitation resulted in negative spillovers on donations.

While it is not surprising that the donation CTA induces reactance for some donors, it is surprising that the Facebook like request induces greater reactance than the donation CTA. The heterogeneous treatment effects find that when requesting donors to engage on Facebook is not seen as greedy, however, the positive spillover of the ask for engagement increases donations. This raises the question as to when the Facebook engagement request is less likely to be seen as greedy. The results of Table 9 speak to the heterogeneous effect of the Facebook like request as a function of donation channel preference. For offline donors, the FB like request is negative, significant, and much greater in magnitude than the donation CTA. For online donors, the net effect of the FB like

request is less negative and comparable in magnitude to the donation CTA. Therefore, the FB like request generated reactance among offline donors but had less impact on online donors.

3. Why is the Facebook ask ineffective at generating online engagement? The results of the field experiment indicate that an *offline* Facebook invitation is ineffective at gathering *online* followers. One possible explanation for this result is that HelpAge's warm list donors are older and therefore less likely to be active on Facebook. Figure 5 shows the histogram of the ages of donors for the 46% of warm list donors who have shared their date of birth. The median age of all donors is 53. For the 2018 Thank You campaign, roughly half of the donors gave online and the median age of those who gave online was 54 while the median age of those who gave offline was 72. Therefore, it is possible that the Facebook like request failed to produce likes for half of the donors because of Facebook inaccessibility but the explanation seems less likely for the other half of donors who gave online. Overall, using an offline mailer to encourage Facebook engagement may not be an effective way to build an online community but the message can generate positive spillovers on donations when asked to the right group.

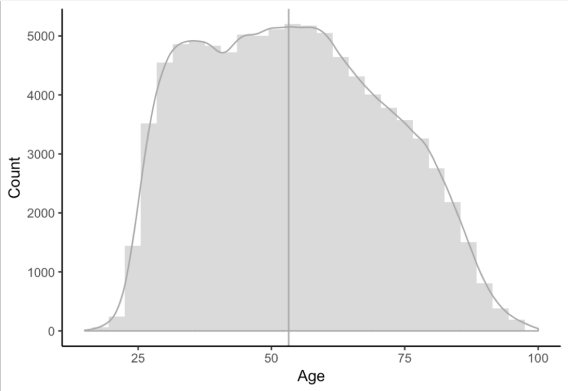
MANAGERIAL IMPLICATIONS

Given that fundraising is costly, should nonprofits simultaneously thank and ask for more? The results of the experiment suggest that the answer depends on the nonprofit's ability to target. If the nonprofit can only send one message to all potential donors, it should not explicitly ask for more when thanking donors. While the donation CTA does not significantly impact donations, the overall effect is negative. The more subtle ask of requesting donors to follow HelpAge on Facebook induces greater reactance, significantly decreasing giving. Furthermore, the heterogeneous response results indicate the explicit asks are particularly off-putting to a nonprofit's most loyal donors. However, the results of the experiment suggest an implicit ask in the form of a mail-in donation form is justified. In HelpAge's setting where the donation reminder (mail-in form) is the default, it is important to maintain the form because it serves as a channel and as a reminder.

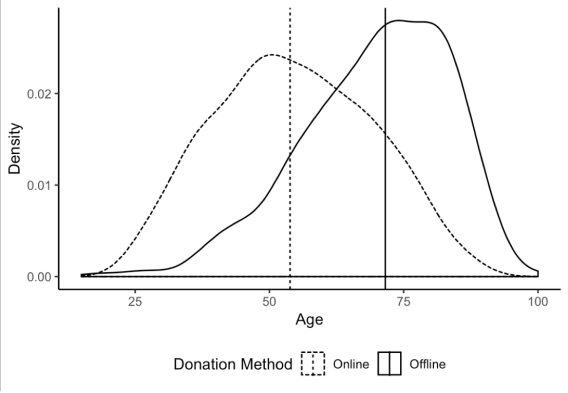
But if the nonprofit can target its thank you message to warm list donors, the nonprofit should

Figure 5: Age Distributions

(a) Warm List Donors' Age Distribution
N = 91,327



(b) 2018 Thank You Donors' Age Distribution
N = 1,019



include a donation CTA for lapsed, infrequent, and lower monetary value donors. Although a Facebook request produces positive spillovers on donations, the impact is less than that of a donation request. After accounting for recency and frequency, monetary value does not greatly impact the expected benefit. Therefore, suppose HelpAge targets its lapsed and infrequent donors, who account for approximately 86% of HelpAge's warm list donors, with an explicit donation request and the remaining donors with a mere donation reminder. Then back of the envelope calculations find that targeting can increase the expected probability of donation by 14% and expected total donations by 11%. If instead lapsed and infrequent donors were sent a Facebook like request, the expected increases are 10% and 6% for expected donation probability and total donations, respectively.

CONCLUSION

Nonprofits send annual thank you letters as a donor retention device but often include an ask to defray the associated costs. While it has been documented in sales settings that persuasion-motivated expressions of gratitude can lead to the discounting of firm effort, a priori it is not obvious whether the same phenomenon occurs in nonprofit fundraising settings. An ask may be seen as an invitation to continue to engage with a cause the donor previously contributed to or it may be seen as an insincere expression of gratitude. With our field experiment, we find that asks in messages of gratitude can also be counterproductive in a nonprofit setting. Not only did donors discount the effort but some even punished the firm by giving less than they otherwise would have. While the explicit asks induced reactance, the implicit ask in the form of a mail-in donation form did not create such disutility and may have even served as a reminder for donation.

The cross-sectional results of the experiment found no significant impact of the donation CTA but incorporating past donation behavior reveals that the insignificance stems from heterogeneity in treatment effects. Specifically, the asks generated reactance among the recent, frequent, and higher monetary value donors. However, the calls to action elicited the desired behavior among the lapsed, infrequent, and lower monetary value donors. The results demonstrate that a cross-

sectional analysis of the experiment offers incomplete insight. By accounting for past donation behavior, we find that targeting fundraising messages can increase the expected probability of donating by 14% and expected total donations by 11%.

The significance of the effects despite the noise that occurs in field experiment settings is reassuring from a generalizability standpoint. However, the setting also imposes some limitations in the generalizability of results. First, HelpAge's default thank you letter includes a mail-in donation form. Removing the form decreased donations but past donors were already familiar with the form. It is hard to say whether adding a mail-in donation form to a thank you letter will increase donations for a nonprofit that does not already use such a form. Second, using the experimental results we were able to determine how to best target the content of messages based on donors' past donation behaviors, resulting in an expected increase of 11%. But to achieve the 11% improvement, we needed to segment the warm list based on the experimental results. However, it is still gratifying that other segmentation strategies (altering frequency but maintaining the recency cutoff) can still obtain an improvement of 6-10%.

There remain several open questions for future research. First, slacktivism was not an issue in this setting because of the ineffectiveness of the Facebook like request in generating likes but it remains an open question as to how online engagement impacts donation behavior. Second, while this paper focused on the heterogeneous effects of various types of asks on giving when expressing gratitude, further research is needed to understand the underlying mechanisms for the sources of observed reactance. Finally, another interesting extension would be to test the impact of the pocket diary sent during the thank you campaign. Newman and Shen (2012) found that thank you gifts to donors on average reduce charitable donations because they reduce feelings of altruism. In contrast, Eckel et al. (2016) found that donors do not react negatively to thank you gifts. While we manipulated the ask, manipulation of the pocket diary could shed additional light on potential heterogeneous effects of thank-you gifts and when they should and should not be used.

In summary, our research shows that even in donation settings, when an expression of gratitude is paired with an explicit ask, donors experience reactance similar to sales settings. However, the

occurrence of reactance depends on donors' past donation activity. The findings demonstrate that combining between-subject field experiments with individual-level panel data can lead to additional insight due to asymmetric treatment effects based on past behavior that may otherwise be obscured when only focusing on average effects.

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APPENDIX

Time Period Sensitivity Analysis

In March 2018, HelpAge initiated a Facebook ad campaign in which the ads paralleled the treatment messages in an attempt to increase Facebook engagement. We restricted the time period of interest to before the ad campaign began (Jan. 25, 2018 to Feb. 28, 2018) to capture the effect of the letters. If the period of interest, however, is extended to Mar. 31, 2018, the results of the experiment remain qualitatively identical as shown in Tables A.1a and A.1b. We limited the time period in the paper because not all warm list donors were on Facebook while all warm list donors did receive a letter. This allows for greater generalizability to other nonprofit organizations.

Table A.1a: Time Period Sensitivity Analysis Heterogeneous Treatment Effects

	Donated (binary)		Donation Amount	
	Probit		Tobit	
	Data Through:			
	Feb.	Mar.	Feb.	Mar.
	(1)	(2)	(3)	(4)
Donation CTA	−0.291**	−0.482***	−4.568**	−9.990***
	(0.126)	(0.103)	(1.986)	(1.900)
CTA x I(Lapsed)	0.385***	0.544***	6.546***	11.289***
	(0.136)	(0.110)	(2.128)	(2.002)
CTA x I(Infrequent)	0.298*	0.370***	5.649**	8.392***
	(0.168)	(0.140)	(2.620)	(2.553)
CTA x Monetary Value	−0.013	−0.001	−0.258**	0.004
	(0.009)	(0.006)	(0.125)	(0.099)
CTA x I(Infrequent) x I(Lapsed)	−0.258	−0.336**	−4.960*	−7.251***
	(0.179)	(0.148)	(2.776)	(2.689)
CTA x I(Infrequent) x Mon. Value	0.014	0.009	0.179	0.040
	(0.010)	(0.007)	(0.138)	(0.106)
FB Like Request	−0.345***	−0.512***	−5.311***	−9.419***
	(0.077)	(0.062)	(1.208)	(1.151)
FB x I(Lapsed)	0.351***	0.606***	5.760***	11.337***
	(0.073)	(0.058)	(1.144)	(1.069)
FB x I(Infrequent)	0.230***	0.292***	4.027***	5.800***
	(0.087)	(0.071)	(1.371)	(1.290)
FB x Monetary Value	−0.004	−0.002	−0.127*	−0.066
	(0.005)	(0.004)	(0.071)	(0.067)
FB x I(Infrequent) x I(Lapsed)	−0.080	−0.228***	−1.497	−4.218***
	(0.085)	(0.069)	(1.338)	(1.253)
FB x I(Infrequent) x Mon. Value	−0.004	−0.001	−0.117*	−0.074
	(0.005)	(0.003)	(0.066)	(0.051)
CTA x FB	0.223	0.416***	3.938	8.382***
	(0.155)	(0.127)	(2.432)	(2.326)
CTA x FB x I(Lapsed)	−0.395**	−0.554***	−6.496**	−11.002***
	(0.172)	(0.138)	(2.691)	(2.513)
CTA x FB x I(Infrequent)	−0.150	−0.380**	−3.672	−8.232**
	(0.220)	(0.188)	(3.452)	(3.434)
CTA x FB x Monetary Value	0.013	0.005	0.206	0.108
	(0.011)	(0.007)	(0.150)	(0.119)
CTA x FB x I(Infrequent) x I(Lapsed)	0.137	0.366*	2.921	7.494**
	(0.237)	(0.199)	(3.696)	(3.627)
CTA x FB x I(Infrequent) x Mon. Value	−0.013	−0.012	−0.129	−0.166
	(0.013)	(0.009)	(0.188)	(0.144)
Form	0.225***	0.148***	3.435***	2.547***
	(0.050)	(0.035)	(0.781)	(0.640)
Pseudo R^2	0.144	0.180	0.106	0.126
Observations	200,858	200,858	200,858	200,858

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

Table A.1b: Time Period Sensitivity Analysis Heterogeneous Treatment Effects—Control Variables

	Donated (binary)		Donation Amount	
	Probit		Tobit	
	Data Through:			
	Feb.	Mar.	Feb.	Mar.
	(1)	(2)	(3)	(4)
Recency	−0.025	0.002	0.064	0.292
	(0.082)	(0.064)	(1.297)	(1.178)
Recency^2	0.023	0.022**	0.284	0.364*
	(0.014)	(0.011)	(0.219)	(0.199)
Frequency	1.063***	1.166***	16.562***	21.104***
	(0.054)	(0.042)	(0.954)	(0.859)
Frequency^2	−0.132***	−0.143***	−2.062***	−2.627***
	(0.009)	(0.007)	(0.154)	(0.141)
Monetary Value	0.032***	0.037***	0.683***	0.829***
	(0.006)	(0.004)	(0.085)	(0.076)
Monetary Value^2	−0.0004***	−0.001***	−0.007***	−0.008***
	(0.0001)	(0.0001)	(0.001)	(0.001)
Constant	−4.473***	−4.398***	−71.529***	−81.288***
	(0.145)	(0.113)	(2.990)	(2.527)

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