

Hassle Costs and Workplace Charitable Giving: Field Experiments with Google Employees

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Abstract

We use field experiments in the employee giving program at Google to demonstrate that hassle costs inhibit charitable donations. Relative to the control condition involving donation by credit card on the charity's website, the treatment group received a simpler option to donate via payroll deduction, thereby decreasing the 'hassle cost' of giving by a couple of minutes. In each of two experiments, we found that reducing hassle costs increased the probability of donation to a promoted charity by at least 50%, without reducing average gift size. Results from the two experiments lead us to conclude that the convenience of payroll deduction reduces hassle costs and produces increases in workplace giving for promoted charities.

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1. Introduction

Charitable fundraisers repeatedly solicit the same set of people within a reasonably short timeframe: think of repeated e-mail or snail-mail requests from charities one has supported in the past, or a public-radio campaign that interrupts programming on an hourly basis for two weeks. Fundraisers engage in repeat solicitations because they know that repeat requests bring in significant additional funds after the initial request has been ignored. Why would someone donate only after being solicited multiple times? We might imagine a combination of limited attention and hassle costs: a person might prefer to donate immediately if the donation were frictionless, but realizes he or she doesn't have time to deal with the transaction at the moment, and needs to be reminded to donate again at a more convenient time.

Indeed, any transaction, including the decision to donate to charity, involves some degree of time and effort. We define "hassle costs" as costs associated with completing a transaction: filling out forms, guarding against possible fraud by the other parties, and other expenditures of time and attention. Such hassle costs may inhibit transactions that might otherwise take place. Though standard economic models typically assume "frictionless" transactions, recent work in psychology and economics has begun to understand the importance of incorporating hassle costs into models of consumer behavior. For example, hassle costs may prevent consumers from redeeming coupons or rebates (Hviid and Shaffer, 1999; Anderson and Song, 2004; Arbatskaya et al., 2004; Dugar and Sorensen, 2006) discourage poor people from taking up valuable poverty-reduction programs such as food stamps (Bertrand et al., 2004) and limit take-up of energy efficiency programs with sizeable private benefits (Fowlie et al., 2015). Thaler and Sunstein (2008) summarize a variety of ways that policymakers might choose to "nudge" individuals to make favorable decisions in the presence of hassle-type frictions.

Rasul and Huck (2010) and Knowles and Servatka (2015) give experimental evidence supporting the role of transaction costs in decisions to donate. Rasul and Huck (2010) present two direct-mail experiments with prospective donors to the Bavarian Opera House. In the first, a reminder mailing six weeks after the original mailing produced nearly half again as many donations as the original solicitation; from this, they conclude via a simple structural model that if one were to reduce transaction costs to zero it would be possible to double the total number of donations from a single mailing. Their second experiment explicitly reduced transaction costs with a treatment whereby the charity provided donors with a pre-filled bank-transfer form and information about making a donation by phone. The authors found an 20% increase in response rates (from 2.7% to 3.4%) by providing these additional components; they interpret this as consistent with their prediction that completely eliminating all transaction costs could double donation amounts. Knowles and Servatka (2015) conducted a laboratory experiment in which subjects could donate up to \$20 to a charity. The authors varied the transaction cost associated with the donation by asking subjects to either place their donation in a box outside the laboratory or in a box elsewhere on campus. The authors found that the probability of making a donation decreased from about 60% to 25% when the box was moved elsewhere on campus.

Other researchers have also found suggestive evidence of hassle costs in charitable donations in the field. Castillo et al. (2014) investigate charitable giving online, and report evidence that the nuisance cost of logging into Facebook to ask a friend to give impedes peer-to-peer charitable campaigns. Chuan and Samek (2014) conduct a field experiment using a door-to-door solicitation campaign and find that giving potential donors the opportunity to write a holiday card for the recipient decreases the likelihood of giving, which they hypothesize is partly due to increased transaction costs. DellaVigna, List and Malmendier (2014) introduce a model in which

transaction costs can explain the increased giving rates in door-to-door fundraising campaigns as compared to mailing campaigns, but the effect of transaction costs can't be distinguished from the differential effects in social pressure between the two solicitation methods.

Our experiments extend this line of research to the domain of workplace charitable giving, demonstrating substantial treatment effects of a small increase in convenience, achieved via the option of employee giving through payroll deduction. This lends important insights for managers, who may wish to increase or promote employee giving in the workplace. It also lends insights for charitable fundraisers, who can explore ways to reduce hassle costs in giving (such as simplified donation pages or donation pages that save donor information) to increase charitable dollars flowing to their organization.

One of the most important themes in the development of the Internet has been the continued series of innovations designed to reduce hassle costs for consumers (online shopping, search, automated driving directions, recommendation systems, customer default preferences, saved billing profiles, etc.) An example of such an innovation is 1-Click shopping, used on such websites as Amazon.com to streamline transactions. In this vein, Google recently implemented a convenient online system to facilitate payroll deduction for employee charitable gifts.

Our investigation focuses on evaluating the new system using a field experiment with Google employees. The workplace is an ideal environment to conduct our experiment since employers can easily implement payroll deduction, thereby reducing the hassle costs involved in giving. Workplace giving campaigns also make up a non-negligible component of the charitable giving sector, generating \$3 billion in contributions for charities annually (America's Charities, 2013). Google, ranked 46th on the 2014 Fortune 500 list, is a major player in the corporate social responsibility (CSR) world. Google has an active culture of workplace giving, matching an

employee's charitable donations for the charities of their choice. Google gift matches employee contributions and combined has donated over \$50 million to over 12,000 nonprofit organizations to date (Google, 2018). Google also occasionally promotes certain charities to employees.

In each of two experiments (N=647 total participants), we find that the online payroll deduction system increased the probability of donation to a promoted charity by at least 50%, without reducing average gift size. This led to large increases in total amount raised. Results from the two experiments lead us to conclude that the convenience of payroll deduction reduces hassle costs and thereby can produce increases in workplace giving for promoted charities.

In what follows, Section 2 documents the experimental design. Section 3 provides results of the two experiments. Section 3 provides a discussion of the roll-out of payroll deduction at Google. Section 4 concludes.

2. Experimental Design

To investigate the role that hassle costs play in workplace charitable giving, we conducted two field experiments with giving campaigns at Google in the Fall of 2013. Experiments 1 and 2 proceeded in much the same way, except that different charities were used and the experiments were separated in time by several months. Googlers (i.e., Google employees) were invited to contribute to Room to Read (Experiment 1) in September 2013 or Action Against Hunger (Experiment 2) in November 2013. Googlers were randomly split into equal sized treatment and control groups using Googler employee ID numbers, whereby odd numbered IDs received one treatment and even numbered IDs received the other treatment. Employee IDs are assigned sequentially, so there is no reason to believe that odd versus even numbers would be correlated with donation behavior.

Figure 1 displays a summary of the donation process. In each experiment, thousands of Googlers who had previously indicated that they were interested in receiving communications from Google about giving opportunities received an email from Google that explained the charitable cause and provided a link to the promotional page (called the “landing page” in Figure 1) on the corporate intranet. Both experiments utilized the same e-mail list and randomization (that is, people randomized to the treatment group in Experiment 1 were also randomized to the treatment group in Experiment 2. This means that there may be overlap in the participants in each experiment.

The landing page solicited a one-time donation to the charity. Our denominator in the experiment is those individuals who arrived on the landing page to learn more about donating to the relevant charity (N=281 in Experiment 1, and N=366 in Experiment 2). On the landing page, Googlers could click a button to open a donation dialog box. The donation dialog was the first place displaying any information specific to control versus treatment. In the donation dialog, Googlers randomized to the control group saw an announcement that they could visit the charity website to donate (which is the usual way that individuals donate in these campaigns). Googlers randomized to the treatment group saw an announcement that donations could now be made via payroll deduction directly on the Google intranet. Since the process for donating in the control group involves leaving the intranet and inputting credit card information, while the process for donating in the treatment group involves simply entering an amount without ever leaving the intranet, we propose that the former induces greater hassle costs than the latter.

[FIGURE 1 ABOUT HERE]

3. Experimental Results

Table 1 presents an overview of the results from Experiment 1, where ‘Donation Dialog Opened’ is the number of individuals who opened the donation input screen for Room to Read, and ‘donation successful’ is the number of individuals who actually donated. We find that reducing hassle costs increases the likelihood of donating substantially - from 34.23% in control to 85.61% in treatment, a result that is statistically significant (Two-sample test of proportions z-score = 8.64, p -value < 0.01). At the same time, average donations conditional on giving are not significantly different at \$125.22 in the treatment group and \$124.14 in the control group (Wilcoxon-Mann-Whitney $z=0.56$, $p>0.10$). As a result of the substantial difference in likelihood of donating, the total donations raised in the treatment group are more than double than the donations raised in the control group.

[TABLE 1 ABOUT HERE]

Table 2 presents an overview of the results from Experiment 2. The data are very similar, though here we collected one additional piece of data: the total number of participants who visited the landing page promoting the charity. As before, the ‘donation dialog opened’ row is the total number of individuals who clicked on the Action Against Hunger link to make a donation, and the ‘donation successful’ row is the number of individuals who actually donated.

[TABLE 2 ABOUT HERE]

In Experiment 2, we again find that reducing hassle costs has a significant effect on the likelihood of a successful donation. Using the number of donation-dialog openings as our denominator (as in Experiment 1), we find that the likelihood that potential donors give increases from 58.62% to 81.25% when payroll deduction is introduced. The difference is statistically significant ($z=4.79$, $p<0.01$). One potential concern is that the denominator (observed donation

dialog opportunities) is somewhat higher in treatment (197) than control (174), and we know this difference ($p=0.08$) cannot be due to treatment because at this stage the treatment has not yet been applied. An alternative, albeit noisier way of estimating impact could be based on landing-page visits - note that these numbers happen to match the intended 50:50 split very closely (264 to 265). Using total landing-page visits instead of donation-dialog openings at the denominator. By this measure, the probability of donating moves from 38.49% to 59.09% when payroll deduction is introduced ($z\text{-score} = 4.83$, $p\text{-value}<0.01$). Experiment 2 also shows that the average donation amounts conditional on giving are not significantly different across treatment and control groups, at \$143.59 and \$142.65, respectively (Wilcoxon-Mann-Whitney $z=1.14$, $p>0.10$). The total amount raised in the treatment group is one and a half times more than the total amount raised in the control group: \$22,350 versus \$14,550.

In summary, we find that the likelihood of donating goes up substantially when the hassle cost is reduced through payroll deduction, a result that holds equally for both experiments. Figure 2 summarizes our main results by displaying the probability that a charitable gift is made, conditional on visiting the donation dialogue page and viewing the treatment or control message. The reduction in hassle costs statistically significantly increasing the probability of giving from 34.23% in control to 85.61% in treatment in Experiment 1 (Two-sample test of proportions $z\text{-score}=8.64$, $p<0.01$) and from 58.62% in control to 81.25% in treatment in Experiment 2 ($z=4.79$, $p<0.01$).

[FIGURE 2 ABOUT HERE]

4. Discussion and Conclusion

We conducted two field experiments on workplace charitable giving at Google. In both experiments, we explored the impact of offering the opportunity to donate to a promoted charity

via payroll deduction. In both experiments, we find that the probability of giving increases significantly when payroll deduction is offered, without changes to the gift amount. This causes an overall increase in the amount raised. Interestingly, however, suggestive evidence from the field roll-out of payroll deduction to all of Google finds increases in the number of gifts but the total amount of each gift is lower, which results in limited change to overall giving.

We believe that decreased hassle costs are the primary mechanism through which payroll deduction increases charitable giving in our experiment. Some alternative explanations are possible. For instance, the control group relative to the treatment group had more time to reflect on their decision, while they were engaging in the ‘hassle’ of filling out their payment information online. Some studies find that having less time for the decision leads to greater giving (‘spontaneous giving,’ Rand *et al.*, 2012), but recent work has shown that these inferences could also be due to mistakes (Recalde *et al.*, 2014). Behavior may also differ because the timing of the payment is different. Breman (2011) has shown that donors are more generous with future income than with current income. However, the direction of the effect in our case is not obvious: the treatment group pays money out of a future paycheck (with a delay of 2-4 weeks, as Google employees are paid every two weeks), while the control group pays on a credit card, the balance of which need not be paid until after the credit-card statement arrives. We find these alternative explanations much less plausible than the hassle-cost explanation. We also note that our results (a relative increase of 50%) are consistent with the predictions of Rasul and Huck (2010), who estimated that a complete elimination of transaction costs could double total charitable giving in their setting. Just as in their experiment, we saw no change in average gift size. While they were able to manage a relative increase of 20% with their direct-mail treatment reducing transaction costs, our online treatment likely represented a much larger reduction in hassle costs, and

accordingly produced larger increases in the probability of giving (50% and 150%, respectively, in our two experiments).

One limitation in the experiment is that in the control group, we are able to record only those charitable gifts which were submitted to Google for the 1:1 employer match. It is possible that some participants in the control condition may have forgotten to apply for the match, causing us to underestimate giving in the control group and overestimate the treatment effect. However, notice that anyone who felt inspired to give to the charity promoted by Google would have had a large incentive to redeem the match, whose hassle cost (affirming a gift amount to Google online) is lower than that of the original gift (entering credit-card information). This limitation is no greater than that of any study of charitable giving using tax records, since claiming a deduction is at least as difficult as requesting an employer match from Google.

We caution that our results might not generalize to all employee charitable giving; the effects of extending the payroll-deduction option to all employee charitable giving might not double total employee gifts. Indeed, following the experiment, Google decided to roll out payroll deduction to all employees for any match-qualified charitable donation they might wish to make. While we cannot share the data due to confidentiality concerns, we can describe the general impact of the roll-out. The roll-out was completed by the end of 2014. We compared total employee donations in December 2014 (since the majority of donations occur at year end) with total donations in the last months of 2013 and 2012 to look for treatment effects of the new policy, with the caveat that other confounds might affect the results, given the lack of a randomized control group. About half of gifts made after the roll-out were made via payroll deduction, suggesting that the program was popular. The 2014 data showed a noticeably larger number of gifts per employee than the years prior to the roll-out. However, unlike the results from our experiments, the total

dollar amount of giving by Googlers did not increase after the roll-out; instead, the average dollar amount per gift declined to compensate for the increase in the number of gifts. We therefore note the importance for managers and charitable fundraisers not only to conduct experiments, but consider the longer-term or spillover impacts of nudges on behavior outside of the experimental setting.

Our results give us confidence that payroll deduction is a valuable tool that reduces employee hassle costs in employer gift-match programs. While its impact may not be large on total employee giving, it has significant benefits for the employees and for specific charities that the employer chooses to promote in the workplace.

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