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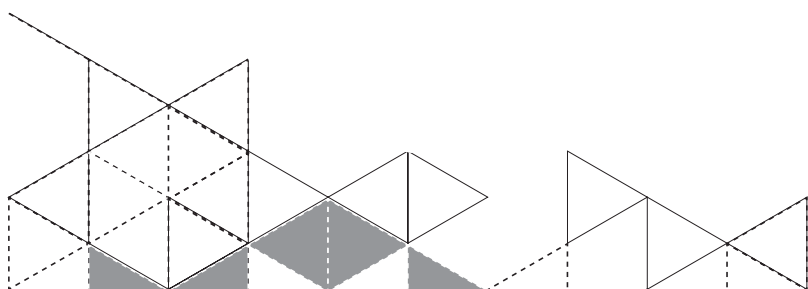
Once and Done: Leveraging Behavioral Economics to Increase Charitable Contributions

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I. Introduction

Total charitable gifts of money typically exceed 2 percent of gross domestic product in the United States. Nine out of ten U.S. citizens donate to at least one charitable cause every year. The traditional explanation for such giving is that people are motivated by pure altruism. For instance, we give to the United Way because we feel empathy for a child in need, or because we deeply care about the well-being of others. Andreoni (1989) introduced an alternative hypothesis based on selfish motives: people give because it feels good to give, or because of the ‘warm glow’ they receive from giving to a worthy cause. These two competing theories have dominated the literature on charitable giving, but it is an open question as to whether these explanations are sufficient to explain real-world giving behavior.

In this paper, we present the results of a two-year series of large-scale natural field experiments involving hundreds of thousands of subjects. Our main experimental

¹ This publication was made possible through the support of a grant from the John Templeton Foundation. The opinions expressed in this publication are those of the author(s) and do not necessarily reflect the views of the John Templeton Foundation.

treatment revolves around a “once and done” mail solicitation. In these campaigns, we explicitly state to potential donors on the outside of the envelope in our mail solicitation: “Make one gift now and we’ll never ask for another donation again.” Those who make a donation are asked to choose from one of three check boxes: (1) do not mail me in the future asking for donations, (2) send me only a limited number of future mailings, or (3) continue to mail me. Relative to a range of different control messages, the “once and done” solicitation roughly doubles initial donations, with 38 percent of the donors self-selecting into the “do not mail” category. Nonetheless, because there are so many more initial donors, the “once and done” treatments yield similar amounts of future contributions as the control campaigns in spite of the “do not mail” option. Combining initial and subsequent donations, “once and done” yields nearly a 50 percent improvement over the controls, which represent the best messaging that Smile Train had come up with over years of test and control experimentation.

Pure altruism cannot easily account for the findings we obtain. If pure altruism is the mechanism driving contributions, it is difficult to understand how withholding future opportunities to act altruistically (but only conditional on the recipient acting altruistically today), would drive giving. The failure of pure altruism to explain our results is consistent with other critiques of the theory. Given that theoretical models suggest that in large economies altruism must be swamped by warm glow motivations (see, e.g., Sugden [1982], Andreoni [1988], and Ribar and Wilhelm [2002]), the failure of the pure altruism model is perhaps unsurprising.²

² For examples of empirical work supporting the warm glow hypothesis, see Andreoni (1995), Palfrey and Prisbrey (1997), and Eckel, Grossman, and Johnston (2005).

Importantly, however, our findings are equally at odds with a warm glow explanation—if it feels good to give, why would donations rise when we link giving now to a restriction of future opportunities to give? And furthermore, why would nearly forty percent of the donors, in a warm glow world, opt not to receive future mailings?

Instead, our empirical findings are (at least superficially) consistent with three other less prominent explanations for giving. The first of these we term “social pressure avoidance.” In this view of the world, a solicitation by a charity imposes a cost on the recipient in the form of social pressure (DellaVigna, List, and Malmendier [2012]). It feels bad to be asked for a donation, especially when you choose not to make a contribution. The “once and done” offer provides an avenue for people who have a large disutility from repeated solicitations (the charity mails many households more than ten times a year) a means of opting out of future intrusions. A second potential explanation is that the “once and done” message changes the frame of the interaction between the charity and the letter recipient. For example, the deliberate act of giving up the power of the ask by the charity may be perceived as a particularly trusting or generous act that is reciprocated by the recipients. Finally, the “once and done” message may simply be so unusual and out of character for the direct mail channel that it piques curiosity, leading people to open the envelope who otherwise would not, some of whom then decide to give once they learn more about what the charity does.

Data on the pattern of subsequent gifts, along with the presence of one control treatment that included a checkbox with a “do not mail” option, allow us to examine supplementary predictions of the various theories. None of these theories match perfectly with the observed data. The social avoidance theory correctly predicts that the “once and done” message on the outside of the envelope induces a dramatic increase in the number of donors asking not to be mailed in the future, but otherwise does not jibe well with the

patterns in the data. The theory that best matches the data is a short-lived reciprocity story in which donors reward the charity with respect to the initial gift, but the reciprocity is gone in future mailings.

II. Theoretical Underpinnings

To fix ideas and to motivate the initial set of treatments, we present a stylized model of the voluntary provision of public goods that is a workhorse in the literature. The model also supplies a means to interpret the data from our field experiment. We apply a variant of Andreoni's [1989, 1990] impure altruism model that has recently been used by Landry et al. [2006] to lend insights into door-to-door fundraising.³

We model an agent $i \in \Omega$ whose utility is additively separable into utility u_i from consuming a numeraire good, y_i , a public good provided at level B , and a warm-glow utility, $f_i(b_i)$, where b_i is the agent's contribution to the public good. We further assume that $\partial f_i / \partial b \geq 0$, $\partial^2 f_i / \partial b^2 \leq 0$. For simplicity, we consider a linear public good that all agents value identically, hB , with $0 \leq h < 1$. Given these assumptions, an agent i 's utility facing a budget constraint $y_i + b_i \leq w_i$ is defined as:

$$V_i(b_i) = w_i - b_i + h(b_i + B_{-i}) + f_i(b_i) \quad (1)$$

³ There are important alternative modeling approaches to our framework. For example, some have considered moral or group interested behavior (see, e.g., Laffont, 1975; Sen, 1977; and Sugden, 1984). In Sugden, (1984), for instance, agents adhere to a "moral constraint," whereby they compare themselves to the least generous person when making their contributions. Relatedly, in Bernheim's (1994) conformity model, agents value status, and behavioral departures from the social norm impair status. Akerlof (1982) obtains similar conformity results by assuming deviations from social norms have direct utility consequences.

where $B_{-i} = \sum_{j \neq i} b_j$.⁴

The term $h(b_i + B_{-i})$ represents the consumer's value of the public good, which includes considerations of both own-consumption of the public good and others-consumption of the public good. $f(b_i)$ depicts the warm-glow effect from giving. The agent maximizes (1) by choosing b_i . The first order condition for agent i 's utility maximization problem is given by:

$$\partial V_i / \partial b_i = -I + h + \partial f_i / \partial b_i \leq 0, \quad (2)$$

which holds with equality if $b_i > 0$. The first order condition provides intuition into the popular motives for why people might choose to give to a charitable cause. For example, even if an agent does not value the public good for his own consumption, if he is altruistic, his gift increases when the total value of the public good increases. This can occur either through a better public good production technology or through the number of consumers of the public good. These effects can be subsumed through the h term.

An important alternative set of predictions arises when individuals gain no utility from the actual provision of the public good but receive warm glow from contributing. In that case, utility from the public good is solely a function of one's own contribution, $f(b_i)$. A stark prediction resulting from this assumption suggests an insensitivity of individual contributions to both the production function of the public good and changes in the number of people who consume the public good.

Recently, scholars have used such insights to motivate experimental tests of the altruism and warm glow models. One line of work is to use laboratory experiments.

⁴ Note that the linearity of the public good allows us to consider the contribution of others ($j \neq i$) as a constant when analyzing the decision of agent i . For notational simplicity we therefore leave out the others' contributions in the notation of the utility which is equivalent to assuming that $B_{-i} = 0$.

For example, in a novel set of laboratory experiments, two studies attempt to decompose giving into altruism and warm glow by using modified public goods experiments, Palfrey and Prisbrey (1997, PP hereafter) and Goeree et al. (2002, GHL hereafter). PP's subjects participate in four ten-period sequences. One publicly announced marginal value of the public good is used for the first two ten-period sequences and a different value is used for the second two ten-period sequences. The marginal value of the private good is randomly determined and private to the subject. Subjects know that the marginal values are assigned according to a uniform distribution between one and twenty. In one treatment, the subjects' endowment per period was one indivisible token; in the second treatment, subjects' endowment per period was nine tokens and they could contribute any (whole) number between zero and nine.

GHL subjects made ten decisions for each of ten treatments. All information for each treatment was available to the subjects and all ten decisions were submitted simultaneously. GHL treat each decision as a one-shot game. For each decision, the subjects allocated 25 tokens between public and private goods. A token allocated to the private good earned a constant return of \$0.05 for the contributing individual. A token contributed to the public good earned the contributing subject either \$0.02 or \$0.04 (the internal return) and earned each of the other group members (either two or four) between \$0.02 and \$0.12.

Interestingly, as similar as the two studies are, they reach different conclusions. Palfrey and Prisbrey (1997) report "...strong evidence for a warm glow effect...and...no significant evidence for an altruism effect" (p. 837). Goeree et al.

(2002) report results supportive of altruistic giving that "...is not simply of the warm glow variety..." (p. 271).

In a more recent laboratory experiment, Crumpler and Grossman (2008) turn off the altruism channel by asking their subjects to donate to a charity when they know that the total amount donated to the charity from the experiment is pre-set. Thus, any amount that the person gives crowds out that amount one for one. Crumpler and Grossman (2008) argue that therefore any giving must be driven by warm glow since extra dollars are not going to the charity. They find that people still give 20% of their income to the public good, and that 57% of experimental subjects opt to give. They interpret such giving patterns as evidence in favor of a warm glow model.⁵

There are also tests of the altruism and warm glow theories using naturally-occurring data. For example, if giving to a public good is driven purely by altruism, there should be complete crowding out of giving by other sources. For instance, private contributions should be crowded out dollar-for-dollar by public funding increases to the charitable cause. By and large, the evidence is at odds with the dollar for dollar crowding prediction. Using data on actual charitable contributions, Burton et al. (1978, 1984) find a 28% crowd out and Clotfelter (1985) a 5% crowd out. More narrowly, using contributions to radio, Kingma (1989) finds a 13% crowd out. In aggregate, it is fair to say that the evidence is in favor of incomplete crowding out. In a literature

⁵ Eckel et al. (2005) also study crowding out in the lab. They recruit subjects and have them choose between keeping or donating money to a charity in a dictator game. Initial allocation of funds between subject and charity is varied (\$18-\$2 and \$15-\$5, where \$18 is initially allocated to the subject and \$2 to the charity and the subject is free to increase the donation to the charity) and framing of the initial allocation is varied. In one treatment the initial allocation is the result of the experimenters but is left unexplained to the subject and in the other it is explicitly labeled a "tax." Eckel et al. finds that the "tax" framing crowds out giving 100%.

review, Steinberg (1991) finds that a \$1 increase in public funding leads to \$0.005-\$0.35 less private giving.

While it is clear that the literature has used several novel approaches to testing the warm glow and altruism models directly, to our best knowledge there has not been a field experiment explicitly designed to test those theories side by side.

III. Experimental Design and Results

The charity with which we partner is *Smile Train*. Smile Train has assembled a worldwide network of doctors to perform corrective surgery on those born with cleft lip and palate (see Appendix A for a picture of a child with a cleft problem). Clefts are a major problem in developing countries where there are millions of children who are suffering with unrepaired clefts. Most cannot eat or speak properly, are not allowed to attend school or hold a job, and face very difficult lives filled with shame and isolation, pain and heartache. With today's technology, a cleft can be helped with surgery that costs as little as \$250 and takes 45 minutes.

Smile Train is a charity under United States Internal Revenue Service code 501(c)3, hence donations are tax-deductible for federal income taxes. Smile Train sends frequent mailings to acquire new donors. Our series of field experiments was from several of these fundraising drives that aim to acquire new donors. They also solicit past donors for additional contributions on a regular basis.

Our sample frame consists of mail solicitations sent in five waves to a total of more than 800,000 individuals over the April 2008-September 2009 period. The sample is split between treatment and control (baseline) groups, after which we observe how

donors within the various groups respond to ‘regular’ solicitation mailers. Figure 1 provides a summary of our experimental design.

Over 415,000 subjects in the control group in the various mailings received variations on Smile Train’s standard solicitation mailer at the time. In some cases, recipients were “invited” to donate; in other cases the message was “we have the cure,” or “it only takes one gift to help a child.” Examples of these packages are included in Appendix B. The letters were written and designed by Smile Train, and conform to their typical fundraising practices. The letters describe the millions of children suffering from cleft lip and palate and how these children can be saved with a simple surgery that takes as little as 45 minutes and costs as little as \$250. The letters “invite” the reader to save the life of a child. The messaging in this letter reflects the learning from years of experimentation on direct mail that drove Smile Train’s annual donations to nearly \$100 million per annum. The organization sends similar mailers to potential donors on average fourteen times per year.

The treatment groups in each of the five waves of mailing received a “once and done” campaign that was also sent to 415,226 households total. We believe that the once and done idea is original to Smile Train—i.e., we are unaware of any other charity utilizing this approach and do not know of any field experiment testing the approach. While nearly all of the specifics of the treatment package were similar to the baseline package, there were two important differences. The first difference is that the headline on the outer envelope of the treatment package states: “Make one gift now and we’ll never ask for another donation again.” Then, on the reply device, Smile Train asks the donor: “How often do you wish to receive communications?” and presents the donor

with three checkboxes: 1. “This will be my only gift. Please send me a tax receipt and do not ask for another donation again.” 2. “I would prefer to receive only two communications from The Smile Train each year. Please honor my wishes to limit the amount of mail sent to me.” 3. “Please keep me up-to-date on the progress The Smile Train is making on curing the world of clefts by sending me regular communications.”⁶

It is important to note that the baseline and treatment packages also differed in other smaller ways—the baseline package in some cases used a smaller envelope than the treatment, the “once and done” package did not have a celebrity buckslip, and the treatment packages always showed pictures of children with clefts on the envelope while some of the baseline packages did not. We do not, however, think these differences are driving the results because in later waves of mailings in which the treatment and control packaging more closely conformed to one another, the results mirror those found in the earlier waves.

IV. Results

Table 1 reports data on the initial response to the control and treatment mailings, aggregating over the five experimental waves. Over 800,000 letters were mailed in total. The donation rate among those in the control treatments was 0.34 percent, with an average gift conditional on making a donation of just over \$50. The control mailings yielded 17 cents per letter sent – an extremely good outcome for acquisition letters in the direct mail channel (Sargeant, Jay, and Lee 2006).

⁶ In one wave carried out in August 2009, we included the checkbox in the control group mailing as well in order to help us distinguish between competing explanations for the lift from the “once and done” approach.

The “once and done” treatment dramatically outperformed the control groups, generating a response rate nearly twice as large (0.66 percent versus 0.34 percent) and a larger average gift (\$56 versus \$50). Consequently, the “once and done” campaign raised more than twice as much initial revenue as the controls (\$152,928 versus \$71,566), yielding a remarkable 37 cents per letter mailed. Appendix Table 1 reports the results for each of the five waves separately. In every one of the waves, response rates and initial revenues under “once and done” far outpaced the control group.

The final two columns of Table 1 report the checkbox choices of donors in the “once and done” treatment. Interestingly, 38 percent of those making donations requested that Smile Train not to make future solicitations. Another 26 percent asked to receive only limited future mailings.

These restrictions on future mailings under “once and done” potentially inhibit Smile Train’s ability to generate future contributions. We explore the issue of subsequent donations in Table 2. Column 1 reproduces the percentage of initial donors across the two groups: 0.34 percent and 0.66 percent. Column 2 reports the share of initial donors who make at least one additional gift over the ensuing XX months. A higher share of initial gifts are followed up with further donations in the control group (43.7 percent versus 28.2 percent). Because there were so many extra initial donors in the “once and done” treatment, however, the absolute number of subsequent donors is actually *higher* in the “once and done” treatment (column 3). 0.185 percent of those initially receiving the “once and done” message ultimately make multiple donations compared to 0.149 percent in the control groups. The subsequent gift size in the “once and done” treatment is, however, smaller than in the control group (\$140 versus \$173).

Consequently, the subsequent revenue raised turns out to be nearly identical across the treatment and the control (\$107,855 under “once and done” versus \$107,043 in the control). Appendix Table 2 presents results for each of the individual waves.

Combining the revenue from both initial and subsequent donations, “once and done” generated a total of \$260,783 compared to \$178,609 for the control mailings – an increase of 46 percent. Because of the restrictions on future mailings dictated by checkbox responses, even though there were twice as many initial donors under “once and done,” the total number of follow-up mailings was actually slightly smaller under “once and done.”⁷

V. Understanding the success of “once and done”

Why is it that “once and done” performs so strongly? As noted earlier, there are at least three possible stories to explain that result. The first of these is “social pressure avoidance” whereby a solicitation by a charity imposes a cost on the recipient in the form of social pressure (DellaVigna, List, and Malmendier 2012). A “Once and done” gift allows the aggrieved consumer a way to escape from future mailings. A second potential explanation is that the “once and done” message changes the frame of the interaction between the charity and the letter recipient. For example, the deliberate act of giving up the power of the ask by the charity may be perceived as a particularly trusting or generous act that is reciprocated by the recipients. Two versions of this scenario seem plausible. In one case, the donor reciprocity is short-lived and only attaches to the initial gift. Future mailings to donors, which do not have the “once and done” hook, would lose the reciprocity boost. Alternatively, one could imagine that the reciprocity boost could

⁷ In the control treatments an average of 28 mailings went out to those who made an initial gift compared to roughly 15 letters to givers in the “once and done” treatment.

persist in time and positively impact future mailings. Finally, the “once and done” message may simply be so unusual and out of character for the direct mail channel that it leads people to open the envelope who otherwise would not, some of whom then decide to give once they learn more about what the charity does. Under this last scenario, one could imagine that these marginal consumers who open the letter because of the curious “once and done” message might be similar to those who open the control envelope, or alternatively, they might on average be less enthusiastic to the cause. In what follows, we consider both possibilities.

Two features of the research design help us distinguish between these three competing hypotheses. First, we observe which of the check-box options (no future mailings, limited mailings, full mailings) donors choose in each of the “once and done” treatments, as well as in one of the control group treatments where we included a check box. Second, we have data on future contributions by treatment and check-box option. The competing theories in the previous paragraph are all consistent with more initial donors and donations, but the various theories have differential predictions with respect to other observable aspects of the data.

The top five rows of Table 3 presents a matrix of the predictions given by each of the competing theories. Columns in the table correspond to observable metrics. Each row represents one of the competing theories. The entries in the cells are that theory’s prediction as to how the “once and done” treatment should deviate from the control group.⁸ For instance, columns 1 and 2 are the number of initial donations and the total dollar value of these initial donations. All five of the competing theories (social pressure avoidance, short-lived reciprocity, long-lived reciprocity, curious letter openers who are similar to typical letter openers, and curious letter openers who are inferior to typical letter openers) predict that “once and done” will outperform the control on these two

⁸ No doubt the critical reader will find a basis for squabbling with some of the signs allocated in the table, as the predictions of some of the theories on some dimensions are not crystal clear.

dimensions, as indicated by the plus signs in the relevant boxes in the table. The bottom row reports the actual observed percent difference between “once and done” and control in our data. The number of initial donors was 93 percent higher under “once and done;” initial dollars given was 114% higher. Thus, all four of the theories are consistent with these dimensions of the data.

In subsequent columns of Table 3, however, the predictions of the competing theories diverge. Take, for instance, column 3, which corresponds to the dollar value of the initial contribution, conditional on a donation being made. Social avoidance might be expected to predict a lower average donation in “once and done” than in the control. Under this theory, all donors who would give in the control group give, plus some social pressure avoiders. If, on average, the social pressure avoider (whose primary motivation for giving is to get the charity to stop bothering him or her with mailings) makes a smaller donation than a true supporter, then the average “once and done” donation would be expected to be smaller than in the control. Under both reciprocity scenarios, the opposite seems likely. Touched by the charity’s “gift” of relinquishing the “ask,” donors might be expected to give larger initial gifts.⁹ The prediction of the curiosity theory depends on whether the pool of curious consumers induced to open the letter by the “once and done” message are similar to those who open the control envelope (row 3) or are less committed to the charity (row 4). If curious openers look typical, there will be no impact on the average initial gift size; if they are inferior, average gift size should be smaller. Empirically, as shown in the bottom row, average initial gift size is quite similar across “once and done” and control (11% higher in the former). This result is consistent with the reciprocity argument (which predicts an increase) and the curious-typical theory (which predicts no difference). The other two theories, however, are at odds with the observed data on this dimension.

⁹ Although, if the reciprocity mechanism operates primarily through the extensive margin, it is possible that more marginal donors are enticed into giving by the charity’s “gift.” In that case, average gift size might decline because of the changing composition of the givers.

In the interest of brevity, rather than marching through the remaining columns of the table in detail, we limit ourselves to a more superficial accounting of the findings. None of the theories matches the data on all dimensions. The best performer is the short-lived reciprocity story, which does a good job of matching the increased levels of initial donor giving and also predicts that more givers will take the “do not mail” option.¹⁰ Empirically, twice as many donors check “do not mail” in the “once and done” treatment as do in the control treatment in which a check box was included (39 percent versus 19 percent).

The other theories deviate from the observed data on multiple dimensions. Social avoidance does well in predicting a jump in “do not mail,” but otherwise carries the wrong sign as often as the right sign. Long-lived reciprocity proves to be overly optimistic with respect to performance in subsequent mailings, and thus underperforms short-lived reciprocity. The two variations on curiosity on the part of donors match the data in places, but each misses on multiple dimensions.

With the generous support of the Templeton Foundation, we were able to provide several replicates of these results with WonderWorks, another non-profit that aids children in development communities. Touching more than 1 million donors in the past year, we have found results congruent to those found above, lending large-scale credibility to our insights. This is important in light of the statistical power to reject false nulls inherent in replicates.

VI. Conclusion

¹⁰ Because the “gift” given to the letter recipient is the power not to receive future emails, it seems likely that the donors most likely to have their behavior influenced by the “gift” are those who value not being mailed in the future, leading to more cases of “do not mail.”

In this study, we report on the remarkable, unexpected fundraising success of an innovative direct mail message that promises not to mail donors in the future if they make a gift today. This “once and done” campaign nearly doubles initial giving relative to the best alternative messages at the charity. Because only 38 percent of the donors check a “do not mail” box, subsequent donations remain on par with campaigns that do not have the “once and done” condition. Thus, the combined revenue of “once and done” is almost 50 percent higher than the other mailings. These findings are inconsistent with the leading theories motivating charitable contributions (altruism and warm glow). We entertain three other theories that *are* consistent with “once and done’s” superior performance. Ultimately, the strongest performing theory empirically is a model in which the charity’s willingness to cede its future power to ask for money leads recipients to respond more generously in the short run, but this reciprocity does not carry over to subsequent gifts. The high share of “once and done” donors who check “do not mail” relative to a control treatment that also offered a “do not mail” option suggests that social pressure avoidance is likely also present.

The most basic implication of our research is the recognition of “once and done” as a potentially important innovation in the philanthropic arena. Having read our account of the success of “once and done” for Smile Train, a number of other charities have already begun to test this strategy in their own fundraising.

More broadly, our results highlight the fact that incentives change behavior not merely by changing prices, but also by altering the way in which a transaction is perceived by the participants. If, for instance, an incentive scheme is perceived as hostile, it may have deleterious effects that operate outside of the price mechanism. Intentions importantly matter.¹¹

¹¹ This result is in line with experimental work from the lab, including Gneezy and Rustichini (2000a, 2000b), Bohnet, Frey, and Huck (2001), and Fehr and List (2004).

Figure 1. Experimental design

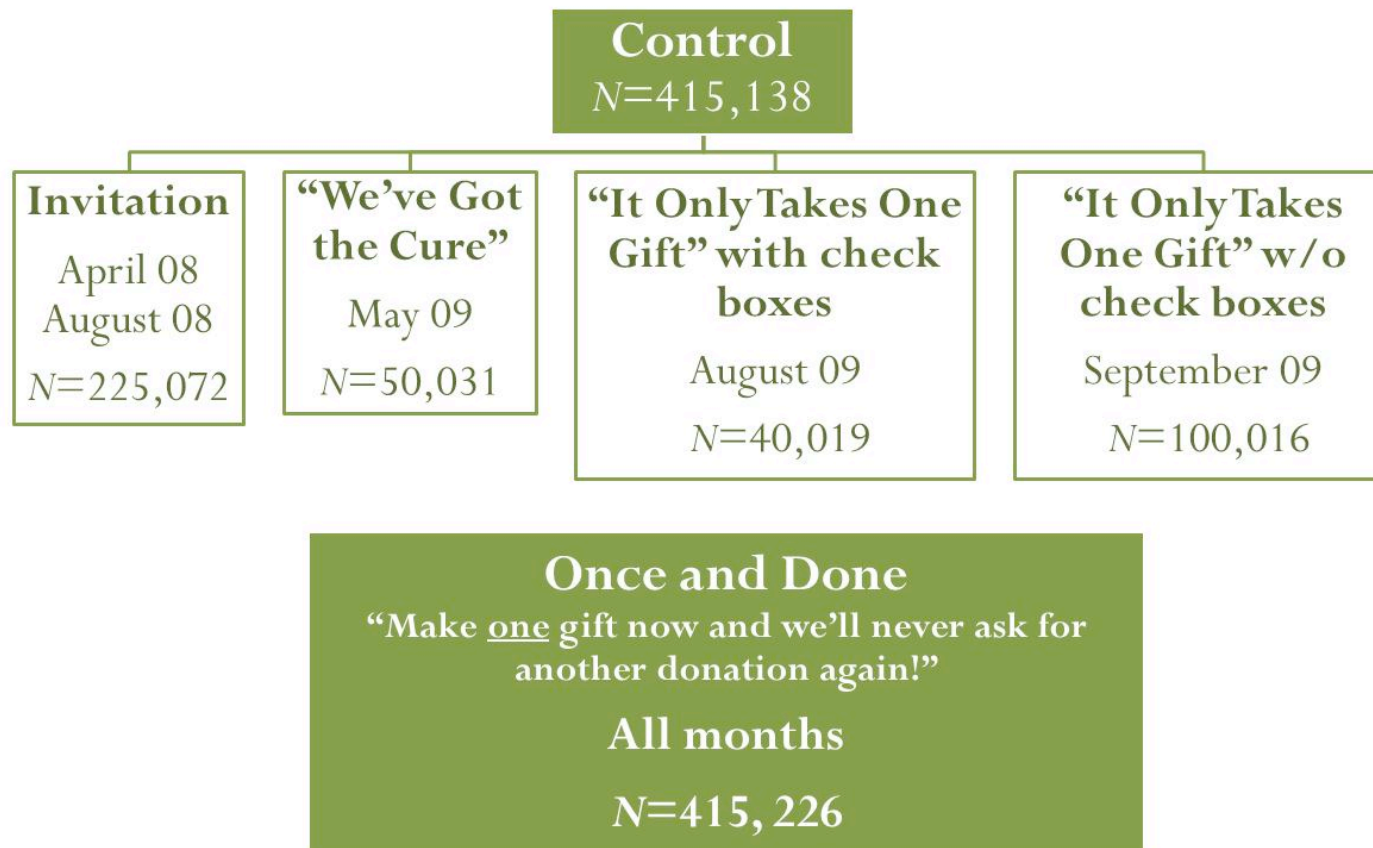


Table 1. A comparison of the initial response to control and "once and done" acquisition campaigns

	Quantity mailed	Response Rate	# donors	Initial revenue per donor	Total initial revenues	Initial revenue per piece mailed	% of donors choosing "do not mail"
Control	415,138	0.34%	1,413	\$50.65	\$71,566	\$0.17	19%
Once and Done	415,226	0.66%	2,722	\$56.18	\$152,928	\$0.37	38%

Notes: Data in the table aggregate across five randomized campaigns carried out between April 2008 and September 2009. Each campaign had nearly equal numbers of acquisition mailings made using a "Once and Done" or control message (see the appendix for sample mailings). The "Once and Done" campaign stated on the outside of the envelope that if a gift was made now, the charity would never ask for money again, and was accompanied by a "do not mail" check box on the donation slip. All numbers in table correspond only to first gifts made within XX weeks of the acquisition mailing. Only the August 2009 control mailing included a "do not mail" checkbox; the final column of the top row reflects only that mailing. Appendix Table 1 reports parallel results for each of the five individual campaigns.

Table 2. A comparison of subsequent gifts for the control and "Once and Done" campaigns

	Initial response rate	% of initial givers who make further donations	# of givers who make further donations	% of all households receiving an acquisition letter that make two or more donations	Revenue per donor making two or more donations (excluding the initial gift)	Total revenues from donors making two or more gifts (excluding the initial gift)	Total revenues from all donations
Control	0.34%	43.74%	618	0.149%	\$173.21	\$107,043	\$178,609
Once and Done	0.66%	28.21%	768	0.185%	\$140.44	\$107,855	\$260,783

Notes: Entries in the table aggregate across five randomized campaigns in which the acquisition letters were mailed between April 2008 and September 2009. Half of the initial letters were mailed using a "Once and Done" message; the other used a control method (see the Appendix for sample letters). Except for the first and last columns, all other entries in the table exclude the initial gift, instead focusing only on second, third, fourth gifts and beyond that are received within XX months of the initial mailing. The first column reports the share of households who gave a gift in response to the acquisition letter. The last column is total revenues from initial gifts and all subsequent gifts.

Table 3. Theoretical predictions of the competing theories regarding the impact of "once and done" relative to the control treatment

Theory	# initial donors	Total initial revenues	Initial revenue per donor	Revenue per person who checks "do not mail"	Share checking "do not mail"	# subsequent donors	Total subsequent revenues	Subsequent revenue per donor
<i>Social pressure avoidance</i>	+	+	–	–	+	=	=	=
<i>Curiosity</i>								
Typical donors	+	+	=	=	=	+	+	=
Less attached donors	+	+	–	–	+	+	+	–
<i>Reciprocity</i>								
Short-lived reciprocity	+	+	+	+	+	=	=	=
Long-lived reciprocity	+	+	+	+	+	+	+	+
<i>Actual</i>	93%	114%	11%	69%	107%	24%	1%	-19%

Notes: Entries in the table note the predicted impact of "once and done" relative to the control mailings on the outcome identified in each column. Rows in the table correspond to one of the competing theories. The social pressure avoidance theory posits that some donors, for whom receiving solicitations reduces utility, will give a gift and check "do not mail" to stop the letters. The curiosity theory argues that the "once and done" message piques the curiosity of recipients who otherwise would not open the envelope, and some of them end up donating. We consider two versions of this hypothesis: one in which the curious recipients act like typical donors, and another in which these curious donors are less attached than average to the charity's cause. The reciprocity story hypothesizes that the charity's willingness to concede the power of future asks to the donor is perceived as a "gift" from the charity to the recipient. In return for that gift, some households exhibit reciprocity and make a donation. In the sort-lived version of that model, the reciprocity only persists for the first gift. In the long-lived version, the reciprocity remains even for subsequent gifts. The final row of the table reports the actual gap between the "once and done" and control mailings across the full range of relevant outcomes.

Appendix Table 1. Campaign specific breakdowns of initial responses to the acquisition mailings

Date	Package description	Quantity mailed	Response rate	Average gift	Total initial revenue	Initial revenue per piece mailed	% do not mail
Apr-08	Control (Invitation)	75,024	0.26%	\$68.57	\$13,234	\$0.18	--
Apr-08	Once and Done	75,031	0.48%	\$62.78	\$22,728	\$0.30	39%
Aug-08	Control (Invitation)	150,048	0.25%	\$55.96	\$20,651	\$0.14	--
Aug-08	Once and Done	150,055	0.56%	\$71.93	\$60,134	\$0.40	34%
May-09	Control (We've Got the Cure)	50,031	0.49%	\$51.59	\$12,588	\$0.25	--
May-09	Once and Done	50,117	0.74%	\$53.07	\$19,688	\$0.39	38%
Aug-09	Control (It Only Takes One Gift with checkboxes)	40,019	0.39%	\$53.21	\$8,300	\$0.21	19%
Aug-09	Once and Done	40,012	0.80%	\$47.06	\$15,107	\$0.38	36%
Sep-09	Control (It Only Takes One Gift without checkboxes)	100,016	0.45%	\$37.24	\$16,793	\$0.17	--
Sep-09	Once and Done	100,011	0.83%	\$42.39	\$35,271	\$0.35	44%

Notes: This table is structured exactly like Table 2, but disaggregating the data across the five campaigns.

Appendix Table 2. Campaign specific breakdown of subsequent response to "once and done" and control mailings

Date	Package description	Initial response rate	% giving second time	# subsequent donors	% all recipients who donate twice	Subsequent revenue per donor	Total subsequent revenues	Total revenues
Apr-08	Control (Invitation)	0.26%	45%	87	0.12%	\$146.85	\$28,343	\$41,577.00
Apr-08	Once and Done	0.48%	29%	105	0.14%	\$59.67	\$21,602	\$44,329.72
Aug-08	Control (Invitation)	0.25%	49%	180	0.12%	\$94.49	\$34,865	\$55,516.00
Aug-08	Once and Done	0.56%	33%	278	0.19%	\$62.04	\$51,864	\$111,998.00
May-09	Control (We've Got the Cure)	0.49%	50%	121	0.24%	\$81.91	\$19,986	\$32,574.00
May-09	Once and Done	0.74%	29%	108	0.22%	\$31.12	\$11,545	\$31,233.00
Aug-09	Control (It Only Takes One Gift with checkboxes)	0.39%	24%	56	0.14%	\$30.61	\$12,564.50	\$20,864.50
Aug-09	Once and Done	0.80%	36%	78	0.19%	\$80.54	\$9,825.00	\$24,932.00
Sep-09	Control (It Only Takes One Gift without checkboxes)	0.45%	24%	174	0.17%	\$15.65	\$11,284.25	\$28,077.25
Sep-09	Once and Done	0.83%	39%	199	0.20%	\$25.02	\$13,019.25	\$48,290.25

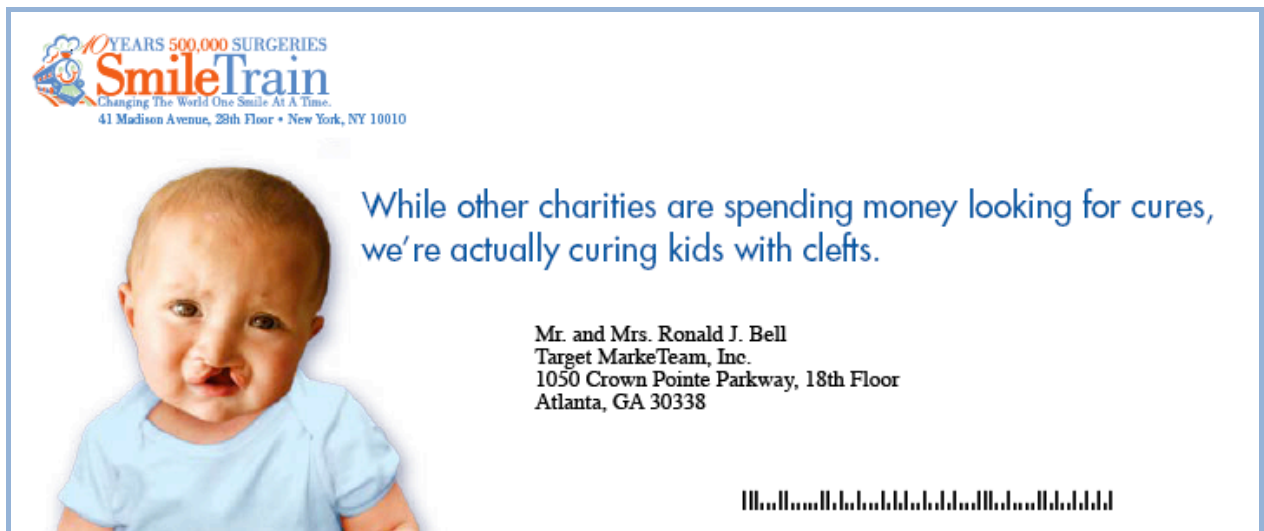
Notes: This table is structured exactly like Table 3, but with the five individual campaigns disaggregated.

Appendix A: Smile Train's Clientele—Picture of a Child with a Cleft Problem



Appendix B:

Baseline Smile Train Envelope and Letter





We're the only charity that has actually found a cure and is on the way to eradicating a medical condition from the face of the Earth.

Dear

Dateline

I'm sure that many charities ask you to help fund research that may... someday... hopefully... possibly find a cure for their disease.

But Smile Train has already found the cure for clefts, and we've used it to provide free cleft repair surgery to 500,000 poor children around the world.

Our programs in the two most populous countries in the world – India and China – are now operating on more children every day than are born with clefts. In other words, every day, there are fewer kids living with unrepaired clefts in these two countries than ever before. We're on the way to total eradication of clefts in these two countries.

But there are still millions of kids living with unrepaired clefts. Let me tell you a little bit more about Smile Train and why we're different from every other charity on Earth:

Today, millions of children in developing countries suffer with cleft lip or palate. Clefts happen when the roof of the mouth or the top lip (or both) doesn't close properly during pregnancy. The result is a hole that is both unsightly and very harmful to the child's development.

Many children with clefts are abandoned at birth, left to die, or dropped off at orphanages. Others die from disease or malnutrition because their cleft makes it impossible to eat properly to receive sufficient nutrition.

Every child born with a cleft faces a life of shame and suffering. Mocked and taunted by the other children, they are too ashamed to attend school.

But it doesn't have to be that way.

With your help, Smile Train can save every child living with a cleft with a simple, relatively inexpensive surgery that...

...can cost as little as \$250...

...can take as little as 45 minutes...

...and changes a child's life permanently.

The results are remarkable. I've watched the tears stream down the cheeks of children who cannot believe their long nightmare of living with a cleft has finally ended...

...all because someone like you made a gift to Smile Train to help pay for the simple surgery their desperately poor parents could never afford, no matter how hard they worked or how much they scrimped and saved.



(over, please)

Because of the support Smile Train received from friends like you, clefts will soon be a thing of the past in China and India. Thanks to hundreds of Smile Train surgeries every day in these two countries where most of the world's clefts occur, we have the capacity to operate on every child born with a cleft while also saving every child who already has a cleft.

But we can't do it alone. We need friends like you to help us eradicate clefts in 75 of the poorest countries around the world.

Join us and you'll like the fact that:

- Cleft repair is permanent – in as little as 45 minutes, a child can be given a new smile and a second chance at life.
- We have the lowest cost per surgery of any cleft charity – by partnering with local doctors and hospitals in developing countries, we can help 10 times as many children for 1/10th the cost of a mission organization.
- Our partner doctors contribute their time, talent, and resources to make very poor – but very proud – communities become self-sufficient.
- Because Smile Train works in desperately poor countries, your gifts go even further. In impoverished places like Ethiopia, Inner Mongolia, Rwanda, Bangladesh and Peru, hundreds of millions of families live on less than one dollar a day – making a single U.S. dollar worth 100... 500... perhaps even 1,000 times more than it is here in America.
- With one gift, a child can be given a brand new life. Surgery gives them a new smile and a second chance at life.

With compassion and hope as your guide, I hope you can send us a gift of \$25 that can cover the cost of sutures for one cleft surgery...

...\$50 that can cover the cost of anesthesia for one surgery...

...\$75 that can cover the cost of sutures and anesthesia...

...\$125 that can cover half the cost of one surgery... or even a most generous donation of \$250 that can cover the cost of a complete cleft surgery.

Your gift today – of any amount – will help us reach more children who are hoping, praying and yearning for the opportunity for a new life without a cleft.

I guarantee you that your donation will put a smile on the face of a little kid, and one on your face, too!

Thank you in advance for "coming aboard" Smile Train,



Brian Mullane
Co-Founder / President

P.S. To show you the dramatic difference cleft surgery can make in a child's life, I've enclosed a few photos of some of the children helped by Smile Train. Send a gift today, and we'll use your support to help little kids born with clefts – not a single penny will be wasted. Please be as generous as you can – thank you!

To make an immediate gift, please visit www.SmileTrain.org to donate online. Thank you.

“Once and Done” Smile Train Envelope and Excerpt from Letter





*One child.
One surgery.
One gift is all it takes.*

Dear Friend of Children,

If you're the kind of person who likes to get things done, cross things off your to-do list, and see immediate results, then I have a very simple and rewarding proposition:

If you could make just *one* gift to provide *one* surgery for just *one* child with a cleft, you'll free a little boy or girl from a life of pain and suffering *forever*.

In return, you will experience the tremendous satisfaction of knowing that you made something very special happen – your *one* good deed saved a child's life.

If that sounds too good to be true, it's not. Let me tell you why Smile Train is so different from other charities...

Today, millions of children in developing countries suffer with cleft lips and/or cleft palates. A cleft happens when the roof of the mouth or the top lip (or both) doesn't close properly during pregnancy. The result is a hole that is both unsightly and very harmful to the child's development.

Being born with a cleft in a developing country can be a life sentence of shame and suffering.

In parts of Africa, children born with clefts are all given the name "Ajok," which means "cursed by God." The shame of bearing a child with cleft is so unbearable that many children are abandoned soon after birth by their families. The "lucky" ones survive to spend the rest of their childhood in orphanages.

Most children with clefts never eat or speak properly. They can't go to school or hold a job. They're often too ashamed to go out in public, where they are taunted mercilessly by other children.

But it doesn't have to be that way.

Unlike other charities, we're *not* trying to cure world poverty... we're *not* trying to end starvation... and we're *not* trying to raise money for expensive exploratory research that may one day, eventually find a cure.

In fact, we already have the cure for clefts – all it takes is one simple, safe, and relatively inexpensive surgery to cure a child's cleft permanently.

It can take as little as **45 minutes**.

It can cost as little as **\$250**.

It changes a child's life forever.

All it takes is just *one* person like you to make a single donation that will help pay for cleft repair surgery for one child.

And since just *one* surgery can cure a child completely, Smile Train only needs to ask our donors for just *one* gift.

(over, please)



We've found the cure. We just need help delivering it.

When Smile Train was established ten years ago, we threw out everything "people knew" about curing clefts or running a non-profit organization.

Other charities were satisfied with bringing a few American surgeons overseas to operate on a handful of children over brief one- or two-week trips. But more kids are born with clefts every week than most charities operate on in a year.

With millions of children suffering from unrepaired clefts, Smile Train knew we needed local doctors and local hospitals in developing countries to assist us. So we developed surgical training programs using interactive DVDs to help train tens of thousands of surgeons around the world.

We recruited doctors, clinics and hospitals in the countries that had the largest number of unrepaired clefts, rather than focusing on countries where U.S. surgeons would like to travel.

We kept our staff (and overhead) to a minimum, using technology and the internet to communicate with medical staff in 76 countries around the world.

Our local doctor-partners volunteer their time and talents to provide free treatment for poor children through free training, free medical equipment and financial support. They dramatically leverage our support by donating their time, talent and resources.

When a child with a cleft shows up at a Smile Train medical facility, we can usually schedule surgery within 24 hours. There's no waiting for a surgical team to arrive because all of our surgeon-partners are right there – on the scene – with the training and capability to operate.

Give a kid a second chance at life.

Send us a gift of \$25 that can cover the cost of sutures for one cleft surgery...
\$50 that can cover the cost of anesthesia for one surgery... \$75 that can cover the cost of both sutures and anesthesia... \$125 that can cover half the cost of one cleft surgery...

...or – best of all – a most generous donation of \$250 that can cover the cost of a complete cleft surgery for a young boy or girl that will change their life forever.

Join us today and put a smile on the face of a child and a smile on your face, too!

Best wishes to you and your loved ones,



Brian Mullaney
Co-Founder / President

P.S. One of the things our supporters like most about helping Smile Train is that all it takes is one surgery to save a child forever. Even in today's uncertain economy, this is an "investment" in a poor child's future that will continue paying dividends for a little kid's entire life. Thank you.

To make an immediate gift, please visit www.SmileTrain.org to donate online. Thank you.

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