

**Crowding Out and Competition in Charitable Giving: The Impact of Thank-  
You Gift Incentives**

Senior Project in Cognitive Science

Harrison Tracy

Yale University

Advised by George Newman

Submitted to the faculty of Cognitive Science in partial fulfillment of the requirements for the  
degree of Bachelor of Science

April 20, 2018

## ABSTRACT

Since most charities rely on fundraising for revenues, charities may be forced to compete with one another to receive funds from donors. In order to encourage giving, a common practice among charities is to offer incentives, such as a thank-you gift. However, there is mixed evidence as to whether the effect of incentives on charitable giving is positive or negative for the charity offering incentives and for other charities competing for fundraising. We conducted two online studies in which participants had the option to donate to two or three charitable crowdfunding campaigns and the number of campaigns offering a thank-you gift incentive was varied. As predicted, we found that incentives did not significantly influence donors' choices and thus did not affect giving levels to the overall charitable space. Specifically incentives did not appear to create value by bringing in new donors or nor destroy value by causing donations to shift from one particular charity to another. After the costs of offering incentives were factored in, charities' collective profits were significantly lower when thank-you gifts were offered compared to when they were not.

*Keywords:* charitable giving, incentives, crowding out, competition, thank-you gifts, crowdfunding

## 1. INTRODUCTION

On January 31, 2018, Yale's Class of 2018 officially launched its Senior Class Gift campaign, an annual drive sponsored by the Alumni Fund to raise unrestricted, current use funds for Yale. A heavily promoted feature of this campaign was that any senior who donated would be entitled to receive a Class of 2018 t-shirt. This is one example of a tactic that many charities employ in their fundraising efforts – offering a thank-you gift as a means of encouraging donations. Given the importance of fundraising for charities, much research in psychology, economics, and marketing has been devoted to examining what factors affect charitable giving. From a social welfare perspective, it is imperative to understand the effectiveness of incentive schemes that charities offer, as incentives that cost charities money and lead to decreased donation levels will prevent charities from providing maximal positive impact with their resources.

Offering incentives to donate can lead to counterproductive outcomes for charities due to motivation crowding out, which occurs when an extrinsic incentive decreases behaviors that are intrinsically motivated (Deci, 1971; see Deci, Koestner, & Ryan, 1999 for a meta-analysis; see Frey & Jegen, 2002 for a review). Recent laboratory and field experiments have looked at the effect of thank-you gifts on charitable giving to determine whether thank-you gifts are demotivating incentives that lead to crowding out. Newman and Shen (2012) and Chao (2017) both conducted studies that indicate offering thank-you gifts reduces charitable donations. Although, on the other hand, Eckel, Herberich, and Meer (2016) demonstrated in a large-scale field study that thank-you gifts do not affect donation behavior positively or negatively. Thus, the effect of thank-you gifts on charitable giving likely varies based on context.

This study adds to the growing body of research on thank-you gifts by exploring their impact in a context that, to our knowledge, has yet to be tested. In our study, participants face a donation decision in which they can give to multiple charities, and either none, one, or all of the charities offer a gift. We believe this multi-charity context is important and worthwhile to study because all prior research involving thank-you gifts has involved participants encountering one charity in a gift or no-gift condition. Participants never saw a mix of charities or certain charities offering gifts and others not. A study in which participants see such a mix of charities more closely resembles how people decide to donate in real life, as people typically do not consider one charity solicitation within a “vacuum”. Additionally, a multi-charity design allows us to build upon the nascent literature that has examined the competitive effects of charities soliciting donations from the same pool of potential donors. For example, we can determine if thank-you gift incentives are better for the overall charity space because they draw in more donors rather than “stealing” donors from other charities and resulting in less money donated in total to all charities.

Furthermore, to add to the ecological validity of our study, the interface participants experienced when reading about the charities and choosing to donate was modeled after a crowdfunding platform interface. Crowdfunding platforms like Kickstarter, Indiegogo, and GoFundMe have become increasingly popular and many charities launch campaigns on these platforms in order to raise money for a particular cause. Since its founding in 2009, Kickstarter has helped over 140,000 successful projects raise a collective \$3.15 billion (“Kickstarter Stats — Kickstarter,” 2018) GoFundMe has raised over \$5 billion since its 2010 launch (“About Us,” 2018). Notably, for both their philanthropic and business-oriented campaigns, a key feature of Indiegogo and Kickstarter is that in return for supporting a particular campaign, donors receive

certain gifts or perks depending on how much they give. On the other hand, campaigns on GoFundMe, which typically involve raising money for people, groups, or organizations in need, do not offer any sort of gifts or perks to donors. The results from our study may then be able to provide some guidance on the effectiveness of thank-you gifts within the domain of crowdfunding and help lead to optimal campaign design.

The remainder of this paper will be organized as follows. First, we will review the relevant literature on incentives for charitable giving and competition between charities. Next, we describe our experimental design and the new questions our study addresses. We then present and interpret the results from our studies and discuss their practical relevance as well as how they build upon past research.

## **2. LITERATURE REVIEW**

### **2.1. Crowding Out of Altruistic Motivation**

While considerable literature within psychology and economics finds evidence of extrinsic incentives crowding out intrinsic motivation for a task (Deci, 1971; Deci et al., 1999; Gneezy & Rustichini, 2000; Frey & Jegen, 2002), we focus our review on studies of motivation crowding out within prosocial contexts because they are most relevant to our present study.

There are currently three primary explanations as to why external incentives crowd out internal, altruistic motivations. The first is that such incentives directly undermine people's altruistic motivations (Deci, 1971). An alternative account draws upon an attention-based multi-attribute choice model, which suggests that when people make choices, they overweight salient attributes and underweight less salient ones (Bordalo, Gennaioli, & Shleifer, 2013; McGill & Anand, 1989). Thus, the offer of an external incentive such as a thank-you gift may cause people to shift their attention away from prosocial, altruistic considerations and towards more

economically minded cost-benefit considerations, leading to reduced engagement in an altruistic task (Heyman & Ariely, 2004; Wang, Zhong, & Murnighan, 2014). A third explanation is that receiving an incentive like a thank-you gift diminishes the quality of a donation as a self-signal of altruism, as it may signal to others that one's altruistic motivations are not entirely pure (Bénabou & Tirole, 2006; Heyman & Ariely, 2004). This third account is less pertinent to our study because it involves participants making donations in a private setting and their donation decisions are not publicized.

Newman and Shen (2012) conducted the first study to examine the effectiveness of small non-monetary thank-you gifts as incentives for charitable giving. These thank-you gifts were conditional, meaning that donors received the gifts in exchange for donating. First, Newman and Shen observed that people expect that the offer of a thank-you gift would increase donations, which may explain why charities so commonly offer them as incentives. However, such offers actually led to reduced giving. This counterintuitive effect was found to be quite robust, as it was present for both real and hypothetical donations, familiar and unfamiliar charities, and high-value and low-value gifts. Furthermore, the authors ruled out several potential mechanisms that may have caused the effect; inferences about the charity's quality, how desirable or undesirable the gifts were deemed to be, and simple anchoring effects did not explain the effect. Instead, the authors found support for Deci's (1971) crowding out hypothesis that thank-you gifts directly undermine altruistic motivations by creating ambiguity about whether one is donating to receive the gift or to help the charitable cause. Importantly, when Newman and Shen (2012) reframed the purpose of the thank-you gift to be altruistic and raise additional awareness for the cause, participants gave just as much to the charity as those in the no-gift control. In that situation, there

was less ambiguity about one's motives to donate because the gift itself also helped the cause and so the crowding out effect consequently disappeared.

In a recent field and online laboratory study also examining thank-you gifts, Chao (2017) did not find evidence to support this account, but instead reached the conclusion that crowding out may be a result of the attention-based mechanism. The field experiment was run in collaboration with a public radio station, which mailed previous donors membership renewal requests with either no gift or one of two types of a thank-you gift. These gifts were offered if donors gave more than \$180. In the "swag" condition, donors were eligible to receive a travel tumbler with the radio station's logo. In the "meals" condition, the station offered to provide 60 meals to the local food bank as a thank-you gift. Similar to Newman and Shen's (2012) design, this meals gift served as a gift that still had an altruistic purpose and so crowding out may not occur in this condition because the gift may not directly undermine donors' altruistic motivations. However, Chao (2017) observed that people in both gift conditions were less likely to donate than those in the no-gift condition. Chao also found that "crowding out was driven by those who likely had relatively higher intrinsic motives (i.e. those who chose to give higher amounts the previous year)". This result is consistent with the attention-based mechanism for crowding out because for people with higher intrinsic altruistic motives to begin with, a shift in attention from such motives would be more likely to cause them to decide against donating.

Chao (2017) also ran a complementary online study using an Amazon Mechanical Turk (mTurk) subject pool. Subjects filled out a brief "opinions and demographics" survey and were asked to donate their \$0.15 bonus to the Red Cross at the end of the survey. Subjects were either offered no gift or a gift that varied in its desirability (high desirability = \$0.01 Amazon gift card; low desirability = \$0.01 Staples.com gift card) and its salience (high salience = image of gift

card included in offer; low salience = no image included). Results indicated that subjects were only less likely to donate compared to the no-gift control when the gift had low desirability and high salience. In all other gift conditions, donation frequency did not differ from the control. This finding is in line with the notion that attention has a mediating role in crowding out. When a thank-you gift is undesirable and increased attention is brought to it, people overweight their lack of interest in receiving the gift and underweight altruistic motivations to give, leading to reduced giving. However, this result also contradicts one of Newman and Shen's (2012) findings: that both desirable and undesirable thank-you gifts lead to crowding out.

## **2.2. Incentives with Positive Effects**

Not all types of incentives lead to reductions in donation behavior. Several field studies have found that providing potential donors with an unconditional gift can increase overall donation frequency. Crucially, these unconditional gifts, such as luggage tags or postcards, are given to potential donors in conjunction with charities' requests for donations and so every potential donor receives a gift – regardless of whether or not they subsequently decide to donate. Falk (2007) conducted a study in which a charity mailed roughly 10,000 donation solicitations that either contained no gift, a small gift of a postcard and envelope, or a large gift of four postcards and four envelopes. Compared to the no gift condition, the inclusion of the small gift led to a 17% increase in relative donation frequency while the inclusion of the large gift led to a 75% increase.

This result was replicated in another field study, which found that giving a small gift along with the donation request increased donation frequency by approximately 5% (Alpizar, Carlsson, & Johansson-Stenman, 2008). Although, it should be noted that the increase in donations that stemmed from the small gifts was not substantial enough to recoup the costs of the



gift. The authors explain these findings in terms of reciprocity – after receiving a gift from the charity, people feel the need to return the favor and donate (Alpizar et al., 2008; Falk, 2007). This explanation is consistent with the notion that feelings of gratitude facilitate prosocial behavior even when helping is costly (Bartlett & DeSteno, 2006).

A recent field experiment compared the effects of unconditional gifts and conditional gifts (i.e. thank you gifts) on donation behavior (Eckel, Herberich, & Meer, 2016). The authors partnered with a large public research university's alumni association and mailed donation solicitation letters to 140,642 alumni who had not donated the prior year or were recent graduates. Potential donors were assigned to one of seven conditions, including a control with no gift, an unconditional high-quality gift (leather luggage tag with the university's logo), an unconditional low-quality gift (plastic luggage tag), a conditional gift (plastic luggage tag) with an opt-in option, and the same conditional gift with an opt-out option. The only gift type that significantly increased donation frequency was the high-quality unconditional gift; donors were twice as likely to give compared to the control. The unconditional low-quality gift and the conditional gifts had neither a positive or negative impact on donation frequency. Additionally, donors indicated that they did not necessarily dislike the conditional gifts, as significantly more donors chose to receive the gift across the opt-in and opt-out conditions. Similar to Falk (2007), the authors conclude unconditional gifts, particularly high-quality ones, can encourage donation behavior by engendering feelings to reciprocate.

Crucially, the way in which incentives are framed to potential donors are an important determinant of how they affect donation behavior. Holmes, Miller, and Lerner (2002) examined people's willingness to donate to a charity through an "exchange" purchase in which they purchased an item (scented candle) from a charity and the charity benefited from the proceeds. In

many ways, this sort of transaction is very similar to a conditional thank-you gift – people give money and receive an item in return for their donation. Yet, under this framing, participants gave more money to a charity when they were asked to make this exchange purchase than when they were simply asked to make a direction donation. Due to the presence of a social norm of self-interest in Western cultures, people often seek to masquerade prosocial motivations as being self-interested and therefore seek excuses, such as buying a gift, to account for prosocial behavior (Miller, 1999; Miller & Ratner, 1998).

In a recent follow-up study, the importance of framing is again illustrated. Over a series of experiments, Zlatev and Miller (2016) found that people are more willing to donate and give more money when donating is framed as buying an item with the proceeds going to charity than when donating is framed as giving money and receiving an item in return. The authors explain this difference with the conclusion that the different frames highlight different alternative situations. When prosociality is made salient in the donate frame, people think about the alternative of behaving purely altruistically. When self-interestedness is made salient in the buy frame, people think about the alternative of behaving purely self-interestedly. This interpretation is supported by norm theory, which holds that when people make decisions, they evaluate their present decision in comparison to relevant norms evoked by the situation, such as acting out of pure altruism or pure self-interest (Kahneman & Miller, 1986).

Under certain circumstances, financial incentives can lead to increases in donation. For example, donation matching – a form of a conditional incentive in which one donor pledges to match the contributions of others at a given rate – has been found to increase donation frequency and amount donated per contribution (Karlan & List, 2007). Evidence suggests that lotteries are also effective incentives (Landry, Lange, List, Price, & Rupp, 2006). In a field study involving

door-to-door solicitation, potential donors in two conditions received a raffle ticket with a chance to win either a \$250 or \$1000 prepaid credit card for every dollar they donated. People in these lottery conditions donated more money overall than people who were simply asked to give and people who were told that the cause had already received a \$1000 seed commitment from an anonymous donor. This result is particularly relevant to our present study because we employ a similar incentive offer (chance to win a \$10 Amazon gift card as a thank-you gift).

### **2.3. Competition between Charities**

There is currently limited research on the effect of competition between charities and specifically how one charity offering an incentive to donate affects the fundraising efforts of other charities approaching the same donor pool. Aldashev and Verdier (2010), who developed a theoretical model on fundraising competition among horizontally differentiated NGOs, highlight that “the crucial question is how effective fundraising efforts are in attracting new donors”.

While crowding out has previously been discussed within the context of donation levels to one charity, crowding out may also occur between charities. For example, if one charity offers an incentive as part of its fundraising that attracts donors who would have otherwise contributed to other charities, the total amount donated to all charities may be less overall and thus have a negative impact on charities as a whole. Much like the case of incentives on donation behavior, the studies that have been conducted indicate the effect of competition depends considerably on context and environment.

Several laboratory studies have examined whether multiple charities competing for fundraising can result in between-charity crowding out. In one such experiment, Corazzini, Cotton, and Valbonesi (2015) looked at donation behavior in a public goods game where multiple public goods were vying for contributions in order to reach a minimum threshold,

similar to how crowdfunding campaigns operate. They found that the increasing the number of projects vying for fundraising decreased total contributions and the likelihood that any one project reached its fundraising goal. Krieg and Samek (2017) built upon this finding by employing a similar experimental design involving simultaneous public goods games in which contributing to one of the games was incentivized in certain conditions. When contributing to one of these games was incentivized with a conditional pay bonus, giving increased to both the incentivized and un-incentivized games. This suggests that overall giving to charities may not be negatively affected when some charities offer incentives and their competitors do not.

This effect of the monetary incentive is inconsistent with a prior study conducted by Reinstein (2007). Reinstein ran a series of laboratory experiments in which subjects had the option to donate to any of three charities. In certain stages, charities had price “shocks” where the experimenters would match 20% of each subject’s gift. Subjects gave more to charities offering this match incentive and were far more likely to decrease their giving to the unmatched charities, resulting in crowding out via “expenditure substitution”. As Eckel and Grossman (2003) have discussed, donation matches and conditional bonuses, which are also known as rebates, are payoff-equivalent. For example, donating \$10 and receiving \$2 back is equivalent to donating \$8 and having 25% matched, both result in the charity receiving \$10 and the donor effectively contributing \$8 (assuming a third-party is responsible for the donation matches and conditional bonuses). Thus, the framing of the incentive and the context of the giving scenario may best explain these differences in results, as people tend to give more in response to donation matches than to conditional bonuses (Eckel & Grossman, 2003).

Recent research relying on observational and field data suggests that strong competition effects between charities do not exist. In a unique field experiment conducted in cooperation

with five large charities in Netherlands, Donkers, van Diepen, and Franses (2017) studied the impact of sending more mail solicitations on short-run and long-run donation behavior. Over the span of one week, potential donors received donation requests from up to five different charities. The authors found that while there was a negative competitive effect of requests from other charities in the short run, this effect was weak and died out rapidly in the long run. Using data from charitable projects on the online crowdfunding platform Donorschoose.org, Meer (2017) observed similar results. As certain projects on the site receive matching grants for donations in an exogenous manner, Meer was particularly interested in whether the donation match incentive led donors to substitute away from other projects on the site. This was not the case; match incentives increased giving to the projects offering them, but a greater number of matched competitors did not crowd out giving to a particular and result in fewer donations contemporaneously or over time. These two studies provide preliminary evidence to suggest that competing charities fundraising through similar channels (i.e. mailers or online platforms) are not strong substitutes of one another.

### **3. PRESENT STUDIES**

Given the degree of mixed evidence in the literature regarding the effect of incentives on giving to particular charities and the effect of competition on giving to charities overall, the goals for our present studies are twofold. The first is to gather further evidence about how and under what circumstances offers of thank-you gifts crowd out charitable giving by studying them in a new context – multiple charities soliciting donations and offering thank-you gifts in an online crowdfunding paradigm. The second is to determine the effect of incentives on overall levels of giving and specifically whether incentives create value by bringing in new donors or merely cause donations to shift from one particular charity to another. Study 1 examined how the

number of charitable campaigns offering thank-you gift incentives impacts donation levels to the campaigns. Study 2 serves as a simplified version of Study 1 in which only two campaigns are present.

### **3.1. Predictions**

It is difficult to make a strong prediction in either direction about the effect of thank-you gifts, as prior research has hardly reached a consensus and our study is examining a previously unstudied context. With that in mind, we predict that most people's motivations to donate are robust and are therefore unaffected by incentives. As a result, people will not give more to campaigns offering thank-you gifts than campaigns not offering them. This would be a similar outcome to what Chao (2017) observed in his online experiment; even if thank-you gifts are desirable, they do not lead to increases in donations. However, we also recognize the possibility that thank-you gifts may increase giving. This may be true particularly in the case of our studies because the thank-you gift comes in the form of a lottery and Landry et al. (2006) found that lotteries (albeit ones with larger pots) led to increased giving and were more effective than other financial incentives.

Regarding the dynamics of competition when multiple campaigns are raising funds from the same donor pool, we predict that one campaign differentiating itself from others with incentives will not benefit from such a strategy, but it will also not hurt other charities – consistent with Meer (2017). Being the sole campaign to offer incentives will not bring in significant new donors, and even if it does, these donors are unlikely to donate significant amounts of money because they had low intrinsic motives to donate.

### **3.2. Study 1**

#### **3.2.1. Subjects and Pay**

301 subjects (51% male), aged 18-82 ( $M = 37.0$ ,  $SD = 11.2$ ) were recruited via Amazon mTurk using the research platform TurkPrime (Litman, Robinson, & Abberbock, 2017).

Participants were told they would be taking a short study about charitable giving and then completed an online survey administered through Qualtrics. They received a base pay of \$0.40 and an additional endowment of \$0.60, of which they could donate any portion to three charitable crowdfunding campaigns. 29 participants did not properly follow instructions and were excluded from analysis, resulting in a final sample size of 272 participants.

### 3.2.2. Campaign Stimuli

Using Adobe Photoshop, we created modified versions of postings for three real crowdfunding campaigns that participants would have the opportunity to donate to in our study. These postings were designed to closely resemble the content people see when they browse different projects on popular crowdfunding sites. Each campaign posting included an image that showcased the type of support the charity would be providing as well as the charity's name, a tagline summarizing its goal, and a two sentence-description of the project. In conditions where thank-you gifts were offered, the thank-you gift incentive was made very salient. Bold green text saying "Thank-You Gift Option" and an icon of a gift card were placed at the top of the posting. Information about each campaign's fundraising goal and how much it had already raised, which is typically included in postings online, was not included in our modified stimuli. This is because that sort of information is unrelated to our research question and might contribute additional noise to the data, even if it was standardized across all three campaigns.

The three campaigns used were as follows:

**Global Learning xPrize (GLX)**, which was raising money to fund the development and deployment of software and tablets that would help children in developing countries learn to read, write, and perform arithmetic within 15 months.

**Justin's Final Mission (JFM)**, which was raising money to build the first cabin at a new military family retreat center. The center's mission is to reduce veteran suicide by helping veterans struggling with posttraumatic stress.

**Campbell County Healthcare Foundation (CCHF)**, which was raising money to buy a PET/CT scanner for a rural Wyoming hospital so that it could provide higher quality treatment for its cancer patients.

These three campaigns were selected for a number of reasons. First, they were all campaigns present on crowdfunding sites and raising money at the time of our study<sup>1</sup>. Therefore, the money participants chose to donate would actually be able to go to the specified campaign. We facilitated this donation process on the behalf of our participants. Secondly, all campaigns were among the most popular (in terms of money raised) on their respective crowdfunding sites, which is indication to some extent of their efficacy. As a result, participants would likely view the charities behind each campaign in an equally favorable light, and so any differences in charitable giving to the campaigns would stem from the effect of thank-you gifts, not differing opinions about the charities themselves. This assumption was found to hold true and is discussed further in Section 3.2.4.

---

<sup>1</sup> One campaign, Global Learning xPrize, had ended its live fundraising period on Indiegogo at the time of the study. Although the project itself is still underway and soliciting donations, and so we were able to donate to it through its website.





*Figure 1: An example of a campaign posting in a thank-you gift condition.*

Additionally, the three campaigns were crowdfunding via separate sites, meaning that there was actual variance in whether or not the campaigns offered incentives. Specifically, GLX launched on Indiegogo and offered perks in return for specified levels of giving, which effectively function the same as a thank-you gift. JFM and CCHF did not offer any sort of incentive for donating, as the platforms they launched on – GoFundMe and YouCaring, respectively – do not have a perk or benefit feature.

Given that how people in need of charitable support are described can significantly affect donation levels (Kogut & Ritov, 2005; Small, Loewenstein, & Slovic, 2007), we were very deliberate in how we presented information about each campaign. Each image included in the posting showed identifiable victims (i.e. those would be receiving support from the charity) and portrayed how the charities would be helping these victims. All two-sentence descriptions were brief summaries of the campaign's actual descriptions online and had two key components: a factual statement of need and how the charity would address that need with its project.

### 3.2.3. Procedure


All participants were randomly assigned to one of three conditions: No Gifts, All Gifts, or One Gift. In all three conditions, they read the following:

In this study we are interested in learning more about how people make donation decisions with real money to charitable causes.

We have partnered with three actual charities that are currently raising money online through online crowdfunding. Below, you will see the three charities and brief descriptions of their campaigns.

**In addition to your \$0.40 base pay, we will endow you with a bonus of \$0.60. Though you do not have to, we ask that you consider donating a portion (or all) of this \$0.60 to one or more of the charities described below. Please carefully read the information about each charitable cause before you make your decision. If you choose to donate, we will deduct it from the bonus you will receive for this HIT and donate the money on your behalf to the charities you chose.**

In the All Gifts and One Gift conditions, participants were also told:

Additionally, campaigns with this icon, , **are offering a thank-you gift in return for donating.** If you donate at least \$0.10 to one of these campaigns, **you will be entered into a lottery to win a \$10 Amazon gift card.** The odds of winning the lottery are 1/100.

We equated the minimum donation amount needed to be eligible for the thank-you gift (\$0.10) with the expected value of the thank-you gift. Because people are generally risk-averse (Kahneman & Tversky, 1984), only those who derive some degree of utility from donating to charities will likely be inclined to donate. Those who do not derive utility from donating to charities would likely not want to risk \$.10 for an opportunity with an equal payoff. This thank-you gift incentive will therefore be effective if it convinces people who were initially on the fence about their decision – likely those with low to medium intrinsic altruistic motivation – to ultimately donate.

After reading these instructions, all participants were presented with three campaign postings (presentation order was counterbalanced) and used a slider to indicate how much, if any, of their \$0.60 endowment they wanted to give to each campaign. If they opted not to donate,

participants had to check an opt-out box labeled “No Donation”. For participants in the No Gift condition, none of the campaigns offered the thank-you gift incentive. For participants in the All Gifts condition, all three campaigns offered it. For participants in the One Gift condition, one campaign selected at random offered it.

Following their donation decisions, participants were asked series of questions related to campaigns they just encountered. They all indicated on a 7-point scale how likely they are to donate to each charity in the future (1 = *extremely unlikely*; 7 = *extremely likely*), their impression of each charity (1 = *extremely negative*; 7 = *extremely positive*), and to what extent they agreed with the following statement: “My donation decisions were altruistic and benefited others” (1 = *strongly disagree*; 7 = *strongly agree*). They also reported how many times per year they typically donated money charities. Participants in the All Gifts and One Gift conditions were asked to indicate on a 5-point scale to what extent did the offer of thank-you gifts factor into their donation decision (1 = *not at all*; 5 = *a great deal*).

Lastly, participants reported their sex, age, level of education, and level of income.

#### 3.2.4. Results and Discussion

Our central research question asks how do offers of thank-you gifts affect overall donation levels. To answer this, the total amount of money each participant gave to all three campaigns was calculated and a one-way analysis of variance was conducted to determine if donation levels differed across condition. Results indicated that the amount participants donated did not differ significantly between condition,  $F(2, 269) = .55, p = 0.58$ . As predicted, campaigns offering thank-you gifts did not lead to increases nor decreases in overall giving. Giving behavior across conditions did not differ significantly along demographic lines (sex,

education, and income). Average donation amounts to each campaign, by condition are presented below in Table 1.

	No Gifts	All Gifts	One Gift
<b>Campbell Co. Healthcare</b>	\$.070 (.011)	\$.063 (.011)	\$.095 (.015)
<b>Global Learning xPrize</b>	\$.056 (.010)	\$.058 (.008)	\$.067 (.010)
<b>Justin's Final Mission</b>	\$.070 (.010)	\$.070 (.010)	\$.059 (.009)
<b>Total</b>	\$.197 (.023)	\$.190 (.021)	\$.221 (.023)

*Table 1:* Study 1 average donation amounts (standard errors) by campaign and condition.

More participants donated at least \$.10 in the All Gifts condition (66%) and in the One Gift condition (66%) than in the No Gift condition (55%). However, a Pearson chi-square test revealed that there was no significant relationship between condition and the frequency of participants donating at least \$.10,  $X^2(2, N = 272), 3.31, p = .19$ . This result indicates that the offers of thank-you gifts did not lead to significantly more people donating to campaigns.

It is important to examine in further detail donation behavior in the One Gift condition in order to assess the competitive effects of one campaign offering a thank-you gift while others do not. While overall giving levels were not significantly different between the One Gift and No Gift conditions, the dynamics of the donation behavior underlying this result should be understood. For example, it is possible that the campaign offering the gift “stole” donations from participants who would have otherwise given to one of the two other campaigns. In this case, the gift-offering campaign would be better off, the other two campaigns would be worse off, and the

overall charity space would be no better off (and arguably worse off). It is also plausible that the thank-you gift offer crowded out donations to the campaign making the offer, which, in turn, led to a *crowding in* of donations to the other two campaigns. To test this, a paired samples t-test was conducted in which the amount donated to the gift-offering campaign was compared to the average amount donated to the other two campaigns. While people on average gave more to the campaigns not offering a gift ( $M = \$.076$ ,  $SD = .089$ ) than to the campaign offering a gift ( $M = \$.070$ ,  $SD = .099$ ), this difference was not significant,  $t(93) = .437$ ,  $p = .663$ . This suggests that the thank-you gift offer was not a substantial incentive nor disincentive for donating when it was only offered by one campaign and the campaigns not offering incentives were not significantly impacted.

Whether or not campaigns offered thank-you gifts also did not affect participants' impressions of the charity behind each campaign nor their likelihood of donating to the charity in the future. Across all conditions, the three charities were viewed equally favorably. Notably, participants in the All Gifts or One Gift Condition reported that the thank-you gift offer did not factor heavily into their donation decision ( $M = 1.81$ ,  $SD = 1.23$ ), which was significantly lower than the midpoint of "3" on the scale,  $t(186) = -13.02$ ,  $p < .001$ . Such low ratings on the impact of the gift lend further support to the conclusion that participants' decisions to donate in the context of our study might not be influenced by giving incentives.

Based on participants' self-reporting of how altruistic they believed their donation decision to be, the offer of thank-you gifts did not appear to reduce people's beliefs about how altruistically they acted. A two-way analysis of variance was conducted to examine whether participants who donated to campaigns offering gifts felt as altruistic as participants who donated without any gift incentive. Unsurprisingly, people who donated considered their decisions to be

more altruistic ( $M = 5.41$ ,  $SD = 1.33$ ) than people who did not donate ( $M = 3.08$ ,  $SD = 1.99$ ), as there was a very strong main effect of donation decision,  $F(2, 266) = 130.4$ ,  $p < .001$ . There was not a significant interaction effect of condition and donation decision, which indicates that people did not feel less altruistic about their donation decision when they were offered an incentive to donate, even though receiving the thank-you gift would benefit themselves. This result suggests that people's intrinsic altruistic motivations to donate were not necessarily crowded out by the extrinsic incentive, as they still felt as though they were acting altruistically even though they were eligible to receive a reward for their donation.

Based on the results discussed thus far, we believe it is reasonable to conclude that within the context of our study, the offer of the thank-you gift incentive did not have a significant effect on giving patterns. One explanation as to why this may be the case is that people's desires to donate may be very intractable to factors such as incentives. Depending on their level of intrinsic motivation to donate, people may decide ahead of time whether they want to give. Once a decision to donate has been made, they merely look for a cause that resonates with them and do not consider incentives. Our results seem to support this hypothesis.

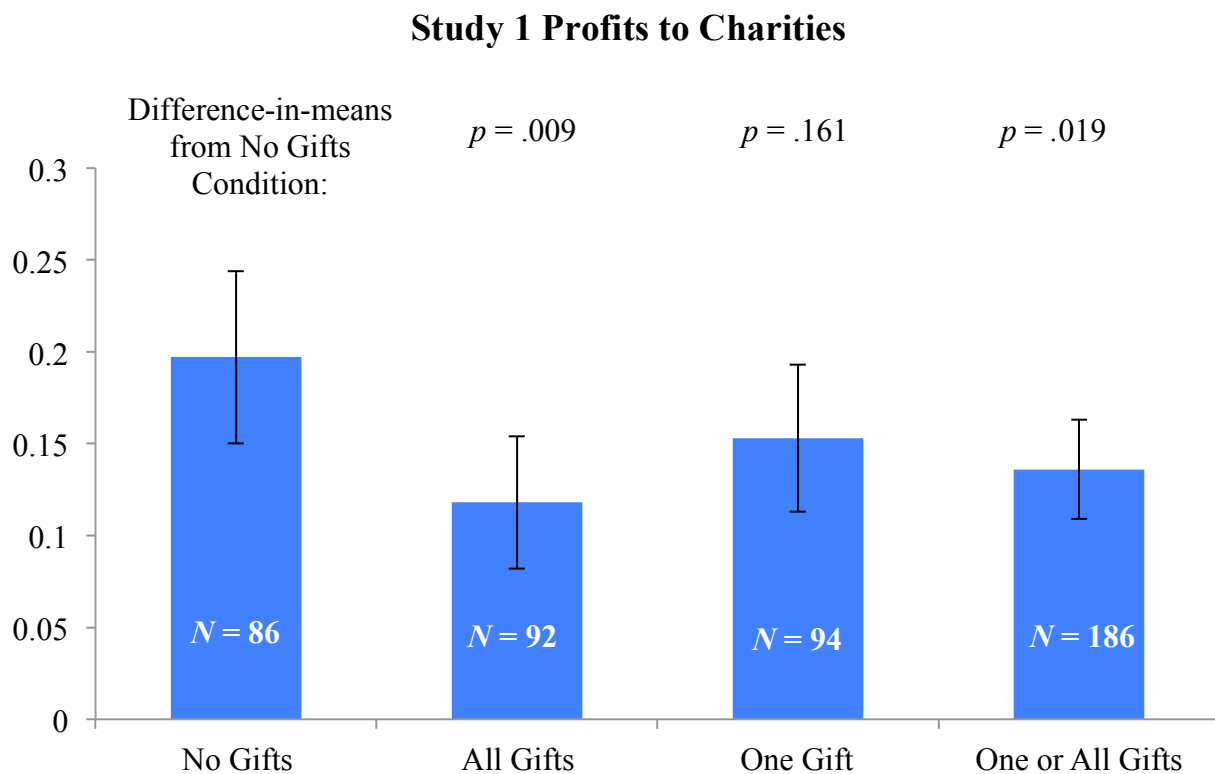
We sorted participants into two groups of roughly equal size based on their past donation behavior. Similar to Chao (2017), we consider participants who gave to charities an above-average number of times to have high intrinsic motivation to donate and participants who gave to charities a below-average number of times to have low intrinsic motivation to donate. A two-way analysis of variance was conducted to examine the influence of condition and donation history (strong vs. weak) on the amount of money donated to the three campaigns. Only the main effect for donation history was significant,  $F(2, 266) = 4.83$ ,  $p = .029$ , as participants with stronger donation histories gave more ( $M = \$0.238$ ,  $SD = .23$ ) than those with weaker donation histories ( $M$

= \$.178,  $SD = .20$ ). While this is a relatively intuitive finding, the lack of an interaction effect between condition and donation history indicates that thank-you gift incentives may not differentially affect people with different intrinsic motivations to donate, which is inconsistent with Chao's (2017) account of attention-based crowding out. Instead, it seems as though people's intrinsic motivations to donate, regardless of whether they are high or low, exert greater influence on donation behavior than incentives.

A final important consideration is the costs that the charities incur when they offer incentives, especially if the incentives are ineffective at bringing in additional donations. While in the context of our study, the charities themselves were not responsible for paying for the thank-you gifts, this is not always the case. For the purposes of our analysis, we examined the "profits" the charities earned by factoring in the effective costs of offering the thank-you gift incentive as if the charities incurred the costs of paying. Each time a donor gave at least \$.10 to a campaign that offered the thank-you gift incentive, the charity behind the campaign would effectively be paying \$.10 to receive that donation because they would be paying \$10 per 100 eligible donations. Thus, we calculated the collective profits of the three charities by subtracting \$.10 from their collective donation revenues if a donation of \$.10 or greater was made to a campaign offering the thank-you gift incentive in the One Gift and All Gift conditions.

A one-way analysis of variance revealed that there were significant differences in charities' profits across the three conditions,  $F(2, 269) = 3.52, p = .031$ . We then conducted a series of post-hoc independent samples t-tests. Charities' profits were significantly less when all three offered thank-you gifts ( $M = \$0.118, SD = 0.17$ ) than when none offered gifts ( $M = \$0.197, SD = 0.22$ ),  $t(176) = 2.64, p = .009$ . While charities' profits were also less when one campaign offered a gift ( $M = $.153, SD = .20$ ) than when none offered gifts, this difference was not

significant,  $t(178) = 1.41, p = .161$ . Comparing charities' profits in the No Gift condition to profits across the two gift conditions ( $M = \$0.136, SD = .19$ ) indicates that when at least one charity offers a thank-you gift, charities overall earn significantly less profit,  $t(270) = 2.37, p = .019$ . Taken together, when the costs of offering incentives are considered, charities earn greater collective profits when no incentives are offered.



*Figure 2:* The collective profits the charities earned, by condition, after accounting for the cost of the incentive. The One or All Gifts bar represents collective profits across the two conditions in which at least one thank-you gift was offered. Error bars represent 95% confidence intervals. *P* values correspond to independent samples *t*-tests (two-tailed).

### 3.3. Study 2

Within the One Gift condition in Study 1, giving patterns were quite erratic as donations to the gift-offering campaign compared to donations to the two other campaigns depended considerably on what particular campaign was offering the incentive (although these differences



were not significant). For example, when JFM offered the thank-you gift, participants gave more to the other two charities ( $M = \$0.096$ ,  $SD = .093$ ) than to JFM ( $M = \$0.069$ ,  $SD = .078$ ). However, when CCHF offered the thank-you gift, people gave less to the other two charities ( $M = \$0.042$ ,  $SD = .064$ ) than to CCHF ( $M = .061$ ,  $SD = .086$ ). As the reason behind this observation was not entirely clear, Study 2 serves as a follow-up to Study 1, employing virtually the same experimental design but with two charities to donate to, instead of three. This modified version of the original study allows for a cleaner comparison between the conditions in which only one charity offers a thank-you gift.

### 3.3.1. Subjects and Pay

408 subjects (51% male), aged 18-76 ( $M = 36.7$ ,  $SD = 11.9$ ) were recruited via Amazon mTurk using the research platform TurkPrime (Litman et al., 2017). Participants were told they would be taking a short study about charitable giving and then completed an online survey administered through Qualtrics. They received a base pay of \$0.40 and an additional endowment of \$0.40, of which they could donate any portion to two charitable crowdfunding campaigns. 30 participants did not properly follow instructions and were excluded from analysis, resulting in a final sample size of 378 participants.

### 3.3.2. Campaign Stimuli

The same campaign posting stimuli from Study 1 were also used in this study. No changes were made to the stimuli. Participants now had the choice of either donating to Justin's Final Mission or Campbell Co. Healthcare. We chose Global Learning xPrize as the campaign to exclude in our new two-campaign design for a few reasons. First, overall, Study 1 participants gave less to this campaign than the other two. Thus, if GLX were one of only two campaigns, participants' preference for the alternative campaign to GLX may overpower any potential

effects of thank-you gifts. Excluding GLX also meant both campaigns were for projects in the U.S., thereby narrowing the scope and focus of our study as well as creating less variation between stimuli that were already intended to be perceived similarly. Finally, in the One Gift condition in Study 1, the effect of GLX solely offering the thank-you gift appeared to be the weakest.

### 3.3.3. Procedure

Again, the procedure for Study 2 is very similar to Study 1. All participants were randomly assigned to one of four conditions: No Gifts, Both Gifts, JFM Gift, and CCHF Gift. In all four conditions, participants read the same instructions as before, except that they would be paid \$0.40 and had an endowment of \$.40 to donate to the two campaigns. For the three conditions involving thank-you gifts, the details of the incentive gift offer were also the same. After making their donation decisions, participants were asked to report the same measures as in Study 1.

### 3.3.4. Results and Discussion

Results from Study 2 largely corroborate the results from Study 1, providing further support for the conclusion that thank-you gifts in this context do not lead to crowding out or competition effects. Given the degree of similarity between the results from Study 1 and Study 2, only the most relevant findings and tests conducted are mentioned in this section. A one-way analysis of variance was conducted to determine if overall donation levels differed across condition. Results indicated that the amount participants donated did not differ significantly between condition,  $F(3, 374) = .40, p = 0.75$ . Once again, giving behavior across conditions did not differ significantly along demographic lines. Average donation amounts to each campaign, by condition are presented below in Table 2.

	No Gifts	All Gifts	JFM Gift	CCHF Gift
<b>Campbell Co. Healthcare</b>	\$.104 (.012)	\$.096 (.012)	\$.088 (.011)	\$.089 (.010)
<b>Justin's Final Mission</b>	\$.081 (.010)	\$.089 (.011)	\$.085 (.009)	\$.078 (.008)
<b>Total</b>	\$.186 (.017)	\$.186 (.016)	\$.172 (.015)	\$.170 (.016)

Table 2: Study 2 average donation amounts (standard errors) by campaign and condition.

More participants donated at least \$.10 in the three gift conditions than in the No Gift Condition. 71% donated in the Both Gifts condition, 71% donated in the JFM Gift condition, and 62% donated in the CCHF Gift condition compared to 60% donating in the No Gift Condition. A Pearson chi-square test revealed that there was no significant relationship between condition and the frequency of participants donating at least \$.10,  $\chi^2(3, N = 378), 4.39, p = .22$ . This result suggests that the offers of thank-you gifts did not lead to significantly more people donating to campaigns. In terms of the competitive effects of offering thank-you gifts in the two conditions in which only one campaign offered the gift, a paired samples t-test indicated that the gift-offering campaign did not receive significantly more donations ( $M = $.087, SD = .093$ ) than the campaign that did not offer the gift ( $M = $.083, SD = .093$ ),  $t(191) = .53, p = .597$ .

Again, it is worthwhile to consider the costs of offering incentives and examine how the two charities' collective profits differed depending on whether or not incentives were offered. Similar to Study 1, a one-way analysis of variance indicates that charities' profits did vary across condition,  $F(3, 374) = 3.48, p = .016$ . Specifically, a post-hoc independent samples t-test

revealed that the two charities profited less when one or both charities offered the thank-you gift ( $M = \$0.136$ ,  $SD = .12$ ) than when neither charity offered it ( $M = \$0.186$ ,  $SD = .17$ ),  $t(376) = 3.06$ ,  $p = .002$ . Thus, because incentives do not bring in additional donors or lead to increased giving, offering incentives is quite costly for the charities.

#### 4. GENERAL DISCUSSION

In both studies, we examined the how the number of charitable campaigns offering a thank-you gift incentive affected donation behavior. Our studies were designed to give participants an interface that modestly resembled actual crowdfunding platforms for the sake of having strong ecological validity. As predicted, incentives did not significantly influence donors' choices. Results suggest that it did not matter whether none, one, or all charities fundraising from the same pool of potential donors offer thank-you incentives, as the amounts people donated to the three campaigns did not differ. Furthermore, the incentive offer did not differentially affect how people with high versus low intrinsic altruistic motivations chose to donate or how altruistically donors felt they acted. It is somewhat difficult to tease out the underlying mechanism that explains the lack of an effect for thank-you gifts, but we believe it is because people's desires to donate are deeply entrenched and supersede more minor considerations, like incentives.

Theoretical models of the donor decision-making process lend support to this explanation of our results. In one such framework, (Sargeant, 1999) proposes five distinct dimensions that all contribute to one's ultimate donation decision. These dimensions include charity inputs, extrinsic determinants, intrinsic determinants, perceptual reaction, and processing determinants. Additional frameworks emphasize that personal values and inclinations (Bekkers & Wiepking, 2011; Bennett, 2006) and nonprofit brand personality (Venable, Rose, Bush, & Gilbert, 2005)

can have a powerful impact on the likelihood that people donate and how much they decide to donate. Extrinsic incentives such as thank-you gifts thereby only serve as one factor amongst a host of additional factors that affect people's donation decisions. If the incentive being offered is not particularly compelling, which may have been the case in our study, other decision-making factors may exert greater influence on people's donation choices.

As is the case with most studies of this nature, the results from our study are certainly not generalizable to all fundraising contexts. Certain types of incentives and framings of solicitations may be effective in one context, but not in another. Specifically, our study contributes to the growing literature on incentives and competition for charitable giving. The lack of motivation crowding out we observed is line with evidence that desirable thank-you gifts do not decrease donations in online giving (Chao, 2017) and in certain field contexts (Eckel et al., 2016). Additionally, our study provides experimental data that supports Meer's (2017) conclusion that when some competing charities offer incentives (such as price matches in Meer's case and thank-you gifts in ours), giving to charities not offering incentives does not suffer. This result is relatively encouraging for charities overall, as it implies smaller charities with fewer resources to hold fundraising campaigns involving incentives may not be crowded out.

Our study has important and practical implications for charities and their administrators. It is crucial for charities to consider evidence on the effectiveness of different fundraising strategies so that they can ensure they are making the best use of their resources and achieving maximal positive impact. If the charities were responsible for paying for the incentives they offered, it is even clearer that offering thank-you gifts was quite counterproductive. In Study 1 and Study 2 respectively, charities earned 30% and 27% less profit when at least one thank-you gift offer was present. Offering incentives is advantageous for charities if the benefits they bring

in outweigh the costs. However, in the case of our study, charities received no benefits from the incentives and so once costs are factored in, offering incentives results in a substantial negative impact on the charities in terms of the funds they are able to put towards their causes. As more becomes known about the dynamics of incentives and competition in different charitable giving contexts, charities can certainly benefit from research insights and learn to optimize their fundraising efforts.

#### 4.1. Limitations and Directions for Future Research

There are several limitations with our present studies that should be mentioned. First, participants were offered a non-monetary thank-you gift, which raises certain concerns. Charities typically offer small token items such as pens, tote bags, or luggage tags as thank-you gifts. Much of the literature on thank-you gifts has focused on non-monetary gifts (Newman & Shen, 2012; Eckel, et al., 2016), and so it is possible that donation behaviors in response to these sorts of gifts cannot really be compared to donation behaviors in response to monetary gifts like gift-cards. We used explicit language to frame the gift-card lottery as a thank-you gift, but participants might have perceived it as a rebate. While a rebate is another form of an incentive, people may behave differently if they represent the gift-card lottery as a rebate than as a thank-you gift, similar to how they respond more favorably to donation matching subsidies than rebate subsidies (Eckel & Grossman, 2003). Furthermore, not every donor actually received the thank-you gift; rather they simply became eligible to receive it. Although some charitable campaigns may implement a lottery or raffle gift system, participants may have felt that the thank-you gift was unorthodox or assumed they would not win the lottery, leading to perhaps a sense of skepticism or downplaying of its relative importance. In addition, the requirement that participants donate \$.10 to be eligible for the gift effectively served as a minimum donation

amount that was only present in conditions where gifts were offered. This may have anchored participants in those conditions to lower levels of giving after deciding to donate.

Although the expected value of thank-you gift (\$.10) was equal to the donation amount needed to be eligible for it, this is a relatively low expected value and may not have served as a sufficient enough of an incentive to bring in donors who would have otherwise not donated. This likely explains why participants self-reported that the thank-you gift did not significantly factor into their donation decisions. Perhaps a thank-you gift with a higher expected value would have been more compelling to participants and encouraged higher levels of giving as a result. In future studies, conducting a pilot experiment that assesses people's opinions and representations of a given incentive is advisable.

It is also important to consider the characteristics and motivations of our study's participants – mTurk workers. Research suggests that mTurk workers exhibit the same characteristics of student populations in that they are risk averse for gains, risk seeking for losses, and show the certainty effect (Goodman, Cryder, & Cheema, 2013). Because mTurk workers are risk averse and generally complete tasks for low pay, the fact that they could double their base pay in Study 2 and more than double it in Study 1 by not donating may have dominated the effect of the thank-you gift. People who routinely explore crowdfunding campaigns, the ideal subjects for our study, likely have higher intrinsic motivations to donate. An ideal experimental setup would involve actually manipulating the incentives charities offer in real-time on a crowdfunding platform.

All or some of these factors may have affected the thank-you gift's ability to serve as an incentive with legitimate swaying power. Though, we do not have any way of testing these hypotheses and therefore the lack of effects we observed might be in part due to the

characteristics of the thank-you gift itself, rather than our conclusion that people have strong donation motives sometimes unsusceptible to external influence. Due to the presence of null effects in our study, it is difficult to provide a satisfactory explanation that is supported by our data. Future research might attempt to clear up this ambiguity by examining whether incentives can affect charitable cause selection. For example, one such study might give participants opportunities to donate to a series of charities multiple times within one session. It would then be interesting to see whether continually increasing the incentives to donate to a dis-preferred charity can ultimately bring in donors who otherwise would not have donated. A field study employing a similar experimental design to this present study in which charities compete and some offer a physical thank-you gift would also help determine the robustness of the effect we observed and resolve some of our study's limitations regarding the thank-you gift we offered.

It is evident that there are still many unanswered questions about mechanisms that may affect charitable giving behavior, such as incentives and competition. Further research in this field will lead to a better understanding of under what contexts charitable giving can be increased.

## **AUTHOR CONTRIBUTIONS**

Tracy and Professor Newman developed the idea and designed the study together. Tracy launched the study and collected the data with the help of a graduate student, Min Ju Han. With guidance from Newman, Tracy analyzed the results and produced an initial draft of the paper. During the review process, Newman suggested that Tracy discuss the charities' profits more thoroughly, which Tracy then incorporated into the final paper.



## REFERENCES

- About Us. (2018). Retrieved March 22, 2018, from <https://www.gofundme.com/about-us>
- Aldashev, G., & Verdier, T. (2010). Goodwill bazaar: NGO competition and giving to development. *Journal of Development Economics*, 91(1), 48–63.
- Alpizar, F., Carlsson, F., & Johansson-Stenman, O. (2008). Anonymity, reciprocity, and conformity: Evidence from voluntary contributions to a national park in Costa Rica. *Journal of Public Economics*, 92(5–6), 1047–1060.
- Bartlett, M. Y., & DeSteno, D. (2006). Gratitude and Prosocial Behavior: Helping When It Costs You. *Psychological Science*, 17(4), 319–325.
- Bekkers, R., & Wiepking, P. (2011). A Literature Review of Empirical Studies of Philanthropy: Eight Mechanisms That Drive Charitable Giving. *Nonprofit and Voluntary Sector Quarterly*, 40(5), 924–973.
- Bénabou, R., & Tirole, J. (2006). Incentives and Prosocial Behavior. *The American Economic Review*, 96(5), 1652–1678.
- Bennett, R. (2006). Factors underlying the inclination to donate to particular types of charity. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8(1), 12–29.
- Bordalo, P., Gennaioli, N., & Shleifer, A. (2013). Salience and Consumer Choice. *Journal of Political Economy*, 121(5), 803–843.
- Chao, M. (2017). Demotivating incentives and motivation crowding out in charitable giving. *Proceedings of the National Academy of Sciences of the United States of America*, 114(28), 7301–7306.
- Corazzini, L., Cotton, C., & Valbonesi, P. (2015). Donor coordination in project funding: Evidence from a threshold public goods experiment. *Journal of Public Economics*, 128, 16–29.
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18(1), 105–115.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627–668.
- Donkers, B., van Diepen, M., & Franses, P. H. (2017). Do charities get more when they ask more often? Evidence from a unique field experiment. *Journal of Behavioral and Experimental Economics*, 66, 58–65.

- Eckel, C. C., & Grossman, P. J. (2003). Rebate versus matching: does how we subsidize charitable contributions matter? *Journal of Public Economics*, 87(3), 681–701.
- Eckel, C. C., Herberich, D. H., & Meer, J. (2016). *It's Not the Thought that Counts: A Field Experiment on Gift Exchange and Giving at a Public University* (Working Paper No. 22867). National Bureau of Economic Research.
- Falk, A. (2007). Gift Exchange in the Field. *Econometrica*, 75(5), 1501–1511.
- Frey, B., & Jegen, R. (2002). Motivation Crowding Theory. *Journal of Economic Surveys*, 15(5), 589–611.
- Gneezy, U., & Rustichini, A. (2000). Pay Enough or Don't Pay at All\*. *Quarterly Journal of Economics*, 115(3), 791–810.
- Goodman, J., Cryder, C., & Cheema, A. (2013). Data Collection in a Flat World: The Strengths and Weaknesses of Mechanical Turk Samples. *Journal of Behavioral Decision Making*, 26(3), 213–224.
- Heyman, J., & Ariely, D. (2004). Effort for Payment: A Tale of Two Markets. *Psychological Science*, 15(11), 787–793.
- Holmes, J. G., Miller, D. T., & Lerner, M. J. (2002). Committing Altruism under the Cloak of Self-Interest: The Exchange Fiction. *Journal of Experimental Social Psychology*, 38(2), 144–151.
- Kahneman, D., & Miller, D. T. (1986). Norm theory: Comparing reality to its alternatives. *Psychological Review*, 93(2), 136–153. <https://doi.org/10.1037/0033-295X.93.2.136>
- Kahneman, D., & Tversky, A. (1984). Choices, values, and frames. *American Psychologist*, 39(4), 341–350.
- Karlan, D., & List, J. A. (2007). Does Price Matter in Charitable Giving? Evidence from a Large-Scale Natural Field Experiment. *The American Economic Review*, 97(5), 1774–1793.
- Kickstarter Stats — Kickstarter. (2018). Retrieved March 22, 2018, from <https://www.kickstarter.com/help/stats>
- Kogut, T., & Ritov, I. (2005). The “identified victim” effect: an identified group, or just a single individual? *Journal of Behavioral Decision Making: Chichester*, 18(3), 157.
- Krieg, J., & Samek, A. (2017). When charities compete: A laboratory experiment with simultaneous public goods. *Journal of Behavioral and Experimental Economics*, 66, 40–57.
- Landry, C. E., Lange, A., List, J. A., Price, M. K., & Rupp, N. G. (2006). Toward an Understanding of the Economics of Charity: Evidence from a Field Experiment. *The Quarterly Journal of Economics*, 121(2), 747–782.

- Litman, L., Robinson, J., & Abberbock, T. (2017). TurkPrime.com: A versatile crowdsourcing data acquisition platform for the behavioral sciences. *Behavior Research Methods*, 49(2), 433–442.
- McGill, A. L., & Anand, P. (1989). The Effect of Vivid Attributes on the Evaluation of Alternatives: The Role of Differential Attention and Cognitive Elaboration. *Journal of Consumer Research*, 16(2), 188–196.
- Meer, J. (2017). Does fundraising create new giving? *Journal of Public Economics*, 145, 82–93.
- Miller, D. T. (1999). The Norm of Self-Interest. *American Psychologist*, 8.
- Miller, D. T., & Ratner, R. K. (1998). The disparity between the actual and assumed power of self-interest. *Journal of Personality and Social Psychology*, 74(1), 53–62.
- Newman, G. E., & Jeremy Shen, Y. (2012). The counterintuitive effects of thank-you gifts on charitable giving. *Journal of Economic Psychology*, 33(5), 973–983.
- Reinstein, D. (2007). *Substitution Between (and Motivations for) Charitable Contributions: An Experimental Study* (Economics Discussion Papers No. 2935). University of Essex, Department of Economics. Retrieved from <https://ideas.repec.org/p/esx/essedp/2935.html>
- Sargeant, A. (1999). Charitable Giving: Towards a Model of Donor Behaviour. *Journal of Marketing Management*, 15(4), 215–238.
- Small, D. A., Loewenstein, G., & Slovic, P. (2007). Sympathy and callousness: The impact of deliberative thought on donations to identifiable and statistical victims. *Organizational Behavior and Human Decision Processes*, 102(2), 143–153.
- Venable, B. T., Rose, G. M., Bush, V. D., & Gilbert, F. W. (2005). The Role of Brand Personality in Charitable Giving: An Assessment and Validation. *Journal of the Academy of Marketing Science*, 33(3), 295–312.
- Wang, L., Zhong, C.-B., & Murnighan, J. K. (2014). The social and ethical consequences of a calculative mindset. *Organizational Behavior and Human Decision Processes*, 125(1), 39–49.
- Zlatev, J. J., & Miller, D. T. (2016). Selfishly benevolent or benevolently selfish: When self-interest undermines versus promotes prosocial behavior. *Organizational Behavior and Human Decision Processes*, 137, 112–122.

## APPENDIX



## Global Learning xPrize

### *Help Educate the World*

250 million children in the world can't read, write, and do math. Help fund the development of software that will teach a child to read, write, and perform arithmetic, by themselves, without a teacher.



## Thank-You Gift Option

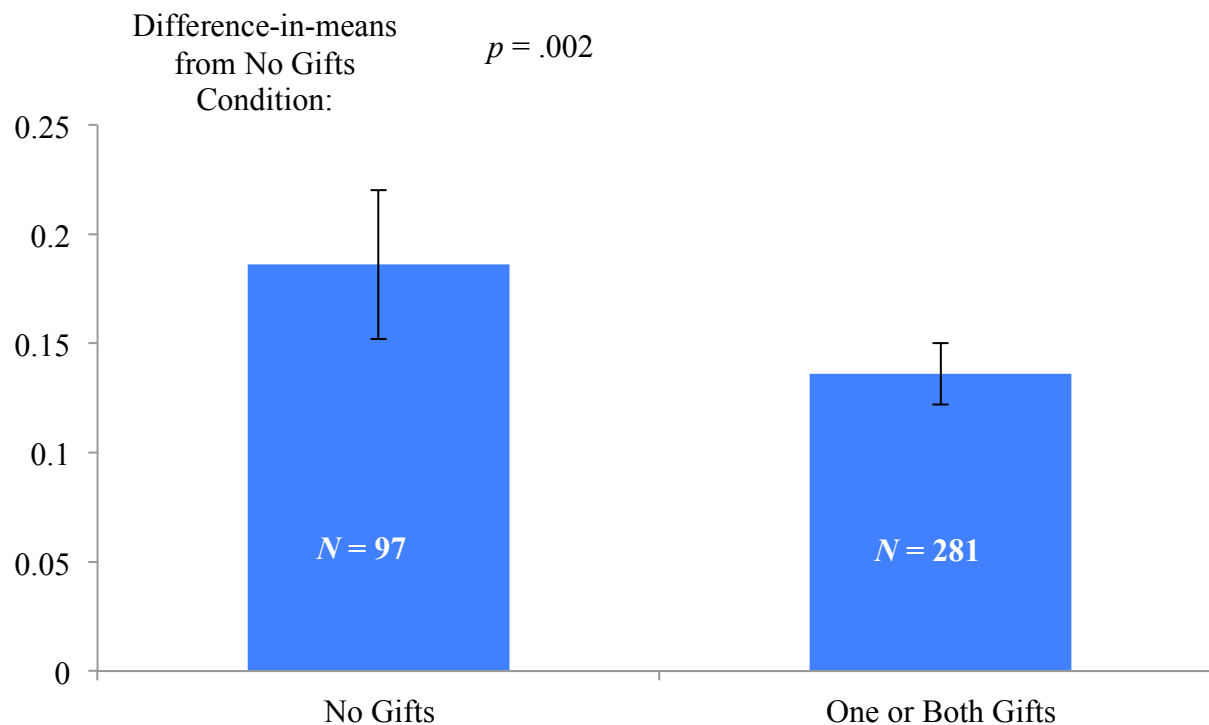
### Campbell County Healthcare Foundation

#### *Help Improve Cancer Care*

PET/CT scanners allow doctors to pinpoint the location of cancer, and create a targeted treatment plan. Help the rural hospital and cancer treatment facility of Campbell County, Wyoming afford PET/CT scanners so that cancer patients can get the treatment they need.

Figures 3 and 4: Examples of the two additional campaign postings used in our studies.

## Study 2 Profits to Charities



*Figure 5:* The collective profits the charities in Study 2 earned after accounting for the cost of the incentive. The One or Both Gifts bar represents collective profits across the three conditions in which at least one thank-you gift was offered. Error bars represent 95% confidence intervals. The  $P$  value corresponds to an independent samples t-test (two-tailed).