On the Limited Role of Efficiency in Charitable Giving

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Abstract
Performance measurement is considered useful in guiding donations to charities. We investigated whether efficiency rates predominately guide donations relative to available alternatives, or influence donation amounts. Across four studies (N = 460), participants evaluating charity advertisements saw randomly assigned efficiency rates presented as background information. Participants could pledge a portion of a gift card, offered in return for participation, to their pick of presented charities. Participants were sensitive to relative, but not absolute, efficiency, giving more often to more relatively efficient charities but generally did not pledge them more money. Even providing an explicit standard of efficiency did not create an absolute sensitivity to efficiency, suggesting that efficiency information, steers, rather than encourages, or discourages, donations overall.

Keywords
efficiency, donation, performance measurement, giving

Deciding whether, how much, and to whom to give is a daunting task, as there is an overwhelming number of charities vying for philanthropic donations. They vary in their mission, from saving frogs to providing wished-for experiences to seriously ill children, their scope from regional to global, and their budgets from tiny to billions annually.

Charities also vary enormously in the efficiency with which they deliver the donations to the targets of the philanthropy, rather than spending the donations on the bureaucracy of the charity itself. The Kids Wish Network, for example, collected approximately 18.6 million dollars in 2012, yet used only 240,000 dollars directly on

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its cause of granting sick children’s wishes (Hundley & Taggart, 2017). In contrast, Direct Relief International, in 2016, spent all US$1.104 billion of the money they raised from individual donations directly on providing humanitarian medical aid, with none going to administrative costs (Barrett, 2017).

Quantifiable performance measurement has become viewed as a particularly convincing way of appealing to donors (Cunningham & Ricks, 2004). Metrics that provide greater nonprofit transparency and accountability should direct funding toward more deserving charities, and may even increase total giving by increasing donor confidence (Cunningham & Ricks, 2004). We investigated to what extent performance measurement motivates donation.

A simple way of conveying charity efficiency is through the percentage of money collected that is spent on the actual cause, as opposed to the overhead of the organization (Stork & Woodilla, 2008). While conceptually simple, determining efficiency becomes more complex in practice, because exactly what counts as overhead is somewhat ambiguous. Furthermore, the marginal efficiency rate can differ from the overall efficiency rate: The first dollar received likely goes all to overhead, and the last dollar much more to the end cause.

Proponents of efficiency rates suggest they can improve and increase philanthropy, believing that donors allocate personal resources by using price and quality like they do in private goods consumption (Callen, 1994). High efficiency rates should signify a higher quality product that would then solicit greater donations. Several online services provide potential donors with ratings of efficiency, such as letter grades similar to a school report card, that are predominantly based on financial efficiency (Lowell, Trelstad, & Meehan, 2005).

However, efficiency rates and ratings are not without their opponents. Preoccupation with appearing efficient can cause charities to handicap themselves by avoiding investments in infrastructure that could increase actual effectiveness, or funding the most efficient programs rather than the most effective ones (Gregory & Howard, 2009; Hager & Wing, 2004). Consequently, some argue that comparing overheads between charities is meaningless (Bowman, 2006; Steinberg, 1986). Furthermore, misreporting efficiency is common in the nonprofit sector (Krishnan, Yetman, & Yetman, 2006). In one estimate, 75% to 85% of public charities misreport costs to appear more efficient (Bedsworth, Gregory, & Howard, 2008). Although opponents of efficiency rates argue that overemphasis on efficiency decreases charity effectiveness, both sides presuppose that people rely on these financial indicators in philanthropic decisions (Gregory & Howard, 2009).

Evidence for high efficiency rates positively affecting donation is limited (Szper & Prakash, 2011). Modest correlations have been observed between efficiency and donations given to, and volunteering for, particular organizations (Bowman, 2006; Callen, 1994). However, other studies have found that efficiency ratings are largely ignored. Only one in five donors studied consulted charity watchdog websites before making donations in the past year (Cnaan, Jones, Dickin, & Salomon, 2011). Hope Consulting (2012) reported that only 3% of donors claimed even to have considered alternatives by effectiveness, the information that efficiency rates are supposed to convey. Preliminary
laboratory studies show more of an effect: When choosing between two fictional charities, participants preferred to give to the option with a smaller overhead, although overhead was defined as percentage of the donation kept by the experimenter rather than as the efficiency of the actual charity (U. Gneezy, Keenan, & Gneezy, 2014; see their field study for evidence of how covering overhead can encourage donation). Caviola, Faulmüller, Everett, Savulescu, and Kahane (2014) likewise found that giving was sensitive to efficiency: Participants asked to imagine donating to a particular fictional charity stated that they would hypothetically give more to a more efficient charity, even if the less efficient charity was actually more effective, and saved more lives.

Expanding on prior work, we explore two ways in which efficiency might influence donations to charity. The first is through sensitivity to the actual level of efficiency: Charities that are highly efficient simply receive bigger donations. The second is through relative efficiency: Charities that are more efficient than immediately present alternatives garner the contributions, but the amount given is independent of absolute efficiency. Increased giving to more efficient charities could then be the result of more frequent, rather than more substantial, gifts.

Andreoni’s (1990) theory of warm-glow giving suggests that donations are made, at least in part, as the result of donors wanting to feel a “warm-glow”. But convincingly distinguishing between giving out of desire for that warmth, rather than warmth emerging as a natural consequence of giving, has proven difficult. Psychological studies on whether helping is done for egoistic reasons or is truly altruistic have been unable to reliably parse the two in real-world settings (Batson, 2014; Cialdini, 1991). Without settling the altruism debate, we can build on the notion that giving can be associated with a warm, affective component, and a colder deliberative component.

Previous studies suggest that there may be a general aversion to cold statistics in charitable donation. Jenni and Loewenstein (1997) found that appeals highlighting individual victims garnered larger donations than those emphasizing statistical victims, or large groups in need of aid. Informing donors of this single-victim bias did not cause increased donation to statistical victims but, instead, decreased donation to single victims (Small, Loewenstein, & Slovic, 2007). Small et al. (2007) suggest that this effect may exist due to a distinction, first proposed by Zajonc (1984), between a faster, more automatic affective system, and a slower, more effortful deliberative system. Participants, informed of their bias, may have deliberated about identifiable victims just as they normally deliberate about statistical victims, and so the affective system did not engage. The deliberative information conveyed by efficiency rates may similarly cause people to donate less money to charities, even if the efficiency rates are high.

Not only do donors respond differently to affective and deliberative information, but they also seem to become less sensitive to deliberative information when provided with more affective bases for their decisions. In Hsee and Rottenstreich’s (2004) study, donation amount was insensitive to number of pandas helped when potential donors were shown either a photo of one panda or photos of four pandas they could help. When the pandas were instead represented by dots, the more abstract and calculated donation decision became sensitive to the number of pandas helped. Consistent with
Small et al.’s (2007) findings that deliberation can suppress affective response, the effect was driven by decreased donation to a single panda represented by a dot, relative to one represented by a photo, with no difference between photos of four pandas or four dots representing pandas. Taken together, these studies suggest that donors not only react differently to deliberative and affective information, but that deliberative, numeric, information is also sometimes overridden by more affective responses, and that donor sensitivity to efficiency should be explored in affective contexts as well.

Another perspective on the potential impact of efficiency information is based on the general evaluability theory (Hsee, 1996; Hsee & Zhang, 2010; Hsee, Loewenstein, Blount, & Bazerman, 1999). This theory suggests that evaluations made between simultaneously available alternatives can differ from evaluations of each alternative made separately. Applying evaluability theory to efficiency ratings, sensitivity to efficiency relative to available alternatives, but not to absolute level of efficiency, may reflect the difference between single and joint evaluation, or between evaluating a single charity’s efficiency and choosing from a selection of charities. Participants without a reference point of how efficient a charity should be would use efficiency to choose between available options when presented with a selection, but not base their donation on the actual efficiency value. Such an effect could be apparent in their choice of a charity to give to and in their choice of how much to give.

In four studies, we explore the impact of efficiency rates on charitable giving. Study 1 explores the impact of relative rates on how people choose between charities, and the impact of the absolute rate on decisions about how much to give. That is, would a high efficiency rate make people give more, or would a better relative efficiency just attract more gifts? If choosing how much to give is the more affective component, and selecting a recipient is the more deliberative component, it might be that efficiency rates affect only those latter relative judgments. In Study 2, we expand the range of efficiencies investigated and remove affective information about the charities, to examine whether cold facts such as efficiency become more important in the absence of warm, affective appeals, consistent with earlier scalesensitivity findings. Studies 3 and 4 explore whether providing an explicit standard for charity efficiency causes an increase or decrease in donations when the presented charities clearly exceed or fall short of that standard. This might be expected if people care about charity efficiency but do not know how to interpret the levels, consistent with general evaluability theory.

**Study 1**

**Method**

**Participants.** One hundred thirty-eight undergraduates completed the study for partial course credit (one participant excluded for not indicating donation amount; demographic info was not collected in Study 1 but was for all subsequent studies; participants in Study 1 were drawn from the same participant pool as in Studies 2 and 3).
Materials. A cover survey stated, as part of the instructions, that participants had been entered in a lottery to win a 50-dollar gift card in exchange for their participation. The survey then asked participants to evaluate the effectiveness of the advertisements for four charities, using a 7-point Likert scale. The charities included in this study were the American Red Cross (RC), Save the Children (StC), American Heart Association (AHA), and Susan G. Komen for the Cure (SgK). Participants viewed one actual published print advertisement per charity, selected for being predominantly visual and relying on an emotional appeal, rather than laying out a logical justification for donation. Advertisements were selected to contain simple taglines, for example, “a little from you can mean a lot to someone else” (American Red Cross) or “imagine a life without breast cancer” (Susan G. Komen). A table listing basic background information was provided with each advertisement, as context to help evaluate advertisements. The table presented the charities’ mission statements alongside one more column, which differed by condition. In the two experimental conditions, this column provided the efficiency rates of the charities. In the control condition, the year the charity was founded was displayed instead. An explanation of how efficiency rates are calculated was provided to those who saw them: Efficiency is measured as cents per dollar spent directly on the cause rather than on raising more money, e.g., an efficiency of 48% would mean that 48 cents of every dollar raised went to the cause, with the remaining 52 cents constituting the overhead of the charity. Participants in the high efficiency condition saw efficiency rates for the four charities of 93%, 88%, 84%, and 76% ($M = 85.25\%$). The low efficiency group was provided with efficiency rates that were 20% lower: 73%, 68%, 64%, and 56% ($M = 65.25\%$). The chosen efficiencies were based on a previous survey of 1,007 American adults, which found that they estimate charities to be only 63.7% efficient, while holding that charities should be 77.6% efficient (Grey Matter Research & Consulting, 2008). Thus, the low efficiency group was intended to be in line with typical expectations, and the high efficiency group was intended to exceed the typically desired level of efficiency.

Efficiencies were randomly assigned to charities between participants. The order the charities appeared in the table was randomized as well. In the control condition, the year each charity was founded was randomly assigned, to control for the amount of information presented, but with numbers unlikely to have any consistent impact on donation decisions. A page thanking participants for their advertisement evaluations asked them to consider pledging a portion of the gift card to any or all of the charities presented. The amount pledged would be donated if they won the gift card. The instructions also stated that previous participants had pledged to donate 5 to 50 dollars of the total amount to create a social norm of giving, without suggesting an appropriate donation amount.

Procedure. On arrival, participants were told that they had been recruited to evaluate charity advertisements. After being explained these instructions as a group (up to four participants), they were seated at separated computer workstations to complete the survey, which reiterated the gift card details and instructions. Participants were randomly assigned to condition: high efficiency, low efficiency, or control. Participants
evaluated the four advertisements, presented in a randomized order, alongside the background information tables. Next, participants saw what appeared to be a concluding screen to the experiment, thanking them for their participation. This same page also asked participants if they would like to donate a portion of their potential winnings to one of the presented charities. The page again displayed the table of background information that contained the efficiency rates for the charities, or, for the control group, the year founded. Participants specified the recipient and amount they wanted to give. When indicating the recipient, participants had the option of selecting “any of the above.” Afterward, participants answered two free response questions, *How did you pick the amount you chose to donate?* and *How did you pick which charity you would donate to?* to explore whether self-reports reflect how efficiency affects donation. Participants were debriefed as to the true purpose of the study. A rating of charity worthiness and an estimate of average charity efficiency are excluded from analyses. All procedures were approved by an IRB.

**Results**

In this experiment, we can look at the impact of both the absolute and the relative levels of efficiency on giving. If people only care about relative efficiency, participants would prefer to give to the more efficient of the charities they saw, but the average donation amount would not differ by whether participants were in the low efficiency, high efficiency, or control conditions. If people are also sensitive to the actual level of efficiency, then we ought to see markedly more giving when the efficiency rates are high than when low. Comparison to the control condition would indicate, in this case, whether high efficiency increased donations, or low efficiency suppressed it.

These data allow us first to explore whether people are more likely to donate to the higher ranked charities. Second, they let us examine whether the people who pick, for example, the most efficient of the charities presented, choose a bigger gift size than people who decide to give to the least efficient charity. Third, we can see whether people who are offered charities with high overall efficiency give more overall than people who are given ones with low efficiency. Ninety-seven percent of participants chose to make a donation.

First, we looked at the distributions of donations, in the two experimental groups, to the first, second, third, and fourth most efficient charities presented. Participants specifying a recipient charity in the efficiency conditions (14 participants gave money without preference to whom it went) showed a preference for better ranked charities, $\chi^2(3, N = 76) = 26.9, p < .001$, Cramer’s $V = 0.34$ (47.4%, 22.4%, 23.7%, 6.58% selected ranks 1-4, respectively). Donation patterns did not differ between the low efficiency and high efficiency conditions, $\chi^2(3, N = 76) = 1.18, p = .76$, Cramer’s $V = 0.07$, suggesting that participants in these two conditions were using the efficiency estimates similarly in guiding donations (48.4%, 22.6%, 19.4%, 9.68% selected ranks 1 to 4, respectively, in the high condition; 46.7%, 22.2%, 26.7%, 4.44% in the low condition; see Figure 1). Participants in the control condition gave to charities irrespectively of assigned charity age, $\chi^2(3, N = 40) = 1.01, p = .80$, Cramer’s $V = 0.09$
(eight had no preference; 27.75%, 30.0%, 20.0%, 22.5% selected charities ranked 1-4, respectively, by age). Thus, more relatively efficient charities were more often selected as the recipients of the donations.

Next, we explored whether there was evidence for increased donation amounts to more efficient charities, the second process by which more efficient charities may solicit greater total donations. In the two conditions that saw efficiency information, donation amount did not differ by relative charity efficiency, $F(1, 74) = 0.003, p = .95, \eta^2 < .001$, indicating that efficiency rank did not play a significant role in determining amount given (rank 1 $M = \text{US}\$29.50, SD = 16.7; rank 2 $M = \text{US}\$28.94, SD = 18.6; rank 3 $M = \text{US}\$25.83, SD = 14.2; rank 4 $M = \text{US}\$33.00, SD = 23.3$).

Finally, we examined whether seeing charities that, overall, were considerably more efficient elicited higher levels of donation. Average amount donated did not differ by condition, $F(2, 134) = 1.15, p = .32, \eta^2 = .017$. Participants pledged to donate an average of US$27.06 of the 50-dollar gift card to charity: an average of US$30.33 in the high efficiency condition ($SD = 18.1$), US$26.94 in the low efficiency condition ($SD = 16.0$), and US$24.68 in the control condition ($SD = 16.8$; see Figure 2). The large variances suggest that participants were not simply defaulting to a donation of half of their potential earnings.

Although more relatively efficient charities collected more money overall, this was the result of increased donation frequency but not increased donation amount. Across the two experimental conditions, the first ranked charities were pledged, from the 90 participants, a total of US$1,065 dollars, while the fourth ranked charities were pledged US$165.
The two open-ended self-report questions were coded for any mention of efficiency. While efficiency did not play a role in deciding amount, with a single participant reporting using efficiency information to decide an amount to give, 35.6% of participants reported using efficiency information to select a donation target, $\chi^2(1, N = 180) = 33.4, p < .001$, Cramer’s $V = .43$.

Independent of efficiency effects, participants did find the charities differentially appealing, $F(3, 134) = 4.33, p < .001$, $\eta^2_p = .036$, with Susan G. Komen getting the highest ratings. This charity also received the most donations (36.8%), although the magnitude of its average donation was not larger (US$23.21 vs. the average donation of US$27.06).

**Discussion**

Donation amounts were not affected by whether low efficiency, high efficiency, or control information was presented. Nonetheless, participants preferred to donate to the best-ranked charity, albeit without adjusting their donation amount by the relative efficiency of the charity they chose. The results of Study 1 demonstrate sensitivity to relative charity rank rather than to absolute efficiency values. Furthermore, participants were deciding donation amount without sensitivity to the scale of efficiency, while choosing a recipient scale-sensitively to relative charity efficiency. This is consistent
with amount donated being a more affective process, and selection of charity being a more deliberative process. These results also suggest that general evaluability theory does not entirely account for efficiency insensitivity, because in the joint evaluation of charity efficiency, participant donation amount remained insensitive to relative efficiency.

In Study 2, we exaggerated low efficiency estimates to explore whether the insensitivity to absolute rates in donation amounts would persist even when the difference was much greater between the two conditions. One might expect the effect of relative rank to be slightly bigger in the low efficiency condition in Study 1, as well as the following study, due to the relative difference between two smaller numbers being greater than between two larger numbers with the same absolute difference.

Given the previous findings of differences between affective and deliberative processes in donation, we also explored whether affective information, provided by the charity advertisements, was dampening sensitivity to efficiency. The nature of the selected ads, as is generally the case, was not to provide logical justification for the charity or analysis of its effectiveness but, instead, to create an emotional appeal through bold, catchy graphics. The advertisement for Save the Children, for example, shows a portrait of a frontline health worker made from electrocardiograms of the children he saved. Study 2 also compared donation decisions made by participants exposed to advertisements with those made by participants not provided this affective information.

**Study 2**

**Method**

Participants. One hundred two undergraduates completed the second study for partial course credit (81.3% female; $M_{age} = 20.8$, $SD = 2.40$; 74% identified as Asian/Pacific Islander, 15% identified as Hispanic/Latino, 9% as White, and 3% as other; age not specified by 30 participants).

Materials. The high efficiency estimates remained 93%, 88%, 84%, 76% ($M = 85.25$%). Low efficiency estimates were made to be 60% lower (and 40% lower than the low efficiency group in Study 1: 33%, 28%, 24%, 16%, $M = 25.25$%). In the nonaffective condition, print advertisements were replaced with a blank page with the name of the charity written in a plain font. Participants could still judge charities by their names and mission statements but no longer by advertisement. The materials otherwise were unchanged from Study 1. The condition without efficiency information was eliminated.

Procedure. The same procedure was utilized as in Study 1, with the addition that participants were also randomly assigned to either an affective (containing print advertisements) or nonaffective (containing blank pages with the names of the charities in place of advertisements) condition.
**Design.** The design of this study was a 2x2 factorial with efficiency—high ($M = 85.25\%$) versus low ($M = 25.25\%$)—and affect—affective versus nonaffective charity information—as the two between-participants factors.

**Results**

As in Study 1, we first explored whether people are more likely to donate to the more relatively efficient of the charities they saw. We then tested for whether donation amount differed by relative efficiency. Third, we examined whether being presented charities with high overall efficiency attracted more overall giving than being presented ones with very low efficiency. With the addition of affective and nonaffective conditions, we also tested for whether the removal of affective stimuli influenced any of these processes. Ninety-five percent of participants chose to make a donation.

Donors remained sensitive to relative efficiency: Participants preferred to give to relatively more efficient charities, $\chi^2(3, N = 77) = 33.2, p < .001$, Cramer’s $V = .38$ (excluding 20 selecting no preference; 53.2\%, 18.2\%, 20.8\%, 7.79\% selected ranks 1-4, respectively; see Figure 3a). There was no detectable difference in sensitivity to efficiency rank between the low and high conditions, $\chi^2(3, N = 77) = 4.15, p = .25$, Cramer’s $V = .13$ (40.7\%, 22.2\%, 22.2\%, 14.8\% selected ranks 1-4, respectively, in the high condition; 60.0\%, 16.0\%, 20.0\%, 4.00\% in the low condition). Thus, relatively more efficient charities were again more often selected as the recipient of the donations. Although nonsignificant, the slightly increased sensitivity to relative efficiency in the lower condition could have been the result of greater relative difference between the lower numbers with the same absolute difference as the larger numbers.

Next, we explored whether this expanded range of efficiency influenced the amount donors were choosing to give. Once more, individual donations did not differ by the relative efficiency of the charity receiving the donation, $F(1, 75) = 0.87, p = 0.36, \eta^2 = .01$ (rank 1 $M = US$25.37, $SD = 15.2$; rank 2 $M = US$26.07, $SD = 14.6$; rank 3 $M = US$17.50, $SD = 15.2$; rank 4 $M = US$26.67, $SD = 20.2$; see Figure 4). Despite participants being sensitive to relative efficiency, and the spread of efficiencies between conditions being extreme, individual donation amounts were no smaller when participants were presented very low efficiencies than when efficiencies were high, $t(100) = 0.927, p = .36, d = .18$. Participants donated an average of US$25.30 ($SD = 16.0$) in the low condition, and US$ 21.48 ($SD = 14.7$) in the high condition. As before, the large variances in these values suggest that participants were not simply consistently pledging half of their potential earnings.

As a result of more frequent selection, but not increased donation amount, relatively efficient charities again collected more money overall. The first ranked charities were pledged a total of US$1,040 dollars, while the fourth ranked charities were pledged US$160.

Next, we explored whether the removal of the affective information, conveyed via print advertisement, influenced participant sensitivity to efficiency. Participants not seeing advertisements were more affected by efficiency rank than those exposed to advertisements, $\chi^2(3, N = 77) = 7.94, p =.047$, Cramer’s $V = .32$ (38.8\%, 25.0\%, 22.2\%,


13.9% selected ranks 1-4, respectively, in the affective condition; 65.8%, 12.2%, 19.5%, 2.44% in the nonaffective condition; see Figure 3b). Participants in the affective condition did not display a strong preference for any of the advertisements, $F(3, 48) = 2.02, p = .11$, $\eta^2_p = .038$ (RC = 4.38, SE = .23; AHA = 4.61, SE = .27; StC = 4.37, SE = .17; SgK = 4.72, SE = .26), though participants in the affective condition overall preferred certain charities, regardless of efficiency, $\chi^2(3, N = 36) = 7.98, p = .046$, Cramer’s $V = .272$ (RC = 30.6%, AHA = 13.9%, StC = 13.9%, SgK = 42.7%), while in the nonaffective condition, there was no detectable preference for any charity, $\chi^2(1, N = 41) = 3.36, p = .34$, Cramer’s $V = .17$ (RC = 14.6%, AHA = 24.4%, StC = 26.9%, SGK = 34.1%), despite participants still being provided with the name and mission statement of each charity. Average donation amounts did not vary between charities, $F(4, 97) = 0.37, p = .83$, $\eta^2 = .014$ (RC = US$22.06, SD = 14.3; AHA = US$22.33, SD = 17.0; StC = US$24.19, SD = 14.6; SgK = US$25.79, SD = 16.5; “any” = US$20.72, SD = 18.5).

We then explored whether individual donation amounts became more sensitive to efficiency in the absence of advertisements. Individual donation amounts did not differ by
whether participants saw advertisements or not, \( t(100) = .66, p = .51, d = .13 \) (M nonaffective = US$24.26, SD = 16.9; M affective = US$22.11, SD = 15.8). An interaction of affective condition and relative efficiency on individual donation amount, \( F(3, 69) = 3.12, p = .03, \eta^2 = .16 \), however, indicated that the removal of affective information resulted in participants basing their individual donation amounts on relative efficiency of the charity selected (rank 1 M = US$21.07, SD = 14.4; rank 2 M = US$25.00, SD = 15.4; rank 3 M = US$25.62, SD = 17.0; rank 4 M = US$22.00, SD = 18.6 in the affective condition; rank 1 M = US$27.59, SD = 15.3; rank 2 M = US$28.00, SD = 14.4; rank 3 M = US$9.38, SD = 7.65; rank 4 M = US$50 from a single donation, in the nonaffective condition). However, yet again, participant sensitivity to relative charity efficiency was not any greater among participants seeing low efficiencies than among those seeing high efficiencies, \( t(39) = 1.15, p = .26, d = .36 \) (M selected rank high = 1.83, SD = 1.11, M selected rank low = 1.48, SD = 0.78).

The two open-ended self-reports coded for mentions of efficiency showed that efficiency was more often mentioned when deciding recipient (31.4%) than amount (2.94%), \( \chi^2(1, N = 204) = 27.0, p < .001 \), Cramer’s \( V = .38 \). There was no significant difference in mentions of efficiency when deciding recipient between the affective (38%) and nonaffective (25%) conditions, \( \chi^2(1, N = 102) = 1.44, p = .23 \), Cramer’s \( V = .14 \).

Discussion

Study 2 investigated both the effects of a larger separation in charity efficiency, and of the removal of affective context on donations. When participants were presented with extremely low efficiencies, donation amount was not reduced. However, efficiency relative to available alternatives did influence charity selection. In the high efficiency
condition, the 76% efficient charities garnered as few donations as the 16% efficient charities did in the low efficiency condition, as a result of both being presented as the least efficient charity. However, participants did use relative efficiency to compare the charities they were presented with, and more often chose the best-ranked charity.

In the absence of affective stimuli, participants became more sensitive to relative efficiency. However, that one group of charities was on average 25% efficient, while the other was 85% efficient, played no role in determining donation amount, even in this more deliberative decision context. Donation amount did become sensitive to relative efficiency in the absence of the print ads, suggesting that more deliberative contexts may cause donors to rethink the amount they donate, but that these effects remain relative rather than absolute. Again, the participants’ lack of sensitivity to relative efficiency in the affective condition suggests that donation insensitivity is not simply the result of a difference in joint/single evaluability. However, once advertisements were removed, the donation amounts became sensitive to relative charity efficiency, suggesting that, perhaps only in the absence of more emotional stimuli normally present in donation decisions can general evaluability theory entirely account for the observed patterns of behavior. People choose to donate smaller amounts when choosing less relatively efficient charities in the nonaffective condition, although one might think that such gifts would need to be bigger to compensate for the decreased efficiency.

For the next study, we explored the possibility that participants in the previous study were not put off by the very low efficiencies because they were unaware of what efficiency they could reasonably expect from charities: One might only find a 25% efficient charity off-putting if one knew that charities in general are vastly better. By informing participants of average charity efficiency, and showing them charities that either failed to meet or exceeded this standard, we explored whether participants could be induced to care about poor efficiency and, conversely, whether there might be an increase in giving when all presented options were more efficient than charities are in general.

**Study 3**

**Method**

*Participants.* Ninety-one undergraduates completed the third study for partial course credit (67.0% female, $M_{age} = 20.5$, $SD = 1.89$; 1% identified as African American, 49% as Asian/Pacific Islander, 18% as Hispanic or Latino, 22% as White, 10% as other).

*Materials.* The materials were unchanged from the affective conditions of Study 2: Half of the participants were exposed to the low condition, where charities were 25% efficient on average, and half were exposed to the high condition, where charities were 85% efficient on average. However, now all participants were also exposed to a page that preceded the advertisement evaluations, which stated that the average U.S. charity
is 70% efficient, alongside an explanation of charity efficiency. Thus, half saw a set of efficiencies that exceeded this average, and half saw a set that fell far short of it.

**Procedure.** The same procedure was utilized as in Study 2. However, before beginning the advertisement evaluations, participants read a statement, which informed them that the average U.S. charity is 70% efficient, alongside an explanation of efficiency, using the same wording as in the first two studies.

**Results**

As in Studies 1 and 2, we first explored whether participants more often chose to donate to more relatively efficient options. Next, we examined whether there were any differences in donation amount attributable to relative efficiency. Last, we investigated whether an explicit standard of efficiency would induce sensitivity to absolute efficiency. Ninety-six percent of participants chose to make a donation.

As in the prior two studies, participants in both conditions showed a preference for relatively more efficient options, $\chi^2(1, N = 77) = 32.83, p < .001$, Cramer’s $V = .38$, excluding the 10 people who donated with no preference for the recipient (54.5%, 11.7%, 20.8%, 13.0% selected ranks 1-4, respectively). There was no significant difference between participant sensitivity to efficiency between the low and high conditions; despite the former now being explicitly worse than average and the latter explicitly better than average, $\chi^2(3, N = 77) = 2.97, p = .40$, Cramer’s $V = 0.20$ (46.3%, 14.6%, 22.0%, 17.1% selected ranks 1-4, respectively, in the high condition; 63.9%, 8.33%, 19.4%, 8.33% in the low condition; see Figure 5). Again, the nonsignificant
trend toward increased sensitivity to relative efficiency in the lower condition could have occurred due to greater relative difference between lower numbers with the same absolute difference as larger numbers.

Next, we examined whether failing to meet or exceeding average efficiency affected donation amount itself. Individual donation amount did not differ by whether participants saw high or low efficiency rates, despite having clear information beforehand that the charities they were choosing from either exceeded or failed to meet average charity efficiency, \( t(89) = 1.52, p = .13, d = .32 \) (\( M \) high = US$29.58, \( SD \) = 17.2; \( M \) low = US$24.30, \( SD \) = 15.8; see Figure 6). Again, large variances in these values suggest that participants were not simply consistently pledging a specific portion of their potential winnings. Individual donation amount did not differ by relative efficiency rank, \( F(1, 75) = 0.38, p = .54, \eta^2 = .005 \) (rank 1 \( M \) = US$26.55, \( SD \) = 15.5; rank 2 \( M \) = US$26.11, \( SD \) = 18.5; rank 3 \( M \) = US$26.88, \( SD \) = 16.6; rank 4 \( M \) = US$31.00, \( SD \) = 17.6), providing further support that, again, participants were choosing the amount they wanted to donate independently of efficiency information.

The first ranked charities were pledged a total of US$1,115, while the fourth ranked charities were pledged US$310. As a result of more frequent selection, but not increased donation amount, relatively efficient charities again collected more money overall. Absolute levels of efficiency, despite now being comparable with an explicit standard, did not have a significant effect on overall donation.

The two open-ended self-reports were again coded for mentions of efficiency. While 8.79% reported using efficiency information to decide an amount to give, 39.6%
of participants reported using efficiency information to select a donation target, $\chi^2(1, N = 182) = 21.9, p < .001, \text{Cramer's } V = .36$.

**Discussion**

The results of Study 3 demonstrated that being explicitly informed of how efficient charities are on average did not create an absolute sensitivity to charity efficiency in our study; participants still solely used relative efficiency to select a recipient. Surprisingly, participants gave just as much money to charities that fell well below what they were told was the national average efficiency, as did those exposed to charities that exceeded average efficiency: Poor performance relative to the average charity did not dissuade overall donation, and conversely, good performance did not boost overall donation. The results of Study 3 suggest that well performing charities have to compete just as hard as underperforming charities do for donors, rather than donors being satisfied with the charity having exceeded a particular level of efficiency. That donation amount remained insensitive to efficiency information despite an explicit reference point provides further evidence that insensitivity to charity efficiency is not entirely the result of an evaluability bias or lack of reference point regarding what an acceptable efficiency level is. To verify that these results generalize beyond undergraduates, Study 4 replicates Study 3 with a sample of U.S. adults.

**Study 4**

**Method**

**Participants.** One hundred twenty-nine U.S. adults were recruited through Amazon’s Mechanical Turk (58.1% female, $M$ age = 34.8, $SD$ = 11.6; 8% identified as African American, 7% as Asian/Pacific Islander, 9% as Hispanic or Latino, 1% as Native American, 76% as White).

**Materials.** The materials were unchanged from Study 3, other than the addition of a manipulation check.

**Procedure.** The same procedure was utilized as in Study 3. After rating ads and making a donation decision, participants were asked to recall the charities’ average efficiency to ensure that they were accepting stipulated efficiency rates.

**Results**

Participants recalled the average efficiency of the charities they were presented with as a check of whether they had accepted stipulated efficiency rates. Participants reported different efficiency rates for the low and high conditions, $t(127) = 11.8, p < .001, d = 2.09 (M \text{ low} = 40.1, SD = 23.0, M \text{ high} = 78.4, SD = 13.6)$. 
As in prior studies, we explored whether participants more often chose to donate to more relatively efficient options and whether there were any differences in donation amount attributable to efficiency. Ninety-three percent of participants chose to make a donation.

Participants in both conditions showed a preference for relatively more efficient options, $\chi^2(1, N=107) = 21.1, p < .001$, Cramer’s $V = .44$, excluding 14 people donating to “any” (39.3%, 31.8%, 16.8%, 12.2% selected ranks 1-4, respectively). There was again no significant difference in sensitivity to relative efficiency between the low and high conditions, $\chi^2(3, N = 107) = 2.47, p = .48$, Cramer’s $V = .15$ (42.4%, 32.2%, 11.9%, 13.6% selected ranks 1-4, respectively, in the high condition; 35.4%, 31.3%, 22.9%, 10.4% in the low condition; see Figure 7).

Failing to meet or exceeding average efficiency again did not influence donation amount in our sample of adults, despite clear information being provided that the charities either exceeded or failed to meet average charity efficiency, $t(127) = .97, p = .33, d = .17$ ($M_{low}$ = US$14.76, $SD = 13.0$, $M_{high}$ = US$17.18, $SD = 14.9$, see Figure 8). Individual donation amount again did not differ by relative efficiency rank, $F(1, 106) = 1.71, p = .19, \eta^2 = .016$, providing further evidence that donation amount was being decided independently of efficiency information (rank 1 $M = US$15.97, $SD = 15.5$; rank 2 $M = US$15.74, $SD = 10.9$; rank 3 $M = US$12.67, $SD = 8.55$; rank 4 $M = US$25.38, $SD = 14.4$). The two open-ended self-reports confirmed that while efficiency played a minimal role in deciding amount to give (6.20% reporting using efficiency), it played a larger role in picking a target (28.7%), $\chi^2(1, N = 258) = 21.2, p < .001$, Cramer’s $V = .30$.

**Figure 7.** Distribution of selected charities’ relative efficiencies when U.S. adults were informed of an explicit standard of efficiency (Study 4).
Discussion

The results of Study 4 replicate our previous finding that being provided a standard of average charity efficiency did not create an absolute sensitivity to charity efficiency, generalizing this result to a sample of U.S. adults. Participants nonetheless used relative efficiency to select a recipient. Poor performance relative to an average did not dissuade overall donation, nor did high performance boost overall donation. Competing on efficiency may be a zero-sum game: Overall donations do not increase as efficiency grows.

General Discussion

The results of four studies provide evidence that efficiency estimates redirect donations to relatively more efficient charities but do not increase or decrease donation overall. In all but the most abstracted situation, individual donation amounts were not influenced by relative efficiency either. Our results support the notion that deciding amount to give, and to whom, are distinct processes when donors are selecting between alternatives with varying efficiencies. Our results do not rule out any possible role for absolute efficiency in donation but, instead, suggest that, consistent with general evaluability theory, any effect of absolute level of efficiency that may exist is much weaker than that of efficiency relative to available alternatives—even when all of the alternatives are explicitly and dramatically subpar.

Our findings are also consistent with previous literature distinguishing between calculating, scale-sensitive processes and affective processes that are scale-insensitive (Hsee & Rottenstreich, 2004). Put into this framework, the scale-insensitivity in
choosing an amount to donate suggests that this decision was predominantly affective. The sensitivity to scale in the form of relative efficiency when selecting a recipient may suggest that choosing a recipient of one’s donation is predominantly deliberative, even in the presence of affective information. Deciding to give, and how much to give, seems not to be based on cold efficiency statistics, in the presence of relatively minor affective stimuli. These statistics, however, do guide the targeting of the donation, and do so to a much greater extent when people are not provided with an affective basis for that aspect of the decision. Further research may explore to what extent these proposed separate components of the donation decision can be independently manipulated.

These studies also demonstrate the importance of incorporating affective stimuli into research on economic decisions that are normally made in the presence of at least some degree of affective information. Had this study been run in the absence of advertisements and the affective information they convey, we would see only the donation patterns from the participants in the nonaffective portion of Study 3 and incorrectly assume that donors base the amount they give to a particular charity on its relative efficiency—a finding that does not generalize to donation decisions made in the context of affective cues.

Our results provide some support for the use of efficiency ratings, albeit with strong reservations; while efficiency ratings may direct donations to relatively more efficient charities, this is more the result of framing than a response to absolute level of charity efficiency. Thus, impartial rankings can direct money to more efficient charities. However, outside of impartial rankings, inefficient charities may deceptively boost their appeal by portraying themselves as relatively efficient compared with even-less-efficient charities. Educating potential donors on what efficiency they should expect from charities does not seem to counteract participants relying on available alternatives and does not decrease competition among well-performing charities. More importantly, our results do not support the use of efficiency ratings to increase overall donation amounts—Participants did not donate more money overall when seeing high efficiencies than when exposed to low efficiencies, even when explicitly told that these efficiencies were better than average. The lack of overall benefit supports the arguments of those concerned that the negative consequences of emphasizing nonprofit efficiency outweigh the positives of its use.

Our studies do have several limitations, perhaps most notably that we employed windfall gains, rather than having participants decide whether to donate their own money. Future studies may explore the extent to which the observed effects generalize to donations made with own money, and could also use larger sample sizes to further explore the smaller effects observed in our studies.

“To give away money is an easy matter,” Aristotle suggested, “and in any man’s power. But to decide to whom to give it and how large and when, and for what purpose and how, is neither in every man’s power nor an easy matter” (Williams, 1869). Efficiency rates may generally help decide to whom to give and for what purpose, but how large a gift is indeed a more complex process that seems to be outside the reach of cold statistics.
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