Charity could do the most good if donations went to the causes that produced the greatest welfare gains. The effective-altruism movement seeks to make this proposition a reality. Effective altruism draws on consequentialist ethics to posit that instead of consulting one’s feelings, individuals should apply expected value maximization when deciding where to donate their money (MacAskill, 2015; Singer, 2009, 2015). Thus, just as an investor aims to maximize the financial return of each dollar invested, donors should aim to maximize the social welfare returns of each dollar donated.

In recent years, effective altruism has given rise to organizations, such as GiveWell.org, that provide information to the public about charities’ effectiveness. However, it is unclear whether the provision of this information will have a demonstrable impact on choice. Although normative models of altruism indicate that individuals should allocate their limited resources to funds that maximize welfare (Baron, 1993, 2005; Ord, 2012; Singer, 1979, 2009, 2015), descriptive accounts of giving show that individuals often do not maximize the outcomes of their donations. People tend to donate more to single identifiable victims than to large groups of victims (Kogut & Ritov, 2005a, 2005b; Small, Loewenstein, & Slovic, 2007), pay more attention to the ratio of victims rather than the absolute number of victims (Fetherstonhaugh, Slovic, Johnson, & Friedrich, 1997), and overweight overhead expenses relative to outcomes achieved (Baron & Szymarska, 2011; Caviola, Faulmüller, Everett, Savulescu, & Kahane, 2014; Gneezy, Keenan, & Gneezy, 2014). Whereas those findings persist in between-subjects designs (i.e., separate evaluation), when outcome metrics are made directly comparable (i.e., joint evaluation; Hsee, 1996), individuals dramatically increase their selection of the welfare-maximizing option (e.g., Caviola et al., 2014;
Kogut & Ritov, 2005b). Thus, people appear to be “distorted altruists” — they care about welfare maximization, but without clear information to make comparisons, they rely on their feelings to guide choice (Loewenstein & Small, 2007; Slovic, 2007).

This past research suggests that people will maximize welfare as long as the decision environment affords comparisons of effectiveness across options. However, one limitation of existing studies is that participants typically evaluate donation options from a single underlying cause, such as choosing between saving one child or eight children suffering from the same disease (e.g., Kogut & Ritov, 2005b). In the real world, individuals must choose among charities that support various types of causes, such as choosing between saving children from illness or reducing hunger. Yet we know little about how people use effectiveness information when causes differ.

The present research investigated how individuals make donation decisions when effectiveness information is provided across multiple different causes, making it easy for people to maximize welfare if they desire to do so. We found that even when effectiveness information was comparable, a substantial portion chose not to maximize welfare. Our results suggest that individuals view charity as a relatively subjective decision (cf. Goodwin & Darley, 2008; Spiller & Belogolova, 2017), one in which people often feel justified to discount welfare-maximization concerns in order to choose in accordance with their personal preferences.

If people view charity solely in terms of welfare maximization, then the idiosyncratic preferences of decision makers should be irrelevant to their choice, and people will strive to choose the option that does the most good. However, if people view charity as a relatively subjective decision, then the personal preferences of decision makers will be considered valid inputs to choice, in spite of their consequences for welfare maximization. In other words, believing that charity is a subjective decision licenses individuals to donate in personally gratifying ways at the cost of maximizing welfare. Thus, evaluating how people construe charitable giving is of utmost importance to understanding the impact of effectiveness information on choice.

The following studies investigated beliefs regarding the subjectivity of charitable giving and its consequences for social welfare maximization. Study 1 showed that, relative to many personal decisions, individuals view charity as being relatively subjective. Study 2 showed that individuals prioritize emotional connection over welfare maximization when comparing charity options. Study 3 examined choice processes and found that people are more likely to override welfare maximization when choosing a charity than when choosing a financial investment. The final two studies found that individuals are less likely to license themselves (Study 4) and others (Study 5) to select an ineffective option when a decision maker assumes a position of responsibility.

### Study 1: Perceived Subjectivity of Charity

We conducted an initial survey to investigate perceived subjectivity of a variety of common decisions, including charity decisions.

**Method**

We recruited 126 participants (55.6% female, 44.4% male; mean age = 25.0 years) from a northeastern university’s behavioral lab pool. Participants were asked to evaluate how they believe they should make decisions across six decision domains (choosing a charity, an investment, a cell phone, a restaurant, a piece of art, and a medical treatment). Specifically, they evaluated the extent to which they agreed with the following statements: “It is important that the ______ I choose reflects my personal tastes or values,” “It is more important to rely on objective measures rather than personal feelings when choosing ______,” and “Objective measures are the best way to choose ______.” Responses were made on a scale from 1 (not at all) to 7 (very much so). We reverse-coded responses from the latter two statements and then averaged all items to create a three-item measure of perceived subjectivity for each decision domain.

In this and all subsequent studies, sample sizes were determined in advance. For the lab studies, sample size was determined by the number of participants who appeared for the assigned lab session. For online studies, we recruited a minimum of 100 participants per cell. No participants or conditions were dropped from any analysis performed. All measures not reported here can be found in the Supplemental Material available online. Data files are stored at https://osf.io/6myfj.

**Results**

We first compared the three-item perceived subjectivity measure for each decision domain with the same measure in the charity condition. Participants indicated that it is more important to rely on one’s subjective preferences, rather than objective metrics, when choosing a charity ($M = 4.85, SD = 1.02$) compared with choosing a cell phone ($M = 3.88, SD = 1.03$), $t(125) = 9.03, p < .001, d = 0.81$, 95% confidence interval (CI) = [0.56, 1.05]; an investment ($M = 3.74, SD = 0.64$), $t(125) = 10.57, p < .001, d = 0.97$, 95% CI = [0.64, 1.30]; or a medical treatment ($M = 3.42, SD = 0.54$), $t(125) = 13.34,$
Table 1. Mean Rating of Perceived Subjectivity for Each Decision Domain in Study 1

<table>
<thead>
<tr>
<th>Item</th>
<th>Art</th>
<th>Charities</th>
<th>Restaurants</th>
<th>Cell phones</th>
<th>Investments</th>
<th>Medical treatments</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is important that the _____ I choose reflects my personal tastes or values.</td>
<td>6.01 (1.27)</td>
<td>5.90 (1.17)</td>
<td><strong>5.52</strong> (1.20)</td>
<td><strong>5.22</strong> (1.40)</td>
<td><strong>4.70</strong> (1.60)</td>
<td><strong>4.63</strong> (1.65)</td>
</tr>
<tr>
<td>It is more important to rely on objective measures rather than personal feelings when choosing __________.</td>
<td><strong>2.48</strong> (1.47)</td>
<td>3.55 (1.50)</td>
<td>3.33 (1.43)</td>
<td><strong>4.46</strong> (1.56)</td>
<td><strong>5.20</strong> (1.49)</td>
<td><strong>4.98</strong> (1.59)</td>
</tr>
<tr>
<td>Objective measures are the best way to choose __________.</td>
<td><strong>2.48</strong> (1.28)</td>
<td>3.79 (1.50)</td>
<td>3.95 (1.52)</td>
<td><strong>5.10</strong> (1.26)</td>
<td><strong>5.21</strong> (1.34)</td>
<td><strong>5.26</strong> (1.35)</td>
</tr>
</tbody>
</table>

Note: Standard deviations are given in parentheses. Boldface indicates that the given decision was rated as being significantly less subjective than charitable decisions, whereas italics indicate that a given decision was rated as being significantly more subjective than charitable decisions. Indications of statistical significance are based on comparisons between each respective domain and the charity condition. *p < .01, **p < .001.

*p < .01, d = 1.23, 95% CI = [0.81, 1.66]. The importance of relying on subjective preferences for a charity decision was roughly on par with choosing a restaurant (M = 4.74, SD = 0.96), t(125) = 1.02, p = .31, d = 0.10, 95% CI = [−0.11, 0.30]. Only choosing a piece of art was evaluated to be more a matter of subjective preference than choosing a charity (M = 5.68, SD = 1.05), t(125) = −7.49, p < .001, d = −0.67, 95% CI = [−0.91, −0.42]. Table 1 displays the results broken down by each item.

Discussion

This survey showed that people think of charity as a relatively personal, or subjective, decision and not necessarily one that should be made using objective measures. Even so, it is possible that people will behave differently in a decision environment when comparative effectiveness information is transparent. The following studies examined whether judgments and choice conform to these metapreferences.

Study 2: Personal Feelings Versus Welfare Gains

Study 2 examined whether people believe it is normatively appropriate to discount welfare-maximizing options in order to choose a more subjectively preferred charity. Whereas past work suggests that people aim to maximize welfare even if they make mistakes when doing so (Loewenstein & Small, 2007; Slovic, 2007), it did not examine people’s beliefs when both causes and welfare gains differ. We expected that people would readily identify that some charities do more good than others. However, we did not expect that individuals would endorse donating to the more effective charity. Instead, we expected that people would endorse donating to causes that they feel connected to over and above causes that maximize welfare, consistent with research showing that one’s personal feelings are normatively valued in prosocial behavior (Barasch, Levine, Berman, & Small, 2014).

Method

We preregistered the design, sample size, and analysis plan for this study on AsPredicted.org (http://aspredicted.org/pe8j2.pdf). We aimed to recruit 400 participants from Mechanical Turk and ended up with a final sample of 404 participants (49.6% male, 49.4% female, 1.0% did not disclose; mean age = 34.8 years). Participants read a scenario involving Mary, who was looking to donate money to one of two hypothetical charities. One charity, Hunger Care in Africa, was described as providing micronutrients for children in Africa, and for each $100 donated, this charity could feed five children for a month. A second charity, Jump Start Your Community, was described as training and educating the homeless in Mary’s community, and for every $100 donated, this charity could provide 2 hr of job training to one homeless person.

Each participant was then randomly assigned to one of two emotional-connection conditions. In the local-causes condition, participants read that Mary feels an emotional connection toward helping people in local communities, whereas in the distant-causes condition, participants read that Mary feels an emotional connection toward helping those in third-world countries (for the full scenario wording, see the Supplemental Material).

We then presented participants with two different questions on separate pages in random order. One question assessed where they felt Mary should donate (“Which charity should Mary donate to?”), whereas the other question asked which charity was the most effective at maximizing social welfare (“Suppose that Mary wanted to donate to the charity that did the greatest good for the greatest number of people. Which one should she donate to?”). Both questions were measured
on a 7-point scale from 1 (definitely Jump Start Your Community) to 7 (definitely Hunger Care in Africa).

**Results**

This study design allowed us to test our hypotheses either by evaluating the first question posed to participants in a between-subjects analysis or by evaluating both questions asked to participants in a within-subjects analysis. In the preregistration, we specified that we would use a between-subjects analysis to test our focal hypothesis because we were unsure whether any order effects would emerge in the within-subjects design. We report the between-subjects analysis below. Nonetheless, we replicated these results in a within-subjects analysis, regardless of question order, as reported in the Supplemental Material.

A two-way analysis of variance (ANOVA) found a significant Emotional Connection \times Response Question interaction in the predicted direction, $F(1, 399) = 8.80, p = .003, \eta^2 = .02$. When participants read that Mary felt an emotional connection with distant charities, they responded that she should donate to Hunger Care in Africa ($M = 5.26, SD = 2.05$) and also evaluated it as being more effective ($M = 5.59, SD = 1.87$), $t(197) = −1.19, p = .24, d = −0.17, 95\% CI = [−0.44, 0.11]$. However, when Mary felt connected to local communities, they indicated that she should donate to Jump Start Your Community ($M = 3.00, SD = 1.99$), despite indicating that Hunger Care in Africa was more effective ($M = 4.55, SD = 2.32$), $t(202) = −5.12, p < .001, d = −0.72, 95\% CI = [−1.00, −0.43]$. Figure 1 displays these results.

![Figure 1](image)

**Study 3: Charity Versus Investment Choice**

Effective altruists argue that to do the most good, individuals should maximize expected welfare just as investors should seek to maximize financial returns. However, in Study 1, we found that individuals more strongly endorsed using objective information in financial decisions compared with charitable decisions. Study 3 directly contrasted choices between charities and financial investments and further evaluated potential explanations for how people choose among options in these two domains.

**Method**

We recruited 401 participants from Mechanical Turk (31.4% female, 68.6% male; mean age = 30.5 years). Each participant was randomly assigned to imagine that he or she decided either to donate $250 to a charity...
(charity condition) or to invest $250 in a stock (investment condition) through a website recommended by a friend.

Participants in the charity condition then read the following information (changes made for the investment condition are in brackets):

The website is renowned for being extremely accurate in evaluating which charities [stocks] are the most effective and do the most good for each dollar donated [provide the best return on each dollar invested]. The website provides a 0 to 100 rating: the higher the number, the better the rating. In order to be listed on the website, each charity [stock] must have a rating of at least 70.

Participants were also told that the website organizes options into six different categories (alternative energy, cancer, education, food, housing, and international). These categories were chosen because they could plausibly represent groupings of either charities or investments.

Participants were then given the choice to sort the options either by effectiveness or by category type. Sorting by effectiveness suggested that an individual was primarily concerned with selecting one of the most effective charities or investments, whereas sorting by category suggested that an individual was primarily concerned with selecting a charity or an investment that reflected a preferred option type. This served as our primary dependent variable for this study.

Next, participants were presented with the list of options, shown in accordance with their sorting choice: A screen displayed six interactive headings that ordered the options either by effectiveness rating (100–96, 95–91, 90–86, 85–81, 80–76, 75–70) or by category type (alternative energy, cancer, education, food, housing, international). Participants could click on each heading to reveal the options within each category.

We created 5 options for each of the six different category types, for a total of 18 options. The options were named such that they could represent either charities or investments (for the full list, see the Supplemental Material). Only the name, category, and effectiveness rating of each option were displayed (e.g., “Arcadia Grocers | Category = Food | Rating = 85”). Each option was randomly assigned an effectiveness rating between 70 and 100. We further structured the randomization so that 3 options were assigned a rating between 100 and 96, 3 options were assigned a rating between 95 and 91, 3 options were assigned a rating between 90 and 86, and so on down to 70. This was done so that regardless of how participants chose to sort the options, there would always be three options under each heading.

After selecting their preferred option, participants evaluated a series of statements intended to probe their decision process. We expected that people would be more likely to weigh their personal preferences when making charitable decisions. To examine this, we asked participants to evaluate the following four statements and rate their agreement with each on a scale from 1 (strongly disagree) to 7 (strongly agree): “It is important for me to choose charities [investments] that I personally care about,” “It is important for me to choose charities [investments] that reflect my personal views and beliefs,” “Objective measures are the best way to select a charity [an investment]” (reverse coded), and “It is more important to rely on objective measures rather than personal feelings when choosing a charity [an investment]” (reverse coded). Scores were averaged to create a four-item subjective-preferences measure (α = .73).

We also included questions intended to probe three additional factors that may have affected how participants made their decisions. First, it is possible that participants attended less to effectiveness ratings for charities because they wished to have agency when making charitable decisions (Andreoni, 1990; Harbaugh, Mayr, & Burghart, 2007), or they may have reacted negatively if they felt like they were being directed where to donate their money (Brehm, 1966). To examine these possibilities, we asked participants to evaluate the following two statements, which were averaged to create a preference-for-agency measure (r = .54): “It is important that I actively select charities [investments] rather than letting someone else decide for me” and “I prefer that other people tell me where to donate [invest] my money than deciding for myself” (reverse coded).

Second, it is possible that participants felt that they had more subjective knowledge about charitable decisions than investment decisions and thus felt qualified to rely less on expert ratings when making charitable decisions. To examine this possibility, we asked participants to evaluate two statements, which were averaged to create a subjective-knowledge measure (r = .81): “I feel that I am quite knowledgeable about charities [stocks]” and “I typically know a great deal about choosing the best charity to donate my money [best stock to invest my money].”

Finally, it is possible that participants simply did not believe that evaluating charities by effectiveness is possible, and as a result, they discounted effectiveness information when objective evaluation was difficult to assess (Inbar, Cone, & Gilovich, 2010). To examine this possibility, we asked participants to evaluate the following statement: “It is possible for charities [investments] to be objectively rated according to their effectiveness.”

**Results**

Consistent with our hypothesis, significantly fewer participants chose to sort by effectiveness rating in the
Investment condition (50.3%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest rated charity (22.0%) than the highest ranked charity (51.3%), \( \chi^2(1, N = 224) = 20.58, p < .001, \varphi = .30 \).

It is also possible that participants were more likely to satisfice when faced with large choice sets for charities than investments, and these results would not replicate in small choice sets when it is easy to compare.

**Mediation analysis.** We conducted a multiple mediation analysis using the bootstrap method with 5,000 samples to test what psychological factors drove participants’ sorting-choice decisions (SPSS PROCESS macro, Model 4; Hayes, 2013). The model included decision type (0 = investment decision, 1 = charity decision) as the independent variable and sorting choice as a binary dependent variable (0 = search by effectiveness rating, 1 = search by category type). We included the subjective-preferences, preference-for-agency, subjective-knowledge, and possible-to-rate measures as independent mediators. Results showed a significant indirect effect only for the subjective-preferences measure; indirect effect = 0.68, 95% CI = [0.34, 1.11]. Relative to investment decisions, when making charity decisions, participants increased the weight placed on subjective preferences (path a: \( b = 0.97, SE = 0.10, p < .001 \)), and the more weight placed on subjective preferences, the more likely participants were to sort by category type (path b: \( b = 0.69, SE = 0.16, p < .001 \)). Once the mediator was controlled for, the effect of decision type on search choice changed—path c: \( b = 0.87, SE = 0.24, p < .001 \); path c′: \( b = 0.25, SE = 0.29, p = .38 \)—suggesting full mediation. We did not find significant mediation for preference for agency (indirect effect = 0.04, 95% CI = [−0.16, 0.25]), subjective knowledge (indirect effect = 0.05, 95% CI = [−0.01, 0.17]), or possibility to rate (indirect effect = −0.03, 95% CI = [−0.14, 0.03]), as indicated by the CIs for the indirect effects including zero.

**Robustness-check studies.** To further test the robustness of these results, we ran an additional study that directly assigned participants to the sort-by-category presentation format (\( N = 224 \); see Study S1 in the Supplemental Material). We again found that fewer participants chose the highest rated charity (22.0%) than the highest rated investment (51.3%), \( \chi^2(1, N = 224) = 20.58, p < .001, \varphi = .30 \).

It is also possible that participants were more likely to satisfice when faced with large choice sets for charities than investments, and these results would not replicate in small choice sets when it is easy to compare.
all options. Yet when we ran a study that presented participants \((N = 201; \text{see Study S2 in the Supplemental Material})\) with choice sets containing only three options, we still found that significantly fewer chose the highest rated charity option (46%) than the highest rated investment (64%), \(\chi^2(1, N = 201) = 6.91, p = .009, \phi = .19\).

We also examined the sensitivity of these findings to the range of effectiveness ratings in a choice set. In an additional study \((N = 430; \text{see Study S3 in the Supplemental Material})\), participants were presented with five charity or investment options. We then randomly assigned options to have effectiveness ratings that were either between 75 and 100 (narrow-range condition) or between 0 and 100 (wide-range condition). A binary logistic regression found a main effect of decision type; specifically, participants were more likely to choose the highest rated investment than the highest rated charity, \(\beta = 0.65, SE = 0.21, \chi^2(1) = 9.21, p = .002, \text{OR} = 1.92, 95\% \text{ CI} = [1.27, 2.89]\), and a main effect of range, such that participants were more likely to maximize effectiveness for wide ranges rather than narrow ranges, \(\beta = 0.44, SE = 0.21, \chi^2(1) = 4.20, p = .04, \text{OR} = 1.55, 95\% \text{ CI} = [1.02, 2.35]\). A separate regression confirmed that there was no significant interaction \((p = .42)\). Thus, even when choice sets contain large differences in effectiveness ratings, people still remain more hesitant to maximize social welfare than financial returns. Additionally, we found some evidence that the more substantial the difference in effectiveness ratings of options, the more likely people will weigh effectiveness information in choice.

**Study 4: Decision-Making Role and Welfare Maximization**

In Study 4, we investigated when individuals are more likely to maximize welfare when helping others. One reason that individuals may discount effectiveness information in choice is that they do not experience the consequences for choosing an ineffective option and are thus rendered insensitive to the impact of actions on others (Imas, 2014). However, we expected that when individuals assume a role of responsibility, they may feel obligated to act in accordance with the welfare of the entire group and will discount their personal preferences to do so.

**Method**

We recruited 419 participants (36.5% male, 61.8% female, 1.7% did not disclose; mean age = 27.4 years) from a behavioral lab pool in the United Kingdom. The study had a 2 (role: donor vs. medical center president) \(\times\) 2 (effectiveness information: present vs. absent) between-subjects design. Participants assigned to the donor condition imagined that they lived near a local medical research center. Participants assigned to the president condition imagined that they were the president of a local medical research center. Participants in the donor condition were then told that “because the stock market has done well, you have more cash than usual. You would like to help by making a donation to medical research.” Participants in the president condition were told that “Because the stock market has done well, the research center has more cash than usual. As president, it is part of your job to allocate these funds to conduct additional medical research.” They were then told that they could select one research group in the medical center to which to allocate the cash.

Participants in the effectiveness-ratings-present condition then proceeded to read about an independent research firm that specializes in analyzing patient benefits for the medical research community. The firm evaluated research departments on a scale from 0 to 100, in which the higher the number, the more effective additional funds would be for helping patients. Each participant was then given his or her choice between allocating funds to one of three departments, with effectiveness ratings provided for each department (arthritis = 92, heart disease = 86, cancer = 74). These ratings were purposefully selected so that the most intuitively appealing choice was rated as the least effective (cancer), and the least appealing choice was rated as the most effective (arthritis), thereby creating a tension between the option that would be most personally gratifying and the option that would maximize welfare. Participants in the effectiveness-ratings-absent condition did not read about the independent research firm and were simply presented with the same three options, with no mention of effectiveness ratings.

**Results**

We conducted an ordinal regression with role (donor vs. president), effectiveness ratings (present vs. absent), and their interaction in a model to predict the rank of chosen option. Results revealed a significant Role \(\times\) Effectiveness Ratings interaction, \(\chi^2(1) = 3.95, p = .047\). To probe this interaction, we ran separate ordinal regressions for the effectiveness-ratings-absent and effectiveness-ratings-present conditions. When the effectiveness ratings were absent, the assigned role did not significantly affect the option that participants chose, \(\beta = 0.05, SE = 0.27, \chi^2(1) = 0.03, p = .87, \text{OR} = 1.05, 95\% \text{ CI} = [0.62, 1.78]\). However, when the ratings were present, participants in the president condition were significantly more likely to select higher rated options than those in the donor condition, \(\beta = 0.79, SE = 0.26, \chi^2(1) = 9.70, p = .002, \text{OR} = 2.20, 95\% \text{ CI} = [1.32, 3.67]\). Although participants used effectiveness
ratings when given this information, significantly more did so when placed in a position of responsibility. Figure 3 displays these results.

Study 5: Judgments of Decision Quality

This study examined how individuals judge others who select either a relatively effective or an ineffective option. We expected that people would acknowledge that selecting a highly effective option is indicative of making a higher quality decision than a less effective option. However, we further examined whether this judgment depends on whether the decision maker assumes a role of responsibility. We expected that participants in a role of responsibility will be viewed particularly harshly for choosing to allocate funds to an ineffective option. In contrast, we expected that more leeway would be given to individual donors who select an option that they personally prefer.

Method

We recruited 227 participants (33.5% male, 65.6% female, 0.9% did not disclose; mean age = 23.5 years) from a behavioral lab pool at a northeastern university. The study had a 2 (role: donor vs. medical center president) × 2 (choice: most effective option vs. least effective option) between-subjects design.

Participants read a scenario about Mr. Peterson, an individual who was allocating money to a local medical research center. In the donor condition, participants read that Mr. Peterson was looking to donate money from recent stock market gains to a department within the medical center. In the president condition, participants read that Mr. Peterson was the president of the medical research center and that he was looking to allocate surplus funds from recent stock market gains to a department within the medical center.

In all conditions, participants then read about an independent research firm that evaluates the effectiveness of departments in the same fashion as in the previous study. Participants were presented with a list of three departments (elderly care, heart disease, and arthritis), the rating for each department, and which department Mr. Peterson ultimately chose to fund. Mr. Peterson chose either the top-rated option or the bottom-rated option. We varied whether elderly care or arthritis was the top-rated option to account for the possibility that people believe that funding a specific department is particularly important for a president of a medical center. This manipulation had no effect on any of our dependent variables; thus, we collapsed across this factor when presenting our analyses. Heart disease was held constant as the middle option and was never chosen by Mr. Peterson.

Participants then evaluated the extent to which they thought the decision was responsible, appropriate, and thoughtful on a scale from 1 (not at all) to 7 (very much so). These were averaged to create a three-item measure of perceived decision quality (α = .92). Participants also
evaluated the extent to which they thought the decision was ethical, selfish (reverse coded), and good on the same 7-point scale. These were averaged to create a three-item perceived-altruism measure ($\alpha = .72$).

**Results**

**Perceived decision quality.** A two-way ANOVA revealed a significant Role $\times$ Choice interaction, $F(1, 223) = 6.64$, $p = .01$, $\eta^2 = .03$. In both the president and the donor conditions, participants felt that Mr. Peterson’s decision was of lower quality when he selected the least effective option over the most effective option. However, the drop in decision quality was significantly greater when he was president (most effective option: $M = 5.65$, $SD = 1.07$; least effective option: $M = 3.89$, $SD = 1.35$), $t(114) = 7.64$, $p < .001$, $d = 1.46$, 95% CI = [0.21, 1.86], than when he was a donor (most effective option: $M = 5.56$, $SD = 1.09$; least effective option: $M = 4.83$, $SD = 1.30$), $t(109) = 4.09$, $p < .001$, $d = 0.61$, 95% CI = [0.22, 1.00].

**Perceived altruism.** A two-way ANOVA revealed a significant Role $\times$ Choice interaction, $F(1, 223) = 10.23$, $p = .002$, $\eta^2 = .04$. In both the president and the donor conditions, participants felt that Mr. Peterson's decision was less altruistic when he selected the least effective option over the most effective option. However, this difference was greater when Mr. Peterson was president (most effective option: $M = 5.75$, $SD = 0.86$; least effective option: $M = 4.30$, $SD = 1.09$), $t(114) = 7.85$, $p < .001$, $d = 1.49$, 95% CI = [1.06, 1.90], than when he was a donor (most effective option: $M = 5.78$, $SD = 0.91$; least effective option: $M = 5.19$, $SD = 1.00$), $t(109) = 3.30$, $p = .001$, $d = 0.62$, 95% CI = [0.22, 1.00].

**General Discussion**

This research shows that many people view relying on subjective preferences to be normatively appropriate when choosing where to donate, even when there are transparently more effective options available to donors. Thus, these results provide an important caveat to the distorted-altruist view of charitable giving, which implies that failures to maximize welfare are due to systematic mistakes that are corrected in the right information environment—when people can compare the impact of different charities (see Small, 2010). In contrast, the current research shows that the benefits of comparing charity effectiveness are limited when causes vary by type, as people often believe that it is more important to choose an option that they emotionally connect with rather than an option that does the most good.

In this sense, these findings are more consistent with the theory of “warm-glow” giving, which argues that individuals gain utility from committing instances of generous acts but are insensitive to the benefits created by the acts (Andreoni, 1990). Our results suggest that one reason that individuals are insensitive to the magnitude of benefits is how they construe charity, believing it is a relatively subjective decision and not one that should be made solely by consulting the numbers.

One limitation of the current research is that we relied primarily on hypothetical scenarios (for an exception, see Study S4 in the Supplemental Material). However, there is strong reason to believe that these results will hold in real-world behavior. For one, the stimuli we used were affect poor, tending to induce calculative mind sets when assessing value (Hsee & Rottenstreich, 2004). As stimuli become more vivid—as is often the case in the field—people may rely on their feelings and intuitions to a greater extent, favoring more emotionally evocative options at the expense of welfare maximization (Loewenstein & Small, 2007). It is also possible that with earned money, people feel even more licensed to choose a cause they subjectively prefer (cf. Cherry, Frykblom, & Shogren, 2002).

Although our findings suggest that there will be little impact of providing effectiveness ratings to donors, this does not mean that effective altruism will fail. Across studies, the number selecting a welfare-maximizing option was significantly greater than chance. However, we expected that the extent to which people used effectiveness information would be contingent on the diversity of options faced: The more diverse the choice set, the more likely individuals are to find and choose an option they personally prefer. In two studies reported in the Supplemental Material (Studies S4 and S5), participants were significantly more likely to maximize welfare when choice sets contained similar (vs. differentiated) causes. When choosing between causes, people appear more willing to discount welfare considerations and choose in line with their personal preferences, but once a cause has been identified, welfare considerations become increasingly paramount. Additional factors may further affect people’s tendency to use effectiveness information when comparing options. For instance, drawing explicit attention to the opportunity costs associated with donating to less effective charities may encourage individuals to make more welfare-maximizing choices.

More broadly, effective altruism can be considered a success as long as the welfare gains produced exceed the costs. Central to this calculation is how information impacts donation rates. Whereas effectiveness information may encourage reluctant donors to give by decreasing uncertainty regarding the consequences of a donation, it may also reduce giving if it severs emotional connections to causes, inhibiting action (Karlan & Wood,
2017; Small et al., 2007). Individuals may additionally become discouraged if past donations are revealed to be ineffective, which could cause them to disengage from donating in the future.

Some individuals may additionally disagree with the premise that effective altruism stands on, which is that donors should treat all human life equally (Singer, 2009, 2015). However, a consequentialist calculation could dictate that saving the life of a skilled doctor would produce greater welfare gains than saving the lives of two accountants. Moreover, certain welfare comparisons may be considered incommensurable, such as determining the relative value of reducing animal suffering versus human suffering or helping a life for sure versus the uncertain possibility of helping more. One challenge that effective altruists face is to convince people that although quantifying these trade-offs may be imperfect and require some amount of tolerance for error, doing so can engender more positive outcomes than permitting feelings to drive choices. Some researchers have argued that at the extremes, the cost-benefit analysis indicates that helping people in the developing world is orders of magnitude greater than helping those in the developed world, making many of these concerns negligible (MacAskill, 2015; Singer, 2015).

In conclusion, our results suggest that people view charity decisions as being relatively subjective, which inhibits the impact of effectiveness information on welfare maximization. Thus, to persuade people to make donation decisions that maximize social welfare, providing information alone may not be sufficient. Rather, it may require altering how individuals view their role as a donor altogether.

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Author Contributions
All the authors contributed to the study designs. E. E. Levine collected the data for Study 1, and J. Z. Berman collected the data for Studies 2 through 5 and Studies S1 through S5. J. Z. Berman analyzed the data and drafted the initial manuscript. A. Barasch, E. E. Levine, and D. A. Small provided critical revisions. All the authors approved the final manuscript for submission.

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Open Practices
All data and materials have been made publicly available via the Open Science Framework and can be accessed at https://osf.io/6myfj/ and https://osf.io/k67x/, respectively. The design and analysis plans for Study 2 were preregistered at AsPredicted.org (https://aspredicted.org/pe8j2.pdf). Study 2 was the final study run for this project. All other studies were run prior to the authors’ adopting preregistration into their methodological toolbox. The complete Open Practices Disclosure for this article can be found at http://journals.sagepub.com/doi/suppl/10.1177/0956797617747648. This article has received badges for Open Data, Open Materials, and Preregistration. More information about the Open Practices badges can be found at http://www.psychologicalscience.org/publications/badges.

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