

1

Q2 Review

3 The Psychology of (In)Effective Altruism

Q5 Q4 Q3 Lucius Caviola,^{1,*} Stefan Schubert,² and Joshua D. Greene^{1,3}

5 **The most effective charities are hundreds of times more effective than typical**
 6 **charities, yet few donors prioritize effectiveness. Why is that? How might we**
 7 **increase the effectiveness of charitable giving? We review the motivational and**
 8 **epistemic causes of (in)effective giving. Many donors view charitable giving as**
 9 **a matter of personal preference, which favors decisions based on emotional**
 10 **appeal rather than effectiveness. In addition, while many donors are motivated**
 11 **to give effectively, they often have misconceptions and cognitive biases that**
 12 **reduce effective giving. Nearly all research on charitable giving interventions**
 13 **focuses on increasing donation amounts. However, to increase societal benefit,**
 14 **donation effectiveness is likely to be more important. This underscores the need**
 15 **for research on strategies to encourage effective giving.**

16 **The Importance of Effectiveness**

17 A US\$100 donation can save a person in the developing world from trachoma, a disease that
 18 causes blindness [1]. By contrast, it costs US\$50 000 to train a guide dog to help a blind person
 19 in the developed world. This large difference in impact per dollar is not unusual. According to
 20 expert estimates, the most effective charities are often 100 times more effective than typical
 21 charities [2]. In the USA, people donate approximately US\$450 billion [2% of gross domestic
 22 product (GDP)] each year [3], but relatively little of this supports the most effective charities –
 23 the ones that save the most lives, or improve lives the most, with each dollar (Box 1).

24 Most research on charitable giving focuses on the amounts that donors give [4]. However, if the
 25 societal goal of charitable giving is to improve human (or animal) well-being, it is probably more impor-
 26 tant to focus on the effectiveness of giving. This is because the variation in charity effectiveness is
 27 much larger than the variation in donation amounts that a donor is likely to consider: you can double
 28 your impact by doubling the amount that you give to typical charities, but you can multiply your
 29 impact by a factor of ten, 100, or even 1000 by choosing to support more effective charities [2]. In
 30 recent years, the effective altruism movement has emphasized the enormous variation in charity
 31 effectiveness and, consequently, the importance of giving more effectively [5–7] (Effective Altruism).

32 In addition to its potential social impact, research on the psychology of (in)effective giving is also
 33 theoretically significant. It addresses longstanding questions in moral psychology, such as: are
 34 humans truly altruistic and if so, to what extent and in what contexts [8]? What motivations and
 35 cognitive processes support altruism?

36 Here, we review recent research on the causes of (in)effective altruism, with a focus on charitable
 37 giving. (Other topics include volunteering and career choice.) We present a framework that
 38 distinguishes between: (i) motivational and (ii) epistemic influences on effective altruism. We
 39 also discuss (iii) interventions that could encourage more effective altruism.

40 **Motivational Obstacles to Effectiveness**41 **Subjectivity of Giving**

42 Across many domains of economic life, people care about cost-effectiveness. Consumers want
 43 the most bang for their buck. Investors want higher returns. Citizens are discouraged by

Highlights

Effective altruism is a philosophy and social movement that advocates using the most effective, evidence-based strategies to benefit others. Here we focus on charitable giving, a domain in which ordinary people can have a large impact.

Most behavioral research on charitable giving focuses on donation amounts, but the impact of giving depends more on the effectiveness of the charities people support than on how much they give. We review recent research on the factors that promote (in)effective giving.

There are motivational and epistemic obstacles to effective giving: People are often drawn to less effective charities, and to the extent that people want to give effectively, they typically do not know how to do it.

We discuss strategies for encouraging effective giving. Several strategies are feasible and warrant further research, as the potential social benefits are large.

¹Department of Psychology, Harvard University, Cambridge, MA, USA

²Uehiro Centre for Practical Ethics, University of Oxford, Oxford, UK

³Center for Brain Science, Harvard University, Cambridge, MA, USA

*Correspondence:
lcaviola@fas.harvard.edu (L. Caviola).

b0.2 **Box 1. How Is Charity Effectiveness Measured?**

b1.3 The effectiveness of charities focusing on health (e.g., treating trachoma; see The Importance of Effectiveness in the main
 b1.4 text) can be measured in the same ways that health economists measure the effectiveness of medical treatments [65,66].
 b1.5 Here, researchers calculate the amount of money needed to produce one unit of a given positive outcome (e.g., dollars per
 b1.6 life saved). A common outcome measure in health economics is the QALY [65,66]. The QALY accounts for the duration of
 b1.7 life saved and the quality of a life (including both psychological and somatic aspects). QALY estimates are rough and
 b1.8 imprecise, but that is inevitable for any measure that attempts to quantify important aspects of subjective experience, such
 b1.9 as the difference between living with and without a specific painful ailment. By comparing the cost per QALY across
 b1.10 interventions, the cost-effectiveness of different charities can be compared.

b1.11 There is no consensus on how to measure the effectiveness of charities that address other causes, such as the arts,
 b1.12 education, or homelessness. Some propose generalizing QALYs by replacing them with well-being-adjusted life years
 b1.13 (WALYs) [99]. The WALY measure aims to incorporate all aspects of well-being, not just health outcomes. While the WALY
 b1.14 measure reflects an appealingly broad understanding of effectiveness, it does not eliminate the challenges inherent in
 b1.15 comparing charities that address very different causes. Nevertheless, cost-effectiveness analysis using WALYs or QALYs
 b1.16 focuses attention on the number of people impacted and the duration of impact. It provides a general framework within
 b1.17 which dimensions of well-being can be weighted in a consistent way. Because differences in charity effectiveness are
 b1.18 so large, even highly approximate measures of absolute effectiveness can yield meaningful assessments of relative
 b1.19 effectiveness.

b1.20 Comprehensive measures of impact must account for indirect and long-term effects in addition to short-term, direct
 b1.21 effects. For example, curing children in the developing world of parasitic worms may allow them to go to school, with
 b1.22 long-term indirect positive effects on education and the local economy [100,101]. Tracking indirect and long-term effects
 b1.23 poses no special theoretical difficulties, since such effects can be incorporated into cost-effectiveness analysis, but is an
 b1.24 additional practical challenge.

b1.25 In some cases, estimates of effectiveness will depend on ethical judgments, such as the value placed on present versus
 b1.26 future generations [102,103], humans versus animals [104], or bringing new people into existence [105]. The nascent field
 b1.27 of global priorities research [106] gathers insights from philosophy, psychology, and economics to address these questions.

44 ineffective public spending. However, when it comes to charitable giving, donors seem to care
 45 less about effectiveness. Why is that?

46 Many people perceive charity as a matter of personal choice, such that donations need not
 47 be guided by objective measures of effectiveness [9]. For many, a donor choosing a charity
 48 is more like a gourmand choosing a restaurant than a doctor prescribing a treatment. When
 49 presented with charities addressing different causes, people tend to choose the charities
 50 that have the most personal appeal, even when informed that other options are more
 51 effective [9]. Moreover, third parties approve of donation decisions based on emotional
 52 connection more than they approve of donation decisions based on objective measures
 53 of effectiveness [9]. The idea that charity choice is a matter of subjective preference is
 54 widespread, but some philosophers have challenged this idea, arguing that if one is going
 55 to help others, one is obliged to do so as effectively as possible (Box 2). While addressing
 56 this philosophical controversy is beyond the scope of this review, as a psychological matter
 57 the perceived subjectivity of giving may be the most fundamental obstacle to effective
 58 giving.

59 If choosing among charities is perceived as merely an expression of personal preference,
 60 donors may see little reason to counteract the misconceptions and cognitive biases that
 61 impede effective giving. Likewise, there is little need for them to conduct research or seek
 62 expert advice to guide their decisions. In a survey of 3000 American donors [10], only 33%
 63 said that they researched the charities they considered and only 9% reporting giving based
 64 on evidence of relative effectiveness. This contrasts starkly with people's behavior as
 65 consumers and investors, where people attend closely to product reviews and seek out financial
 66 advice at great expense [11].

b0.2 **Box 2. Is Effectiveness Morally Obligatory?**

b2.3 In one of the most influential philosophical arguments of the 20th century, Peter Singer asked readers to imagine encountering
 b2.4 a child drowning in a shallow pond [86]. Is it morally acceptable to allow the child to drown because one does not want to ruin
 b2.5 one's clothes? Singer reasonably assumed that it would be wrong to allow the child to drown. However, he argued further
 b2.6 that affluent people have a comparable moral obligation to save the lives of distant children, at least when relatively little
 b2.7 personal sacrifice is required. While many have found this argument convincing, many more have found it unsettling: it implies
 b2.8 that even moderately affluent people ought to give far more to charity than most of them currently give.

b2.9 More recently, philosophers have considered a related moral challenge that applies even to those who reject Singer's
 b2.10 conclusion: if one is going to donate, does one have an obligation to choose one of the most effective charities? Parfit
 b2.11 considers a case in which a man is about to lose both of his arms [107]. Someone can save either one arm or both arms
 b2.12 at great cost to themselves, but the cost is the same whether they save one arm or both. Parfit grants that one is not
 b2.13 obliged to save a stranger's limb(s) at great cost to oneself. However, he claims that, if one decides to help, it would be
 b2.14 perverse not to save both arms.

b2.15 Applying this logic to charitable giving, Pummer argues that even if it is not obligatory to donate to charity, it is obligatory to
 b2.16 donate effectively once one has decided to give [108]. MacAskill [109] considers an interpersonal version of Parfit's case.
 b2.17 Suppose that a firefighter who is charging into a burning building has time to reach only one room. One room contains one
 b2.18 child, whereas the other contains ten. The conclusion, says MacAskill, is the same: If one is going to help, it is wrong to help
 b2.19 in a way that helps less effectively.

b2.20 In the firefighter case, the more effective option is ten times more effective. Ord's analysis of global health interventions
 b2.21 indicates that this ratio undersells the moral imperative to give effectively [1]. He finds that the most effective interventions
 b2.22 can be hundreds or even thousands of times more effective than other interventions (Figure 1).

67 People may view donation decisions as subjective because they do not feel responsible or
 68 accountable [12] for the effects of their donations. Many people view donating to help strangers
 69 as nonobligatory ('supererogatory') [13], which suggests that there is no obligation to give in a
 70 particular way. However, there are some contexts in which people feel more obliged to consider
 71 effectiveness. For instance, in preliminary research we found that people feel more obliged to
 72 maximize effectiveness when they are the only possible helpers and are therefore solely respon-
 73 sible for the outcome [14]. However, individual donors are typically not the only ones who can
 74 help, making effectiveness seem less important.

75 **Narrow Affective Motivation**

76 Donors' reliance on subjective preferences raises the question: what produces these
 77 preferences? Research indicates that charitable giving, and helping behavior more generally,
 78 is typically driven by emotional motivators such as empathy (or sympathy) for victims [15–17]
 79 or the positive satisfaction of personally provisioning a good (i.e., 'warm glow' [18]). However,
 80 these affective responses are not necessarily triggered by opportunities to help effectively. On
 81 the contrary, they often hinder more effective giving [19]. We refer to these as 'narrow' affective
 82 motivations, contrasting them with motivations that reflect a broader integration of information
 83 about available options and their likely consequences [20].

84 **Personal Connection**

85 People are more inclined to support causes to which they feel personally connected or that they
 86 find personally meaningful [9]. For example, donors in wealthy nations are more likely to be
 87 personally affected by cancer than malaria, leading to greater support for charities focusing on
 88 this more personally relevant disease [21]. Moreover, they are unlikely to change their minds if
 89 informed that charity experts consider malaria charities more effective at saving lives. Likewise,
 90 people are often drawn toward charities that help victims suffering from the same diseases or
 91 misfortunes as their friends or loved ones [22]. Similarly, people tend to prefer animal charities
 92 that help familiar companion animals, such as dogs, over charities that help farm animals, such
 93 as pigs, although charities that help farm animals tend to reduce animal suffering more effectively

94 (Animal Charity Evaluatorsⁱⁱ). Finally, people are typically loyal to the charities with which they
95 already have a relationship as a donor [10], a form of *status quo* bias [23].

96 *Narrow Moral Circle*

97 People tend to favor proximate beneficiaries over distant ones. First, there is spatial distance,
98 which typically coincides with social distance: people are more willing to help others the more
99 they feel socially connected with them [24]. Donors in the developed world, for example, prefer
100 local over foreign charities although charities working in distant poor countries tend to be more
101 effective [13,25–27]. Second, there is biological distance: most people prefer to help humans
102 over animals, even when controlling for perceived cognitive capacity and capacity for suffering
103 [28,29]. The tendency to favor humans over animals is a stable trait that correlates with tenden-
104 cies that are widely regarded as biases (e.g., racism, sexism) and is reflected in donation behavior
105 (helping humans vs animals) [28]. Third, there is temporal distance: people prefer to help current
106 generations over future generations, as reflected in the quip ‘What has posterity ever done for
107 us?’. While strategies to safeguard future generations are by their nature uncertain, they may
108 still be highly effective, as the inhabitants of the future may far outnumber the living. A strategy
109 with a 1% chance of preventing human extinction could save vast numbers of lives, making it a
110 rational bet from an impartial perspective [30]. Although the value of such investments is difficult
111 to quantify, there is evidence that people’s intuitive thinking about extinction events is irrationally
112 myopic, focused on the immediate consequences of catastrophic events rather than their long-
113 term consequences [31].

114 *Scope Neglect*

115 Few would say that the 100th life one can save is worth less than the first life one can save, yet
116 people’s altruistic motivations do not scale proportionately with the number of beneficiaries
117 [32]. Rather, the perceived value of each additional life saved is reduced once large numbers
118 have been saved. This has been called ‘psychophysical numbing’ [33–35]: compassion fades
119 with increasing numbers of victims. In one study, people were willing to donate about the same
120 amount to help either 2000, 20 000, or 200 000 victims [36,37]. This neglect of scope may follow
121 from our tendency to represent values using domain-general mechanisms that evolved to
122 represent the value of goods such as food, which (unlike human lives) exhibits steeply declining
123 marginal value [38].

124 Scope neglect is accentuated for single identifiable victims, which often draw more support
125 than large numbers of ‘statistical’ victims [39–43]. This is illustrated by the famous case of
126 ‘Baby Jessica’ who, while trapped in a well in Texas, received over US\$700 000 in donations
127 [44]. Furthermore, adding statistical information about victims to profiles of identifiable victims
128 can even reduce people’s willingness to donate [45].

129 *Prioritization Aversion*

130 Donating effectively requires, above all else, the prioritization of charities focused on high-impact
131 causes [5]. The most effective charities tend to work on causes that are relatively: (i) large in scope
132 (more individuals are affected); (ii) neglected (do not receive much support), and (iii) tractable
133 (progress can be made more easily). Charities addressing large, neglected problems for which
134 there are (or may soon be) scalable solutions can have an impact that is orders of magnitude
135 larger than that of typical charities.

136 Prioritizing some causes over others implies prioritizing some people over others – not because
137 they are inherently less worthy, but as a form of philanthropic ‘triage’. People are averse to making
138 such trade-offs, especially when they involve human lives [46]. Consequently, people consider it

139 unfair to deprioritize certain victims because others can be helped more effectively [47,48]. This is
140 one reason why many donors prefer to split their donations across charities [49], even when
141 some recipient charities are much less effective than others [21,50]. However, this can reduce
142 the overall impact of one's giving.

143 While people resist the deprioritization of whole causes based on effectiveness considerations,
144 they do consider it important to avoid charities that they perceive as wasteful. That is, they
145 deprioritize charities that use their available resources in a suboptimal way to serve their cause.
146 For example, people consider it wrong to support a charity that relies on a relatively ineffective
147 medication if another charity addresses the same cause with a more effective intervention [14].
148 Many donors are especially concerned about supporting organizations with excessively high
149 overhead costs [51,52] (see Overhead Myth later). These tendencies indicate that donors do
150 care about effectiveness. When asked directly, donors often identify effectiveness as a primary
151 motivation for giving [10,21,53]. However, donors' concern for effectiveness is rather narrow,
152 focused on avoiding wastefulness in the service of a given cause rather than using effectiveness
153 as a criterion for choosing between causes [9].

154 Character and Reputational Benefit

155 One powerful driver of prosocial behavior is reputational benefit [54–56]. Giving to charity can
156 signal good character to potential cooperation partners, but the effectiveness of one's
157 donations may not influence the strength of that signal, as social rewarders pay little attention
158 to effectiveness [57]. This may be because effectiveness has historically been difficult to track,
159 which puts a reputational premium on prosocial actions that are well-defined and highly
160 observable [57]. This favors visible personal sacrifice over social benefit [58] and donations
161 based on mutually salient emotional factors [59] rather than complex calculations [60]. Consistent
162 with this, people whose donations are based on deliberation rather than empathy are viewed less
163 positively [61]. Under prevailing norms, donors have relatively little reputational incentive to give
164 effectively.

165 Epistemic Obstacles to Effectiveness

166 In addition to motivational factors, epistemic factors prevent people from giving effectively, even
167 when they might be motivated to do so.

168 Overhead Myth

169 People tend to avoid charities with high overhead (administrative) costs [26,62]. This is partly
170 because they incorrectly believe that overhead ratio tracks cost-effectiveness [62], such that
171 money is always better spent directly on beneficiaries. While charities can overspend on
172 overhead, research indicates that higher overhead costs are not associated with lower cost-
173 effectiveness [62–64]. On the contrary, to maximize effectiveness charities require competent
174 staff, good infrastructure, and self-evaluation, all of which increase overhead costs. Donors'
175 focus on low overhead creates perverse incentives for charities, leading them to minimize
176 their administrative costs at the expense of effectiveness [63]. Research shows that the
177 'overhead myth' can be partly dispelled. When people are informed that overhead ratio and
178 cost-effectiveness are not the same, many donate to more effective charities, ignoring
179 overhead costs [21,62]. However, the effects of such information may be limited because
180 overhead aversion has a motivational component as well. Spending on overhead can reduce
181 the warm glow of giving [18,52] as the relationship between donor and recipients becomes
182 more indirect. A more general strategy for charities to mitigate the effects of overhead aversion
183 is to have major philanthropists cover overhead costs, allowing ordinary donors to cover direct
184 costs [52].

185 Quantifiability Skepticism

186 Many people doubt that charity effectiveness can be quantified and compared. While people
187 readily accept that one can compare the effectiveness of charities that work on the same problem
188 (e.g., malaria prevention) [21], they have doubts about comparing the effectiveness of charities
189 that work on different problems. There are, however, tools developed by economists that can
190 be used to quantify and compare charity effectiveness. For instance, health economists conduct
191 cost-effectiveness analysis using quality-adjusted life years (QALYs) [65] to quantify the effectiveness
192 of alternative health interventions (Box 1) [66]. While practically challenging, cost-effectiveness
193 analysis allows comparisons of charities addressing different causes (e.g., malaria prevention versus
194 education). More research is needed to investigate people's beliefs about the quantification and
195 comparability of charity effectiveness.

196 Innumeracy

197 Maximizing the effectiveness of one's charitable giving may require complex quantitative reasoning,
198 or at least an understanding of certain basic statistical and economic concepts such as probability
199 and expected value. Many people lack such knowledge or fail to transfer it from other domains
200 (e.g., investing) [67]. For example, many donors incorrectly believe that a charity that saves one
201 life with certainty is more effective than a charity that has a 10% chance of saving 100 lives,
202 although the latter can be expected to save ten times more lives over time [21]. Another important
203 but widely misunderstood concept is marginal value, considering the good that an additional
204 donation can do [26]. When one charity is substantially more effective than the alternative charities,
205 one maximizes impact by donating exclusively to the most effective charity (assuming there is no
206 substantial decline in marginal value) [68]. Many people incorrectly believe that it is more effective
207 to split their donations across charities that vary in effectiveness [21,26,69].

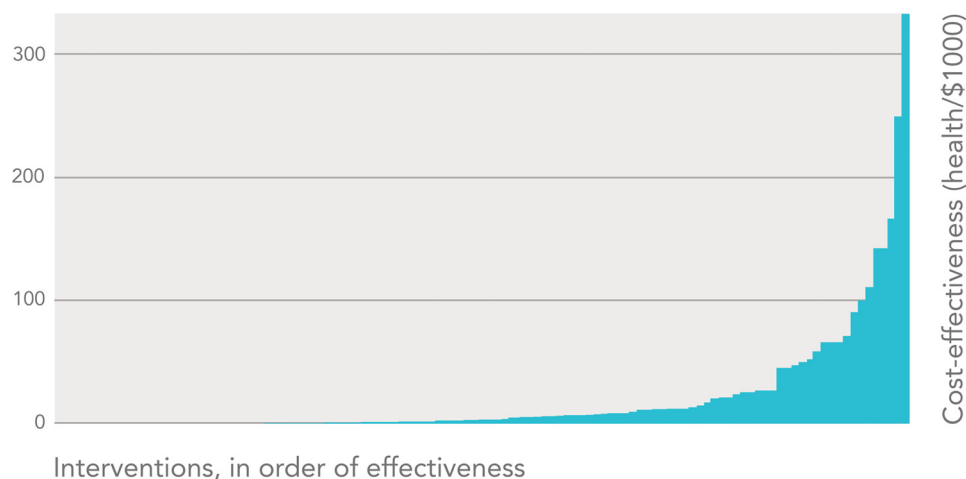
208 People are also misled by 'pseudoinefficacy': if a vast number of people are threatened, people
209 often view saving a small number of people as just a 'drop in the bucket' and therefore not
210 valuable [70]. In other words, donors attend to the proportion of victims they can save rather
211 than the absolute number [33]. This can discourage donors from supporting solutions that,
212 while highly effective, address problems of broad scope.

213 Underestimation of Effectiveness Variance

214 Most people underestimate the variation in charity effectiveness. Experts believe that the most
215 effective charities working on global poverty are about 100 times more cost-effective than typical
216 charities in that domain [2]. Laypeople, by contrast, estimate that the most effective charities are
217 only about 1.5 times more effective than average [2]. People assume that the distribution of
218 charities by effectiveness is approximately normal (like the distribution of adult human heights)
219 when it more closely follows a power law distribution, such that a small number of charities are
220 vastly more effective than typical charities, much as the largest urban areas are vastly larger
221 than typical urban areas (Figure 1). One explanation for these vast differences in effectiveness is
222 that the charity market is, from an effectiveness perspective, highly inefficient. Donors do not
223 penalize charities that do less good than others in the way consumers penalize companies that
224 offer higher prices or lower quality products. As a result, many relatively ineffective charities remain
225 in operation without improving.

226 Ignorance About the Most Effective Charities

227 Effective altruist researchers such as those at GiveWell^{iv} aim to identify the world's most effective
228 charities. They have converged on a relatively small number of stand-out charities that focus on
229 supporting the world's poorest people (GiveWell's focus), improving conditions at factory
230 farms, and safeguarding humanity's long-term future (e.g., from global pandemic risks). Most



Trends in Cognitive Sciences

Q1 Figure 1. Cost-Effectiveness Distribution of Interventions in Global Health. There are large differences in cost-effectiveness across health interventions. This figure displays the cost-effectiveness estimates for 108 health interventions, arranged from least cost-effective to most cost-effective. Cost-effectiveness is here measured in disability-adjusted life years (DALYs) per US\$1000. Originally reported in [1], based on the Disease Control Priorities in Developing Countries (DCP2) Report [110]; figure adapted by 80 000 Hours[®], used here with permission.

231 people are unaware of these charities [21], which partly explains why few people support them. At
 232 the same time, people tend to overestimate the effectiveness of charities that they find personally
 233 appealing [21], especially ones that are local [27,71]. Many people also assume that charities
 234 responding to disasters are especially effective, although charities addressing ongoing problems
 235 in poor countries (e.g., neglected tropical diseases) tend to be more effective [21,72]. This may be
 236 driven by people's greater emotional responses to victims who have experienced distinct losses
 237 compared with victims of chronic misfortune [73].

238 Strategies to Increase Effective Giving

239 Previous research has focused on strategies to increase people's willingness to give to
 240 charity and the amounts that people give [4], but there is relatively little research on strate-
 241 gies encouraging people to give more effectively. Whether or not it is good to give more
 242 effectively, or to give at all, is a moral question [5–7] (Box 2) that we do not attempt to
 243 answer here. Nevertheless, we proceed on the assumption that saving and improving more
 244 lives rather than fewer lives is a good thing, and discuss psychologically informed strategies to
 245 encourage more effective giving.

246 Information

247 A natural strategy is to inform donors about which charities are most effective (as GiveWell does)
 248 and dispel misconceptions about effectiveness (e.g., the Overhead Myth Campaign^v). The
 249 evidence for the effectiveness of effectiveness information is mixed. Some studies have found
 250 no effect [74,75], while some of our own studies have found a large effect, increasing the
 251 proportion of effective donors from zero to 17% or even higher [21,76]. Other studies point to
 252 heterogeneity among donors, with minimal effects overall but larger effects for donors who are
 253 more altruistically motivated [77] and more educated, especially when encouraged to think
 254 more deliberately [78]. Providing more tangible details about a charity's intervention strategies
 255 may also make giving more effective [75,79]. All studies to date use limited amounts of effectiveness
 256 information, but some donors, including donors willing to give large amounts, may be influenced by
 257 more extensive information.

258 Choice Architectures and Incentives

259 Defaults

260 As with other behaviors [80], setting donating as the default behavior can increase its prevalence
261 [81]. Default settings could also be used to increase the effectiveness of giving. While default
262 choices are by no means specific to effective giving, highly effective defaults are especially
263 relevant because they can be justified in terms of their greater social benefits, as in the classic
264 case of opt-out organ donation [82].

265 Incentivizing

266 Another general strategy to promote a behavior is to provide incentives. Consistent with this,
267 charities benefit from donor tax deductions and often use matching campaigns [83]. Although
268 incentivization is a general strategy, it may be especially relevant to effective giving if there is a
269 subset of donors who are highly motivated to incentivize others to give effectively and who are
270 therefore willing to provide matching funds for this purpose (see later regarding Giving Multiplier).
271 Likewise, governments could provide larger incentives for effective giving through targeted tax
272 deductions.

273 Unit Asking

274 Scope neglect (see earlier) is reduced when people evaluate donation options jointly rather
275 than separately [41]. The 'unit asking' technique builds on this idea [84]. Potential donors are
276 first asked how much they would give to help one person in need before being asked how
277 much they would give to help a group of a specified size. Unit asking tends to increase donors'
278 inclinations to raise their donations proportionally with group size and thus makes giving more
279 effective.

280 Splitting

281 As noted earlier, people tend to split donations across multiple charities when given the option
282 [49,85]. While the preference for splitting can reduce the effectiveness of giving (see earlier), it
283 can also promote more effective giving if the tendency to split causes people to allot some, rather
284 than none, of their money to a highly effective charity. As discussed earlier, people tend to support
285 charities that are emotionally appealing, paying little attention to effectiveness. However, there is
286 evidence that many people do care about effectiveness and that information about effectiveness
287 can make giving more effective [2,21]. Combining these insights suggests a new strategy to
288 increase the effectiveness of charitable giving: many donors may be amenable to splitting their
289 donations between an emotionally appealing charity and a highly effective charity, especially if
290 provided with effectiveness information. We have applied this technique in the design of an online
291 donation platform (Giving Multiplier^{vi}), which uses matching funds (see earlier) to encourage
292 donors to split their donations between a highly effective charity and their favorite charity [76].

293 Philosophical Reasoning

294 Philosophical arguments of the kind pioneered by Peter Singer [86] (Box 2) can increase people's
295 willingness to donate to an effective charity [87,88]. Likewise, veil-of-ignorance reasoning of the
296 kind pioneered by Rawls [89] and Harsanyi [90] – asking people to consider what they would
297 want if they did not know who they are going to be – can counteract parochial tendencies
298 ('narrow moral circle') and thus make giving more effective [25]. The effective altruism movement
299 was inspired by philosophers [1,86,91,92] and has directed billions of dollars toward effective
300 charities [93], indicating that philosophical arguments can have a powerful impact (see also
301 Open Philanthropy^{vi}). However, it may be that relatively few people are receptive to such
302 arguments [87,88]. Understanding how philosophical arguments (Box 2) might influence the
303 behavior of more typical donors is an important topic for future research.

304 **Norm Changes**

305 One of the most robust findings in research on social influence is the power of norms [94]. As
 306 explained earlier, prevailing altruistic norms emphasize self-sacrifice, but not effectiveness.
 307 There is also a norm against publicizing one's altruistic behavior [95,96] and (outside certain
 308 religions) there is little expectation that people donate a significant percentage of their disposable
 309 income. In the effective altruism community, these norms have shifted [5,6]. Many effective
 310 altruists publicly commit to significant life-long giving to effective charities in the hope of encour-
 311 aging others to do the same (see Giving What We Can^{viii}, The Life You Can Save^{ix}). There is
 312 also a visible commitment to evidence-based decision making and open-mindedness to new
 313 causes. It is unknown how widely such effectiveness-oriented norms could spread, but history
 314 tells us that radical norm change is possible, as demonstrated by widespread changes in moral
 315 views about slavery and racial discrimination, women's rights, gay rights, etc. [97,98].

316 **Concluding Remarks**

317 Ordinary people have the power to save and transform people's lives through effective giving, and
 318 we are beginning to understand the factors that encourage and discourage such choices, with
 319 many open questions for future research (see Outstanding Questions).

320 Some obstacles to effective giving are motivational: People believe that whether and how to give
 321 is primarily a matter of personal preference. Altruism tends to be motivated by narrow affective
 322 responses that are highly sensitive to personal relevance and insensitive to the scope of the
 323 problems that may be addressed. People are also averse to prioritizing some causes over others
 324 and receive little reputational benefit (and may even pay reputational costs) for prioritizing
 325 effectiveness.

326 Other obstacles are epistemic: people mistakenly believe that helping indirectly through
 327 organizational overhead is wasteful and that effectiveness cannot be well quantified. People
 328 misunderstand probability, fail to think in terms of marginal value, and dismiss important benefits
 329 as a drop in the bucket. Furthermore, people are unaware that charities vary enormously in their
 330 effectiveness, and do not know which charities are most effective.

331 There are, however, promising strategies to address these obstacles to effective giving. More
 332 accurate information can remove epistemic obstacles. Well-designed choice architectures and
 333 incentives may overcome motivational limitations, boosting people's existing (but rarely dominant)
 334 concerns for effectiveness. Finally, in the long run, shifting norms may lead to widespread
 335 commitments to doing as much good as possible with our resources.

336 **Acknowledgments**

337 We thank Samantha Kassirer, Joshua Lewis, and Matt Coleman for their valuable inputs on the manuscript. This research
 338 was funded by EA Funds (L.C.) and EA Grants (S.S.).
 Q6

339 **Declaration of Interests**

340 The authors have no interests to declare.

341 **Resources**

342 ⁱwww.effectivealtruism.org/

343 ⁱⁱ<https://animalcharityevaluators.org/>

344 ⁱⁱⁱ<https://80000hours.org/>

345 ^{iv}<http://givewell.com/>

346 ^v<http://overheadmyth.com/>

Outstanding Questions

What motivates effective giving? We have focused on obstacles to effective giving but have said little about positive motivations for effectiveness. On a cognitive level, what processes support effective giving? At the level of individual differences, what traits, beliefs, and values motivate effective giving? Existing studies show that a sizable minority of people are moved to give effectively when informed about charity effectiveness. What are their distinguishing traits and how are they acquired?

In what ways do attitudes toward effectiveness in charitable giving (and altruism more generally) vary across cultures? Beyond current attitudes, how might cultural groups vary in their amenability to effective giving? At present, effective altruism has drawn adherents primarily from Western societies, but its underlying philosophy has parallels in non-Western cultures and it aspires to maximize global benefits. Is effective giving inherently culturally bound or is it more cross-culturally amenable?

How has effectiveness been valued throughout history and across domains (e.g., in medicine)? What lessons can be learned from prior attempts to implement novel evidence-based practices?

What interventions can promote effective giving? Information campaigns and behavioral interventions should be tested in field studies. Researchers might also examine long-term interventions aimed at changing norms.

347 ^{vi}<http://givingmultiplier.org/>
 348 ^{vii}<https://openphilanthropy.org/>
 349 ^{viii}<https://givingwhatwecan.org/>
 350 ^{ix}www.thelifeyoucansave.org/

352 **References**

355 1. Ord, T. (2013) *The Moral Imperative Toward Cost-*
 356 *Effectiveness in Global Health*, Center for Global Development
 357 2. Caviola, L. *et al.* (2020) Donors vastly underestimate
 358 differences in charities' effectiveness. *Judgm. Decis. Mak.*
 359 15, 509–516
 360 3. Giving USA Foundation (2020) *Giving USA 2020: The Annual*
 361 *Report on Philanthropy for the Year 2019*, Giving USA
 362 4. Bekkers, R. and Wiepking, P. (2011) A literature review of
 363 empirical studies of philanthropy: eight mechanisms that
 364 drive charitable giving. *Nonprofit Volunt. Sect. Q.* 40, 924–973
 365 5. MacAskill, W. (2015) *Doing Good Better: Effective Altruism and*
 366 *a Radical New Way to Make a Difference*, Guardian Faber
 367 6. Singer, P. (2015) *The Most Good You Can Do: How Effective*
 368 *Altruism Is Changing Ideas About Living Ethically*, Yale University
 369 Press
 370 7. Fiennes, C. (2017) We need a science of philanthropy. *Nature*
 371 546, 187
 372 8. Batson, D. (2014) *The Altruism Question: Toward A Social-*
 373 *Psychological Answer*, Psychology Press
 374 9. Berman, J.Z. *et al.* (2018) Impediments to effective altruism:
 375 the role of subjective preferences in charitable giving. *Psychol.*
 376 *Sci.* 29, 834–844
 377 10. Camber Collective (2015) *Money for Good 2015: Revealing the*
 378 *Voice of the Donor in Philanthropic Giving*, Camber Collective
 379 11. Collinger, T. (2017) *How Online Reviews Influence Sales*, Medill
 380 IMC Spiegel Research Center
 381 12. Lerner, J.S. and Tetlock, P.E. (1999) Accounting for the effects
 382 of accountability. *Psychol. Bull.* 125, 255
 383 13. Nagel, J. and Waldmann, M.R. (2013) Deconfounding distance
 384 effects in judgments of moral obligation. *J. Exp. Psychol.*
 385 *Learn. Mem. Cogn.* 39, 237–252
 386 14. Caviola, L. and Schubert, S. (2020) Is it obligatory to donate
 387 effectively? Judgments about the wrongness of donating
 388 ineffectively. *PsyArXiv* Published online August 24, 2020.
 389 <https://doi.org/10.31234/osf.io/2h4r>
 390 15. Batson, C.D. *et al.* (1981) Is empathic emotion a source of
 391 altruistic motivation? *J. Pers. Soc. Psychol.* 40, 290–302
 392 16. Batson, C.D. *et al.* (1987) Distress and empathy: two qualitatively
 393 distinct vicarious emotions with different motivational
 394 consequences. *J. Pers.* 55, 19–39
 395 17. Loewenstein, G. and Small, D.A. (2007) The Scarecrow and
 396 the Tin Man: the vicissitudes of human sympathy and caring.
 397 *Rev. Gen. Psychol.* 11, 112–126
 398 18. Andreoni, J. (1990) Impure altruism and donations to public
 399 goods: a theory of warm-glow giving. *Econ. J. Nepal* 100,
 400 464–477
 401 19. Bloom, P. (2016) *Against Empathy*, HarperCollins
 402 20. Cushman, F. (2013) Action, outcome, and value a dual-system
 403 framework for morality. *Personal. Soc. Psychol. Rev.* 17,
 404 273–292
 405 21. Caviola, L. *et al.* (2020) The many obstacles to effective giving.
 406 *Judgm. Decis. Mak.* 15, 159
 407 22. Small, D.A. and Simonsohn, U. (2007) Friends of victims:
 408 personal experience and prosocial behavior. *J. Consum. Res.*
 409 35, 532–542
 410 23. Samuelson, W. and Zeckhauser, R. (1988) *Status quo bias in*
 411 *decision making.* *J. Risk Uncertain.* 1, 7–59
 412 24. Jones, B. and Rachlin, H. (2006) Social discounting. *Psychol.*
 413 *Sci.* 17, 283–286
 414 25. Huang, K. *et al.* (2019) Veil-of-ignorance reasoning favors
 415 the greater good. *Proc. Natl. Acad. Sci. U. S. A.* 116,
 416 23989–23995
 417 26. Baron, J. and Szymanska, E. (2011) Heuristics and biases in
 418 charity. In *The Science of Giving: Experimental Approaches to*
 419 *the Study of Charity* (Oppenheimer, D.M. and Olivola, C.Y., eds),
 420 pp. 215–235, Psychology Press
 421 27. Knowles, S. and Sullivan, T. (2017) Does charity begin at home
 422 or overseas? *Nonprofit Volunt. Sect. Q.* 46, 944–962
 423 28. Caviola, L. *et al.* (2019) The moral standing of animals: towards
 424 a psychology of speciesism. *J. Pers. Soc. Psychol.* 116,
 425 1011–1029
 426 29. Caviola, L. *et al.* (2020) Utilitarianism for animals, Kantianism for
 427 people? Harming animals and humans for the greater good.
 428 *J. Exp. Psychol. Gen.* Published online October 19, 2020.
 429 <https://doi.org/10.1037/xge0000988>
 430 30. Ord, T. (2020) *The Precipice: Existential Risk and the Future of*
 431 *Humanity*, Hachette
 432 31. Schubert, S. *et al.* (2019) The psychology of existential risk:
 433 moral judgments about human extinction. *Sci. Rep.* 9, 15100
 434 32. Dickert, S. *et al.* (2015) Scope insensitivity: the limits of intuitive
 435 valuation of human lives in public policy. *J. Appl. Res. Mem.*
 436 *Cogn.* 4, 248–255
 437 33. Fetherstonhaugh, D. *et al.* (1997) Insensitivity to the value of
 438 human life: a study of psychophysical numbing. *J. Risk Uncertain.*
 439 14, 283–300
 440 34. Västfjäll, D. *et al.* (2014) Compassion fade: affect and charity
 441 are greatest for a single child in need. *PLoS One* 9, e100115
 442 35. Slovic, P. (2007) When compassion fails. *New Scientist*
 443 194, 18
 444 36. Desvousges, W.H. *et al.* (1992) *Measuring Nonuse Damages*
 445 *Using Contingent Valuation: An Experimental Evaluation of*
 446 *Accuracy*, Research Triangle Institute
 447 37. Kahneman, D. and Knetsch, J.L. (1992) Valuing public goods:
 448 the purchase of moral satisfaction. *J. Environ. Econ. Manag.*
 449 22, 57–70
 450 38. Shenhav, A. and Greene, J.D. (2010) Moral judgments recruit
 451 domain-general valuation mechanisms to integrate representa-
 452 tions of probability and magnitude. *Neuron* 67, 667–677
 453 39. Slovic, P. (2010) If I look at the mass I will never act: psychic
 454 numbing and genocide. In *Emotions and Risky Technologies*,
 455 pp. 37–59, Springer
 456 40. Kogut, T. and Ritov, I. (2005) The "identified victim" effect: an
 457 identified group, or just a single individual? *J. Behav. Decis.*
 458 *Mak.* 18, 157–167
 459 41. Kogut, T. and Ritov, I. (2005) The singularity effect of identified
 460 victims in separate and joint evaluations. *Organ. Behav. Hum.*
 461 *Decis. Process.* 97, 106–116
 462 42. Sudhir, K. *et al.* (2016) Do sympathy biases induce charitable
 463 giving? The effects of advertising content. *Mark. Sci.* 35,
 464 849–869
 465 43. Small, D.A. and Loewenstein, G. (2003) Helping a victim or
 466 helping the victim: altruism and identifiability. *J. Risk Uncertain.*
 467 26, 5–16
 468 44. Bloom, P. (2013) *The baby in the well: the case against empathy*,
 469 *New Yorker*, May 20
 470 45. Small, D.A. *et al.* (2007) Sympathy and callousness: the impact of
 471 deliberative thought on donations to identifiable and statistical
 472 victims. *Organ. Behav. Hum. Decis. Process.* 102, 143–153
 473 46. Tetlock, P.E. (2003) Thinking the unthinkable: sacred values
 474 and taboo cognitions. *Trends Cogn. Sci.* 7, 320–324
 475 47. Ubel, P.A. *et al.* (1996) Cost-effectiveness analysis in a setting
 476 of budget constraints – is it equitable? *N. Engl. J. Med.* 334,
 477 1174–1177
 478 48. Paolacci, G. and Yalcin, G. (2020) Fewer but poorer: benevolent
 479 partiality in prosocial preferences. *Judgm. Decis. Mak.* 15,
 480 173–181
 481 49. Sharps, D.L. and Schroeder, J. (2019) The preference for
 482 distributed helping. *J. Pers. Soc. Psychol.* 117, 954–977
 483 50. Null, C. (2011) Warm glow, information, and inefficient charitable
 484 giving. *J. Public Econ.* 95, 455–465
 485 51. Exley, C.L. (2020) Using charity performance metrics as an
 486 excuse not to give. *Manag. Sci.* 66, 553–563

- 487 52. Gneezy, U. et al. (2014) Avoiding overhead aversion in charity. *Science* 346, 632–635
- 488
- 489 53. Cunningham, H. et al. (2017) Bilateral foreign aid: how important is aid effectiveness to people for choosing countries to support? *Appl. Econ. Lett.* 24, 306–310
- 490
- 491
- 492 54. Uhlmann, E.L. et al. (2015) A person-centered approach to moral judgment. *Perspect. Psychol. Sci.* 10, 72–81
- 493
- 494 55. Nowak, M.A. (2006) Five rules for the evolution of cooperation. *Science* 314, 1560–1563
- 495
- 496 56. Yoeli, E. et al. (2013) Powering up with indirect reciprocity in a large-scale field experiment. *Proc. Natl. Acad. Sci. U. S. A.* 110, 10424–10429
- 497
- 498
- 499 57. Burum, B. et al. (2020) An evolutionary explanation for ineffective altruism. *Nat. Hum. Behav.* 4, 1245–1257
- 500
- 501 58. Johnson, S. (2018) Dimensions of altruism: do evaluations of prosocial behavior track social good or personal sacrifice? *SSRN* Published online November 15, 2018. <https://doi.org/10.2139/ssrn.3277444>
- 502
- 503
- 504
- 505 59. Barasch, A. et al. (2014) Selfish or selfless? On the signal value of emotion in altruistic behavior. *J. Pers. Soc. Psychol.* 107, 393–413
- 506
- 507
- 508 60. Simler, K. and Hanson, R. (2017) *The Elephant in the Brain: Hidden Motives in Everyday Life*, Oxford University Press
- 509
- 510 61. Montealegre, A. et al. (2020) Does maximizing good make people look bad? *PsyArXiv* Published online April 12, 2020. <https://doi.org/10.31234/osf.io/2zbax>
- 511
- 512
- 513 62. Caviola, L. et al. (2014) The evaluability bias in charitable giving: saving administration costs or saving lives? *Judgm. Decis. Mak.* 9, 303
- 514
- 515
- 516 63. Torgovnick May, K. (2014) *Charities + Overhead: Dan Pallotta's TED Talk Changes the Conversation*, TED
- 517
- 518 64. Berrett, J.L. (2020) *Burying the Overhead Myth and Breaking the Nonprofit Starvation Cycle: Identifying More Valid Measures and Determinants of Nonprofit Efficiency*, North Carolina State University
- 519
- 520
- 521
- 522 65. Zeckhauser, R. and Shepard, D. (1976) Where now for saving lives. *Law Contemp. Probs* 40, 5
- 523
- 524 66. Banerjee, A.V. et al. (2011) *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*, PublicAffairs
- 525
- 526 67. Peters, E. et al. (2006) Numeracy and decision making. *Psychol. Sci.* 17, 407–413
- 527
- 528 68. Snowden, J. (2019) Should we give to more than one charity? In *Effective Altruism: Philosophical Issues* (Greaves, H. and Pummer, T., eds), Oxford University Press
- 529
- 530
- 531 69. Baron, J. and Greene, J. (1996) Determinants of insensitivity to quantity in valuation of public goods: contribution, warm glow, budget constraints, availability, and prominence. *J. Exp. Psychol. Appl.* 2, 107
- 532
- 533
- 534
- 535 70. Västfjäll, D. et al. (2015) Pseudoinefficacy: negative feelings from children who cannot be helped reduce warm glow for children who can be helped. *Front. Psychol.* 6, 616
- 536
- 537
- 538 71. Grimson, D. et al. (2020) How close to home does charity begin? *Appl. Econ.* 52, 3700–3708
- 539
- 540 72. Karnofsky, H. (2013) *6 Tips on Disaster Relief Giving*, GiveWell
- 541
- 542 73. Small, D.A. (2010) Reference-dependent sympathy. *Organ. Behav. Hum. Decis. Process.* 112, 151–160
- 543
- 544 74. Metzger, L. and Günther, I. (2019) Making an impact? The relevance of information on aid effectiveness for charitable giving. A laboratory experiment. *J. Dev. Econ.* 136, 18–33
- 545
- 546 75. Bergh, R. and Reinstein, D. (2020) Empathic and numerate giving: the joint effects of victim images and charity evaluations. *Soc. Psychol. Pers. Sci.* Published online February 17, 2020. <https://doi.org/10.1177/1948550619893968>
- 547
- 548
- 549
- 550 76. Caviola, L. and Greene, J.D. (2021) Boosting effective giving with bundling and donor coordination. *PsyArXiv* Published online March 22, 2021. <https://doi.org/10.31234/osf.io/65fmr>
- 551
- 552
- 553 77. Karlan, D. and Wood, D.H. (2017) The effect of effectiveness: donor response to aid effectiveness in a direct mail fundraising experiment. *J. Behav. Exp. Econ.* 66, 1–8
- 554
- 555
- 556 78. Verkaik, D. (2016) Do donors really care about impact information? A dual process account. *Open Sci. Framework* Published online May 18, 2016. <https://osf.io/paf2b>
- 557
- 558
- 559 79. Cryder, C.E. et al. (2013) The donor is in the details. *Organ. Behav. Hum. Decis. Process.* 120, 15–23
- 560
80. Thaler, R.H. and Sunstein, C.R. (2009) *Nudge*, Penguin 561
81. Everett, J.A.C. et al. (2015) Doing good by doing nothing? The role of social norms in explaining default effects in altruistic contexts. *Eur. J. Soc. Psychol.* 45, 230–241 562
82. Johnson, E.J. and Goldstein, D. (2003) Do defaults save lives? *Science* 302, 1338–1339 563
83. Karlan, D. and List, J.A. (2007) Does price matter in charitable giving? Evidence from a large-scale natural field experiment. *Am. Econ. Rev.* 97, 1774–1793 564
84. Hsee, C.K. et al. (2013) Unit asking: a method to boost donations and beyond. *Psychol. Sci.* 24, 1801–1808 565
85. Weisz, E. and Cikara, M. (2020) Merely increasing action options increases charitable donation. *Research Square* Published online August 28, 2020. <https://doi.org/10.21203/rs.3.rs-59021/v1> 566
86. Singer, P. (1972) Famine, affluence, and morality. *Philos Public Aff* 1, 229–243 567
87. Lindauer, M. et al. (2020) Comparing the effect of rational and emotional appeals on donation behavior. *Judgm. Decis. Mak.* 15, 413–420 568
88. Schwitzgebel, E. and Cushman, F. (2020) Contest winner! A philosophical argument that effectively convinces research participants to donate to charity. *Splintered Mind* Published online June 23, 2020. <http://schwitzsplinters.blogspot.com/2020/06/contest-winner-philosophical-argument.html> 569
89. Rawls, J. (2009) *A Theory of Justice*, Harvard University Press 570
90. Harsanyi, J.C. (1955) Cardinal welfare, individualistic ethics, and interpersonal comparisons of utility. *J. Polit. Econ.* 63, 309–321 571
91. Singer, P. (2016) *The Most Good You Can Do*, Yale University Press 572
92. MacAskill, W. (2015) *Doing Good Better*, Guardian Faber 573
93. MacAskill, W. (2019) The definition of effective altruism. In *Effective Altruism: Philosophical Issues* (Greaves, H. and Pummer, T., eds), Oxford University Press 574
94. Cialdini, R.B. and Goldstein, N.J. (2004) Social influence: compliance and conformity. *Annu. Rev. Psychol.* 55, 591–621 575
95. Berman, J.Z. et al. (2015) The braggart's dilemma: on the social rewards and penalties of advertising prosocial behavior. *J. Mark. Res.* 52, 90–104 576
96. De Freitas, J. et al. (2019) Maimonides' ladder: states of mutual knowledge and the perception of charity. *J. Exp. Psychol. Gen.* 148, 158–173 577
97. Pinker, S. (2012) *The Better Angels of Our Nature: Why Violence Has Declined*, Penguin 578
98. Singer, P. (2011) *The Expanding Circle: Ethics, Evolution, and Moral Progress*, Princeton University Press 579
99. Johnson, R. et al. (2016) Where's WALY? A proof of concept study of the "wellbeing adjusted life year" using secondary analysis of cross-sectional survey data. *Health Qual. Life Outcomes* 14, 126 580
100. Miguel, E. and Kremer, M. (2004) Worms: identifying impacts on education and health in the presence of treatment externalities. *Econometrica* 72, 159–217 581
101. Baird, S. et al. (2016) Worms at work: long-run impacts of a child health investment. *Q. J. Econ.* 131, 1637–1680 582
102. Mintz-Woo, K. (2020) A philosophers' guide to discounting. In *Philosophy & Climate Change* (McPherson, T. et al., eds), Oxford University Press 583
103. Stern, N.H. et al. (2006) *Stern Review on the Economics of Climate Change*, Cambridge University Press 584
104. Singer, P. (1975) *Animal Liberation: A New Ethic for Our Treatment of Animals*, Avon 585
105. Greaves, H. (2017) Population axiology. *Philos Compass* 12, e12442 586
106. Greaves, H. et al. (2020) *A Research Agenda for the Global Priorities Institute*, University of Oxford 587
107. Parfit, D. (1986) *Reasons and Persons*, Oxford University Press 588
108. Pummer, T. (2016) Whether and where to give. *Philos Public Aff* 44, 77–95 589
109. MacAskill, W. (2013) What Charity Navigator Gets Wrong About Effective Altruism. *Stanf. Soc. Innov. Rev.* December 3 590
110. Jamison, D.T. et al. (2006) *Disease Control Priorities in Developing Countries*, World Bank 591