

How Morally Good are Donors? It Depends on Who Knows About Their Donation

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Abstract

Prior work has examined how donors who donate publicly are judged less positively than those who donate anonymously. However, it is not well understood how people judge donors who reveal their identity only to the recipient (“known-to-recipient donors”) or how the donor-recipient relationship influences these judgments. Across three studies (N = 547), we investigated moral judgments and the perceptions of motives of anonymous donors, public donors, and known-to-recipient donors who donated to close others (e.g., family, friends) or strangers. We found that anonymous donors were judged as more morally good, followed by known-to-recipient donors, and, finally, public donors, with no influence of donor-recipient relationship. Participants judged anonymous donors as most likely to have donated because they believed it was the right thing to do, and because they wanted to minimize the recipient’s negative feelings (e.g., shame). Known-to-recipient donors were perceived as most likely to have donated to show their care for the recipient. Public donors were perceived as most likely to have donated for reputational reasons, to strengthen their relationship with the recipient, and to strengthen norms around donating. Donors who gave to close others were perceived as more likely than donors who gave to strangers to take the recipient’s feelings into account and less likely to be reputationally motivated. Moral character judgments of donors are robust across relationship contexts and only partially explained by perceptions of their motives.

Keywords: donations, charity, anonymity, motives, moral judgment, relationship

How Morally Good are Donors? It Depends on Who Knows About Their Donation

Moral judgments of donors often depend on their perceived motives (Alrababa'h et al., 2020). Are donors primarily trying to help someone in need, or do they simply want to appear helpful? Research on prosocial behavior demonstrates that the inferred motives of individuals (Raihani & Power, 2021) and companies (Silver et al., 2021) for their prosocial acts influence how others perceive them, and how much others are willing to cooperate with them (Guo, 2023). Prior work suggests that anonymity plays a key role in perceptions of donors' motives. Public donors are often perceived as less likely to have donated for morally good reasons than anonymous donors (Kraft-Todd et al., 2022, Berman et al., 2015). In addition to donating publicly (i.e., revealing one's identity to everyone) and anonymously (i.e., revealing one's identity to no one), donors may also choose to only reveal their identity to the recipient ("known-to-recipient" donors). We refer to the different ways donors may choose to reveal their identity while donating in this paper as *donation formats*. Observers may infer different information about the motives of donors depending on their donation format, influencing judgments of their moral character. For instance, by choosing to reveal their identity to their recipient, known-to-recipient donors may be perceived as wanting to demonstrate their support and care for their recipient.

However, while previous studies have examined how inferences about donors' motives for donating impact judgments of their character (Newman & Cain, 2014), no work has examined how the "known-to-recipient" donation format or the donor-recipient relationship impacts perceptions of donors' motives or characters. The current studies investigated how donation format and inferred donor motives influence judgments of donors' moral character, and whether the donor-recipient relationship impacts these links.

People donate for a multitude of reasons. The competitive altruism hypothesis predicts that people donate to signal to others that they are a desirable group member (Hardy & van Vugt, 2006). Expanding on this, Bekkers and Wiepking (2010) outline eight mechanisms that

drive people's charitable giving: awareness of need, solicitation, costs and benefits, altruism, reputation, psychological benefits, values, and efficacy. Different attributions of donors' motives can produce divergent judgments of their moral characters. For example, as sharing one's charitable actions with others can draw attention to one's generosity, it can also appear as reputation signaling, a phenomenon known as the "braggart's dilemma" (Berman et al., 2015). Berman et al. found that bragging donors are perceived as less intrinsically motivated to help, making them appear less altruistic. However, prosocial motives also exist for donors that publicize their donations, such as inspiring others to donate. Indeed, Berman et al. also showed that bragging donors who attempt to recruit others to donate are perceived as more altruistic than bragging-only donors. Donating publicly might also carry the risk of being perceived as a false signaler, one who violates the moral values that they have signaled to others as important to them (Jordan & Sommers, in prep.). When one donates publicly, their donation behavior can be compared against their known history of other behaviors, making it easier for observers to detect discrepancies between this prosocial behavior and their past behaviors. Therefore, public donors may be more likely to be characterized as hypocrites.

Since the motives of donors are difficult to verify, observers do not need much evidence to support their derogation of donors as selfishly motivated (Berman & Silver, 2022). Donors who could benefit from their own prosocial actions, for instance, are judged as less selfless than agents who could not (Lin-Healy & Small, 2013). As an extreme example, charitable actors who help a charity *and* benefit themselves are viewed as less moral than those whose actions do not help a charity at all (Newman & Cain, 2014). Yet, not all personal benefits are discredited; agents who donate to reap emotional benefits, such as reduced distress or increased empathy, are viewed as more moral than agents who are motivated by reputational or material benefits (Barasch et al., 2014).

How donors expect to be perceived has a significant impact on their donation behavior. Donors tend to donate more when they know they are being observed (Alpizar et al., 2008;

Soetevent, 2005; but see Savary & Goldsmith, 2020). Additionally, when distributing resources, children (Shaw & Olson, 2012) and adults (Shaw & Knobe, 2013) prefer discarding resources to make a fair choice instead of giving them away unfairly, which may be motivated by a desire to be seen as impartial.

Current Studies

There is an important distinction between public donations that are intentionally public and those that are not, such as donations that are required to be made publicly. Research on “obligatory-publicity” strategies shows that requiring donations to be made publicly increases donations, especially among donors with strong reputational motives (Yang & Hsee's, 2021). This suggests that when selfish motives for donating publicly are less readily inferred due to plausible alternative reasons (e.g., following a requirement), observers are less likely to perceive these public donors as purely selfishly motivated. Donors' choices of different donation formats (anonymous, public, known-to-recipient) are likely ascribed different plausible motives, which may impact judgments of their character. The current studies examined inferences about the underlying motives and judgments of donors.

While the relationship between donors and their recipients is likely to influence how people infer donors' motives, most prior work on donor motive inferences examines donating to strangers. Yet, other work reveals that evaluations of prosocial behavior are sensitive to how people are expected to behave across different social relationship contexts. Helping a stranger, for instance, may be perceived as unexpected and supererogatory, whereas helping a family member may be perceived as expected and obligatory. These differences in obligation impact how helping behavior is perceived. Agents who help strangers are perceived as more moral than agents who help family members; however, agents who help strangers *instead of* family members are perceived as less moral (McManus et al., 2020, 2021). Complementary work shows that agents who prioritize the well-being of loved ones over strangers in moral dilemmas

are judged as more moral than agents who are impartial (Hughes, 2017), and helping distant others instead of close others is viewed as immoral and harmful to relationship quality (Law et al., 2022).

While no prior work has examined how the social relationship between donors and their recipients influences inferences about donors' motives for choosing a particular donation format, donors may have unique motivations for donating and for choosing whom to reveal their identity to while donating, when they are donating to close others, such as a family member or friend, or to strangers. Donors may, for instance, want to *conceal* their identity from close others to prevent them from feeling pitied or embarrassed for being in need. Alternatively, donors may want to *disclose* their identity to close others to communicate their care for them. In this way, a known-to-recipient donation may strengthen the donor-recipient relationship when recipients are close others. Recipient-oriented motives may work against or in tandem with various other reasons for donating publicly (e.g., reputational benefits, encouraging others to donate) or anonymously (e.g., altruism, avoiding backlash). The current investigation examined how the donor-recipient relationship influences how people infer donors' motives for donating under different donation formats.

The current research extends existing literature on the impact of motive inferences on evaluations of donors by examining 1) the impact of the choice of donation format on moral judgments of donors (Studies 1a-1c), 2) the impact of motive inferences about the choice of donation format on moral judgments of donors (Study 2), and 3) the moderating impact of the donor-recipient relationship on these motive inferences and moral judgments (Study 2). Study 2 was preregistered while Studies 1a-1c were not. All measures, manipulations, exclusions, and methods for selecting sample size in the study are disclosed. No data collection was continued after data analysis for of the current studies.

Studies 1a-1c Methods

Studies 1a-1c followed the same basic procedure. First, participants read the following text describing someone (Ryan) asking for donations to his Go Fund Me page, a community-based fundraising platform:

Ryan was recently diagnosed with early-stage skin cancer. If treated soon, he has a high chance of survival. However, Ryan's health insurance is subpar; it will only cover about 50% of his treatment and he will be unable to continue to work and gain an income. Because of this, Ryan created a "Go Fund Me" page, asking for donations to help pay his medical bills. The "Go Fund Me" page has been widely shared since its creation, reaching people who Ryan has never seen or met before.

Then, participants read about three donors displayed in a random order (Appendix A):

1. *Anonymous donor* - This agent donated to the recipient completely anonymously; they chose not to reveal their identity to the recipient or to anyone else who could see the donation page.
2. *Known-to-recipient donor* - This agent donated to the recipient partially anonymously; they chose to reveal their identity to the recipient but not to anyone else who could see the donation page.
3. *Public donor* - This agent donated to the recipient non-anonymously; they chose to reveal their identity to the recipient and to anyone else who could see the donation page.

Participants rated the moral goodness of each donor on a scale from 0 (Extremely bad) to 100 (Extremely good) and answered a series of demographic questions.

Study 1a

Sample

We recruited 109 American adults from Prolific and received 105 complete responses (48 women, 56 men, 1 non-binary/other; Mean age = 37.90, $SD = 12.12$). The study took on average 5 minutes to complete, and participants were compensated \$0.60 for participating.

Procedure

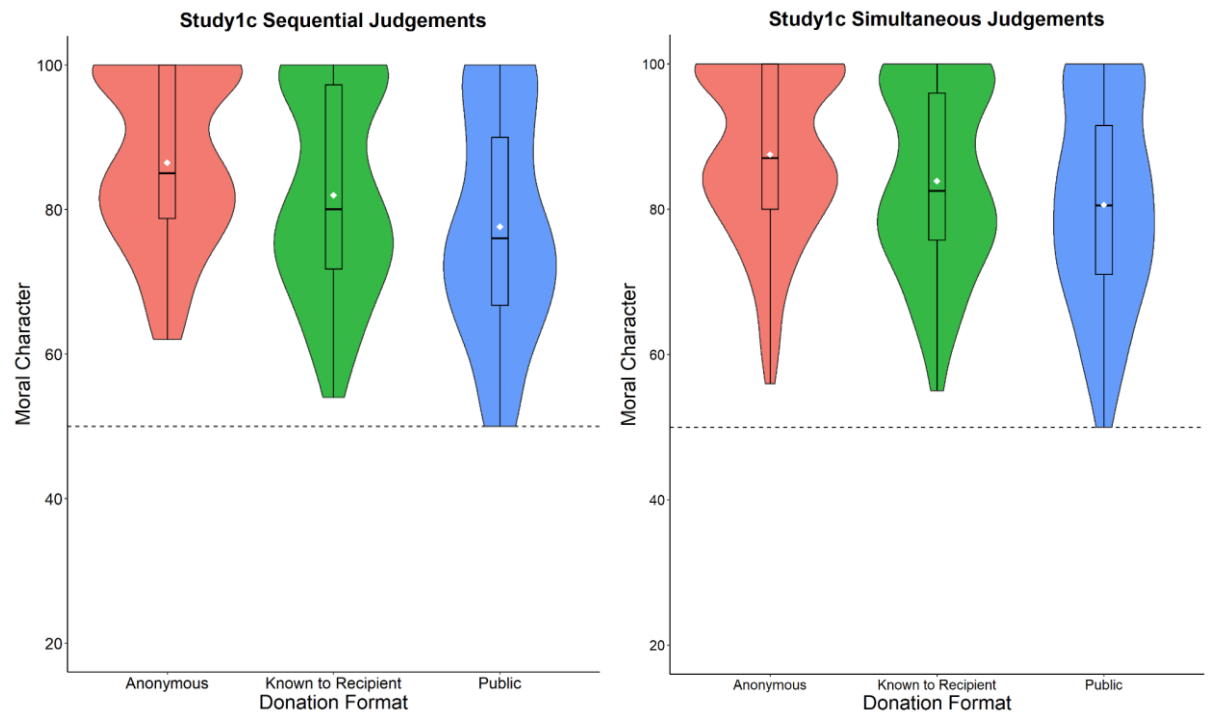
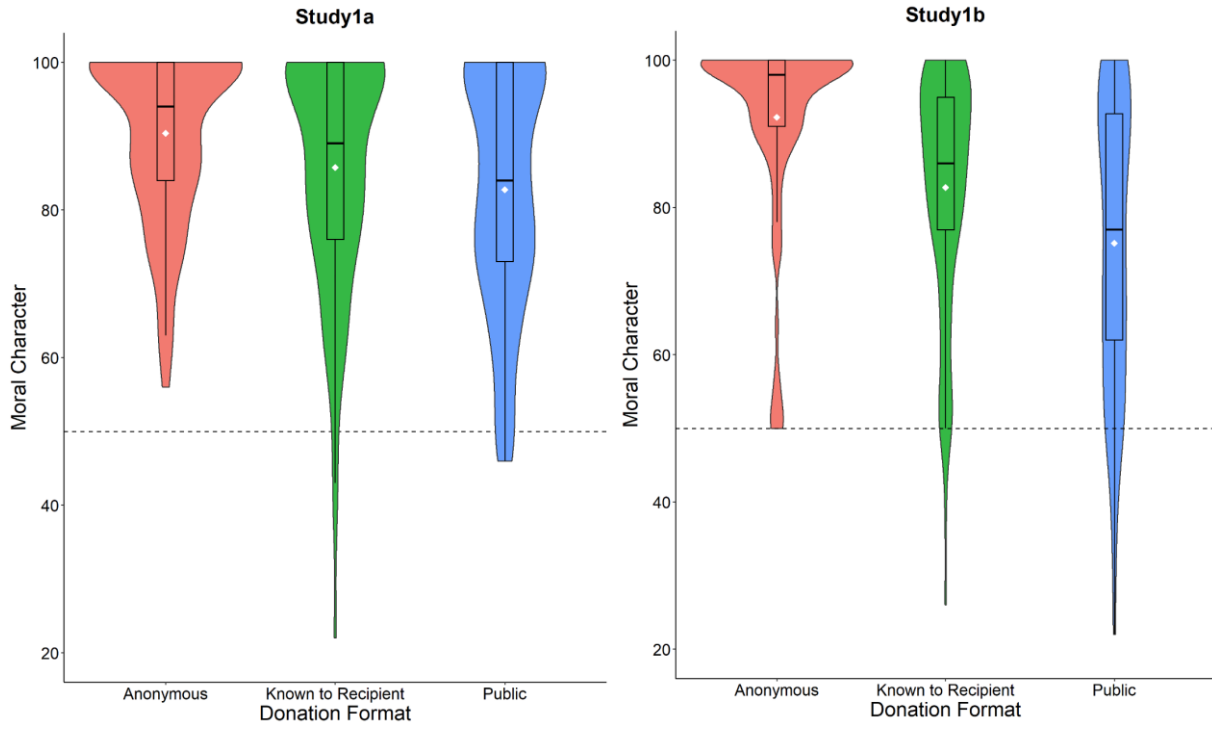
In Study 1a, participants followed the basic format described above. Moral goodness ratings were obtained sequentially; participants rated the moral goodness of each donor immediately after reading about that donor. Correlations between the variables within Studies 1a-1c are reported in the Supplementary Materials.

Results

We found a linear decrease in moral goodness across the conditions (Fig. 1). Anonymous donors were judged as more morally good than known-to-recipient donors, $t(104) = 4.77$, $p < .001$, $dz = .47$. Additionally, known-to-recipient donors were judged as more morally good than public donors, $t(104) = 2.39$, $p = .019$, $dz = .23$. We hypothesized that this could be driven by inferences of the donors' motives; anonymous donations are perceived as more likely to have been motivated by morally good reasons (e.g., because it is the "right thing to do"), while more public donors are perceived as more likely to have been motivated by morally suspect reasons, i.e., ulterior motives such as reputation signaling (Kraft-Todd et al., in press). We tested this hypothesis in Study 1b.

Figure 1

Judgments of Donors' Moral Character in Studies 1a-1c



Study 1b

Sample

We recruited 120 American adults from Prolific and received 105 complete responses (40 women, 65 men; Mean age = 39.34, $SD = 10.77$). The study took on average 8 minutes to complete, and participants were compensated \$1.00 for participating.

Procedure

In Study 1b, participants followed the same basic format described above, but, after reading about each donor, they were asked to rate the likelihood that each person donated “solely because they believed it was the right thing to do”. Additionally, we asked participants, in an exploratory manner, to make the same motive judgments simultaneously, so that they could make explicit comparisons among agents. Finally, instead of making moral character judgments sequentially after reading about each donor, we randomly assigned half ($N = 53$) of the participants to use our original moral character measure to judge each agent simultaneously at the end of the study. The other half ($N = 50$) of participants rated the likelihood that each agent was truly a morally good person. Modifying the format of the motive and moral character judgments in this way allowed us to test the generalizability of the judgments and account for the possibility that some participants would not be able to express their true differential judgments when seeing stimuli sequentially rather than simultaneously (e.g., participants who used the extreme end of the scale on their first stimulus would have been unable to distinguish between later more extreme stimuli). Since we found identical effects regardless of the question format for each DV, we combined the data and report results of the combined dataset here.¹

Results

Moral Character Judgments

Replicating Study 1b, we found a linear decrease across the conditions (Fig. 1). Anonymous donors were judged as more morally good than known-to-recipient donors, $t(104) = 7.94$, $p <$

¹ Analyses of the effect of donation format on each format of the DVs are reported in the Supplementary Materials.

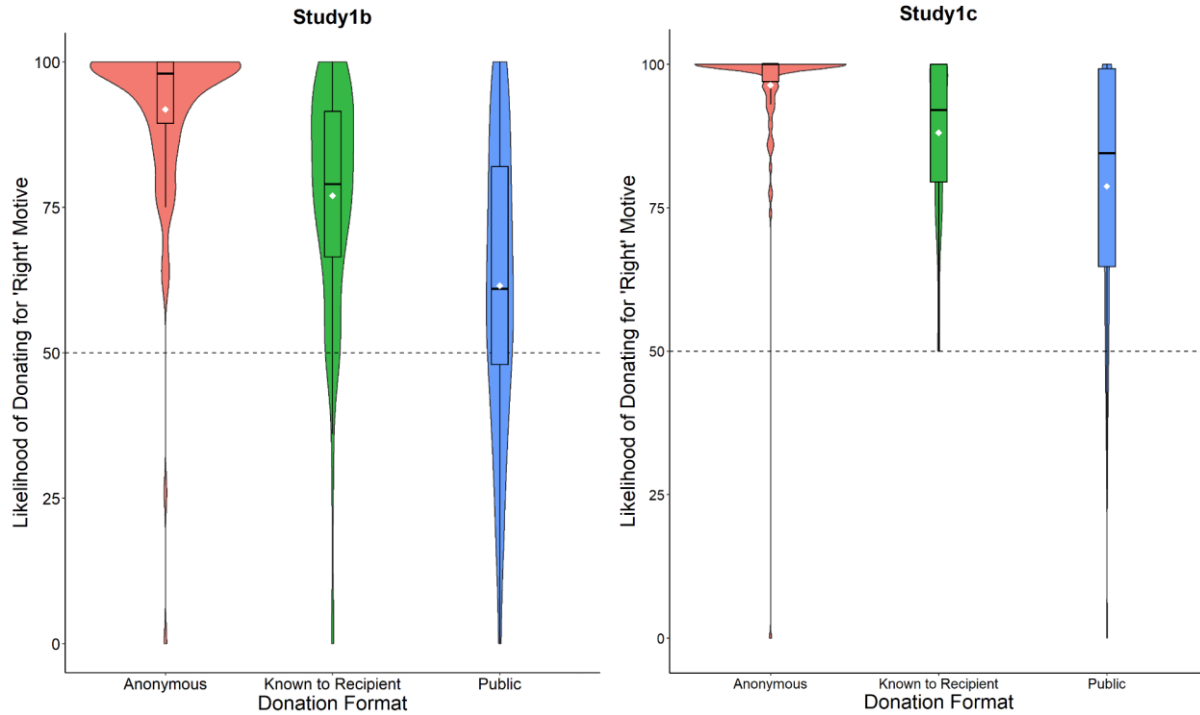
.001, $d_z = .77$. Known-to-recipient donors were judged as more morally good than public donors, $t(104) = 6.52$, $p < .001$, $d_z = .64$.

Motive Judgments

We found a linear decrease across the conditions (Fig. 2). Anonymous donors were perceived as more likely than known-to-recipient donors to have donated *solely* because they believed it was the right thing to do, $t(104) = 9.22$, $p < .001$, $d_z = .90$. Known-to-recipient donors were perceived as more likely than public donors to have donated solely because they believed it was the right thing to do, $t(104) = 9.59$, $p < .001$, $d_z = .94$.

Figure 2

Perceived Motives of Donors in Studies 1b-1c



These results suggest that participants made inferences about donors' motives, and that donors' choice of donation format influenced those motives. In Study 1c, we aimed to replicate these effects for participants' explicit comparisons among donors.

Study 1c

Sample

We recruited 120 American adults from Prolific and received 96 complete responses (43 women, 53 men; Mean age = 39.43, $SD = 9.80$). The study took on average 8 minutes to complete, and participants were compensated \$1.00 for participating.

Procedure

In Study 1c, participants followed the same basic format described above, except we asked participants to make moral character judgments both sequentially and simultaneously. Additionally, we asked participants to make the motive judgments simultaneously after the moral character judgments.

Results

Sequential Moral Character Judgments

Replicating studies 1a-1b, we found a linear decrease across the conditions (Fig. 1). Anonymous donors were judged as more morally good than known-to-recipient donors, $t(95) = 6.42, p < .001, dz = .66$. Known-to-recipient donors were judged as more morally good than public donors, $t(95) = 5.49, p < .001, dz = .56$.

Simultaneous Moral Character Judgments

Replicating studies 1a-1b, we found a linear decrease across the conditions (Fig. 1). Anonymous donors were judged as more morally good than known-to-recipient donors, $t(95) = 6.38, p < .001, dz = .65$. Known-to-recipient donors were judged as more morally good than public donors, $t(95) = 5.80, p < .001, dz = .59$.

Simultaneous Motive Judgments

Replicating studies 1a-1b, we found a linear decrease across the conditions (Fig. 2). Anonymous donors were perceived as more likely than known-to-recipient donors to have donated *solely* because they believed it was the right thing to do, $t(95) = 6.20, p < .001, dz = .63$. Known-to-recipient donors were perceived as more likely than public donors to have donated *solely* because they believed it was the right thing to do, $t(95) = 5.85, p < .001, dz = .60$.

Post-hoc Sensitivity Analyses

A post-hoc sensitivity analysis was conducted using G*Power3 (Faul et al., 2007) to determine the minimum effect size (dz) each study was powered to detect using an alpha of .05 and .80 power for the difference between two dependent group means using a two-tailed test. With a sample of 105, Study 1a had .80 power to detect an effect size of at least 0.28 at an alpha of .05. With a sample of 120, Study 1b had .80 power to detect an effect size of at least 0.26 at an alpha of .05. With a sample of 96, Study 1c had .80 power to detect an effect size of

at least 0.29 at an alpha of .05. Importantly, all observed effect sizes were larger than the smallest detectable effect sizes.

Discussion

Studies 1a-1c demonstrate that donation format has a significant effect on judgments of donors' moral character and how likely a donor is to be perceived as having donated solely because it is the right thing to do. However, since these studies examined the impact of donation format on perceptions of donations given to only *strangers*, it is not clear how the donor-recipient relationship influences these judgments or how people judge donors who reveal their identity only to the recipient ("known-to-recipient donors"). It is possible that observers ascribe unique motivations to these kinds of donors, which may impact judgments of their moral character. Additionally, since these studies only examined the perceived likelihood of one kind of motive (i.e., because it was the right thing to do), it is not clear how people may attribute other kinds of motives, such as those related to strengthening the donor-recipient relationship, to different kinds of donors, or how moral people perceive these motives to be.

Study 2

In Study 2, we expanded on Studies 1a-1c in several important ways: 1) we examined perceptions of known-to-recipient donors and donors who donated to close others, 2) we examined perceptions of a wider range of motives for donating under different donation formats (i.e., anonymously, publicly, or known-to-recipient), and 3) we examined judgments of the moral goodness of these potential motives (i.e., we asked participants to judge to what extent donors' potential motives were morally good).

Before conducting Study 2, we conducted an exploratory study (1) to test a list of potential motives for donors choosing to donate [anonymously/known-to-recipient/publicly] that we drafted based on prior work, (2) to test three conditions for examining the impact of the donor-recipient relationship (family, close friends, stranger), and (3) to collect open response feedback from participants on other potential motives that we had not considered. Since this

study (Study 2 Pilot) mainly served to refine the methods and formulate hypotheses to preregister for Study 2, the methods and results of the Study 2 Pilot are reported in Supplementary Materials. Based on the Study 2 Pilot, including the results of an exploratory factor analysis on twelve different motives and free-response feedback from participants, we selected a finalized list of eight motives to use in Study 2.

This list includes both motives that have previously been investigated as potential motives for donating, including an altruism motive (Elster, 2006), a reputation signaling motive (Small & Cryder, 2016), and a norm-setting motive (Pereda et al., 2017), as well as motives that have not been previously investigated, including three related to the donor-recipient relationship and two exploratory motives that were highlighted by participants in the free-response section. The relationship-oriented motives include both those we expected to be attributed more to donors who reveal their identity to the recipient (i.e., a desire to strengthen the relationship with the recipient and to show care for the recipient), and one we expected to be attributed more to donors who do not reveal their identity to the recipient (i.e. to prevent the recipient from feeling bad for asking for money). The two exploratory motives we included were 1) the donor's desire to avoid scrutiny from others, and 2) the donor's desire to prevent others from being jealous. As many participants in the Study 2 Pilot remarked, donors who reveal their identity to the public may risk making other people jealous of the recipient and asking the donor for money. To prevent this, donors may be motivated to conceal their identity. We added these two motives because they were, at least anecdotally, distinct from the other motives on the list, and provided two potential selfish motives for anonymous donors, which the list did not already have. Since they were not originally included in the Study 2 Pilot studies, these two motives were exploratory items for which we had no a priori hypotheses. After the addition of these two motives, the list contained both selfish and prosocial motives for all three types of donors.

This study used a 3 X 2 within-subjects design to examine the effects of donation format and donor-recipient relationship on the perceived likelihood and moral goodness of donors'

motives for donating, and the moral character of the donors. Based on the Study 2 Pilot, we preregistered the following hypotheses and planned analyses.

Hypotheses

- H1a: As found in Studies 1a-1c and the Study 2 Pilot, anonymous donors will be perceived as more morally good than known-to-recipient and public donors.
- H1b: As found in the Study 2 Pilot, donors who gave to family members will be perceived as no more morally good than donors who gave to strangers.
- H2a: As found in the Study 2 Pilot, anonymous donors will be perceived as more likely to have donated for the following reasons: Right and Prevent Bad Feelings.
- H2b: As found in the Study 2 Pilot, known-to-recipient donors and public donors will be perceived as more likely to have donated for the following reasons: Strengthen Relationship and Show Care.
- H2c: As found in the Study 2 Pilot, public donors will be perceived as more likely to have donated for the following reasons: Reputation and Norm-Setting.
- H3a: As found in the Study 2 Pilot, donors who donated to family members will be perceived as more likely to have donated for the following reasons: Strengthen Relationship, Show Care, and Prevent Bad Feelings.
- H3b: As found in the Study 2 Pilot, donors who donated to family members will be perceived as no more likely than donors who donated to strangers to have donated for the following reasons: Right, Reputation, and Norm-Setting.

We did not have a priori hypotheses about the differences in moral goodness ratings of each motive across anonymity and relationship type. We also preregistered our plan for calculating a total motivation score for each donor to examine how participants' perceptions of donors' motives, overall, informs their moral character judgments (see Results).

Method

Sample

An a priori power analysis was conducted using G*Power3 (Faul et al., 2007) to test the difference between two dependent means using a two-tailed test, an effect size of $d_z = .20$, and an alpha of .05. Results showed that a total sample of 199 participants was required to achieve a power of .80. We chose d_z of 0.20 as our smallest effect size of practical and theoretical significance. Because our design is fully within-subjects, this sample size also gives us .80 power to detect interactions (i.e., difference-in-differences) of $d_z = .20$. To obtain a sample of at least 199 after exclusions, we oversampled and collected 250 American participants from Prolific. After 9 attention checks were applied, $N = 199$ participants remained (108 women, 82 men, 7 non-binary, 2 other; Mean age = 37.23, $SD = 13.97$). The study took on average 22 minutes to complete, and participants were compensated \$3.00 for participating.

Procedure

Participants evaluated the potential motives of each of the six donors separately in a random order. First, participants were asked “How likely is it that [donor] donated [anonymously (“fully anonymously”), known-to-recipient (“selectively anonymously”), or publicly (“non-anonymously”)] for each of the following reasons?” and rated their responses on a five-point Likert scale from “Extremely unlikely” to “Extremely likely” for each of eight potential motives (Table 1). Then participants were asked “How morally good would it have been for [donor] to donate [anonymously (“fully anonymously”), known-to-recipient (“selectively anonymously”), or publicly (“non-anonymously”)] for each of the following reasons?” for the same set of eight motives and rated their responses on a 6-point Likert scale from “Extremely morally bad” to “Extremely morally good.”

Finally, participants rated the moral character of each donor simultaneously on a five-point Likert scale from “Extremely morally bad” to “Extremely morally good”.²

² Correlations between each motive and between each motive and moral character rating are reported in Supplementary Materials.

Table 1*Motives for Donating Anonymously or Not (Study 2)*

Motive	Item
Right	they believed it was the right thing to do
Show Care	they wanted Ryan to know that they care
Prevent Bad Feelings	they didn't want Ryan to feel bad for asking for money
Example	they wanted to set an example for others
Strengthen Relationship	they wanted to strengthen their relationship with Ryan
Prevent Jealousy	they didn't want to make other people jealous
Avoid Scrutiny	they wanted to avoid scrutiny from others
Reputation	they wanted others to think that they are a good person

Note: Motives are ordered from most morally good to least morally good, according to mean moral goodness ratings across conditions

Results

Moral Character

Supporting H1a, there was a main effect of Donation Format on moral character judgments of donors. Tukey tests for the main effect of Donation Format showed that anonymous donors were perceived as more moral than known-to-recipient donors (MD = 0.24, $p = .001$, $dz = 0.51$) and public donors (MD = 0.52, $p < .001$, $dz = 0.62$). Known-to-recipient donors were perceived as more moral than public donors (MD = 0.27, $p < 0.001$, $dz = 0.46$). Supporting H1b, there was no main effect of Relationship and no significant interaction effect between Donation Format and Relationship on the perceived moral character of donors (Table 2).

Table 2

2x2 Two-way ANOVA for the Interaction Effect of Donation Format and Relationship on judgments of the Donor's Moral Character

Source of variation	df	F-ratio	p-value	η_p^2
Donation Format	(2, 396)	62.30	< .001	.082
Relationship	(1,198)	0.55	.548	.000
Interaction	(2, 396)	0.52	.592	.000

Donation Format Motives

Table 3

Two-Way ANOVAs for Likelihood of Each Donation Format Motive

DV	Source of variation	df	F-ratio	p-value	η_p^2
Right	Donation Format	(2, 396)	35.80	< .001	.051
	Relationship	(1, 198)	19.31	< .001	.007
	Interaction	(2, 396)	11.53	< .001	.008
Show Care	Donation Format	(2, 396)	256.30	< .001	.360
	Relationship	(1, 198)	51.22	< .001	.023
	Interaction	(2, 396)	18.72	< .001	.014
Prevent Bad Feelings	Donation Format	(2, 396)	46.10	< .001	.078
	Relationship	(1, 198)	102.60	< .001	.032
	Interaction	(2, 396)	0.54	0.582	.000
Norm-Setting	Donation Format	(2, 396)	108.00	< .001	.166
	Relationship	(1, 198)	10.15	.002	.003
	Interaction	(2, 396)	1.08	.340	.001
Strengthen Relationship	Donation Format	(2, 396)	306.90	< .001	.346

	Relationship	(1, 198)	373.50	< .001	.231
	Interaction	(2, 396)	62.69	< .001	.059
Prevent Jealousy	Donation Format	(2, 396)	32.92	< .001	.060
	Relationship	(1, 198)	1.81	.180	.001
	Interaction	(2, 396)	0.31	.736	.000
Avoid Scrutiny	Donation Format	(2, 396)	37.05	< .001	.073
	Relationship	(1, 198)	12.19	< .001	.004
	Interaction	(2, 396)	13.97	< .001	.008
Reputation	Donation Format	(2, 396)	407.90	< .001	.472
	Relationship	(1, 198)	0.81	.370	.000
	Interaction	(2, 396)	8.48	< .001	.005

Table 4

Two-Way ANOVAs for Moral Goodness of Each Donation Format Motive

DV	Source of variation	df	F-ratio	p-value	η_p^2
Right	Donation Format	(2, 396)	5.93	.003	.007
	Relationship	(1, 198)	0.42	.518	.000
	Interaction	(2, 396)	0.67	.514	.000
Show Care	Donation Format	(2, 396)	34.84	<.001	.052
	Relationship	(1, 198)	13.63	<.001	.005
	Interaction	(2, 396)	1.94	.146	.001
Prevent Bad Feelings	Donation Format	(2, 396)	26.33	<.001	.037
	Relationship	(1, 198)	4.08	.045	.001
	Interaction	(2, 396)	1.55	.213	.001
Norm-Setting	Donation Format	(2, 396)	2.75	.065	.003
	Relationship	(1, 198)	0.60	.439	.000

	Interaction	(2, 396)	1.42	.243	.001
Strengthen Relationship	Donation Format	(2, 396)	23.57	<.001	.028
	Relationship	(1, 198)	103.70	<.001	.051
	Interaction	(2, 396)	12.25	<.001	.006
Prevent Jealousy	Donation Format	(2, 396)	12.89	<.001	.015
	Relationship	(1, 198)	2.26	.135	.001
	Interaction	(2, 396)	1.17	.313	.001
Avoid Scrutiny	Donation Format	(2, 396)	25.82	<.001	.023
	Relationship	(1, 198)	0.94	.333	.000
	Interaction	(2, 396)	1.32	.267	.001
Reputation	Donation Format	(2, 396)	0.32	.729	.000
	Relationship	(1, 198)	0.03	.865	.000
	Interaction	(2, 396)	2.26	.106	.001

Right Motive

There was a significant interaction effect between Donation Format and Relationship on the perceived likelihood that donors donated because they believed it was the right thing to do ('Right' motive; Table 3). Supporting H2a, follow-up 2x2 two-way ANOVAs show that anonymous donors were perceived as most likely to have donated for the 'Right' motive, followed by known-to-recipient donors, and finally, public donors. Although we did not expect to find an effect of Relationship (H3b), these differences were larger for donors who gave to strangers than donors who gave to family members, which was largely driven by perceptions of public donors who gave to strangers as less likely than the other donors to have donated for the 'Right' motive (Table 5).

There was no significant interaction effect between Donation Format and Relationship on the perceived moral goodness of donors donating because they believed it was the right thing to do (Table 4). However, there was a main effect of Donation Format such that the 'Right' motive was judged as more morally good for anonymous donors than public donors, MD = 0.15,

$p = .072$, $dz = 0.22$. There was no difference in the perceived moral goodness of the 'Right' motive for anonymous donors and known-to-recipient donors, $MD = 0.04$, $p = .869$, $dz = 0.06$, or known-to-recipient donors and public donors, $MD = 0.12$, $p = .207$, $dz = 0.18$. There was no main effect of Relationship.

Table 5

2x2 Two-way ANOVAs for the Interaction Effect of Donation Format and Relationship on the Likelihood of the Right motive

ANOVA Model	Source of variation	df	F-ratio	p-value	η_p^2
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1,198)	10.17	.002	.009
	Relationship	(1,198)	2.31	.13	.001
	Interaction	(1,198)	9.37	.003	.004
2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1,198)	56.12	<.001	.069
	Relationship	(1,198)	10.04	.002	.005
	Interaction	(1,198)	22.04	<.001	.011
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1,198)	29.86	<.001	.032
	Relationship	(1,198)	35.17	<.001	.018
	Interaction	(1,198)	3.45	.065	.002

Show Care Motive

There was a significant interaction effect between Donation Format and Relationship on the perceived likelihood that donors donated because they wanted Ryan to know that they care ('Show Care' motive; Table 3). Supporting H2b, follow-up 2x2 two-way ANOVAs showed that known-to-recipient donors were perceived as more likely to have have donated because of the 'Show Care' motive than public donors, followed by anonymous donors, and, supporting H3a, the effects were stronger for donors who gave to family members than donors who gave to strangers (Table 6).

There was no significant interaction effect between Donation Format and Relationship on the perceived moral goodness of donors donating because they believed it was the right thing to do (Table 4). However, there was a main effect of Donation Format such that the 'Right' motive was judged as less moral good for anonymous donors than known-to-recipient donors, $MD = -0.48$, $p < .001$, $dz = -0.56$, and public donors, $MD = -0.40$, $p < .001$, $dz = -0.39$. The 'Right' motive was judged as no more morally good for known-to-recipient donors than public donors ($MD = 0.08$, $p = .569$, $dz = 0.12$). There was also a main effect of Relationship such that the 'Right' motive was judged as more morally good for donors who gave to family members than donors who gave to strangers, $MD = 0.13$, $p = .069$, $dz = 0.26$.

Table 6

2x2 Two-way ANOVAs for the Interaction Effect of Donation Format and Relationship on the Likelihood of the Show Care motive

ANOVA Model	Source of variation	df	F-ratio	p-value	η_p^2
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1,198)	340.8	<.001	.391
	Relationship	(1,198)	12.97	<.001	.006
	Interaction	(1,198)	12.6	<.001	.006
2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1,198)	233.7	<.001	.287
	Relationship	(1,198)	33.11	<.001	.016
	Interaction	(1,198)	27.47	<.001	.016
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1,198)	31.76	<.001	.031
	Relationship	(1,198)	70.51	<.001	.081
	Interaction	(1,198)	10.05	.002	.007

Prevent Bad Feelings Motive

There was no significant interaction effect between Donation Format and Relationship on the perceived likelihood of donors donating because they didn't want Ryan to feel bad for

asking for money ('Prevent Bad Feelings' motive; Table 3). However, supporting H2a, there was a main effect of Donation Format such that anonymous donors were perceived as more likely to have donated because of the 'Prevent Bad Feelings' motive than known-to-recipient donors, $MD = 0.49$, $p < .001$, $dz = 0.40$, and public donors, $MD = 0.82$, $p < .001$, $dz = 0.61$. Known-to-recipient donors were perceived as more likely to have donated because of the 'Prevent Bad Feelings' motive than public donors, $MD = 0.33$, $p = .005$, $dz = 0.32$. Supporting H3a, there was also a main effect of Relationship such that donors who gave to family members were perceived as more likely to have donated because of the 'Prevent Bad Feelings' motive than donors who gave to strangers, $MD = 0.42$, $p < .001$, $dz = 0.72$.

There was no significant interaction effect between Donation Format and Relationship on the perceived moral goodness of donors donating because they didn't want Ryan to feel bad for asking for money (Table 4). However, there was a main effect of Donation Format such that the 'Prevent Bad Feelings' motive was rated as more morally good for anonymous donors than known-to-recipient donors, $MD = 0.23$, $p = .017$, $dz = 0.28$, and public donors, $MD = 0.43$, $p < .001$, $dz = 0.52$. Additionally, the 'Prevent Bad Feelings' motive was rated as more morally good for known-to-recipient donors than public donors, $MD = 0.20$, $p = .03$, $dz = -0.23$. There was no main effect of Relationship.

Norm-Setting Motive

There was no significant interaction effect between Donation Format and Relationship on the perceived likelihood of donors donating because they wanted to set an example for others ('Norm-Setting' motive; Table 3). However, supporting H2c, there was a main effect of Donation Format such that public donors were perceived as more likely to have donated because of the 'Norm-Setting' motive than anonymous donors, $MD = 1.03$, $p < .001$, $dz = 0.81$, and known-to-recipient donors, $MD = 1.10$, $p < .001$, $dz = 0.92$. Anonymous donors were perceived as no more likely to have donated because of the 'Norm-Setting' motive than known-to-recipient donors, $MD = -0.07$, $p = .805$, $dz = -0.06$. Although we did not expect an effect of

Relationship (H3b), there was also a main effect of Relationship such that family members were perceived as more likely to have donated because of the ‘Norm-Setting’ motive than donors who gave to strangers, $MD = 0.12$, $p = .142$, $dz = 0.23$.

There was no significant interaction effect between Donation Format and Relationship on the perceived moral goodness of donors donating because they wanted to set an example for others (Table 4), and there was no main effect of Donation Format or Relationship.

Strengthen Relationship Motive

There was a significant interaction effect between Donation Format and Relationship on the perceived likelihood that donors donated because they wanted to strengthen their relationship with the recipient (‘Strengthen Relationship’ motive; Table 3). Although we expected public and known-to-recipient donors to be no different in their perceived likelihood for this motive (H2b), follow-up 2x2 two-way ANOVAs showed that public donors were perceived as more likely to have donated because of the ‘Strengthen Relationship’ motive than known-to-recipient donors, followed by anonymous donors. Supporting H3a, the differences between public donors and the other two conditions were larger for donors who gave to strangers than donors who gave to family members such that donors who gave to strangers were especially unlikely to be seen as motivated by the ‘Strengthen Relationship’ motive (Table 7a).

There was a significant interaction effect between Donation Format and Relationship on the perceived moral goodness of donors donating because they wanted to strengthen their relationship with the recipient (Table 4). Follow-up 2x2 two-way ANOVAs revealed that the ‘Strengthen Relationship’ motive was judged as more morally good for known to the recipient donors and public donors than anonymous donors, and these effects were stronger for donors who gave to family members than donors who gave to strangers (Table 7b).

Table 7a

2x2 Two-way ANOVAs for the Interaction Effect of Donation Format and Relationship on the Likelihood of the Strengthen Relationship motive

ANOVA Model	Source of variation	df	F-ratio	p-value	η_p^2
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1,198)	393.7	<.001	.387
	Relationship	(1,198)	199.2	<.001	.148
	Interaction	(1,198)	64.14	<.001	.044
2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1,198)	396.7	<.001	.364
	Relationship	(1,198)	305	<.001	.211
	Interaction	(1,198)	106.8	<.001	.085
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1,198)	5.28	.023	.004
	Relationship	(1,198)	358.6	<.001	.334
	Interaction	(1,198)	9.22	.003	.006

Table 7b

2x2 Two-way ANOVAs for the Interaction Effect of Donation Format and Relationship on the Moral Goodness of the Strengthen Relationship motive

ANOVA Model	Source of variation	df	F-ratio	p-value	η_p^2
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1,198)	43.1	<.001	.037
	Relationship	(1,198)	70.69	<.001	.040
	Interaction	(1,198)	18.56	<.001	.007
2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1,198)	20.68	<.001	.023
	Relationship	(1,198)	65.59	<.001	.037
	Interaction	(1,198)	18.94	<.001	.007
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1,198)	2.24	.136	.002
	Relationship	(1,198)	113.1	<.001	.083
	Interaction	(1,198)	0.01	.906	.000

Prevent Jealousy Motive

There was no significant interaction effect between donation format and relationship on the perceived likelihood of donors donating because they didn't want to make other people jealous ('Prevent Jealousy' motive; Table 3). However, there was a main effect of Donation Format such that public donors were perceived as less likely to have donated because of the 'Jealousy' motive than anonymous donors, $MD = -0.54, p < .001, dz = -0.40$, and known-to-recipient donors, $MD = -0.65, p < .001, dz = -0.52$. Anonymous donors were judged as no more likely to have donated because of the 'Jealousy' motive than known-to-recipient donors, $MD = 0.12, p = .496, dz = -0.11$. There was no main effect of Relationship.

There was no significant interaction effect between Donation Format and Relationship on the perceived moral goodness of donors donating because they didn't want to make other people jealous (Table 4), however there was a main effect of Donation Format such that the 'Prevent Jealousy' motive was judged as less morally good for public donors than anonymous donors, $MD = -0.30, p = .005, dz = -0.31$ and marginally less morally good than for known-to-recipient donors, $MD = -0.22, p = .063, dz = -0.27$. The 'Prevent Jealousy' motive was judged as no more morally good for anonymous donors than known-to-recipient donors, $MD = 0.08, p = .663, dz = 0.10$. There was no main effect of Relationship.

Avoid Scrutiny Motive

There was a significant interaction effect between Donation Format and Relationship on the perceived likelihood that donors donated because they wanted to avoid scrutiny from others ('Avoid Scrutiny' motive; Table 3). Follow-up 2x2 two-way ANOVAs revealed that public donors were perceived as less likely to have donated because of the 'Avoid Scrutiny' motive than anonymous donors and known-to-recipient donors, and these effects were stronger for strangers than family members (Table 8).

There was no significant interaction effect between Donation Format and Relationship on the perceived moral goodness of donors donating because they wanted to avoid scrutiny

from others (Table 4). However, there was a main effect of Donation Format such that the ‘Avoid Scrutiny’ motive was judged as less morally good for public donors than anonymous donors, $MD = -0.41$, $p < .001$, $dz = -0.42$, and known-to-recipient donors, $MD = -0.35$, $p = .005$, $dz = -0.41$. The ‘Avoid Scrutiny’ motive was judged as no more morally good for anonymous donors than known-to-recipient donors, $MD = 0.06$, $p = .849$, $dz = 0.08$. There was no main effect of Relationship.

Table 8

2x2 Two-way ANOVAs for the Interaction Effect of Donation Format and Relationship on the Likelihood of the Avoid Scrutiny motive

ANOVA Model	Source of variation	df	F-ratio	p-value	η_p^2
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1,198)	3.62	0.059	.003
	Relationship	(1,198)	0.08	0.775	.000
	Interaction	(1,198)	1.72	0.191	.001
2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1,198)	33.71	<.001	.067
	Relationship	(1,198)	22.54	<.001	.012
	Interaction	(1,198)	13.83	<.001	.006
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1,198)	57.79	<.001	.106
	Relationship	(1,198)	13.89	<.001	.008
	Interaction	(1,198)	26.73	<.001	.012

Reputation Motive

There was a significant interaction effect between Donation Format and Relationship on the perceived likelihood that donors donated because they wanted to strengthen their relationship with the recipient (‘Reputation’ motive; Table 3). Supporting H2c, follow-up 2x2 two-way ANOVAs show that public donors were perceived as most likely to have donated because of the ‘Reputation’ motive, followed by known-to-recipient donors, and finally, anonymous

donors. Although we did not expect to find an effect of Relationship (H3b), these differences were larger for strangers than family members, which was largely driven by perceptions of the public donors who gave to strangers as more likely than the other donors to have donated for the 'Reputation' motive (Table 9).

There was no significant interaction effect between Donation Format and Relationship on the perceived moral goodness of donors donating because they wanted others to think that they are a good person (Table 4), and there was no main effect of Donation Format or Relationship.

Table 9

2x2 Two-way ANOVAs for the Interaction Effect of Donation Format and Relationship on the Likelihood of the Reputation motive

ANOVA Model	Source of variation	df	F-ratio	p-value	η_p^2
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1,198)	46.23	<.001	.052
	Relationship	(1,198)	2.01	.158	.001
	Interaction	(1,198)	2.04	.155	.001
2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1,198)	646	<.001	.568
	Relationship	(1,198)	5.29	.023	.003
	Interaction	(1,198)	7.31	.007	.003
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1,198)	402.3	<.001	.410
	Relationship	(1,198)	1.28	.26	.006
	Interaction	(1,198)	15.47	<.001	.007

Motive Score

Based on prior work showing that the inferred motives of prosocial actors impact how they are perceived (e.g., Kraft-Todd et al., 2022; Raihani & Power, 2021; Silver et al., 2021), we sought to test whether the likelihood and moral goodness of the donors' motives mediated the

impact of donation format and donor-recipient relationship on moral character judgments. In line with our preregistered analyses, we calculated a total motivate score for each donor by subtracting the mean likelihood of morally bad motives from the mean likelihood of morally good motives. Motives were classified as “morally bad” if participants rated their moral goodness as 3 or below on the 6-pt moral goodness scale for that particular donor and were classified as “morally good” if participants rated their moral goodness as 4 or higher on that scale. This method allowed us to classify motives as good or bad based on participants’ judgments of how morally good it would be for a particular donor to be driven by that motive.

A motive score was calculated for each donor, resulting in six motive scores for each participant (one corresponding to each type of donor). *Greater motivation scores* indicated that participants perceived a donor as *more likely to have donated because of morally good motives* than by morally bad motives. Thus, we expected to find a positive link between motivation score and moral character rating.

To examine the effect of motive perceptions on moral character judgments, we fitted a linear mixed effects model predicting moral character by motive score with response ID entered as a random intercept. The model was significant, $b = .34$, $t(1176) = 10.82$, $p < .001$. We also fitted this model separately for each donor condition. This model was significant for all donor conditions (all p 's $< .01$) except for one, anonymous strangers, for which it was marginally significant ($p = .075$).

To examine whether Donation Format had a direct influence on ratings of the moral character of the donor, as well as an indirect effect via an effect on the perceived motives of the donor, we estimated a multilevel mediation model. Since all aspects of the model varied within participants we estimated a 1-1-1 model with fixed effects (Fig. 7). This model was estimated in Mplus 8, which allows for the estimation of multilevel mediation models via the use of the Bayes Estimator. Instead of p values the Bayes estimator provides 95% Credible Intervals. If a 95% Confidence Interval does not include 0 then the value can be considered as statistically

significant. In this model, dummy-coded variables for known-to-recipient and public donors, both relative to the anonymous donors, and a dummy-coded variable indicating whether the donor was a family member (= 1) were included as exogenous variables/predictors. The mediator was the estimated motive score, and the outcome was the moral character rating of the donor.

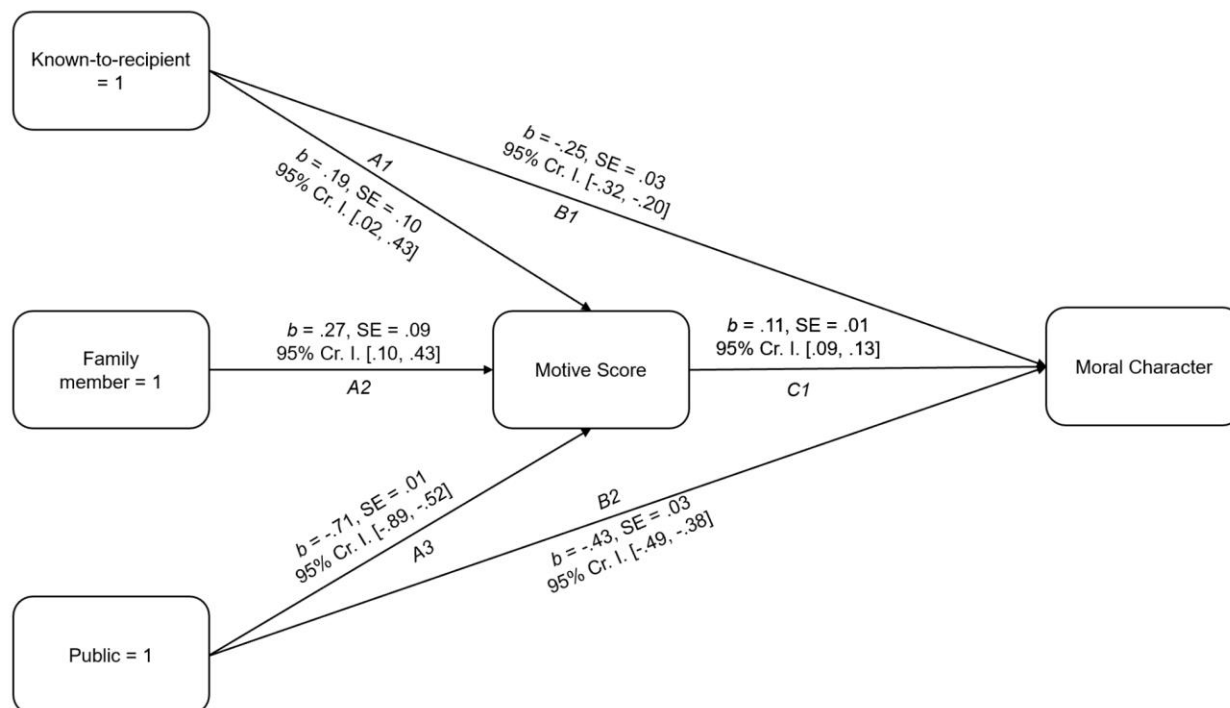
Effects on motive score. There were significant direct effects for both the public (versus anonymous) and the known-to-recipient (versus fully anonymous) donors on motive score. Public donors had a lower motive score than anonymous donors (Fig. 7, A3), while known-to-recipient donors had a higher motive score than anonymous donors (Fig. 7, A1). There was a significant direct effect of donors who gave to family (versus strangers) on motive score such that donors who gave to family members had a higher motive score than donors who gave to strangers (Fig. 7, A2).

Effects on moral character judgments. There were significant direct effects for both the public (versus anonymous) and the known-to-recipient (versus anonymous) donors on moral character judgments. Public donors had lower moral character ratings than anonymous donors (Fig. 7, B2), and known-to-recipient donors had lower moral character ratings than anonymous donors (Fig. 7, B1). There was no significant direct effect of donors who gave to family (versus strangers) on moral character ratings, $b = -.04$, $SE = .03$, 95% Cr. I. [-.10, .01], so it is not displayed in Fig. 7.

Indirect effects. Importantly, there were significant indirect effects for both the public (versus anonymous) and the known-to-recipient (versus anonymous) donors. Public donors had lower motive scores than anonymous donors: $b = -.07$, $SE = .01$, 95% Cr. I. [-.10, -.05], and known-to-recipient donors had higher motive scores than anonymous donors: $b = .02$, $SE = .01$, 95% Cr. I. [.003, .05].

Figure 7

Multilevel Mediation (1-1-1) Model



Discussion

In line with our preregistered hypotheses, we found that anonymous donors were judged as most morally good, followed by known-to-recipient donors, and finally, public donors. As expected, the donor-recipient relationship did not moderate this effect, as donors who gave to family members and donors who gave to strangers were viewed similarly in terms of their moral goodness. Most of our hypotheses regarding the main effect of donation format were supported. As expected, anonymous donors were perceived as most likely to have donated for the 'Right' motive and the 'Prevent Bad Feelings' motives, known-to-recipient donors were perceived as most likely to have donated for the 'Show Care' motive, and public donors were perceived as most likely to have donated for the 'Norm-Setting' and 'Reputation' motives. Unexpectedly, public donors were perceived as more likely than known-to-recipient donors to have donated for the 'Strengthen Relationship' motive. Results for the two exploratory motives showed that public donors were perceived as less likely to have donated publicly for the 'Avoid Scrutiny' motive and

the 'Prevent Jealousy' motive compared to anonymous donors and known-to-recipient donors, who did not differ in their perceived likelihood for these motives.

Additionally, our preregistered hypotheses regarding the main effects of the donor-recipient relationship were largely supported, as donors who gave to family members were perceived as more likely to have donated for relationship-oriented and recipient-oriented motives (i.e., Strengthen Relationship, Show Care, Prevent Bad Feelings). However, we also found several unexpected effects of the donor-recipient relationship on the 'Right', 'Reputation', and 'Norm-Setting' motives. Specifically, publicly donors who gave to strangers were judged as less likely to have donated for the 'Right' motive, and more likely to have donated for the 'Reputation' motive, compared to other donors. Also, donors who gave to family members were perceived as more likely to have donated for the 'Norm-Setting' motive.

We found several interaction effects between the donor-recipient relationship and the donation format. Specifically, motive attributions of donors who gave to strangers were more extreme than motive attributions of donors who gave to family members for the 'Right', 'Strengthen Relationship', and 'Avoid Scrutiny' motive, but they were less extreme for the 'Care' motive.

Finally, we found that, while evaluations of the moral goodness of most of the potential motives do not depend on the donor, three motives ('Right', 'Avoid Scrutiny', and 'Prevent Jealousy') were perceived as less morally good for public donors than anonymous donors. Additionally, the 'Right' and 'Strengthen Relationship' motives were seen as more morally good for donors who gave to family members than donors who gave to strangers.

Based on these findings, we calculated a "motive score" for each donor for each participant representing the overall likelihood of morally good versus morally bad motives and showed that this score helps explain the impact of donation format and donor-recipient relationship on moral character judgments. Specifically, motive score (i.e., the participants' perceptions of the likelihood that donors donated for morally good reason) is directly related to

moral character ratings and indirectly contributed to the effects of known-to-recipient and public donors, as well as donors who donated to family members.

We developed this mediation model based on social cognition research demonstrating that inferences about a target's motives and principles impact evaluations of the target's actions (Critcher et al., 2020) and specific work showing that motive perceptions of donors influence judgments of their moral character (e.g., Newman & Cain, 2014). However, since we did not causally manipulate motive perceptions in this study, we cannot infer a causal affect of motive perceptions on moral character judgments based on the current studies. Indeed, judgments of donors' moral character based on their donation format could have an impact on perceptions of their motives. Therefore, an alternative mediation model that examines whether moral judgment mediates the impact of donation format on motive score may be equally viable. As we note below, future work that causally manipulates donor motives is needed to examine the impact of these motives on moral judgments.

General Discussion

Across five studies (including the Study 2 Pilot), we investigated moral judgments and motive perceptions for donors who chose to reveal their identity to everyone (public donors), no one (anonymous donors), or only to the recipient (known-to-recipient donors).

We found that anonymous donors were perceived as the most morally good, followed by known-to-recipient donors, and, finally, public donors. The donor-recipient relationship did not moderate this link. This may be because donors are viewed as morally good for donating to someone in need, regardless of whether that someone is close or distant. As prior work shows, agents who help close others are viewed as morally praiseworthy for fulfilling a relational obligation (McManus et al., 2020, 2021), but also agents who help distant others are viewed as morally praiseworthy for going "above and beyond" their relational obligations to others (Khan et al., 2023).

In line with prior work outlined above (e.g., Kraft-Todd et al., 2022), anonymous donors are seen as likely to be driven by a virtuous motive, wanting to do the right thing, while public donors are seen as likely to be driven both by a desire to improve their reputation and to set norms about donating. The present research adds nuance to this body of literature by showing that there are a number of additional motives for donating that are ascribed to donors—many of which relate to the donor’s relationship with the recipient—and that there are unique motives ascribed to known-to-recipient donors, a type of donor that has not been empirically tested in prior work.

Specifically, known-to-recipient donors were perceived as most likely to have donated to show their care for the recipient, suggesting that observers may infer some relationship-building motives behind these donors’ decisions to reveal their identity only to their recipient. However, this does not explain why public donors were perceived as more likely than known-to-recipient donors to have donated to strengthen their relationship with the recipient. One potential explanation for this finding is that observers may think that donors who share their donation with everyone may further strengthen their relationship with the recipient by publicizing their closeness. People also attribute recipient-oriented motives to anonymous donors: particularly, the desire to prevent the recipient from feeling bad for asking for money. In being more impersonal, anonymous donations may be seen as preventing the negative feelings (e.g., shame) that are often felt by people receiving charity due to the perceived judgment of those who are providing the charity (Parsell & Clarke, 2022).

One popular phenomenon documented in the generosity literature is the “braggart’s dilemma”, which describes the ironic conflict between the desire to boast about one’s generosity and the fear of being perceived as selfishly motivated (Berman et al., 2015). We both provide further evidence of this phenomenon, demonstrating that public donors are seen as most likely to be reputationally motivated, and also add another level of depth, showing that donors who choose not to donate publicly are seen as most likely to have donated to avoid scrutiny from

others. This suggests that anonymous donors may face their own kind of dilemma; while they may want to hide their identity to avoid appearing boastful, they may be criticized for doing so as a way to avoid the reputational punishments of donating publicly.

We also found that anonymous and known-to-recipient donors were seen as more likely to be driven by a desire to prevent others from being jealous. As reflected by the mixed moral ratings of this motive, people may see this motive as having both prosocial and selfish aspects. Donors who do not reveal their identity to the public may avoid making other people they know jealous of their generosity toward someone else, which could cause them to ask the donor to give *them* money. As a way of donors avoiding others asking them for money, this motive may be seen as selfish. At the same time, preventing others' jealousy, a negative emotion, may be seen as having a similar prosocial effect as the motive to prevent the recipient from feeling bad for asking for money, which was rated as more morally good. Future work should measure these two aspects separately to help tease apart these effects.

Although there was no main effect of the donor-recipient relationship on judgments of donors' moral character, there was an effect on motive perceptions of donors. Unsurprisingly, donors who gave to family members were perceived as more likely to have donated for reasons regarding the recipient (e.g., to strengthen their relationship with the recipient, to show they care). Donors who gave to family members were also perceived as more likely to be driven by the desire to set norms about donating, which may be because participants think it is more plausible for a donor to set norms about donating within a close versus diffuse social network.

We found that the donor-recipient relationship moderated the effect of donation format on several motives. Public donors who gave to strangers were seen as especially less likely to have donated because it was the right thing to do and also especially less likely to have donated to avoid scrutiny from others. Additionally, public donors who gave to strangers, as well as known-to-recipient donors who gave to strangers, were seen as especially less likely to have donated to strengthen their relationship with the recipient. This demonstrates that at least

certain motive judgments of public donors are more extreme when they donate to strangers than when they donate to family members.

Across all four studies, public donors were perceived to be the least morally good. This effect is robust across multiple relationship contexts (family, stranger), and holds even when participants consider potential prosocial motives for donating publicly, such as strengthening the donor's relationship with the recipient, as well as potential selfish motives for donating anonymously, such as avoiding scrutiny from others. Observers' derogation of public donors is made further evident by the fact that participants say it is less good for a public donor to be motivated to donate because they want to do the right thing (the motive perceived to be the most morally good overall) than it is for an anonymous donor to be motivated by this reason. These findings extend previous work on "virtue discounting" showing not only that public (versus private) acts of generosity are perceived as less likely to be driven by principled motives (e.g., pertaining to the actor's moral beliefs and identity) (Kraft-Todd et al., in press), but also that these principled motives (e.g., doing the right thing) are viewed as less morally good for public donors.

Despite the significant impact of donation format on all of the motives we examined, we found that the perceived likelihood and moral goodness ratings of donor's motives only partially explained judgments of their moral character. This may suggest that certain kinds of motives are more strongly related to moral character judgments than others, or that motive perceptions may serve more as tools for post-hoc rationalization of moral character judgments than as factors considered while formulating these judgments. Future work is needed to test these hypotheses.

The present work is limited in that participants were provided with a list of potential motives to consider before making judgments about the donors' moral character. Although we supplemented our final study's list of motives with items derived from open-response questions in a pilot study, it is unclear how readily accessible these motives are to participants without priming. It is possible that people do not typically consider the impact of a donor's choice of

donation format on the recipient's feelings or on the donor-recipient relationship unless those factors are made salient to them. Future work should examine whether and how often people consider donors' motives for, and method of, donating.

The present work is limited in its use of only one donation vignette. While the use of one vignette allowed us to conduct a within-subjects investigation with as many as nine different donor conditions without inducing excessive cognitive load on participants, it is unclear whether the results of the current studies generalize to other donation scenarios, such as donations to groups or causes that may seem less compulsory than a cancer treatment fund (e.g., a student's study abroad trip). The present work is also limited in its sample of American participants, as anonymous donations may be perceived differently across cultures. For instance, donors from collectivist cultures such as Indonesia are more likely to donate anonymously, which may be because they view the sincerity of donations as more important than the donation amount (Firmansyah & Pratama, 2021). Furthermore, it is unclear whether the results of the current study generalize to other acts of virtue. While some work has compared public versus private acts across different virtues (e.g., impartiality, fairness; Kraft-Tood et al., in press), more work is needed to determine whether the present effects are unique to donation behavior specifically, generosity more broadly, or any prosocial behavior at all.

Another key direction for future work is the impact of donors' expectations about how their donation decisions will be perceived on their donation behavior. Prior work shows that donors expect to be seen as more reflective about their giving if they donate anonymously versus publicly (Schervish, 1994). Additionally, donors are more likely to conceal their identity if they donate extremely low or extremely high amounts (Peacey & Sanders, 2013), which may be due to a fear of being ostracized or punished (Raihani, 2014), or a desire to conform to social norms (Mokos & Scheuring, 2019) and a desire not to be seen as a rule breaker (Parks & Stone, 2010). Donors who are among the first to donate to a cause are seen as being driven by purer motives (Silver et al., 2021) and are also more likely to donate anonymously than those

who donate later (Peacey & Sanders, 2013). However, there appear to be limits on the influence of these perceptions on donors' decisions to choose their donation format. For instance, even when donors in an online dictator game knew that their low or null donations would be revealed to recipients, they continued donating low amounts or nothing at all, despite expressing feeling shame (Winking, 2014). Since donating to someone signals a donor's commitment to their relationship or coalition with that person (Imada, 2020), donors' expectations about how they will be perceived may also be influenced by their relationship with the recipient. For instance, donors who are giving to a controversial public figure or political candidate may be motivated to donate anonymously to conceal their support and avoid backlash from others. Future work should examine how other relationship contexts change the judgment donors expect to receive from others and how these expectations influence their decision to donate in certain ways (e.g., who they reveal their donation to).

Conclusion

When people donate, they are often judged based on their motives for donating. The current work adds nuance to the story of the observed donor by examining perceptions of a donor that has not been empirically examined in prior work, one that reveals their donation only to the recipient ("known-to-recipient" donor), and by showing that there are unique motives ascribed to donors who have a close relationship with their recipient.

Open Practices

All data, materials, and analysis code are available on OSF: https://osf.io/xuqw8/?view_only=229c44f67f9e41379c87cba6bc5c5802. The preregistration for Study 2 is available here: <https://aspredicted.org/ux6y4.pdf>.

References

- Alpizar, F., Carlsson, F., & Johansson-Stenman, O. (2008). Donation Format, reciprocity, and conformity: Evidence from voluntary contributions to a national park in Costa Rica. *Journal of Public Economics*, *92*(5-6), 1047-1060.
- Alrababa'h, A., Myrick, R., & Webb, I. (2020). Do donor motives matter? Investigating perceptions of foreign aid in the conflict in Donbas. *International Studies Quarterly*, *64*(3), 748-757.
- Barasch, A., Levine, E. E., Berman, J. Z., & Small, D. A. (2014). Selfish or selfless? on the signal value of emotion in altruistic behavior. *Journal of Personality and Social Psychology*, *107*(3), 393–413. <https://doi.org/10.1037/a0037207>
- Bekkers, R., & Wiepking, P. (2011). Accuracy of self-reports on donations to charitable organizations. *Quality & Quantity*, *45*, 1369-1383.
- Berman, J. Z., & Silver, I. (2022). Prosocial behavior and reputation: When does doing good lead to looking good?. *Current opinion in psychology*, *43*, 102-107. <https://doi.org/10.1016/j.copsyc.2021.06.021>
- Berman, J. Z., Levine, E. E., Barasch, A., & Small, D. A. (2015). The Braggart's dilemma: On the social rewards and penalties of advertising prosocial behavior. *Journal of Marketing Research*, *52*(1), 90-104.
- Chen, J., Duan, J., Wang, T., Li, S., & Yu, B. (2023). Donate for your secrets: Relationship between secrecy, guilt and donation behavior. *Psychological Reports*, 003329412311568. <https://doi.org/10.1177/00332941231156817>
- Critcher, C. R., Helzer, E. G., & Tannenbaum, D. (2020). Moral character evaluation: Testing another's moral-cognitive machinery. *Journal of Experimental Social Psychology*, *87*, 103906. <https://doi.org/10.1016/j.jesp.2019.103906>

- Elster, J. (2006). Chapter 3 altruistic behavior and altruistic motivations. *Handbook of the Economics of Giving, Altruism and Reciprocity*, 183–206. [https://doi.org/10.1016/s1574-0714\(06\)01003-7](https://doi.org/10.1016/s1574-0714(06)01003-7)
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods*, 39(2), 175-191.
- Firmansyah, F. M., & Pratama, A. R. (2021). Donation Format in COVID-19 online donations: A cross-cultural analysis on fundraising platforms. *Advances in Intelligent Systems and Computing*, 34–47. https://doi.org/10.1007/978-3-030-73103-8_3
- Guo, G. (2023). Perceived donation behavior and cooperation intention: The mediating role of motivation attribution and perceived hypocrisy. *Journal of Education, Humanities and Social Sciences*, 8, 1310-1317.
- Hardy, C. L., & Van Vugt, M. (2006). Nice guys finish first: The competitive altruism hypothesis. *Personality and Social Psychology Bulletin*, 32(10), 1402–1413.
<https://doi.org/10.1177/0146167206291006>
- Imada, H. (2020). Preference for anonymous giving. *Letters on Evolutionary Behavioral Science*, 11(1), 22–26. <https://doi.org/10.5178/lebs.2020.76>
- Jordan, J., & Sommers, R. (2020). *False Signaling and Personal Moral Failings: Two distinct pathways to hypocrisy with unequal moral weight*. Working Paper.
- Khan, U., Jaffer-Diaz, M., Najafizadeh, A., & Starmans, C. (2023). Going above and beyond? early reasoning about which moral acts are best. *Cognition*, 236, 105444.
<https://doi.org/10.1016/j.cognition.2023.105444>

- Kodipady, A., Kraft-Todd, G., Sparkman, G., Hu, B., & Young, L. (2022). Beyond virtue signaling: Perceived motivations for pronoun sharing. *Journal of Applied Social Psychology*. <https://doi.org/10.1111/jasp.12937>
- Kraft-Todd, G., Kleiman-Weiner, M., & Young, L. (in press). Virtue Discounting: Observability Reduces Moral Actors' Perceived Virtue. *Open Mind*. <https://psyarxiv.com/hsjta/>
- Kraft-Todd, G., Kleiman-Weiner, M., & Young, L. (2022). Assessing and dissociating virtues from the 'bottom up': A case study of generosity vs. fairness. <https://doi.org/10.31234/osf.io/3paqs>
- Kraft-Todd, G., Kleiman-Weiner, M., & Young, L. (2022). Virtue discounting: Observability reduces moral actors' perceived virtue. <https://doi.org/10.31234/osf.io/hsjta>
- Kraft-Todd, G., Norton, M. I., & Rand, D. G. (2016). Setting a price for charitable giving increases donations. <https://doi.org/10.31234/osf.io/kw5t9>
- Lin-Healy, F., & Small, D. A. (2013). Nice guys finish last and guys in last are nice: The clash between doing well and doing good. *Social Psychological and Personality Science*, *4*(6), 692-698.
- McManus, R. M., Mason, J. E., & Young, L. (2021). Re-examining the role of family relationships in structuring perceived helping obligations, and their impact on moral evaluation. *Journal of Experimental Social Psychology*, *96*, 104182.
- McManus, R. M., Kleiman-Weiner, M., & Young, L. (2020). What we owe to family: The impact of special obligations on moral judgment. *Psychological Science*, *31*(3), 227-242.
- Mokos, J., & Scheuring, I. (2019). Altruism, costly signaling, and withholding information in a sport charity campaign. *Evolution, Mind and Behaviour*, *17*(1), 10–18. <https://doi.org/10.1556/2050.2019.00007>

- Newman, G. E., & Cain, D. M. (2014). Tainted altruism: When doing some good is evaluated as worse than doing no good at all. *Psychological science*, 25(3), 648-655.
- Parks, C. D., & Stone, A. B. (2010). The desire to expel unselfish members from the group. *Journal of Personality and Social Psychology*, 99(2), 303–310.
<https://doi.org/10.1037/a0018403>
- Parsell, C., & Clarke, A. (2022). Charity and shame: Towards reciprocity. *Social Problems*, 69(2), 436-452. <https://doi.org/10.1093/socpro/spaa057>
- Peacey, M. W., & Sanders, M. (2013). Masked heroes: Endogenous anonymity in charitable giving1. *The Centre for Market and Public Organisation*.
<https://doi.org/10.2139/ssrn.4325962>
- Pereda, M., Brañas-Garza, P., Rodríguez-Lara, I., & Sánchez, A. (2017). The emergence of altruism as a social norm. *Scientific Reports*, 7(1). <https://doi.org/10.1038/s41598-017-07712-9>
- Raihani, N. J. (2014). Hidden altruism in a real-world setting. *Biology Letters*, 10(1), 20130884.
<https://doi.org/10.1098/rsbl.2013.0884>
- Raihani, N. J., & Power, E. A. (2021). No good deed goes unpunished: The social costs of prosocial behaviour. *Evolutionary Human Sciences*, 3.
<https://doi.org/10.1017/ehs.2021.35>
- Savary, J., & Goldsmith, K. (2020). Unobserved altruism: How self-signaling motivations and social benefits shape willingness to donate. *Journal of Experimental Psychology: Applied*, 26(3), 538–550. <https://doi.org/10.1037/xap0000261>
- Schervish, P. G. (1994). The sound of one hand clapping: The case for and against anonymous giving. *International Journal of Voluntary and Nonprofit Organizations*, 5(1), 1–26.
<https://doi.org/10.1007/bf02353950>

- Shaw, A., & Knobe, J. (2013). Not all mutualism is fair, and not all fairness is mutualistic. *Behavioral and Brain Sciences*, 36(1), 100.
<https://doi.org/10.1017/S0140525X12000878>
- Shaw, A., & Olson, K. R. (2012). Children discard a resource to avoid inequity. *Journal of Experimental Psychology: General*, 141(2), 382. <https://doi.org/10.1037/a0025907>
- Silver, I., Kelly, B. A., & Small, D. A. (2021). Selfless first movers and self-interested followers: Order of entry signals purity of motive in pursuit of the greater good. *Journal of Consumer Psychology*, 31(3), 501-517. <https://doi.org/10.1002/jcpy.1228>
- Small, D. A., & Cryder, C. (2016). Prosocial consumer behavior. *Current Opinion in Psychology*, 10, 107–111. <https://doi.org/10.1016/j.copsyc.2016.01.001>
- Soetevent, A. R. (2005). Donation Format in giving in a natural context—a field experiment in 30 churches. *Journal of public Economics*, 89(11-12), 2301-2323.
- Trivers, R. L. (1971). The evolution of reciprocal altruism. *The Quarterly Review of Biology*, 46(1), 35–57. <https://doi.org/10.1086/406755>
- Winking, J. (2014). Donation Format versus privacy in the dictator game: Revealing donor decisions to recipients does not substantially impact donor behavior. *PLoS ONE*, 9(12).
<https://doi.org/10.1371/journal.pone.0115419>
- Yang, A. X., & Hsee, C. K. (2022). Obligatory Publicity Increases Charitable Acts. *Journal of Consumer Research*, 48(5), 839-857.

Appendix A

Anonymous Donor (Study 1)

Gordon, who doesn't know Ryan personally, came across the "Go Fund Me" page. After some deliberation, Gordon decided to donate \$100 to Ryan. When asked if he would like to disclose his identity alongside his donation, Gordon chose not to reveal his identity to Ryan or to anyone else who could see the donation page. Therefore, only Gordon himself would know whose donation it was.

Known-to-Recipient Donor (Study 1)

Kevin, who doesn't know Ryan personally, came across the "Go Fund Me" page. After some deliberation, Kevin decided to donate \$100 to Ryan. When asked if he would like to disclose his identity alongside his donation, Kevin chose to reveal his identity to Ryan, but Kevin did not reveal his identity to anyone else who would eventually see the donation page. Therefore, in addition to Kevin himself, Ryan and anyone that Ryan told would know whose donation it was.

Non-Anonyous Donor (Study 1)

Isaac, who doesn't know Ryan personally, came across the "Go Fund Me" page. After some deliberation, Isaac decided to donate \$100 to Ryan. When asked if he would like to disclose his identity alongside his donation, Isaac chose to reveal his identity both to Ryan and to anyone else who would eventually see the donation page. Therefore, in addition to Isaac himself, Ryan, anyone who Ryan told, and anyone else who saw the donation page would know whose donation it was.

Supplementary

Supplementary Table 1a

Correlations Among Variables in Study 1a

	Moral Character (Anonymous)	Moral Character (Known-to- Recipient)
Moral Character (Known-to- Recipient)	0.79	
Moral Character (Public)	0.61	0.67

Supplementary Table 1b

Correlations Among Variables in Study 1b

	Moral Character (Anon)	Moral Character (Known)	Moral Character (Public)	Right Motive (Anon)	Right Motive (Known)
Moral Character (Known)	0.65				
Moral Character (Public)	0.28	0.71			
Right Motive (Anon)	0.57	0.41	0.18		
Right Motive (Known)	0.36	0.61	0.40	0.53	
Right Motive (Public)	0.03	0.45	0.63	0.17	0.73

Supplementary Table 1c*Correlations Among Variables in Study 1c*

	Seq MC (Anon)	Seq MC (Known)	Seq MC (Public)	Sim MC (Anon)	Sim MC (Known)	Sim MC (Public)	Right Motive (Anon)	Right Motive (Known)
Seq MC (Known)	0.85							
Seq MC (Public)	0.74	0.84						
Sim MC (Anon)	0.74	0.82	0.58					
Sim MC (Known)	0.80	0.94	0.82	0.82				
Sim MC (Public)	0.73	0.87	0.89	0.63	0.91			
Right Motive (Anon)	0.37	0.31	0.21	0.39	0.32	0.25		
Right Motive (Known)	0.51	0.62	0.56	0.46	0.65	0.62	0.48	
Right Motive (Public)	0.40	0.54	0.53	0.35	0.57	0.61	0.07	0.77

Notes: Sim MC stands for Simultaneous Moral Character rating; Seq MC stands for Sequential Moral Character rating

Methods and Results of the Study 2 Pilot

Method

Sample

We recruited 289 participants from Prolific. After 12 attention checks were applied, 74 participants were excluded, resulting in a total sample size of $N = 215$. The study took on average 15 minutes to complete and participants were compensated \$2.00.

Procedure

The stimuli used in Studies 1a-1c were expanded to include three different types of donor-recipient relationships. In this 3x3 within-subjects design, we used the same three donation formats specified previously: anonymous, known-to-recipient, and public; and three forms of relationships: stranger, close friend, family member.

To maximize clarity and comprehension, participants read and made judgments about three donors at a time. Roughly half of the participants read about three donors with the same donation format at a time (e.g. all anonymous donors differing in their relationship to the recipient), while the other half of participants read about three donors with the same relationship to the recipient at a time (e.g. all close friends of the recipient differing in their donation format). Modifying the format in this way allowed us to determine whether the way agents were grouped had an effect on the results. Since we found very few (and quite small) differences in effects between the two samples³, we report the combined results here.

Measures

Motive judgments

Participants were asked to evaluate the likelihood that donors donated solely because “they believed it was the right thing to do” on a 100-point scale. Participants were also asked to

³ Analyses of the effect of version on the results are reported in Supplementary.

evaluate the likelihood that donors donated [anonymously (“fully anonymously”), partially anonymously (i.e., revealing their identity to only the recipient), or publicly (“non-anonymously”)] for each of 12 different potential reasons displayed in Table 1. We included among this list both motives that have previously been investigated as potential motives for donating, including altruism (Elster, 2006), reputation signaling (Small & Cryder, 2016), reciprocity (Trivers, 1971), norm-setting (Pereda et al., 2017) as well as a number of exploratory, relationship-oriented and recipient-oriented motives (e.g., expressing care and reducing pity) that would allow us to test the effect of the donor-recipient relationship on motive perceptions.

Moral character

Participants were asked to evaluate the moral character of the donors using the same item from previous studies.

Supplementary Table 1

Motives for Donating Anonymously or Not

Motive	Item
Right	they believed it was the right thing to do
Reputation	they wanted others to think that they are a good person
Strengthen Relationship	they wanted to strengthen their relationship with Ryan
Show Care	they wanted Ryan to know that they care
Support	they wanted Ryan to know that they support him
Appreciate	they think that Ryan would appreciate knowing they helped him
Inspiration	they wanted to inspire others to donate

Example	they wanted to set an example for others
Pity	they didn't want Ryan to think they pitied him
Prevent Bad Feelings	they didn't want Ryan to feel bad for asking for money
Owe	they didn't want Ryan to feel like he owed them
Reciprocity	they know that Ryan would do the same thing for them if their positions were reversed

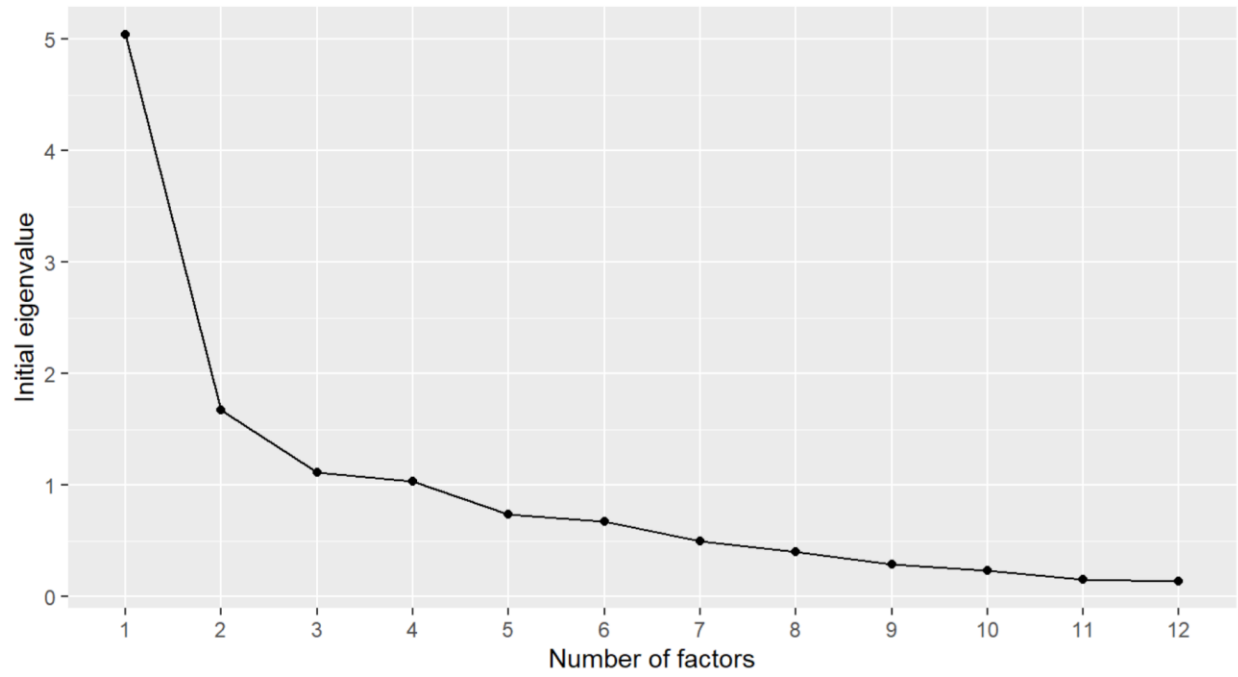
Note: Items are grouped into those that comprise the Boosting the Recipient's Positive Feelings cluster (highlighted in orange), those that comprise the Norm-Setting cluster (highlighted in green), those that comprise the Reducing the Recipient's Negative Feelings cluster (highlighted in blue), and those that do not cluster together with the other items (unhighlighted) according to the Exploratory Factor Analysis reported below.

Exploratory Factor Analysis

An exploratory factor analysis (EFA) with an oblimin rotation was performed on the mean likelihood of each of 12 motives across all 9 targets. As indicated by the scree plot (Fig. 6), a $n = 3$ or $n = 4$ factors appeared to produce the best structure. Two EFAs were run using $n = 3$, and $n = 4$ factors with an oblimin rotation. A four-factor model explained only a marginal increase in the variance (64.0% versus 56.7% explained by the three-factor model) and there was only one item highly loaded ($> .40$) onto the fourth factor. Therefore, a three-factor model was used. Four items in the three-factor model had high uniqueness scores: reputation (0.808), relationship (0.670), reciprocity (0.650), and right (0.728) so they were removed (Mooi et al., 2018). The factor analysis was then rerun without these four items. The results are shown in Table 2.

Supplementary Figure 1

Scree Plot Based on the Unreduced Correlation Matrix



Supplementary Table 2*Results of the Exploratory Factor Analysis (EFA)*

	Factor Loading		
	Boosting the Recipient's Positive Feelings	Reducing the Recipient's Negative Feelings	Norm-Setting
Show Care	0.891		
Support	0.912		
Appreciation	0.651		
Example			1.018
Inspiration			0.801
Pity		0.854	
Owe		0.822	
Prevent Bad Feelings		0.876	

Note: Unstandardized factor loadings greater than 0.500 are displayed. Since Factor 1 included items related to boosting the positive feelings of the recipient (i.e., showing care and support and doing something that will be appreciated by the recipient), we labeled this factor “Boosting the Recipient’s Positive Feelings.” Since Factor 2 included items related to reducing the negative feelings of the recipient (i.e., preventing the recipient from feeling bad or pitied or like they owe the donor), we labeled this factor “Reducing the Recipient’s Negative Feelings.” Since Factor 3 included items related to setting donation norms (i.e., setting an example and inspiring others), we called this factor “Norm-Setting.”

Results

Two-way repeated-measures ANOVAs were conducted to examine the effects of Donation Format and Relationship on each DV as well as identify any interaction effects. If a significant interaction effect was observed, a series of post-hoc two-way ANOVAs were conducted on 2x2 subsets of Donation Format and Relationship to identify where the interaction effect occurred. If no significant interaction effect was observed but a main effect of Donation Format and/or Relationship was observed, post-hoc Tukey tests were conducted to examine the main effects. Motives that clustered together in the EFA were collapsed by taking the mean score for those motives. These clusters were highly reliable (all α s > .94).

Donation Motive

There was no significant interaction between Relationship and Donation Format, $F(4,856) = 0.82, p = .514$, however there was a main effect of Donation Format, $F(2,428) = 51.02, p < .001$, such that anonymous donors were perceived as more likely to have donated solely because it was the right thing to do compared to known-to-recipient donors, $MD = 5.71, p = .004, dz = .26$, and public donors, $MD = 12.41, p < .001, dz = .26$. Additionally, known-to-recipient donors were perceived as more likely to have donated solely because it was the right thing to do compared to public donors, $MD = 6.70, p < .001, dz = .51$. There was no main effect of Relationship, $F(2,428) = 0.49, p = .614$.

Donation Format Motives

Supplementary Table 3

Two-Way ANOVAs for the Each Donation Format Motives

DV	Source of variation	df	F-ratio	p-value
Right	Donation Format	(2, 428)	17.43	< .001

	Relationship	(2, 428)	6.63	.001
	Interaction	(4, 856)	0.12	.975
Reputation	Donation Format	(2, 428)	357.20	<.001
	Relationship	(2, 428)	0.06	.942
	Interaction	(4, 856)	0.86	.485
Relationship	Donation Format	(2, 428)	433.60	<.001
	Relationship	(2, 428)	325.00	<.001
	Interaction	(4, 856)	146.10	<.001
Reciprocity	Donation Format	(2, 428)	42.44	<.001
	Relationship	(2, 428)	246.30	<.001
	Interaction	(4, 856)	16.03	<.001
Boosting the Recipient's Positive Feelings	Donation Format	(2, 428)	727.10	<.001
	Relationship	(2, 428)	65.44	<.001
	Interaction	(4, 856)	41.25	<.001
Reducing the Recipient's Negative Feelings	Donation Format	(2, 428)	164.20	<.001
	Relationship	(2, 428)	54.89	<.001
	Interaction	(4, 856)	26.32	<.001
Norm-Setting	Donation Format	(2, 428)	133.10	<.001
	Relationship	(2, 428)	0.09	.916

Interaction	(4, 856)	0.24	.918
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Right

There was no significant interaction effect between Donation Format and Relationship on the perceived likelihood that donors donated because they believed it was the right thing to do ('Right' motive; Table 3). However, there was a main effect of Donation Format such that anonymous donors were perceived as more likely to have donated because they believed it was the right thing to do compared to public donors, $MD = 11.35$, $p < .001$, $dz = 0.32$. Additionally, known-to-recipient donors was perceived as more likely to have donated because of the 'Right' motive than public donors, $MD = 8.97$, $p < .001$, $dz = 0.27$. Anonymous donors were perceived as no more likely than known-to-recipient donors to have donated because of the 'Right' motive, $MD = 2.38$, $p = 0.437$, $dz = 0.07$. There was no main effect of Relationship.

Reputation

There was no significant interaction effect between Donation Format and Relationship on the perceived likelihood that donors donated because they wanted others to think they are a good person ('Reputation' motive; Table 3). However, there was a main effect of Donation Format such that anonymous donors were perceived as less likely to have donated because of the 'Reputation' motive than known-to-recipient donors, $MD = -19.95$, $p < .001$, $dz = -0.78$, and public donors, $MD = -53.68$, $p < .001$, $dz = -1.98$. Known-to-recipient donors were perceived as less likely to have donated because of the 'Reputation' motive than public donors, $MD = -33.73$, $p < .001$, $dz = -1.04$. There was no main effect of Relationship.

Strengthen Relationship

There was a significant interaction effect between Donation Format and Relationship on the perceived likelihood that donors donated because they wanted to strengthen their relationship with the recipient ('Strengthen Relationship' motive, Table 3). Follow-up 2x2 two-

way ANOVAs show that known-to-recipient donors are perceived as more likely to have donated for the 'Strengthen Relationship' motive than public donors, followed by anonymous donors. These effects are stronger for donors who gave to family members and close friends than donors who gave to strangers, who are perceived as much less likely to have donated because of the 'Strengthen Relationship' motive (Table 4a).

Supplementary Table 4a

2x2 Two-way ANOVAs for the Interaction Effect of Donation Format and Relationship on the Strengthen Relationship motive

ANOVA Model	Source of variation	df	F-ratio	p-value
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1, 214)	468.9	<.001
	Relationship	(1, 214)	305.4	<.001
	Interaction	(1, 214)	224.6	<.001
2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1, 214)	368.9	<.001
	Relationship	(1, 214)	266.9	<.001
	Interaction	(1, 214)	175.7	<.001
2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Donation Format	(1, 214)	535.8	<.001
	Relationship	(1, 214)	353.3	<.001
	Interaction	(1, 214)	251.8	<.001
2 (Anonymous, Public) X 2 (Friend, Stranger)	Donation Format	(1, 214)	404.2	<.001
	Relationship	(1, 214)	303.5	<.001

	Interaction	(1, 214)	212	<.001
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1, 214)	12.17	<.001
	Relationship	(1, 214)	398.6	<.001
	Interaction	(1, 214)	6.29	.013
2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Donation Format	(1, 214)	10.79	.001
	Relationship	(1, 214)	448.5	<.001
	Interaction	(1, 214)	5.0	.026
2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Donation Format	(1, 214)	609.8	<.001
	Relationship	(1, 214)	0.11	.741
	Interaction	(1, 214)	2.41	.122
2 (Anonymous, Public) X 2 (Family, Friend)	Donation Format	(1, 214)	454.3	<.001
	Relationship	(1, 214)	0.24	.627
	Interaction	(1, 214)	3.18	.076
2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Donation Format	(1, 214)	13.58	<.001
	Relationship	(1, 214)	1.68	.196
	Interaction	(1, 214)	0.09	.771

Reciprocity

There was a significant interaction effect between Donation Format and Relationship on the perceived likelihood that donors donated because they know that the recipient would do the same thing for them if their positions were reversed ('Reciprocity' motive; Table 3). Follow-up

2x2 two-way ANOVAs show that known-to-recipient donors are perceived as more likely to have donated because of the 'Reciprocity' motive than public donors, followed by anonymous donors. These effects are stronger for donors who gave to family and close friends than donors who gave to strangers, who are perceived as much less likely to have donated because of Reciprocity (Table 4b).

Supplementary Table 4b

2x2 Two-way ANOVAs for the Interaction Effect of Donation Format and Relationship on the Reciprocity motive

ANOVA Model	Source of variation	df	F-ratio	p-value
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1, 214)	48.23	<.001
	Relationship	(1, 214)	271.8	<.001
	Interaction	(1, 214)	26.22	<.001
2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1, 214)	27.57	<.001
	Relationship	(1, 214)	231.1	<.001
	Interaction	(1, 214)	7.76	.006
2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Donation Format	(1, 214)	62.26	<.001
	Relationship	(1, 214)	348.7	<.001
	Interaction	(1, 214)	37.74	<.001
2 (Anonymous, Public) X 2 (Friend, Stranger)	Donation Format	(1, 214)	39.94	<.001
	Relationship	(1, 214)	298.3	<.001

	Interaction	(1, 214)	15.01	<.001
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1, 214)	5.32	.022
	Relationship	(1, 214)	284.2	<.001
	Interaction	(1, 214)	11.67	<.001
2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Donation Format	(1, 214)	3.8	.053
	Relationship	(1, 214)	378.5	<.001
	Interaction	(1, 214)	9.12	.003
2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Donation Format	(1, 214)	63.21	<.001
	Relationship	(1, 214)	0.35	.553
	Interaction	(1, 214)	1.47	.226
2 (Anonymous, Public) X 2 (Family, Friend)	Donation Format	(1, 214)	33.14	<.001
	Relationship	(1, 214)	0.6	.441
	Interaction	(1, 214)	2.35	.127
2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Donation Format	(1, 214)	10.77	.001
	Relationship	(1, 214)	1.8	.182
	Interaction	(1, 214)	0.51	.475

Boosting the Recipient's Positive Feelings

There was a significant interaction effect between Donation Format and Relationship on the perceived likelihood that donors donated because they wanted Ryan to know that they care,

they wanted Ryan to know that they support him, and they think that Ryan would appreciate knowing they helped him (Table 3). Follow-up 2x2 two-way ANOVAs show that known-to-recipient donors are perceived as more likely to have donated to boost the recipient's positive feelings than public donors, followed by anonymous donors. This effect tends to be stronger for donors who are family members or close friends of the recipient than donors who are strangers to the recipient, for whom the differences between known-to-recipient/public donors and anonymous donors are reduced (Table 4c).

Supplementary Table 4c

2x2 Two-way ANOVAs for the Interaction Effect of Donation Format and Relationship on the Boosting the Recipient's Positive Feelings motive

ANOVA Model	Source of variation	df	F-ratio	p-value
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1, 214)	712.3	<.001
	Relationship	(1, 214)	61.71	<.001
	Interaction	(1, 214)	73.94	<.001
2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1, 214)	658.9	<.001
	Relationship	(1, 214)	40.6	<.001
	Interaction	(1, 214)	46.12	<.001
2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Donation Format	(1, 214)	734.6	<.001
	Relationship	(1, 214)	71.86	<.001
	Interaction	(1, 214)	69.42	<.001

	Donation Format	(1, 214)	653.5	<.001
2 (Anonymous, Public) X 2 (Friend, Stranger)	Relationship	(1, 214)	42.47	<.001
	Interaction	(1, 214)	43.78	<.001
	Donation Format	(1, 214)	4.71	.031
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Relationship	(1, 214)	78.88	<.001
	Interaction	(1, 214)	8.36	.004
	Donation Format	(1, 214)	5.6	.019
2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Relationship	(1, 214)	92.86	<.001
	Interaction	(1, 214)	11.38	<.001
	Donation Format	(1, 214)	940.5	<.001
2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Relationship	(1, 214)	0.36	.552
	Interaction	(1, 214)	0.04	.838
	Donation Format	(1, 214)	805.6	<.001
2 (Anonymous, Public) X 2 (Family, Friend)	Relationship	(1, 214)	0.03	.857
	Interaction	(1, 214)	0.03	.855
	Donation Format	(1, 214)	19.42	<.001
2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Relationship	(1, 214)	0.09	.767
	Interaction	(1, 214)	0.8	.371

Reducing the Recipient's Negative Feelings

There was a significant interaction effect between Donation Format and Relationship on the perceived likelihood that donors donated because they didn't want Ryan to feel bad for asking for money, they didn't want Ryan to think they pitied him, and they didn't want Ryan to feel like he owed them (Table 3). Follow-up 2x2 two-way ANOVAs show that anonymous donors are perceived as more likely to have donated to reduce the recipient's negative feelings than known-to-recipient donors, followed by public donors. These effects tend to be stronger for donors who gave to family members or friends than donors who gave to strangers, for whom the differences between known-to-recipient/public donors and anonymous donors are reduced and the likelihood of choosing their donation format to reduce the recipient's negative feelings is reduced overall (Table 4d).

Supplementary Table 4d

2x2 Two-way ANOVAs for the Interaction Effect of Donation Format and Relationship on the Reducing the Recipient's Negative Feelings motive

ANOVA Model	Source of variation	df	F-ratio	p-value
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1, 214)	159.1	<.001
	Relationship	(1, 214)	86.83	<.001
	Interaction	(1, 214)	47.11	<.001
2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1, 214)	191.6	<.001
	Relationship	(1, 214)	89.38	<.001
	Interaction	(1, 214)	45.42	<.001
2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Donation Format	(1, 214)	126.1	<.001

	Relationship	(1, 214)	61.4	<.001
	Interaction	(1, 214)	26.53	<.001
2 (Anonymous, Public) X 2 (Friend, Stranger)	Donation Format	(1, 214)	159.6	<.001
	Relationship	(1, 214)	58.59	<.001
	Interaction	(1, 214)	28.54	<.001
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1, 214)	11.48	<.001
	Relationship	(1, 214)	26.66	<.001
	Interaction	(1, 214)	0.25	.619
2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Donation Format	(1, 214)	12.68	<.001
	Relationship	(1, 214)	23.8	<.001
	Interaction	(1, 214)	0.73	.393
2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Donation Format	(1, 214)	157.5	<.001
	Relationship	(1, 214)	2.851	.093
	Interaction	(1, 214)	4.94	.027
2 (Anonymous, Public) X 2 (Family, Friend)	Donation Format	(1, 214)	189.6	<.001
	Relationship	(1, 214)	3.93	.049
	Interaction	(1, 214)	3.85	.051
2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Donation Format	(1, 214)	10.23	.002
	Relationship	(1, 214)	0.001	.974

Interaction	(1, 214)	0.17	.679
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Norm-Setting

There was no significant interaction effect between Donation Format and Relationship on the perceived likelihood that donors donated because they wanted to inspire others to have donated or set an example for others ('Norm-Setting' motive; Table 3). However, there was a main effect of Donation Format such that public donors were perceived as more likely to have donated because of the 'Norm-Setting' motive than anonymous donors, $MD = 33.87$, $p < .001$, $dz = 1.00$, and known-to-recipient donors, $MD = 32.83$, $p < .001$, $dz = 1.00$. Anonymous donors were perceived as no more likely to have donated because of the 'Norm-Setting' motive than known-to-recipient donors, $MD = -1.05$, $p = 0.849$, $dz = -0.03$. There was no main effect of Relationship.

Moral Character

There was no significant interaction between Relationship and Donation Format, $F(4, 856) = 0.35$, $p = .845$). However, there was a main effect of Donation Format such that anonymous donors were judged as more moral than known-to-recipient donors, $MD = 6.00$, $p < .001$, $dz = 0.40$, and public donors, $MD = 10.16$, $p < .001$, $dz = 0.61$. Known-to-recipient donors were judged as more moral than public donors, $MD = 4.18$, $p < .001$, $dz = .24$. There was also a main effect of Relationship such that donors who gave to family members were judged as marginally less moral than donors who gave to strangers, $MD = -2.08$, $p = .069$, $dz = -0.12$. Donors who gave to family members were judged as no more moral than donors who gave to friends, $MD = -0.91$, $p = .596$, $dz = -0.05$, and donors who gave to friends as no more moral than donors who gave to strangers, $MD = -1.17$, $p = .428$, $dz = -0.07$.

Sensitivity Analyses for the Study 2 Pilot

A post-hoc sensitivity analysis was conducted using G*Power3 (Faul et al., 2007) to determine the minimum effect size (d_z) each study was powered to detect using an alpha of .05 and .80 power for the difference between two dependent group means using a two-tailed test. Since this study was fully within-subjects, this effect size represents the minimum interaction effect size (i.e., difference-in-differences). With a sample of 215, the Study 2 Pilot had .80 power to detect an effect size of at least 0.19 at an alpha of .05.

Effect of Donation Format on Motive and Moral Character judgments for Each Judgment Format in Study 1b

Sequential Motive Judgments

We found a linear decrease across the conditions (Fig 2). Anonymous donors were perceived as more likely than known-to-recipient donors to have donated *solely* because they believed it was the right thing to do, $t(104) = 8.44, p < .001, d_z = .82$. Known-to-recipient donors were perceived as more likely than public donors to have donated solely because they believed it was the right thing to do, $t(104) = 8.63, p < .001, d_z = .84$.

Simultaneous Motive Judgments

We found a linear decrease across the conditions. Anonymous donors were perceived as more likely than known-to-recipient donors to have donated *solely* because they believed it was the right thing to do, $t(104) = 8.53, p < .001, d_z = .83$. Known-to-recipient donors were perceived as more likely than public donors to have donated solely because they believed it was the right thing to do, $t(104) = 9.51, p < .001, d_z = .93$.

Simultaneous Moral Character Judgments (N = 53):

We found a linear decrease across the conditions (Fig. 1). Anonymous donors were judged as more morally good than known-to-recipient donors, $t(53) = 5.87, p < .001, d_z = .80$. Known-to-recipient donors were judged as more morally good than public donors, $t(53) = 5.62, p < .001, d_z = .77$.

Simultaneous "Truly Moral" Judgments (N = 50):

We found a linear decrease across the conditions (Fig. 1). Anonymous donors were perceived as more likely than known-to-recipient donors to be truly moral people, $t(50) = 5.36$, $p < .001$, $dz = .75$. Known-to-recipient donors were perceived as more likely than public donors to be truly moral people, $t(50) = 4.17$, $p < .001$, $dz = .58$.

Effect of Version on the Results in the Study 2 Pilot

To reduce cognitive load, participants in the Study 2 Pilot were shown each of nine donors three at a time. For half of the participants, each set of three had the same donation format and differed on their relationship with the recipient. For the other half, each set of three had the same relationship with the recipient and differed on their donation format. We tested the effect of this framing on the results using a series of three-way mixed effects ANOVAs with the *rstatix* package in R.

Each model was structured in the same way: DV = Donation Format*Relationship*Version. The three-way interaction term for each model is reported below. Full model outputs can be found in the OSF project database.

Supplementary Table 5

DV	dfs	F	p
Donation Motive	(3.28, 698.30)	0.56	.660
Donation Format Motive - Right	(3.08, 656.51)	0.37	.781
Donation Format Motive - Reputation	(3.70, 789.05)	0.69	.591
Donation Format Motive - Relationship	(2.74, 584.04)	2.20	.093
Donation Format Motive - Reciprocity	(2.83, 601.89)	1.32	.269
Donation Format	(2.70, 575.42)	1.20	.308

Motive - Show Care			
Anonymith Motive - Support	(2.70, 585.37)	2.64	.053
Donation Format Motive - Appreciate	(2.81, 599.21)	3.18	.026
Donation Format Motive - Pity	(2.69, 573.88)	8.77	< .001
Donation Format Motive - Prevent Bad Feelings	(2.54, 540.81)	3.07	.035
Donation Format Motive - Owe	(2.82, 600.99)	8.18	< .001
Donation Format Motive - Inspiration	(3.27, 697.22)	0.83	.489
Donation Format Motive - Example	(3.53, 752)	0.58	.659
Moral Character judgments	(3.12, 664.05)	2.49	.057

These analyses revealed a significant three-way interaction effect between version, anonymity, and relationship for 4 anonymity motives: Appreciate, Pity, Prevent Bad Feelings, and Owe.

Follow-up analyses for the Appreciate motive were conducted by examining the two-way interaction effect of Donation Format and Relationship on the Appreciate motive separately for each version. Both effects were significant. Follow-up tests for both versions are reported below.

Supplementary Table 6

Appreciate Motive

Version	ANOVA Model	Source of variation	df	F-ratio	p-value
Binned by Donation Format	2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1, 98)	335.8	< .001
		Relationship	(1, 98)	55.38	< .001
		Interaction	(1, 98)	57.58	< .001
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1, 115)	390.7	<.001
		Relationship	(1, 115)	0.03	.86
		Interaction	(1, 115)	11.69	<.001
Binned by Donation Format	2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1, 98)	283.3	< .001
		Relationship	(1, 98)	33.27	< .001
		Interaction	(1, 98)	34.74	< .001
Binned by Relationship	2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1, 115)	351.5	<.001
		Relationship	(1, 115)	0.12	.732
		Interaction	(1, 115)	7.57	.007
Binned	2 (Anonymous, Known-to-	Donation Format	(1, 98)	329.9	< .001

by Donation Format	Recipient) X 2 (Friend, Stranger)	Relationship	(1, 98)	49.16	< .001
		Interaction	(1, 98)	52.35	< .001
Binned by Relations hip	2 (Anonymous, Known-to- Recipient) X 2 (Friend, Stranger)	Donation Format	(1, 115)	393.2	<.001
		Relationship	(1, 115)	0.21	.648
		Interaction	(1, 115)	9.69	.002
Binned by Donation Format	2 (Anonymous, Public) X 2 (Friend, Stranger)	Donation Format	(1, 98)	286.4	< .001
		Relationship	(1, 98)	31.43	< .001
		Interaction	(1, 98)	35.93	< .001
Binned by Relations hip	2 (Anonymous, Public) X 2 (Friend, Stranger)	Donation Format	(1, 115)	326.9	<.001
		Relationship	(1, 115)	0.06	.801
		Interaction	(1, 115)	5.54	.02
Binned by Donation Format	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1, 98)	0.29	.592
		Relationship	(1, 98)	61.61	< .001
		Interaction	(1, 98)	7.71	.007
Binned by Relations hip	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1, 115)	5.04	.027
		Relationship	(1, 115)	4.58	.034
		Interaction	(1, 115)	1.61	.206
Binned by Donation Format	2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Donation Format	(1, 98)	0.15	.703
		Relationship	(1, 98)	59.35	< .001

		Interaction	(1, 98)	5.69	.019
Binned by Relationship	2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Donation Format	(1, 115)	4.50	.036
		Relationship	(1, 115)	4.29	.041
		Interaction	(1, 115)	5.38	.022
Binned by Donation Format	2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Donation Format	(1, 98)	444	< .001
		Relationship	(1, 98)	0.91	.342
		Interaction	(1, 98)	.22	.638
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Donation Format	(1, 115)	421.8	<.001
		Relationship	(1, 115)	0.15	.701
		Interaction	(1, 115)	.124	.726
Binned by Donation Format	2 (Anonymous, Public) X 2 (Family, Friend)	Donation Format	(1, 98)	345.8	< .001
		Relationship	(1, 98)	0.56	.456
		Interaction	(1, 98)	.22	.643
Binned by Relationship	2 (Anonymous, Public) X 2 (Family, Friend)	Donation Format	(1, 115)	353.8	<.001
		Relationship	(1, 115)	0.01	.937
		Interaction	(1, 115)	.40	.529
Binned by Donation Format	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Donation Format	(1, 98)	5.23	.024
		Relationship	(1, 98)	0.53	.467
		Interaction	(1, 98)	0.40	.530

Binned by Relations hip	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Donation Format	(1, 115)	12.76	<.001
		Relationship	(1, 115)	0.05	.822
		Interaction	(1, 115)	.39	.532

Follow-up analyses for the Pity motive were conducted by examining the two-way interaction effect of Donation Format and Relationship on the Pity motive separately for each version. Both effects were significant. Follow-up tests for both versions are reported below.

Supplementary Table 7

Pity Motive

Version	ANOVA Model	Source of variation	df	F-ratio	p-value
Binned by Donation Format	2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1, 98)	55.37	<.001
		Relationship	(1, 98)	63.85	<.001
		Interaction	(1, 98)	47.96	<.001
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1, 115)	68.62	<.001
		Relationship	(1, 115)	19.28	<.001
		Interaction	(1, 115)	3.22	.076
Binned by Donation Format	2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1, 98)	86.44	<.001
		Relationship	(1, 98)	65.99	<.001
		Interaction	(1, 98)	32.55	<.001
Binned by Relationship	2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1, 115)	91.01	<.001
		Relationship	(1, 115)	13.03	<.001
		Interaction	(1, 115)	8.38	.005
Binned	2 (Anonymous, Known-to-	Donation Format	(1, 98)	55.38	<.001

by Donation Format	Recipient) X 2 (Friend, Stranger)	Relationship	(1, 98)	64.91	<.001
		Interaction	(1, 98)	47.52	<.001
Binned by Relations hip	2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Donation Format	(1, 115)	56.22	<.001
		Relationship	(1, 115)	7.66	.007
		Interaction	(1, 115)	.27	.607
Binned by Donation Format	2 (Anonymous, Public) X 2 (Friend, Stranger)	Donation Format	(1, 98)	87.36	<.001
		Relationship	(1, 98)	63.83	<.001
		Interaction	(1, 98)	32.95	<.001
Binned by Relations hip	2 (Anonymous, Public) X 2 (Friend, Stranger)	Donation Format	(1, 115)	67.98	<.001
		Relationship	(1, 115)	5.11	.026
		Interaction	(1, 115)	1.73	.192
Binned by Donation Format	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1, 98)	3.52	.064
		Relationship	(1, 98)	10.65	.002
		Interaction	(1, 98)	7.09	.009
Binned by Relations hip	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1, 115)	16.65	<.001
		Relationship	(1, 115)	6.86	.01
		Interaction	(1, 115)	9.10	.003
Binned by Donation Format	2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Donation Format	(1, 98)	4.05	.047
		Relationship	(1, 98)	12.06	<.001

		Interaction	(1, 98)	6.22	.014
Binned by Relationship	2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Donation Format	(1, 115)	14.92	<.001
		Relationship	(1, 115)	4.15	.044
		Interaction	(1, 115)	2.35	.128
Binned by Donation Format	2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Donation Format	(1, 98)	97.8	<.001
		Relationship	(1, 98)	0.54	.542
		Interaction	(1, 98)	.25	.615
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Donation Format	(1, 115)	58.84	<.001
		Relationship	(1, 115)	3.35	.07
		Interaction	(1, 115)	1.64	.203
Binned by Donation Format	2 (Anonymous, Public) X 2 (Family, Friend)	Donation Format	(1, 98)	112.1	<.001
		Relationship	(1, 98)	< .01	.949
		Interaction	(1, 98)	.13	.715
Binned by Relationship	2 (Anonymous, Public) X 2 (Family, Friend)	Donation Format	(1, 115)	81.38	<.001
		Relationship	(1, 115)	2.18	.143
		Interaction	(1, 115)	3.02	.085
Binned by Donation Format	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Donation Format	(1, 98)	0.26	.609
		Relationship	(1, 98)	0.41	.525
		Interaction	(1, 98)	1.33	.252

Binned by Relations hip	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Donation Format	(1, 115)	23.34	<.001
		Relationship	(1, 115)	0.23	.63
		Interaction	(1, 115)	1.60	.208

Follow-up analyses for the Owe motive were conducted by examining the two-way interaction effect of Donation Format and Relationship on the Owe motive separately for each version. Both effects were significant. Follow-up tests for both versions are reported below.

Supplementary Table 8

Owe Motive

Version	ANOVA Model	Source of variation	df	F-ratio	p-value
Binned by Donation Format	2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1, 98)	131.7	<.001
		Relationship	(1, 98)	81.72	<.001
		Interaction	(1, 98)	46.4	<.001
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1, 115)	132.7	<.001
		Relationship	(1, 115)	13.13	<.001
		Interaction	(1, 115)	5.09	.026
Binned by Donation Format	2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1, 98)	157.3	<.001
		Relationship	(1, 98)	77.28	<.001
		Interaction	(1, 98)	67.6	<.001
Binned by Relationship	2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1, 115)	151.1	<.001
		Relationship	(1, 115)	15.7	<.001
		Interaction	(1, 115)	4.20	.043
Binned	2 (Anonymous, Known-to-	Donation Format	(1, 98)	145.2	<.001

by Donation Format	Recipient) X 2 (Friend, Stranger)	Relationship	(1, 98)	82.62	<.001
		Interaction	(1, 98)	58.13	<.001
Binned by Relations hip	2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Donation Format	(1, 115)	118.7	<.001
		Relationship	(1, 115)	11.66	<.001
		Interaction	(1, 115)	4.82	.03
Binned by Donation Format	2 (Anonymous, Public) X 2 (Friend, Stranger)	Donation Format	(1, 98)	150.3	<.001
		Relationship	(1, 98)	81.45	<.001
		Interaction	(1, 98)	66.11	<.001
Binned by Relations hip	2 (Anonymous, Public) X 2 (Friend, Stranger)	Donation Format	(1, 115)	136.1	<.001
		Relationship	(1, 115)	14.39	<.001
		Interaction	(1, 115)	3.45	.066
Binned by Donation Format	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1, 98)	2.81	.097
		Relationship	(1, 98)	10.52	.002
		Interaction	(1, 98)	1.89	.173
Binned by Relations hip	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1, 115)	20.35	<.001
		Relationship	(1, 115)	6.67	.011
		Interaction	(1, 115)	.02	.888
Binned by Donation Format	2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Donation Format	(1, 98)	1.28	.262
		Relationship	(1, 98)	13.2	<.001

		Interaction	(1, 98)	.35	.555
Binned by Relationship	2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Donation Format	(1, 115)	14.49	<.001
		Relationship	(1, 115)	5.97	.016
		Interaction	(1, 115)	.11	.741
Binned by Donation Format	2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Donation Format	(1, 98)	174.4	<.001
		Relationship	(1, 98)	0.42	.517
		Interaction	(1, 98)	2.05	.155
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Donation Format	(1, 115)	119.6	<.001
		Relationship	(1, 115)	.01	.919
		Interaction	(1, 115)	< .01	.975
Binned by Donation Format	2 (Anonymous, Public) X 2 (Family, Friend)	Donation Format	(1, 98)	243.6	<.001
		Relationship	(1, 98)	2.25	.137
		Interaction	(1, 98)	.14	.714
Binned by Relationship	2 (Anonymous, Public) X 2 (Family, Friend)	Donation Format	(1, 115)	124.3	<.001
		Relationship	(1, 115)	.04	.837
		Interaction	(1, 115)	.02	.895
Binned by Donation Format	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Donation Format	(1, 98)	2.26	.136
		Relationship	(1, 98)	.09	.762
		Interaction	(1, 98)	2.91	.091

Binned by Relations hip	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Donation Format	(1, 115)	11.27	.001
		Relationship	(1, 115)	.05	.831
		Interaction	(1, 115)	.03	.859

Follow-up analyses for the Prevent Bad Feelings motive were conducted by examining the two-way interaction effect of Donation Format and Relationship on the Prevent Bad Feelings motive separately for each version. Both effects were significant. Follow-up tests for both versions are reported below.

Supplementary Table 9

Prevent Bad Feelings Motive

Version	ANOVA Model	Source of variation	df	F-ratio	p-value
Binned by Donation Format	2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1, 98)	92.35	<.001
		Relationship	(1, 98)	78.32	<.001
		Interaction	(1, 98)	14.4	<.001
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Donation Format	(1, 115)	89.94	<.001
		Relationship	(1, 115)	27.42	<.001
		Interaction	(1, 115)	5.33	.023
Binned by Donation Format	2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1, 98)	109.7	<.001
		Relationship	(1, 98)	58.52	<.001
		Interaction	(1, 98)	24.92	<.001
Binned by Relationship	2 (Anonymous, Public) X 2 (Family, Stranger)	Donation Format	(1, 115)	125.3	<.001
		Relationship	(1, 115)	24.48	<.001
		Interaction	(1, 115)	7.49	.007

Binned by Donation Format	2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Donation Format	(1, 98)	85.06	<.001
		Relationship	(1, 98)	79.36	<.001
		Interaction	(1, 98)	12.56	<.001
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Donation Format	(1, 115)	59.17	<.001
		Relationship	(1, 115)	15.79	<.001
		Interaction	(1, 115)	.01	.913
Binned by Donation Format	2 (Anonymous, Public) X 2 (Friend, Stranger)	Donation Format	(1, 98)	104.4	<.001
		Relationship	(1, 98)	51.92	<.001
		Interaction	(1, 98)	27.98	<.001
Binned by Relationship	2 (Anonymous, Public) X 2 (Friend, Stranger)	Donation Format	(1, 115)	80.23	<.001
		Relationship	(1, 115)	13.7	<.001
		Interaction	(1, 115)	.53	.467
Binned by Donation Format	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1, 98)	.03	.874
		Relationship	(1, 98)	23.42	<.001
		Interaction	(1, 98)	.81	.372
Binned by Relationship	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Donation Format	(1, 115)	17.55	<.001
		Relationship	(1, 115)	9.54	.003
		Interaction	(1, 115)	2.76	.1
Binned	2 (Known-to-Recipient, Public) X	Donation Format	(1, 98)	.15	<.001

by Donation Format	2 (Friend, Stranger)	Relationship	(1, 98)	25.16	.696
		Interaction	(1, 98)	1.88	.174
Binned by Relations hip	2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Donation Format	(1, 115)	14.02	<.001
		Relationship	(1, 115)	13.75	<.001
		Interaction	(1, 115)	2.91	.906
Binned by Donation Format	2 (Anonymous, Known-to- Recipient) X 2 (Family, Friend)	Donation Format	(1, 98)	102.5	<.001
		Relationship	(1, 98)	.06	.813
		Interaction	(1, 98)	.82	.368
Binned by Relations hip	2 (Anonymous, Known-to- Recipient) X 2 (Family, Friend)	Donation Format	(1, 115)	60.02	<.001
		Relationship	(1, 115)	.58	.449
		Interaction	(1, 115)	5.50	.021
Binned by Donation Format	2 (Anonymous, Public) X 2 (Family, Friend)	Donation Format	(1, 98)	140.5	<.001
		Relationship	(1, 98)	.53	.468
		Interaction	(1, 98)	.01	.944
Binned by Relations hip	2 (Anonymous, Public) X 2 (Family, Friend)	Donation Format	(1, 115)	82.78	<.001
		Relationship	(1, 115)	.53	.468
		Interaction	(1, 115)	5.13	.025
Binned by Donation Format	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Donation Format	(1, 98)	.49	.486
		Relationship	(1, 98)	.02	.903

		Interaction	(1, 98)	1.24	.268
Binned by Relations hip	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Donation Format	(1, 115)	19.7	<.001
		Relationship	(1, 115)	1.22	.273
		Interaction	(1, 115)	< .01	.97

Supplementary Table 10a*Correlations Among Motive Likelihood Scores and Moral Character Ratings in Study 2*

	MC	Right	Show Care	Prevent Bad Feelings	Ex	Relat	Jeal	Scrut
Right	0.32	—						
Show Care	-0.22	-0.10	—					
Prevent Bad Feelings	0.25	0.28	-0.22	—				
Ex	-0.24	-0.10	0.19	-0.06	—			
Relat	-0.26	-0.08	0.65	-0.09	0.19	—		
Jeal	0.15	0.16	-0.05	0.29	-0.14	-0.02	—	
Scrut	0.12	0.13	-0.06	0.26	-0.21	-0.004	0.39	—
Rep	-0.47	-0.33	0.33	-0.30	0.51	0.34	-0.25	-0.26

Notes: Repeated measures correlations were calculated using the rmcrr package in R Studio (Bakdash & Marusich, 2017). (MC stands for Moral Character).

Supplementary Table 10b*Correlations Among Motive Moral Goodness Scores and Moral Character Ratings in Study 2*

	MC	Right	Show Care	Prevent Bad Feelings	Ex	Relat	Jeal	Scrut
Right	0.23	—						
Show Care	-0.07	0.24	—					
Prevent Bad Feelings	0.20	0.24	0.04	—				
Ex	0.08	0.23	0.14	0.19	—			
Relat	-0.04	0.17	0.46	0.03	0.09	—		
Jeal	0.16	0.25	0.06	0.25	0.15	0.04	—	
Scrut	0.22	0.20	0.03	0.30	0.08	0.04	0.27	—
Rep	0.17	0.12	0.12	0.15	0.18	0.12	0.08	0.18

Notes: Repeated measures correlations were calculated using the rmcrr package in R Studio (Bakdash & Marusich, 2017). (MC stands for Moral Character).

Supplementary Table 10c*Correlations Among Motive Likelihood Scores and Motive Moral Goodness Scores in Study 2*

	Right (L)	Show Care (L)	Prevent Bad Feelings (L)	Ex (L)	Relat (L)	Jeal (L)	Scrut (L)	Rep (L)
Right (M)	0.26	-0.01	0.12	-0.04	-0.06	0.09	0.06	-0.18
Show Care (M)	0.07	0.36	-0.09	0.13	0.30	-0.03	-0.04	0.12
Prevent Bad Feelings (M)	0.21	-0.15	0.30	-0.10	-0.17	0.10	0.13	-0.25
Ex (M)	0.09	0.02	0.06	0.15	-0.03	0.01	-0.02	0.01
Relat (M)	0.14	0.26	-0.03	0.05	0.37	0.05	0.05	0.04
Jeal (M)	0.14	-0.05	0.12	-0.08	-0.10	0.14	0.05	-0.20
Scrut (M)	0.10	-0.13	0.19	-0.16	-0.14	0.23	0.21	0.23
Rep (M)	0.12	0.03	0.10	-0.02	-0.01	0.09	0.07	0.01

Notes: Repeated measures correlations were calculated using the rmcrr package in R Studio (Bakdash & Marusich, 2017). (L stands for Likelihood; G stands for Goodness).