

### **Abstract**

When a prosocial actor helps someone, how does an observer perceive the motives underlying their act? Prior work in this domain has largely focused on three motives: virtue-based, reputation-signaling, and norm-setting (encouraging others to help). We add nuance to this work by examining perceptions of relationship-based motives for helping (e.g., showing care, strengthening the helper-recipient relationship) across different social relationships and helping formats (e.g., anonymous, public). Across four studies (N = 1,882), we found that relationship-based motives are ascribed more often to agents who help close others (e.g., family, friends) versus strangers and to agents who reveal their identity only to the recipient versus to no one (anonymous) or to everyone (public). Additionally, reputation-signaling and norm-setting motives are ascribed more often, and virtue-based motives less often, to agents who help close others. Relationship-based motives for helping are judged as more morally good than reputation-signaling, but less morally good than virtue.

*Keywords:* motives, moral judgment, social relationships, helping, prosocial behavior

### **Statement of Limitations**

The current work raises several remaining questions about the motives ascribed to prosocial actors. Firstly, the present work primarily explores the helper-recipient relationship (e.g., strangers, family members) and helping format (e.g., anonymous, public) as independent factors that shape the perceived motives of a prosocial actor. However, it is possible that these factors are interdependent, and that observers make assumptions about the helper-recipient relationship based on the helping format (and vice-versa). Secondly, the current work assesses motive perceptions using predefined lists of potential motives, so it is uncertain how salient the present motives are to observers when evaluating prosocial actors or how often relationship-based motives are spontaneously ascribed to prosocial actors. Finally, since the current study relies on American samples of participants, it is unclear how cultural factors such as collectivism may impact the influence of relationship and helping format on the perceived motives or evaluations of prosocial actors.

### **Authors Contributions**

Trystan Loustau designed and analyzed the results for Studies 1-4. Trystan Loustau wrote the manuscript. Ryan McManus designed and analyzed the results for pilot studies 1-3 (reported in Supplementary Materials). Stylianos Syropoulos and Liane Young provided feedback on study design and the manuscript.

## **Contextualized Helping:**

### **The Impact of Social Ties on the Perceived Motives of Prosocial Actors**

When a prosocial actor helps someone, how does an observer perceive the motives underlying their act? Are prosocial actors perceived as genuinely trying to help someone in need (i.e., virtue-driven), or as simply wanting to appear helpful (i.e., reputation-seeking)? Past work has shown that people's inferences about the motives underlying the prosocial actions of individuals (Raihani & Power, 2021; Newman & Cain, 2014) and companies (Silver et al., 2021) influences their moral judgments (Alrababa'h et al., 2020) and willingness to cooperate with them (Guo, 2023).

Yet, important questions remain. Do people make different inferences about the underlying motives of prosocial actions depending on their relationship with the recipient? Aside from virtue and reputation-seeking, observers may also wonder if prosocial actors have additional, more interpersonal goals in mind. Observers may infer that a prosocial actor wants to show care for or strengthen one's social ties with the recipient, especially if the prosocial actor has a close relationship with the recipient.

This work extends a large body of work investigating the factors that influence third-party observations of prosocial actors (e.g., Yudkin et al., 2019; Klein et al., 2015; Eaton, 2013; Swap, 1991), which has helped advanced scientific understanding of the role of mental state reasoning in social cognition and behavior. In this project, we examined the impact of social relationships and the helping format (i.e., the anonymity versus publicness of their actions) on perceived motives of prosocial actors. We examined these effects first in the context of an online donation (Studies 1-4) and then across a broad range of helping scenarios (Studies 4a-4f). Thus, we consider literature that focuses on the motives attributed to donors as well as prosocial actors more generally.

Past work on the perceived motives of prosocial actors has largely focused on three types of motives: genuine, virtue-based motives (doing it because it was the right thing to do);

reputation-based motives (doing it to boost your social image); and norm-setting motives (doing it to inspire others' prosocial behavior). Much of this work has centered on contrasting how these motives are ascribed to different extents to anonymous versus public donors. Since telling other people about their prosocial deed may come off as bragging and open up the opportunity for receiving social praise, 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). Indeed, Freitas and colleagues (2019) found that anonymous donations are revered so much that participants will not indicate that a public donor is more charitable than an anonymous donor, even when the public donor donates 100 times the amount donated by the anonymous donor (\$100,000 versus \$10,000). By contrast, publicizing one's good deeds can also be interpreted as a prosocial attempt to inspire others to help (norm-setting). In this way, the extent to which a public prosocial actor is seen as likely to have been motivated by norm-setting goals might help offset the costs of being seen as a reputation-signaler. Indeed, donors who brag about their donation and attempt to recruit others to donate are perceived as more altruistic than donors who only brag (Berman et al., 2015).

Although a wealth of literature has outlined the evolutionary benefits of prosocial behavior for developing, maintaining, and strengthening social bonds (e.g., Brown & Brown, 2009, Hruschka et al., 2015), prior work on the perceived motives of prosocial actors has largely excluded relationship-based motives. Yet, given the relational benefits of helping (Altman, 1973), prosocial actors may be perceived as having unique motivations for helping close others, such as wanting to communicate their care for the recipient and strengthen their relationship with the recipient. In the present work, we investigate perceptions of relationship-based motives for prosocial behavior by examining attributions of these motives within different relationships and within different helping scenarios.

Relevant prior work on the impact of social relationships on perceptions of prosocial behavior shows that these perceptions are sensitive to how people are expected to behave

across different 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 moral judgements of helpers. 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 finds 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). Other work shows helping is perceived as more beneficial to the recipient in the context of close relationships (controlling for the specific act), but as less costly to the helper (a “labor of love”) (McGuire, 2003). The lack of relative costs accrued by helpers of close others may help account for why they are often not praised as highly as those who help strangers.

Limited prior work has directly examined how the helper-recipient relationship influences perceptions of helpers’ motives. Related work shows that people tend to give more when they feel greater sympathy toward the recipient, as when the recipient is a close other (e.g., friend) compared to a distant other (e.g., acquaintance), or when they have a close friend who suffers from the same misfortune as the recipient (Small & Simonsohn, 2008). However, some studies find that donors who have lost a friend to the misfortune supported by the charity to which they are giving (“friends of victims”) are perceived as more *selfishly motivated* than those who have no personal connection to the charity (Lin-Healy & Small, 2012). Other work finds that those who give to families in their community are perceived as more likely to have donated to improve their reputation with the family and the broader community and to be more interested in initiating a relationship with the family if they revealed their identity to the family than if they donated anonymously (Freitas et al., 2019). This work suggests that the helper-recipient relationship might interact with the helping format to impact the perceived motives of helpers.

In addition to the two helping formats examined by prior work (anonymous and public helping), prosocial actors may also have the opportunity to reveal their identity only to the recipient when helping. Agents who help in this “known-to-recipient” format may be more likely to be ascribed relationship-based motives than agents who help anonymously, since telling the recipient may help facilitate positive relationship benefits. Known-to-recipient helpers may also be more likely to be ascribed relationship-based motives than public helpers, since their selective decision to reveal their identity *only* to the recipient may be seen as revealing the extent to which they were thinking about the recipient and their bond with the recipient.

### **Current Studies**

The current research extends existing literature on the impact of social relationships on perceptions of prosocial behavior by addressing these gaps. In the current work, we examine the interactive effects of social relationships and helping format on the perceived motives of helpers and moral judgments of helpers. In Studies 1-3, we conduct a rich investigation of the perceived motives of helpers across different relationships contexts (family, friends, strangers) and formats (anonymous, public, known-to-recipient), examining the perceived likelihood of 14 different potential motives for helping in a context (online donation to a GoFundMe). Across these three studies, we test the motives attributed to donors and the impact of motive perceptions on moral character judgments of donors. In Studies 4a-4f, we demonstrate the generalizability of the interactive effects of relationship and helping format on these motive perceptions across six different helping scenarios. Studies 2-4 were preregistered. The preregistration for Study 2 can be found here: [https://aspredicted.org/2RC\\_QGW](https://aspredicted.org/2RC_QGW). The preregistration for Study 3 can be found here: [https://osf.io/2xszy/?view\\_only=d73ad934ae25409abffcd884437bebfc](https://osf.io/2xszy/?view_only=d73ad934ae25409abffcd884437bebfc). The preregistration for Study 4 can be found here: [https://osf.io/qzw29/?view\\_only=1b33dd65cdbf413588ebe042422127d1](https://osf.io/qzw29/?view_only=1b33dd65cdbf413588ebe042422127d1). We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in

the study. First, we report the methods of Studies 1-3, then the results from Studies 1-3. Second, we report the methods and results of Studies 4a-4f and summarize the overall trends. All data, materials, and analysis code are available on OSF:

[https://osf.io/xuqw8/?view\\_only=229c44f67f9e41379c87cba6bc5c5802](https://osf.io/xuqw8/?view_only=229c44f67f9e41379c87cba6bc5c5802).

**Table 1**

*Sample Characteristics Across Studies*

Study	Age	Sex			
	M (SD)	Female	Male	Nonbinary	Other
<b>Study 1</b> (N = 215)	39.59 (15.80)	130	75	10	0
<b>Study 2</b> (N = 199)	37.23 (13.97)	108	82	7	2
<b>Study 3</b> (N = 230)	41.59 (14.38)	137	89	3	1
<b>Study 4a (GoFundMe)</b> (N = 203)	43.91 (13.96)	94	104	3	2
<b>Study 4b (College)</b> (N = 213)	42.69 (13.83)	102	109	2	0
<b>Study 4c (Clean)</b> (N = 203)	44.34 (13.74)	103	97	1	1
<b>Study 4d (Food Bin)</b> (N = 203)	42.94 (14.17)	98	102	3	0
<b>Study 4e (Study)</b> (N = 213)	44.70 (13.42)	91	112	7	2
<b>Study 4f (Science)</b> (N = 203)	42.7 (13.51)	97	102	2	2

### Studies 1-3

#### Study 1

In Study 1, we conducted an exploratory study to 1) test a list of specific potential motives for donating that may be ascribed to different helpers that we generated based on prior work, 2) collect open response feedback on other potential motives that we had not considered, and 3) test three conditions of helper-recipient relationship (family, close friends, strangers) and three conditions of helping format (anonymous, public, known-to-recipient).

We chose to examine the interactive effects of relationship and helping format on perceived motives for helping first in the context of an online donation for several reasons. Firstly, online giving is a popular form of helping both close others and strangers. Online giving increased by 42 percent between 2018 and 2021 (Blackbaud Institute, 2022) and GoFundMe, the specific crowdsourcing platform used in our stimuli for Studies 1-3, reports that 28 million people have sent or received help in 2023 as of September (GoFundMe, 2023). Secondly, an online donation context can be easily adapted to simulate the three Helping Formats we are interested in.

To generate our initial list of potential inferred motives for donating, we drew both from motives that have previously been investigated as potential motives for donating, including an altruism motive (Elster, 2006), a reputation signaling motive (Small & Cryder, 2016), reciprocity (Trivers, 1971), and a norm-setting motive (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 Helper-Recipient relationship on motive perceptions.

### **Method (Study 1)**

Study 1 had a 3x3 within-subjects design. 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 nine donors displayed in a random order (Appendix A). The donors varied on their Helping Format and their relationship with the recipient (Table 2).

**Table 2**

*Nine Helper Types*

<b>Helping Format</b>	<b>Helper-Recipient Relationship</b>
<p><b>Anonymous</b></p> <p>This donor chose not to reveal their identity to the recipient or to anyone else who could see the donation page.</p>	<p><b>Family Member</b></p> <p>This donor is a family member of the recipient.</p>
<p><b><i>Known-to-recipient</i></b></p> <p>This donor chose to reveal their identity to the recipient but not to anyone else who could see the donation page.</p>	<p><b>Close Friend</b></p> <p>This donor is a close friend of the recipient.</p>
<p><b>Public</b></p> <p>This donor chose to reveal their identity to the recipient and to anyone else who could see the donation page.</p>	<p><b>Stranger</b></p> <p>This donor does not know the recipient personally.</p>

***Post-Hoc Sensitivity Analysis (Study 1)***

A post-hoc sensitivity analysis was conducted using G\*Power3 (Faul et al., 2007) to determine the minimum effect size (dz) this 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, Study 1 had .80 power to detect an effect size of at least 0.19 at an alpha of .05.

***Procedure (Study 1)***

To maximize clarity and comprehension, participants read and made judgments about three donors at a time. Half of the participants were randomly assigned to read about three donors with the same Helping Format at a time (e.g. all three anonymous), while the other half of participants were randomly assigned to read about three donors with the same relationship to the recipient at a time (e.g. all three donors who were close friends of the recipient). Since we found very few (and quite small) differences in effects between the two samples (see Supplementary Materials), we collapsed the data across the two versions and report the combined results here.

### **Measures (Study 1)**

Participants were asked to evaluate the probability that each donor donated [anonymously (“fully anonymously”), known-to-recipient (“selectively anonymously”), or publicly (“non-anonymously”)] “solely” for each of 12 different potential reasons displayed in Table 3 on a scale from 0 to 100. After rating the probability of each motive for each donor, participants rated the moral goodness of each donor simultaneously on a scale from 0 (Extremely bad) to 100 (Extremely good). At the end of the study, participants were asked to list any additional reasons (aside from those they were asked about in the study) that each donor may have donated in a free response text box.

**Table 3**

*Potential Motives for Prosocial Behavior Assessed in Studies 1-3, Studies 4a-4f*

<b>Motive</b>	<b>Item</b>	<b>Study 1</b>	<b>Study 2</b>	<b>Studies 3, 4a-4f</b>	<b>Mean Moral Goodness (Study 2)</b>
Right	they believed it was the right thing to do	✓	✓	✓	5.44

Reciprocity	they know that Ryan would do the same thing for them if their positions were reversed	✓			
Show Care Factor					
Show Care	they wanted Ryan to know that they care	✓	✓	✓	5.14
Support	they wanted Ryan to know that they support him	✓			
Appreciate	they think that Ryan would appreciate knowing they helped him	✓			
Prevent Bad Feelings					
Prevent Bad Feelings	they didn't want Ryan to feel bad for asking for money	✓	✓		5.01
Pity	they didn't want Ryan to think they pitied him	✓			
Owe	they didn't want Ryan to feel like he owed them	✓			
Norm-Setting					
Example	they wanted to set an example for others	✓	✓	✓	4.72
Inspiration	they wanted to inspire others to donate	✓			
Strengthen Relationship	they wanted to strengthen their relationship with Ryan	✓	✓	✓	4.55
Prevent Jealousy Motive	they didn't want to make other people jealous		✓		4.17
Avoid Scrutiny Motive	they wanted to avoid scrutiny from others		✓		3.62
Reputation	they wanted others to think that they are a good person	✓	✓	✓	3.23

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## **Study 2**

Since we found minimal differences between donors who gave to family and donors who gave to close friends in Study 1 (see Results for Study 1 below), we removed the “close friends” condition in Study 2. In Study 2, we 1) tested the replicability of our findings from Study 1 using pre-registered hypotheses and an adjusted measure of motive likelihood, 2) measuring perceptions of the moral goodness of different motives for donating, providing clarity on how people compare these motives, and 3) examining the two exploratory motives for donating suggested by participants in Study 1. Our process for identifying these two exploratory motives is reported in “Additional Motives Offered by Participants in Study 1” below.

This study used a 3 X 2 within-subjects design to examine the effects of Helper-Recipient relationship and Helping Format on the perceived likelihood and moral goodness of donors' motives for donating, and the moral character of the donors. Based on Study 1, we preregistered the following hypotheses.

### **Hypotheses for Study 2**

Anonymous helpers will be perceived as more likely to have been motivated by the Right motive (H1a) and less likely to have been motivated by the Show Care motive (H2a), Prevent Bad Feelings motive (H3a), Norm-Setting motive (H4a), Strengthen Relationship motive (H5a), and Reputation motive (H6a) than known-to-recipient and public helpers. Agents who helped strangers will be perceived as no more likely than agents who helped family members to have been motivated by the Right motive (H1b), the Norm-Setting motive (H4b), and the Reputation motive (H6b), and less likely to have been motivated by the Show Care motive (H2b), the Prevent Bad Feelings motive (H3b), the Strengthen Relationship motive (H5b). Anonymous helpers will be perceived as more morally good than known-to-recipient and public helpers (H7a) and agents who helped strangers will be perceived as no more morally good than agents who helped family members (H7b).

## Method (Study 2)

### ***Power Analysis (Studies 2-3, Studies 4a-4f)***

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 provided .80 power to detect interactions (i.e., difference-in-differences) of  $d_z = .20$ .

### ***Procedure (Study 2)***

After reading the same GoFundMe stimulus from Study 1, participants evaluated the potential motives of each of six of the donors from Study 1 (the two donors who gave to close friends were not included in this study) separately in a random order. First, participants were asked to rate how likely it was that each donor donated [anonymously (“fully anonymously”), known-to-recipient (“selectively anonymously”), or publicly (“non-anonymously”)] for each of eight potential motives (Table 3) on a five-point Likert scale from “Extremely unlikely” to “Extremely likely”. Then participants evaluated how morally good it would have been for [donor] to donate [anonymously (“fully anonymously”), known-to-recipient (“selectively anonymously”), or publicly (“non-anonymously”)] for each motive on a six-point Likert scale from “Extremely morally bad” to “Extremely morally good.” Since we found minimal differences between donors on the perceived moral goodness of each motive, we report only the mean moral goodness of each motive across donor conditions (Table 3). The full results and follow-up analyses for the interactive effects of relationship and helping format on the perceived moral goodness of each motive can be found in Supplementary. Finally, completed the same measure of moral character used in Study 1 for each donor.

### **Study 3**

In Study 3, we aimed to conduct a simplified replication of Study and to address potential ceiling effects on the moral character rating measure we employed in Studies 1-2. The moral character rating measure in Studies 1-2 used a bipolar scale and all donors had a mean moral character rating above the midpoint, suggesting that the scale may not have enabled participants to effectively discriminate between donors in their assessments of moral character. To address this in Study 3, we employed a revised monopolar moral character rating scale in Study 3. In Study 3, we utilized a condensed list of five motives from Study 2 (Table 3). We excluded the Prevent Jealousy and Avoid Scrutiny motives since they had relatively small correlations with moral character ratings in Study 2 and excluded the Prevent Bad Feelings since it is less straightforward than the other five motives. We did not re-assess the perceived moral goodness of the motives in Study 3. Study 3 had the same 3 X 2 within-subjects design as Study 2.

#### ***Method (Study 3)***

##### ***Procedure***

Participants read the same scenarios used in Study 2 and completed the same measure of the perceived likelihood of each motive for each of the six donors as they did in Study 2. Next, in an exploratory manner, participants were asked to say how much that each motive contributed to that donor's decision to donate on a scale from 0 to 100. Participants were instructed to assign these proportions such that if they thought, for example, that a given motive accounted for 50% of the donor's decision to donate, then they should enter a 50 for that motive. Results for this proportion question are reported in the Supplementary Materials. Finally, participants rated the moral character of each donor simultaneously, but rather than rating them on a bipolar scale, they instead rated them on a monopolar five-point Likert scale from "Not at all morally good" to "Extremely morally good".

## Results

### ***Exploratory Factor Analysis (Study 1)***

To determine the factor structure of the initial list of potential motives we assessed in Study 1, we performed an exploratory factor analysis (EFA) on the mean likelihood of each of the 12 motives, averaged across all 9 targets. As indicated by the scree plot (Supplementary Materials), 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 motive 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), Strengthen 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 three factors that emerged (all loadings  $> .65$ ) were the Show Care factor (comprised of motives related to making the recipient feel good: the Show Care, Support, and Appreciate motives), the Prevent Bad Feelings factor (comprised of motives related to preventing the recipient from feeling bad: the Prevent Bad Feelings, Pity, and Owe motives), and the Norm-Setting factor (comprised of motives related to setting norms about helping: Inspiration, Example). The full results of the EFA are reported in Supplementary Materials.

### **Impact of Helper-Recipient Relationship and Helping Format on Motive Perceptions**

We employed the same analysis approach across all studies. To examine the fixed effects and interaction effects of the helper-recipient relationship and helping format on the perceived likelihood of each motive, we conducted two-way repeated-measures ANOVAs. If a significant interaction effect was observed, a series of post-hoc two-way ANOVAs were conducted on 2x2 subsets of Helping Format and Relationship to identify where the interaction effect occurred. If no significant interaction effect was observed but a main effect of Helping Format and/or Relationship was observed, post-hoc Tukey tests were conducted to examine the

main effects. Motives that loaded onto the same factor in the EFA in Study 1 were collapsed by taking the mean score for those motives. The items in each factor were highly reliable (all  $\alpha$ s > .94). We report the results for Studies 1-3 in Table 4.

**Table 4**

*Two-Way ANOVAs for the Likelihood of Each Potential Motive (Studies 1-3)*

DV	Source of variation	Study 1	Study 2	Study 3
Right Motive	Helping Format	$F(2, 428) = 17.43, p < .001, \eta_p^2 = .020$	$F(2, 396) = 35.80, p < .001, \eta_p^2 = .051$	$F(2, 458) = 49.65, p < .001, \eta_p^2 = .055$
	Relationship	$F(2, 428) = 6.63, p = .001, \eta_p^2 = .008$	$F(1, 198) = 19.31, p < .001, \eta_p^2 = .007$	$F(1, 229) = 1.23, p = .268, \eta_p^2 < .001$
	Interaction	$F(4, 856) = 0.12, p = .975, \eta_p^2 < .001$	$F(2, 396) = 11.53, p < .001, \eta_p^2 = .008$	$F(2, 458) = 2.86, p = .059, \eta_p^2 = .001$
Show Care Motive	Helping Format	$F(2, 428) = 727.10, p < .001, \eta_p^2 = .514$	$F(2, 396) = 256.30, p < .001, \eta_p^2 = .360$	$F(2, 458) = 392.70, p < .001, \eta_p^2 = .357$
	Relationship	$F(2, 428) = 65.44, p < .001, \eta_p^2 = .049$	$F(1, 198) = 51.22, p < .001, \eta_p^2 = .023$	$F(1, 229) = 113.00, p < .001, \eta_p^2 = .026$
	Interaction	$F(4, 856) = 41.25, p < .001, \eta_p^2 = .027$	$F(2, 396) = 18.72, p < .001, \eta_p^2 = .014$	$F(2, 458) = 36.06, p < .001, \eta_p^2 = .012$
Prevent Bad Feelings Motive	Helping Format	$F(2, 428) = 164.20, p < .001, \eta_p^2 = .172$	$F(2, 396) = 46.10, p < .001, \eta_p^2 = .078$	NA
	Relationship	$F(2, 428) = 54.89, p < .001, \eta_p^2 = .041$	$F(1, 198) = 102.60, p < .001, \eta_p^2 = .032$	NA
	Interaction	$F(4, 856) = 26.32, p < .001, \eta_p^2 = .015$	$F(2, 396) = 0.54, p = .582, \eta_p^2 = .000$	NA
Norm-Setting Motive	Helping Format	$F(2, 428) = 133.10, p < .001, \eta_p^2 = .173$	$F(2, 396) = 108.00, p < .001, \eta_p^2 = .166$	$F(1, 229) = 153.60, p < .001, \eta_p^2 = .208$
	Relationship	$F(2, 428) = 0.09, p = .916, \eta_p^2 < .001$	$F(1, 198) = 10.15, p = .002, \eta_p^2 = .003$	$F(2, 458) = 5.40, p = .021, \eta_p^2 = .001$



	Interaction	$F(4, 856) = 0.24, p = .918, \eta_p^2 < .001$	$F(2, 396) = 1.08, p = .340, \eta_p^2 = .001$	$F(2, 458) = 1.05, p = .351, \eta_p^2 < .001$
Strengthen Relationship Motive	Helping Format	$F(2, 428) = 433.60, p < .001, \eta_p^2 = .307$	$F(2, 396) = 306.90, p < .001, \eta_p^2 = .346$	$F(2, 458) = 485.10, p < .001, \eta_p^2 < .280$
	Relationship	$F(2, 428) = 325.00, p < .001, \eta_p^2 = .277$	$F(1, 198) = 373.50, p < .001, \eta_p^2 = .231$	$F(1, 229) = 656.40, p < .001, \eta_p^2 = .204$
Reciprocity Motive	Interaction	$F(4, 856) = 146.10, p < .001, \eta_p^2 = .109$	$F(2, 396) = 62.69, p < .001, \eta_p^2 = .059$	$F(2, 458) = 71.48, p < .001, \eta_p^2 = .032$
	Helping Format	$F(2, 428) = 42.44, p < .001, \eta_p^2 = .035$	NA	NA
	Relationship	$F(2, 428) = 246.30, p < .001, \eta_p^2 = .249$	NA	NA
Prevent Jealousy	Interaction	$F(4, 856) = 16.03, p < .001, \eta_p^2 = .008$	NA	NA
	Helping Format	NA	$F(2, 396) = 32.92, p < .001, \eta_p^2 = .060$	NA
	Relationship	NA	$F(1, 198) = 1.81, p = .180, \eta_p^2 = .001$	NA
	Interaction	NA	$F(2, 396) = 0.31, p = .736, \eta_p^2 < .001$	NA
Avoid Scrutiny	Helping Format	NA	$F(2, 396) = 37.05, p < .001, \eta_p^2 = .073$	NA
	Relationship	NA	$F(1, 198) = 12.19, p < .001, \eta_p^2 = .004$	NA
Reputation Motive	Interaction	NA	$F(2, 396) = 13.97, p < .001, \eta_p^2 = .008$	NA
	Helping Format	$F(2, 428) = 357.20, p < .001, \eta_p^2 = .376$	$F(2, 396) = 407.90, p < .001, \eta_p^2 = .472$	$F(2, 458) = 547.40, p < .001, \eta_p^2 = .493$
	Relationship	$F(2, 428) = 0.06, p = .942, \eta_p^2 < .001$	$F(1, 198) = 0.81, p = .370, \eta_p^2 < .001$	$F(1, 229) = 2.77, p < .001, \eta_p^2 < .001$
	Interaction	$F(4, 856) = 0.86, p = .485, \eta_p^2 = .001$	$F(2, 396) = 8.48, p < .001, \eta_p^2 = .005$	$F(2, 458) = 3.73, p = .025, \eta_p^2 = .001$

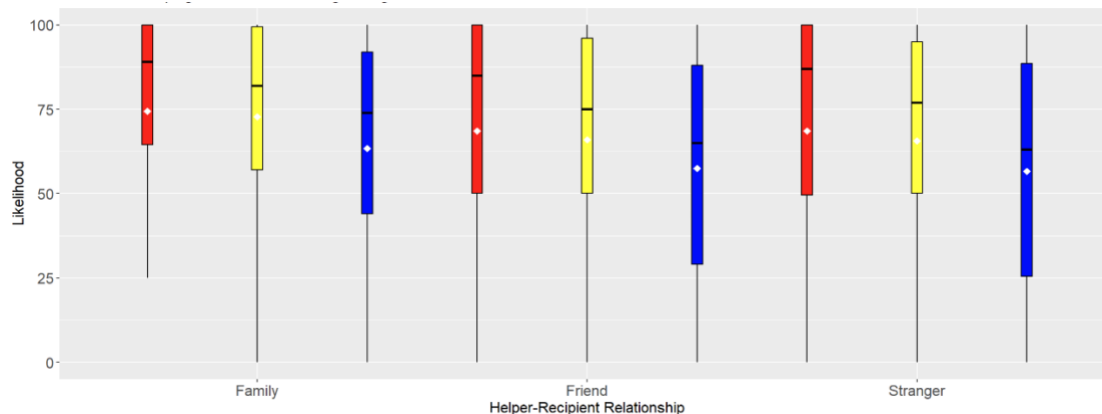
## Right Motive

Across Studies 1-3, there was a main effect of Helping Format (H1a) on the perceived likelihood that donors donated because they believed it was the right thing to do ('Right' motive; Table 4) such that anonymous donors were perceived as most likely to have donated for this motive, followed by known-to-recipient donors, and, finally, public donors (Table 5). There was a significant interaction effect between Helping Format and Relationship in Studies 2-3, but not in Study 1. Although we did not expect to find an effect of Relationship since we did not find one in Study 1 (H1b), follow-up 2x2 two-way ANOVAs (Table 6) show that the difference in likelihood for the Right motive between anonymous and public donors is significantly larger for donors who gave to strangers than donors who gave to family members in Studies 2-3, largely driven by the fact that public donors who gave to strangers are perceived as less likely to have donated for the Right motive than public donors who gave to family members (Fig. 1).

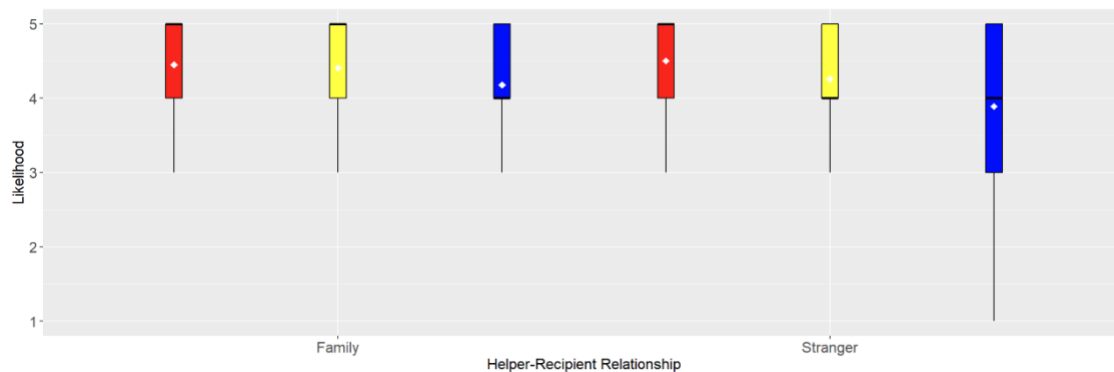
## Figure 1

*Impact of Helper-Recipient Relationship and Helping Format on Perceived Likelihood of Helping Because It Was the Right Thing to Do (Studies 1-3)*

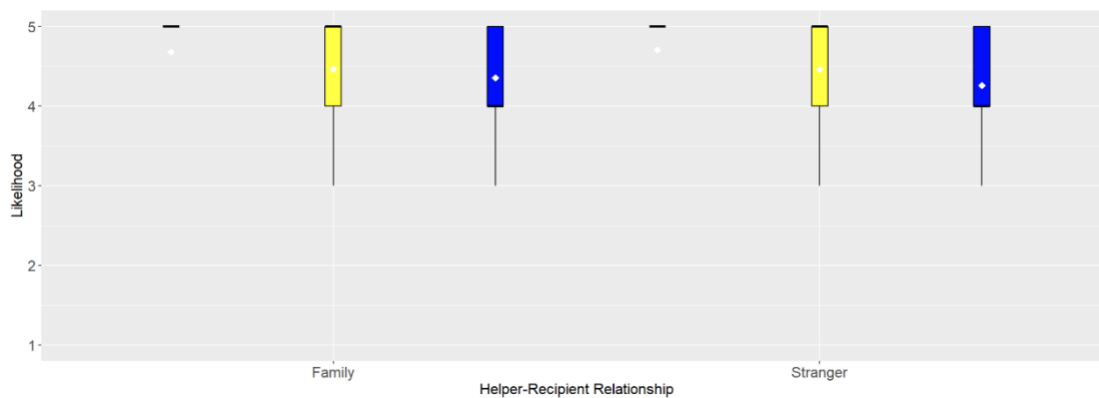
### Study 1



Study 2



Study 3



Helping Format ■ Anonymous ■ Known-to-Recipient ■ Public

**Table 5**

*Follow-up Tukey Tests for the Impact of Helping Format and Helper-Recipient Relationship on Motive Likelihood*

Comparison	
<b>Right Motive – Study 1</b>	
Anonymous - Public	MD = 11.35, SE = 1.94, p < .001, dz = 0.32
Anonymous - Known-to-recipient	MD = 2.38, SE = 1.94, p = .437, dz = 0.07

Known-to-recipient - Public MD = 8.97, SE = 1.94,  $p < .001$ ,  $d_z = 0.27$

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**Prevent Bad Feelings Motive – Study 2**

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Anonymous – Public MD = 0.82, SE = 0.11,  $p < .001$ ,  $d_z = 0.61$

Anonymous - Known-to-recipient MD = 0.49, SE = 0.11,  $p < .001$ ,  $d_z = 0.40$

Known-to-recipient - Public MD = 0.33, SE = 0.11,  $p = .005$ ,  $d_z = 0.32$

Family – Stranger MD = 0.42, SE = 0.084,  $p < .001$ ,  $d_z = 0.72$

---

**Reputation Motive – Study 1**

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Anonymous - Public MD = -53.68, SE = 1.59,  $p < .001$ ,  $d_z = -1.98$

Anonymous - Known-to-recipient MD = -19.95, SE = 1.59,  $p < .001$ ,  $d_z = -0.78$

Known-to-recipient - Public MD = -33.73, SE = 1.59,  $p < .001$ ,  $d_z = -1.04$

---

**Prevent Jealousy Motive – Study 2**

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Anonymous - Public MD = 0.54, SE = 0.10,  $p < .001$ ,  $d_z = 0.40$

Anonymous - Known-to-recipient MD = 0.12, SE = 0.10,  $p = .496$ ,  $d_z = 0.11$

Known-to-recipient - Public MD = 0.65, SE = 0.10,  $p < .001$ ,  $d_z = 0.52$

---

**Table 6**

*2x2 Two-way ANOVAs for the Interaction Effect of Helping Format and Relationship on the Likelihood of the Right motive (Studies 2-3)*

ANOVA Model	Source of variation	Study 2	Study 3
2 (Anonymous, Known-to-Recipient) X 2	Helping Format	$F(1,198) = 10.17, p = .002, \eta_p^2 = .009$	$F(1, 229) = 36.70, p < .001, \eta_p^2 = .029$

(Family, Stranger)	Relationship	$F(1,198) = 2.31, p = .130, \eta_p^2 = .001$	$F(1, 229) = 0.21, p = .648, \eta_p^2 < .001$
	Interaction	$F(1,198) = 9.37, p = .003, \eta_p^2 = .004$	$F(1, 229) = 0.37, p = .542, \eta_p^2 < .001$
	Helping Format	$F(1,198) = 56.12, p < .001, \eta_p^2 = .069$	$F(1, 229) = 73.43, p < .001, \eta_p^2 = .079$
2 (Anonymous, Public) X 2 (Family, Stranger)	Relationship	$F(1,198) = 10.04, p = .002, \eta_p^2 = .005$	$F(1, 229) = 1.47, p = .226, \eta_p^2 = .001$
	Interaction	$F(1,198) = 22.04, p < .001, \eta_p^2 = .011$	$F(1, 229) = 4.98, p = .027, \eta_p^2 = .002$
	Helping Format	$F(1,198) = 29.86, p < .001, \eta_p^2 = .032$	$F(1, 229) = 22.49, p = .067, \eta_p^2 = .015$
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Relationship	$F(1,198) = 35.17, p < .001, \eta_p^2 = .018$	$F(1, 229) = 3.40, p < .001, \eta_p^2 = .001$
	Interaction	$F(1,198) = 3.45, p = .065, \eta_p^2 = .002$	$F(1, 229) = 2.97, p = .086, \eta_p^2 = .001$

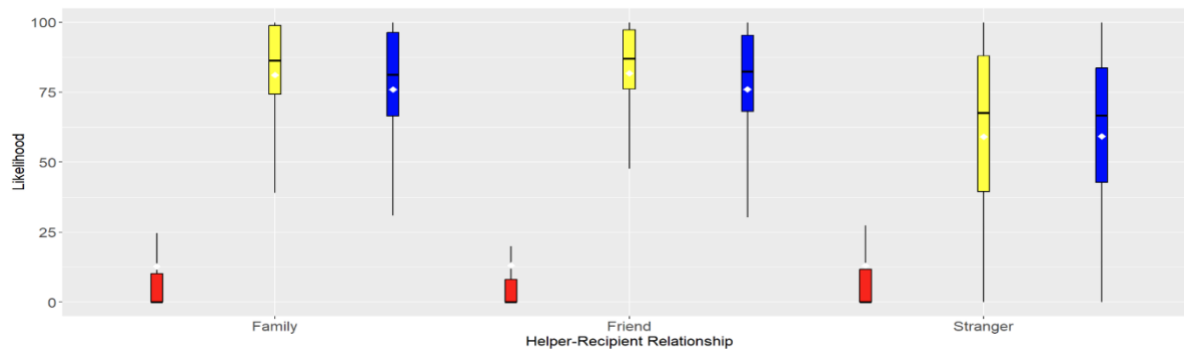
### Show Care Motive

Across Studies 1-3, there was a significant interaction effect between Helping 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 ('Show Care' motive; Table 4). Follow-up 2x2 two-way ANOVAs (Table 7) show that donors who gave to strangers are perceived as less likely than donors who gave to family (and friends in Study 1) to have donated to show care (H2b), particularly in the known-to-recipient and public conditions (Fig. 2). Known-to-recipient donors were seen as most likely to be motivated to show care, followed by public donors, and, finally, anonymous donors (H2a).

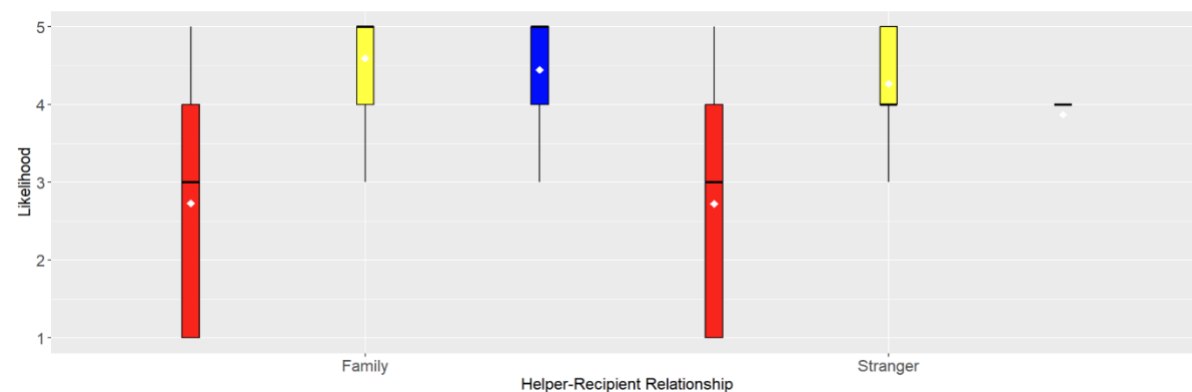
**Figure 2**

*Impact of Helper-Recipient Relationship and Helping Format on Perceived Likelihood of Helping to Show Care for the Recipient (Studies 1-3)*

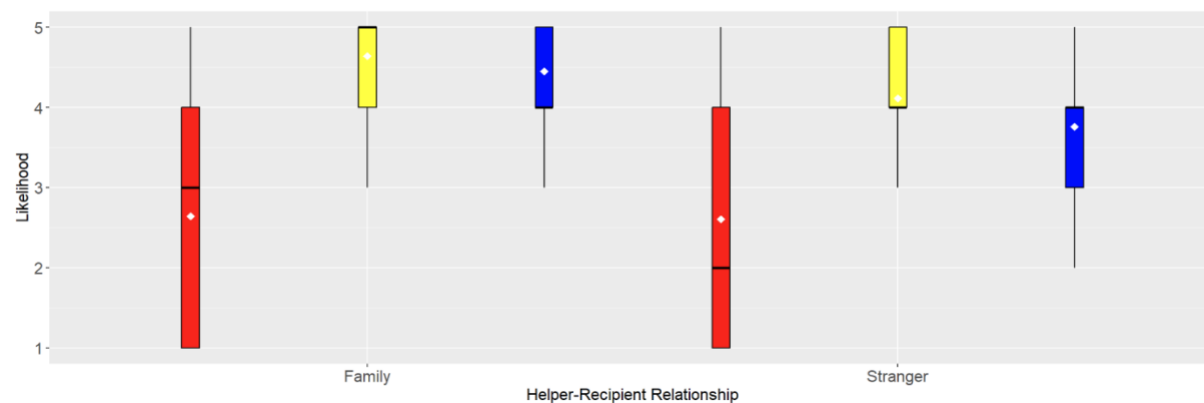
**Study 1**



**Study 2**



**Study 3**



Helping Format ■ Anonymous ■ Known-to-Recipient ■ Public

**Table 7***2x2 Two-way ANOVAs for the Likelihood of the Show Care Motive (Studies 1-3)*

<b>ANOVA Model</b>	<b>Source of variation</b>	<b>Study 1</b>	<b>Study 2</b>	<b>Study 3</b>
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Helping Format	F(1, 214) = 712.30, $p < .001$ , $\eta_p^2 = .516$	F(1, 198) = 340.80, $p < .001$ , $\eta_p^2 = .391$	F(1, 229) = 409.50, $p < .001$ , $\eta_p^2 = .386$
	Relationship	F(1, 214) = 61.71, $p < .001$ , $\eta_p^2 = .038$	F(1, 198) = 12.97, $p < .001$ , $\eta_p^2 = .006$	F(1, 229) = 39.45, $p < .001$ , $\eta_p^2 = .010$
	Interaction	F(1, 214) = 73.94, $p < .001$ , $\eta_p^2 = .039$	F(1, 198) = 12.60, $p < .001$ , $\eta_p^2 = .006$	F(1, 229) = 40.36, $p < .001$ , $\eta_p^2 = .007$
2 (Anonymous, Public) X 2 (Family, Stranger)	Helping Format	F(1, 214) = 658.90, $p < .001$ , $\eta_p^2 = .491$	F(1, 198) = 233.70, $p < .001$ , $\eta_p^2 = .287$	F(1, 229) = 305.90, $p < .001$ , $\eta_p^2 = .291$
	Relationship	F(1, 214) = 40.60, $p < .001$ , $\eta_p^2 = .022$	F(1, 198) = 33.11, $p < .001$ , $\eta_p^2 = .016$	F(1, 229) = 66.08, $p < .001$ , $\eta_p^2 = .018$
	Interaction	F(1, 214) = 46.12, $p < .001$ , $\eta_p^2 = .023$	F(1, 198) = 27.47, $p < .001$ , $\eta_p^2 = .016$	F(1, 229) = 49.76, $p < .001$ , $\eta_p^2 = .014$
2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Helping Format	F(1, 214) = 734.60, $p < .001$ , $\eta_p^2 = .516$	NA	NA
	Relationship	F(1, 214) = 71.86, $p < .001$ , $\eta_p^2 = .041$	NA	NA
	Interaction	F(1, 214) = 69.42, $p < .001$ , $\eta_p^2 = .040$	NA	NA
2 (Anonymous, Public) X 2 (Friend, Stranger)	Helping Format	F(1, 214) = 653.50, $p < .001$ , $\eta_p^2 = .486$	NA	NA
	Relationship	F(1, 214) = 42.47, $p < .001$ , $\eta_p^2 = .022$	NA	NA

	Interaction	F(1, 214) = 43.78, $p < .001$ , $\eta_p^2 = .022$	NA	NA
	Helping Format	F(1, 214) = 4.71, $p = .031$ , $\eta_p^2 = .002$	F(1, 198) = 31.76, $p < .001$ , $\eta_p^2 = .031$	F(1, 229) = 47.97, $p < .001$ , $\eta_p^2 = .027$
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Relationship	F(1, 214) = 78.88, $p < .001$ , $\eta_p^2 = .098$	F(1, 198) = 70.51, $p < .001$ , $\eta_p^2 = .081$	F(1, 229) = 167.80, $p < .001$ , $\eta_p^2 = .139$
	Interaction	F(1, 214) = 8.36, $p < .004$ , $\eta_p^2 = .002$	F(1, 198) = 10.05, $p = .002$ , $\eta_p^2 = .007$	F(1, 229) = 5.80, $p = .017$ , $\eta_p^2 = .003$
	Helping Format	F(1, 214) = 5.60, $p = .019$ , $\eta_p^2 = .002$	NA	NA
2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Relationship	F(1, 214) = 92.86, $p < .001$ , $\eta_p^2 = .101$	NA	NA
	Interaction	F(1, 214) = 11.38, $p < .001$ , $\eta_p^2 = .003$	NA	NA
	Helping Format	F(1, 214) = 940.50, $p < .001$ , $\eta_p^2 = .664$	NA	NA
2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Relationship	F(1, 214) = 0.36, $p = .552$ , $\eta_p^2 < .001$	NA	NA
	Interaction	F(1, 214) = 0.04, $p < .838$ , $\eta_p^2 < .001$	NA	NA
	Helping Format	F(1, 214) = 805.60, $p < .001$ , $\eta_p^2 = .603$	NA	NA
2 (Anonymous, Public) X 2 (Family, Friend)	Relationship	F(1, 214) = 0.03, $p = .857$ , $\eta_p^2 < .001$	NA	NA
	Interaction	F(1, 214) = 0.03, $p = .855$ , $\eta_p^2 < .001$	NA	NA



	Helping Format	F(1, 214) = 19.42, $p < .001$ , $\eta_p^2 = .013$	NA	NA
2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Relationship	F(1, 214) = 0.09, $p = .767$ , $\eta_p^2 < .001$	NA	NA
	Interaction	F(1, 214) = 0.80, $p = .371$ , $\eta_p^2 < .001$	NA	NA

### Prevent Bad Feelings Motive (Studies 1-2)

Across Studies 1-2, there was a main effect of Helping Format (H3a) 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 ('Prevent Bad Feelings' Motive; Table 4) such that anonymous donors were perceived as most likely to have donated to prevent the recipient's bad feelings, followed by known-to-recipient donors, and, finally, public donors (Table 5). There was also a main effect of Relationship (H3b) across both studies, such that donors who gave to strangers were perceived as less likely than donors who gave to family (and friends in Study 1) to have donated to prevent the recipient's bad feelings. This was qualified by a significant interaction in Study 1; the difference between donors who gave to strangers and donors who gave to family and friends was strongest in the anonymous condition (Table 8).

**Table 8**

*2x2 Two-way ANOVAs for the Interaction Effect of Helping Format and Relationship on the Prevent Bad Negative Feelings Motive (Study 1)*

ANOVA Model	Source of variation	df	F-ratio	p-value	$\eta_p^2$
	Helping Format	(1, 214)	159.10	<.001	.134

2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Relationship	(1, 214)	86.83	<.001	.065
	Interaction	(1, 214)	47.11	<.001	.020
2 (Anonymous, Public) X 2 (Family, Stranger)	Helping Format	(1, 214)	191.60	<.001	.177
	Relationship	(1, 214)	89.38	<.001	.068
2 (Anonymous, Public) X 2 (Family, Stranger)	Interaction	(1, 214)	45.42	<.001	.023
	Helping Format	(1, 214)	126.10	<.001	.111
2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Relationship	(1, 214)	61.40	<.001	.050
	Interaction	(1, 214)	26.53	<.001	.012
2 (Anonymous, Public) X 2 (Friend, Stranger)	Helping Format	(1, 214)	159.60	<.001	.153
	Relationship	(1, 214)	58.59	<.001	.050
2 (Anonymous, Public) X 2 (Friend, Stranger)	Interaction	(1, 214)	28.54	<.001	.013
	Helping Format	(1, 214)	11.48	<.001	.005
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Relationship	(1, 214)	26.66	<.001	.024
	Interaction	(1, 214)	0.25	.619	< .001
2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Helping Format	(1, 214)	12.68	<.001	.005
	Relationship	(1, 214)	23.80	<.001	.024
2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Interaction	(1, 214)	0.73	.393	< .001
	Helping Format	(1, 214)	157.50	<.001	.191
2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Relationship	(1, 214)	2.85	.093	< .001
	Interaction	(1, 214)	4.94	.027	.001

	Helping Format	(1, 214)	189.60	<.001	.603
2 (Anonymous, Public) X 2 (Family, Friend)	Relationship	(1, 214)	3.93	.049	< .001
	Interaction	(1, 214)	3.85	.051	< .001
	Helping Format	(1, 214)	10.23	.002	.006
2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Relationship	(1, 214)	0.001	.974	< .001
	Interaction	(1, 214)	0.17	.679	< .001

### Norm-Setting Motive

Across Studies 1-3, there was a main effect of Helping Format (H4a) on the perceived likelihood that donors donated because they wanted to inspire others to have donated ('Norm-Setting' motive; Table 4) such that public donors were seen as more likely than known-to-recipient and anonymous donors to have donated to set norms about donating (Table 9). Although we did not expect an effect of Relationship (H4b) in Studies 2-3 since we did not observe one in Study 1, there was a main effect of Relationship in both studies such that family members were perceived as more likely to have donated because of the 'Norm-Setting' motive than donors who gave to strangers (Fig. 3). However, the follow-up Tukey test in Study 3 revealed that this difference was not significant.

**Table 9**

*Tukey Tests for the Impact of Helping Format on the Likelihood of the Norm-Setting Motive*

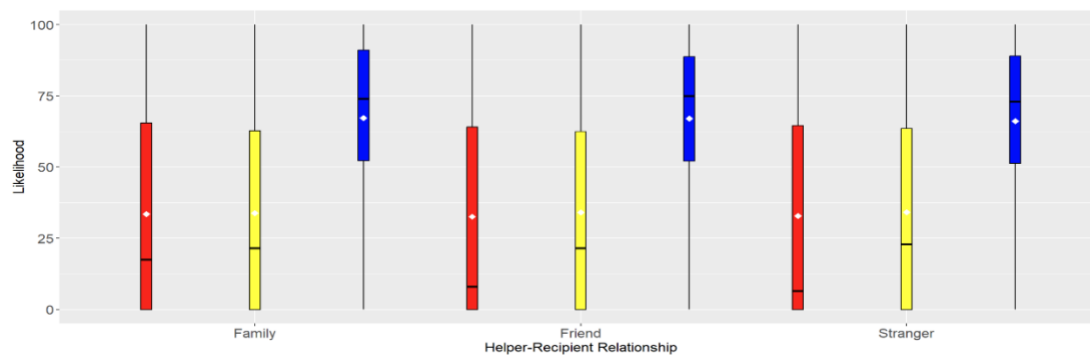
Comparison	Study 1	Study 2	Study 3
Anonymous - Public	MD = -33.87, SE = 1.92, $p < .001$ , $dz = -1.00$	MD = -1.03, SE = 0.104, $p < .001$ , $dz = -0.81$	MD = 1.15, SE = 0.098, $p < .001$ , $dz = -0.85$

Anonymous - Known-to- recipient	MD = -1.05, SE = 1.92, $p = .849$ , $dz = -$ 0.03	MD = -0.07, SE = 0.104, $p = .805$ , $dz = -$ 0.06	MD = -0.13, SE = 0.098, $p = .391$ , $dz =$ 0.12
Known-to-recipient - Public	MD = -32.83, SE = 1.92, $p < .001$ , $dz = -$ 1.00	MD = -1.10, SE = 0.104, $p < .001$ , $dz = -$ 0.92	MD = -1.28, SE = 0.098, $p < .001$ , $dz =$ 1.05
Stranger - Family	NA	MD = -0.12, SE = 0.083, $p = .142$ , $dz = -$ 0.23	MD = -0.07, SE = 0.076, $p = .341$ , $dz = -$ 0.15

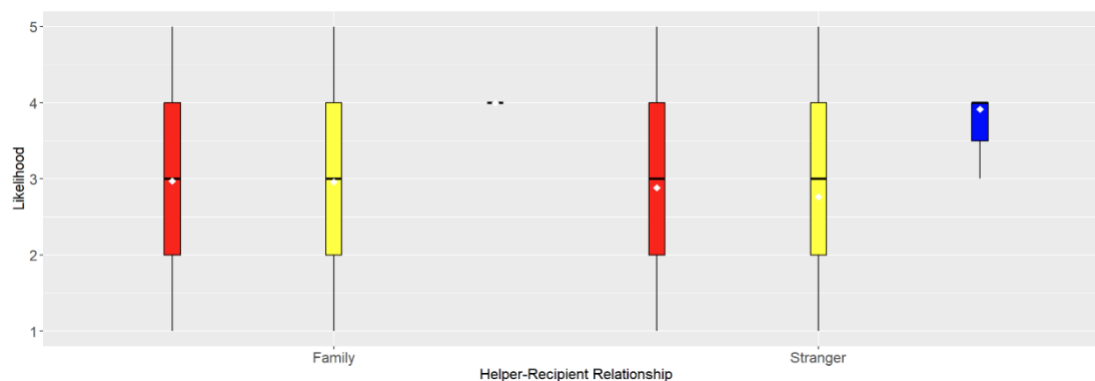
**Figure 3**

*Impact of Helper-Recipient Relationship and Helping Format on Perceived Likelihood of Helping to Set Norms (Studies 1-3)*

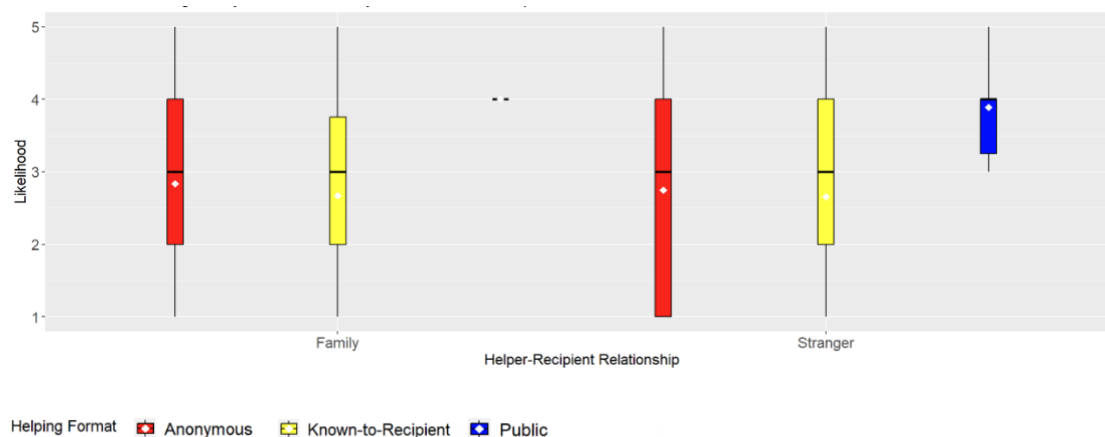
**Study 1**



**Study 2**



### Study 3



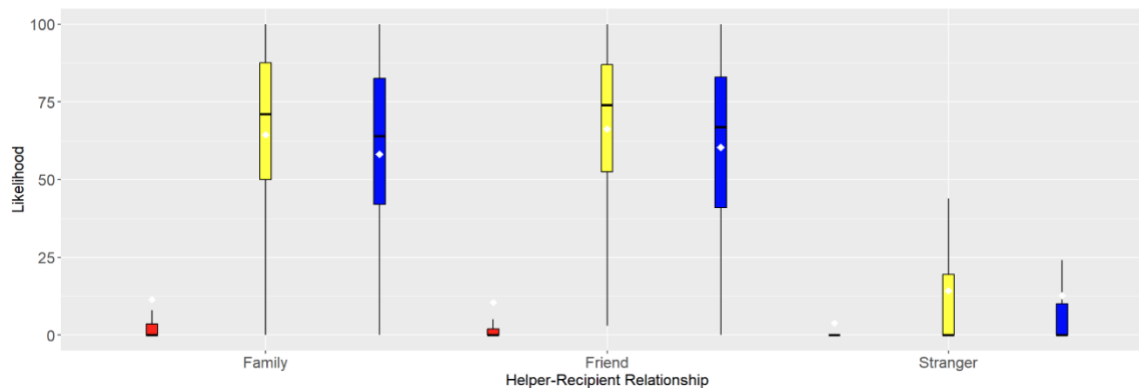
### Strengthen Relationship Motive

Across Studies 1-3, there was a significant interaction effect between Helping Format and Relationship on the perceived likelihood that donors donated because they wanted to strengthen their relationship with the recipient ('Strengthen Relationship' motive, Table 4). Follow-up 2x2 two-way ANOVAs (Table 10) show that donors who gave to strangers are perceived as less likely than donors who gave to family and friends to have donated to strengthen their relationship with the recipient (H5b), especially in the known-to-recipient and public conditions (Fig. 4). Known-to-recipient donors were seen as most likely to have been motivated to strengthen their relationship with the recipient, followed by public donors, and finally, anonymous donors (H5a).

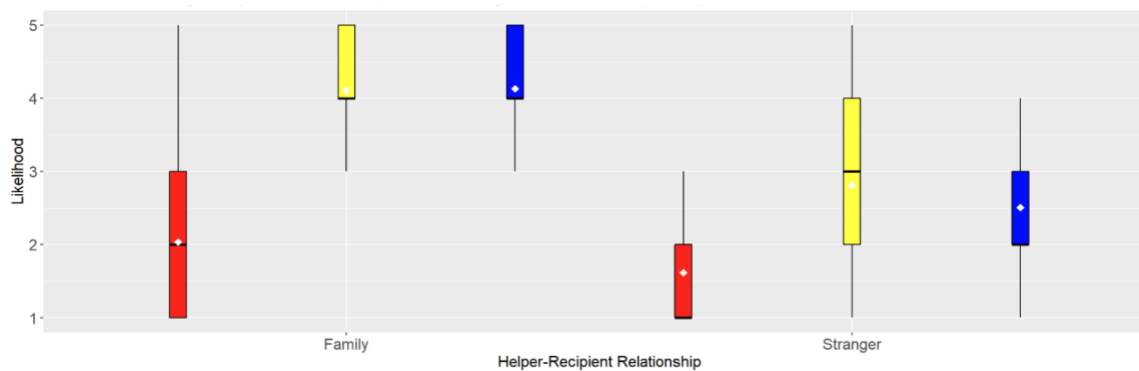
**Figure 4**

*Impact of Helper-Recipient Relationship and Helping Format on Perceived Likelihood of Helping to Strengthen One's Relationship with the Recipient (Studies 1-3)*

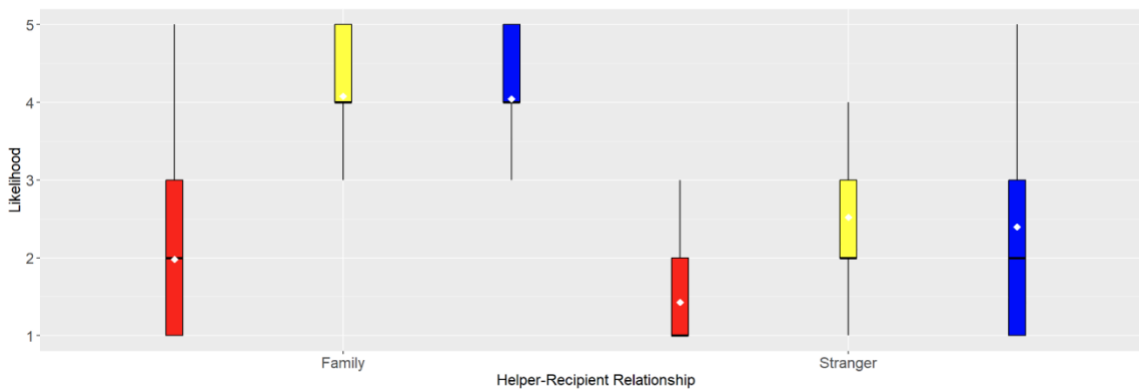
**Study 1**



**Study 2**



**Study 3**



Helping Format ■ Anonymous ■ Known-to-Recipient ■ Public

**Table 10**

*2x2 Two-way ANOVAs for the Interaction Effect of Helping Format and Relationship on the Strengthen Relationship motive (Studies 1-3)*

<b>ANOVA Model</b>	<b>Source of variation</b>	<b>Study 1</b>	<b>Study 2</b>	<b>Study 3</b>
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Helping Format	F(1, 214) = 468.90, $p < .001$ , $\eta_p^2 = .293$	F(1, 198) = 393.70, $p < .001$ , $\eta_p^2 = .387$	F(1, 229) = 727.90, $p < .001$ , $\eta_p^2 = .340$
	Relationship	F(1, 214) = 305.40, $p < .001$ , $\eta_p^2 = .258$	F(1, 198) = 199.20, $p < .001$ , $\eta_p^2 = .148$	F(1, 229) = 400.80, $p < .001$ , $\eta_p^2 = .149$
	Interaction	F(1, 214) = 224.60, $p < .001$ , $\eta_p^2 = .158$	F(1, 198) = 64.14, $p < .001$ , $\eta_p^2 = .044$	F(1, 229) = 100.10, $p < .001$ , $\eta_p^2 = .034$
2 (Anonymous, Public) X 2 (Family, Stranger)	Helping Format	F(1, 214) = 368.90, $p < .001$ , $\eta_p^2 = .242$	F(1, 198) = 396.70, $p < .001$ , $\eta_p^2 = .364$	F(1, 229) = 615.30, $p < .001$ , $\eta_p^2 = .310$
	Relationship	F(1, 214) = 266.90, $p < .001$ , $\eta_p^2 = .227$	F(1, 198) = 305.00, $p < .001$ , $\eta_p^2 = .211$	F(1, 229) = 501.00, $p < .001$ , $\eta_p^2 = .164$
	Interaction	F(1, 214) = 175.70, $p < .001$ , $\eta_p^2 = .129$	F(1, 198) = 106.80, $p < .001$ , $\eta_p^2 = .085$	F(1, 229) = 111.70, $p < .001$ , $\eta_p^2 = .041$
2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Helping Format	F(1, 214) = 535.80, $p < .001$ , $\eta_p^2 = .322$	NA	NA
	Relationship	F(1, 214) = 353.30, $p < .001$ , $\eta_p^2 = .272$	NA	NA
	Interaction	F(1, 214) = 251.80, $p < .001$ , $\eta_p^2 = .183$	NA	NA
2 (Anonymous, Public) X 2 (Friend, Stranger)	Helping Format	F(1, 214) = 404.20, $p < .001$ , $\eta_p^2 = .269$	NA	NA
	Relationship	F(1, 214) = 303.50, $p < .001$ , $\eta_p^2 = .239$	NA	NA

	Interaction	F(1, 214) = 212.00, $p < .001$ , $\eta_p^2 = .152$	NA	NA
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Helping Format	F(1, 214) = 12.17, $p < .001$ , $\eta_p^2 = .005$	F(1, 198) = 5.28, $p = .023$ , $\eta_p^2 = .004$	F(1, 229) = 2.35, $p = .127$ , $\eta_p^2 = .310$
	Relationship	F(1, 214) = 398.60, $p < .001$ , $\eta_p^2 = .416$	F(1, 198) = 358.60, $p < .001$ , $\eta_p^2 = .334$	F(1, 229) = 562.50, $p < .001$ , $\eta_p^2 = .391$
	Interaction	F(1, 214) = 6.29, $p = .013$ , $\eta_p^2 = .002$	F(1, 198) = 9.22, $p = .003$ , $\eta_p^2 = .006$	F(1, 229) = 0.82, $p = .367$ , $\eta_p^2 < .001$
2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Helping Format	F(1, 214) = 10.79, $p = .001$ , $\eta_p^2 = .004$	NA	NA
	Relationship	F(1, 214) = 448.50, $p < .001$ , $\eta_p^2 = .442$	NA	NA
	Interaction	F(1, 214) = 5.00, $p = .026$ , $\eta_p^2 = .002$	NA	NA
2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Helping Format	F(1, 214) = 609.80, $p < .001$ , $\eta_p^2 = .500$	NA	NA
	Relationship	F(1, 214) = 0.11, $p = .741$ , $\eta_p^2 < .001$	NA	NA
	Interaction	F(1, 214) = 2.41, $p = .122$ , $\eta_p^2 = .001$	NA	NA
2 (Anonymous, Public) X 2 (Family, Friend)	Helping Format	F(1, 214) = 454.30, $p < .001$ , $\eta_p^2 = .430$	NA	NA
	Relationship	F(1, 214) = 0.24, $p = .627$ , $\eta_p^2 < .001$	NA	NA
	Interaction	F(1, 214) = 3.18, $p = .076$ , $\eta_p^2 < .001$	NA	NA



	Helping Format	F(1, 214) = 13.58, $p < .001$ , $\eta_p^2 = .010$	NA	NA
2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Relationship	F(1, 214) = 1.68, $p = .196$ , $\eta_p^2 = .001$	NA	NA
	Interaction	F(1, 214) = 0.09, $p = .771$ , $\eta_p^2 < .001$	NA	NA

### Reciprocity Motive (Study 1)

There was a significant interaction effect between Helping 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 4). Follow-up 2x2 two-way ANOVAs (Table 11) show that donors who gave to strangers are perceived as less likely than donors who gave to family and friends to have donated for this reason, and the greatest differences between donors who gave to strangers and donors who gave to close others emerged for the anonymous and known-to-recipient conditions. Known-to-recipient donors were seen as most likely to have been motivated by reciprocity, followed by public donors, and, finally, anonymous donors.

**Table 11**

*2x2 Two-way ANOVAs for the Interaction Effect of Helping Format and Relationship on the Reciprocity motive (Study 1)*

ANOVA Model	Source of variation	df	F-ratio	p-value	$\eta_p^2$
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Helping Format	(1, 214)	48.23	<.001	.031
	Relationship	(1, 214)	271.80	<.001	.269

	Interaction	(1, 214)	26.22	<.001	.012
	Helping Format	(1, 214)	27.57	<.001	.018
2 (Anonymous, Public) X 2 (Family, Stranger)	Relationship	(1, 214)	231.10	<.001	.231
	Interaction	(1, 214)	7.76	.006	.003
	Helping Format	(1, 214)	62.26	<.001	.039
2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Relationship	(1, 214)	348.70	<.001	.291
	Interaction	(1, 214)	37.74	<.001	.017
	Helping Format	(1, 214)	39.94	<.001	.026
2 (Anonymous, Public) X 2 (Friend, Stranger)	Relationship	(1, 214)	298.30	<.001	.253
	Interaction	(1, 214)	15.01	<.001	.007
	Helping Format	(1, 214)	5.32	.022	.002
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Relationship	(1, 214)	284.20	<.001	.315
	Interaction	(1, 214)	11.67	<.001	.003
	Helping Format	(1, 214)	3.80	.053	.001
2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Relationship	(1, 214)	378.50	<.001	.358
	Interaction	(1, 214)	9.12	.003	.002
	Helping Format	(1, 214)	63.21	<.001	.071
2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Relationship	(1, 214)	0.35	.553	< .001
	Interaction	(1, 214)	1.47	.226	< .001

	Helping Format	(1, 214)	33.14	<.001	.037
2 (Anonymous, Public) X 2 (Family, Friend)	Relationship	(1, 214)	0.60	.441	< .001
	Interaction	(1, 214)	2.35	.127	< .001
	Helping Format	(1, 214)	10.77	.001	.007
2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Relationship	(1, 214)	1.80	.182	.002
	Interaction	(1, 214)	0.51	.475	< .001

### Reputation Motive

Across Studies 1-3, there was a main effect of Helping Format (H6a) on the perceived likelihood that donors donated because they wanted others to think they are a good person ('Reputation' motive; Table 4) such that public donors were seen as most likely to have been motivated by reputation-seeking, followed-by known-to-recipient donors, and, finally, anonymous donors. (Table 5). There was a significant interaction effect between Helping Format and Relationship on the perceived likelihood of this motive in Studies 2-3, but not in Study 1 (Fig. 5). Although we did not expect to find an effect of Relationship (H6b) since we did not find one in Study 1, follow-up 2x2 two-way ANOVAs (Table 12) showed that donors who gave to strangers were perceived as more likely to have donated for reputational reasons than donors who gave to family members, particularly in the public condition.

**Table 12**

*2x2 Two-way ANOVAs for the Interaction Effect of Helping Format and Relationship on the Likelihood of the Reputation motive (Studies 2-3)*

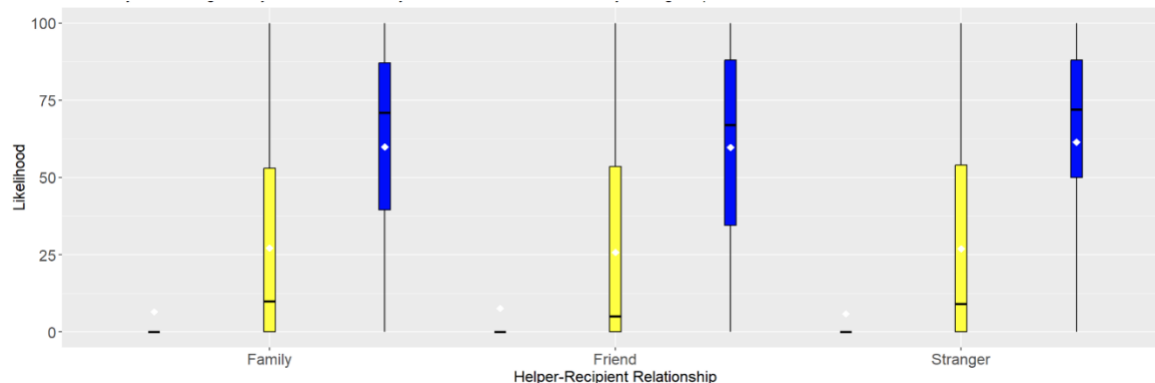
ANOVA Model	Source of variation	Study 2	Study 3
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2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Helping Format	$F(1, 198) = 46.23, p < .001, \eta_p^2 = .052$	$F(1, 229) = 73.64, p < .001, \eta_p^2 = .061$
	Relationship	$F(1, 198) = 2.01, p = .158, \eta_p^2 = .001$	$F(1, 229) = 8.62, p = .004, \eta_p^2 = .003$
	Interaction	$F(1, 198) = 2.04, p = .155, \eta_p^2 = .001$	$F(1, 229) = 0.36, p = .548, \eta_p^2 < .001$
2 (Anonymous, Public) X 2 (Family, Stranger)	Helping Format	$F(1, 198) = 646.00, p < .001, \eta_p^2 = .568$	$F(1, 229) = 877.20, p < .001, \eta_p^2 = .591$
	Relationship	$F(1, 198) = 5.29, p = .023, \eta_p^2 = .003$	$F(1, 229) = 0.16, p = .687, \eta_p^2 < .001$
	Interaction	$F(1, 198) = 7.31, p = .007, \eta_p^2 = .003$	$F(1, 229) = 4.23, p = .041, \eta_p^2 = .001$
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Helping Format	$F(1, 198) = 402.3, p < .001, \eta_p^2 = .410$	$F(1, 229) = 493.30, p < .001, \eta_p^2 = .420$
	Relationship	$F(1, 198) = 1.28, p = .260, \eta_p^2 = .001$	$F(1, 229) = 0.75, p = .388, \eta_p^2 < .001$
	Interaction	$F(1, 198) = 15.47, p < .001, \eta_p^2 = .007$	$F(1, 229) = 5.62, p = .019, \eta_p^2 = .002$

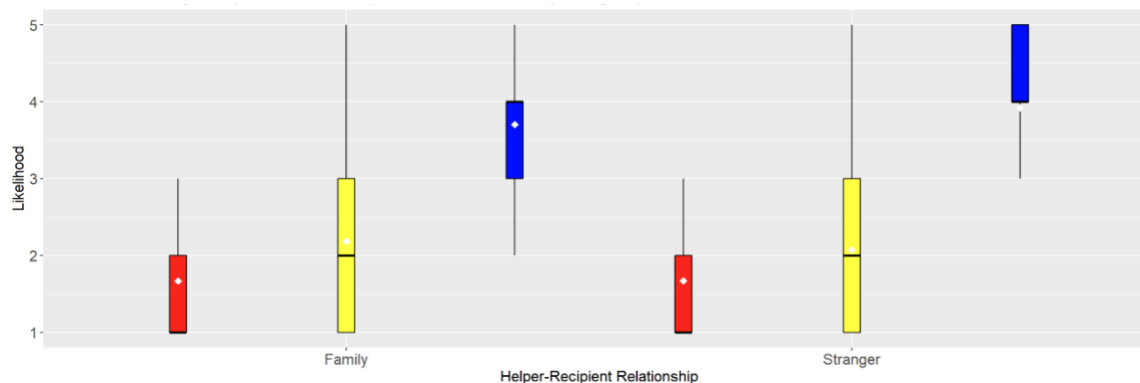
**Figure 5**

*Impact of Helper-Recipient Relationship and Helping Format on Perceived Likelihood of Helping to Look Like a Good Person (Studies 1-3)*

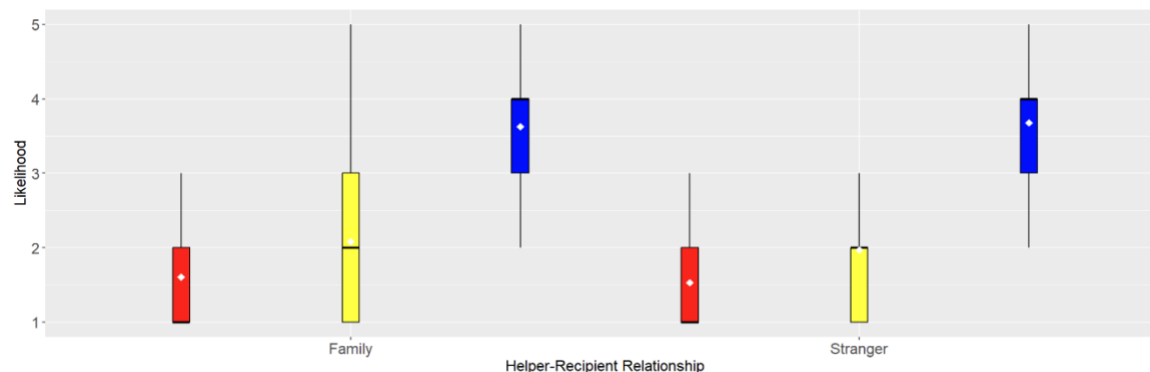
**Study 1**



## Study 2



## Study 3



Helping Format Anonymous Known-to-Recipient Public

## Additional Motives Offered by Participants in Study 1

In Study 1, we examined participants' free response text for additional potential perceived motives for donating. While most participants reiterated previously identified motives (e.g., Right motive and Reputation motive), some mentioned unique motives. The most commonly reported unique motives were: 1) a desire to avoid scrutiny from others (N = 16) and 2) a desire to prevent jealousy in others (N = 10), particularly for anonymous donors. These motives were added to the list. Subsequently, we condensed the list by including only one motive from each factor that emerged from the EFA and excluding the Reciprocity motive, resulting in eight total motives for use in Study 2 (Table 3). Results for exploratory analyses of the Prevent Jealousy and Avoid Scrutiny motives are reported below.

### Prevent Jealousy Motive (Study 2)

There was no significant interaction effect between Helping format and Relationship on the perceived likelihood of donors donating because they didn't want to make other people jealous ('Prevent Jealousy' motive; Table 4) and no main effect of Relationship. However, there was a main effect of Helping Format such that public donors were perceived as less likely to have donated because of the 'Jealousy' motive than anonymous donors and known-to-recipient donors (Table 5).

### Avoid Scrutiny Motive (Study 2)

There was a significant interaction effect between Helping Format and Relationship on the perceived likelihood that donors donated because they wanted to avoid scrutiny from others ('Avoid Scrutiny' motive; Table 4). Follow-up 2x2 two-way ANOVAs (Table 13) revealed that donors who gave to strangers were perceived as less likely to have donated to avoid scrutiny than donors who gave to family members, particularly in the public condition. Public donors were seen as less likely than anonymous and known-to-recipient donors to have donated to avoid scrutiny.

**Table 13**

*2x2 Two-way ANOVAs for the Interaction Effect of Helping Format and Relationship on the Likelihood of the Avoid Scrutiny motive (Study 2)*

ANOVA Model	Source of variation	df	F-ratio	p-value	$\eta_p^2$
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Helping Format	(1,198)	3.62	.059	.003
	Relationship	(1,198)	0.08	.775	.000
	Interaction	(1,198)	1.72	.191	.001
2 (Anonymous, Public) X 2 (Family, Stranger)	Helping 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)	Helping Format	(1,198)	57.79	<.001	.106
	Relationship	(1,198)	13.89	<.001	.008
	Interaction	(1,198)	26.73	<.001	.012

### ***Moral Character***

Across Studies 1-3, we found a main effect of Helping Format (H7a) on moral character judgments of donors such that anonymous donors were judged as most morally good, followed by known-to-recipient donors, and, finally, public donors (Table 14, Table 15). The impact of Relationship on moral character varied across studies. In Study 1, there was a main effect of Relationship such that donors who gave to family members were judged as less moral than donors who gave to strangers, but a follow-up Tukey test revealed this difference to be marginal. There was no main effect of Relationship in Study 2 (H7b). There was a significant interaction between Helping Format and Relationship in Study 3 (Table 16), however the size of the effect is negligible ( $\eta_p^2 = .001$ ). Thus, we once again found that the Helper-Recipient relationship has no meaningful impact on moral character ratings of donors in this scenario.

**Table 14**

*2x2 Two-way ANOVA for the Interaction Effect of Helping Format and Relationship on Moral Character Judgments*

Source of variation	Study 1	Study 2	Study 3
Helping Format	F(2, 428) = 72.92, $p < .001$ , $\eta_p^2 = .061$	F(2, 396) = 62.30, $p < .001$ , $\eta_p^2 = .082$	F(2, 454) = 106.03, $p < .001$ , $\eta_p^2 = .113$
Relationship	F(2, 428) = 8.35, $p < .001$ , $\eta_p^2 = .002$	F(1, 198) = 0.55, $p = .548$ , $\eta_p^2 < .001$	F(1, 226) = 3.61, $p = .059$ , $\eta_p^2 < .001$
Interaction	F(4, 856) = 0.35, $p = .845$ , $\eta_p^2 < .001$	F(2, 396) = 0.52, $p = .592$ , $\eta_p^2 < .001$	F(2, 454) = 4.23, $p = .015$ , $\eta_p^2 = .001$

**Table 15**

*Tukey Tests for the Impact of Helping Format and the Helper-Recipient Relationship on Moral Character Judgments (Studies 1-2)*

<b>Comparison</b>	<b>Study 1</b>	<b>Study 2</b>
Anonymous - Public	MD = 10.16, SE = 0.912, $p < .001$ , $dz = 0.61$	MD = 0.52, SE = 0.068, $p < .001$ , $dz = 0.62$
Anonymous - Known-to-recipient	MD = 5.98, SE = 0.912, $p < .001$ , $dz = 0.40$	MD = 0.24, SE = 0.068, $p = .001$ , $dz = 0.51$
Known-to-recipient - Public	MD = 4.18, SE = 0.912, $p < .001$ , $dz = 0.24$	MD = 0.27, SE = 0.068, $p < .001$ , $dz = 0.46$ .
Family - Stranger	MD = -2.08, SE = 0.94, $p = .069$ , $dz = -0.12$	NA
Family – Friend	MD = -0.91, SE = 0.94, $p = .596$ , $dz = -0.05$	NA
Friend - Stranger	MD = -1.17, SE = 0.94, $p = .428$ , $dz = -0.07$	NA

**Table 16**

*2x2 Two-way ANOVAs for the Interaction Effect of Helping Format and Relationship on Moral Character Ratings (Study 3)*

<b>ANOVA Model</b>	<b>Source of variation</b>	<b>df</b>	<b>F-ratio</b>	<b>p-value</b>	<b><math>\eta_p^2</math></b>
2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Helping Format	(1,227)	72.824	<.001	.047
	Relationship	(1,227)	10.525	.001	.002
	Interaction	(1,227)	1.052	.306	.000
2 (Anonymous, Public) X 2 (Family, Stranger)	Helping Format	(1,227)	130.55	<.001	.151
	Relationship	(1,227)	2.54	.112	.000
	Interaction	(1,227)	8.87	.003	.001
2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Helping Format	(1,227)	80.82	<.001	<.001
	Relationship	(1,227)	.12	.731	<.001



Interaction	(1,227)	3.93	.049	<.001
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### Studies 4a-4f

In Studies 4a-4f, we sought to test the generalizability of the effects we observed in Studies 1-3 to different kinds of helping scenarios. We used ChatGPT 3.5 to generate an initial set of vignettes using the following prompt:

“Write scenarios in which a person helps another person. The scenario must be able to be modified such that the help is given anonymously, publicly, or in a way that is only known to the recipient and not to the general public.”

This search generated an initial set of scenarios that we expanded and refined. Our final list of vignettes encompassed helping behaviors that varied along several dimensions (e.g., the location of the help, the type of help given), summarized in Fig. 6.

For the purposes of design and analysis, we treated each context as a different study. Within each context, participants read about and evaluated the motives and moral characters of six helpers in the same format used for Studies 2-3.

### Method

#### *Sample*

Since we planned to examine the interactions between helping format and relationship separately within each context (as preregistered), we used the minimum sample size recommended by the a priori power analysis we conducted for Study 2 for this type of analysis. To obtain the minimum sample size of  $N = 199$  we oversampled and collected 340 American participants from Prolific for each context. After nine attention checks were applied,  $N > 199$  for each context remained (Table 1). The study took on average 11 minutes to complete, and participants were compensated \$1.70 for participating.

#### *Procedure*

Participants for all scenarios were recruited at the same time and randomly assigned to one of the six scenarios. Next, participants followed a procedure identical to the one employed in Studies 2-3. First, they read a brief description of a person in need. Then, they read about six helpers displayed in a random order and completed the same measures of perceived motive likelihood and contributive proportion used in Study 3. These measures were slightly adjusted to apply to any helping context (i.e., the word “donor” was changed to “helper” and “donating” to “helping”). Lastly, participants completed the same measure of moral character used in Study 3.

## Figure 6

### *Details of the Six Helping Scenarios*

<b>Context</b>	<b>Location of Help</b>	<b>Type of Help</b>	<b>Need</b>	<b>Recipient</b>
<b>GoFundMe</b>	Online	Money (\$100 donation)	Needs cancer treatment	Unspecified age
<b>College Fund</b>	In-Person	Money (\$10 donation)	Raising money for college education	Teenager
<b>Clean Yard</b>	In-Person	Time/Service (cleaning)	Needs hazardous debris cleaned from yard	Old age
<b>Food Bin</b>	In-Person	Resources (food)	Needs food after being layed off from job	Working-age adult
<b>Struggling Student</b>	Online	Resources (study materials)	Needs help to pass a course	College student
<b>School Project</b>	Online	Time/Service (60 min survey)	Needs to complete a school project	Middle-schooler

## Results

For each context, we employed the same analysis procedure we used in Studies 1-2 to examine the interactive effects of relationship and Helping Format on the perceived likelihood of each motive and judgments of the helpers’ moral character. The two-way ANOVAs for each study are reported in Table 17. Since our findings from Studies 1-3 were largely replicated across Studies

4a-4f, we summarize our findings below, mainly noting the few places where our results diverged between studies. The full results of the follow-up analyses can be found in the Supplementary Materials.

**Table 17**

*Significant Main Effects and Interaction Effects of Helping Format and Relationship on Motive Perceptions Across Six Helping Scenarios*

Motive	Context	Helping Format	Relationship	Interaction
<b>Right Motive</b>	Study 4a (GoFundMe)	F(2, 404) = 46.13, $p < .001$ , $\eta_p^2 = .067$	F(1, 202) = 2.12, $p = .147$ , $\eta_p^2 = .001$	F(2, 404) = 6.35, $p = .002$ , $\eta_p^2 = .003$
	Study 4b (College Fund)	F(2, 424) = 120.90, $p < .001$ , $\eta_p^2 = .169$	F(1, 4212) = 5.52, $p = .020$ , $\eta_p^2 = .002$	F(2, 424) = 14.45, $p < .001$ , $\eta_p^2 = .008$
	Study 4c (Clean Yard)	F(2, 404) = 77.30, $p < .001$ , $\eta_p^2 = .118$	F(1, 202) = 0.59, $p = .444$ , $\eta_p^2 < .001$	F(2, 404) = 8.07, $p < .001$ , $\eta_p^2 = .004$
	Study 4d (Food Bin)	F(2, 404) = 90.74, $p < .001$ , $\eta_p^2 = .124$	F(1, 202) = 2.68, $p = .103$ , $\eta_p^2 = .001$	F(2, 404) = 11.30, $p < .001$ , $\eta_p^2 = .006$
	Study 4e (Struggling Student)	F(2, 424) = 85.09, $p < .001$ , $\eta_p^2 = .120$	F(1, 212) = 6.53, $p = .011$ , $\eta_p^2 = .001$	F(2, 424) = 7.84, $p < .001$ , $\eta_p^2 = .003$
	Study 4f (School Project)	F(2, 404) = 44.24, $p < .001$ , $\eta_p^2 = .066$	F(1, 222) = 8.52, $p = .004$ , $\eta_p^2 = .003$	F(2, 404) = 3.23, $p = .041$ , $\eta_p^2 = .002$
<b>Show Care Motive</b>	Study 4a (GoFundMe)	F(2, 404) = 358.30, $p < .001$ , $\eta_p^2 = .429$	F(1, 202) = 77.90, $p < .001$ , $\eta_p^2 = .016$	F(2, 404) = 11.84, $p < .001$ , $\eta_p^2 = .004$
	Study 4b (College Fund)	F(2, 424) = 473.00, $p < .001$ , $\eta_p^2 = .462$	F(1, 4212) = 140.00, $p < .001$ , $\eta_p^2 = .033$	F(2, 424) = 29.42, $p < .001$ , $\eta_p^2 = .009$
	Study 4c (Clean Yard)	F(2, 404) = 335.30, $p < .001$ , $\eta_p^2 = .416$	F(1, 202) = 83.94, $p < .001$ , $\eta_p^2 = .017$	F(2, 404) = 15.75, $p < .001$ , $\eta_p^2 = .005$
	Study 4d (Food Bin)	F(2, 404) = 186.90, $p < .001$ , $\eta_p^2 = .292$	F(1, 202) = 73.04, $p < .001$ , $\eta_p^2 = .016$	F(2, 404) = 15.09, $p < .001$ , $\eta_p^2 = .006$
	Study 4e (Struggling Student)	F(2, 424) = 320.70, $p < .001$ , $\eta_p^2 = .348$	F(1, 212) = 114.90, $p < .001$ , $\eta_p^2 = .035$	F(2, 424) = 34.69, $p < .001$ , $\eta_p^2 = .012$
	Study 4f (School Project)	F(2, 404) = 485.70, $p < .001$ , $\eta_p^2 = .413$	F(1, 222) = 145.70, $p < .001$ , $\eta_p^2 = .051$	F(2, 404) = 32.56, $p < .001$ , $\eta_p^2 = .013$

<b>Norm-Setting Motive</b>	Study 4a (GoFundMe)	F(2, 404) = 117.60, $p < .001$ , $\eta_p^2 = .175$	F(1, 202) = 1.24, $p = .268$ , $\eta_p^2 < .001$	F(2, 404) = 1.40, $p = .247$ , $\eta_p^2 < .001$
	Study 4b (College Fund)	F(2, 424) = 379.00, $p < .001$ , $\eta_p^2 = .400$	F(2, 424) = 3.61, $p = .059$ , $\eta_p^2 = .001$	F(2, 424) < 0.01, $p = .997$ , $\eta_p^2 < .001$
	Study 4c (Clean Yard)	F(2, 404) = 102.10, $p < .001$ , $\eta_p^2 = .153$	F(1, 202) = 1.71, $p = .192$ , $\eta_p^2 < .001$	F(2, 404) = 9.55, $p < .001$ , $\eta_p^2 = .003$
	Study 4d (Food Bin)	F(2, 404) = 154.40, $p < .001$ , $\eta_p^2 = .235$	F(1, 202) = 1.30, $p = .256$ , $\eta_p^2 < .001$	F(2, 404) = 2.54, $p = .080$ , $\eta_p^2 = .001$
	Study 4e (Struggling Student)	F(2, 424) = 231.60, $p < .001$ , $\eta_p^2 = .302$	F(1, 212) = 0.24, $p = .628$ , $\eta_p^2 < .001$	F(2, 424) = 1.65, $p = .194$ , $\eta_p^2 < .001$
	Study 4f (School Project)	F(2, 404) = 265.30, $p < .001$ , $\eta_p^2 = .317$	F(1, 222) = 7.35, $p = .007$ , $\eta_p^2 = .001$	F(2, 404) = 2.28, $p = .104$ , $\eta_p^2 = .001$
<b>Strengthen Relationship Motive</b>	Study 4a (GoFundMe)	F(2, 404) = 377.90, $p < .001$ , $\eta_p^2 = .263$	F(1, 202) = 302.70, $p < .001$ , $\eta_p^2 = .138$	F(2, 404) = 51.41, $p < .001$ , $\eta_p^2 = .030$
	Study 4b (College Fund)	F(2, 424) = 451.10, $p < .001$ , $\eta_p^2 = .360$	F(2, 424) = 462.50, $p < .001$ , $\eta_p^2 = .286$	F(2, 424) = 128.20, $p < .001$ , $\eta_p^2 = .098$
	Study 4c (Clean Yard)	F(2, 404) = 457.00, $p < .001$ , $\eta_p^2 = .349$	F(1, 202) = 269.60, $p < .001$ , $\eta_p^2 = .107$	F(2, 404) = 41.48, $p < .001$ , $\eta_p^2 = .019$
	Study 4d (Food Bin)	F(2, 404) = 381.20, $p < .001$ , $\eta_p^2 = .270$	F(1, 202) = 445.20, $p < .001$ , $\eta_p^2 = .183$	F(2, 404) = 74.76, $p < .001$ , $\eta_p^2 = .032$
	Study 4e (Struggling Student)	F(2, 424) = 578.20, $p < .001$ , $\eta_p^2 = .389$	F(1, 212) = 267.50, $p < .001$ , $\eta_p^2 = .106$	F(2, 424) = 66.30, $p < .001$ , $\eta_p^2 = .023$
	Study 4f (School Project)	F(2, 404) = 439.30, $p < .001$ , $\eta_p^2 = .266$	F(1, 222) = 450.90, $p < .001$ , $\eta_p^2 = .195$	F(2, 404) = 72.91, $p < .001$ , $\eta_p^2 = .039$
<b>Reputation Motive</b>	Study 4a (GoFundMe)	F(2, 404) = 478.40, $p < .001$ , $\eta_p^2 = .472$	F(1, 202) = 5.27, $p = .023$ , $\eta_p^2 = .001$	F(2, 404) = 5.24, $p = .006$ , $\eta_p^2 = .002$
	Study 4b (College Fund)	F(2, 424) = 505.10, $p < .001$ , $\eta_p^2 = .470$	F(2, 424) = 2.07, $p = .152$ , $\eta_p^2 < .001$	F(2, 424) = 8.00, $p < .001$ , $\eta_p^2 = .003$
	Study 4c (Clean Yard)	F(2, 404) = 377.40, $p < .001$ , $\eta_p^2 = .410$	F(1, 202) = 11.09, $p = .001$ , $\eta_p^2 = .001$	F(2, 404) = 0.89, $p = .413$ , $\eta_p^2 < .001$
	Study 4d (Food Bin)	F(2, 404) = 308.30, $p < .001$ , $\eta_p^2 = .393$	F(1, 202) = 6.97, $p = .009$ , $\eta_p^2 = .001$	F(2, 404) = 3.37, $p = .035$ , $\eta_p^2 = .001$
	Study 4e (Struggling Student)	F(2, 424) = 479.30, $p < .001$ , $\eta_p^2 = .449$	F(1, 212) = 0.01, $p = .917$ , $\eta_p^2 < .001$	F(2, 424) = 8.25, $p < .001$ , $\eta_p^2 = .003$
	Study 4f (School Project)	F(2, 404) = 417.70, $p < .001$ , $\eta_p^2 = .434$	F(1, 222) = 2.05, $p = .153$ , $\eta_p^2 < .001$	F(2, 404) = 7.50, $p < .001$ , $\eta_p^2 = .002$

### **Impact of the Helper-Recipient Relationship and Helping Format on Perceived Motives**

Replicating Studies 2-3, we found the same significant interactive effect between Helping Format and Relationship on the perceived likelihood of helping for the *Right* motive in all six scenarios. Replicating Studies 1-3, we found the same significant interactive effects between Helping Format and Relationship on the perceived likelihood of helping for the *Show Care* motive and the *Strengthen Relationship* motive in all six scenarios. Replicating Studies 1-3, we found the same significant main effect of Helping Format on the perceived likelihood of helping for the Norm-Setting motive in all six scenarios. Replicating Study 1 but in contrast to Studies 2-3, we found no main effect of Relationship in five out of six scenarios. In Study 4f, we found the same main effect of Relationship that we found in Study 1 such that those who helped family members were seen as more likely to have helped to set norms than those who helped strangers. Additionally, in Study 4c, we found a significant interaction effect between Helping Format and Relationship driven largely by the public agent who helped a stranger being seen as especially likely to have helped to set norms. Finally, Replicating Studies 2-3, we found a significant interactive effect between Helping Format and Relationship on the perceived likelihood of helping for the *Reputation* motive in five out of six scenarios. While there was no significant interactive effect on the Reputation motive in Study 4c, there was a significant main effect of Relationship consistent with the other studies such that agents who helped close others were seen as more likely to be motivated by reputation than those who helped strangers.

Thus, we find consistent evidence that agents who help close others are perceived as *more likely* than agents who help strangers to have been motivated to help to show their care for the recipient, strengthen their relationship with the recipient, and to be seen as a good person by others and *less likely* to have been motivated to help because it was the right thing to do. We find inconsistent evidence that agents who help close others are perceived as more likely than agents who help strangers to have been motivated to help to set an example for others. Additionally, we find consistent evidence that anonymous helpers are perceived as most

likely to have been motivated to help because it was the right thing to do, known-to-recipient helpers are perceived as most likely to have been motivated to help because they wanted to show their care for the recipient and strengthen their relationship with the recipient, and public helpers are seen as most likely to have been motivated to help because they wanted to look like a good person and to set an example for others.

### Impact of the Helper-Recipient Relationship and Helping Format on Moral Character

Replicating Studies 1-3, we found a significant main effect of Helping Format on moral character judgments such that anonymous helpers were perceived as most morally good, followed by known-to-recipient helpers, and, finally, public helpers (Table 18). In contrast to Studies 1-3, we found a significant main effect of Relationship on moral character judgments in three scenarios (Study 4c, Study 4d, Study 4f; Study 4d also showed a significant interaction) and the effect of Relationship was trending toward significance in the other three scenarios. Across all scenarios in Studies 4a-4f, agents who helped strangers were perceived as more morally good than agents who helped family members. Thus, we find inconsistent evidence that those who help strangers are viewed as more morally good than those who help family members.

**Table 18**

*Significant Main Effects and Interaction Effects of Helping Format and Relationship on Moral Character Across Six Helping Scenarios*

Context	Helping Format	Relationship	Interaction
Study 4a (GoFundMe)	$F(2, 402) = 102.71, p < .001, \eta_p^2 = .126$	$F(1, 200) = 3.41, p = .066, \eta_p^2 = .001$	$F(2, 402) = 0.81, p = .444, \eta_p^2 < .001$
Study 4b (College Fund)	$F(2, 423) = 146.78, p < .001, \eta_p^2 = .190$	$F(1, 210) = 2.77, p = .098, \eta_p^2 < .001$	$F(2, 423) = 1.91, p = .149, \eta_p^2 < .001$
Study 4c (Clean Yard)	$F(2, 402) = 152.10, p < .001, \eta_p^2 = .219$	$F(1, 202) = 4.03, p = .046, \eta_p^2 < .001$	$F(2, 402) = 0.12, p = .892, \eta_p^2 < .001$

Study 4d (Food Bin)	$F(2, 404) = 139.00, p < .001, \eta^2 = .175$	$F(1, 202) = 4.42, p = .037, \eta^2 < .001$	$F(2, 404) = 4.05, p = .018, \eta^2 = .001$
Study 4e (Struggling Student)	$F(2, 423) = 115.95, p < .001, \eta^2 = .134$	$F(1, 211) = 2.64, p = .106, \eta^2 < .001$	$F(2, 423) = 2.49, p = .084, \eta^2 < .001$
Study 4f (School Project)	$F(2, 404) = 109.60, p < .001, \eta^2 = .137$	$F(1, 202) = 4.56, p = .034, \eta^2 < .001$	$F(2, 404) = 0.31, p = .734, \eta^2 < .001$

### Correlations Between Motives and Moral Character Judgments Across Studies

To examine the relationship between the perceived likelihood of each type of motive and the moral character judgments of helpers, we calculated the average correlation between each motive and moral character judgements across Studies 1-3 and Studies 4a-4f. The Right motive had a moderate positive correlation with moral character (0.47) and the Show Care motive had a weak positive correlation (0.20). Additionally, the Reputation motive (-0.19) and the Reciprocity motive (-0.19) both had weak negative correlations with moral character. Finally, the Norm-Setting (0.03), Strengthen Relationship (-0.03), Prevent Jealousy (0.01), and Prevent Bad Feelings (-0.01) motives had very weak, close to null correlations with moral character.

### General Discussion

Across four high-powered studies, we investigated the interactive effects of social relationships and helping format on the perceived motives and moral character of helpers. We examined these effects across three different types of social relationships (family, friends, strangers) and three different helping formats (anonymous, public, known-to-recipient donors). In line with prior work (e.g., Kraft-Todd et al., 2022), we found that anonymous helpers are seen as more likely than public helpers to be driven by a virtuous motive (wanting to do the right thing), while public helpers are seen as more likely than anonymous helpers to be driven by a desire to improve their reputation and to set norms about helping. Extending this work, we found that the relationship between the helper and the recipient also impacts these perceptions.

First, we found that agents who helped strangers are perceived as more likely than agents who helped close others to have done so for virtuous motives and less likely to have done so for reputational reasons. This may be because, absent of a pre-existing personal relationship, there is less of an expectation of generosity between strangers, making the action seem more likely to be driven by genuine virtue rather than self-interest or reputation-seeking. Boosting one's reputation as a good person may also be more important among close others in one's social network compared to strangers, making this motive seem more plausible for agents who helped close others than those who helped strangers.

Second, we found that agents who helped family members were perceived as more likely than agents who helped strangers to have done so to set norms about helping. This may be because observers think setting expectations around helping someone is likely to be more effective among those in a close social network, for whom adherence to social norms may have stronger social implications due to more frequent interactions with others in the network, compared to a diffuse social network. As a result, the norm-setting motive may seem more likely for those who help close others than those who help strangers. However, this effect was not stable; we observed it in Studies 2-3 and Study 4f but not in Study 1 or Studies 4a-4e. Thus, there are also cases in which observers see those who helped strangers as no less likely to have been motivated by norm-setting goals than those who helped close others. Future work can help clarify when the helper-recipient relationship impacts perceptions of prosocial agents' norm-setting goals and when it does not.

Further building on prior work, we show that there are numerous other, relationship-based motives that are also ascribed to helpers. When people help, observers think they may be doing it not only because it is the right thing to do or to boost their reputation as a good person, but also because they want to strengthen their relationship with the recipient and to show the recipient that they care about them. Relationship-based motives are perceived as less



morally good than virtue-based motives but as more morally good than reputation-based motives.

We also found that the extent to which these relationship-based motives are ascribed to helpers is impacted by the helper-recipient relationship and the helping format. First, as expected, we found that agents who helped close others were perceived as more likely than agents who helped strangers to have helped for these relationship-based motives. This findings demonstrates that observers are mindful of the relationship-strengthening functions that prosocial acts can serve. Second, we found that helpers who revealed their identity to only the recipient ("known-to-recipient" helpers) were seen as more likely than anonymous helpers and public helpers to be driven by relationship-based motives. This may be because, by selectively disclosing their identity to the recipient, these helpers are perceived as wanting to establish a more personal and intimate connection with their recipient than anonymous helpers, who are unknown to their recipient, and public helpers, who are known to all observers.

The motives that observers attribute to prosocial actors have important implications for social cognition and interpersonal relationships. In the present study, we examined the impact of motive perceptions on moral character judgments of helpers. In line with prior work (e.g., Freitas et al., 2019), anonymous helpers were perceived as more morally good than public helpers. Extending this work, we find that known-to-recipient helpers are perceived as more morally good than public helpers but less morally good than anonymous helpers. This result is consistent with our findings regarding the motives attributed to these three kinds of helpers. Anonymous helpers are seen as most likely to be motivated by virtue—the motive seen as most morally good, while public helpers are seen as most likely to be motivated by reputation-signaling—the motive seen as least morally good, and known-to-recipient helpers are seen as most likely to be motivated by relationship-based motives, which fall between these two motives in terms of moral goodness. It is unsurprising, then, that known-to-recipient helpers fall between anonymous and public helpers on ratings of their moral character.

Further building on this work, we found that the helper-recipient relationship can also impact moral character judgments of prosocial actors. Although we did not consistently find a difference in moral character judgments between relationship contexts, when we did observe an effect, it was always in the same direction. That is, agents who helped strangers were viewed as more morally good than agents who helped close others. This trend is consistent with our motive attribution results; agents who help strangers are perceived as more likely than agents who help close others to have been motivated by the virtue, the most morally good motive, than reputation-signaling, the least morally good motive. Our results suggest that there may be competing factors (e.g., obligatory versus supererogatory helping) that influence moral judgements of prosocial actors across relationship contexts. 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 so are agents who go “above and beyond” their relational obligations to help distant others (Khan et al., 2023). Future work should clarify which factors are most salient in which contexts.

Moreover, we found that certain motives had stronger correlations with moral character than others. The more a helper was seen as being motivated by virtue and a desire to show care for the recipient, the more morally good they were judged to be. The more a helper was seen as being motivated by reputation-signaling, the less morally good they were judged to be. However, while one may have thought that norm-setting and a desire to strengthen one’s relationship with the recipient are morally relevant motives, we did not find that these motives were significantly associated with moral character judgments of helpers. It is possible that norm-setting and relationship-strengthening motives have more crucial implications for moral character judgments in defined community or social group contexts in which reciprocal helping is more common or important to social life.

While we found differences in the extent to which motive attributions shape moral character judgments, they may also shape other aspects of social cognition and behavior. For

example, since helping someone signals a helper's commitment to their relationship with that person, motive attributions play a key role in establishing and maintaining social relationships (Imada, 2020). Prior work shows that the more prosocial motives are attributed to helpers, the more people intend to cooperate with them (Guo, 2023), the higher performance evaluations they receive (Badawy et al., 2016), and the more rewards they are allocated (Johnson et al., 2002).

### **Limitations and Future Directions**

In the present work, we have largely explored the helper-recipient relationship and helping format as independent factors, but it is also possible that observers make inferences about helping format based on the helper-recipient relationship (or vice-versa). For example, observers may believe that fewer people are likely to find out the identity of an agent who helps a stranger compared to an agent who helps a close other. As a result, observers may assume that there is greater anonymity for helping strangers than helping close others. Similarly, observers may assume that, given the intimacy indicated by the selective disclosure of their identity to the recipient, known-to-recipient helpers are more likely to have a close relationship with the recipient than anonymous or public helpers. Future work will aim to determine the influence of the helper-recipient relationship on inferences about the helping format, and vice-versa, and how these inferences influence motive attributions.

One limitation of the present work is that motive perceptions were assessed with a pre-set list of potential motives. It is unclear how readily accessible these motives are to participants. It is possible that people do not typically consider relationship-oriented motives for prosocial behavior unless those factors are made salient to them. To help address this concern, we supplemented our list of motives with items derived from open-response questions in Study 1. Future work should examine whether and how often people spontaneously consider the relationship-oriented motives of prosocial actors.

The present work is also limited in its sample of American participants, as anonymous prosocial acts may be perceived differently across cultures. For instance, donors from collectivist cultures such as Indonesia are more likely to help anonymously, which may be because they view the sincerity of donations as more important than the donation amount (Firmansyah & Pratama, 2021). The limitations of the present work are summarized in Table 19.

**Table 19**

*Table of Limitations*

<b>Remaining Question(s)</b>	<b>Description</b>
How readily accessible are relationship-based motives to observers of prosocial acts?	In the present work, we provided participants with a pre-set list of potential motives to consider as underlying drivers of prosocial actors. Thus, it is unclear how salient these motives typically are to observers or how often observers ascribe these motives to prosocial actors. Future work may investigate how salient these motives are by asking participants to describe the potential motives of a prosocial actor without a pre-set list.
How generalizable are the current results to non-American populations?	In the present work, we relied on samples of Americans. Therefore, it is uncertain how people may perceive the motives of prosocial actors outside of America. Some work suggests that certain cultural factors, such as collectivism, may affect the impact of helping format on perceptions of prosocial actors (Firmansyah & Pratama, 2021). Future work can utilize cross-cultural samples to examine differences between cultures on the perceived motives of prosocial actors.
How are perceptions of the helper-recipient relationship and helping format related?	In the present work, we explored the helper-recipient relationship and helping format as independent factors. It is uncertain how observers may perceive the likelihood of certain helping formats under different relationship contexts or infer certain relationships based on the helping format. Future work can help disentangle these two factors by assessing observers' assumptions about aspects of the helping format (e.g., how many people know/will learn about

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the good deed) based on the helper-recipient relationship and assessing observers' assumptions about aspects of the helper-recipient relationship (e.g., what is the most likely relationship between these two individuals) based on the helping format.

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### **Conclusion**

When people observe others helping, they infer different underlying motives for helping. The current work adds nuance to the existing literature on motive attributions by examining attributions of relationship-based motives for helping. We demonstrate that the relationship between a helper and their recipient impacts the motives ascribed to helpers and moderates the impact of the helping format (e.g., whether actors helped anonymously or publicly) on motive perceptions. In doing so, this work helps to situate the study of evaluations of prosocial behavior within the context of social relationships.

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## **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-Anonymous 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.

## Appendix B

### *Six Helping Scenarios in Study 4*

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#### **GoFundMe**

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 Ryan's family and friends, as well as people who Ryan has never seen or met before.

#### **Food Bin**

Ryan recently lost his job due to a nation-wide layoff at his company. Although he has been working hard to apply to as many job openings as he can, he is struggling to find something new. As he searches for a new job, Ryan has been using what little savings he has to pay his rent, and hasn't been able to afford buying much food. For his last few meals, he has eaten at the local food pantry. Ryan was recently spotlighted in a news article about the layoffs, which detailed his situation. At the end of the article, there is an address for a secured donation bin where people can donate nonperishable food items for Ryan. The article states that Ryan checks the donation bin every day at noon, but donations are accepted anytime. The article has been widely shared, reaching Ryan's family and friends, as well as people who Ryan has never seen or met before.

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#### **College Fund**

Ryan lives in a low-income neighborhood and has always dreamed about going to college. Recently, he was accepted into a top university but did not receive enough financial aid to cover the cost of his tuition, room, and board. Because of this, Ryan has set up a donation box on the corner of the local grocery store, where he sometimes stands and asks for donations to help him cover the costs of attendance. Many people have seen Ryan on the corner, including his family and friends, as well as people who Ryan has never seen or met before.

#### **Struggling Student**

Ryan has been working hard to maintain his grades in college while also juggling a part-time job to pay his rent. However, despite his best efforts, he has faced significant challenges in one of his biology courses this year. If he does not pass the final exam, he will fail the course and need to take an extra semester of classes in order to fulfill his graduation requirements. Ryan has posted about his struggles on social media. Many people have seen Ryan's post, including his family and friends, as well as people who Ryan has never seen or met before.

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#### **Clean Yard**

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#### **School Project**

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Ryan has lived alone in his home for decades. His house, once the pride of the neighborhood, has slowly fallen into disrepair over the years. His mobility has declined with age, making it difficult for him to maintain the property. Over time, his yard had become cluttered with a massive amount of debris and plant overgrowth. The clutter now poses a safety hazard for Ryan, who uses a cane to walk. Many people have seen the debris in Ryan's yard, including his family and friends, as well as people who Ryan has never seen or met before.

Ryan is working on completing his middle school science fair project. To collect the data for the project, Ryan needs 50 people to complete a survey. The survey is long with several free response questions and takes about 1 hour to complete. Two days before the project was due, Ryan still had not collected enough responses on the survey. In a panic, he posted about it on social media, asking people to complete the survey. The post has been widely shared, reaching Ryan's family and friends, as well as people who Ryan has never seen or met before.

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## Supplementary

### Pilot Studies 1a-1c Methods

Pilot 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.

### **Pilot 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 Pilot 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.

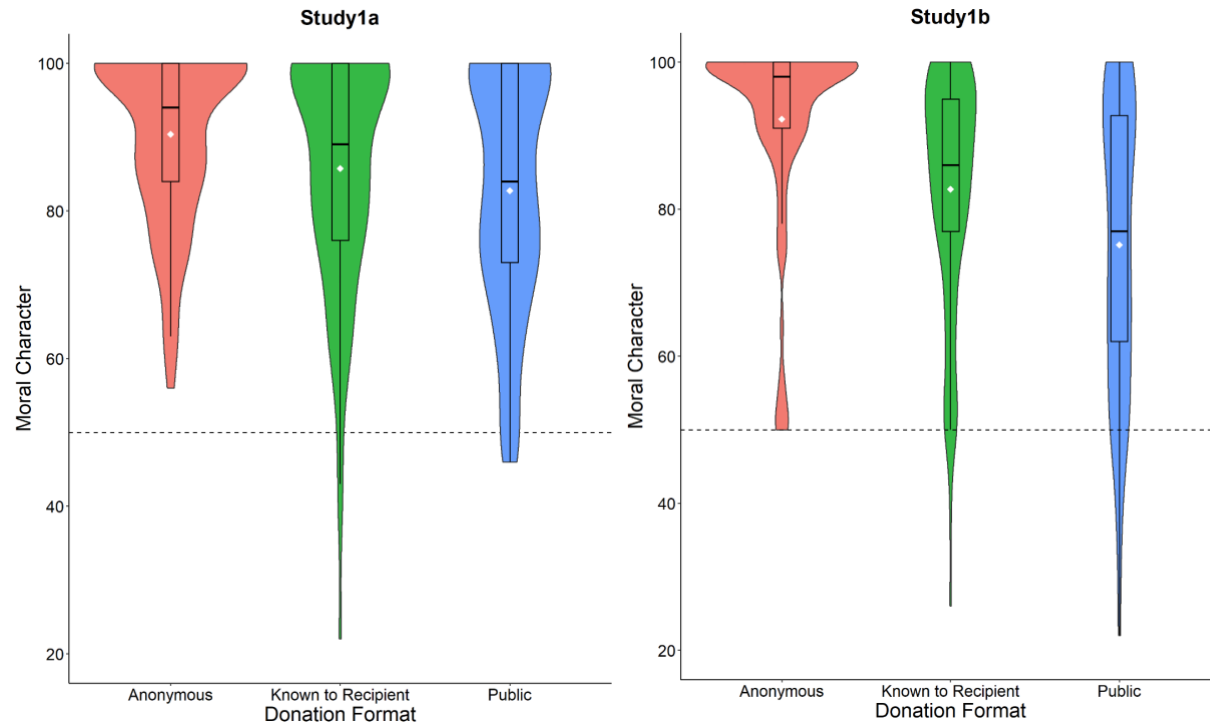
#### **Results**

We found a linear decrease in moral goodness across the conditions (Supplementary Fig. 1). Anonymous donors were judged as more morally good than known-to-recipient donors,  $t(104) = 4.77$ ,  $p < .001$ ,  $d_z = .47$ . Additionally, known-to-recipient donors were judged as more morally good than public donors,  $t(104) = 2.39$ ,  $p = .019$ ,  $d_z = .23$ . 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

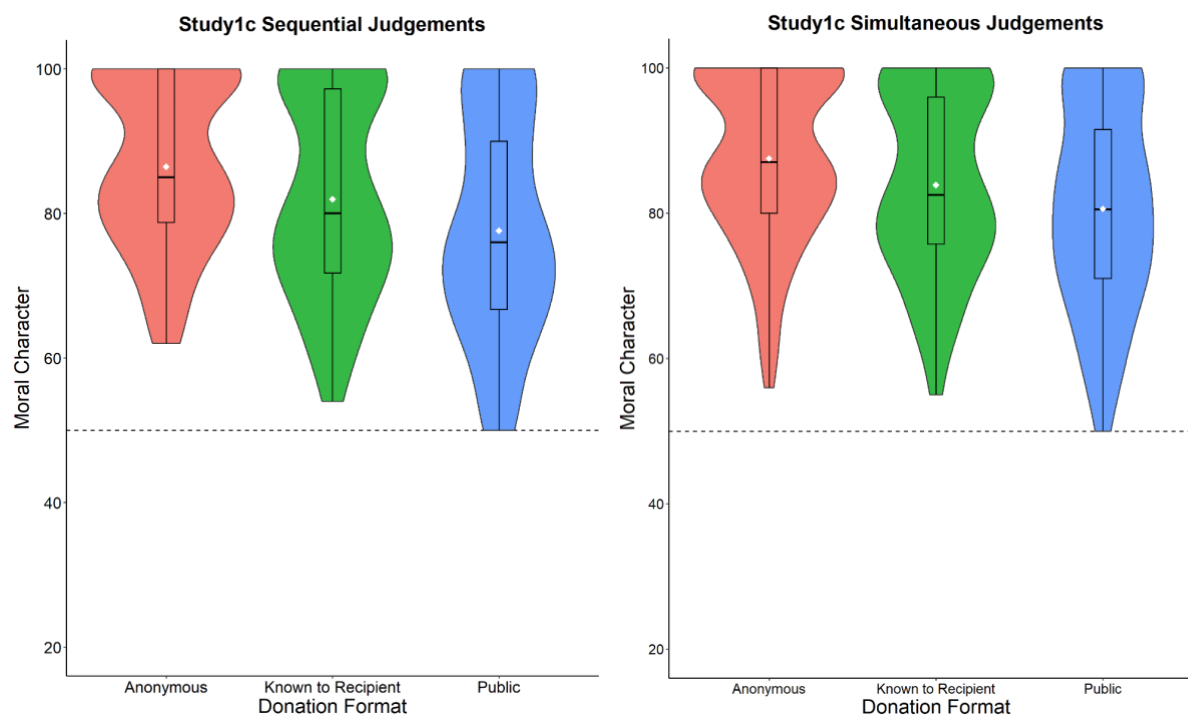
morally suspect reasons, i.e., ulterior motives such as reputation signaling (Kraft-Todd et al., in press). We tested this hypothesis in Pilot Study 1b.

### Supplementary Figure 1

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







## Pilot 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 Pilot 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.<sup>1</sup>

## **Results**

### ***Moral Character Judgments***

Replicating Pilot Study 1b, we found a linear decrease across the conditions (Supplementary Fig. 1). Anonymous donors were judged as more morally good than known-to-recipient donors,  $t(104) = 7.94, p < .001, dz = .77$ . Known-to-recipient donors were judged as more morally good than public donors,  $t(104) = 6.52, p < .001, dz = .64$ .

### ***Motive Judgments***

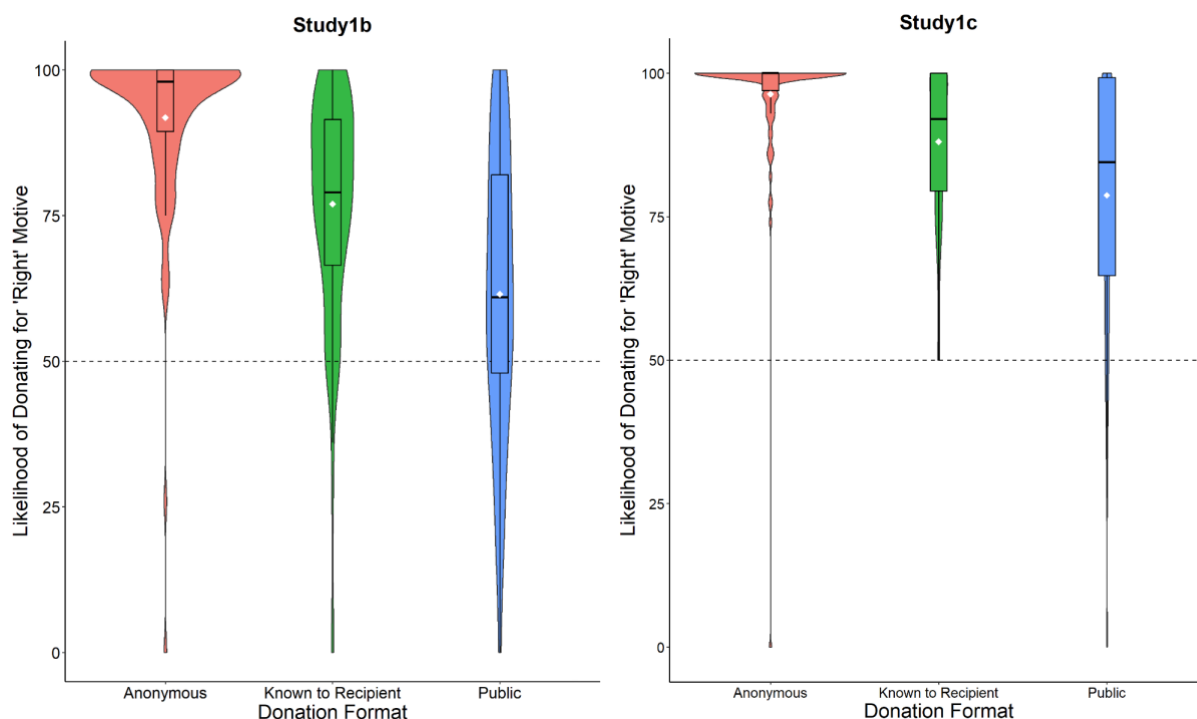
We found a linear decrease across the conditions (Supplementary Fig. 2). Anonymous donors were perceived as more likely than known-to-recipient donors to have donated *solely* because they believed it was the right thing to do,  $t(104) = 9.22, p < .001, dz = .90$ . Known-to-recipient donors were perceived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

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<sup>1</sup> Analyses of the effect of Helping Format on each format of the DVs are reported in the Supplementary Materials.

## Supplementary 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 Helping Format influenced those motives. In Pilot Study 1c, we aimed to replicate these effects for participants' explicit comparisons among donors.

### Pilot 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 Pilot 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 Pilot Studies 1a-1b, we found a linear decrease across the conditions (Supplementary 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 (Supplementary 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 (Supplementary 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, Pilot 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, Pilot 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, Pilot 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.

### Effect of Version on the Results in Study 1

To reduce cognitive load, participants in Study 1 were shown each of nine donors three at a time. For half of the participants, each set of three had the same Helping 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 Helping 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 = Helping 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 1**

DV	dfs	F-ratio	p-value
Right Motive	(3.08, 656.51)	0.37	.781
Reputation Motive	(3.70, 789.05)	0.69	.591
Relationship Motive	(2.74, 584.04)	2.20	.093
Reciprocity Motive	(2.83, 601.89)	1.32	.269
Show Care Motive	(2.70, 575.42)	1.20	.308
Support Motive	(2.70, 585.37)	2.64	.053
Appreciate Motive	(2.81, 599.21)	3.18	.026
Pity Motive	(2.69, 573.88)	8.77	< .001
Prevent Bad Feelings Motive	(2.54, 540.81)	3.07	.035

Owe Motive	(2.82, 600.99)	8.18	< .001
Inspiration Motive	(3.27, 697.22)	0.83	.489
Example Motive	(3.53, 752)	0.58	.659
Moral Character	(3.12, 664.05)	2.49	.057

These analyses revealed a significant three-way interaction effect between version, Helping Format, and relationship for four motives: Appreciate, Pity, Prevent Bad Feelings, and Owe. Follow-up analyses for each of these four motives were conducted by examining the two-way interaction effect of Helping Format and Relationship on the motive separately for each version. Effects were consistent across both versions:

### Supplementary Table 2

*Examining the Two-Way Interaction Between Helping Format and Helper-Recipient Relationship on the Appreciate Motive for Both Versions in Study 1*

Version	ANOVA Model	Source of variation	df	F-ratio	p-value
Binned by Helping Format	2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Helping 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)	Helping Format	(1, 115)	390.7	<.001
		Relationship	(1, 115)	0.03	.86
		Interaction	(1, 115)	11.69	<.001
Binned by Helping Format	2 (Anonymous, Public) X 2 (Family, Stranger)	Helping Format	(1, 98)	283.3	< .001
		Relationship	(1, 98)	33.27	< .001

		Interaction	(1, 98)	34.74	< .001
		Helping Format	(1, 115)	351.5	<.001
Binned by Relationship	2 (Anonymous, Public) X 2 (Family, Stranger)	Relationship	(1, 115)	0.12	.732
		Interaction	(1, 115)	7.57	.007
		Helping Format	(1, 98)	329.9	< .001
Binned by Helping Format	2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Relationship	(1, 98)	49.16	< .001
		Interaction	(1, 98)	52.35	< .001
		Helping Format	(1, 115)	393.2	<.001
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Relationship	(1, 115)	0.21	.648
		Interaction	(1, 115)	9.69	.002
		Helping Format	(1, 98)	286.4	< .001
Binned by Helping Format	2 (Anonymous, Public) X 2 (Friend, Stranger)	Relationship	(1, 98)	31.43	< .001
		Interaction	(1, 98)	35.93	< .001
		Helping Format	(1, 115)	326.9	<.001
Binned by Relationship	2 (Anonymous, Public) X 2 (Friend, Stranger)	Relationship	(1, 115)	0.06	.801
		Interaction	(1, 115)	5.54	.02
		Helping Format	(1, 98)	0.29	.592
Binned by Helping Format	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Relationship	(1, 98)	61.61	< .001
		Interaction	(1, 98)	7.71	.007
Binned by	2 (Known-to-Recipient,	Helping Format	(1, 115)	5.04	.027

Relationship	Public) X 2 (Family, Stranger)	Relationship	(1, 115)	4.58	.034
		Interaction	(1, 115)	1.61	.206
Binned by Helping Format	2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Helping 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)	Helping Format	(1, 115)	4.50	.036
		Relationship	(1, 115)	4.29	.041
		Interaction	(1, 115)	5.38	.022
Binned by Helping Format	2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Helping 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)	Helping Format	(1, 115)	421.8	<.001
		Relationship	(1, 115)	0.15	.701
		Interaction	(1, 115)	.124	.726
Binned by Helping Format	2 (Anonymous, Public) X 2 (Family, Friend)	Helping 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)	Helping Format	(1, 115)	353.8	<.001
		Relationship	(1, 115)	0.01	.937
		Interaction	(1, 115)	.40	.529



		Helping Format	(1, 98)	5.23	.024
Binned by Helping Format	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Relationship	(1, 98)	0.53	.467
		Interaction	(1, 98)	0.40	.530
		Helping Format	(1, 115)	12.76	<.001
Binned by Relationship	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Relationship	(1, 115)	0.05	.822
		Interaction	(1, 115)	.39	.532

**Supplementary Table 3**

*Examining the Two-Way Interaction Between Helping Format and Helper-Recipient Relationship on the Pity Motive for Both Versions in Study 1*

<b>Version</b>	<b>ANOVA Model</b>	<b>Source of variation</b>	<b>df</b>	<b>F-ratio</b>	<b>p-value</b>
Binned by Helping Format	2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Helping 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)	Helping Format	(1, 115)	68.62	<.001
		Relationship	(1, 115)	19.28	<.001
		Interaction	(1, 115)	3.22	.076
Binned by Helping Format	2 (Anonymous, Public) X 2 (Family, Stranger)	Helping 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)	Helping Format	(1, 115)	91.01	<.001
		Relationship	(1, 115)	13.03	<.001
		Interaction	(1, 115)	8.38	.005
Binned by Helping Format	2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Helping Format	(1, 98)	55.38	<.001
		Relationship	(1, 98)	64.91	<.001
		Interaction	(1, 98)	47.52	<.001
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Helping Format	(1, 115)	56.22	<.001
		Relationship	(1, 115)	7.66	.007

		Interaction	(1, 115)	.27	.607
Binned by Helping Format	2 (Anonymous, Public) X 2 (Friend, Stranger)	Helping Format	(1, 98)	87.36	<.001
		Relationship	(1, 98)	63.83	<.001
		Interaction	(1, 98)	32.95	<.001
Binned by Relationship	2 (Anonymous, Public) X 2 (Friend, Stranger)	Helping Format	(1, 115)	67.98	<.001
		Relationship	(1, 115)	5.11	.026
		Interaction	(1, 115)	1.73	.192
Binned by Helping Format	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Helping Format	(1, 98)	3.52	.064
		Relationship	(1, 98)	10.65	.002
		Interaction	(1, 98)	7.09	.009
Binned by Relationship	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Helping Format	(1, 115)	16.65	<.001
		Relationship	(1, 115)	6.86	.01
		Interaction	(1, 115)	9.10	.003
Binned by Helping Format	2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Helping 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)	Helping Format	(1, 115)	14.92	<.001
		Relationship	(1, 115)	4.15	.044
		Interaction	(1, 115)	2.35	.128
Binned by	2 (Anonymous, Known-to-	Helping Format	(1, 98)	97.8	<.001

Helping Format	Recipient) X 2 (Family, Friend)	Relationship	(1, 98)	0.54	.542
		Interaction	(1, 98)	.25	.615
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Helping Format	(1, 115)	58.84	<.001
		Relationship	(1, 115)	3.35	.07
		Interaction	(1, 115)	1.64	.203
Binned by Helping Format	2 (Anonymous, Public) X 2 (Family, Friend)	Helping 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)	Helping Format	(1, 115)	81.38	<.001
		Relationship	(1, 115)	2.18	.143
		Interaction	(1, 115)	3.02	.085
Binned by Helping Format	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Helping Format	(1, 98)	0.26	.609
		Relationship	(1, 98)	0.41	.525
		Interaction	(1, 98)	1.33	.252
Binned by Relationship	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Helping Format	(1, 115)	23.34	<.001
		Relationship	(1, 115)	0.23	.63
		Interaction	(1, 115)	1.60	.208

**Supplementary Table 4**

*Examining the Two-Way Interaction Between Helping Format and Helper-Recipient Relationship on the Owe Motive for Both Versions in Study 1*

<b>Version</b>	<b>ANOVA Model</b>	<b>Source of variation</b>	<b>df</b>	<b>F-ratio</b>	<b>p-value</b>
Binned by Helping Format	2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Helping 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)	Helping Format	(1, 115)	132.7	<.001
		Relationship	(1, 115)	13.13	<.001
		Interaction	(1, 115)	5.09	.026
Binned by Helping Format	2 (Anonymous, Public) X 2 (Family, Stranger)	Helping 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)	Helping Format	(1, 115)	151.1	<.001
		Relationship	(1, 115)	15.7	<.001
		Interaction	(1, 115)	4.20	.043
Binned by Helping Format	2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Helping Format	(1, 98)	145.2	<.001
		Relationship	(1, 98)	82.62	<.001
		Interaction	(1, 98)	58.13	<.001
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Helping Format	(1, 115)	118.7	<.001
		Relationship	(1, 115)	11.66	<.001

		Interaction	(1, 115)	4.82	.03
Binned by Helping Format	2 (Anonymous, Public) X 2 (Friend, Stranger)	Helping Format	(1, 98)	150.3	<.001
		Relationship	(1, 98)	81.45	<.001
		Interaction	(1, 98)	66.11	<.001
Binned by Relationship	2 (Anonymous, Public) X 2 (Friend, Stranger)	Helping Format	(1, 115)	136.1	<.001
		Relationship	(1, 115)	14.39	<.001
		Interaction	(1, 115)	3.45	.066
Binned by Helping Format	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Helping Format	(1, 98)	2.81	.097
		Relationship	(1, 98)	10.52	.002
		Interaction	(1, 98)	1.89	.173
Binned by Relationship	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Helping Format	(1, 115)	20.35	<.001
		Relationship	(1, 115)	6.67	.011
		Interaction	(1, 115)	.02	.888
Binned by Helping Format	2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Helping 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)	Helping Format	(1, 115)	14.49	<.001
		Relationship	(1, 115)	5.97	.016
		Interaction	(1, 115)	.11	.741
Binned by	2 (Anonymous, Known-to-	Helping Format	(1, 98)	174.4	<.001

Helping Format	Recipient) X 2 (Family, Friend)	Relationship	(1, 98)	0.42	.517
		Interaction	(1, 98)	2.05	.155
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Helping Format	(1, 115)	119.6	<.001
		Relationship	(1, 115)	.01	.919
		Interaction	(1, 115)	< .01	.975
Binned by Helping Format	2 (Anonymous, Public) X 2 (Family, Friend)	Helping 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)	Helping Format	(1, 115)	124.3	<.001
		Relationship	(1, 115)	.04	.837
		Interaction	(1, 115)	.02	.895
Binned by Helping Format	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Helping Format	(1, 98)	2.26	.136
		Relationship	(1, 98)	.09	.762
		Interaction	(1, 98)	2.91	.091
Binned by Relationship	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Helping Format	(1, 115)	11.27	.001
		Relationship	(1, 115)	.05	.831
		Interaction	(1, 115)	.03	.859

**Supplementary Table 5**

*Examining the Two-Way Interaction Between Helping Format and Helper-Recipient Relationship on the Prevent Bad Feelings Motive for Both Versions in Study 1*

<b>Version</b>	<b>ANOVA Model</b>	<b>Source of variation</b>	<b>df</b>	<b>F-ratio</b>	<b>p-value</b>
Binned by Helping Format	2 (Anonymous, Known-to-Recipient) X 2 (Family, Stranger)	Helping 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)	Helping Format	(1, 115)	89.94	<.001
		Relationship	(1, 115)	27.42	<.001
		Interaction	(1, 115)	5.33	.023
Binned by Helping Format	2 (Anonymous, Public) X 2 (Family, Stranger)	Helping 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)	Helping Format	(1, 115)	125.3	<.001
		Relationship	(1, 115)	24.48	<.001
		Interaction	(1, 115)	7.49	.007
Binned by Helping Format	2 (Anonymous, Known-to-Recipient) X 2 (Friend, Stranger)	Helping 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)	Helping Format	(1, 115)	59.17	<.001
		Relationship	(1, 115)	15.79	<.001



		Interaction	(1, 115)	.01	.913
Binned by Helping Format	2 (Anonymous, Public) X 2 (Friend, Stranger)	Helping 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)	Helping Format	(1, 115)	80.23	<.001
		Relationship	(1, 115)	13.7	<.001
		Interaction	(1, 115)	.53	.467
Binned by Helping Format	2 (Known-to-Recipient, Public) X 2 (Family, Stranger)	Helping 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)	Helping Format	(1, 115)	17.55	<.001
		Relationship	(1, 115)	9.54	.003
		Interaction	(1, 115)	2.76	.1
Binned by Helping Format	2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Helping Format	(1, 98)	.15	<.001
		Relationship	(1, 98)	25.16	.696
		Interaction	(1, 98)	1.88	.174
Binned by Relationship	2 (Known-to-Recipient, Public) X 2 (Friend, Stranger)	Helping Format	(1, 115)	14.02	<.001
		Relationship	(1, 115)	13.75	<.001
		Interaction	(1, 115)	2.91	.906
Binned by	2 (Anonymous, Known-to-	Helping Format	(1, 98)	102.5	<.001

Helping Format	Recipient) X 2 (Family, Friend)	Relationship	(1, 98)	.06	.813
		Interaction	(1, 98)	.82	.368
Binned by Relationship	2 (Anonymous, Known-to-Recipient) X 2 (Family, Friend)	Helping Format	(1, 115)	60.02	<.001
		Relationship	(1, 115)	.58	.449
		Interaction	(1, 115)	5.50	.021
Binned by Helping Format	2 (Anonymous, Public) X 2 (Family, Friend)	Helping Format	(1, 98)	140.5	<.001
		Relationship	(1, 98)	.53	.468
		Interaction	(1, 98)	.01	.944
Binned by Relationship	2 (Anonymous, Public) X 2 (Family, Friend)	Helping Format	(1, 115)	82.78	<.001
		Relationship	(1, 115)	.53	.468
		Interaction	(1, 115)	5.13	.025
Binned by Helping Format	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Helping Format	(1, 98)	.49	.486
		Relationship	(1, 98)	.02	.903
		Interaction	(1, 98)	1.24	.268
Binned by Relationship	2 (Known-to-Recipient, Public) X 2 (Family, Friend)	Helping Format	(1, 115)	19.7	<.001
		Relationship	(1, 115)	1.22	.273
		Interaction	(1, 115)	< .01	.97

**Supplementary Table 6a***Correlations Among Variables in Pilot 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 6b***Correlations Among Variables in Pilot 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 6c***Correlations Among Variables in Pilot 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	0.74	0.84						

(Public)								
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

### Supplementary Table 6d

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 *rmcorr* package in R Studio (Bakdash & Marusich, 2017). (MC stands for Moral Character).

### Supplementary Table 6e

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 *rmcorr* package in R Studio (Bakdash & Marusich, 2017). (L stands for Likelihood; G stands for Goodness).

**Supplementary Table 7***Two-Way ANOVAs for Moral Goodness of Each Donation Format Motive (Study 2)*

<b>DV</b>	<b>Source of variation</b>	<b>df</b>	<b>F-ratio</b>	<b>p-value</b>	<b><math>\eta_p^2</math></b>
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
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### Supplementary Table 8

*Two-Way ANOVAs for Proportion of Each Donation Format Motive (Study 2)*

DV	Source of variation	df	F-ratio	p-value	$\eta_p^2$
Right	Donation Format	(2, 458)	375.00	< .001	.317
	Relationship	(1, 229)	152.30	< .001	.036
	Interaction	(2, 458)	27.27	< .001	.010
Show Care	Donation Format	(2, 458)	234.90	< .001	.244
	Relationship	(1, 229)	94.58	< .001	.041
	Interaction	(2, 458)	29.65	< .001	.017
Norm-Setting	Donation Format	(2, 458)	62.19	< .001	.091
	Relationship	(1, 229)	29.87	< .001	.009
	Interaction	(2, 458)	11.17	< .001	.006
Strengthen Relationship	Donation Format	(2, 458)	132.50	< .001	.126
	Relationship	(1, 229)	274.70	< .001	.143
	Interaction	(2, 458)	49.18	< .001	.038
Reputation	Donation Format	(2, 458)	167.80	< .001	.247
	Relationship	(1, 229)	37.78	< .001	.008
	Interaction	(2, 458)	30.32	< .001	.015