

What We Owe to Family: The Impact of Special Obligations on Moral Judgment



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Abstract

Although people often recognize the moral value of impartial behavior (i.e., not favoring specific individuals), it is unclear when, if ever, people recognize the moral value of partiality. The current studies investigated whether information about special obligations to specific individuals, particularly kin, is integrated into moral judgments. In Studies 1 and 2, agents who helped a stranger were judged as more morally good and trustworthy than those who helped kin, but agents who helped a stranger, instead of kin were judged as less morally good and trustworthy than those who did the opposite. In Studies 3 and 4, agents who simply neglected a stranger were judged as less morally bad and untrustworthy than those who neglected kin. Study 4 also demonstrated that the violation (vs. fulfillment) of perceived obligations underlaid all judgment patterns. Study 5 demonstrated boundary conditions: When occupying roles requiring impartiality, agents who helped a stranger instead of kin were judged as more morally good and trustworthy than agents who did the opposite. These findings illuminate the importance of obligations in structuring moral judgment.

Keywords

morality, obligation, prosocial behavior, impartiality, open data, open materials, preregistered

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Peter Singer, an inspiring altruist, is well recognized for his philosophical argument that we should value close loved ones and distant strangers similarly (or at least not as differently as most of us do). He practices what he preaches and donates 40% of his income to strangers through high-efficacy charities. When his mother developed Alzheimer's disease, however, he partially eschewed his philosophy and spent more money caring for her than his own moral arguments permitted. On his violation of principle, Singer remarked, "Perhaps it is more difficult than I thought before, because it is different when it's your mother" (MacFarquhar, 2015, p. 101). Had Singer done otherwise, how would he have been judged? In isolation, helping strangers seems commendable precisely because Singer has no obligations to strangers. However, had Singer continued helping strangers instead of his mother, not only might this have been judged as less praiseworthy, but also he may have been condemned for violating a special obligation to family.

Although philosophy has given some attention to the question of special obligations to family (e.g., Jeske,

1998; Sommers, 1986), moral psychology has largely neglected the fact that our day-to-day lives are mostly spent with close others rather than unrelated strangers (Bloom, 2011), and it has lagged behind in characterizing special obligations (Bartels, Bauman, Cushman, Pizarro, & McGraw, 2016; Kleiman-Weiner, Saxe, & Tenenbaum, 2017; Tomasello, 2019). Existing frameworks, such as moral-foundations theory (Graham et al., 2011) and relationship-regulation theory (Rai & Fiske, 2011), have noted the importance of sociofunctional dynamics in morality (e.g., in-group loyalty and unity). Importantly—and in support of relationship-regulation theory—perceived moral relevance is higher when a relational component is present than when it is absent, such as if one burns someone else's arm as opposed to one's own arm (Tepe & Aydinli-Karakulak,

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2019). To our knowledge, neither framework has measured obligations to family specifically or their relation to moral judgment. However, a recent theory, known as *morality as cooperation*, suggests that family obligations are widely considered morally relevant (Curry, Chesters, & Van Lissa, 2019). In this article, we provide evidence that in everyday contexts, people indeed recognize a positive obligation to help kin more than nonkin, and these perceptions influence moral judgments.

Consistent with the evolutionary theory of *kin altruism* (Hamilton, 1964), previous work has suggested that people will generally favor kin over nonkin when making first-person decisions. In life-threatening situations, people more often report intending to help a sibling responsible for his or her plight instead of a nonresponsible acquaintance (Greitemeyer, Rudolph, & Weiner, 2003). When someone needs help, genetic relatedness between the potential helper and the beneficiary increases helping intentions (Burnstein, Crandall, & Kitayama, 1994), and people will sustain uncomfortable physical exercise for longer to reward close, rather than distant, genetic relatives (Madsen et al., 2007). People are also sensitive to these distinctions in moral dilemmas, being more willing to sacrifice one brother to save five brothers than one stranger to save five strangers (Kurzban, DeScioli, & Fein, 2012). When contemplating hypothetical crimes, adults are less willing to report a responsible brother than a responsible stranger, regardless of whether the person in question is clearly culpable (Lee & Holyoak, 2020). Finally, in third-party evaluations, people judge others as morally worse when they abuse family than when they abuse friends or coworkers (Hughes, Creech, & Strosser, 2016).

From a third-party perspective, however, it remains unclear whether in everyday helping contexts, (a) the relationship between helper and beneficiary influences moral judgments and (b) perceptions of fulfilled and unfulfilled obligations underlie those judgments. Specifically, kinship may entail involuntary obligations to one's family, a property that nonkinship may not equally share. Therefore, if kin obligations influence moral judgments, agents performing the same behaviors will be judged differently depending on who benefits from their actions. Consider two scenarios, one in which an unrelated stranger needs help and another in which a relative needs help. Agents who help a stranger should be judged more positively than agents who help their kin, precisely because people have no special obligations to strangers. Conversely, when a choice must be made between two people (one related and one not), agents who fulfill this obligation by helping their kin instead of a stranger should be judged more positively because an obligation to kin will be present (Everett, Faber, Savulescu, & Crockett, 2018; Hughes, 2017). When

simply failing to help, agents who neglect kin should be judged less positively (or more negatively) than agents who neglect a stranger because the former are violating a special obligation (see Haidt & Baron, 1996).

All predictions thus far have relied on the assumption that kin obligations will ultimately structure moral judgments. Here, we also explored contexts in which favoritism seems inappropriate and kin obligations may not take precedence over other obligations. We propose that when agents occupy roles requiring impartiality (e.g., professors helping their new students), those who help their kin instead of a stranger should be judged less positively than those who do the opposite.

Across five studies, we tested these predictions by manipulating the helper–beneficiary relationship and the presence of another potential beneficiary, whose relationship to the helper differed. Importantly, in the final two studies, we measured the extent to which obligations were perceived as being violated or fulfilled, in order to explicitly investigate the role of obligation in moral judgment.

Open Science

All data and materials necessary to replicate our analyses are available on the Open Science Framework (<https://osf.io/bnwdv/>). This project contains full stimulus texts; traditionally formatted repeated measures data, repeated measures analyses, and interpretation of those analyses (see the Supplemental Online Material folder); mixed-effects data, R code, and output from this analysis; and by-scenario/by-item breakdowns for all studies. All initial sample sizes were chosen to result in analyzable samples of at least 200 participants per study. A sensitivity analysis determined that this sample size would yield 80% power to detect an effect size (Cohen's d_z) of 0.20 for within-participants comparisons (see the Supplemental Online Material file for these effect sizes). All studies were preregistered at AsPredicted.org (see the Open Practices section for links). In Studies 3, 4, and 5, we deviated from our analysis plans because we mistakenly preregistered separate mixed-effects models for situations in which one model was appropriate.

Study 1

Method

Participants. Participants were 234 United States (U.S.) residents recruited and compensated via Amazon Mechanical Turk. Participants who failed to correctly answer two scenario-relevant memory questions ($n = 25$) were excluded from analyses, resulting in a final sample of 209 (40.2% female, mean age = 34.75 years).

Table 1. Example Manipulations of an Abridged Partiality Scenario in Studies 1 Through 5

Condition	Stranger condition	Kin condition
No choice	John noticed that someone was moving into an apartment down the hall from him. <u>He did not recognize the new tenant; she was a stranger.</u> John helped his <u>new neighbor</u> move her furniture in.	John noticed that someone was moving into an apartment down the hall from him. <u>He recognized the new tenant; she was his cousin whom he had not seen or spoken to in years.</u> John helped <u>his cousin</u> move her furniture in.
Choice	John noticed that people were moving into two separate apartments down the hall from him. He did not recognize one of the new tenants; she was a stranger. He recognized the other new tenant, though; she was his cousin whom he had not seen or spoken to in years. Rather than help <u>his cousin</u> , John helped <u>his other new neighbor</u> move her furniture in.	John noticed that people were moving into two separate apartments down the hall from him. He did not recognize one of the new tenants; she was a stranger. He recognized the other new tenant, though; she was his cousin whom he had not seen or spoken to in years. Rather than help <u>the stranger</u> , John helped <u>his cousin</u> move her furniture in.
Failure	John noticed that someone was moving into an apartment down the hall from him. <u>He did not recognize the new tenant; she was a stranger.</u> Rather than help <u>his new neighbor</u> move her furniture in, John stayed in his apartment and played video games.	John noticed that someone was moving into an apartment down the hall from him. <u>He recognized the new tenant; she was his cousin whom he had not seen or spoken to in years.</u> Rather than help <u>his cousin</u> move her furniture in, John stayed in his apartment and played video games.

Note: Underlining signifies phrases that changed between the stranger and kin conditions. The actual scenarios were more detailed (see <https://osf.io/bnwdv/> for full texts). Participants always saw different scenarios for each condition. No-choice and choice conditions were presented in all five studies. The failure condition was presented only in Studies 3 through 5. In partiality scenarios, favoring specific individuals (e.g., kin) in choice conditions would be considered morally appropriate. See Table 6 for examples from an impartiality scenario used in Study 5.

Materials and procedure. Participants read eight stories in which agents engaged in helping behavior. We varied the relationship between helper and beneficiary (relationship: stranger vs. kin) and whether another potential beneficiary could have been helped instead (choice: no choice vs. choice). Participants read two stories for each pair of relations (e.g., stranger–no choice, stranger–choice). Thus, the study had a fully crossed 2 (relationship) × 2 (choice) within-participants design in which participants saw all eight stories but never the same story across conditions (see Table 1 for a shortened scenario example across conditions).¹

After reading each scenario, participants answered questions assessing how morally bad or good the agent was as a person and how trustworthy the agent was (1, *extremely bad/untrustworthy*, to 7, *extremely good/trustworthy*), as these characteristics appear most important in person perception (Cottrell, Neuberg, & Li, 2007; Goodwin, 2015; Goodwin, Piazza, & Rozin, 2014). Participants also answered questions about the wrongness of the act and how diagnostic agents’ actions were of their future behaviors (see the Supplemental Online Material file at <https://osf.io/bnwdv/> for analyses).

Results

Descriptive statistics for morality are shown in Figure 1 (for graphing purposes, “neither bad nor good,” originally 4 on the scale from 1 to 7, is shown at the 0

midpoint).² Following our preregistration, we analyzed data with linear mixed-effects models specified to predict moral judgments from the fixed effects of relationship (stranger vs. kin) and choice (no choice vs. choice), their interaction, and the random intercepts of participant and scenario. The random-intercepts model allows for generalization of results to other stimuli and individuals (Judd, Westfall, & Kenny, 2012). All comparisons and corresponding statistics are reported in Table 2.

Moral goodness. As predicted, there was a significant interaction between relationship and choice for moral-goodness judgments, $b = -0.640$, 95% confidence interval (CI) = $[-0.456, -0.824]$, $SE = 0.094$, $t = 6.843$, $p < .001$. No means crossed below the midpoint into “morally bad.” In no-choice conditions, agents who helped a stranger were judged as significantly more morally good than agents who helped kin, whereas in choice conditions, agents who helped kin instead of a stranger were judged as significantly more morally good than agents who helped a stranger instead of their kin.

Trustworthiness. As predicted, there was a significant interaction between relationship and choice for trustworthiness judgments, $b = -0.772$, 95% CI = $[-0.588, -0.956]$, $SE = 0.094$, $t = 8.179$, $p < .001$. Both pairwise comparisons of interest showed trends that were statistically identical to those observed for moral goodness.

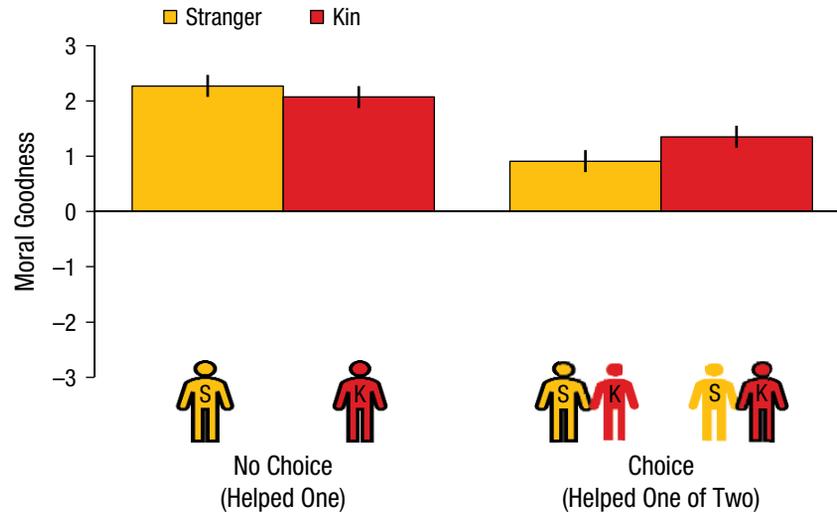


Fig. 1. Study 1: judgments of target agents' moral goodness as a function of whether another potential beneficiary could have been helped instead (no choice vs. choice) and the relationship between target agent and beneficiary (stranger vs. kin). Silhouettes depict the number of potential beneficiaries in each condition; outlined and nonoutlined silhouettes depict helped and neglected potential beneficiaries, respectively. In no-choice conditions, only one potential beneficiary (either a stranger or a relative) was present and was helped by the target agent. In choice conditions, two potential beneficiaries were present (one stranger and one relative), but only one was helped by the target agent. Error bars represent 95% confidence intervals.

Study 2

The purpose of Study 2 was to directly replicate Study 1's results.

Method

Participants. Participants were 235 U.S. residents recruited and compensated via Amazon Mechanical Turk. Participants who failed to correctly answer two scenario-relevant memory questions ($n = 43$) were excluded from analyses, resulting in a final sample size of 193 (49.7% female, mean age = 38.30 years).

Materials and procedure. The study design and procedure were identical to those of Study 1. Because no

means crossed below the midpoint in Study 1, moral goodness and trustworthiness were measured on unidirectional scales (1, *not at all good/trustworthy*, to 5, *extremely good/trustworthy*). Participants also answered questions about how likely it would be for the average person to do what the agent did, the unpredictability of the agent's future behavior, and the amount of harm that occurred (see the Supplemental Online Material file at <https://osf.io/bnwvdv/> for analyses).

Results

Data were analyzed with the identical mixed-effects models employed in Study 1. Descriptive statistics for moral goodness are shown in Figure 2. All

Table 2. Comparison of Moral-Goodness and Trustworthiness Ratings of Agents Reacting to Strangers and Kin in Study 1

Condition and dependent variable	<i>M</i>		Mean difference	<i>t</i>	<i>p</i>	<i>d</i>
	Stranger	Kin				
No choice						
Moral goodness	6.27	6.07	0.20 [0.07, 0.33]	3.00	.003	0.17 [0.06, 0.28]
Trustworthiness	6.19	5.97	0.21 [0.08, 0.34]	3.20	.001	0.18 [0.07, 0.29]
Choice						
Moral goodness	4.91	5.35	-0.44 [-0.31, -0.57]	6.66	< .001	0.38 [0.27, 0.49]
Trustworthiness	4.81	5.37	-0.56 [-0.43, -0.69]	8.35	< .001	0.48 [0.36, 0.59]

Note: Study 1 had 1,692 observations per variable. Values in brackets are 95% confidence intervals; *ds* were computed by dividing the mean difference by the square root of the summed variance components (as described by Brysbaert & Stevens, 2018).

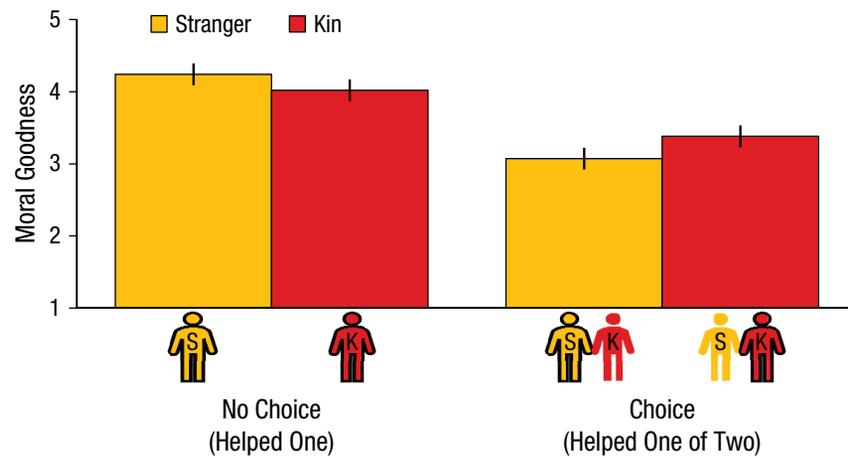


Fig. 2. Study 2: judgments of target agents’ moral goodness as a function of whether another potential beneficiary could have been helped instead (no choice vs. choice) and the relationship between target agent and beneficiary (stranger vs. kin). Silhouettes depict the number of potential beneficiaries in each condition; outlined and nonoutlined silhouettes depict helped and neglected potential beneficiaries, respectively. In no-choice conditions, only one potential beneficiary (either a stranger or a relative) was present and was helped by the target agent. In choice conditions, two potential beneficiaries were present (one stranger and one relative), but only one was helped by the target agent. Error bars represent 95% confidence intervals.

comparisons and corresponding statistics are reported in Table 3.

Moral goodness. As predicted, there was a significant interaction between relationship and choice for moral-goodness judgments, $b = -0.532$, 95% CI = [-0.389, -0.675], $SE = 0.073$, $t = 7.277$, $p < .001$. In no-choice conditions, agents who helped a stranger were judged as significantly more morally good than agents who helped kin, whereas in choice conditions, agents who helped kin instead of a stranger were judged as significantly more morally good than agents who helped a stranger instead of kin.

Trustworthiness. As predicted, there was a significant interaction between relationship and choice for trustworthiness judgments, $b = -0.518$, 95% CI = [-0.375, -0.661], $SE = 0.073$, $t = 7.069$, $p < .001$. Both pairwise comparisons of interest showed trends that were statistically identical to moral goodness.

Study 3

Study 3 had three aims. First, it served as an additional replication of Studies 1 and 2. Second, it tested the prediction that simply failing to help kin would elicit harsher moral judgments than failing to help strangers.

Table 3. Comparison of Moral-Goodness and Trustworthiness Ratings of Agents Reacting to Strangers and Kin in Study 2

Condition and dependent variable	<i>M</i>		Mean difference	<i>t</i>	<i>p</i>	<i>d</i>
	Stranger	Kin				
No choice						
Moral goodness	4.24	4.02	0.22 [0.12, 0.32]	4.27	< .001	0.25 [0.13, 0.36]
Trustworthiness	4.05	3.92	0.13 [0.03, 0.23]	2.49	.013	0.14 [0.03, 0.26]
Choice						
Moral goodness	3.07	3.38	-0.31 [-0.21, -0.41]	6.01	< .001	0.35 [0.23, 0.46]
Trustworthiness	3.00	3.39	-0.39 [-0.29, -0.49]	7.50	< .001	0.43 [0.32, 0.54]

Note: Study 2 had 1,544 observations per variable. Values in brackets are 95% confidence intervals; *ds* were computed by dividing the mean difference by the square root of the summed variance components (as described by Brysbaert & Stevens, 2018).

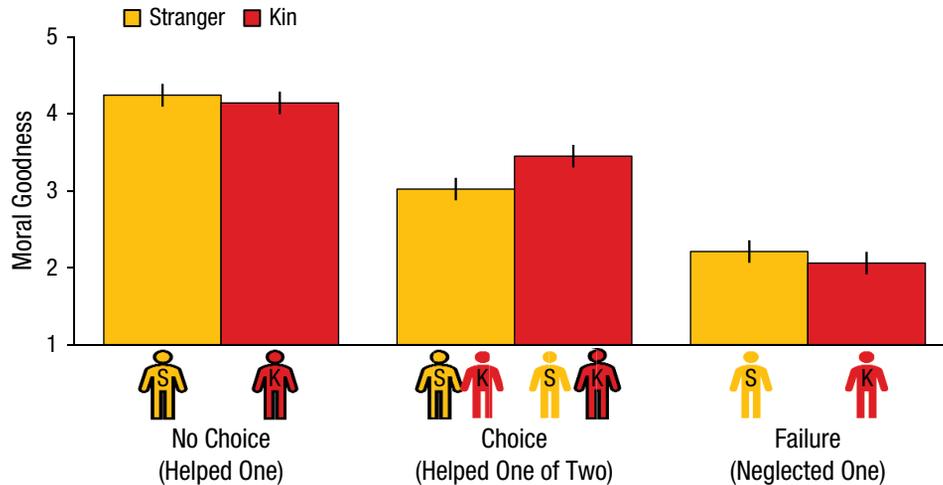


Fig. 3. Study 3: judgments of target agents' moral goodness as a function of whether another potential beneficiary could have been helped instead (no choice vs. choice vs. failure) and the relationship between target agent and beneficiary (stranger vs. kin). Silhouettes depict the number of potential beneficiaries in each condition; outlined and nonoutlined silhouettes depict helped and neglected potential beneficiaries, respectively. In no-choice conditions, only one potential beneficiary (either a stranger or a relative) was present and was helped by the target agent. In choice conditions, two potential beneficiaries were present (one stranger and one relative), but only one was helped by the target agent. In failure conditions, only one potential beneficiary (either a stranger or a relative) was present and was neglected by the target agent. Error bars represent 95% confidence intervals.

Third, our design allowed us to compare helping strangers instead of kin with simply failing to help kin.

Method

Participants. Participants were 330 U.S. residents recruited and compensated via Amazon Mechanical Turk. Participants who failed to correctly answer at least two scenario-relevant memory questions ($n = 26$) were excluded from analyses, resulting in a final sample size of 304 (37.5% female, mean age = 36.88 years).

Materials and procedure. Participants read six stories in which agents either engaged or failed to engage in helping behavior. The study design and procedure were similar to those in Studies 1 and 2 except that failure scenarios were added. Thus, Study 3 had a fully crossed 2 (relationship: stranger vs. kin) \times 3 (choice: no choice vs. choice vs. failure) within-participants design in which participants saw six total stories, each corresponding to a different condition. After reading each scenario, participants rated the agent's moral goodness (1, *not at all good*, to 5, *extremely good*). Participants also judged the unpredictability of the agent's future behavior (see the Supplemental Online Material file at <https://osf.io/bnwdv/> for analyses). Trustworthiness was not measured in Study 3.

Results

Data were analyzed with mixed-effects models similar to the ones used in Studies 1 and 2. Descriptive statistics for

moral goodness are shown in Figure 3. All comparisons and corresponding statistics are reported in Table 4.

As predicted, we found a significant interaction between relationship and choice when comparing moral-goodness judgments in the no-choice and choice conditions, $b = -0.536$, 95% CI = $[-0.334, -0.738]$, $SE = 0.103$, $t = 5.186$, $p < .001$. Also as predicted, we found a significant interaction between relationship and choice when comparing the choice and failure conditions, $b = -0.589$, 95% CI = $[-0.387, -0.791]$, $SE = 0.103$, $t = 5.698$, $p < .001$. Unlike Studies 1 and 2, which supported the predicted difference between strangers and kin in the no-choice conditions, here there was no difference in moral goodness. However, in the choice conditions, agents who helped kin instead of a stranger were judged as significantly more morally good than agents who had helped a stranger instead of kin. In the failure conditions, agents who failed to help a stranger were judged as more morally good than agents who failed to help kin. Additionally, agents who failed to help kin were judged as less morally good than agents who helped a stranger instead of kin, suggesting that neglecting kin but still helping someone is better than simply neglecting kin.

Study 4

Study 4 was designed to replicate the results of Study 3 and to examine explicit obligation judgments. Across the no-choice and choice conditions, helping kin should be judged as more of a fulfillment of one's

Table 4. Comparison of Moral-Goodness Ratings of Agents Reacting to Strangers and Kin in Study 3

Condition	<i>M</i>		Mean difference	<i>t</i>	<i>p</i>	<i>d</i>
	Stranger	Kin				
No choice	4.24	4.14	0.10 [-0.05, 0.24]	1.33	.183	0.10 [-0.05, 0.25]
Choice	3.02	3.45	-0.44 [-0.29, -0.58]	5.99	< .001	0.46 [0.31, 0.60]
Failure	2.21	2.06	0.15 [0.01, 0.29]	2.06	.040	0.16 [0.01, 0.31]

Note: Study 3 had 1,824 observations per variable. Values in brackets are 95% confidence intervals; *ds* were computed by dividing the mean difference by the square root of the summed variance components (as described by Brysbaert & Stevens, 2018). Participants also judged agents as more morally good when they helped a stranger instead of kin compared with when they failed to help kin, $t = 13.10$, $p < .001$, $d = 1.00$, 95% confidence interval = [0.85, 1.15].

obligation than helping strangers. Conversely, failing to help kin should be judged as more of a violation of one's obligation than failing to help strangers.

Method

Participants. Participants were 333 U.S. residents recruited and compensated via Amazon Mechanical Turk. Participants who failed to correctly answer at least two scenario-relevant memory questions ($n = 28$) were excluded from analyses, resulting in a final sample of 305 (45.9% female, mean age = 36.33 years).

Materials and procedure. The study design and procedure were similar to those in Study 3. However, because the failure scenarios could be viewed as morally bad, and participants were unable to make this judgment in Study 3, all measures in Study 4 relied on bidirectional scales to potentially capture negative judgments. Specifically, participants judged the agent's moral goodness and trustworthiness (1, *extremely bad/untrustworthy*, to 9, *extremely good/trustworthy*), as well as whether the agent violated or fulfilled an obligation (1, *completely violated*, to 9, *completely fulfilled*). Participants also answered questions about the rightness of the act, the praise deserved, the fairness of the outcome, the unpredictability of the agent's future behavior, and the likelihood that the average person would behave similarly (see the Supplemental Online Material file at <https://osf.io/bnwdv/> for analyses).

Results

Data were analyzed with identical mixed-effects models as in previous studies. Descriptive statistics for moral goodness and obligation are shown in Figure 4 (for graphing purposes, "neither" judgments, originally 5s on the scale ranging from 1 to 9, are shown at the 0 midpoint). All comparisons and corresponding statistics are reported in Table 5.

Moral goodness. As predicted, we found a significant interaction between relationship and choice when comparing moral-goodness judgments both in the no-choice and choice conditions, $b = -0.643$, 95% CI = [-0.322, -0.964], $SE = 0.164$, $t = 3.910$, $p < .001$, and in the choice and failure conditions, $b = -1.057$, 95% CI = [-0.736, -1.378], $SE = 0.164$, $t = 6.427$, $p < .001$. In the no-choice conditions, there was no difference in moral goodness. However, in the choice conditions, agents who helped kin instead of a stranger were judged as significantly more morally good than those who helped a stranger instead of kin. In the failure conditions, agents who failed to help a stranger were judged as significantly less morally bad than those who failed to help kin, and, replicating the findings of Study 3, agents who failed to help kin were judged as significantly less morally good than agents who helped a stranger instead of kin.

Trustworthiness. As predicted, we found a significant interaction between relationship and choice when comparing trustworthiness judgments in both the no-choice and choice conditions, $b = -0.922$, 95% CI = [-0.579, -1.265], $SE = 0.175$, $t = 5.263$, $p < .001$, and the choice and failure conditions, $b = -1.598$, 95% CI = [-1.155, -1.941], $SE = 0.175$, $t = 9.118$, $p < .001$. All pairwise comparisons of interest showed trends that were statistically identical to moral goodness.

Obligation. As predicted, we found a significant interaction between relationship and choice when comparing obligation judgments in both the no-choice and choice conditions, $b = -0.704$, 95% CI = [-0.339, -1.069], $SE = 0.186$, $t = 3.777$, $p < .001$, and the choice and failure conditions, $b = -1.648$, 95% CI = [-1.283, -2.013], $SE = 0.187$, $t = 8.839$, $p < .001$. In the no-choice conditions, agents who helped a stranger were judged as fulfilling an obligation significantly less than agents who helped kin; similarly, in the choice conditions, agents who helped a stranger instead of kin were judged as fulfilling an obligation

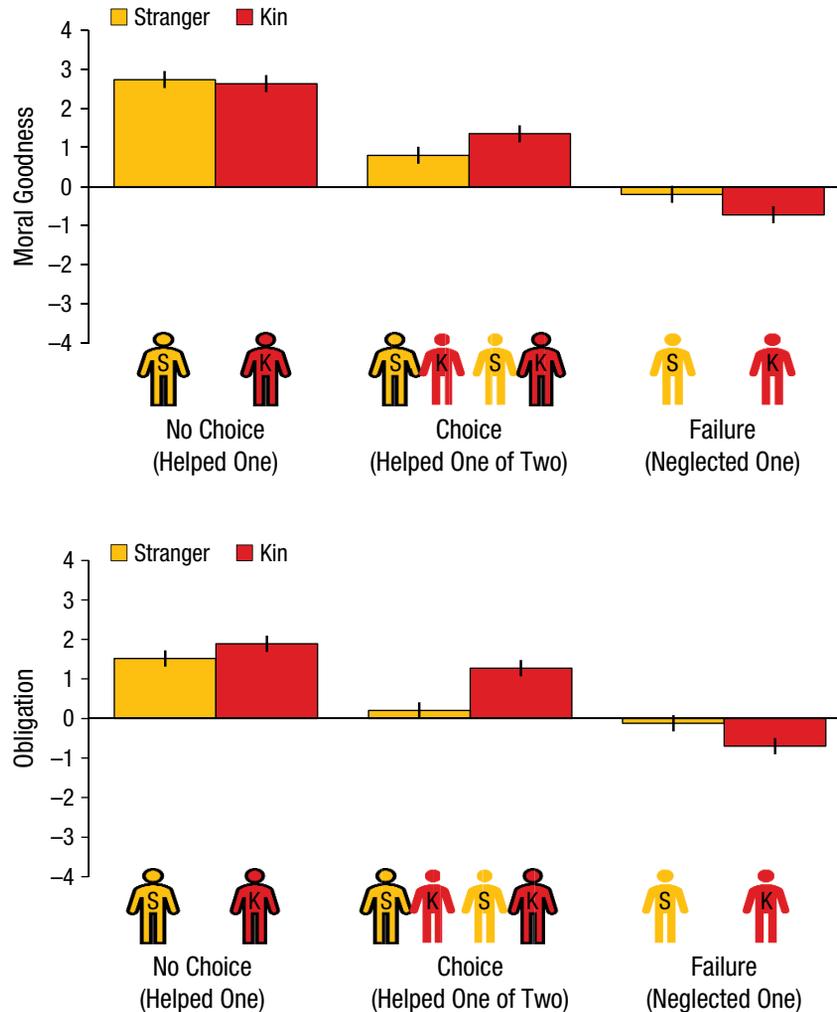


Fig. 4. Study 4: judgments of target agents' moral goodness (top) and obligation (bottom) as a function of whether another potential beneficiary could have been helped instead (no choice vs. choice vs. failure) and the relationship between target agent and beneficiary (stranger vs. kin). Silhouettes depict the number of potential beneficiaries in each condition; outlined and nonoutlined silhouettes depict helped and neglected potential beneficiaries, respectively. In no-choice conditions, only one potential beneficiary (either a stranger or a relative) was present and was helped by the target agent. In choice conditions, two potential beneficiaries were present (one stranger and one relative), but only one was helped by the target agent. In failure conditions, only one potential beneficiary (either a stranger or a relative) was present and was neglected by the target agent. Error bars represent 95% confidence intervals.

significantly less than agents who helped kin instead of a stranger. Agents who failed to help a stranger were judged as violating an obligation significantly less than agents who failed to help kin, and agents who failed to help kin were also judged as violating an obligation significantly more than agents who helped a stranger instead of kin.

Study 5

Study 5 was designed to replicate the obligation effects from Study 4 and to investigate boundary conditions. Specifically, when occupying roles requiring impartiality,

agents assume additional obligations to nonkin (e.g., professors have obligations to students). Because helping kin may be perceived as showing inappropriate favoritism in these contexts, agents who help kin instead of strangers should be judged less positively, and as having fulfilled an obligation to a lesser extent, than agents who do the opposite.

Method

Participants. Participants were 443 U.S. residents recruited and compensated via Amazon Mechanical Turk.

Table 5. Comparison of Moral-Goodness, Trustworthiness, and Obligation Ratings of Agents Reacting to Strangers and Kin in Study 4

Condition and dependent variable	<i>M</i>		Mean difference	<i>t</i>	<i>p</i>	<i>d</i>
	Stranger	Kin				
No choice						
Moral goodness	7.73	7.63	0.10 [-0.13, 0.33]	0.87	.383	0.07 [-0.08, 0.22]
Trustworthiness	7.32	7.30	0.02 [-0.22, 0.27]	0.18	.861	0.01 [-0.14, 0.16]
Obligation	6.52	6.89	-0.36 [-0.11, -0.62]	2.76	.006	0.21 [0.06, 0.36]
Choice						
Moral goodness	5.80	6.35	-0.54 [-0.31, -0.77]	4.65	< .001	0.35 [0.20, 0.50]
Trustworthiness	5.38	6.28	-0.90 [-0.66, -1.14]	7.25	< .001	0.56 [0.41, 0.71]
Obligation	5.20	6.27	-1.07 [-0.81, -1.33]	8.09	< .001	0.62 [0.47, 0.77]
Failure						
Moral goodness	4.80	4.28	0.52 [0.29, 0.74]	4.43	< .001	0.34 [0.19, 0.49]
Trustworthiness	5.01	4.32	0.70 [0.45, 0.94]	5.62	< .001	0.43 [0.28, 0.58]
Obligation	4.88	4.30	0.58 [0.32, 0.84]	4.39	< .001	0.34 [0.19, 0.49]

Note: Study 4 had 1,830 observations per variable. Values in brackets are 95% confidence intervals (CIs); *ds* were computed by dividing the mean difference by the square root of the summed variance components (as described by Brysbaert & Stevens, 2018). Participants also judged agents as more morally good, $t = 13.07, p < .001, d = 0.99, 95\% \text{ CI} = [0.85, 1.14]$; more trustworthy, $t = 8.56, p < .001, d = 0.66, 95\% \text{ CI} = [0.51, 0.81]$; and as fulfilling an obligation more, $t = 6.80, p < .001, d = 0.52, 95\% \text{ CI} = [0.37, 0.67]$, when they helped a stranger instead of kin compared with when they simply failed to help kin.

Participants who failed to correctly answer at least one attention-check question ($n = 55$) were excluded from analyses, resulting in a final sample of 388 (43.6% female, mean age = 35.04 years).

Materials and procedure. The study had a 2 (relationship: stranger vs. kin) \times 3 (choice: no choice vs. choice vs. failure) \times 2 (context: partiality vs. impartiality) mixed design in which relationship and choice were manipulated within participants but context was manipulated between participants (partiality: $n = 192$; impartiality: $n = 196$). Here, partiality refers to contexts in which it is considered morally appropriate to favor specific individuals, whereas impartiality refers to contexts in which it is considered morally inappropriate to favor specific individuals. Participants answered the same questions as in Study 4 but on 7-point bidirectional scales. Participants also judged how expected or unexpected the agent's behavior was (see the Supplemental Online Material file at <https://osf.io/bnwdv/> for analyses of this and other variables). See Table 6 for shortened examples from an impartiality scenario.

Results

Data were analyzed with the same mixed-effects models as in previous studies. Descriptive statistics for moral goodness and obligation, by context, are shown in Figures 5 and 6 (for graphing purposes, “neither” judgments, originally 4s on a scale from 1 to 7, are shown

at the 0 midpoint). All comparisons and corresponding statistics are reported in Tables 7 and 8.

Moral goodness. As predicted, we found a three-way interaction among relationship, choice, and context when comparing both the no-choice and choice conditions, $b = 0.997, 95\% \text{ CI} = [0.534, 1.460], SE = 0.236, t = 4.232, p < .001$, and the choice and failure conditions, $b = 1.600, 95\% \text{ CI} = [1.137, 2.063], SE = 0.236, t = 6.792, p < .001$. To further investigate this three-way interaction, we ran two new models, one for partiality contexts and one for impartiality contexts.

For partiality contexts, comparisons revealed a significant interaction between relationship and choice in both the no-choice and choice conditions, $b = -0.943, 95\% \text{ CI} = [-0.620, -1.266], SE = 0.165, t = 5.722, p < .001$, and the choice and failure conditions, $b = -1.246, 95\% \text{ CI} = [-0.923, -1.569], SE = 0.165, t = 7.562, p < .001$. In no-choice conditions, agents who helped a stranger were judged to be no better morally than those who helped kin. In choice conditions, agents who helped a stranger instead of kin were judged as significantly less morally good than agents who helped kin. In failure conditions, agents who failed to help a stranger were judged as significantly less morally bad than those who failed to help kin.

For impartiality contexts, we found no interaction between relationship and choice when comparing the no-choice and choice conditions, $b = 0.052, 95\% \text{ CI} = [-0.277, 0.381], SE = 0.168, t = 0.306, p = .759$; however,

Table 6. Example Manipulations of an Abridged Impartiality Scenario in Study 5

Condition	Stranger	Kin
No choice	Debbie, a professor, received an e-mail from a student who asked to meet on [the student's] only day off to talk about graduate school. <u>Debbie did not recognize the student's name; she was a stranger.</u> Debbie e-mailed back and set up a meeting to drive to a coffee shop near <u>the student's</u> hometown to chat more about graduate school.	Debbie, a professor, received an e-mail from a student who asked to meet on [the student's] only day off to talk about graduate school. <u>Debbie recognized this student's name; she was her cousin's daughter whom she had not seen or spoken to in a while.</u> Debbie e-mailed back and set up a meeting to drive to a coffee shop near <u>her cousin's</u> hometown to chat more about graduate school.
Choice	Debbie, a professor, received two e-mails from students who asked to meet on their only days off to talk about graduate school. Debbie did not recognize one student's name; she was a stranger. Debbie recognized the other student's name; she was her cousin's daughter whom she had not seen or spoken to in a while. Instead of e-mailing <u>her cousin's daughter back</u> , Debbie <u>set up a meeting to drive to a coffee shop near the other student's</u> hometown to chat more about graduate school.	Debbie, a professor, received two e-mails from students who asked to meet on their only days off to talk about graduate school. Debbie did not recognize one student's name; she was a stranger. Debbie recognized the other student's name; she was her cousin's daughter whom she had not seen or spoken to in a while. Instead of e-mailing <u>the student she did not know</u> , Debbie <u>set up a meeting to drive to a coffee shop near her cousin's</u> hometown to chat more about graduate school.
Failure	Debbie, a professor, received an e-mail from a student who asked to meet on [the student's] only day off to talk about graduate school. <u>Debbie did not recognize the student's name; she was a stranger.</u> Instead of setting up a meeting, Debbie e-mailed back telling <u>the student</u> that she could not meet.	Debbie, a professor, received an e-mail from a student who asked to meet on [the student's] only day off to talk about graduate school. <u>Debbie recognized this student's name; she was her cousin's daughter whom she had not seen or spoken to in a while.</u> Instead of setting up a meeting, Debbie e-mailed back telling <u>her cousin's daughter</u> that she could not meet.

Note: Underlining signifies phrases that changed between the stranger and kin conditions. The actual scenarios were more detailed (see <https://osf.io/bnwdv/> for full scenario texts). Participants always saw different scenarios for each condition. In impartiality scenarios, favoring specific individuals (e.g., kin) in choice conditions would be considered morally inappropriate. See Table 1 for examples from a partiality scenario.

when comparing the choice and failure conditions, we found a significant interaction, $b = 0.356$, 95% CI = [0.027, 0.685], $SE = 0.168$, $t = 2.118$, $p = .034$. In no-choice conditions, agents who helped a stranger were judged to be significantly better morally than those who helped kin. In choice conditions, agents who helped a stranger instead of kin were also judged as significantly more morally good than those who helped kin instead of a stranger. In the failure conditions, there was no difference in moral goodness, suggesting that failing to help a stranger and failing to help kin may be equally bad when agents occupy roles requiring impartiality.

Trustworthiness. As predicted, we found a three-way interaction among relationship, choice, and context when comparing trustworthiness judgments in both the no-choice and choice conditions, $b = 1.229$, 95% CI = [0.757, 1.701], $SE = 0.241$, $t = 5.106$, $p < .001$, and the choice and failure conditions, $b = 1.910$, 95% CI = [1.440, 2.380], $SE = 0.240$, $t = 7.945$, $p < .001$. To further investigate this three-way interaction, we ran two new models, one for partiality contexts and one for impartiality contexts.

For partiality contexts, we found a significant interaction between relationship and choice when comparing both the no-choice and choice conditions, $b = -1.076$,

95% CI = [-0.758, -1.266], $SE = 0.162$, $t = 6.627$, $p < .001$, and the choice and failure conditions, $b = -1.574$, 95% CI = [-1.256, -1.892], $SE = 0.162$, $t = 9.690$, $p < .001$. For impartiality contexts, we found no interaction between relationship and choice when comparing the no-choice and choice conditions, $b = 0.148$, 95% CI = [-0.199, 0.495], $SE = 0.177$, $t = 0.833$, $p = .405$; however, when comparing the choice and failure conditions, we found a marginally significant interaction, $b = 0.346$, 95% CI = [-0.001, 0.693], $SE = 0.177$, $t = 1.955$, $p = .051$. Within each context, all pairwise comparisons of interest showed trends that were statistically identical to those for moral goodness.

Obligation. As predicted, we found a three-way interaction among relationship, choice, and context occurred when comparing obligation judgments in both the no-choice and choice conditions, $b = 0.814$, 95% CI = [0.285, 1.343], $SE = 0.270$, $t = 3.012$, $p = .003$, and the choice and failure conditions, $b = 2.110$, 95% CI = [1.581, 2.639], $SE = 0.270$, $t = 7.813$, $p < .001$.

For partiality contexts, the results replicated those of Study 4. We found a significant interaction between relationship and choice when comparing both the no-choice and choice conditions, $b = -0.898$, 95% CI =

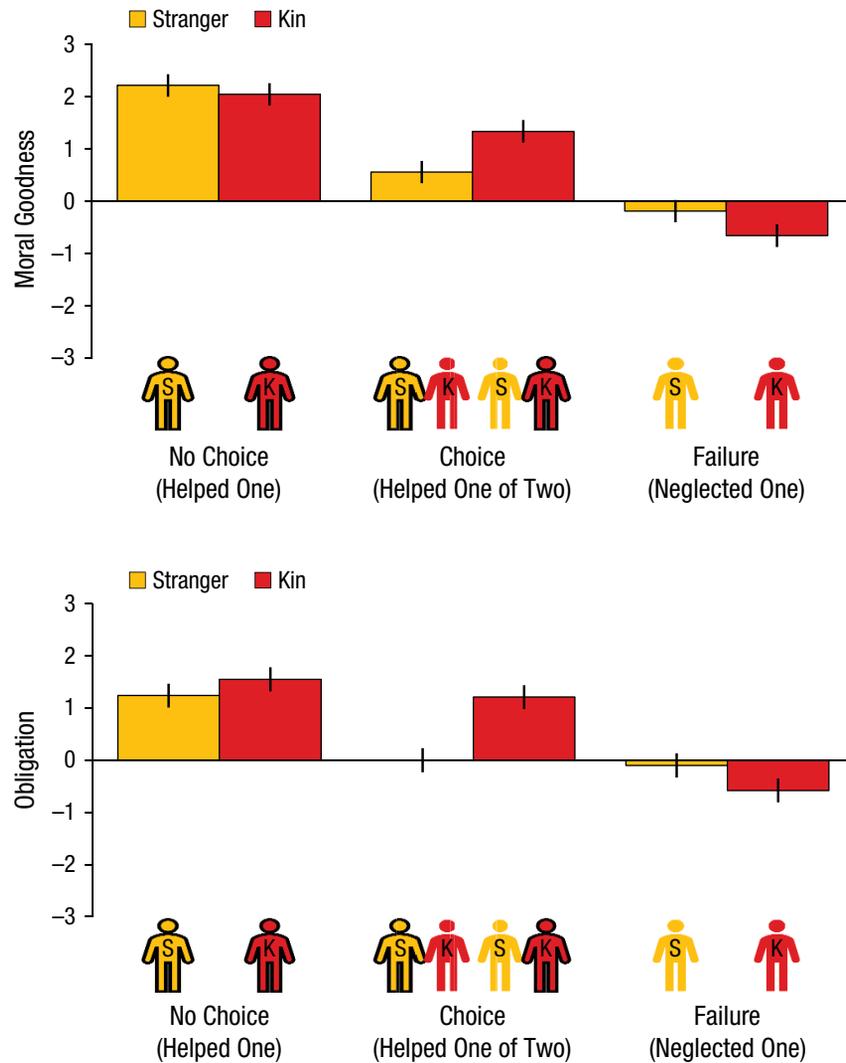


Fig. 5. Study 5: judgments of target agents' moral goodness (top) and obligation (bottom) in partiality contexts as a function of whether another potential beneficiary could have been helped instead (no choice vs. choice vs. failure) and the relationship between target agent and beneficiary (stranger vs. kin). Silhouettes depict the number of potential beneficiaries in each condition; outlined and nonoutlined silhouettes depict helped and neglected potential beneficiaries, respectively. In no-choice conditions, only one potential beneficiary (either a stranger or a relative) was present and was helped by the target agent. In choice conditions, two potential beneficiaries were present (one stranger and one relative), but only one was helped by the target agent. In failure conditions, only one potential beneficiary (either a stranger or a relative) was present and was neglected by the target agent. Error bars represent 95% confidence intervals.

[-0.551, -1.245], $SE = 0.177$, $t = 5.082$, $p < .001$, and the choice and failure conditions, $b = -1.689$, 95% CI = [-1.342, -2.036], $SE = 0.177$, $t = 9.559$, $p < .001$. In no-choice conditions, agents who helped a stranger were judged as fulfilling an obligation significantly less than agents who helped kin. In choice conditions, agents who helped a stranger instead of kin were also judged as fulfilling an obligation significantly less. In the failure conditions, agents who failed to help a stranger were judged as violating an obligation significantly less than agents who failed to help kin.

For impartiality contexts, we found no interaction between relationship and choice when comparing the no-choice and choice conditions, $b = -0.086$, 95% CI = [-0.486, 0.318], $SE = 0.204$, $t = 0.422$, $p = .673$; however, when comparing the choice and failure conditions, we found a significant interaction, $b = 0.420$, 95% CI = [0.020, 0.820], $SE = 0.204$, $t = 2.063$, $p = .039$. In no-choice conditions, agents who helped a stranger were judged as fulfilling an obligation significantly more than agents who helped kin. In choice conditions, agents who helped a stranger instead of kin were also judged

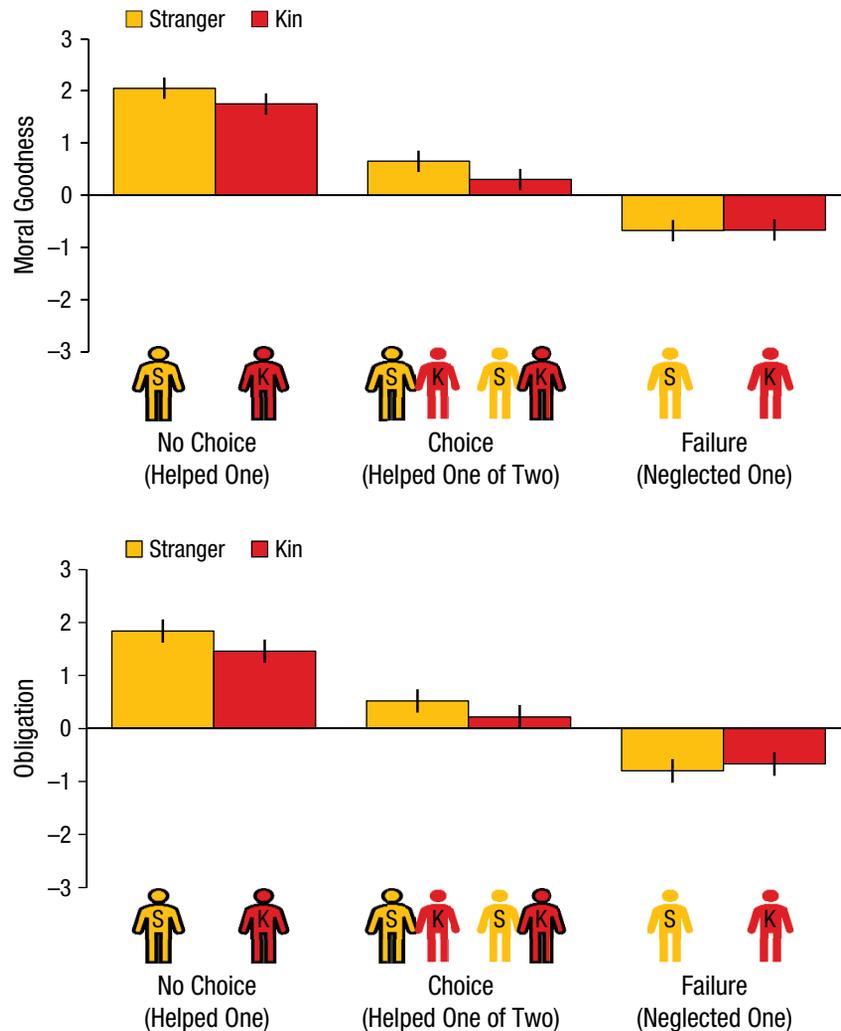


Fig. 6. Study 5: judgments of target agents' moral goodness (top) and obligation (bottom) in impartiality contexts as a function of whether another potential beneficiary could have been helped instead (no choice vs. choice vs. failure) and the relationship between target agent and beneficiary (stranger vs. kin). Silhouettes depict the number of potential beneficiaries in each condition; outlined and nonoutlined silhouettes depict helped and neglected potential beneficiaries, respectively. In no-choice conditions, only one potential beneficiary (either a stranger or a relative) was present and was helped by the target agent. In choice conditions, two potential beneficiaries were present (one stranger and one relative), but only one was helped by the target agent. In failure conditions, only one potential beneficiary (either a stranger or a relative) was present and was neglected by the target agent. Error bars represent 95% confidence intervals.

as fulfilling an obligation significantly more than agents who helped kin instead of a stranger. In failure conditions, there was no difference in obligation judgments.

Discussion

Although it has been argued and demonstrated that people recognize the moral value of impartiality (i.e., not favoring specific individuals; DeScioli & Kurzban, 2009, 2013; Niemi, Wasserman, & Young, 2018), with

consequences for ethical behavior (Dungan, Young, & Waytz, 2019; Waytz, Dungan, & Young, 2013), our findings demonstrate that people also recognize the moral value of partiality (i.e., favoring specific individuals). Although participants judged agents who favored kin over strangers as morally good across Studies 1 through 4, participants in Study 5 viewed partiality as inappropriate in certain boundary conditions, such as when one's role requires fair allocation of limited resources (see Shaw, Barakzai, & Keysar, 2019; Shaw, Choshen-Hillel, & Caruso, 2018).

Table 7. Comparison of Moral-Goodness, Trustworthiness, and Obligation Ratings of Agents Reacting to Strangers and Kin in the Partiality Conditions of Study 5

Condition and dependent variable	<i>M</i>		Mean difference	<i>t</i>	<i>p</i>	<i>d</i>
	Stranger	Kin				
No choice						
Moral goodness	6.22	6.05	0.17 [-0.06, 0.40]	1.43	.153	0.14 [-0.05, 0.33]
Trustworthiness	5.95	5.88	0.07 [-0.16, 0.29]	0.57	.566	0.05 [-0.13, 0.24]
Obligation	5.24	5.55	-0.31 [-0.06, -0.55]	2.47	.014	0.24 [0.05, 0.43]
Choice						
Moral goodness	4.56	5.33	-0.78 [-0.55, -1.01]	6.64	< .001	0.64 [0.46, 0.84]
Trustworthiness	4.43	5.44	-1.01 [-0.78, -1.24]	8.77	< .001	0.83 [0.64, 1.01]
Obligation	4.00	5.21	-1.21 [-0.96, -1.45]	9.64	< .001	0.93 [0.74, 1.12]
Failure						
Moral goodness	3.81	3.34	0.47 [0.24, 0.70]	4.03	< .001	0.39 [0.20, 0.58]
Trustworthiness	4.12	3.56	0.56 [0.34, 0.79]	4.89	< .001	0.46 [0.28, 0.65]
Obligation	3.90	3.42	0.48 [0.24, 0.73]	3.84	< .001	0.37 [0.18, 0.56]

Note: Study 5 had 1,152 observations per variable for partiality contexts. Values in brackets are 95% confidence intervals; *ds* were computed by dividing the mean difference by the square root of the summed variance components (as described by Brysbaert & Stevens, 2018).

In Studies 1 and 2, agents who helped strangers were judged more positively than agents who helped kin; although null effects were observed in Studies 3 through 5, these effects emerged in a meta-analysis (see the Supplemental Online Material file at <https://osf.io/bnwdv/>). Conversely, in Studies 1 through 5, when given the choice between two potential beneficiaries, agents were judged more positively for helping kin instead of strangers. In Studies 3 through 5, when

agents failed to help kin, they were judged more negatively than agents who failed to help strangers. In Studies 4 and 5, when asked explicitly about obligations, participants perceived that agents fulfilled their obligations more when they helped kin than when they helped strangers and that they had violated their obligations more when they failed to help kin (as opposed to strangers). Critically, when occupying roles requiring impartiality, agents in Study 5 who helped kin instead

Table 8. Comparison of Moral-Goodness, Trustworthiness, and Obligation Ratings of Agents Reacting to Strangers and Kin in the Impartiality Conditions of Study 5

Condition and dependent variable	<i>M</i>		Mean difference	<i>t</i>	<i>p</i>	<i>d</i>
	Stranger	Kin				
No choice						
Moral goodness	6.05	5.75	0.30 [0.06, 0.53]	2.46	.014	0.24 [0.05, 0.43]
Trustworthiness	6.01	5.72	0.29 [0.04, 0.54]	2.31	.021	0.22 [0.03, 0.41]
Obligation	5.84	5.46	0.38 [0.09, 0.66]	2.60	.009	0.26 [0.06, 0.45]
Choice						
Moral goodness	4.65	4.30	0.35 [0.11, 0.58]	2.90	.004	0.28 [0.09, 0.47]
Trustworthiness	4.78	4.34	0.44 [0.19, 0.68]	3.50	< .001	0.33 [0.15, 0.52]
Obligation	4.52	4.22	0.29 [0.01, 0.57]	2.01	.044	0.20 [0.01, 0.39]
Failure						
Moral goodness	3.32	3.33	-0.01 [0.22, -0.24]	0.09	.931	0.01 [-0.18, 0.19]
Trustworthiness	3.49	3.39	0.09 [-0.15, 0.34]	0.74	.462	0.07 [-0.12, 0.26]
Obligation	3.20	3.33	-0.13 [0.16, -0.41]	0.89	.372	0.09 [-0.11, 0.28]

Note: Study 5 had 1,176 observations per variable for impartiality contexts. Values in brackets are 95% confidence intervals; *ds* were computed by dividing the mean difference by the square root of the summed variance components (as described in Brysbaert & Stevens, 2018).

of strangers were judged less positively, and as fulfilling an obligation less, than agents who did the opposite.

Morality-as-cooperation theory predicts (and demonstrates) that helping kin is judged as morally good (Curry, Chesters, & Van Lissa, 2019; Curry, Mullins, & Whitehouse, 2019). Our results are consistent with, but add nuance to, this view. Specifically, people are judged even more positively when they help strangers (but less positively when helping strangers instead of kin), and they are judged more negatively when they fail to help kin than when they fail to help strangers. Relatedly, developmental research has found that children expect other people to behave prosocially toward in-group members (Chalik & Dunham, 2020), and they guide others to give more resources to family than to strangers (Olson & Spelke, 2008), suggesting an early-emerging understanding of relationship-oriented obligations. However, it is unclear whether such patterns result from beliefs about what typically occurs or beliefs about what should occur. Supplemental analyses allowed us to distinguish between these possibilities in our data. Specifically, after controlling for perceptions of what typically occurs and for general expectations, we found that obligation perceptions still accounted for unique variance in moral judgments as well as the highest percentage of variance (see the Supplemental Online Material file at <https://osf.io/bnwdv/>). Our results also extend recent work on the impact of kin obligations on moral judgment (Everett et al., 2018; Hughes, 2017). First, by describing kin as genetically and socially distant (as opposed to close), we can disentangle kin-obligation effects from reciprocity effects (i.e., perceptions that people have obligations to reciprocate past help). Second, and most importantly, moderation effects in Study 5 demonstrated how context powerfully reprioritizes kin obligations in moral judgment, suggesting that people's moral psychology goes beyond the intuitive folk wisdom of "family first."

One limitation of the present research is the exclusive reliance on U.S. participants (Henrich, Heine, & Norenzayan, 2010). In no-choice conditions, more positive judgments when agents helped strangers may be due to the tendency of Western, educated, industrialized, rich, and democratic (WEIRD) populations to be more impersonally prosocial (Schulz, Bahrami-Rad, Beauchamp, & Henrich, 2019), and thus, they may more highly value this behavior in others. In less WEIRD populations, however, helping strangers may be interpreted as a misuse of limited resources. Moreover, in partiality-appropriate choice conditions, larger differences may exist in cultures that more strongly value relationship obligations over justice (Miller & Bersoff, 1992), whereas in impartiality-appropriate choice conditions, smaller differences (or no differences) may exist in those same cultures.

In addition to between-culture differences, individual differences may also provide clues to the relationship between values and judgments in this paradigm. In exploratory analyses, endorsement of specific morality-as-cooperation values statistically moderated the reported patterns (see the Supplemental Online Material file at <https://osf.io/bnwdv/>). For example, in partiality-appropriate contexts, the more participants endorsed family values and reciprocity, the larger the difference was in their judgments of moral goodness in choice conditions. However, in impartiality-appropriate contexts, endorsement of family values and reciprocity did not relate to moral-goodness differences in choice conditions. Future work should investigate how these effects vary both within and across cultures.

Another limitation is that none of our scenarios involved friends, who may or may not be perceived like kin. Therefore, whether there are similar, quantitatively different, or qualitatively different obligations to socially close but unrelated other people remains unknown (but see Marshall & Bloom, 2019, for evidence that older children and adults judge that family "has to" help more than friends do).

Conclusion

The current work suggests that people who are impartially prosocial may be evaluated as less moral and less trustworthy precisely because they are perceived as not fulfilling, and perhaps not believing that they have, special obligations. Though our work focused on third-person perceptions of obligation, the findings may have practical implications for first-person prosociality and its promotion. For example, prosocial behavior is often zero sum; the more one donates to distant strangers, the less one has for family and close others. That different judgments emerged for cases that either highlighted this "zero sumness" or did not (i.e., choice vs. no-choice conditions) raises a counterintuitive possibility. Specifically, attempts to convince other people that it is rational and right to treat strangers and nonstrangers similarly may fail insofar as they make relationship obligations salient. Perhaps proponents of large-scale, impartial prosociality will be most effective with messaging that simply communicates the good one can do for strangers without making salient the simultaneous loss for one's family and close others.

Transparency

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Author Contributions

R. M. McManus developed the study concept. R. M. McManus, M. Kleiman-Weiner, and L. Young designed the study. Data were collected and analyzed by R. M. McManus.

R. M. McManus drafted the manuscript, and M. Kleiman-Weiner and L. Young provided critical feedback. All authors contributed to revisions and approved the final version of the manuscript for submission.

Declaration of Conflicting Interests

The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

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Open Practices

All data and materials have been made publicly available via Open Science Framework and can be accessed at <https://osf.io/bnwdv/>. The design and analysis plans for all studies were preregistered at AsPredicted.org (Study 1: <https://aspredicted.org/te2vd.pdf>; Study 2: <https://aspredicted.org/in3gd.pdf>; Study 3: <https://aspredicted.org/yf43k.pdf>; Study 4: <https://aspredicted.org/d6sy7.pdf>; Study 5: <https://aspredicted.org/m533y.pdf>). The complete Open Practices Disclosure for this article can be found at <http://journals.sagepub.com/doi/suppl/10.1177/0956797619900321>. This article has received the badges for Open Data, Open Materials, and Preregistration. More information about the Open Practices badges can be found at <https://www.psychologicalscience.org/publications/badges>.



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Notes

1. Across Studies 1 to 4, genetic relatives ranged from 1.56% related (e.g., second cousin's child) to 12.50% related (e.g., cousin) to the target agent. In Study 5, 4 of 18 total scenarios involved relatives who were 25% related (e.g., niece). In addition, across studies, kin were always described as otherwise like strangers (e.g., had not been seen or spoken to in years) to isolate the effect of relatedness on obligation, as opposed to social closeness or shared history and therefore possible inferences of reciprocity (i.e., that the family member may have helped the target agent in the past). Thus, our approach represents a conservative test; effects are likely to be stronger as relatedness, social closeness, or shared history among kin increases.

2. Because moral-goodness and trustworthiness judgments were highly correlated across studies, for simplicity, we graphically depict only moral-goodness judgments in the figures across studies. (All trustworthiness graphs are included in the Supplemental Online Material file at <https://osf.io/bnwdv/>.)

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