

Motives matter: The emotional consequences of recalled self- and other- focused prosocial acts

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Abstract Past research has demonstrated that engaging in and reflecting upon past instances of prosocial behavior promote happiness. Yet, people provide help for a myriad of reasons. Do the motives for giving impact its emotional consequences? In three experiments ($N > 680$), we compared the emotional outcomes of recalling a past instance of prosocial behavior motivated by self-focused and other-focused concerns. Using both between and within subjects designs, we find that recalling an instance of other-focused helping leads to higher positive affect than recalling an instance of self-focused helping. This finding was mediated by feelings of morality. The present work suggests that not all acts of kindness offer equivalent well-being benefits and that selfish motives may undermine the emotional rewards that typically follow other-focused prosocial behavior.

Keywords Helping · Prosocial behavior · Happiness · Well-being · Morality

Introduction

Using one's resources, whether it be time or money, to benefit others can lead to happiness gains for the helper (e.g., Borgonovi 2008; Dunn et al. 2008, 2014; Lyubomirsky et al. 2005). The emotional benefits of helping persist over time

(Nelson et al. 2016) and are detectable upon delay through simple acts of cognitive reflection (Aknin et al. 2013). Importantly, however, past research has shown that people engage in prosocial behavior for a variety of reasons (Clary et al. 1998) and that various motivations can influence both peoples' behavior and their emotional experiences (Lepper et al. 1973). As such, we investigated whether recalling a previous act of prosocial behavior motivated by self-focused or otherwise selfish reasons (as opposed to other-focused or altruistic reasons) influences the warm glow of giving.

The emotional rewards of prosocial behavior

A large and growing body of research demonstrates that giving both time and money leads to greater well-being for the giver. For instance, data from nearly 30,000 people across 29 states in the United States demonstrates that people who volunteer more frequently are both healthier and happier than those who do not volunteer, even after controlling for well-known predictors of well-being, such as age, gender, relationship status, education, and income (Borgonovi 2008). The relationship between volunteering and well-being is not limited to the United States and has been demonstrated across numerous countries worldwide. In one survey, Haski-Leventhal (2009) examined data from over 30,000 people in 12 countries and found that those who volunteered within the last month reported better health and life satisfaction, as well as lower depression than those who did not volunteer. Similar findings have been demonstrated in an experimental context. For instance, Lyubomirsky, Sheldon, and Schkade (2005) found that participants randomly assigned to engage in five acts of kindness in a single day weekly for 6 weeks reported higher subjective well-being relative to a control group who did not engage in prosocial behavior (see also Nelson et al. 2016 for comparison of prosocial

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acts to self-beneficial acts). Together, these findings suggest that using one's time to help others can increase the giver's happiness.

Along similar lines, engaging in *prosocial spending*—spending money on others as opposed to oneself—yields hedonic rewards (Dunn et al. 2008, 2014). For instance, data from over 230,000 people in 136 countries reveals that people who have donated to charity in the past month report greater subjective well-being than those who have not (Aknin et al. 2013). Moreover, the relationship between prosocial spending and well-being is causal. When students were randomly assigned to spend a windfall of either \$5 or \$20 on themselves or someone else by the end of the day, those who spent the money on someone else were happier, regardless of the dollar amount (Dunn et al. 2008). This relationship between prosocial spending and well-being has been replicated in rich and poor countries (Aknin et al. 2013) and small-scale traditional villages (Aknin et al. 2015). A conceptual replication has even been conducted with toddlers under the age of two (Aknin et al. 2012). The hedonic benefits derived from giving can even be detected when givers have no direct contact with the beneficiary, or when experimenters are unaware of condition assignment, suggesting that happiness is not simply a result of building social relationships or anticipating social praise (Aknin et al. 2014).

Value of recalled experiences

While the emotional benefits of engaging in any single generous action fade over time, prosocial actors can re-experience the warm glow of giving by reflecting upon their previous behavior. Indeed, humans are endowed with the unique capability to mentally travel beyond the present by imagining the future and recalling the past. Importantly, this ability is commonly used (Killingsworth and Gilbert 2010) and allows people to relish (and ruminate) about what could be and what has been, thereby reaping additional utility from positive experiences including prosocial action. In fact, while people report emotional reactions in response to anticipating, experiencing, and recalling a behavior (Loewenstein and Elster 1992), given their frequency anticipations and recollections may offer more total emotional enjoyment and utility than the short-lived act itself (Kahneman 1999; Van Boven and Gilovich 2003).

Supporting the possibility that prosocial actors can revisit the hedonic benefits of generosity upon delay, numerous studies have demonstrated that the emotional rewards associated with prosocial behavior are detectable using recollection paradigms. For example, Aknin et al. (2011) found that recalling a previous instance of prosocial spending led to higher levels of positive affect than recalling a previous instance of personal spending. These findings, detected

among participants from North America, have been replicated using recollection paradigms in India and Uganda, suggesting that emotional benefits of recalled generosity are observable in a range of cultures and contexts (Aknin et al. 2013). Importantly, emotional outcomes reported by participants in recollection designs typically mirror immediate emotional reports provided by participants who engage in a conceptually similar act. For instance, past research has shown that charitable donors are more likely to report greater happiness after giving to charity when they are told how their donation will make a positive impact (as opposed to when this information is not presented; Aknin et al. 2013). Crucially, a similar pattern of results emerged with recollections; participants who recalled a previous instance of prosocial spending were more likely to report greater happiness if their gift had a positive impact on the recipient than if it did not (Aknin et al. 2013). Taken together these findings suggest that even though recollections may be incomplete or inaccurate representations of real world events (e.g., Loftus and Palmer 1974), the emotional consequences of recollections are meaningful because they (a) persist long after a specific event or behavior, and (b) align with emotional reports provided after engaging in analogous behavior.

Various motives for prosocial behavior

A long line of research has explored what motives inspire human behavior (e.g., Deci and Ryan 1980; Erikson 1950; Maslow 1943). Consistent with the literature identifying the self in a broader social context, past research has recognized that both self- and other-focused concerns can motivate many behaviors, including prosocial action (Clary and Synder 1999; Crocker et al. 2017; Deci and Ryan 2002). Indeed, a recent investigation by Konrath et al. (2012) demonstrated that volunteer work, a seemingly pure instance of other-focused concern, can be inspired by a variety of self-focused motives such as self-improvement, self-enhancement, and self-protection. For instance, people may volunteer to gain new skills, bolster their resume, or display a charitable image to others.

Does engaging in prosocial action with self-focused concerns diminish the rewards of prosociality? Several converging lines of research suggest so. For instance, within the context of romantic relationships, engaging in shared couple activities or actions that can benefit the relationship, such as date nights, leads to increased feelings of closeness when the behavior is motivated by other-focused (e.g., 'this will make my partner happy') or couple-focused (e.g., 'this will bring us closer') motives, but not when the behavior is motivated by self-focused concerns (e.g., 'this will make me happy'; Girme et al. 2013). Additionally, when self-focused partners provide support, their efforts are often misguided and ineffective, which can subsequently reduce relationship strength

(Feeney and Collins 2003). This work aligns with a larger literature demonstrating that selfish motives can take various forms (e.g., materialism, self image maintenance, etc.) and are often accompanied with well-being costs (see Crocker et al. 2017 for review).

Looking at prosocial behavior more directly, Konrath et al. (2012) examined how sustained volunteer work motivated by self- versus other-focused concerns predicted mortality among an elderly sample. Findings revealed that volunteering was linked to decreased mortality risk four years in the future, but only among volunteers who were motivated by other-focused concerns, suggesting that the well-being rewards associated with prosocial behavior may be dampened or absent when motivated by self-interest (Konrath et al. 2012). Additionally, Barasch et al. (2016) found that when people donate with a selfish motive they are less effective at persuading others to donate and are seen as less sincere. Finally, consistent with these findings, people appear to report greater happiness after making private (as opposed to public) donations, potentially because public donations are more likely to be motivated by self-focused concerns (Wang and Tong 2015). In sum, past work suggests that engaging in prosocial action for the benefit of others yields greater positive outcomes than engaging in prosocial action for self-gain. However, most of this work has been correlational in nature (e.g., Konrath et al. 2012), focused on one manifestation of prosocial behavior (i.e. donations; Wang and Tong 2015), or explored outcomes other than happiness (e.g., relationship outcomes; Girme et al. 2013). As such, the present work is the first to explore the causal impact of self- and other-focused motives for prosocial behavior on happiness (i.e., positive affect).

Moral perceptions as a mediator

Why might engaging in prosocial behavior with self-focused motives lead to lower levels of well-being than prosocial behavior with other-focused motives? We propose that people may feel as if their actions are selfish and reflect lower moral character when they benefit from their generosity. Moreover, given that most people want to view themselves as good and moral (Allport 1955; Taylor and Brown 1988), such evaluations conflict with this desire and result in lower positive affect. We conceptualize selfishness as a component of moral evaluation, as seen previous work (e.g., Barasch et al. 2014).

Past research confirms that prosocial actors are seen as less moral and more selfish when they benefit from helping. Indeed, donors who support a charitable cause that addresses a threat that has harmed them in the past or could harm them in the future are seen as less charitable than those who have no such personal connection (Lin-Healy and Small 2012). Similarly, people who expect to benefit from their

prosocial actions are rated as having lower moral character and higher selfishness than people who do not expect to benefit from their prosocial actions (Barasch et al. 2014). In fact, individuals who engage in prosocial behavior for self-focused reasons (e.g., volunteer at a homeless shelter to gain another person's affection) are rated as less moral than those who engage in a more neutral behavior with self-focused reasons (i.e., volunteer at a coffee shop to gain another person's affection; Newman and Cain 2014). While the research above suggests that moral judgements are readily made for *others'* behavior, some initial data suggest that similar moral judgements may extend to self-evaluations as well. For instance, Wang and Tong (2015) found that making moral identity salient before donation opportunities amplifies the emotional consequences of private and public gifts, such that the rewards of giving are greatest when the donor's moral identity is made salient before private donations and the rewards are lowest when the donor's moral identity is made salient before public donations. Together, these findings suggest that engaging in prosocial behavior with self-focused motives might lead to lower levels of well-being than engaging in prosocial behavior with other-focused motives because actors might feel that their behavior was less moral.

Present research

We present three experiments examining the emotional consequences of recalling self-focused and other-focused prosocial action. We assessed the impact of these recollections on positive affect, as opposed to other dimensions of subjective well-being (negative affect and life satisfaction; see Diener 1994), because previous research has shown that momentary reports of positive affect are influenced by both recent and recalled acts of prosocial behavior (Aknin et al. 2013). In all three experiments, participants were prompted to recall engaging in a previous prosocial act. Importantly, however, participants were randomly assigned to recall either a kind act motivated by concern for themselves (*self-focused prosocial action*) or a kind act motivated by concern for another person (*other-focused prosocial action*). Afterward, we measured participants' feelings of positive affect. In line with previous research, we predicted that participants recalling an other-focused act of generosity would report higher levels of positive affect than those recalling a self-focused act of generosity. Moreover, in Experiments 2 and 3 we measured feelings of one's moral behavior (i.e. one's perceived morality and selfishness) as a potential mediator, allowing us to explore whether self-evaluations of one's moral action influenced the emotional consequences of recalling self- and other-focused prosocial behavior. Questionnaires and data for all three experiments can be found online at <https://osf.io/bp57k/>.

Experiment 1

As an initial test of our hypothesis we asked people to recall a time they engaged in an act of generous spending with the goal of helping either themselves or helping someone else. We hypothesized that participants who recalled engaging in prosocial spending with other-focused (vs. self-focused) motives would report higher levels of well-being.

Methods

Participants

Eighty-six people ($M_{age} = 21.4$, 26% male) recruited in public spaces on a university campus took part in this study in exchange for a small chocolate bar. This sample size was adequately powered to detect an effect as small as $d = 0.54$ ($\beta = 0.80$, $\alpha = 0.05$).

Procedure

Participants were invited to take part in a short survey on everyday spending habits. If they agreed, participants were randomly assigned to one of two conditions and given a questionnaire that asked them to recall the last time they spent approximately \$20 on someone else and the purchase was either “intended to help *someone else* get ahead or gain some benefit” or “intended to help *you* get ahead or gain some benefit.” Afterward, participants reported their current emotion on the Positive and Negative Affect Schedule (PANAS; Watson et al. 1988; $\alpha = 0.90$ for positive affect) and their demographics.

Results

We predicted that participants randomly assigned to recall an act of generous spending in which their motives were other-focused (i.e. they intended to help someone else get ahead) would report higher positive affect than participants assigned to recall an act of generous spending in which their motives were self-focused (i.e. they intended to help themselves get ahead). We tested this prediction with an independent-samples t-test comparing average positive affect ratings reported by participants in each condition. Supporting our hypothesis, participants assigned to recall a time they spent \$20 on someone else with the intention of helping someone else get ahead reported higher positive affect ($M = 2.79$, $SD = 0.75$) than participants

assigned to recall a time they spent \$20 on someone else with the intention to help themselves get ahead ($M = 2.45$, $SD = 0.80$), $t(84) = 2.059$, $p = .04$, 95% CI [0.01, 0.67], $d = 0.43$.

Discussion

Experiment 1 provides initial support for the hypothesis that people experience greater emotional rewards from recalling a past act of generosity motivated by other-focused concerns than self-focused concerns. While findings align with predictions, this initial study had several limitations. First, the sample size was relatively small even though it reflected all the participants we could recruit in a semester. Second, the study focused specifically on prosocial spending, which only reflects one way in which people can help others. Finally, Experiment 1 did not probe why recalling other-focused prosocial action may promote greater positive affect than self-focused prosocial action. We addressed these limitations in Experiment 2 by recruiting a larger sample, prompting participants to recall a broader range of prosocial behaviors, and assessing feelings of morality as a potential mediator of interest.

In Experiment 2, we also employed a within-subjects design for two reasons. First, this design provides more statistical power. Second, by asking participants to recall instances of both self- and other-focused helping in counterbalanced order, we were able to investigate whether counterfactual information influences perceptions of one’s morality and selfishness, which, in turn, may impact emotional outcomes. Indeed, in light of past work demonstrating that counterfactual information leads people to evaluate actors who engage in self-beneficial charitable behavior more negatively than actors who do not engage in charitable behavior at all (because *selfish* prosocial behavior is compared to *selfless* prosocial behavior but self-interested action is not; Newman and Cain 2014), we hypothesized that reflecting on an instance of other-focused prosocial behavior first would lead participants to consider how their actions could have been motivated by care for another when imagining a self-focused prosocial act. As such, we predicted that participants who recalled an other-focused prosocial action first would display larger differences in perceived morality, and emotional outcomes across the two conditions. In contrast, given that self-interest is frequently believed to be ubiquitous even within the realm of prosocial action (Miller 1999), the counterfactual of other-focused concern may not be apparent when self-interested prosocial behavior is considered first. As such we predicted that participants presented with self-focused helping first would display smaller differences in perceived morality, and emotion across the two conditions.

Experiment 2

Methods

Participants

Three hundred and three individuals participated on Amazon's mTurk ($M_{age} = 32.6$, 48% male) in exchange for a small monetary payment. This sample size was adequately powered to detect an effect as small as $f = 0.08$ or $d_z = 0.14$ ($\beta = 0.80$, $\alpha = 0.05$). Drop-out rates did not differ by condition (see SOM; Zhou and Fishbach 2016).

Procedure

After agreeing to participate in the online survey, participants were asked to describe two helping experiences in counterbalanced order. Specifically, participants were asked to describe a time in which they helped someone else with the goal of helping *themselves* get ahead and a time in which they helped someone else with the goal of helping the *other person* get ahead. After each recollection, participants were asked to report their current positive affect on the PANAS ($\alpha = 0.92$ for positive affect; Watson et al. 1988). In addition, participants were asked to what extent each helping behavior was motivated by concern for oneself or another person ("To what extent was your help driven by the following motives or concerns?") as a manipulation check on a 100-point sliding scale (0—concern about myself, 100—concern about another person). Finally, participants completed measures of the potential mediator after each recollection by reporting the extent to which they felt 'selfish' and 'moral' right now on five point scales (1—not at all, 5—extremely); looking at the responses to participants first recollections, these two items were highly correlated, $r(301) = -0.22$, $p < .001$. As such, we reverse scored responses to the "selfish" question and averaged items to create a single measure of "morality".

Results

Manipulation check

We first examined whether motivations for self- and other-focused helping differed using a 2 (motivation: other-focused vs. self-focused) X 2 (presentation order: other-focused helping first vs. last) ANOVA. As expected, analyses revealed a significant main effect of motivation condition, such that participants reported that their actions were driven by a greater concern for another person after recalling an instance of other-focused helping ($M = 88.19$, $SD = 15.94$) than after recalling an instance of self-focused helping ($M = 39.29$, $SD = 26.85$), $F(1,298) = 729.96$, $p < .001$, $f = 1.56$. We also detected a significant interaction with presentation order,

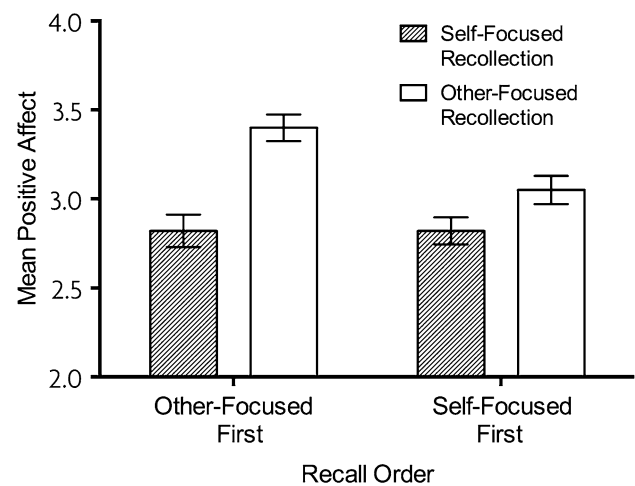


Fig. 1 Means and standard errors for positive affect reported in Experiment 2. There was a significant condition by presentation order interaction, such that difference between self- and other-focused helping on positive affect was larger when the other-focused condition was presented first

$F(1,298) = 8.01$, $p = .01$, $f = 0.18$, demonstrating that this gap in motives was greatest when participants described an act of other-focused helping first ($M_{self} = 34.38$, $SD = 25.89$; $M_{other} = 88.28$, $SD = 14.76$) than when self-focused helping was described first ($M_{self} = 44.41$, $SD = 26.96$; $M_{other} = 88.09$, $SD = 17.14$), supporting the hypothesis that counterfactual information may amplify the difference in self-perceptions and emotional outcomes. Importantly, however, simple effect comparisons indicated that recalling an act of other-focused helping led to greater concern for others than self-focused helping in both presentation orderings, $F_s > 285.18$, $p_s < 0.001$.

Positive affect

We examined our key question of whether recalling an instance of other-focused helping led to greater positive affect than self-focused helping and whether presentation order influenced emotional outcomes by conducting a 2 (motivation: other-focused vs. self-focused helping) X 2 (presentation order: other-focused helping first vs. last) ANOVA. Consistent with Experiment 1, participants reported higher levels of positive affect after recalling an instance of other-focused helping ($M = 3.23$, $SD = 0.96$) than after recalling an instance of self-focused helping, ($M = 2.82$, $SD = 1.04$), $F(1,300) = 56.42$, $p < .001$, $f = 0.43$ (see Fig. 1). Moreover, there was a significant interaction between recalled helping type and presentation order, $F(1,300) = 10.0$, $p = .002$, $f = 0.18$, such that the relative difference in positive affect was greatest when people recalled an act of other-focused giving first as opposed to last. The difference, however, was significant and in the predicted

direction regardless of presentation order, $F_s > 11.70$, $p_s < 0.001$.

Do similar findings emerge with a between-subjects design, akin to Experiment 1? To find out, we compared positive affect reports from participants who were first assigned to recall an act of other-focused helping to those of participants who were first assigned to recall an act of self-focused helping using a between-subjects t-test. Consistent with findings reported above and those of Experiment 1, individuals who first recalled an instance of other-focused giving reported higher positive affect ($M = 3.40$, $SD = 0.93$) immediately afterward than individuals who first recalled an instance of self-focused giving ($M = 2.82$, $SD = 0.93$), $t(300) = 5.44$, $p < .001$, 95% CI [0.37, 0.79], $d = 0.63$.

Mediation

We conducted a within-subjects mediation analysis to explore whether perceptions of one's moral behavior explained differences in positive affect after self- and other-focused helping recollections. To do so, we utilized the MEMORE macro for SPSS (Montoya and Hayes 2016) because it allowed us to enter our morality composite variable as a mediator. Within-subjects mediation assesses the relationship between the difference scores of the mediators and outcome variable (Judd et al. 2001); the difference scores used in the following analyses were calculated as other-focused minus self-focused. We predicted that helping with other-focused motives would lead to higher feelings of morality than helping with self-focused motives. Supporting these predictions, people reported feeling more moral after recalling an instance of other-focused helping ($M = 4.11$, $SD = 0.75$) than self-focused helping ($M = 3.28$, $SD = 1.00$), and this difference in morality predicted their difference in positive affect after recalling other- versus self-focused helping ($b = 0.41$, $t(298) = 9.32$, $p < .001$, 95% CI [0.33, 0.50]; Indirect effect: $b = 0.35$, 95% CI [0.24, 0.47]). Thus, other-focused helping led to increased feelings of morality, which in turn led to higher positive affect.

Fluency

One reason why other-focused helping may lead to higher happiness than self-focused helping is because acts of self-focused generosity may be rare, and thus challenging to recall. If so, participants in the self-focused condition may simply report lower positive affect than participants in the other-focused condition because their memory was harder to retrieve. To address this alternative explanation, we examined the average amount of time spent completing the writing task in the online survey across conditions with the logic that participants struggling to recall a prosocial act would have needed more time to complete this task. Challenging

fluency as an alternative explanation, a paired-samples t-test revealed that participants spent similar amounts of time completing the writing exercise when describing both an other-focused ($M_{sec} = 239.21$, $SD = 150.16$) and self-focused ($M_{sec} = 232.39$, $SD = 129.25$) instance of giving, $t(302) = -0.79$, $p = .43$, 95% CI [-23.90, 10.26]. As such, these results suggest that fluency is unlikely to account for the observed positive affect difference across conditions.

Discussion

Experiment 2 offers additional causal evidence that people experience greater emotional rewards after recalling a generous act motivated by concern for another person than a generous act motivated by concern for themselves. These benefits are detectable in both between-subjects (Experiment 1) and within-subjects designs (Experiment 2). Interestingly, the results of Experiment 2 suggest that evaluations of one's own behavior can be influenced by counterfactual information, such that thinking about other-focused helping first draws attention to the fact that behavior can be motivated by care for another, and magnifies the relative emotional benefits of other-focused prosocial behavior. Finally, mediation analyses indicated that emotional benefit of other-focused helping (vs. self-focused helping) is due, at least in part, to increased feelings of morality.

We conducted Experiment 3 to make several additional improvements. First, we wanted to see if results replicated in another large sample, this time using a between-subjects design to provide a more stringent test. Second, in Experiment 2 the dependent variable, positive affect, was measured *before* the potential mediators. In Experiment 3 we corrected this oversight by measuring the potential mediator before positive affect. Finally, in Experiment 3 we decided to code participant's detailed recollections to explore whether self- vs. other-focused helping differ along several dimensions of interest (e.g., target of help, form of help, etc).

Experiment 3

Methods

Participants

Two-hundred and ninety-nine individuals participated on Amazon's mTurk ($M_{age} = 33.43$, 50.5% male) in exchange for a small monetary payment. This sample size was adequately powered to detect an effect as small as $d = 0.29$ ($\beta = 0.80$, $\alpha = 0.05$). Dropout rates did not differ by condition (see SOM; Zhou and Fishbach 2016).

Procedure

Participants were randomly assigned to recall and describe a recent instance of self- or other-focused helping behavior. Specifically, participants in the *other-focused helping condition* were asked to spend three minutes recalling an instance of helping in which they helped someone else with the intention of helping that other person get ahead or gain some benefit. Meanwhile, participants in the *self-focused helping condition* were asked to spend three minutes recalling an instance of helping in which their intention was to gain some benefit for themselves. To encourage engagement and detailed recollections, participants were asked to describe the event for a subsequent participant to read.

After completing the recollection exercise, all participants completed measures of the proposed mediator by reporting how selfish and moral they felt right now on 7-point likert scales (1—*Very slightly or not at all*, 7—*Extremely*). Once again, these two items were highly correlated, $r(297) = -0.35$, $p < .001$. As such, we reverse scored responses to the “selfish” question and averaged items to create a single measure of “morality.” Following this, participants reported their current positive affect using the PANAS (alpha for positive affect = 0.92; Watson et al. 1988). In addition, participants completed two manipulation check questions in which they reported the extent to which their helping behavior was motivated by (a) a concern for themselves and (b) concern for another person on 100-point sliding scales (0 - *Not at all*, 100 - *Completely*).

Coding

Self-focused and other-focused acts of generosity differ in their motives, but do they differ in other ways as well? In particular, are self-focused acts of generosity less impactful, kind, or socially connecting? Or are self-focused acts of kindness directed towards more distant, as opposed to close, others? To address alternative explanations that the quality, form, or target of help may explain the dampened emotional rewards of self-focused giving, we implemented a two-step coding procedure to explore potential differences.

In Step One, a trained research assistant, blind to hypotheses and participants’ positive affect scores, scrubbed all recollections of information disclosing recall condition; this ensured that coders would not be able to identify whether the act of kindness was motivated by self or other concerns. In Step Two, each of the scrubbed recollections generated in Step One were rated by three independent coders, blind to recollection prompt and positive affect scores, for apparent degree of kindness, impact, type of help, and closeness of the target. Specifically, *kindness* and *impact* were each rated on separate 4-point likert scales (“How kind was the act?” 1—not very kind, 2—somewhat kind, 3—very

kind, 4—extremely kind; “How much did the act appear to improve the recipient’s situation?” 1—not at all, 2—a little, 3—quite a bit, 4—a lot). Coders also noted whether each of the following *types of help* were present (coded as 1) or absent (coded as 0): (a) gave help/skill (e.g., helped with computer trouble), (b) gave money, (c) gave item (e.g., book, computer), (d) gave time, or (e) other. Similarly, coders noted whether each of the following *recipient* possibilities were present (coded as 1) or absent (coded as 0): (a) stranger, (b) acquaintance, (c) colleague, (d) friend, (e) family member, or (f) romantic partner. Coders were told to only indicate that a type of help or recipient was present if clear evidence was included. For instance, if a participant indicated that they gave a gift to “a friend” then coders indicated that the recipient was a friend. If, however, a participant indicated that they gave a gift to “someone”, the recipient could not be coded.

Results

Manipulation check

We first examined whether participants in the self- and other-focused helping conditions indicated that their behavior reflected different levels of concern for themselves and others. Suggesting that participants were able to recall appropriate instances of self- and other-focused helping, participants in the other-focused helping condition reported that their behavior reflected significantly higher levels of concern for others ($M = 85.13$, $SD = 19.22$), $t(296) = -17.06$, $p < .001$, 95% CI $[-50.88, -40.36]$, $d = 1.98$, than participants in the self-focused helping condition ($M = 39.51$, $SD = 26.42$). Similarly, participants in the self-focused helping condition reported that their actions reflected significantly higher levels of concern for themselves ($M = 71.57$, $SD = 22.69$) than participants in the other-focused helping condition ($M = 21.14$, $SD = 26.14$), $t(297) = 17.80$, $p < .001$, 95% CI $[44.86, 56.01]$, $d = 2.08$.

Positive affect

Our key prediction was that participants randomly assigned to recall an instance of other-focused giving would report levels of higher positive affect than participants randomly assigned to recall an instance of self-focused giving. We tested this hypothesis with an independent-samples t-test comparing average positive affect reports provided by participants in the self- and other-focused conditions. Consistent with our hypothesis and Experiments 1–2, participants randomly assigned to recall an instance of other-focused giving reported higher positive affect ($M = 3.16$, $SD = 0.83$) than participants assigned to recall an instance of self-focused

Table 1 Coder ratings of recollections in Experiment 3

Dimension	Alpha	Recall condition		Mean comparison
		Self-focused (n = 139)	Other-focused (n = 150)	
Kindness	0.70	2.13 (0.37)	2.55 (0.52)	t(285) = 7.57, p < .001
Impact	0.77	2.25 (0.47)	2.79 (0.61)	t(285) = 8.15, p < .001
Content				
Skill	0.86	73.3% (37.7)	66.9% (41.7)	t(285) = -1.37, p = .172
Money	0.98	6.0% (23.4)	15.9% (35.6)	t(285) = 2.77, p = .006
Item	0.70	13.1% (42.4)	19.1% (34.5)	t(285) = 1.31, p = .192
Time	0.67	27.5% (29.2)	32.2% (36.1)	t(285) = 1.21, p = .228
Target				
Stranger	0.93	11.9% (29.4)	13.6 (32.8)	t(285) = 0.46, p = .645
Acquaintance	0.78	12.4% (27.5)	7.3% (22.2)	t(285) = -1.74, p = .083
Colleague	0.96	18.3% (36.5)	15.9% (36.0)	t(285) = -0.57, p = .566
Friend	0.98	19.1% (38.0)	27.0% (43.9)	t(285) = 1.64, p = .103
Family	0.97	15.8% (35.3)	21.8% (40.7)	t(285) = 1.32, p = .188
Romantic partner	0.96	7.9% (25.8)	7.9% (26.0)	t(285) = 0.03, p = .979

All recollections were rated on the above dimensions by three independent coders. Kindness and impact were rated on a 1–5 scale. Content and target were rated as 0 (absent) or 1 (present)

helping ($M = 2.76, SD = 0.94, t(297) = 3.902, p < .001, 95\%$ CI [0.20, 0.60], $d = 0.46$).

Coder ratings of recollections

Average coder ratings are summarized in Table 1. As can be seen, recollections provided by participants in the self- and other-focused conditions were rated as similar along many dimensions. For instance, coders blind to condition indicated that recollections contained similar frequencies of giving skill-based help, items, and time. Similarly, participants in both conditions were equally likely to provide help to a stranger, colleague, family member or romantic partner. Interestingly, several significant differences in self- and other-focused helping did emerge. Recollections provided by participants in the other-focused helping condition were rated as significantly higher in kindness, impact, and more likely to involve financial gifts than recollections provided by participants in the self-focused helping condition. In addition, there were marginal differences detected, mainly ratings of giving to a friend or acquaintance.

Importantly, however, the main effect of condition remained significant while controlling for coder ratings of dimensions that differed across conditions. Specifically, we conducted Analyses of Covariance (ANCOVAs) in which condition assignment was entered as the independent variable, positive affect was entered as the dependent variable, and each coding dimension showing either a marginal or significant difference across recall condition was entered as a covariate in separate analyses (i.e. kindness, impact, giving money, target as acquaintance, target as friend). In all cases, the main effect of condition remained significant, $F_s > 6.50,$

$p_s < 0.02,$ suggesting that although self- and other-focused acts of helping may differ in meaningful ways, these differences do not account for the observed emotional differences.

Mediation

We tested whether recalling an other-focused act of giving led to higher levels of positive affect than self-focused giving through increased feelings of morality using the lavaan package (Rosseel 2012) in R (R Core Team 2016). First, we regressed positive affect on condition assignment to ensure that there was a direct effect of condition assignment on positive affect before the mediator was added to the model. Consistent with earlier analyses, we found that participants randomly assigned to recall an instance of other-focused giving reported higher positive affect than participants assigned to recall an instance of self-focused giving ($\beta = 0.40, p < .001$).

Following this, we entered condition as the independent variable predicting positive affect, with the two-item morality measure entered as a mediator. Analyses revealed that recalling an instance of other-focused giving predicted increased feelings of morality $b = 0.78, p < .001, 95\%$ CI [0.59, 0.97]. Consistent with our prediction, there was a significant indirect effect such that to the extent other-focused giving increased feelings of morality, positive affect increased as well ($b = 0.36, 95\%$ CI [0.24, 0.49]). Importantly, results of the mediation analysis remain consistent when average coder ratings for all dimensions shown to differ across conditions (i.e. kindness, impact, giving money, target as acquaintance, target as friend) are included in the model, suggesting that these differences do not account for

the observed results.¹ Taken together, the present results suggest that recalling a past instance of other-focused giving influences experiences of positive affect through increased feelings of morality.

Fluency

Once again, we examined whether fluency could account for the differences in positive affect observed across the two recall conditions. To do so, we examined the amount of time participants spent completing the writing task in the online survey, assuming that, if self-focused acts of helping were less common and harder to recall, participants would require more time to complete the writing exercise. As seen in Experiment 2, an independent-samples t-test revealed that participants spent approximately the same amount of time writing about other-focused ($M_{sec} = 223.94$, $SD = 79.75$) and self-focused ($M_{sec} = 236.69$, $SD = 94.41$) instances of helping, $t(297) = 1.26$, $p = .21$, 95% CI $[-7.16, 32.67]$, suggesting that fluency is unlikely to explain the present results.

Discussion

Experiment 3 provides further evidence that reflecting upon recollections of other-focused helping leads to greater current positive affect than reflecting upon recollections of self-focused helping. Moreover, mediation analyses suggest that feelings of morality explain these effects. Interestingly, coder ratings revealed that acts of other-focused help are viewed as kinder and more impactful, as well as more likely to involve gifts of money, than acts of self-focused help, yet none of these differences explained the positive affect differences observed across conditions.

General discussion

Do the motivations behind prosocial action influence its emotional outcomes upon reflection? The results of three experiments reported here suggest the answer is yes. People assigned to recall a prosocial act in which they were motivated by self-benefit reported lower well-being afterward than people assigned to recall a prosocial act in which they

were motivated by concern for another person. This finding was mediated by feelings of morality in two studies. Moreover, results appear to be robust to recall fluency, various forms of prosocial behavior, such as prosocial spending (Experiment 1) or the broad category (Experiments 2–3), and detectable using both between and within subjects designs. In addition, coder ratings of participant generated recollections in Experiment 3 demonstrated that while self- and other-focused acts of helping may differ in interesting ways, these disparities do not account for the emotional consequences.

The present work adds to the large literatures on prosocial behavior, motivation and emotion by demonstrating one cost of motivated giving. These experiments build upon previous correlational (Konrath et al. 2012) and experimental work (Wang and Tong 2015) by offering additional experimental evidence for the emotional rewards of other-focused helping. Moreover, these findings offer insight into a potential mediator of this effect—perceived morality. Indeed, just as previous research has shown that third-party actors are judged as less moral when they receive self-benefit from their prosocial action (Lin-Healy and Small 2012; Newman and Cain 2014), the present studies demonstrate that the same judgments are applied to *oneself* when prosocial behavior provides self-benefit. Moreover, these judgments dampen the emotional rewards of the actor's generosity upon reflection. As such, the current work underscores a potentially similar evaluation process applied to various targets (oneself and others) and the extent to which self-benefit taints evaluations of helpers. Indeed, even though people are (a) privy to more contextual information about their own generous acts and (b) particularly motivated to see themselves in a positive light, kind acts providing opportunity for self-gain lead givers to see themselves less favorably and experience reduced emotional rewards when thinking about these acts.

Various features of the present studies suggest that results are not simply the product of demand effects or self-presentation. Indeed, given that Experiments 1 and 3 utilized between-subjects designs in which participants were assigned to recall only one of two types of helping (self- or other-focused) before reporting their positive affect, it would have been difficult for participants recalling other-focused helping to intentionally inflate their well-being ratings above those of participants in self-focused helping condition, because they were not made aware of the alternative condition, let alone the scores reported in that condition. Instead, we argue that the present findings reflect differences in current affect experienced after recalling a relatively selfish or altruistic act of kindness.

¹ When all coding dimension shown to differ across recall conditions in Experiment 3 were entered as covariates (i.e. kindness, impact, giving money, target as acquaintance, target as friend) into the mediation model, the key conclusion remained unchanged: recalling an instance of other-focused helping led to higher feelings of positive affect than self-focused helping through perceptions of morality (Indirect Effect = .34, $p < .001$, 95% CI [.23, .49]). It is also worth noting that none of the five coder rated dimension included as covariates predicted feelings of morality or positive affect (all $ps > .10$). Full model results can be found at <https://osf.io/bp57k/>.

Limitations and future directions

The present work focused on the emotional consequences of recalling self- and other-focused helping and, as such, does not evaluate the immediate emotional outcomes of helping with these distinct motives. While past work suggests that the emotional consequences of generous action are similar when assessed immediately and upon delay (e.g., Aknin et al. 2013; Dunn et al. 2008), it is possible that generous action inspired by self- and other-focused concerns may yield different results. Indeed, to the extent that a time delay allows participants to construe self-focused prosocial action as an anomaly and not the standard, participants may be more comfortable reflecting on their actions and accurately sharing their emotional state. Thus, while we chose to focus on recollections of past behavior because they have been argued to exert a significant and sustained impact on their creators (Van Boven and Gilovich 2003), future researchers would be wise to examine whether prosocial action motivated by self-benefit is more or less rewarding in the present than prosocial action motivated by concern for others.

Beyond the immediate emotional outcomes of self- and other-focused giving, future research should further explore the role that feelings of morality play in mediating this relationship. As noted above, we found consistent evidence that other-focused giving leads to higher feelings of morality than self-focused giving, and this difference predicted higher positive affect (see Experiments 2–3). These findings, however, were uncovered using correlational mediation analyses, which cannot confirm causality. Therefore, it may be helpful to directly manipulate perceived morality in future work to more directly test the proposed mediation model (Imai et al. 2012).

Conclusions

People engage in helpful behavior for various reasons. Do all acts of generosity yield equivalent emotional rewards for the giver? Three studies suggest that the emotional rewards of recalling a previous prosocial act depend on the motives or focus of the helping behavior. Specifically, recalling a time that one engaged in a helpful act motivated by concern for others leads to greater well-being than recalling a helpful act motivated by concern for oneself, a finding mediated by feelings of morality. This work offers greater insight into human motivation, prosociality and emotion—and suggests that the most likely way to feel good about giving is to focus on what you can do for others and not how you might benefit from doing so.

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