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Reports

Goal gradient in helping behavior

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HIGHLIGHTS

- People are more likely to pitch in as charitable campaigns approach their goals.
- Three studies showed evidence of this goal-gradient helping behavior.
- Perceived impact and heightened satisfaction explain the late stage contributions.

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ABSTRACT

People are more likely to pitch in as charitable campaigns approach their goals. Such "goal gradient helping" occurs in part because late-stage efforts provide donors with a heightened sense of personal impact, an influential source of satisfaction from prosocial acts. Using web robot technology in an Internet field study of micro-lending, Study 1 demonstrated that charity contribution rates increase as recipients approach their fundraising goals. Study 2, a large-scale field experiment, found that funds close to reaching campaign goals received more donations than did funds far from reaching campaign goals. Study 3 replicated the goal gradient helping effect in a controlled scenario experiment, and mediational analyses showed that increased perceived impact of late-stage contributions, and the resultant satisfaction from this impact, explain goal gradient helping. In conclusion, people are not charitable simply to be kind or to relieve negative emotions; they find satisfaction from having personal influence in solving a social problem.

Introduction

Generous acts can increase happiness. People who have greater opportunities to volunteer are happier than those whose have fewer (Meier & Stutzer, 2008). Mesolimbic reward systems in the brain that activate when we receive rewards also activate when we donate to charity (Moll et al., 2006). There even is evidence that helping others can provide greater satisfaction than helping ourselves; people who are randomly assigned to spend money on others report greater happiness than do those who are randomly assigned to spend the same amount of money on themselves (Dunn, Aknin, & Norton, 2008).

Where does the joy of giving come from? In this paper, we explore the idea that perceptions of personal impact are an influential source of prosocial satisfaction. Specifically, we use the domain of goal pursuit, and the finding that people experience a greater feeling of progress when they approach achieving a goal, to explore the role of impact as both a driver of charitable acts, and as a source of satisfaction from prosocial behavior.

Theoretical background

As humans and other animals approach reaching a goal, their efforts toward that goal increase (Locke & Latham, 1984). Rats run faster as they approach a food reward (Hull, 1934), and humans increase effort as they approach rewards such as gift certificates (Kivetz, Urminsky, & Zheng, 2006) or goals such as visual finish lines (Cheema & Bagchi, 2011). This pattern of increased effort in proximity to goals has been termed "goal gradient" motivation, a phenomenon originally described in the 1930s by the behaviorist Hull when observing patterns of acceleration in rat maze navigation (Hull, 1934).

One reason that goal gradient patterns occur, at least in humans, is that people judge late-state events to have greater value than equivalent early-stage events. In many situations, this makes perfect sense because the ratio of benefit to (remaining) cost increases as one approaches a goal. For example, when someone must rate 10 more songs to receive $10, the expected value of rating the next song is $1.

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In contrast, when the person advances and must rate only 2 more songs to receive $10, the expected value of rating the next song is $5.

However, goal gradient effects have also been observed in situations in which the normative rationale is less, if at all, compelling. In one study scenario, two people flipped a coin and won a prize if the flip outcomes matched each other (both heads or both tails). Participants reported that the person who flipped last would receive more blame for a failed outcome than would the person who flipped first, even though both contributors had equal objective impact (Miller & Gunasegaram, 1990).

In some cases, participants have explicitly stated that late-stage actions seem more impactful than early-stage actions. Participants randomly assigned to receive a coffee loyalty reward card with 7 out of 10 coffee purchases already completed, stated that they would make greater progress toward the 10-drink goal with 1 additional drink purchase than did participants who received a card with 3 out of 10 coffee purchases already completed (Koo & Fishbach, 2012). The same objective unit of progress (one drink) seemed more impactful later in the sequence than earlier in the sequence, consistent with the notion that as distance to a goal decreases, each incremental step represents greater proportional progress in the shrinking portion that remains (Förster, Higgins, & Idson, 1998).

These patterns of increased impact as goal progress advances are important to the present investigation because a greater sense of impact predicts prosocial acts. People are more likely to donate when their donation amount is matched by an outside source, allowing the original gift to feel more substantial (Karlan & List, 2007). People also are more likely to donate when they receive detailed information, rather than broad information, about a charity because specific information increases the perceived impact of a contribution (Cryder, Loewenstein, & Scheines, 2013). A similar pattern occurs in work settings when employees are motivated to behave prosocially when they feel that their actions will meaningfully help others or have impact (Grant, 2007; Grant et al., 2007).

Because impact is important for prosocial acts, and because the perception of impact increases with goal proximity, we predicted that people would be more likely to help as prosocial campaigns approached their goals. Importantly, we predicted this pattern of goal gradient, or accelerated, helping despite the fact that prosocial goals do not offer explicit rewards. Many demonstrations of goal gradient motivation involve material incentives, and in these cases, as discussed above, accelerated efforts near the end of goal progress have a clear rationale: the expected value of each incremental unit of effort increases.

Prosocial goals, however, do not usually offer such explicit incentives, nor do they even offer a clear sense of personal achievement when the goal is reached. Many times, prosocial contributors, particularly those who contribute to charity campaigns, never even learn whether the goals they contribute to are achieved or not. However, because of the connection between late-stage contributions and impact, and the connection between impact and generosity, we expected to observe a goal gradient in helping behavior.

We also investigated a subsidiary hypothesis that impact will serve as a source of satisfaction from prosocial acts. Although evidence is building regarding the hedonic benefits of giving (Dunn et al., 2008; Harbaugh, Mayr, & Burghart, 2007; Meier & Stutzer, 2008), little is known about where this happiness comes from. Here, we propose that one source of the happiness from giving is a sense of personal impact (see also Sonnentag & Grant, 2012).

We tested for the existence of goal gradient helping in three studies. Study 1 examined patterns of contributions in an observational field study that measured how rates of contributions to an online microloan website changed as loan recipients approached their fundraising goals. Study 2, a large-scale randomized field experiment, measured donations to charitable campaigns when those campaigns were close to, versus far from, reaching their goals. Study 3, a controlled scenario experiment, tested how goal proximity influenced helping behavior while attempting to hold constant the certainty of the goal's success. Finally, Study 3 also investigated the explanatory roles of impact and satisfaction for goal gradient helping.

Study 1: Kiva field study

Study 1 relied on information from the Kiva website (www.kiva.org). Kiva is an organization that connects potential microloan recipients and microloan providers via the web. Recipients request the loans for specific amounts from local microloan agencies who then contract with Kiva to raise the funds. The Kiva website lists hundreds of potential recipients with information about their background, the nature of their loan request, and, most important for this study, the progress that recipients have made so far toward reaching their loan amount goal. Progress information is presented via both numerical percentages and a progress bar, and is updated immediately when a contribution is made. Private individuals can go to the Kiva website and contribute money toward individual recipients' loan needs. Each contribution is not a pure donation, but is a loan with a very high (98.57%) average repayment rate (Kiva Microfunds, 2010). There is no interest return on the loan to the individual contributor and the default contribution amount is $25.

Method

Using a web robot (a 'bot'), we collected information every hour, every day, for approximately one week for each loan recipient listed on the Kiva website (number of recipients = 209; number of observations = 2011). The main variable of interest was the percent progress that loan recipients had made toward their goal at every hour of observation. Because the Kiva website updates every time that a recipient receives a contribution, we could measure how quickly recipients were making progress toward their goal based on the level of progress that they had achieved so far.

Results and discussion

Results supported the hypothesis that rates of helping increase as recipients approach their fundraising goals. The rate of contribution when recipients were 33.01–66% of the way toward reaching their fundraising goals was significantly greater than when recipients were 0–33% of the way toward reaching their fundraising goals ($M_{33–66\%} = 10.8\%$ per hour, $M_{0–33\%} = 6.7\%$ per hour; $t(1, 208) = 4.7$, $p < 0.0005$; Fig. 1). Similarly, the rate of contribution when participants were 66.01–100% of the way toward reaching their fundraising goals was significantly greater than when participants were 33.01–66% of the way toward reaching their goals ($M_{66–100\%} = 12.8\%$ per hour, $M_{33–66\%} = 10.8\%$ per hour; $t(1, 208) = 2.53$, $p = 0.01$). This pattern of increasing rates of donation was robust across different choices of cutoffs; for example, comparisons of progress rates at 0–20% progress, 20–80% progress, and 80–100% progress yielded the same pattern of increasing rates as recipients approached their fundraising goals (p's < 0.01).

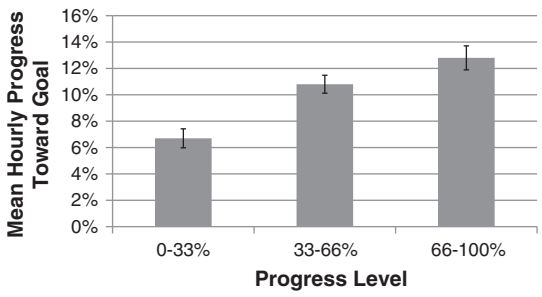

Fig. 1. Microloan recipients' rate of progress toward the goal based on the level of progress achieved so far.

In sum, results from Study 1 support the hypothesis that real contributions increase as individuals approach their fundraising goals, and this finding is robust across choice of cutoffs.

In this observational study, however, there were some features of the Kiva website that covaried with the information about progress toward the goal, making it possible that factors besides goal proximity drove the goal gradient pattern. The most important potential confound was that website visitors could sort the order of potential loan recipients in several ways including by "popularity." We were not able to determine how popularity was calculated, but it is possible that rates of contribution were included in the popularity score so that recipients quickly making progress toward their goals were sorted to the top of the list, resulting in even greater rates of progress as they continued to raise funds. Although it is unlikely that popularity fully accounted for our results in Study 1, we designed Study 2 to provide a controlled experimental test of the influence of nearing a goal on charitable donation decisions.

Study 2: charity field experiment

Study 2 was a field experiment conducted in partnership with a local chapter of an international disaster relief charity.

Participants

Thirteen thousand five hundred lapsed donors to an international charity with a local branch in the midatlantic United States participated in the study. These lapsed donors had donated to the local branch of the charity in the past, but not within the past year. Though we do not have detailed demographic information about these participants, which was not shared to protect donor privacy, we are confident that the participants represent a population that is relevant to charitable giving behavior because they were actual donors.

Method

Lapsed donors received one of six mailings that corresponded to six experimental conditions. In all conditions, the potential donors were informed that the charity was contacting a small number of donors to raise money for their disaster response vehicles (for example letter, see Appendix A; charity identifying information removed). One condition informed potential donors that the charity was 10% of the way toward the goal, another condition informed potential donors that the charity was 66% of the way toward the goal, and a third condition informed potential donors that the charity was 85% of the way toward achieving its goal (cf. List & Lucking-Reiley, 2002). The remaining three conditions served as controls.

Although we could have established real funds with the same name that had different levels of progress for each condition, using such tight experimental controls is difficult when working with real charities because donors who receive mailings from different conditions might compare notes and conclude that they were being deceived. To eliminate the possibility that donors who knew each other would receive different mailings that cited the same-named fund at a different level of progress, each real fund raised money for a different item that was requested by the charity. The 10% progress fund raised money for a GPS system, the 66% fund raised money for a radio communication system, and the 85% progress fund raised money for a generator.

To control for inherent differences in the appeal of the three items, we created the three complementary control conditions. Each control condition raised money for one of the same three items but did not mention a level of progress toward the goal. The experiment therefore included a total of six different experimental conditions, outlined in Table 1. Our main outcome of interest was the difference in amount raised when potential donors were provided with information about each fund's percent progress toward the goal (10%, 66%, or 85%) compared to when money was raised for the same-named fund with no mention of progress.

Table 1
Six experimental conditions in Study 2.

Matched control conditions	Progress mentioned conditions
Raise money for a generator	Raise money for a generator 10% of the way toward goal
Raise money for a radio system	Raise money for a radio system 66% of the way toward goal
Raise money for a GPS unit	Raise money for a GPS unit 85% of the way toward goal

Results and discussion

Although overall donation rates in response to the mail solicitation were very low (approximately 1%), we still were able to detect differences among conditions. There was no significant change in donations when potential donors were told that a fund was 10% of the way toward its goal compared to not mentioning goal progress ($\chi^2(1, N = 4500) = .03, p > .80$), nor was there a change in donations when donors were told that a fund was 66% of the way toward its goal compared to not mentioning the fund's progress ($\chi^2(1, N = 4500) = .01, p > .90$). However, there was a significant increase in the percent of people donating when they were told that the fund was 85% of the way toward achieving its goal as compared to not mentioning the fund's progress ($\chi^2(1, N = 4500) = 4.24, p < 0.05$). Results from a binary logistic regression analysis showed a marginally significant interaction between being in the 85% progress condition and receiving information about the progress toward the goal ($B_{ProgressMentioned * 85\%Condition} = .77$, $t(1, 13{,}498) = 1.72$, $p < 0.09$); receiving goal progress information only increased contributions in the 85% condition. In terms of magnitude, there was little difference in the donation rate in the 10% and 66% cells when progress information was included, however, the donation rate more than doubled in the 85% cells from 0.5% in the matched control condition to 1.17% in the progress mentioned condition (see Fig. 2).

There was no difference between any of the conditions in average amount donated per contribution; only the frequency of donations changed. This result suggests that the benefit of including advanced progress information is not to encourage those who would already give to give more, but to encourage people who would otherwise give nothing to give something.

Results from Study 2 provide additional, experimental, support for the hypothesis that donations increase as charitable campaigns approach their fundraising goals. A fund that was very close to reaching its goal benefitted more from highlighting its progress toward the goal than did funds that were farther from reaching their goals.

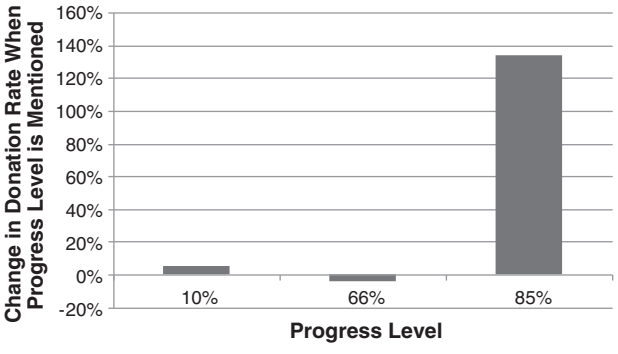

Fig. 2. The benefit in donation rates from mentioning that a fund is 10% of the way toward the goal, 66% of the way toward the goal, or 85% of the way toward the goal.

Multiple explanations for the observed pattern remain. First, as hypothesized, the effect could occur because it feels more substantial and satisfying to contribute as a goal nears completion compared to when little progress has been made. Second, the effect could occur because people like to contribute to causes that are likely to succeed, and people are more confident that a cause close to completion will succeed. We designed Study 3 to control for disparities in the likelihood of goal completion; in both experimental conditions of Study 3, goal completion was certain, holding constant the likelihood of success. In Study 3, participants also answered several follow-up questions that were designed to examine the process behind the goal gradient helping. Specifically, we looked at the explanatory roles of impact and satisfaction.

Study 3: the role of impact and satisfaction

Study 3 was a scenario study designed to test whether people are more likely to help when close to achieving a goal, even when the likelihood of goal success is constant. Participants were randomly assigned to read one of two vignettes about Sheila, a 7th grade student who needed to sell 100 candy bars for her sports team fundraiser (see Appendix B). Depending on condition, Sheila needed to sell either 2 or 32 more candy bars to meet her quota. In both conditions, participants were informed that "Sheila is certain to reach her goal by the end of the day" and were asked how likely they would be to help her out by purchasing a candy bar.

Participants

One hundred eighty-three adults located in the U.S. (58% female; M_{Age} = 34 years) participated online in exchange for a small incentive.[3]

Method

Participants were randomly assigned to read one of two vignettes about Sheila in which they were told that she needed to sell either 2 or 32 more candy bars to meet her quota. For the main dependent measure, participants answered the question "How likely are you to buy a candy bar from Sheila?" Participants also answered several other questions, presented in a counterbalanced (randomized) order, designed to examine the process behind the preference to help Sheila when she was very close to her goal. Three questions asked about the impact participants expected to make by buying a candy bar (α = .87): "How much progress would your potential candy bar purchase make toward Sheila's goal?", "How big would your contribution be toward Sheila's goal if you purchased a candy bar?", and "How substantial would your contribution be toward Sheila's goal if you purchased a candy bar?" Three additional questions asked participants how satisfying it would be to help Sheila reach her goal (α = .89): "How satisfying would it be to help Sheila reach her goal?", "How excited would you be to help Sheila reach her goal?", and "How happy would you feel to be able to help Sheila reach her goal?"

An additional trio of questions asked how much sympathy participants felt for Sheila (α = .72): "To what extent do you feel sympathy for Sheila?", "To what extent do you feel compassion for Sheila?", and "To what extent do you feel distress for Sheila?" We asked these sympathy questions because we wanted to measure if a prosocial emotion like sympathy could play a role in the goal proximity effect; prosocial emotions are often identified as a central factor in encouraging helping behavior (Batson, 1998; Small & Verrochi, 2009). Finally, to measure participants' judgment of the likelihood that Sheila would complete her goal, we asked participants to gauge "How likely is it that Sheila will reach her goal?" All questions were answered on a 7-point scale.

Results and discussion

Main analyses

Consistent with results from Study 3, participants reported a significantly higher likelihood of helping Sheila when she needed to sell 2 more candy bars compared to when she needed to sell 32 more candy bars (M_2 = 5.81, M_{32} = 5.24; $t(1, 159) = 2.12$, $p < .05$, 95% CI of difference = 0.04–1.09).[4]

Participants also reported that helping would both be more satisfying (M_2 = 5.1, M_{32} = 4.6; $t(1, 159) = 2.62$, $p < .05$) and have higher impact (M_2 = 4.8, M_{32} = 3.5; $t(1, 159) = 6.7$, $p < 0.0005$) when Sheila was 2 candy bars away from reaching her goal compared to when she was 32 candy bars away from reaching her goal. Additionally, and despite an explicit statement in the vignette that Sheila was certain to reach her goal, there was a significant difference in the judged likelihood that Sheila would reach her goal (M_2 = 6.6, M_{32} = 5.9; $t(1, 159) = 6.7$, $p < 0.0005$). There were no differences between conditions for how much sympathy participants felt for Sheila ($t(159) < 1$, n.s).

Mediation analyses

We tested the role of sympathy, satisfaction, impact, and likelihood of goal completion as mediators of the details effect. Using the Preacher and Hayes (2008) macro with 1000 bootstrapped samples, we observed that, when entered individually as mediators, impact and satisfaction both showed patterns of indirect-only mediation of the goal proximity effect (Zhao, Lynch, & Chen, 2010; indirect-only mediation is also known as "full mediation", Baron & Kenny, 1986); Z's > 2.5, p's < 0.05. Sympathy and likelihood of goal completion did not show patterns of mediation, Z's < 0.40.

The bootstrapping analysis also allowed simultaneous examination of multiple mediators (Preacher & Hayes, 2004, 2008; Zhao et al., 2010). When we included sympathy, satisfaction, impact, and likelihood of goal completion in the same bootstrapped model simultaneously, we see that only satisfaction significantly mediates the relationship between goal proximity and helping, satisfaction B = .10, Z = 2.41; $p < 0.05$, 95% CI = .10–.78. In this model, satisfaction once again exhibited indirect-only, or "full", mediation. None of the other variables were significant mediators, Z's < 0.90.

Further analysis suggests that impact may drive the increased satisfaction that comes from helping when goals are close to completion. An additional bootstrapped mediational model finds that impact is a significant and "indirect-only" or "full" mediator of the relationship between goal proximity and anticipated satisfaction, impact B = 0.67, Z = 4.85; $p < 0.0001$, 95% CI = .48–.98.

In sum, results from Study 3 show additional evidence that people are more willing to help someone who is very close to goal completion compared to far from goal completion. Despite an attempt to equalize likelihood of goal completion across conditions, a manipulation check question about goal success likelihood found that participants still judged Sheila's chances to reach her goal as greater when she was close to her goal rather than far away. Nevertheless, these judgments of goal completion likelihood did not explain goal gradient helping in mediational models. Instead, mediational results are consistent with the hypothesis that goal proximity heightens perceived impact, which in turn increases anticipated satisfaction and helping.

[3] Twenty-two participants were excluded from analyses for failing an "instructional manipulation check" (IMC; Oppenheimer, Meyvis, & Davidenko, 2009) designed to identify inattentive participants; inattention can be especially pronounced for online samples (Goodman, Cryder, & Cheema, 2013). When all participants are included, results look similar, e.g., main DV $t(1, 181) = 2.34$, $p < .05$.

[4] In an initial study with a similar design, but no measurement of mediating variables, Sheila either needed to sell either 1 or 21 more candy bars to meet her quota. Participants (111 females, 61 males) reported a significantly higher likelihood of helping Sheila when she needed to sell 1 more candy bar compared to when she needed to sell 21 more candy bars (M_1 = 5.51, M_{21} = 4.81; $t(1, 161) = 2.41$, $p < .05$). Nine participants were excluded from analyses for failing an "instructional manipulation check" (IMC; Oppenheimer et al., 2009). When all participants are included, results look similar, e.g., main DV $t(1, 170) = 2.44$, $p < .05$.

General discussion

Evidence is building about the hedonic benefits of being generous. The current investigation sheds light on one source of the happiness from giving, specifically a sense of personal impact. In this paper, we observe that a perception of impact and the resulting satisfaction from this impact drive a pattern of "goal gradient helping" in which people are more likely to contribute as prosocial campaigns approach their goals. An internet field study with Kiva and a field experiment with an international disaster relief agency show that people are more willing to help when a fundraising campaign is close to rather than far from its goal. Two additional experimental studies show that people are more willing to help a person who is close to reaching her goal, and that likelihood of goal completion cannot explain this result. Mediational models are consistent with a pattern in which goal proximity increases perceived impact, which then positively influences anticipated satisfaction and giving.

The results highlight the importance of impact when encouraging prosocial acts, and point to a connection to the psychological literature about social loafing. Social loafing occurs when individuals expend less effort when working in groups than when working individually (Karau & Williams, 1993). Interestingly, it may be precisely the lack of perceived impact that causes social loafing to occur. Once individual contributions can be identified, and thus the individual impact is delineated, social loafing disappears (Harkins & Petty, 1982).

The results also point to new avenues for future research. One open question concerns the extent to which perceived impact drives goal gradient effects outside of the prosocial domain. Impact appears to play an influential role at least in some cases outside the prosocial domain, such as when a cup of coffee purchased at 70% of the way toward a goal is viewed as making greater progress than an equivalent cup of coffee purchased at 30% of the way toward a goal (Koo & Fishbach, 2012). However, for cases in which the progress units are not clearly defined, such as animal mazes (Hull, 1934), or when incentives are involved, such as when people receive payments for batch work (Kivetz et al., 2006), other factors may explain goal gradient patterns such as increased expected value near the end of goal completion, heightened confidence about reaching the end state, or a heightened desire for closure (Zeigarnik, 1967).

One interesting feature of the current findings, highlighted by Study 3, is that people are not just more intense in pursuing their own goals when they draw closer to reaching those goals, but they also exert more effort when a person or organization is close to reaching their goals. Although intriguing, it is not currently clear whether prosocial goal gradient patterns occur because donors feel empathy for others' who are pursuing the goals, or whether donors actually adopt others' goals as their own. Future research could attempt to tease these options apart.

Practical implications

The results point to several strategies that prosocial organizations can use to heighten perceived impact and increase contributions. The most straightforward technique is to set fundraising goals and to prioritize publicizing the goals when campaigns are very close to reaching them. Some non-profit organizations, such as public radio stations, already use this technique in fundraising but the consistent results in this paper suggest that others could use similar methods to their advantage.

Our results also suggest that, although publicizing goal progress early may entail extra promotional costs, publicizing progress early does not seem to have a detrimental effect on contributions (see e.g., 10% progress conditions, Study 3). Some recent work suggests that, if framed in a certain way, emphasizing progress early can actually increase motivation (Bonezzi, Brendl, & De Angelis, 2011; Koo & Fishbach, 2012). When people focus on the amount of progress "to go" toward goal completion, they show classic goal gradient patterns of motivation. However, at least in some cases, when people focus explicitly on the amount of progress "to date", they show increased motivation at very early stages of goal completion as well (Bonezzi et al., 2011; Koo & Fishbach, 2012). It seems that when goal seekers are explicitly focused on contributions to-date, very early contributions can also offer a sense of large proportional impact compared to the small amount of progress that has been achieved so far.

The results also point to strategies that highlight the goals of an intermediary person. In the final two studies, people were more willing to help a fundraiser who was very close to her goal. We predict that organizations may benefit if fundraisers or other intermediaries not only mention large institutional goals, but also mention their own individual goals when they are close to reaching those goals. For example, a student soliciting funds for her university by telephone might inform an alumnus that she is "only two calls away from reaching my goal for the day." Highlighting her own goal might not only yield benefits for the solicitor, but it also could yield benefits for the donor because the donor can receive satisfaction both from helping the organization and from helping the individual fundraiser.

Conclusion

The psychological literature about altruism has focused on themes such as the altruistic versus egoistic nature of generous acts (Baumann, Cialdini, & Kenrick, 1981; Toi & Batson, 1982), the emotional triggers of those acts (Cialdini & Kenrick, 1976; Small & Verrochi, 2009), and the intergroup dynamics behind those acts (Dovidio et al., 1997). The current findings add to an emerging literature about the importance of impact for triggering generous acts (Cryder et al., 2013; Grant et al., 2007) and ultimately, for increasing the satisfaction that prosocial actors can feel (Sonnentag & Grant, 2012). In conclusion, it appears that people are not generous simply to be kind or to relieve negative emotions; they obtain satisfaction from the feeling that they have personally had impact in solving a social problem.

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Appendix A. Study 2 mailing

Dear Firstname,

We are contacting a small number of donors to raise money for a Global Positioning System(GPS) to be used in our disaster response vehicles. This new GPS unit will improve our response time to local emergencies at times when every second counts.

We are 85% of the way toward reaching the needed funds to purchase a GPS unit. Your donation can make a critical difference by allowing us to reach this goal and therefore helping us to provide better emergency relief to our Southwestern Pennsylvania communities.

Sincerely,

Financial Development Officer

Appendix B. Study 3 vignette

Sheila is a 7th-grade student who needs to sell 100 candy bars (cost: $1 each) to meet a quota for her school sports team fundraiser. If you buy a candy bar, you will help Sheila reach her goal. She needs to sell [2/32] more candy bars to meet her quota, and asks you if you would be willing to buy one. (Note: Sheila is certain to reach her quota by the end of the day).

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