

Partitioned Prosociality:
Why Giving a Large Donation Bit-by-Bit Makes People Seem More Committed to
Social Causes

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https://osf.io/kucb3/?view_only=fd00bceb5027447c9c6e8bdfd9f6bd07

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Abstract

Donating money to worthy social causes is one of the most impactful and efficient forms of altruism, but skepticism often clouds perceptions of donors' motives for giving. We propose a solution that reduces this skepticism: instead of giving a single large donation, donors can partition their donations into multiple, smaller ones. Ten preregistered studies with 3,816 participants supported this idea. The positive effect of partitioned giving was robust to the number and size of the partitions and the method of displaying the partitions. Moreover, this effect emerged when the actual effort to give in partitions was held constant and donors precommitted to giving in partitions. The effect arose because the number of donations seems to act as a heuristic, signaling that the donor has more frequent impulses to give and a greater desire to be connected to the social cause. Accordingly, the effect was enhanced when donors gave on nonconsecutive days rather than consecutive days and diminished when they gave their multiple donations on a single day compared to on different days. This effect emerged across both joint and separate evaluations of partitioned versus lump sum giving, indicating that people think donors who give in partitions should be judged more positively than those who give in one lump sum. Overall, this work shows that how donors structure their donations affects judgments of their motives for giving, thereby providing new insights into how people evaluate prosocial behavior.

Keywords. Prosocial commitment, moral praise, donations, altruism, corporate social responsibility

Public significance statement:

Donating money is an impactful and efficient form of altruism, but people often question the true intentions behind monetary donations, which can cause donors to choose less effective ways of giving. So how can donors get credit for donating money when others are quick to question their motives? The findings from 10 experiments suggest that donating bit-by-bit rather than in a lump sum is one answer to this question. Participants consistently thought donors were more prosocially committed when they partitioned their donation than when they gave in a lump sum. People seem to interpret the number of donations as a signal of stronger, ongoing impulses to give and a deeper connection to the cause, even when the effort and cost to donate is same. This work suggests that by simply adjusting how they give, donors can positively influence how their motives are perceived, potentially increasing the impact of their contributions.

Partitioned Prosociality:

Why Giving a Large Donation Bit-by-Bit Makes People Seem More Committed to Social Causes

Donating money to worthy social causes is one of the most effective forms of altruism in terms of its impact on the outcome (GiveWell, 2023; Singer, 2015). However, people often view monetary donations with skepticism, questioning the donor's underlying motives for giving (Carlson & Zaki, 2018; Cassar & Meier, 2017). Is the person motivated by genuine concern for the cause or to improve their own image (Barasch et al., 2016; Berman et al., 2015; Berman & Silver, 2022; Newman & Cain, 2014)? This skepticism is not necessarily unjustified, as people do sometimes give money for self-interested reasons, such as receiving tax breaks or higher status and respect from others (Small & Cryder, 2016). However, fear of being met with this skepticism can reduce the positive impact of people's charitable giving (Barasch et al., 2016; Cassar & Meier, 2017), inclining people to help in less effective ways (Brown et al., 2019; Olivola & Shafir, 2013; Schaumberg & Wiltermuth, 2014).

Contemporary models of moral praise suggest that people give according to the social rewards they receive (Borum et al., 2020), which are partly determined by the motives others infer behind their prosocial acts (Carlson et al., 2022; Carlson & Zaki, 2018). The same prosocial act is judged differently depending on the motives inferred from the act (Carlson et al., 2022). People regard someone as morally praiseworthy not merely for giving, but for giving for morally worthy motives (Anderson et al., 2020; Helzer & Critcher, 2018). Thus, people look for cues of the purity of someone's motives for giving (Barasch et al., 2016; Silver, Newman, et al., 2021), giving them less moral credit when those motives seem more self-interested (Barasch et al., 2016; Berman et al., 2015; Lin-Healy & Small, 2012; Lin et al., 2017).

Past research has identified ways that people can donate to allay concerns that they are giving for strategic or selfish reasons, thereby bolstering the perception of their prosocial commitment. By prosocial commitment, we mean the belief that someone is genuinely dedicated to acting in ways that benefit others or contribute positively to society. For instance, people are seen as having purer prosocial motives when they have a personal connection to the social cause (Lin-Healy & Small, 2012), feel strong emotions when they give (Amormino et al., 2024; Barasch et al., 2014), decide to give quickly (Critcher et al., 2013), or give before others do (Silver et al., 2021). People also are judged more positively when they help in more effortful or costly ways (Bigman & Tamir, 2016). For instance, people are viewed as more moral when they donate their time instead of their money (Brown et al., 2019; Johnson & Park, 2021) or endure personal risk or suffering in the donation process (e.g., flying overseas to volunteer) (Bigman & Tamir, 2016; Celniker et al., 2023; Olivola, 2011; Schaumberg & Mullen, 2017).

Each of these ways of helping could make someone seem more prosocially committed. But these ways often require significant changes in the manner of giving, potentially leading to less efficient forms of helping (Caviola et al., 2021; Jaeger & van Vugt, 2022), or require the donor to control uncontrollable aspects of the donation process such as when others donate (Silver et al., 2021). This highlights a critical need to identify methods for donors to demonstrate their prosocial commitment without compromising their preferred mode and the effectiveness of giving.

We propose one way that donors can do this. Rather than giving the totality of their donation in one single donation (i.e., lump sum prosociality), they can partition their donation into multiple smaller donations (i.e., partitioned prosociality). Consider two donors who gave \$1,200 to charity last year. Donor A made four \$300 donations, whereas donor B made a single \$1,200 donation. We predict that donor A would seem more committed to the social cause than donor B.

This prediction about the positive effects of partitioning a donation on the judgments of the donor's prosocial commitment is analogous to the way that partitioning a criminal offense into multiple chargeable counts makes a defendant seem more culpable and blameworthy (Griffin, 2017). Prosecutors can arbitrarily charge a defendant with a single count or multiple counts for the same violation. In *Hennemeyer v. Commonwealth*, the defendant fired a total of four shots at police officers over the course of two minutes on the first day. The following day, within a span of 15 minutes, the defendant fired five more shots at a police car, followed by an additional shot while fleeing (Chemerinsky, 2009). The court ruled that the first four shots were considered one offense, while each of the remaining six shots constituted separate offenses. Partitioning these acts into seven distinct offenses led to a longer sentence of seven years for Hennemeyer, presumably compared to a potentially shorter sentence if the six shots on the second day had been treated as a single offense (Chemerinsky, 2009). This illustrates how individuals who cause the same amount of harm can receive different consequences based solely on how their actions are divided.

We propose a reciprocal effect for morally praiseworthy behaviors. People see a donor as more committed when they partition their donation, rather than giving the same amount in a lump sum.

Why Partitioned Giving Signals Greater Prosocial Commitment than Lump Sum Giving

Imagine two donors: one gives \$100 on five separate occasions, while the other gives \$500 all at once. The donor who gives all at once performs what can be seen as a grand prosocial gesture. Like presenting an oversized check to a beneficiary, this lump sum donation emphasizes the size of the contribution, drawing attention to the donor's financial sacrifice (Basu, 2021).

Showcasing the size of the donation through lump sum giving might signal prosocial commitment—as some previous work suggests it does (Basu, 2021). However, we argue that this signal is weaker than the one sent by partitioned giving because, for positive moral judgments, people care less about size of the help provided. They care more that the person helped at all and that they helped for the right reasons (Anderson et al., 2020; Burum et al., 2020; Olivola, 2011; Schaumberg & Wiltermuth, 2014). For instance, one study found that participants did not praise someone who donated a large bonus to charity more than someone who donated a smaller bonus. This was true even when a matching donation boosted the impact of the larger gift (Burum et al., 2020). Similarly, in another study, concertgoers who donated above the suggested amount were not viewed as warmer than those who donated the suggested amount (Klein & Epley, 2014, Study 1a). These studies suggest that, emphasizing the amount of help provided may not effectively signal a person’s prosocial commitment. In contrast, partitioned giving likely clarifies the donor’s motives better, signaling a more genuine, ongoing commitment to helping others than a one-time grand gesture.

Partitioned Giving Generates Positive Character Inferences of the Donor

We argue that partitioning a donation enhances perceptions of prosocial commitment because it positively influences the inferences people make about the donor’s motives for giving. People are often skeptical of the motivations behind donations (Barasch et al., 2016; Cassar & Meier, 2017), as donors might contribute out of genuine concern for the cause, but they could also be motivated by less altruistic reasons, such as tax benefits (Small & Cryder, 2016), social recognition (Berman et al. 2015), or a sense of obligation (Andreoni & Rao, 2017; Lin, Schaumberg, & Reich, 2016; Lin & Miller 2021; Lin & Reich 2018). We identify two specific positive character inferences people make about donors who partition their donations that suggest

genuine motives for giving: the donors have frequent impulses to give and have a strong desire to be connected to the cause.

The literature on chargeable offenses highlights the importance of inferred impulses in judgments. In legal contexts, courts often consider the number of criminal acts committed as a reflection of the defendant's impulses, even though the exact number of impulses cannot be observed (e.g., Nisbett & Wilson, 1977). Consider *Blockburger v. United States*, in which the defendant was charged with multiple counts of selling drugs to the same buyer. Despite the defense arguing that the multiple accounts represented one criminal act, the court ruled that separate sales of morphine constituted distinct impulses, leading to multiple charges (Chemerinsky, 2009). Similarly, in the context of prosocial behavior, multiple donations are likely interpreted as evidence of multiple prosocial impulses. We propose that people use the frequency of donations as a heuristic to infer whether the donor frequently feels the urge to give, regardless of the actual number of impulses the donor may have had.

Additionally, partitioned donations may signal a stronger desire to connect with the cause. Just as repeated actions towards a goal indicate greater personal investment and connection (e.g., Huang et al., 2017; Silverman et al., 2023), multiple donations could reflect a deeper emotional engagement with the cause. Donors who give multiple times might be seen as seeking to foster a closer relationship with the charitable organization. This could involve receiving multiple notifications about their donations, which, although potentially uncomfortable (e.g., Gu & Chen, 2023), might reinforce the donor's self-image as someone who is committed to helping others. In contrast, a one-time donation might suggest lower emotional investment (Johnson & Park, 2021). Therefore, partitioned giving could be interpreted as a sign of greater prosocial commitment.

The Positive Effect of Partitioned Giving Further Depends on the Grouping of the Partitions

Our theory suggests that observers perceive individuals who donate more frequently as more prosocially committed than those who donate once, even when the total amount given is the same. This is because people infer that partitioned givers experience more frequent impulses to give and have a stronger desire to connect with the cause compared to lump sum donors. The strength of this effect, however, may depend on the schedule of the donations. Specifically, we predict that donating on nonconsecutive days will signal stronger prosocial commitment than donating on consecutive days, even when the frequency of donations is the same. The reasoning is that donations spread out over time are seen more as discrete acts, whereas clustered donations are perceived as part of a single act.

This prediction aligns with the law of proximity, which states that events or objects spaced farther apart are perceived as distinct, while those closer together are seen as part of a unified whole (Koffka, 1935). Although dates on a calendar are not physical objects, similar categorization processes occur with time (Donnelly et al., 2022). Moreover, this prediction parallels findings in legal contexts regarding chargeable offenses. Whether several actions are considered part of a signal act or multiple acts depends on factors such as time, location, or intervening circumstances (Chemerinsky, 2009). In the previously discussed case of *Hennemeyer v. Commonwealth*, for example, the judge ruled that the six shots fired on the second day constituted six separate acts, while the four shots fired on the first day were considered one act, likely because the six shots occurred over a longer period (15 minutes) compared to the four shots (2 minutes).

Thus, when donations are spread out over nonconsecutive days, people may infer that the donor is more frequently moved to give and, as a result, view them as more prosocially committed. Additionally, donations spaced out over time may also suggest that the donor has a stronger desire to maintain an ongoing connection with the cause, further reinforcing their commitment.

A Preference for Partitioned Giving that Goes Beyond Effort

We reason that people favor donors who engage in partitioned giving more than lump sum giving, per se. That is, even when everything else about the donation is held constant, people see someone who gives multiple donations to be more prosocially committed than someone who gives everything in a single lump sum. This reflects our theory that merely seeing that someone gives in partitions makes the person seem to have more prosocial impulses and desire to connect to the cause, and so are more prosocially committed than seeing someone give all at once.

An alternative explanation is that it is objectively harder or more costly to partition a donation. In line with this, prior research has shown that change that occurs over a longer period of time leads to greater perceptions of commitment than the same amount of change occurring at once because slower and more consistent change is viewed as more effortful (Jago & Laurin, 2017). In the context of prosocial giving, making partitioned donations could involve more cognitive resources and self-control, making it nontrivially more demanding than giving a lump sum. Thus, people may see partitioned donors as more prosocially committed than lump sum donors because giving in partitions is more effortful, which has been shown to correlate with more positive moral judgments (Bigman & Tamir, 2016).

An effort heuristic undoubtedly plays a role in observers favoring partitioned giving, particularly when donating in partitions requires more effort. However, our theory generates unique predictions beyond an effort heuristic. It suggests that the positive effect of partitioned giving may emerge even when effort and the personal cost to donate are held constant because people make positive inferences about the type of person who wants to make multiple donations—namely that they likely have more frequent impulses to give and a stronger desire to be connected to the social cause. We test this idea directly in Studies 5a and 5b.

Evaluating Partitioned vs. Lump Sum Giving Under Joint or Separate Evaluation

We argue that people favor partitioned giving. An important question arises: Do people think that donors should be judged as more prosocially committed when they partition their donation? Although we did not make specific predictions about this question, the use of heuristics is sometimes conscious and adaptive, and can lead to accurate assessments (Gigerenzer & Gaissmaier, 2011), and judgments of others based on thin slices of behavior are often accurate (Ambady, 2010). Additionally, prior research has also shown that people view those who donate time to be more moral than those who donate money, even though they recognize that giving money is likely more effective (Johnson & Park 2021). It is possible that people believe it is reasonable to assume that someone who gave in partitions is more prosocially committed than someone who gave in a lump sum, while also knowing that they gave equivalent amounts.

We assessed this possibility by comparing participants' responses under joint evaluation (asking participants to explicitly compare the prosocial commitment of partitioned to lump sum donors) and separate evaluations of donors (assessing prosocial commitment of partitioned donors and lump sum donors separately). People tend to use more intuitive or affective processing under separate evaluations, but more rules or norms in joint evaluation contexts (Bazerman et al., 1999; Hsee et al., 1999; Kogut & Ritov, 2005). Jointly comparing partitioned giving to lump sum giving allows people to consciously determine whether the frequency or schedule of giving should influence their judgments of a person's prosocial commitment. If it does, this suggests that people regard these factors as meaningful inputs to their determination of someone's prosocial commitment.

Overview of Studies

In seven preregistered studies (along with three supplemental studies reported in the SOM), we found that partitioning a donation signals greater prosocial commitment than giving the same amount in a lump sum. Across all studies, we held the total donation amount constant. In Studies 1 and 2, we varied whether donors gave in a lump sum or in partitions within joint evaluation contexts. In Study 3, we varied lump sum and partitioned giving between subjects and tested whether the positive effect of partitioned giving on perceived prosocial commitment emerged even when the donor precommitted to a partitioned donation schedule. In Study 4, we explored whether this effect is stronger when donations occur on a discontinuous schedule (e.g., donating on five different Tuesdays) versus a continuous schedule (e.g., donating on five consecutive days). In Studies 5a and 5b, we tested whether this effect persisted when effort was held constant by manipulating whether participants made a single decision to donate in a lump sum or in five partitions, all processed immediately. In Study 5b, we added another condition where donors made a single a priori decision to schedule the five partitions on different days. Finally, in Study 6, we examined whether presenting a company's yearly donations on its website as partitioned, rather than as a lump sum, would lead to greater perceived commitment to corporate social responsibility.

We found consistent support for the prediction that partitioning donations signals greater prosocial commitment. This effect emerged across different ways of describing the partitions, different donation amounts, and different ways of displaying the donation schedule a donor followed, suggesting the findings are robust and generalizable. Moreover, the effects emerged both when people directly compared different ways of donating to each other (joint evaluation) or in isolation (separate evaluation). This indicates that people see the frequency of giving as a relevant and appropriate feature on which to base their moral judgments. Mediation analyses also provided evidence for our proposed character inference mechanisms. Partitioning a donation suggested that

the donor is someone who likely has more frequent impulses to give and a greater desire to be connected to the social cause compared to donating the same amount in a lump sum. Consequently, we observed that donors were seen as more prosocially committed when they donated on nonconsecutive days than on consecutive days and the positive effect of partitioned (vs. lump sum), and when effort was held constant.

Openness and Transparency

We preregistered all studies and made the preregistrations, data, materials, and analysis code available on the Open Science Framework:

https://osf.io/kucb3/?view_only=fd00bceb5027447c9c6e8bdfd9f6bd07.

We report all conditions and all measures either in the main text or in the Supplemental Online Materials (SOM), where relevant.

Study 1

All participants evaluated two donors who donated the same amount. One donor gave in a lump sum while the other partitioned their donation. We predicted that participants would see the donor that partitioned their donations as more prosocially committed than the one who gave in a lump sum. We also varied whether participants read about an individual or corporate donor to assess the generalizability of the findings across the donor's identity. We aimed to understand whether the findings would extend to corporate donors and assessments of their commitment to corporate social responsibility, which we test directly in Study 6.

Participants

We posted the study to Mechanical Turk for 250 adult participants from the United States. We preregistered a sequential analysis, specifying that we would open the study to a maximum of 500 participants, with a planned interim analysis at 250 responses. To account for this sequential

analysis design, we adjusted the p -value with the Pocock correction to $p < .0294$ (see Lakens, 2014). We excluded participants according to preregistered exclusion criteria, resulting in a final sample of 231 (see Table S1 in the SOM for more details).

Procedure

This was a 2 (Manner of giving: partitioned vs. lump sum, within) \times 2 (Type of donor: individual vs. corporate, between) mixed-subjects design. We expected the main prediction to generalize across individual and corporate donors.

Participants in the individual donor condition read about two real estate attorneys and those in the corporate donor condition read about two real estate companies¹. In the individual donor condition, participants learned that the two attorneys each donated \$5,200 to the same charity in 2021. One attorney gave a single donation of \$5,200, and the other attorney made 52 separate donations to the charity, for a total donation amount of \$5,200. In the corporate donor condition, participants read that one company gave a \$52,000 lump sum donation, and the other made 52 separate donations, for a total of \$52,000. The total amounts differed between individual and corporate donors for believability.

Participants answered two questions about the donors: (1) If you had to say, [which person / which of the two companies] do you think is more committed to giving back to the community? (2) If you had to say, [which person / which of the two companies] do you think cares more about helping people in need?

¹ The names of the individual donors were Eric Leimbach and William Morrison. The names of the corporate donors were LJ Real Estate Group, LLC and Skyline Development Group, LLC. The name associated with the lump sum donor and partitioned donor was randomized as was whether the lump sum or partitioned donor appeared first or second on the screen.

Participants concluded the study by answering two multiple-choice attention-check questions about the amount the donors gave and the city in which the scenario took place.

Results

As shown in Figure 1, for both types of donors, participants thought the one that gave in partitions was more committed to giving back to the community and cared more about helping people in need. One-sample binomial tests showed that the proportion of participants selecting the two donors differed significantly from 50% for both dependent variables for both the individual and corporate donor, all p values $< .001$, Cohen's $g_{\text{question1}} = 0.23$, Cohen's $g_{\text{question2}} = 0.21$.

Figure 1

Percentage of participants selecting the donor that gave in a lump sum and the one that partitioned their donations (Study 1)



Note. Error bars are +/- SEM.

A chi-square test of independence showed that the results did not significantly depend on whether participants read about individual or corporate donors (the p -values for both the dependent variables were greater than $p = .222$), or on the order in which the donors were presented: Question 1: $\chi^2(1) = 2.46, p = .117$, Cohen's $w = 0.10$; Question 2: $\chi^2(1) = 2.64, p = .104$, Cohen's $g = 0.11$. Critically, the percentage of participants selecting the donor that gave in partitions was significantly different from 50% for both orders ($p < .001$ for both orders).

As the order of the partitioned and lump sum donors was counterbalanced, we ran an exploratory robustness check that was not pre-registered. Specifically, we ran a logistic regression regressing whether participants chose the first donor as the one who was more prosocially committed onto whether the first donor was the one described as giving in partitions or a lump sum. For both dependent measures, the positive effect of the first donor being the one who gave in partitions on participants choosing the first donor as the one who was more prosocially committed was highly significant, (committed to giving back: $z = 6.62, p < .0001$; cares about helping people in need: $z = 6.24, p < .0001$).

Discussion

Participants thought both individual and corporate donors were more prosocially committed when they partitioned their financial donations than when they gave the same amount in a lump sum.

However, there is an alternative explanation for the findings. Perhaps participants thought the donor partitioned their donation because they lacked the resources to give the total amount all at once. This might lead participants to think that the donor who partitioned their donation gave a larger share of their income or profits than did the one that gave in a lump sum.

We addressed this concern in a follow-up study (Study S1 in the SOM). We asked participants to compare two real estate attorneys who both gave to the same charity. We told participants that both attorneys earned \$150,000 in 2020 after taxes. At the end of 2020, they both gave \$2,200 to Philabundance in 2021. Everything else about the study was identical to the individual-donor condition in Study 1. The results replicated the findings from Study 1. We further address this concern in Studies 3-5b, where we again make the donor's income explicit to participants.

Study 2

The purpose of Study 2 was to ensure that the findings generalize beyond a single partitioning description. The donor in Study 1 gave 52 times. In Study 2, we tested whether people would see the partitioned giving donor as more prosocially committed than the lump sum giving donor when the donor gave less frequently, when the partition was described differently (e.g., “gave weekly” vs. “gave 52 times in a year”), and when the total amount donated was omitted. This study also allowed us to compare the findings with previous work that found disaggregating donations reduced moral praise (Basu, 2021). In that research, the studies did not make explicit the total amount the donors gave. Instead, it compared, for instance, someone who gave \$10 weekly to someone who gave \$520. The results showed that people praised the donor more when they saw the aggregated amount (e.g., \$520) than the disaggregated one. We varied whether the total amount of money donated was explicit to compare our findings to those of Basu (2021).

Participants

We posted the study to Mechanical Turk for 500 adult participants from the United States. We excluded participants according to preregistered exclusion criteria, resulting in a final sample size of 472 (see Table S1 in the SOM for more details).

Procedure

The study was identical to Study 1, except that we varied the manner of partitioning between-subjects, yielding a 2 (Manner of giving: lump sum vs. partitioned, within) \times 2 (Type of donor: individual vs. corporate, between) \times 5 (Manner of partitioning: weekly without total amount; weekly with total amount; weekly with amount given each week and the total amount; four times with the total amount; 52 times with the total specified, between) mixed-subjects design. Participants again evaluated either two individual donors or two corporate donors that donated to the same charity in the same year. We again varied the manner of giving (lump sum vs. partitions) within subjects. However, we varied the way we described the partitioned donation between-subjects.

We randomly assigned participants to read one of the following five descriptions of partitioned donating. As before, those in the corporate donor condition viewed totals of \$52,000, and those in the individual donor condition viewed totals of \$5,200. Here we show only the text from the individual donor condition: 1) [The donor] donated weekly to Philabundance in 2021; 2) [The donor] donated weekly to Philabundance in 2021 for a total of \$5,200; 3) [The donor] donated \$100 each week to Philabundance in 2021 for a total of \$5,200; 4) [The donor] made four different donations to Philabundance in 2021 for a total of \$5,200; 5) [The donor] made 52 different donations to Philabundance in 2021 for a total of \$5,200.

Participants answered one question about the donor's prosocial commitment, which was the same as Question 1 in Study 1 ("If you had to say, [which person / which of the two companies]

do you think is more committed to giving back to the community?”). They then answered the same attention check questions as they did in Study 1.

Results

Participants selected which donor they thought was more committed to giving back to the community: the lump sum donor or the partitioned donor. We first collapsed across the specific way the partitioned giving was described and the type of donor. We then ran a one-sample binomial test to assess whether the proportion of participants selecting the donor that gave in partitions and the percentage selecting the donor that gave in a lump differed significantly from 50%. It did: 73.2% of participants selected the donor that gave in partitions; 26.8% selected the donor that gave in a lump sum, $p < .001$, Cohen's $g = 0.23$.

We next ran a chi-square test of independence to compare whether the frequency with which participants selected the donor that gave in partitions depended on the way the partitions were described. As shown in Figure 2, it did not, $\chi^2(4) = 4.13$, $p = .389$, Cohen's $w = 0.09$.²

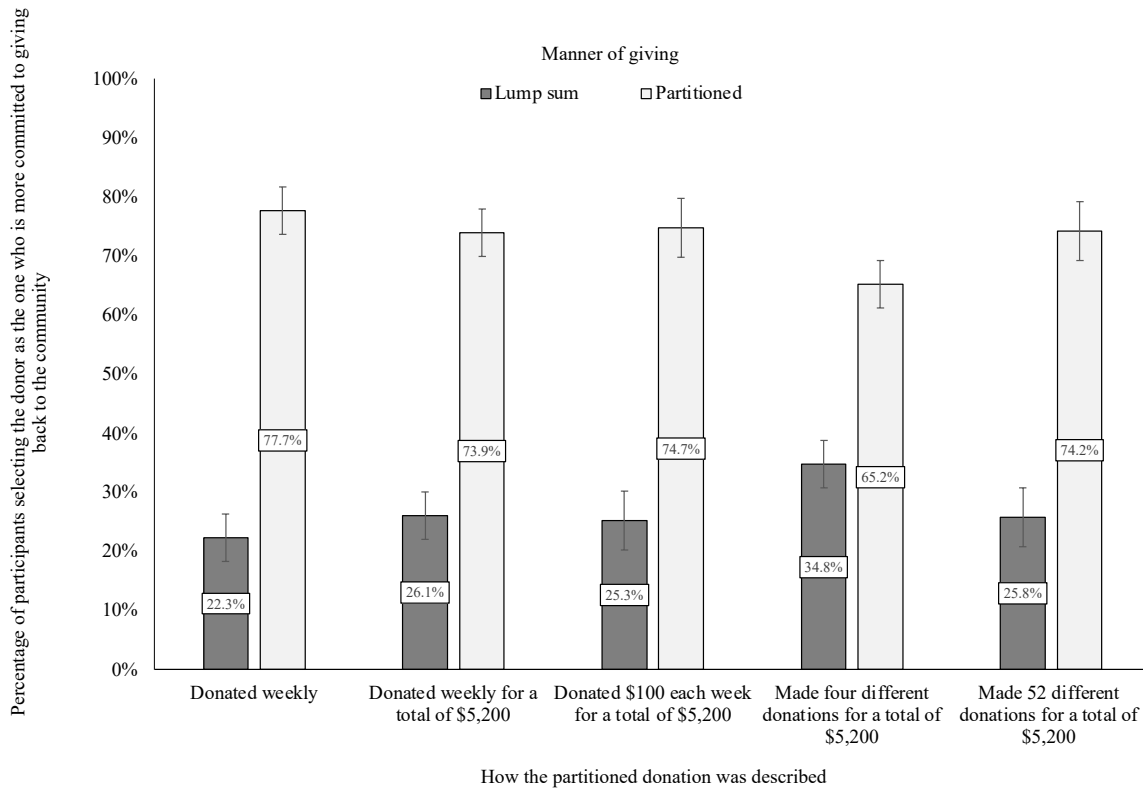
We also ran robustness checks to test whether our effects differed for individual and corporate donors, and whether the results depended on the order in which the donors were presented. A chi-square test of independence showed that the results did not significantly depend on whether participants read about individual or corporate donors, $\chi^2(1) = 1.46$, $p = .227$, Cohen's $w = 0.06$, but did depend on the order in which the donors were presented, $\chi^2(1) = 5.06$, $p = .024$, Cohen's $w = .10$. When the partitioned donor was presented first, 77.7% of participants selected the partitioned donor as the one who was more committed to giving. When the partitioned donor

² An inspection of Figure 2 shows that the “making four donations with the total amount” condition shows a weaker effect than the other conditions. We explored whether this difference was significant. We collapsed across the four other conditions to create a “making four donations with the total amount” binary variable. We then assessed whether the likelihood of selecting the partitioned donor was lower in this description than in the others by running a chi-square test of independence on the likelihood of selecting this donor. The effect was marginally significant, $\chi^2(1) = 3.71$, $p = .054$, Cohen's $w = .09$.

was presented second, 68.5% made this same selection. Critically, the percentage of participants selecting the donor that gave in partitions was significantly different from 50% for both orders ($p < .001$ for both orders).

Figure 2

Percentage of participants selecting the donor that gave in a lump sum and the one that partitioned their donations as a function of how the donor partitioned their donation (Study 2)



Note. Error bars are +/- SEM. The graph shows the wording from the individual donor condition. In the corporate donor condition, the total amount donated (when it was specified) was \$52,000, and the total weekly amount (when it was specified) was \$1,000.

Discussion

Study 2 replicated the finding that partitioning a donation makes both individual and corporate donors seem more committed to prosocial giving. Study 2 further showed that this effect

is relatively insensitive to the manner of partitioning, with the effect emerging when the donor was said to give weekly or quarterly, and with the total amount they gave present or absent. These findings are inconsistent with previous research (Basu, 2021). We discuss this further in the General Discussion.

The fact that we found this effect in joint evaluation in Studies 1 and 2 suggests that people do think it is appropriate to see the person who donates more frequently as the more prosocially committed donor, even when they donate the same amount as the one who donates in one lump sum. However, one concern is that this study design forced participants to select a more prosocially committed donor. We addressed this concern in the remaining studies by manipulating whether a donor gave in partitions or in a lump sum between subjects.

Study 3

In Study 3, we varied whether a donor donated a total of \$300 in a lump sum or partitions to a charitable cause and measured judgments of their prosocial commitment. We also measured impressions of how often the donor has the impulse to give and their desire to be connected to the cause. We theorized that both character inferences would mediate the positive effect of partitioning a donation on prosocial commitment judgments.

For exploratory purposes, we also varied whether the donor that gave in partitions pre-committed to their donation schedule. Our mechanisms suggest that our effect could still emerge even when the donor precommitted to give. We reason that merely seeing that someone gave in partitions makes the person seem to have more pure motives for giving and more prosocially committed than seeing that they gave all at once. Thus, even when someone makes a single a priori decision to donate multiple times, they may still be seen as the type of person who has frequent impulses to give and wishes to connect more with the social cause.

Method

Participants

We opened the study to 400 participants on Prolific. We excluded participants according to preregistered criteria, resulting in a final sample size of 389 participants (see Table S1 in the SOM for a full accounting of these exclusions).

Procedure

This was a three-condition between-subjects design: lump sum, partitioned giving, and partitioned giving with precommitment. We introduced participants to The Bethesda Project, a nonprofit organization that provides shelter, housing, and supportive services to adults experiencing chronic homelessness.

Participants read that The Bethesda Project, as part of its preparation for a new fundraising initiative, was reviewing donations to its January fundraising initiative. We clarified that donors chose how much and how often they wanted to donate during the campaign. We also specified that donations fund activities such as serving meals, providing social services, hosting activities for guests and residents, and carrying out daily site operations.

Participants then read about one donor: Will Calvert. We provided details about Will Calvert to minimize concerns that differences in inferences about the donor's background or disposable income could account for the effects. We specified that Will Calvert is a 34-year-old city planner from Philadelphia who makes \$105,000 a year.

Participants saw The Bethesda Projects' January donation log for Will Calvert. The log showed that Will Calvert gave in a lump sum or partitions (see Figure 3). For the purposes of stimulus sampling, for each condition, we had three different donation logs. In the lump sum giving condition, we varied whether the donor gave on January 3, January 13, or January 30. In the

partitioned giving conditions, we varied whether the donor gave four \$75 donations, six \$50 donations, or ten \$30 donations. We specified in our preregistration that we would collapse across these stimuli within the condition. The SOM shows all the stimuli.

We manipulated whether the partitioned donor precommitted to giving in partitions by telling the participants, “At the beginning of the campaign, Will Calvert pre-committed to making [ten donations of \$30 each/six donations of \$50 each/four donation of \$75 each] during the January fundraising campaign.” Again, we stimulus-sampled the manner of partitioning, so the exact description depended on the specific donation log that participant received.

Figure 3

Examples of the manipulation of lump sum versus partitioned giving (Study 3)

Lump sum giving			Partitioned giving		
Date	Donor name	Amount donated	Date	Donor name	Amount donated
1-Jan			1-Jan		
2-Jan			2-Jan		
3-Jan	Will Calvert	\$300	3-Jan		
4-Jan			4-Jan		
5-Jan			5-Jan		
6-Jan			6-Jan		
7-Jan			7-Jan		
8-Jan			8-Jan		
9-Jan			9-Jan	Will Calvert	\$75
10-Jan			10-Jan		
11-Jan			11-Jan		
12-Jan			12-Jan		
13-Jan			13-Jan		
14-Jan			14-Jan		
15-Jan			15-Jan		
16-Jan			16-Jan	Will Calvert	\$75
17-Jan			17-Jan		
18-Jan			18-Jan		
19-Jan			19-Jan		
20-Jan			20-Jan		
21-Jan			21-Jan		
22-Jan			22-Jan		
23-Jan			23-Jan	Will Calvert	\$75
24-Jan			24-Jan		
25-Jan			25-Jan		
26-Jan			26-Jan		
27-Jan			27-Jan		
28-Jan			28-Jan		
29-Jan			29-Jan		
30-Jan			30-Jan	Will Calvert	\$75
31-Jan			31-Jan		
Total amount donated		\$300	Total amount donated		\$300

Note. Examples of the stimuli used in the lump sum condition and partitioned giving condition. The stimuli for the partitioned giving condition were the same regardless of whether the donor pre-committed to partitioned giving. There were three separate giving schedules for each condition (see the SOM for all the stimuli).

After reviewing the donation log, participants answered questions about the donor's prosocial commitment, impulses to give, and desire to be connected to the social cause. Table 1 has the exact items used here and in the remaining studies. Participants concluded the study by answering attention check questions.

Table 1

Items used to measure prosocial commitment, impulse to give, and desire to be connected to the social cause (Studies 3 – 5b)

Measure	Item	Study 3 (α)	Study 4 (α)	Study 5a (α)	Study 5b (α)
Prosocial commitment	[Donor name] is highly committed to The Bethesda Project.	.93	.94	.92	.89
Prosocial commitment	[Donor name] would be willing to put in a great deal of effort beyond what is normally expected to help The Bethesda Project be successful.				
Prosocial commitment	[Donor name] is very dedicated to The Bethesda Project.				
Impulse to give	[Donor name] frequently thinks about The Bethesda Project.	.82	.87	.80	.80
Impulse to give	[Donor name] often has the impulse to help The Bethesda Project.				
Desire to be connected to the social cause	[Donor name] likes to feel connected to The Bethesda Project.	.82	.87	.85	.78
Desire to be connected to the social cause	[Donor name] wants to be associated with The Bethesda Project.				

Results

We regressed each dependent variable on $k-1$ dummy variables for condition. As shown in Table 2 and Figure 4, participants judged the donor who gave in partitions to be more prosocially committed, to have more impulses to give, and to have a greater desire to be connected to the social cause than the donor that gave in a lump sum. We observed no significant difference in judgments of the partitioned giving donor who did and did not explicitly pre-commit to partitioned giving. (The SOM shows the results broken down by each of the six donation logs.)

Table 2

Linear regression results predicting judgments of the donor's prosocial commitment, impulses to give, and desire to be connected to the social cause (Study 3)

Variable	Prosocial commitment		Impulse to give		Desire to be connected to the cause	
	(1)	(2)	(3)	(4)	(5)	(6)
Lump sum		-1.36** (.14)		-1.64** (.14)		-.80** (.11)
Partitioned	1.36** (.14)		1.64** (.14)		.80** (.11)	
Partitioned w/precommitment	1.25** (.14)	-.11 (.14)	1.43** (.14)	-.21 (.14)	.73** (.11)	-.07 (.11)
Constant	4.25** (.10)	5.60** (.10)	3.75** (.10)	5.39** (.10)	5.09** (.08)	5.88** (.08)
Observations	389	389	389	389	389	389
R-squared	.23	.23	.30	.30	.14	.14

Note. Standardized errors are in parentheses. Models 1, 3, and 5 compare the two partitioned giving conditions to the lump sum giving condition. Models 2, 4, and 6 compare the partitioned giving condition (without explicit pre-commitment) to the other two conditions to assess whether there are significant differences between partitioned giving with and without explicit precommitment.

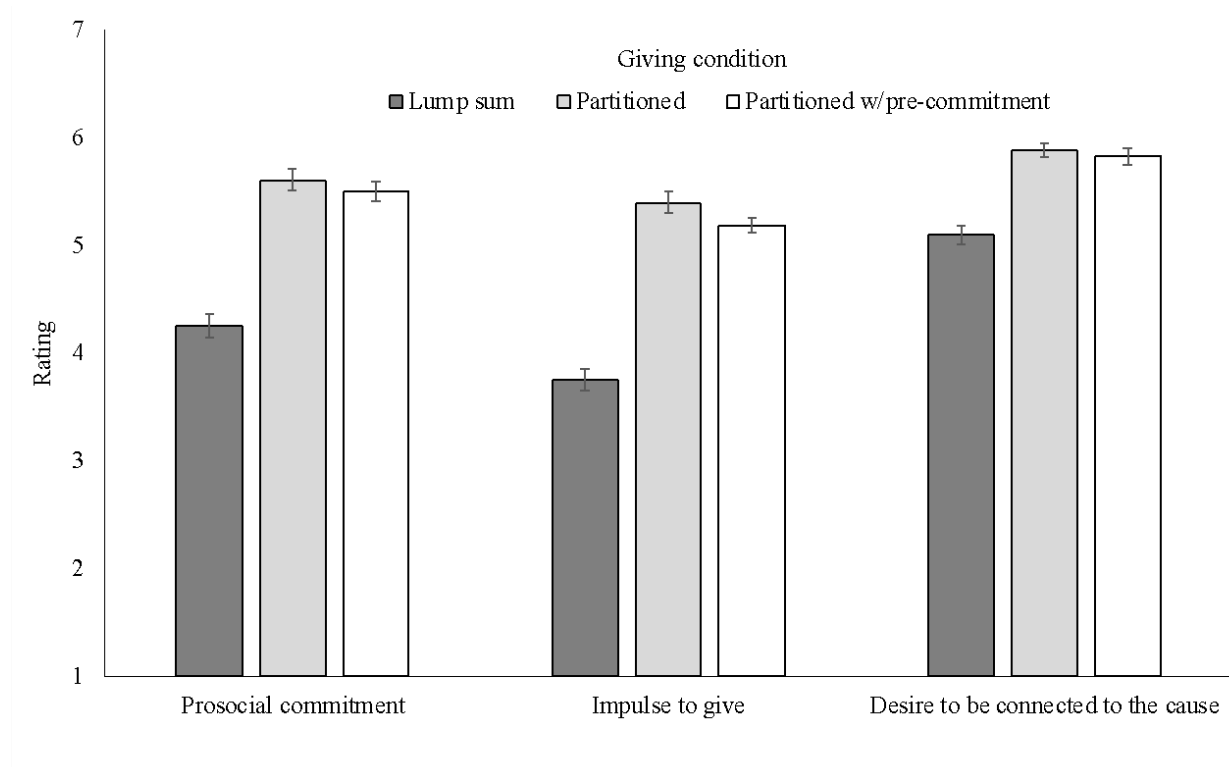
** $p < .01$

We used the bootstrapping method (Preacher & Hayes, 2008) to assess the significance of the indirect effects of the giving condition on prosocial commitment through impulses to give and/or the desire to be connected to the social cause, testing for both indirect effects

simultaneously. Per our preregistration, we collapsed across the partitioned giving and the partitioned giving with precommitment conditions because we observed no significant differences between them on the dependent variables. The 95% CI around the indirect effect through both judgments of the donor's impulses to give [.59, .97] and desire to be connected to the social cause [.19, .43] excluded zero, suggesting that both indirect effects were significant.

Figure 4

The effect of partitioned giving (with or without pre-commitment to partitioned giving) compared to lump sum giving on judgments of the donor (Study 3)



Note. Errors bars are the +/- SEM

Discussion

Participants saw a donor as more prosocially committed when they donated in partitions than in a lump sum. Donating in partitions signaled that the donor has more frequent impulses to

give and a stronger desire to be connected to the social cause. These inferences helped explain why partitioning a donation increased judgments of a donor's prosocial commitment relative to giving the same donation all at once.

We varied whether the partitioned donor precommitted to giving in partitions and found that this had no significant effect on judgments of the donor's prosocial commitment. Notably, although our theory specifies that our effects should still emerge under precommitment, it would be reasonable to predict that our effect should be strongest when each donation was explicitly linked to a discrete act. It is possible here that people believed that the person precommitted to a donation schedule that mapped onto their anticipated impulses to give, which is another way in which the number of donations could inform this character judgment. There may be ways of describing or operationalizing precommitment that would render different results.

We replicated these findings in an additional study, which we report in the SOM (Study S2). The design was similar to Study 3. But instead of varying precommitment, we varied whether the partitioned-giving donor gave in equal or unequal partitions. We explored the possibility that unequal partitioned giving would act as a stronger signal of prosocial commitment than equal partitioned giving, reasoning that paying unequal amounts may indicate greater prosocial impulses (as equal amounts may require less thought and be more habitual). However, we did not see evidence of this, finding similar positive effects of partitioned giving compared to lump sum giving when the partitions were equal and unequal.

Study 4

Our theory holds that partitioning donations makes a donor seem more prosocially committed because people use the number of discrete donations as signal of the donor's impulses to give and desire to be connected to the social cause. This suggests that partitioning donations

may elevate judgments of a donor's prosocial commitment more if the partitions are seen as more discrete acts than as more of a group or cluster. We tested this idea in Study 4 by varying whether the partitioned donor donated on consecutive days or nonconsecutive days, while holding constant the number of times they donated.

Method

Participants

We posted the study to Mechanical Turk for 500 participants. We had 438 participants after excluding participants according to our preregistered exclusion criteria (see Table S1 in the SOM for more details).

Procedure

This was a three condition between-subjects design (lump sum giving vs. partitioned giving: consecutive days vs. partitioned giving: nonconsecutive days). Participants again learned that a donor (Mark P) gave \$500 to The Bethesda Project during its previous fundraising drive. Like Study 3, we again specified that Mark was a 34-year-old city planner from Philadelphia who makes \$105,00 a year.

Participants viewed a calendar showing when Mark donated during The Bethesda Project's previous fundraising drive which ran from February 2022 to March 2022. We varied whether Mark donated once (lump sum giving condition), five times on five consecutive days (partitioned giving: consecutive days condition), or five times on five nonconsecutive days (partitioned giving: nonconsecutive days condition). We stimulus sampled the dates within each condition. The SOM shows all the stimuli.

Participants answered the same questions about the donor's prosocial commitment, impulses to give, and desire to be connected to the social cause as they did in Study 3 (see Table 1).

Results

We regressed each dependent variable on $k-1$ dummy variables for condition. The results can be viewed in Table 3 and Figure 5.³ The results showed that participants thought the donor had the highest prosocial commitment, the most frequent impulses to give, and the strongest desire to be connected to the social cause when they partitioned their donation on nonconsecutive days, followed by when they partitioned their donation on consecutive days, followed by when they gave everything on a single day.

Table 3

Linear regression results predicting judgments of the donor's prosocial commitment, impulses to give, and desire to be connected to the social cause (Study 4)

Variable	Prosocial commitment		Impulse to give		Desire to be connected to the cause	
	(1)	(2)	(3)	(4)	(5)	(6)
Lump sum		-.75** (.13)		-1.01** (.13)		-.46** (.11)
Partitioned: Consecutive days	.75** (.13)		1.01** (.13)		.46** (.11)	
Partitioned: Nonconsecutive days	1.48** (.13)	.73** (.13)	1.94** (.14)	.93** (.13)	.87** (.11)	.41** (.11)
Constant	4.36** (.09)	5.11** (.09)	3.68** (.10)	4.69** (.09)	5.03** (.08)	5.49** (.07)
Observations	438	438	438	438	438	438
R-squared	.23	.23	.32	.32	.12	.12

Note. Standardized errors are in parentheses. Models 1, 3, and 5 compare the two partitioned giving conditions to the lump sum giving condition. Models 2, 4, and 6 compare the partitioned giving: consecutive days condition to the other two conditions to assess whether there are significant differences between partitioned giving on consecutive and nonconsecutive days.

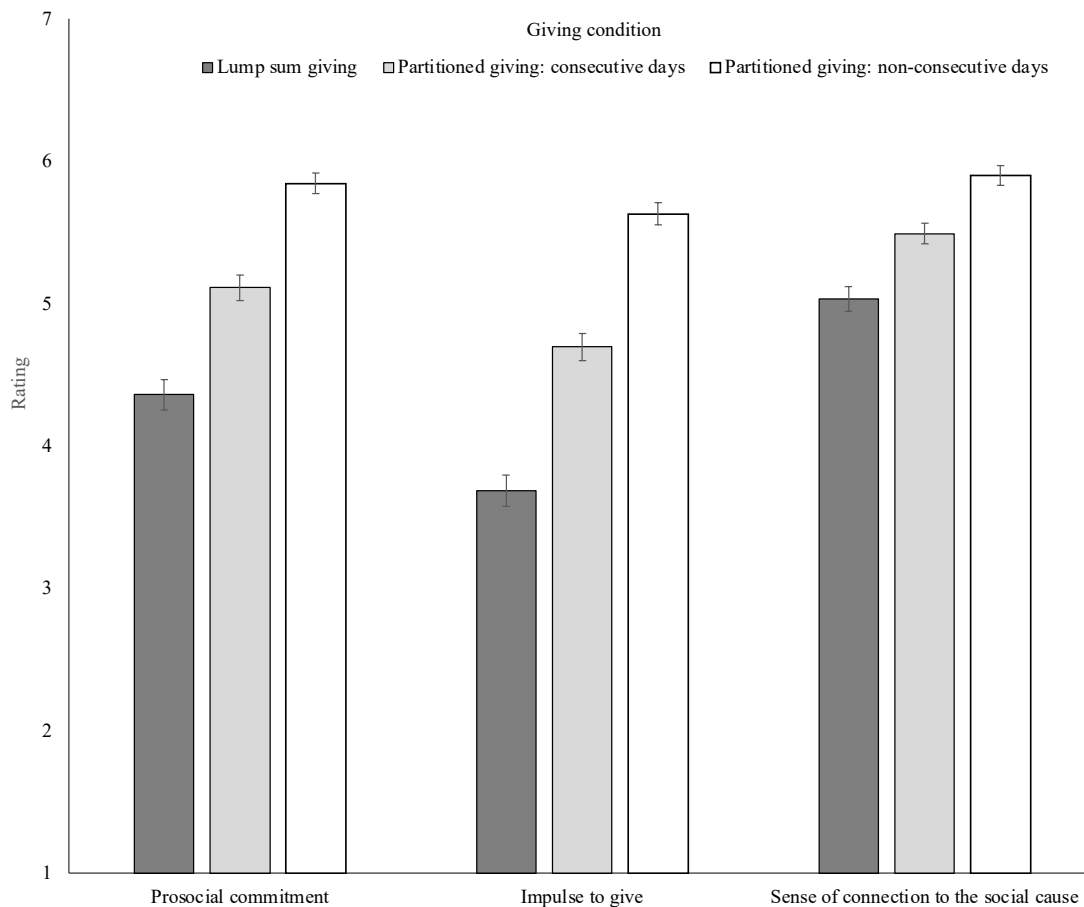
** $p < .01$

³ We preregistered that we would run a one-way ANOVA. We ran a linear regression instead to be consistent with the analyses from Studies 3, 5a, and 5b. We note that the results are identical if we run an ANOVA instead.

We again used the bootstrapping method (Preacher & Hayes, 2008) to assess the significance of the parallel indirect effects of the giving condition on prosocial commitment through impulses to give and/or the desire to be connected to the social cause. As shown in Table 4, judgments of how the donor's impulses to give and their desire to be connected to the social cause mediated each direct effect, as indicated by the 95% confidence interval around the indirect effect excluding zero.

Figure 5

The effect of partitioned giving (on consecutive versus nonconsecutive days) compared to lump sum giving on judgments of the donor (Study 4)



Note. Error bars are +/- SEM

Table 4

Results from mediation analysis assessing the indirect effects of type of giving on prosocial commitment through impulse to give and the desire to be connected to the social cause (Study 4)

Comparison condition (IV)	Impulse to give		Desire to be connected to the social cause	
	Coef	95% CI	Coef	95% CI
Lump sum vs. Partitioned: Consecutive	0.37	.23, .50	0.25	.12, .37
Lump sum vs. Partitioned: Nonconsecutive	0.70	.50, .90	0.46	.32, .61
Partitioned: Consecutive vs. Partitioned Nonconsecutive	0.34	.22, .46	0.22	.10, .33

Note. Coef = the coefficient for the indirect effect with 95% CI.

Discussion

Study 4 revealed that the donation schedule that a donor follows impacts how their prosocial tendencies are perceived. Replicating the previous findings, partitioned giving signaled greater prosocial commitment than lump sum giving because it signaled the donor has stronger impulses to give and a stronger desire to be connected to the social cause.

We expected that making separate donations seem like more discrete acts would result in a stronger partitioning effect compared to making them seem more like a group. We reasoned that acts that are spread out over time may be seen as more discrete than acts that are closer together. Thus, these acts may be more likely to be perceived as stemming from distinct impulses and reflecting the donor's ongoing connection to the cause. Supporting this, Study 4 found that holding both the number of times someone donated and the amount they donated constant, people saw the donor that donated on nonconsecutive days as having more impulses to give and a greater desire to be connected to the social cause than the donor who gave the same number of times on consecutive days, and thus also more prosocially commitment. This suggests that the positive

effect of partitioning donations is not just about the actual number of acts but about the perception of more or fewer discrete acts.

We replicated the finding that people see someone who gives on nonconsecutive days versus consecutive days as more prosocially committed in a within-subjects design (Study S3 in the SOM). This provides some support that participants feel that giving on nonconsecutive days should be considered a relevant factor in deciding who is more prosocially committed.

Studies 5a and 5b

We contend that people use a partitioned heuristic to guide their prosocial judgments – that the mere act of seeing that someone gives multiple times signals positive information about their prosocial motives and commitment. However, an alternative explanation is that participants are not using a partitioned heuristic but responding to the fact that partitioned giving requires nontrivially more effort or personal cost than giving a lump sum. For instance, maybe it takes more time to donate on multiple occasions than on one occasion. Study 4 suggests that this might not be driving the results. Here we held constant the number of times someone donated, varying just whether these times occurred closer in time or more spread-out – to make them seem less or more like partitions. That said, the results of Study 4 alone are insufficient to address this alternative explanation of effort fully because perhaps donating five times in one week seems easier than donating five times across multiple weeks.

In Studies 5a and 5b, we provide a stronger test of our partitioned heuristic account. We also better address the alternative explanation that people regard partitioned giving as a signal of prosocial commitment because it requires more effort or personal cost than giving in a lump sum. In Studies 5a and 5b, we hold constant the effort required for donors to give in a lump sum or in partitions. We also hold constant the time duration involved in giving once or multiple times by

having the nonprofit organization process the donation(s) on the same day. This design allowed us to hold constant everything about the donation process save for whether the donor chose to give in partitions or in a lump sum. This provides a stronger test of the idea that partitioned giving affects judgments of a prosocial commitment *per se* because effort, personal cost, and the time involved to donate in partitions versus in a lump sum is held constant

Study 5a

Method

Participants

We posted the study to Mechanical Turk for 600 participants. We had 542 participants after excluding participants according to our preregistered exclusion criteria (see Table S1 in the SOM for more details).

Procedure

This was a two condition between-subjects design (lump sum giving vs. partitioned giving). As in previous studies, participants learned that a donor (Mark P) gave \$500 to The Bethesda Project. We again specified that Mark was a 34-year-old city planner from Philadelphia who makes \$105,00 a year.

Participants learned that Mark recently donated to The Bethesda Project. Upon visiting The Bethesda Project's website, Mark was directed to a user-friendly donation form. Participants then saw Mark's completed donation form. The donation form asked how much the donor wanted to donate, whether they wanted to make one donation or multiple donations, and whether they wanted to have their donation(s) processed today or to specify the date(s) on which their donation(s) would be made. The form explained that if the donor wanted to make one donation, they just needed to enter "1" in the "Number of Donations" box. If they wanted to make multiple donations, they just

needed to enter the number of donations they want to make in the “Number of Donations” box. Their total donation would then be divided by the number of donations they wanted to make. The form then provided an example (see the SOM for the full materials).

In both conditions, Mark donated \$500 and chose to have his donation(s) processed today. As shown in Figure 6, the only thing that varied was whether Mark indicated that he wanted to have this total donation processed as one donation (lump sum giving condition) or five donations (partitioned giving condition). This allowed us to hold effort, personal cost, and time duration of one’s donation constant across the conditions, isolating the specific effect of partitioning one’s donation.

After reviewing Mark’s donation form, participants then answered the same questions about their impressions of Mark’s prosocial commitment, impulses to give, and desire to be connected to the social cause as they did in Studies 3 and 4 (see Table 1).

Figure 6

Stimuli used to manipulate lump sum versus partitioned giving (Study 5a and 5b)

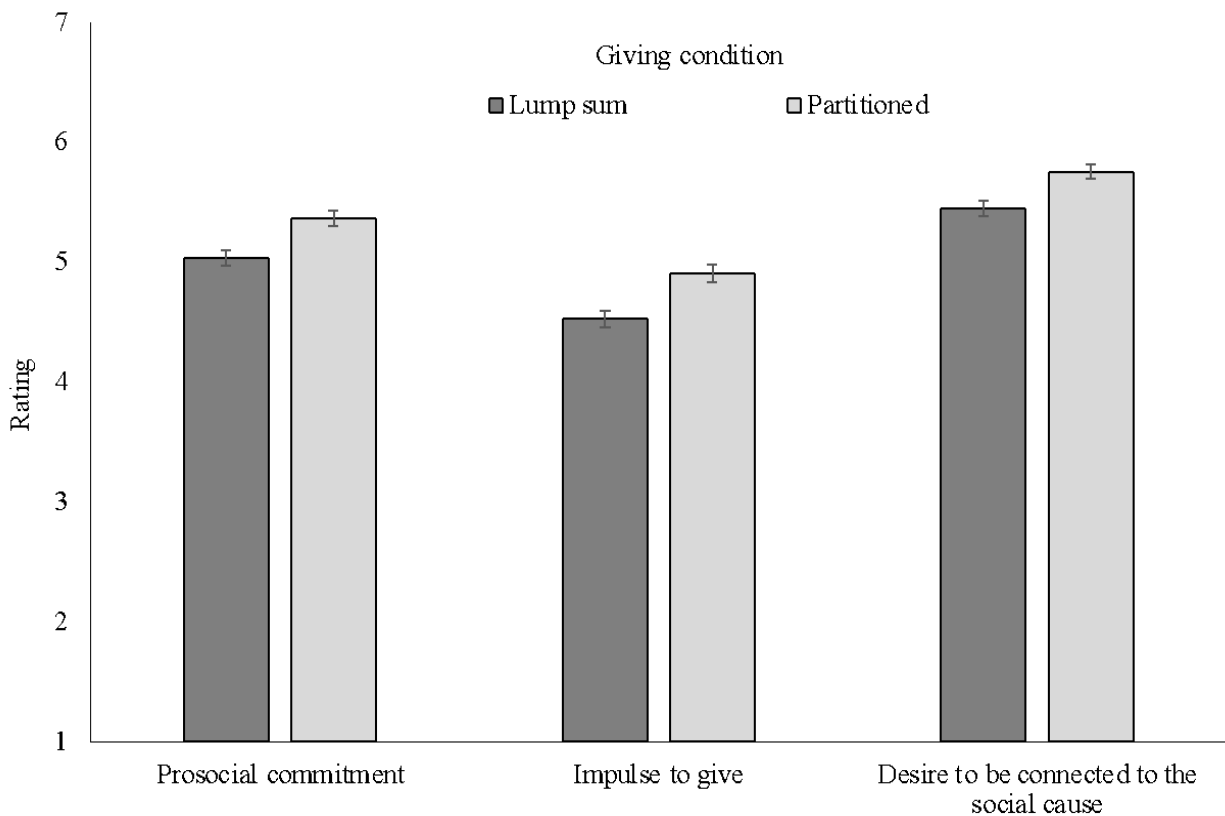
<u>Lump sum giving condition</u>	<u>Partitioned giving condition</u>
<p>Number of Donations</p> <input data-bbox="224 1318 500 1346" type="text" value="1"/> <p>Date to process the donation(s):</p> <p><input checked="" data-bbox="224 1402 240 1423" type="radio"/> Process the donation(s) today</p> <p><input data-bbox="224 1423 240 1444" type="radio"/> Select date(s)</p> <p>We will process your \$500 donation today. <small>Click DONATE NOW to confirm</small></p> <hr/> <p><input data-bbox="391 1556 472 1583" type="button" value="Save"/> <input data-bbox="483 1556 646 1583" type="button" value="Donate Now"/></p>	<p>Number of Donations</p> <input data-bbox="862 1318 1105 1346" type="text" value="5"/> <p>Date to process the donation(s):</p> <p><input checked="" data-bbox="862 1402 878 1423" type="radio"/> Process the donation(s) today</p> <p><input data-bbox="862 1423 878 1444" type="radio"/> Select date(s)</p> <p>We will process your 5 donations of \$100 each for a total donation of \$500 today. <small>Click DONATE NOW to confirm</small></p> <hr/> <p><input data-bbox="1008 1577 1089 1604" type="button" value="Save"/> <input data-bbox="1101 1577 1230 1604" type="button" value="Donate Now"/></p>

Results

Independent samples t -tests showed that participants thought the donor was more prosocially committed [$t(540) = 3.47, p < .001, d = .30$], had more impulses to give [$t(540) = 3.77, p < .001, d = .32$], and had a stronger desire to be connected to the social cause [$t(540) = 3.74, p < .001, d = .32$] when they donated in partitions than in a lump sum (see Figure 7).

Figure 7

The effect of partitioned versus lump sum giving on judgments of a donor's prosocial commitment, impulses to give, and desire to be connected to the social cause (Study 5a)



Note. Error bars are +/- SEM

We again used the bootstrapping method (Preacher & Hayes, 2008) to assess the significance of the parallel indirect effects of the giving condition on prosocial commitment through impulses to give and/or the desire to be connected to the social cause. The 95% CI around

the indirect effect through both judgments of the donor's impulses to give [.06, .23] and desire to be connected to the social cause [.07, .25] excluded zero, suggesting that both indirect effects were significant.

Discussion

Study 5a held constant the effort, personal cost, and time duration of donating in partitions or a lump sum. Yet participants still thought the partitioned giving donor was more prosocially committed than the lump sum giving donor. That is, merely seeing that the donor wanted to give their donation in multiple partitions was sufficient to signal the donor's prosocial commitment, suggesting that people rely on partitions *per se* in forming their judgments of donors.

Study 5b

Study 5b was identical to Study 5a except we included a third condition in which the partitioned donor specified different dates for each of their five donations rather than having their five donations processed all on the same day. We explored whether seeing these individual donations would enhance the effect of partitioned giving on judgments of prosocial commitment, similar to how giving on nonconsecutive days enhanced this effect in Study 4.

Method

Participants

We posted the study to Prolific for 500 participants. We had 466 participants after excluding participants according to our preregistered exclusion criteria (see Table S1 in the SOM for more details).

Procedure

This was a three condition between-subjects design (lump sum giving vs. partitioned giving: donations processed on the same day vs. partitioned giving: donations processed on

different days). The study had the same design as Study 5a except we included a third condition in which the partitioned donor specified the dates on which they wanted their donations to be processed.

In this condition, the donor selected “Select date(s)” for the question “Date to process the donation(s) (see Figure 6). They then specified they wanted their five donations processed on April 8, April 15, April 22, April 29, and May 6.

We also specified in all conditions that the donation(s) were processed successfully to minimize the possibility that some participants might wonder whether the donors followed through with their planned donations. Everything else about the study was identical to Study 5a.

Results

We regressed each dependent variable on $k-1$ dummy variables for condition. Table 5 shows the regression results and Figure 8 plots the results by condition.

Replicating Study 5a, participants perceived the donors who partitioned their donations to be more prosocially committed than the donor who gave in a lump sum, both when the donations were processed on the same day or different days (Table 5, Model 1). Participants also perceived the partitioned giving donor to be more prosocially committed when he chose to have his donations processed on different days than all on the same day (Table 5, Model 2).

Further replicating Study 5a, participants thought the donors who partitioned their donations had more impulses to give than the donor who gave in a lump sum, both when the donations were processed on the same day or different days (Table 5, Model 3). There was no significant difference in participants’ impressions of the donor’s impulses to give between the two partitioned giving conditions (Table 5, Model 4).

Table 5

Regression results predicting judgments of a donor's prosocial commitment, impulses to give, and desire to be connected to the social cause from their manner of giving (Study 5b)

Variable	Prosocial commitment		Impulse to give		Desire to be connected to the social cause	
	(1)	(2)	(3)	(4)	(5)	(6)
Lump sum		-.34** (.11)		-.40* (.12)		-.14 (.10)
Partitioned: Same day	.34** (.11)		.40** (.12)		.14 (.10)	
Partitioned: Different days	.63** (.11)	.29* (.12)	.54** (.12)	.14 (.12)	.36** (.10)	.22* (.10)
Constant	4.96** (.08)	5.30** (.08)	4.66** (.08)	5.06** (.08)	5.40** (.07)	5.54** (.07)
Observations	466	466	466	466	466	466
R-squared	.06	.06	.04	.04	.03	.03

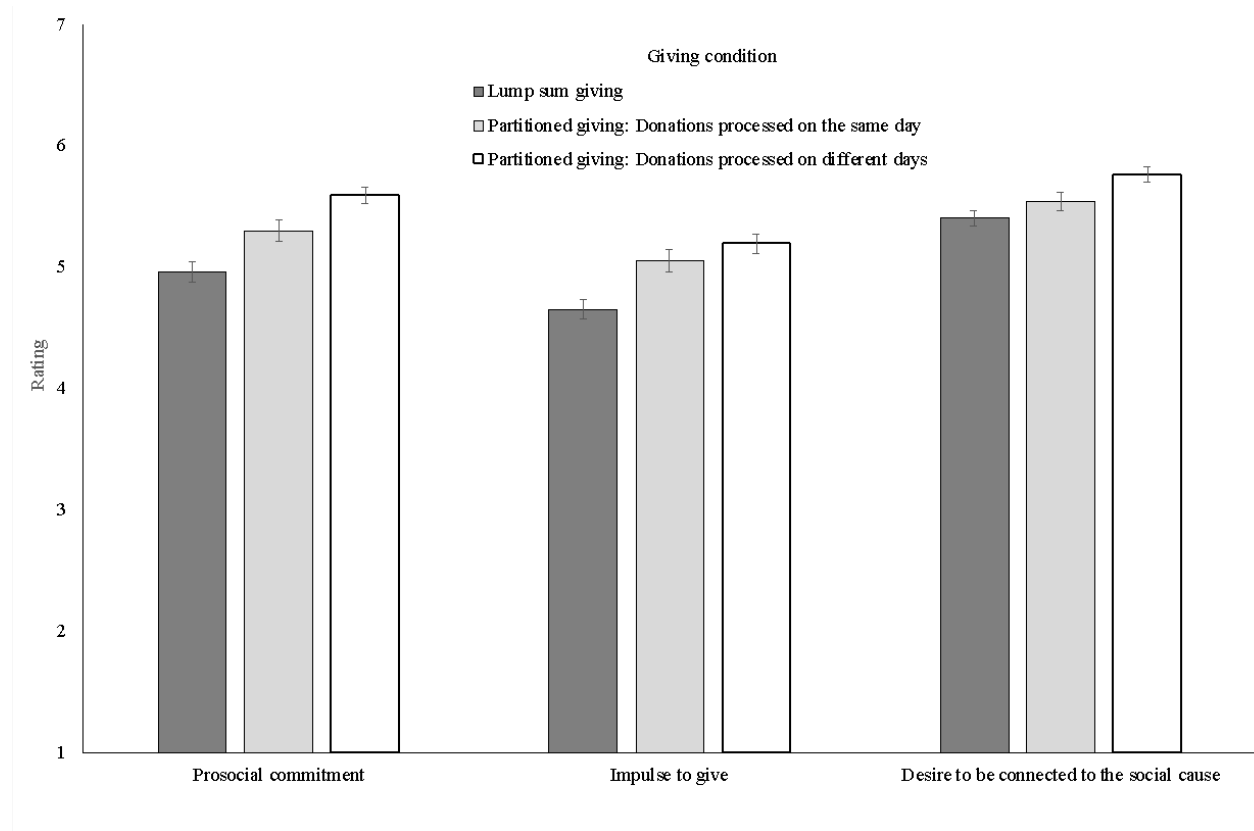
Standard errors are in parentheses

*** $p < .01$, * $p < .05$*

Different from Study 5a, participants did not see the donor who gave in partitions that were processed on the same day as significantly more desirous of being connected to the social cause than the donor who gave in a lump sum (Table 5, Model 5). However, participants did see the donor who gave in partitions and had their donations processed on different days as being more desirous of being connected to the social cause than both other donors (Table 5, Models 5 and 6).

Figure 8

The effect of partitioned versus lump sum giving on judgments of a donor's prosocial commitment, impulses to give, and desire to be connected to the social cause (Study 5b)



Note. Error bars are +/- SEM

We again used the bootstrapping method (Preacher & Hayes, 2008) to assess the significance of the parallel indirect effects of the giving condition on prosocial commitment through impulses to give and/or the desire to be connected to the social cause mediated. As shown in Table 6, the indirect effect through impulses to give was significant for the comparison of the lump sum giving condition to both the partitioned giving conditions, but not for the comparison between the two partitioned giving conditions.

Different from Study 5a, the indirect effect through the desire to be connected to the social cause was not significant for the comparison between lump sum giving and partitioned giving with the donations processed on the same day. This indirect effect was significant for the comparison between lump sum giving and partitioned giving with the donations processed on different days, but not between the two partitioned giving conditions.

Table 6

Mediation results assessing the indirect effects of type of giving on prosocial commitment through impulse to give and the desire to be connected to the social cause (Study 5b)

Comparison condition (IV)	Impulses to give		Desire to be connected to the social cause	
	Coef	95% CI	Coef	95% CI
Lump sum vs. Partitioned: Processed same day	0.15	.04, .26	0.08	-.02, .18
Lump sum vs. Partitioned: Processed different days	0.19	.09, .29	0.19	.09, .29
Partitioned: Processed same day vs. Processed different days	0.05	-.04, .14	0.09	-.01, .18

Note. Coef = the coefficient for the indirect effect with 95% CI.

Discussion

Study 5b replicated the finding from Study 5a that partitioning donations increases perceptions of a donor's prosocial commitment, even when the effort, cost, and time duration to donate in partitions or a lump sum are the same. Study 5b further showed that this effect was stronger when the donations were spread out, presumably because participants then perceived each donation more as a discrete act, reinforcing the donor's positive motives. The results regarding these motives were somewhat mixed but still suggestive of our mechanisms. The fact that desire

to be connected to the cause was greatest when the partitions were spread out over different days makes sense given our theory that the person may want ongoing interactions and association with the organization.

Whereas in Study 5a people viewed the partitioned donor who gave all partitions at once to be more desirous of a connection with the social cause, we did not find this effect in Study 5b. This may simply be a smaller effect that needs more power to emerge consistently; our theory does indeed suggest that this effect would likely be small (as the association with the organization would not be ongoing). Similarly, the difference between partitions processed on the same day and partitions processed on different days on impulse to give may also emerge with greater power.

Study 6

An implication of the findings thus far is that, for donors who have engaged in partitioned giving, showing the number of times they donated in addition to how much they donated should make them seem more prosocially committed. We tested this idea in Study 6 by varying how a company presented its yearly charitable giving on its corporate giving page. We then assessed participants' impressions of the company's commitment to corporate social responsibility (CSR).

Method

Participants

We posted the study to Mechanical Turk for 500 participants. After applying our preregistered exclusion criteria, we had 454 participants (see Table S1 in the SOM for more details).

Procedure

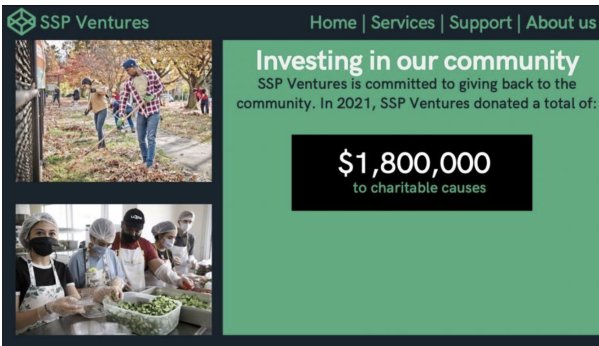
Participants read about a Maryland-based company, SSP Ventures, which donates a portion of its revenue to charity each year. Participants saw a screen recording of the corporate giving page on SSP Ventures' website. The page showed the company's giving for 2021.

In the lump sum giving condition, participants saw that the company gave \$1,800,000 to charitable causes in 2021. In the partitioned giving condition, participants saw the amount that SSP ventures gave in January, March, May, July, September, and November of 2021, for a total of \$1,800,000. Figure 5 shows screenshots of the websites, which were animated in the study (see SOM for links to the animated websites).

Figure 5

Screenshots of the websites used to manipulate the presentation of a company's corporate giving (Study 6)

Panel A



Panel B



Note. Participants saw the website in Panel A in the lump sum giving condition. They saw Panel B in the partitioned giving condition.

We then measured participants' agreement (1 = *Strongly disagree*, 5 = *Strongly agree*) with four statements which we averaged to form our measure of prosocial commitment ($\alpha = 0.90$): 1) "I think SSP Ventures is highly committed to helping its community;" 2) "I think that SSP Venture gives sustainable support to programs with good social causes;" 3) "SSP Ventures cares a lot about

giving back to its community;" 4) "SSP Ventures cares about the interests of the people in its community." Participants concluded the study by answering an attention check question about the total amount of money SSP Ventures donated to charity in 2021.

Results

A *t*-test revealed that participants thought the company was more committed to corporate social responsibility when it presented its yearly charitable giving in partitions ($M = 4.37$, $SD = 0.56$) than when it presented these donations as a single lump sum ($M = 4.17$, $SD = 0.61$), $t(454) = 3.73$, $p < .001$, $d = 0.34$.

Discussion

Study 6 showed the benefits of communicating when a company gave throughout the year. Notably, these results suggest when a company is engaged in partitioned giving, the company needs to change nothing about their schedule of giving to be seen as more committed to corporate social responsibility; they simply need to state when they gave alongside how much they gave.

General Discussion

How do donors get credit for donating to worthy social causes when others are quick to question their intentions (Berman & Silver, 2022; Carlson & Zaki, 2018; Cassar & Meier, 2017; Newman & Cain, 2014)? The findings from 10 experiments (seven reported in the main text and three in the SOM) suggest that donating bit-by-bit rather than in a lump sum is one answer to this question. Across studies, participants saw a donor as more prosocially committed when they partitioned their donation than when they gave this donation in one lump sum. This effect was robust. It emerged for different sizes and frequency of partitions, and different ways of displaying them, including on calendars, presented on a company website, with written text and no visual aid. Critically, the positive effect of partitioned giving on prosocial judgment emerged even when the

effort, cost, and time duration of giving was held constant, suggesting people infer someone's prosocial commitment from them making multiple donations per se and not merely because making multiple donations could require more effort or time.

We found that partitioning a donation signals to observers that the donor is the type of person to have more impulses to give and to have a stronger desire to be connected to the social cause, and that these perceptions help explain why partitioning a donation makes a donor seem more prosocially committed. Accordingly, the effect was larger when the partitioned donor gave on nonconsecutive days than on consecutive days (Study 4) or on the same day (Study 5b). Giving on nonconsecutive days sent a stronger signal about the donor's impulses to give and desire to be connected to the social cause, presumably because observers viewed these donations more as discrete acts than donating on consecutive days. Further speaking to the process, this effect emerged across both joint and separate evaluations of partitioned versus lump sum giving, suggesting that this is not a bias per se; rather, it reflects how people think prosocial commitment should normatively be assessed.

Theoretical Implications and Future Directions

Our work provides compelling evidence that the structure of donations can significantly influence people's perceptions of the donor and their motivations. This research offers novel insights into how people evaluate prosocial behavior, thereby advancing the study of moral judgment. We demonstrate that people use a partitioned heuristic when assessing a donor's prosocial commitment. Existing research on prosocial judgments does not fully explain this phenomenon. The preference for partitioned giving is not because people believe the partitioned donor donated a greater amount than the lump sum donor, as the total amount donated was held constant (even in joint evaluation). This effect is also not due to the perception that the partitioned

donor is not able to afford to donate the total amount at once, and thus is making a greater financial sacrifice than the lump sum donor, as financial stability and income were explicit. Additionally, the preference for partitioned giving is not solely due to differences in actual effort, cost, or time span required to donate multiple times versus once. Although effort likely does play a role in our effect when giving in partitions requires significantly more effort, cost, time, or sacrifice, this preference emerged even when these factors were held constant, with the only difference being that one donor's contribution was processed as a single donation and the other as five separate donations. Thus, we propose and find that people care about the partitions themselves. When they perceive that someone has donated multiple times, they infer that the donor likely has frequent impulses to give and a strong connection to the social cause. Ultimately, these positive inferences about the donor's motives likely reduce skepticism about their reasons for giving.

Our work also shows that judgments of partitioned donors can be influenced by how the partitions are grouped. Even if someone donated five times, people may be more likely to see this donation as more of a single significant prosocial act rather than five separate acts when the donations occur closer in time. Indeed, this reasoning led us to predict and find that the positive effect of partitioned giving on perceived prosocial commitment is enhanced when the donor gives on nonconsecutive days compared to consecutive days.

The criminal justice literature on chargeable offenses inspired this prediction, revealing how sometimes arbitrary factors may influence how people perceive the number of prosocial acts someone engaged in, such as how multiple donations are grouped. This idea has interesting implications for how the presentation of multiple donations could affect the strength of the positive partitioned giving effect on prosocial commitment. Suppose someone donates on April 28, April 29, and April 30. Now suppose they donate on April 29, April 30, and May 1. The latter donation

pattern may signal greater prosocial commitment because this schedule crosses a time boundary (the boundary between months), whereas the former schedule does not. Research finds that people perceive events that cross time boundaries as longer (Donnelly et al., 2022), and thus people may see donations that cross time boundaries as more discrete acts and those that do not as more of a group.

Another implication is how people or companies display their donations on their corporate giving page. Given the law of proximity from Gestalt psychology (Koffka, 1935), which states that objects close to each other are perceived more as a group than objects farther apart, the spacing of the partitions could matter. While we wondered whether visually representing the partitions might enhance the effect, the positive effect of partitioning donations emerged even when the donations were not visually represented, as shown in Study 5a and 5b.

We find that people use partitioned giving as evidence that someone is likely to have frequent impulses to give. Previous research shows that people care about others' intentions to help (Anderson et al., 2020), and, as we found, seeing multiple discrete instances of giving can make someone seem like they have more frequent impulses to help. But how many impulses does a donor actually have? A person's impulses to help are not observable and might not even be known or accessible to themselves (Nisbett & Wilson, 1977). The number of impulses someone had also is debatable. For example, returning to *Blockburger v. United States*, the defendant insisted he had only one impulse to sell drugs that night, but the court ruled he multiple impulses because he made multiple transactions. Relevantly, we do not argue that a person who gives multiple times instead of in a lump sum, or gives on nonconsecutive days instead of consecutive days, has more impulses than someone who gives on consecutive days. Rather, we argue and find that people perceive them as having more impulses because people, like courts counting offenses, seem to have a one-

impulse-one-act calculation. Thus, when donations appear as more discrete acts, people infer that the person likely has more impulses to help.

This calculation does not mean that the positive effect of partitions on prosocial commitment is linear, with more partitions equating to greater prosocial commitment. Indeed, our studies cannot fully address the relationship between the number of partitions and judgments of prosocial commitment. Are more partitions viewed as better than fewer? Would partitioning a \$1,000 donation into 1,000 \$1.00 donations be effective? What about partitioning it into 4,000 separate \$0.25 donations? Partitioning likely would seem excessive at some level. People may become desensitized to additional partitions after a certain point because they have a diminishing sensitivity to gains. This diminishing sensitivity also raises questions about whether people who give in more partitions are evaluated as more prosocially committed than those who give in partitions but fewer of them. Study 2 partially addresses this issue because in it we varied how the partitioning was framed (e.g., “gave weekly” vs. “gave 52 times a year”). Participants thought the partitioned donor was more prosocially committed than the lump sum donor, regardless of the partition framing. However, this study does not directly answer whether more partitions are viewed as better than fewer, since participants compared partitioned donors with lump sum donors, rather than comparing different types or amounts of partitioning among donors.

Our studies kept the total donation amount constant. But what if we varied it? Would people still perceive the partitioned donor as more prosocially committed, even if their total donation was less than that of someone who gave a single lump sum? And how much more would the lump sum donor need to give to be seen as equally or more prosocially committed than the donor who gave in partitions? Answering these calibration questions may be more challenging than it seems. For example, imagine a donor gives \$50 six times, totaling \$300. One could compare this partitioned

giving to progressively larger lump sum donations until reaching a point where both types of donors are seen similarly. This would reveal the monetary equivalent of six \$50 donations. How would these results hold up if the partitioned donor instead made 10 donations of \$30 or 100 donations of \$3? Additionally, would the relative monetary equivalent of a partition hold if the total donation amount was much smaller or larger? Probably not, given, for example, the logarithmic way people perceive numbers. While modeling the breakeven point between lump sum and partitioned donations based on total amount and number of partitions is beyond the scope of this paper, it remains an intriguing direction for future research.

Our work shows that a donor's donation schedule influences perceptions of their motives and prosocial commitment. We examined the impact of the number of donations and the dates on which someone donated (e.g., donating on consecutive versus nonconsecutive days) on these perceptions. However, other aspects of the donation schedule might also be influential. For instance, donating on special days may indicate genuine motives, making the donor appear more prosocially committed, as people tend to praise those who give for emotional reasons (Amormino et al., 2024; Barasch et al., 2014) and those who are personally connected to causes (Lin-Healy & Small, 2012). Thus, donating a lump sum on emotionally significant or personally meaningful dates, such as donating to the Breast Cancer Research Foundation on a friend's birthday who has breast cancer, or to Habitat for Humanity on the anniversary of the charity's first house construction, could minimize the negative effect of lump sum giving compared to partitioned giving on prosocial commitment. This may be an additional way that a donation schedule can affect perceptions of donor motives and commitment.

Future research may help clarify the disparity between our findings and those of Basu (2021), which found that framing a donation in periodic terms (e.g., \$25 each week) garnered less

moral praise than framing it as an aggregated amount (e.g., a total of \$250). Basu focused on whether people who give to “pennies-a-day” type charitable campaigns receive less moral praise than those who give to lump sum campaigns. This focus means their paper differed from this paper in two significant ways. First, Basu did not include the total donation amount in the periodic giving conditions, whereas we did (except in Study 2 where we manipulated it but found our effect both when the total amount was specified and when it was not). Participants in Basu’s (2021) studies might have observed, for instance, a person responding to a plea for \$1.00 per day or a plea to donate \$365 annually. The omission of the total amount given in the periodic framing condition makes sense, given Basu’s research question. However, this omission may have led people to think that the donor in the periodic framing condition gave less than the one in the aggregated framing condition. Indeed, participants in Basu (2021) thought the person who gave in response to a periodic framing plea sacrificed less than the donor who gave in response to an aggregated framing plea.

Second, in scenarios in Basu (2021), participants saw the donor give in response to a charitable plea. Perhaps participants encoded giving in response to a direct charitable ask whose persuasive appeal involves giving in small amounts as ‘cheap’ (which is similar to their argument). In our studies, giving was initiated by the donor, who decided how to partition their donations. In summary, comparing our findings with Basu suggests that there are likely situations in which partitioned giving results in someone being seen as less prosocially committed than lump sum giving. Future research should explore when and why this occurs.

Practical Implications

This work contributes to research on effective altruism by identifying a novel strategy for individual and corporate donors to reduce skepticism about their charitable giving, potentially

making their contributions more impactful (see Caviola et al., 2021; Jaeger & van Vugt, 2022). In Study 6, the company reported the total amount it donated to charities the previous year. We varied whether the company also reported the specific dates of these donations on its website. Our recommendation is that companies making multiple donations should (honestly) report how much they gave each month or quarter, in addition to the total annual amount. This approach highlights their genuine commitment to corporate social responsibility. It does not require the company to change its donation practices, engage in deception, or promise future donations. Instead, it emphasizes aspects of the donation process that companies might overlook, such as monthly donation amounts.

Additionally, when people see others give out of genuine concern for a cause, they can become more motivated to give themselves (Barasch et al., 2016). Moreover, employees are more positively impacted by a company's CSR efforts when they believe the company is genuinely concerned with giving back (Cassar & Meier, 2017). Thus, highlighting the timing of donations, not just the total amount, can enhance the effectiveness of a company's CSR efforts and potentially encourage more engagement in such activities.

However, there are two points of caution regarding this recommendation. First, making multiple donations could generate transaction costs for the charitable organization in terms of time and processing fees. These costs may decrease the overall value of the donation, making it less impactful than a single donation. Second, strategic actors might use partitioned giving to garner undeserved positive evaluation of their prosocial commitment. While genuine donors can better signal their motives by making multiple donations, strategic donors could do the same to falsely signal prosocial commitment. This presents a challenge, as partitioning donations could either clarify genuine commitment or falsely signal it.

Constraints on Generality

We conducted research with adult participants recruited from online panels in the United States. This choice of target population aligns with our focus on third-party perceptions of prosocial behavior. However, it does limit the generalizability of our findings in two ways. First, we did not assess how donors or beneficiaries felt about partitioned versus lump sum donations. If donors or beneficiaries dislike partitioned giving, it could limit the appeal of this strategy for encouraging more effective giving. Second, all of our participants were born or currently residing in the United States, a cultural context marked by its high level of independent self-construal (Markus & Kitayama, 1991). People in high independent self-construal contexts place a premium on people's inner thoughts, motivations, or intentions for their actions. Our theory assumes that people care about why someone gave, so it is unclear whether these results would apply to cultural or situational contexts where people prioritize donor's inner states less.

Concluding Remarks

Especially in cases in which individuals and organizations already donate in partitions, communicating the partitions can signal greater prosocial commitment than communicating only the total amount given. Dividing a larger donation into smaller parts conveys an image of an actor who often experiences moments of wanting to help—especially when these moments are spread out over time rather than occurring continuously without breaks. Turning one large act into a series of smaller caring actions can thus lead to an instance where the whole is less than the sum of its parts.

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