Marketing Letters (2026) 37:26
https://doi.org/10.1007/s11002-026-09820-x

ORIGINAL RESEARCH

Is volunteering a gateway to increased monetary giving? Evidence from a field experiment

Sachin Gupta[1] · **Sungjin Kim**[2] · **Anirban Mukherjee**[3]

Received: 11 September 2025 / Accepted: 10 April 2026

Abstract

Understanding how volunteer engagement influences subsequent charitable giving remains a central question in nonprofit management. This study employs a large-scale randomized field experiment involving over 149,000 individuals who had no prior volunteering or donation to a large nonprofit organization. By comparing a group that received additional volunteer recruitment emails to a control, the research examines changes in both volunteer participation and later donation behavior. Results reveal that enhanced volunteer encouragement increases volunteer participation by 10% and subsequent donation participation by 32%, while leaving the average amount given unchanged. These findings provide robust causal evidence that volunteering elevates the likelihood of future charitable giving but does not affect per-donor giving. The study introduces an experimentally validated approach for disentangling behavioral spillovers from standard nonprofit marketing activities. Strategic implications include integrating volunteer recruitment and fundraising, highlighting optimal approaches for nonprofits to encourage both active engagement and financial support within their communities.

Keywords Philanthropy · Volunteering · Donor management · Field experiments · Charitable giving · Email campaigns

✉ Sachin Gupta
sg248@cornell.edu

Sungjin Kim
sungjin.kim@rutgers.edu

Anirban Mukherjee
anirban@avyayamholdings.com

[1] SC Johnson College of Business, Cornell University, Ithaca, USA

[2] Rutgers Business School, Rutgers University, Newark and New Brunswick, USA

[3] Avyayam Holdings, Singapore, Singapore

Published online: 05 May 2026

1 Introduction

Nonprofit organizations (NPOs) are a cornerstone of civil society, and their operations depend critically on the generosity of individuals, which takes two primary forms: monetary donations and volunteering of time and effort. In 2023 alone, individual monetary giving in the USA reached $557 billion (Giving USA, 2024), while over a quarter of Americans formally volunteered, contributing an estimated economic value of $167.2 billion (AmeriCorps, 2024). Prominent NPOs like the Red Cross, Habitat for Humanity, and Doctors Without Borders rely on a combination of both volunteers and donors to achieve their missions, making the interplay between these two resources a central management concern.

Many individuals contribute both time and money, often to the same organization. This dual engagement signals a deep commitment, allowing supporters to witness the direct impact of their contributions and thereby strengthening their connection to the cause. Industry reports consistently highlight a strong positive correlation between these behaviors. For instance, studies have found that active volunteers donate at twice the rate of non-volunteers (Corporation for National and Community Service, 2018), and a history of volunteering is associated with significantly larger monetary gifts (Fidelity Charitable, 2009)—leading some to call volunteering a "gateway drug" to financial giving (Dietz & Keller, 2015).

While this correlation is well-documented, the underlying causal relationship remains ambiguous. Theoretical frameworks offer competing explanations. On the one hand, theories of complementarity suggest that volunteering should spur future donations. Self-perception theory (Bem, 1972), for example, posits that volunteering strengthens an individual's identity as a charitable supporter, making them more receptive to subsequent donation requests as they strive for self-consistency (Aronson, 1969; Bénabou & Tirole, 2006). Similarly, social capital theory (Bourdieu, 1985; Brown & Ferris, 2007) suggests that volunteering builds stronger social and emotional ties to an NPO, increasing the perceived value of making a financial contribution.

On the other hand, theories of substitution predict that volunteering could crowd out monetary gifts. From a standard economic perspective, individuals operate with a finite "altruism budget" (Gee & Meer, 2020) and must allocate limited resources—time and money—based on preferences and constraints (Duncan, 1999; Feldman, 2010). Volunteering has an opportunity cost, and devoting significant time to a charity may lead individuals to reduce their financial contributions (A. L. Brown et al., 2019; Meier, 2007). This is further complicated by psychological mechanisms such as moral licensing, where performing one good deed (volunteering) may give individuals a subjective license to forego another (donating) (Blanken et al., 2015; Khan & Dhar, 2006).

This theoretical tension creates a significant managerial challenge for nonprofit marketers who must decide how to allocate scarce resources. If volunteering and donating are complements, NPOs can strategically design engagement pathways where volunteering serves as an entry point for cultivating future donors. But if

they are substitutes, focusing heavily on volunteer recruitment could inadvertently cannibalize fundraising revenue. The ambiguity in the literature leaves managers without clear guidance. Resolving this requires moving beyond correlational data to establish clear causal evidence. To do so, this study investigates the causal effect of volunteering on subsequent monetary giving through a large-scale randomized field experiment with a major NPO. We examine whether encouraging individuals to volunteer causally impacts their decision to donate money seven weeks later. Moreover, we measure the effects on both the likelihood of donating (the extensive margin) and the amount given (the intensive margin).

Previewing the results, enhanced volunteer encouragement increased volunteer participation by 10% and subsequently raised donation participation by 32%, while leaving the average donation amount unchanged, indicating a shift on the extensive margin but not on the intensive margin. These findings reconcile prior mixed results by demonstrating that participation decisions are more malleable than contribution levels over the time horizon studied, with clear implications for how NPOs should prioritize message sequencing and objectives across engagement campaigns.

2 Data and institutional context

The data for this study come from a large-scale randomized field experiment conducted in 2021 with a major nonprofit scientific research center that is focused on advancing the understanding and protection of the natural world through research, education, and public outreach. The experiment revolved around a multi-day citizen science event in which volunteers collected and submitted observational data using a mobile application or a website. These community-sourced data help scientists analyze time trends and geographic variation of a natural phenomenon.

The sample comprised 149,480 individuals who had recently engaged with the NPO but had no prior record of volunteering or donating to it. Participants were randomly allocated to a control group ($N=74{,}679$) or a treatment group ($N=74{,}801$). All participants received 21 baseline emails promoting the event, but only the treatment group received three additional emails offering incentives such as free online courses to further encourage volunteering. Importantly, neither the baseline nor the additional emails solicited monetary donations.

Seven weeks after the event, the NPO initiated a fundraising campaign by inviting all experiment participants to become annual members through a standard, multi-tiered program.[1] The NPO tracked two primary indicators for volunteer engagement ("participation" and "number of submissions") and two for the subsequent fundraising campaign (the incidence of giving and the $ amount of contributions).

[1] The NPO solicits monetary gifts in two ways: as pure donations, for which supporters receive only a tax benefit, and as memberships, which provide tangible benefits (e.g., mugs and magazines) in exchange for a recurring fee. Our study focuses on the membership program as the form of monetary giving.

3 Empirical strategy

Our analysis proceeds in three stages. First, we estimate the direct effect of the additional volunteer-recruitment emails on both the likelihood of volunteering and the level of volunteer effort. Second, we measure the intent-to-treat (ITT) effect of receiving those same emails on subsequent monetary giving, examining both donation participation and the amount given. Finally, we estimate the causal effect of volunteering itself on later donations.

To achieve this, we specify two parallel sets of models for volunteering and donation behaviors. For volunteering, we employ a probit model for event participation (Model V1) and two Poisson models for the number of submissions, one conditional on participation (Model V2) and another unconditional in the full sample (Model V3). This structure is mirrored for monetary giving, with a probit for gift incidence (Model D1) and Poisson models for gift amount conditional on giving (Model D2) and unconditional in the full sample (Model D3).

Because the decision to volunteer is endogenous, we use the random assignment to the additional email campaign as an instrumental variable (IV) for volunteer effort to identify the causal spillover to monetary giving. The first-stage regression confirms the instrument's relevance by showing that the treatment significantly increases volunteer submissions. In the second stage, instrumented volunteer effort is used to predict donation incidence (Model D4, IV-probit) and donation amounts (Models D5 and D6, both IV-Poisson).

The validity of this IV strategy is supported by key institutional features of the field experiment: (1) the recruitment emails were exclusively focused on volunteering and made no mention of fundraising; (2) a seven-week gap separated the volunteer event from the donation campaign; (3) all participants were new to the organization, eliminating prior expectations about the NPO's engagement sequences; and (4) the subsequent fundraising appeal was part of a broad campaign, not a targeted follow-up to volunteers. These conditions ensure the instrument affects monetary giving only through its impact on volunteer engagement, allowing for a clean identification of the behavioral spillover.

3.1 Effects of additional emails on volunteering

Models V1, V2, and V3 measure the effect of the additional email campaign—the randomized treatment—on both participation in and the extent of volunteering.

Model V1 estimates the effect of the treatment on the likelihood of volunteering.

$$Y_i^{V^*} = \alpha_{V1} + \beta_{V1}\, Treatment_i + \varepsilon_{v1,\,i},\ \varepsilon_{v1,i} \sim N(0,1)$$

$$Y_i^V = 1\ if\ Y_i^{V^*} > 0$$

where $Y_i^{V^*}$ is a latent continuous variable, $Treatment_i$ is 1 if individual i is in the treatment group (i.e., received the additional emails), 0 otherwise. Y_i^V is the observed binary outcome, namely, participation in volunteering. This specification leads to a probit model.

Model V2 measures the effect of the treatment on the extent of volunteering, conditional on volunteering participation. For the subsample of individuals who volunteered $\left(Y_i^V = 1\right)$, we model the number of scientific observations submitted, $Y_i^{V_{Submissions}}$, using a Poisson regression:

$$Y_i^{V_{Submissions}} \left| Treatment_i \sim Poisson\left(\lambda_i\right),\ if\ Y_i^V = 1 \right.$$

$$log\left(\lambda_i\right) = \alpha_{V2} + \beta_{V2} Treatment_i$$

where λ_i is the mean of the Poisson distribution.

Model V3 estimates the unconditional effect on the extent of volunteering across the entire sample, including non-volunteers (for whom submissions are zero). The specification is a Poisson regression identical to Model V2 but applied to all participants.

$$Y_i^{V_{Submissions}} \left| Treatment_i \sim Poisson\left(\lambda_i\right) \right.$$

$$log\left(\lambda_i\right) = \alpha_{V3} + \beta_{V3} Treatment_i$$

3.2 Effects of additional emails on donations

Models D1, D2, and D3 assess the intent-to-treat (ITT) effect of the additional email campaign on donation behavior. Their specifications are analogous to the volunteering models V1, V2, and V3, respectively.

Model D1 estimates the treatment effect on donation participation using a probit model:

$$Y_i^{D^*} = \alpha_{D1} + \beta_{D1} Treatment_i + \varepsilon_{D1,i},\ \varepsilon_{D1,i} \sim N(0,1)$$

$$Y_i^D = 1\ if\ Y_i^{D^*} > 0$$

where $Y_i^{D^*}$ is a latent continuous variable, $Treatment_i$ is 1 if individual i is in the treatment group (i.e., received the additional emails), 0 otherwise. Y_i^D is the observed binary outcome, namely, participation in giving.

Model D2 measures the effect on the donation amount, conditional on giving. For the subsample of donors $\left(Y_i^D = 1\right)$, we use a Poisson regression:

$$Y_i^{D_{Donation\_amt}} \left| Treatment_i \sim Poisson\left(\lambda_i\right),\ if\ Y_i^D = 1 \right.$$

$$log\left(\lambda_i\right) = \alpha_{D2} + \beta_{D2} Treatment_i$$

where $Y_i^{D_{Amount}}$ is the amount given by individual i. λ_i is the mean of the Poisson distribution, and $\log\left(\lambda_i\right)$ is modeled as a linear function of $Treatment_i$.

Model D3 estimates the unconditional effect on the donation amount across the entire sample, including non-donors. This model uses a Poisson specification identical in form to Model D2 but is applied to both the sample of donors $\left(Y_i^D = 1\right)$ as well as non-donors $\left(Y_i^D = 0\right)$.

$$Y_i^{D_{Donation\_amt}} \left| Treatment_i \sim Poisson\left(\lambda_i\right) \right.$$

$$log\left(\lambda_i\right) = \alpha_{D3} + \beta_{D3} Treatment_i$$

It is important to interpret the parameters from these models—β_{D1}, β_{D2}, and β_{D3}—as intent-to-treat (ITT) estimates. They measure the average effect of being assigned to receive the additional emails, not the causal effect of the act of volunteering. This distinction is necessary because, as our results will show, not all individuals in the treatment group ultimately volunteered (and some in the control group did volunteer). These ITT estimates, therefore, capture the effect on donation of the encouragement to volunteer, accounting for this partial compliance. To isolate the causal effect of the volunteering behavior itself, we next describe our instrumental variable strategy.

3.2.1 Causal effects of volunteering on donations

To estimate the causal effect of volunteering on donations, we must address the endogeneity of volunteer effort, $Y_i^{V_{Submissions}}$. Unobserved factors, such as an individual's affinity for the NPO's mission, likely influence both the decision to volunteer and the decision to donate. We address this using an instrumental variable (IV) approach, where random assignment to the additional email campaign $Treatment_i$ serves as the instrument for volunteer effort.

The instrument is valid for three reasons. First, it satisfies the *relevance* condition, as the additional emails causally increase volunteer submissions (we show this finding later). Second, its *exogeneity* is guaranteed by the randomized design of the experiment. Finally, the *exclusion* restriction is met because, as supported by the institutional details described earlier, the emails affect donations only through their influence on volunteering, not through any direct channel.

We specify the following IV models:

Model D4 estimates the causal effect of volunteering on donation participation.

$$Y_i^{D^*} = \alpha_{D4} + \beta_{D4}\, Y_i^{V_{Submissions}} + \upsilon_{D4,i},$$

$$Y_i^{V_{Submissions}} = \theta_{D4} + K_{D4} Treatment_i + \nu_{D4,i}$$

$$\left(\upsilon_{D4,i}, \nu_{D4,i}\right) \sim N\left(0, \sum\right)$$

$$Y_i^D = 1 \text{ if } Y_i^{D^*} > 0$$

$Y_i^{D1^*}$, $Y_i^{V_{Submissions}}$, and Y_i^D have been defined previously. We deal with the endogeneity of $Y_i^{V_{Submissions}}$ in the first equation by instrumenting it with $Treatment_i$, which is exogenous by design, in the second equation. The error terms of the two equations are bivariate normally distributed, and the model is estimated by maximum likelihood.

Model D5 measures the causal effect on the donation amount, conditional on giving $\left(Y_i^D = 1\right)$.

$$Y_i^{D_{donatin\_amount}} \left| Y_i^{V_{SubmissionsD}} \sim Poisson\left(\lambda_i\right),\ if\ Y_i^D = 1 \right.$$

$$log\left(\lambda_i\right) = \alpha_{D5} + \beta_{D5}\, Y_i^{V_{Submissions}}$$

where $Y_i^{D_{Amount}}$, $Y_i^{V_{Submissions}}$ and λ_i have been defined previously. Once again, we instrument for $Y_i^{V_{Submissions}}$ using $Treatment_i$, and estimate the model using the Generalized Method of Moments (GMM) (Cameron & Trivedi, 2013).

Model D6 is specified exactly as Model D5 but is estimated on the sample of both donors ($\left(Y_i^D = 1\right)$ and non-donors ($\left(Y_i^D = 0\right)$.

A summary of the models is provided in Table 1.

4 Results

4.1 Sample description

Table 2 provides descriptive statistics for the field experiment sample. The additional email campaign significantly increased volunteer participation: 6.29% of the treatment group participated in the citizen science event, compared to 5.72% of the control group ($p < 0.001$). However, among those who volunteered, the average number of submissions was not statistically different between the two groups (6.28 in treatment vs. 6.10 in control).

This pattern extends to the subsequent donation behavior (see the lowest panel of Table 2 titled Donated (summary)). A higher percentage of the treatment group donated (0.41%) compared to the control group (0.31%, $p < 0.01$). Yet, among

Table 1 Summary of models

Dependent variable	Endogenous predictor?	Model number and functional form
Volunteering participation	No	V1 Probit
Submission count, conditional on volunteering participation	No	V2 Poisson
Submission count, including non-volunteers as 0	No	V3 Poisson
Donation participation	No	D1 Probit
Donation amount $, conditional on donation participation	No	D2 Poisson
Donation amount $, including non-givers as 0	No	D3 Poisson
Donation participation	Yes	D4 IV Probit
Donation amount $, conditional on donation participation	Yes	D5 IV Poisson
Donation amount $, including non-givers as 0	Yes	D6 IV Poisson

those who gave, the average donation amount was statistically indistinguishable ($44.60 in treatment vs. $45.70 in control). Taken together, the treatment successfully boosted participation rates for both volunteering and donating but did not affect the intensity of either behavior.

The data also reveal a strong underlying association between volunteering and giving, independent of the treatment (middle panel of Table 2 titled Donated). In both the treatment and control groups, individuals who volunteered were substantially more likely to donate. For instance, in the control group, the donation rate

Table 2 Descriptive statistics of the field experiment sample

	Treatment group				**Control group**			
	N = 74,801				*N* = 74,679			
Volunteered	**Yes**		**No**		**Yes**		**No**	
n	4,703		70,098		4,272		70,407	
%	6.29		93.71		5.72		94.28	
# Submissions (mean, std)	6.28 (9.08)		-		6.10 (9.19)		-	
Donated	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
n	95	4,608	210	69,888	92	4,180	137	70,270
%	2.02	97.98	0.30	99.7	2.15	97.85	0.19	99.81
Gift Amount $ (mean, std)	52.4 (101.8)	–	41.1 (41.2)	–	43.4 (38.2)	–	47.2 (53.2)	–
Donated (summary)	**Yes**		**No**		**Yes**		**No**	
n	305		74,496		229		74,450	
%	0.41		99.59		0.31		99.69	
Gift Amount $ (mean, std)	44.6 (66.3)		–		45.7 (47.7)		–	

was 2.15% for volunteers versus just 0.19% for non-volunteers—a more than tenfold difference. This highlights the strong correlation that motivated our causal inquiry.

4.2 Success of random assignment

To assess the success of the random assignment, we compared the treatment and control groups on a set of pre-treatment characteristics. As shown in Table 3, we examined four variables: participation in two prior NPO engagement activities (Activity A and Activity B), the channel through which individuals first connected with the NPO, and the quarter in which they joined.

In each of the four variables, we found no statistically significant difference between the treatment and control groups. This indicates that the randomization was successful in creating two comparable groups, supporting the validity of our experimental estimates.

4.3 Effects of additional emails on volunteering and donation

Table 4 shows the estimated intent-to-treat effects of the additional email campaign. The treatment had a significant positive impact on all measures of volunteering: it increased participation (Model V1, $p < 0.01$), the number of submissions among those who volunteered (Model V2, $p < 0.01$), and the total number of submissions across all participants (Model V3, $p < 0.01$).

Table 3 Comparison of treatment group and control group on profiling variables

	Treatment group	Control group	*p*-value
# participants	74,801	74,679	
Users of NPO's Activity A			
n (%)	1456 (1.95)	1507 (2.02)	0.322
Users of NPO's Activity B			
n (%)	866 (1.16)	799 (1.07)	0.110
Source of joining NPO *n* (%)			
Downloaded NPO's App on iOS	68,910 (92.12)	68,974 (92.36)	
NPO's website	5517 (7.38)	5313 (7.11)	
Others	374 (0.50)	392 (0.52)	0.123
When joined NPO *n* (%)			
Quarter 1	495 (0.66)	580 (0.78)	
Quarter 2	35,603 (47.60)	35,584 (47.65)	
Quarter 3	27,776 (37.13)	27,654 (37.03)	
Quarter 4	10,927 (14.61)	10,861 (14.54)	0.070

p-value is for a chi-square test of independence between the distribution of the profiling variable and membership in treatment and control groups

Table 4 Effects of additional email campaign on volunteering and donation

	Model V1	**Model V2**	**Model V3**	**Model D1**	**Model D2**	**Model D3**
Outcome variable	**Volunteering participation**	**Number of submissions (only volunteers)**	**Number of submissions, including non-volunteers as 0**	**Donation participation**	**Donation amount $ (only givers)**	**Donation amount $ (including non-givers as $0)**
Model form	Probit	Poisson	Poisson	Probit	Poisson	Poisson
Estimator	MLE	MLE	MLE	MLE	MLE	MLE
Constant	−1.579**	−1.808**	−1.053**	−2.741**	−3.822**	−1.965**
	(0.007)	(0.006)	(0.006)	(0.022)	(0.010)	(0.010)
Treatment	0.048**	0.030**	0.124**	0.095**	−0.024	0.261**
	(0.010)	(0.009)	(0.009)	(0.029)	(0.013)	(0.013)
N	149,479	8,975	149,479	149,479	534	149,479

**$p < 0.01$; *$p < 0.05$; standard errors in parentheses

A similar pattern emerged for donation behavior. The additional emails increased the likelihood of donating (Model D1, $p < 0.01$). However, the treatment did not affect the donation amount among those who chose to give (Model D2). Despite this, the campaign had a positive and significant effect on the total giving, which is the product of participation and amount (Model D3, $p < 0.01$). These results indicate that the marketing intervention influenced the extensive margin (participation) of both volunteering and donating, but not the intensive margin (level of engagement or gift size).

4.4 Causal effects of volunteering on monetary donations

Table 5 presents the instrumental variable (IV) estimates of the causal effect of volunteering on subsequent monetary giving. The results demonstrate that volunteering significantly increases the likelihood that an individual will make a donation (Model D4, $p < 0.01$). However, among those who donate, volunteering does not have a statistically significant effect on the donation amount (Model D5).

Despite the null effect on the amount given by individual donors, the overall impact on total giving—the product of participation and donation amount—is positive and significant (Model D6, $p < 0.01$). This core finding indicates that volunteering causally enhances giving primarily by influencing the extensive margin (the decision to donate) rather than the intensive margin (the amount donated).

5 Discussion and conclusions

Our analysis provides several key insights into the relationship between volunteering and monetary giving. The experimental results show that a subtle marketing intervention—three additional emails—was sufficient to increase volunteer

Table 5 Causal effects of volunteering on donations in field experiment random assignment as instrumental variable

	Model D4	**Model D5**	**Model D6**
Outcome variable	**Donation participation**	**Donation amount $ (only givers)**	**Donation amount $ (including non-givers as $0)**
Model form	Probit	Poisson	Poisson
Estimator	MLE	GMM	GMM
Constant	−0.619**	2.805	−2.760
	(0.199)	(2.685)	(3.107)
Number of submissions[#]	0.372**	0.097	0.060**
	(0.003)	(0.107)	(0.029)
N	149,479	534	149,479
[#]Instrumental variable	Random assignment	Random assignment	Random assignment

**$p < 0.01$; *$p < 0.05$; standard errors in parentheses

participation by 10% (a rise from 5.72% to 6.29% in Table 2) and, subsequently, donation participation by 32% (a rise from 0.31 to 0.41% in Table 2). This spillover effect represents a significant windfall for the nonprofit and provides novel evidence of marketing carryover effects in a philanthropic context (cf. Wedel & Kannan, 2016). Failing to account for such spillovers would lead to an undervaluation of volunteer recruitment efforts.

Our central contribution is the causal evidence, presented in Table 5, that volunteering increases the likelihood of subsequent monetary giving, even after a seven-week lag. However, this effect was confined to the extensive margin (the decision to donate). We found no impact on the intensive margin (the amount given). This asymmetry—where participation is more malleable than intensity—is consistent with prior research in charitable giving (Esterzon et al., 2023; Kim et al., 2021; Meer & Rosen, 2011; Schulz et al., 2018). While our design does not allow us to definitively isolate the underlying psychological mechanism, our findings align strongly with theories of complementarity. For example, from a self-perception theory perspective (Bem, 1972), the effortful and public act of volunteering may lead individuals to update their self-concept to include "a supporter of this NPO." A subsequent donation then becomes an act of cognitive consistency, reinforcing this new identity. This is distinct from substitution-based theories like moral licensing; if volunteering provided a license to forego donating, we would expect a neutral or negative effect on donation participation, which we do not observe.

Furthermore, the hands-on nature of volunteering likely builds greater social and emotional capital compared to a purely transactional donation. This "stickiness" can lower the psychological barrier to making a first-time financial gift, as the individual no longer sees the NPO as an outside entity but as a community they are part of. Our findings suggest that for new supporters, the primary effect of a first volunteer experience is to shift their identity and relationship with the organization, making them fundamentally more open to giving, even if it does not immediately change how much they are willing to give. Future research should further investigate these psychological mechanisms.

5.1 Implications for practice

Our findings offer several actionable implications for nonprofit practitioners.

- *Strategic sequencing of engagement*: The results show that prior volunteer engagement significantly boosts responses to subsequent fundraising appeals. NPOs should therefore strategically design their annual calendars to place volunteering opportunities before key fundraising drives, using volunteering as a "warm-up" mechanism, priming individuals for a financial ask and serving as a direct, cost-effective pathway to donor acquisition.
- *Designing integrated supporter journeys*: Nonprofits should develop explicit "pathway" models that treat volunteering as the first step in a deeper supporter journey. This requires moving beyond one-off events to implement structured,

post-volunteering nurturing campaigns. For example, a campaign could feature a personalized thank-you email from a staff member highlighting the specific impact of the volunteer's contribution, followed by an impact report and testimonials from dual supporters, before finally making a soft-ask fundraising appeal. It also involves training volunteer coordinators to understand their critical role in the broader donor development process, equipping them to speak about the organization's mission in a way that naturally bridges the gap between giving time and financial support.

- *Unified organizational design and measurement*: Our findings challenge the conventional separation of volunteer services and fundraising departments. NPOs should adopt a unified approach to manage the entire supporter lifecycle, potentially by creating cross-functional teams or "supporter experience" roles with shared KPIs. This structure should be supported by an integrated CRM and data analytics system capable of tracking key metrics such as volunteer-to-donor conversion rates and, critically, the long-term value (LTV) of supporters acquired through this channel. This allows for more accurate attribution models that credit volunteer recruitment with its downstream fundraising impact, leading to better resource allocation and proving the ROI of volunteer programs.
- *Refining solicitation tactics*: The key finding that volunteering drives the decision to give but not the amount given suggests a tactical shift in messaging. Fundraising appeals following volunteer engagement should emphasize the collective impact of broad participation, encouraging any level of contribution, rather than focusing on high-dollar asks. For example, email subject lines could focus on community goals (e.g., "Join 500 others to help us reach our goal") rather than specific dollar amounts (e.g., "Donate $50 today"). This approach is especially well-suited for digital and social media, where celebrating participation can create viral engagement and a stronger sense of community.

5.1.1 Limitations and future research

This study has two primary limitations that open avenues for future research. First, while we establish a causal link, we cannot definitively identify the underlying psychological mechanism (e.g., self-perception and social capital). Future experiments could be designed to isolate these pathways. Second, our findings are from a single, large nonprofit with a specific mission. While the field context provides high external validity, generalizability would be strengthened by replicating this experiment in other nonprofit settings. Future research should explore whether this effect holds for NPOs focused on human services, arts and culture, or advocacy. The nature of the volunteer task itself—whether it is skills-based, labor-intensive, or purely administrative—may also moderate the strength of the spillover effect and warrant investigation.

6 Conclusion

This study provides compelling causal evidence that volunteering serves as a gateway to monetary giving. By employing a large-scale field experiment, we demonstrate that engaging individuals in volunteer activities significantly increases their likelihood of making a subsequent financial contribution, even while the average donation amount remains constant.

This insight is particularly valuable for nonprofit organizations seeking to optimize their fundraising and engagement strategies. Our findings underscore the importance of an integrated approach, leveraging volunteerism as a strategic asset to build a broad and committed community of supporters. As nonprofits navigate the complexities of resource mobilization, these results highlight the potential of fostering non-monetary engagement to cultivate supporters who are prepared to contribute both their time and, eventually, their financial resources to the causes they champion.

Acknowledgements The authors are grateful to the management and staff of the anonymous scientific research center, who were very generous with their time, wisdom, and data.

Funding The author(s) received no financial support for the research, authorship, and/or publication of this article.

Data availability Data used in this article were obtained by the authors from the participating institution under a non-disclosure agreement.

Declarations

Conflict of interest The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

References

AmeriCorps (2024) Civic engagement and volunteering supplement

Aronson, E. (1969). The theory of cognitive dissonance: A current perspective1. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (pp. 1–34). Academic Press.

Bem, D. J. (1972). Self-Perception Theory. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (pp. 1–62). Academic Press.

Bénabou, R., & Tirole, J. (2006). Incentives and prosocial behavior. *American Economic Review, 96*, 1652–1678. https://doi.org/10.1257/aer.96.5.1652

Blanken, I., van de Ven, N., & Zeelenberg, M. (2015). A meta-analytic review of moral licensing. *Personality and Social Psychology Bulletin, 41*, 540–558. https://doi.org/10.1177/0146167215572134
Bourdieu, P. (1985). The social space and the genesis of groups. *Theory and Society, 14*, 723–744.
Brown, A. L., Meer, J., & Williams, J. F. (2019). Why do people volunteer? An experimental analysis of preferences for time donations. *Management Science, 65*, 1455–1468. https://doi.org/10.1287/mnsc.2017.2951
Brown, E., & Ferris, J. M. (2007). Social capital and philanthropy: An analysis of the impact of social capital on individual giving and volunteering. *Nonprofit and Voluntary Sector Quarterly, 36*, 85–99. https://doi.org/10.1177/0899764006293178
Cameron, A. C., & Trivedi, P. K. (2013). *Regression Analysis of Count Data* (2nd edition). Cambridge University Press.
Fidelity Charitable (2009) The role of volunteering in philanthropy
Corporation for National and Community Service (2018) 2018 Volunteering in America Report
Dietz R, Keller B (2015) Donor loyalty study: A deep dive into donor behaviors and attitudes. http://www.thenonprofittimes.com/wp-content/uploads/2016/04/Donor-Loyalty-Study.pdf. Accessed 21 Dec 2021
Duncan, B. (1999). Modeling charitable contributions of time and money. *Journal of Public Economics, 72*, 213–242. https://doi.org/10.1016/S0047-2727(98)00097-8
Esterzon, E., Lemmens, A., & Van den Bergh, B. (2023). Enhancing donor agency to improve charitable giving: Strategies and heterogeneity. *Journal of Marketing, 87*, 636–655. https://doi.org/10.1177/00222429221148969
Feldman, N. E. (2010). Time is money: Choosing between charitable activities. *American Economic Journal: Economic Policy, 2*, 103–130.
Gee, L. K., & Meer, J. (2020). The altruism budget: Measuring and encouraging charitable giving. In P. Bromley & W. W. Powell (Eds.), The nonprofit sector (pp. 558–565). Stanford University Press. https://doi.org/10.1515/9781503611085-033
Giving USA (2024) Giving USA 2024: The Annual Report on Philanthropy for the Year 2023
Khan, U., & Dhar, R. (2006). Licensing effect in consumer choice. *Journal of Marketing Research (JMR), 43*, 259–266. https://doi.org/10.1509/jmkr.43.2.259
Kim, S., Gupta, S., & Lee, C. (2021). Managing members, donors, and member-donors for effective nonprofit fundraising. *Journal of Marketing, 85*, 220–239. https://doi.org/10.1177/0022242921994587
Meer, J., & Rosen, H. S. (2011). The ABCs of charitable solicitation. *Journal of Public Economics, 95*, 363–371. https://doi.org/10.1016/j.jpubeco.2010.07.009
Meier, S. (2007). A survey of economic theories and field evidence on pro-social behavior. *Economics and psychology: A promising new cross-disciplinary field* (pp. 51–87). MIT Press.
Schulz, J. F., Thiemann, P., & Thöni, C. (2018). Nudging generosity: Choice architecture and cognitive factors in charitable giving. *Journal of Behavioral and Experimental Economics, 74*, 139–145. https://doi.org/10.1016/j.socec.2018.04.001
Wedel, M., & Kannan, P. K. (2016). Marketing Analytics for Data-Rich Environments. *Journal of Marketing, 80*, 97–121. https://doi.org/10.1509/jm.15.0413