

Obligatory Publicity Increases Charitable Acts

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To entice new donors and spread awareness of the charitable cause, many charity campaigns encourage donors to broadcast their charitable acts with self-promotion devices such as donor pins, logoed apparel, and social media hash-tags. However, this voluntary-publicity strategy may not be particularly attractive because potential donors may worry that observers will attribute their publicized charitable behavior to “impure” image motives rather than “pure” altruistic motives. We propose and test a counterintuitive campaign strategy—obligatory publicity, which *requires* prospective donors to use a self-promotion device as a prerequisite for contributing to the campaign. Five studies ($N = 10,866$) test the application and effectiveness of the proposed strategy. The first three studies, including two field experiments, find that obligatory-publicity campaigns recruit more contributions and campaign promoters than voluntary-publicity campaigns. The last two studies demonstrate that the obligatory-publicity strategy produces a greater effect among people with stronger image motives and that the effect is mitigated when the publicized charitable act signals a low level of altruism. Finally, we discuss limitations and implications of this research.

Keywords: charitable giving, nonprofit marketing campaigns, ulterior motive, image motives, justification, obligatory publicity

Whether intended to draw social attention or recruit social contributions, publicity is key to a charity’s impact (Kotler and Kotler 1982). In pursuing publicity, charities seek to leverage social influence (Barnes 2011; Curtis et al.

2010; Tucker 2012; Waters et al. 2009) because consumers’ attitudes and behaviors are influenced by others in their social surroundings (Andreoni and Scholz 1998; Martin and Randal, 2008; Shang and Croson 2009). Despite extensive efforts, however, many charities struggle to achieve these goals (Van der Linden 2017), and even those that gain widespread social attention encounter tremendous difficulty in translating superficial attention into meaningful engagement and actual contributions (Lewis, Gray, and Meierhenrich 2014; Tucker 2012; Van der Linden 2017).

One particularly popular strategy for leveraging social influence in charity campaigns is the provision of self-promotion devices, such as donor stamps, logoed apparel, and social media hashtags. At first glance, voluntary-publicity strategies that allow, encourage, or urge donors to broadcast their participation with self-promotion devices should benefit charity campaigns—most people desire to be deemed charitable, and this reputation ostensibly can be crafted with the use of a self-promotion device, such as wearing a donor stamp to broadcast one’s blood donation.

This supposition, however, does not withstand the scrutiny of psychological research, which suggests that people

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Editor: Amna Kirmani

Associate Editor: Manoj Thomas

Advance Access publication April 29, 2021

fear being perceived as self-promoters or posers. In fact, an opportunity for conspicuous giving creates a dilemma for charity donors: they want others to know about their good deed, but they do not want others to infer image motives from their self-promotion of the good deed (also see Bénabou and Tirole 2006). As a result, numerous charity campaigns fail to drive up social contributions or social awareness despite adopting and encouraging the use of self-promotion devices (Hughes 2015; Ohannessian 2014).

Facing these hurdles, how can charities recruit social contributions and raise campaign awareness more effectively? We aim to address these questions by examining a potential resolution for the donors' dilemma over the conflict of motives. In particular, we propose a novel campaign strategy, which we term "obligatory publicity," and we test its effectiveness against the more prevalent voluntary-publicity strategy. We predict that a charity campaign can recruit more donors if it mandates self-promotion as part of the charitable giving process than if it merely gives donors the option to self-promote their charitable act. This is because obligatory self-promotion is attributable to an external justification, which can mitigate concerns about the negative social inference of image motives. This proposal builds on previous findings that self-promotion is often more effective if it conceals image motives while delivering image benefits (Jones and Wortman 1973; Pfeffer et al. 2006; Tal-Or 2010), and it extends this idea to the marketing of social campaigns with substantial policy and welfare consequences.

"Pure" and "Impure" Motives for Charitable Acts

Various motives drive charitable acts, some selfless, and others selfish. On the one hand, people are often genuinely interested in improving others' welfare (Batson 2010; Haidt 2003), reflecting Adam Smith's "moral sentiments." On the other hand, people are also incentivized to appear charitable for self-interested reasons. A charitable social image leads to a good reputation—more trustworthy, more likable, and of higher social status—which confers other social advantages via direct or indirect reciprocation (Fehrler and Przepiorca 2013; Flynn et al. 2006; Hardy and Van Vugt 2006; Trivers 1971). A charitable self-image also helps generate positive self-worth, increase self-efficacy, and improve psychological well-being (Aknin et al. 2013; Choi and Kim 2011; Williamson and Clark 1989). As such, people are often motivated by image motives to perform charitable acts and present themselves in a good light (Baumeister 1982; Small and Cryder 2016).

These "pure" and "impure" motives can contribute synergistically to charitable acts because an individual may genuinely care about both the charitable cause *and* their image. However, these motives are often perceived as mutually incompatible by observers and sometimes even by

donors themselves (Lin-Healy and Small 2012, 2013; Newman and Cain 2014; Newman and Shen 2012). Copious evidence shows that the inference of image motives and other ulterior motives diminishes the perception of genuine altruism (Berman et al. 2015; Lin-Healy and Small 2012; Newman and Cain 2014). In fact, it has been shown that observers are remarkably sensitive to cues that insinuate ulterior motives (Heyman et al. 2014; Lin-Healy and Small 2012) and are generally cynical about the motives underlying a seemingly altruistic behavior (Critcher and Dunning 2011; Eastman 1994; Fein, Hilton, and Miller 1990).

These social inferences are further worsened when the good deed is spontaneously broadcast to observers. Besides adulterating the altruism signal, the voluntary self-promotion of a charitable act can induce additional negative inferences such as inauthenticity and self-superiority, which further reduce the self-promoter's likability (Hoorens 2012; Pfeffer et al. 2006; Scopelliti, Loewenstein, and Vosgerau 2015; Sezer, Gino, and Norton 2018; Tal-Or 2010). In other words, the voluntary self-promotion of a charitable act often undercuts the very characteristic that one intends to promote, and it evokes other negative image consequences as well.

Therefore, it is unsurprising that many people do not voluntarily self-promote charitable acts. Anticipating the negative image consequences, they may fear that using self-promotion devices will make them appear as a "braggart" (someone who offers unsolicited advertisements of their good deeds) or a "poser" (someone who does good deeds just for show). Even though people are not perfect at gauging social reactions to self-promoting behaviors (Scopelliti et al. 2015; Sezer et al. 2018), and social attribution and self-attribution are often systematically misaligned (Bradley 1978; Malle 2006), people are generally aware of the types of social inferences that their behaviors will induce (Krueger, Ham, and Linford 1996; Jones and Pittman 1982). Indeed, a wealth of evidence supports this reasoning, showing that these anticipated image consequences directly affect subsequent decisions about charitable giving (Ariely, Bracha, and Meier 2009; Blakely, Andrews, and Fuller 2003; Danheiser and Graziano 1982; Gneezy et al. 2010; Kraut 1973; Newman and Shen 2012; White and Peloza 2009).

The above theorization highlights the paradox that inspired this research: because trying to signal "pure," genuine altruism is itself a signal of an "impure," ulterior motive, prospective donors face a dilemma over how to maximize the image outcomes of a publicizable charitable act. Consequently, charities struggle to leverage image motives to increase public engagement in charitable acts. To resolve both the donor's dilemma and the charity's quandary, we aim to address how charity campaigns can better wield the power of image motives to propel charitable acts. We propose that a charity campaign can recruit

donors more effectively by deploying “obligatory publicity,” a recruitment strategy that allows donors to reap the benefits of publicity while obviating the expected negative inferences of image motives.

Obligatory Publicity

We define an obligatory-publicity campaign as a charity campaign that mandates an act of self-promotion (e.g., wearing a donor stamp) as part of the charitable giving process. We propose that an obligatory-publicity campaign is more effective at recruiting charitable acts than more commonly adopted voluntary-publicity campaigns that simply encourage donors to self-promote without requiring them to do so. This is because the publicity of a charitable can be ascribed to campaign requirement in the obligatory-publicity campaign, but not in the voluntary-publicity campaign.

Decades of social psychological research have established an attribution process between the external situation and internal disposition for an observed action (Heider 1944; Jones and Davis 1965). In this process, the provision of a situational cause shifts attribution toward the situation and away from the disposition (Brehm and Cohen 1959; Festinger and Carlsmith 1959). As such, when the dispositional inference is undesirable, heightening the external cause of the action mitigates the undesirable dispositional inference (Jones and Davis 1965; Jones and Harris 1967). When a person anticipates these attribution outcomes and feels conflicted about an action for fear of negative dispositional inferences, a salient external justification can resolve the conflict and facilitate the action (Hsee, 1996; Hsee, Yang, and Wang 2010; Li and Hsee, 2019, Shalvi et al. 2015; Snyder et al. 1979). For example, consumers often feel conflicted about consuming luxury goods—while this action signals status and prestige, its self-enhancing and self-indulgent connotations are decried as morally objectionable (Ordabayeva and Fernandes 2018; Goenka and Thomas 2020). Yet, this conflict is resolved when consumers find an external functional or moral alibi to justify their luxurious consumption (Keinan, Kivetz, and Netzer 2016; Okada 2005; Strahilevitz and Myers 1998).

A similar conflict is faced by a prospective donor, who desires the potential image benefits from others knowing about the charitable act yet is concerned about the negative dispositional inferences that observers make from self-promotion. Thus, when a charity campaign requires self-promotion as part of the charitable giving process, it offers an external justification, which resolves the conflict by shifting observers’ attribution toward the charity’s policy and away from the donor’s selfish image motives. In other words, the obligatory-publicity strategy creates an opportunity for a prospective donor to do good and look good at the same time. We refer to the hypothesized effect as *the obligatory-publicity effect*:

H1: A charity campaign will be more effective at recruiting donors if it mandates self-promotion as part of the charitable giving process than if it gives donors the option to use self-promotion devices voluntarily.

The obligatory-publicity effect has important moderators. Because we propose that the effect is driven by prospective donors’ management of their social image, we consider two necessary conditions for the effect that directly arise from this mechanism. First, the obligatory-publicity effect is based on the premise that most people seek to display a desirable social image. The prevalence of this desire has been well established (Jones and Pittman 1982; Leary 2019; Steele and Spencer 1992), and such image motives have a pervasive influence on behaviors (Baumeister 1982; Bodner and Prelec 2003; Leary and Kowalski 1990). Nonetheless, these image motives are not equally salient in every situation or for every individual. When people care little about how others in their social environment perceive them, potential social image consequences should have less influence on charitable acts, and the obligatory-publicity effect (hypothesis 1) should be mitigated. Therefore, we propose:

H2: The obligatory-publicity effect will be attenuated when social image concern is low.

Furthermore, the obligatory-publicity effect also hinges on the assumption that the publicized charitable act signals altruism, but this is not always the case. For instance, because perceived effort influences perceived motivation (Kirmani 1990; Kirmani and Wright 1989; Morales 2005), a trivial donation to an important charitable cause may signal a weak altruistic motivation. In fact, self-promoting a trivial contribution may strengthen the inference that the donor’s charitable engagement is only for show. If the prospective donors anticipate such inferences, then their motivation to publicize their charitable acts will decrease, and some of them may wish to give in private instead, causing the obligatory-publicity strategy to backfire. Thus, we propose:

H3: The obligatory-publicity effect will be attenuated and potentially reversed when the altruism-signaling value of the donation is low.

To be clear, an obligatory-publicity campaign does not require prospective donors to give; instead, it requires them to use a self-promotion device *if* they give. Therefore, obligatory-publicity campaigns may well raise the bar for giving by imposing an additional prerequisite. In this sense, our main hypothesis is both counter-normative and counter-intuitive. Normatively, adding a prerequisite should reduce giving, not increase it. Indeed, in a pilot study on lay intuitions (the [web appendix](#)), about 90% of participants predicted that an obligatory-publicity campaign would be less effective than an otherwise

equivalent voluntary-publicity campaign. Nonetheless, our experiments in the laboratory and field, even in the same population as the pilot study, consistently revealed results that contradict these lay predictions. Perhaps this misprediction could partly explain why the obligatory-publicity strategy is rarely adopted in practice: the juxtaposition of the two strategies can render the obligatory-publicity strategy ostensibly less attractive by highlighting its imposition of the additional prerequisite. However, such predictions under joint evaluation often systematically deviate from actual outcomes observed in separate evaluation (Hsee and Zhang 2004).

We present five studies to test these hypotheses. Study 1 tests the main hypothesis in a scenario study that involved a tiered fundraising campaign. Study 2 examines the application and effectiveness of the obligatory-publicity campaign using a cross-sectional before-and-after analysis (DID) on data from a large-scale field experiment involving a blood drive. Study 3 examines the main hypothesis in another field experiment that recruited volunteer work for a charity campaign. These three studies reveal consistent evidence of the obligatory-publicity effect and establish its generalizability across different types of charity campaigns. The remaining two studies examine the underlying psychological mechanism by testing key boundary conditions. Study 4 examines if high (vs. low) social image concern moderates the obligatory-publicity effect. Finally, study 5 demonstrates that the effect is reversed by low (vs. high) altruism signaled by the charitable act.

STUDY 1: ESTABLISHING THE EFFECT WITH TIERED FUNDRAISING

We first tested the obligatory-publicity hypothesis using a hypothetical scenario. Study 1 had 3 between-subjects campaign-strategy conditions (obligatory-publicity vs. voluntary-publicity vs. no-publicity). Even though the key comparison is between obligatory publicity and voluntary publicity, we also included a no-publicity campaign condition as a baseline to examine whether the provision of a voluntary self-promotion device motivates giving more effectively than no device at all (also see Bénabou and Tirole 2006).

We designed a tiered fundraising campaign involving matching gifts, a popular fundraising strategy in practice (Rondeau and List 2008), and we mandated self-promotion as a prerequisite for gift matching in the obligatory-publicity condition. Because asking donors to publicize their various donation amounts could muddle the standard of desirability and eliminate the intended effect of obligatory publicity, we specified a high threshold for self-promotion: reaching VIP donor status by donating \$28 or more.

Method

We aimed for a sample size of 600 total participants (200 per condition) from MTurk for this study, anticipating that the statistical power would be reduced by the skewed and truncated nature of typical donation data. We recruited 700 participants, received 733 attempted entries, and obtained 661 valid responses ($M_{\text{age}} = 35$, 45% female, $Mdn_{\text{personal_income}} = \$10\text{--}\$30\text{k}$) after excluding duplicate IP addresses, incomplete responses, and those who failed a generic instructional manipulation check (IMC; Oppenheimer, Meyvis, and Davidenko 2009). Participants read a scenario about a local charity campaign that was raising funds for a community hospital by sending fundraising mail to everyone in the participant's community. The mail came with a return envelope, an empty donation check, and an explanation that donors who gave \$28 or more would earn VIP status.

We randomly assigned participants to the three campaign-strategy conditions. In the no-publicity condition, all donors who met the \$28 threshold would trigger gift matching and achieve VIP donor status (without receiving a donor pin). In the voluntary-publicity condition, all donors who met the threshold would trigger gift matching, achieve VIP donor status, and receive a VIP donor pin, with encouragement (but no requirement) to wear the donor pin; thus, self-promotion (i.e., wearing the donor pin in public) was dissociated from gift matching. In the obligatory-publicity condition, donors who met the threshold would achieve VIP donor status, receive a VIP donor pin, and trigger gift matching only if they wore the donor pin; thus, self-promotion was a prerequisite for an additional charitable outcome. The VIP donor pin, which was engraved with "VIP donor" and the logo of the hospital, was explained as a means to bring social attention to the charitable cause.

In short, while the same monetary incentive (gift matching) was offered to all donors who met the specified donation threshold, the voluntary-publicity and no-publicity conditions offered an automatic donation scheme, whereas the obligatory-publicity condition offered stricter terms for the additional charitable outcome. We expected that, despite the stricter terms, the obligatory-publicity condition would be more effective at raising donations at or above the VIP threshold because the conditional matching scheme served as an external justification for self-promotion.

We then measured participants' intended donations on a scale from \$0 to \$100 in \$1 increments. After that, in the voluntary- and obligatory-publicity conditions, we asked participants who intended to donate \$28 or more to indicate whether or not they would wear the VIP donor pin (yes/no). Last, participants completed the IMC (to write "yes" in a box if they were paying attention) and indicated their

average annual donation amount, annual income, gender, and age.

Results

VIP Donor Status. Our primary dependent variable was the percentage of people who would donate at least \$28 to earn VIP donor status. As predicted, this rate was significantly higher in the obligatory-publicity condition (54.6%) than in both the voluntary-publicity condition (41.7%, $\chi^2(1, N = 438) = 7.31, p = .007, \eta = .13$) and the no-publicity condition (42.6%) ($\chi^2(1, N = 450) = 6.51, p = .011, \eta = .12$), while the difference between the voluntary-publicity and the no-publicity conditions was not ($\chi^2(1, N = 434) < 1, p = .850$). When dummy-coding the campaign strategies, only the obligatory-publicity strategy (OP = 1, VP = 0, NP = 0) had a significant effect on the likelihood of earning VIP status (binary logistic regression: $b_{OP} = .52, SE = .19, Wald = 7.27, p = .007$); the other dummy variable representing whether self-promotion device was involved in the campaign strategy (OP = 1, VP = 1, NP = 0) had no significant results ($b_{device} = -.04, SE = .20, Wald < 1, p = .850$).

Donation Amount. Participants in the obligatory-publicity condition reported a greater average intended donation amount ($M_{OP} = \$24.0, SD = \$20.8, Mdn = \$28$) than both participants in the voluntary-publicity condition ($M_{VP} = \$19.3, SD = \$17.8, Mdn = \$19$) and participants in the no-publicity condition ($M_{NC} = \$18.0, SD = \$20.1, Mdn = \$10; F(2, 658) = 5.74, p = .003, \eta_p^2 = .02$; non-parametric t -test for median, $p = .003$, figure 1). Planned contrast t -tests revealed that the average intended donation amount differed significantly between the obligatory-publicity condition and the other two conditions ($t(658) = 3.14, p = .001$), but not between the no-publicity and voluntary-publicity conditions ($p = .512$).

The obligatory-publicity campaign strategy no longer had an effect on the average intended donation amount ($b_{OP} = .65, SE = 1.15, t < 1, p = .570$) when controlling for VIP donor status (i.e., whether or not the participant reached the \$28 threshold) in a multivariate regression, whereas VIP donor status had a significant effect ($b_{status} = 31.49, SE = 1.15, t = 33.5, p < .001$); the involvement of self-promotion device still had no effect ($b_{device} = 1.52, SE = 1.15, t = 1.32, p = .186$). As these results indicate, the higher average intended donation amount in the obligatory-publicity condition was driven primarily by the increase in the proportion of participants who decided to achieve VIP donor status. The null effect of the campaign strategy on the average intended donation amount after controlling for VIP donor status suggests that the obligatory-publicity campaign strategy did not otherwise increase the intention to donate.

Individual Differences. When controlling for the individual-level covariates, the effect of the obligatory-publicity strategy persisted on both the likelihood of a VIP donation ($b_{OP} = .50, SE = .20, Wald = 6.21, p = .013$) and the average intended donation amount ($b_{OP} = 4.03, SE = 1.82, t = 2.21, p = .028$). Only the average annual donation had a negative effect as a covariate on both the likelihood of a VIP donation ($b_{annual_donation} = -.28, SE = .06, Wald = 24.86, p < .001$) and the average intended donation amount ($b_{annual_donation} = -3.45, SE = .50, t = -6.86, p < .001$).

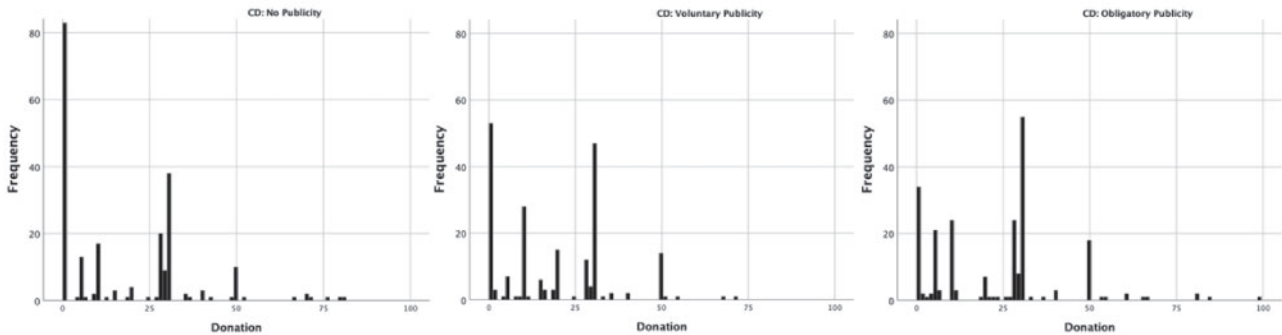
Conversion of Campaign Promoters. Last, we examined participants' intention to wear the pin among those who intended to reach VIP donor status. In the obligatory-publicity condition, 85.2% (52 participants) indicated that they would wear the VIP donor pin—significantly more than in the voluntary-publicity condition (48.9% or 23 participants; $\chi^2(1, N = 227) = 17.9, p < .001, \eta = .29$). Overall, the obligatory-publicity campaign mobilized 2.26 charity-promoting donors for each one recruited by the voluntary-publicity campaign. By design, the no-publicity condition mobilized no active campaign promoters.

Discussion

Study 1 revealed initial evidence supporting our main hypothesis (hypothesis 1). In a tiered fundraising scenario, the obligatory-publicity strategy yielded the best outcomes in terms of both the total amount raised and the number of donors who were mobilized to promote the campaign publicly. This study also revealed some additional useful insights. First, the voluntary-publicity campaign did not recruit giving more effectively than the no-publicity campaign. This finding validates the previously-discussed charity's dilemma over utilizing self-promotion devices—namely, that the deployment of a voluntary self-promotion device may not actually increase donor recruitment. Second, prior research suggests that image motives can increase charitable acts independently of altruistic motives, while extrinsic incentives (e.g., monetary compensation) tend to crowd out both altruistic motives and image motives (Ariely et al. 2009; Bowles 2008; Titmuss 1987). Indeed, a comparison of the effectiveness of the obligatory-publicity and no-publicity strategies revealed little evidence of crowding-out between image motives and altruistic motives. In particular, the higher intended donation amount in the obligatory-publicity campaign than in the no-publicity campaign suggests that, at least in this sample, anticipated image benefits added to (but did not replace) existing altruistic motives.

FIGURE 1

HISTOGRAMS OF THE DISTRIBUTIONS OF DONATIONS (BETWEEN \$0 AND \$100 IN \$1 INCREMENTS) IN THE NO-PUBLICITY CONDITION (LEFT), VOLUNTARY-PUBLICITY CONDITION (MIDDLE), AND OBLIGATORY-PUBLICITY CONDITION (RIGHT) IN STUDY 1



STUDY 2: A FIELD REPLICATION WITH BLOOD DONATIONS

We conducted study 2 to examine the obligatory-publicity effect in a large-scale field experiment, in which we randomly assigned two similar groups of participants into 2 between-subjects conditions (obligatory-publicity vs. voluntary-publicity). Specifically, we organized a 2-week advertising campaign in advance of a 3-day blood donation event at the National University of Singapore in collaboration with the Singapore Red Cross, which administers all blood donations in Singapore. In this blood drive, we featured a donor stamp as the self-promotion device and varied how the donor stamp was introduced in the campaign's advertisement to potential donors.

Method

We recruited undergraduate students for the blood drive via a university-wide email-blast system and hardcopy posters on noticeboards. The university has 11 independent schools of various sizes, each with their own faculty buildings and student communities, with shuttle buses in between. A majority of undergraduate students live at home and commute to school, taking courses and engaging in student activities within each school on certain planned days of the week. Therefore, to avoid information contamination across conditions, we matched the samples between conditions and selected students from four schools with similar population characteristics that were geographically separated from each other on campus. Archival data from previous blood drives on the same campus indicated that school size, gender ratio, and physical distance to the donation site were the three primary predictors of donation likelihood. We thus matched and combined the four schools into two groups of students that were similar in size,

gender ratio, and distance to the donation site ($N = 8,504$, $M_{\text{age}} = 21$, 47.5% female), and we randomly assigned them to the two conditions (based on a coin flip). The obligatory-publicity condition comprised 4,817 undergraduates (42.4% female) with an average shuttle-bus commute of 12 minutes to the donation site, and the voluntary-publicity condition comprised 3,687 undergraduates (54.1% female) with an average shuttle-bus commute of 10.5 minutes to the donation site.

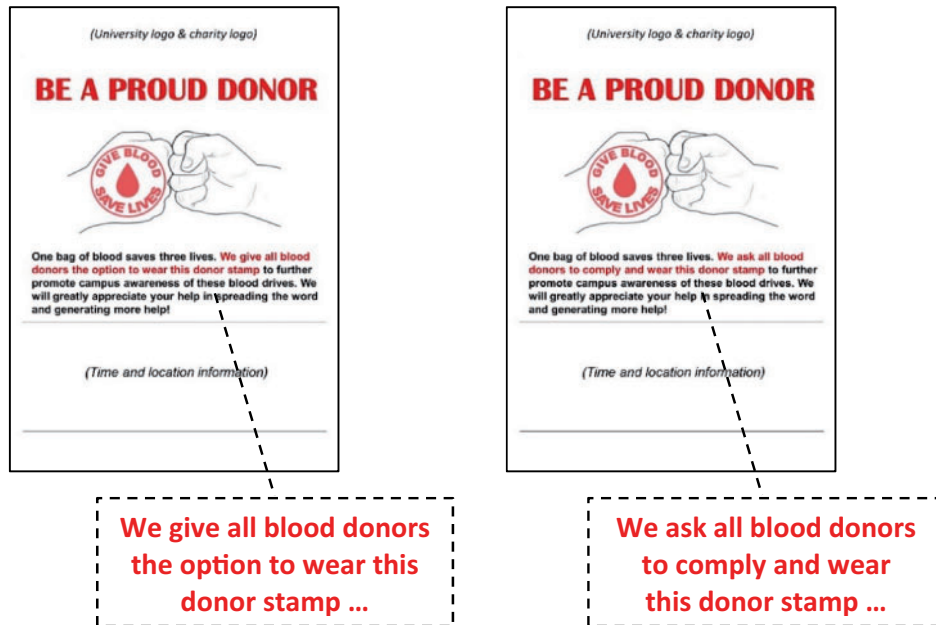
We first advertised the blood drive to the undergraduate students through the university-wide email system 2 weeks before the first day of blood collection. Unbeknownst to the students, we sent different versions of the advertisement to the two groups (figure 2). In the voluntary-publicity condition, the email stated in red, "We give all blood donors the option to wear this donor stamp to further promote campus awareness of this blood drive"; in the obligatory-publicity condition, the email instead stated, "We ask all blood donors to comply and wear this donor stamp to further promote campus awareness of this blood drive." These two key messages were written to clearly convey the intended manipulation based on the local language preferences. In a pretest using a sample from the student population ($N = 97$, $M_{\text{age}} = 21$, 55% female), we found that the charitable causes conveyed in these messages were similarly important and similarly meaningful ($t_s < 1$, $p_s > .250$).

In addition, both versions specified that the donor stamp was skin-safe, was designed to promote campus awareness of the charitable cause, and would last for 3 days once applied. The rest of the university population that was not included in the experiment received a generic email containing the same time and location information without the donor stamp.

One day after the email blast, six research assistants distributed printed posters, identical to the emails, on the

FIGURE 2

IN STUDY 2, THE EMAIL AND POSTER DESIGNS VARIED BETWEEN THE VOLUNTARY-PUBLICITY CONDITION (LEFT) AND OBLIGATORY-PUBLICITY CONDITION (RIGHT)



university campus. The assistants put up 12 obligatory-publicity posters and 12 voluntary-publicity posters inside the corresponding school buildings, such that students in each condition were exposed to posters within their faculty buildings to reinforce the emailed message about the donor stamp. In addition, the assistants posted 94 generic posters, identical to the generic email, in public spaces on campus. The research assistants actively tracked the location of the posters and the duration of their presence on campus to minimize contamination between experimental conditions and to maximize information exposure.

During the 3 days of blood collection, research assistants joined the Red Cross medical staff on the donation site and collected the following information from all intended donors via a registration card: school, year, gender, age, recruitment channel (email/poster/friend/other), awareness of the donor stamp (yes/no), and first-time donor status (yes/no). The registration card was attached to the first page of a health survey administered by the Red Cross and was required for all intended donors. The screening and donation took between 40 and 80 minutes, during which some intended donors were screened out by health or travel criteria. Once a donor completed the blood donation process, a research assistant approached the donor again to apply the donor stamp (obligatory-publicity condition) or to obtain consent to apply the donor stamp (voluntary-publicity condition), and the assistant recorded whether they had applied

the stamp. After that, the donor received food supplements and left.

Results

Our primary dependent variable was the donation rate, or the proportion of the student population that chose to donate blood. In addition, we examined several other variables of interest, most notably the proportion of successful blood donors who were converted into campaign promoters (i.e., who wore the donor stamp) and the self-reported channel of recruitment.

Donation Rate. During the blood drive, students in the obligatory-publicity condition were more likely to choose to donate blood (15.36) than were students in the voluntary-publicity condition (6.24; $\chi^2(1, N = 8504) = 15.4, p < .001, \eta = .05; b_{\text{strategy}} = 1.34, SE = .28, Wald = 22.26, p < .001$; table 1). The obligatory-publicity effect persisted ($b_{\text{strategy}} = 1.31, SE = .29, Wald = 21.08, p < .001$) when controlling for school year (highly correlated with age), which negatively predicted the donation likelihood as a covariate ($b_{\text{school_year}} = -.27, SE = .09, Wald = 8.36, p = .004$); gender as a covariate did not have an effect ($b_{\text{gender}} = -.21, SE = .22, Wald < 1, p = .347$; table 1). Among the intended blood donors, 60.7% were male. The obligatory-publicity effect was observed in both gender groups when running the models separately for male

TABLE 1

EFFECT OF THE OBLIGATORY-PUBLICITY CAMPAIGN STRATEGY ON THE DONATION DECISION IN THE PRESENT BLOOD DRIVE IN STUDY 2

	Donate (yes/no)	
	(1)	(2)
Campaign strategy (OP = 1 vs. VP = 0)	1.34 (.28)***	1.31 (.29)***
School year (1–4)		–.27 (.09)**
Gender ($M=0$, $F=1$)		–.21 (.22)
N	8504	8504
Cox & Snell R^2	.003	.005

Notes.—

** $p < .01$.*** $p < .001$.

($b_{\text{strategy}} = .77$, $SE = .33$, $Wald = 5.41$, $p = .020$) and female ($b_{\text{strategy}} = 2.36$, $SE = .61$, $Wald = 15.23$, $p < .001$); an interaction between campaigns strategies and gender ($b_{\text{interaction}} = -1.60$, $SE = .69$, $Wald = .537$, $p = .020$) reveals that the obligatory-publicity effect was stronger on female students than on male students.

Next, to rule out the influence of population differences on the observed effect, we compared the daily donation rate in the current blood drive with that from a 4-day blood drive that took place 9 months earlier at the same university. Specifically, we were interested in the behavior of students who were recruited for the current blood drive in their years 2–4, as these students had also been recruited, via a generic message, to participate in the previous blood drive (during their years 1–3). We matched the samples and did not find repeated donors between the two blood drives. Focusing on this matched subset of the student population, we conducted a cross-sectional before-and-after analysis (DID) on the daily donation rate in each blood drive. In the matched subset, we again found that the daily donation rate for the current blood drive was greater in the obligatory-publicity condition (4.47 per day) than in the voluntary-publicity condition (1.87 per day), whereas the daily donation rate in the previous blood drive was similar between conditions (1.67 vs. 2.15 per day, [figure 3](#)). In fact, the voluntary-publicity condition had a slightly greater daily donation rate in the previous blood drive, presumably because the corresponding schools were closer to the donation site (10.5 vs. 12 minutes away by shuttle bus, as described in the method section).

An interaction between campaign-strategy groups (obligatory-publicity vs. voluntary-publicity) and blood drives (present vs. previous) validated that the greater donation rate in the present obligatory-publicity condition was due to the obligatory-publicity strategy in the present blood drive, not to idiosyncratic differences between the two groups (DID regression $b_{\text{interaction}} = 1.13$, $SE = .42$, $Wald = 7.23$, $p = .007$). As in the earlier analyses, the

effect was marginally stronger among female students than male students ($b_{\text{3-way interaction}} = 1.67$, $SE = .94$, $Wald = 3.16$, $p = .075$), and the effect persisted when individual-level demographics were included as covariates, among which school year negatively predicted donation whereas gender did not have an effect ([table 2](#)).

Breakdown of Recruitment Channels. We analyzed the self-reported recruitment channels to explore whether and how the different campaign strategies translated into donor recruitment. Of all intended donors, 33.0% reported being recruited primarily by email, 20.6% by poster, 42.3% by friends, and 4.1% by other unspecified means ([table S3](#) in the [web appendix](#)). The recruitment strategies had different influences between conditions (χ^2 (4, $N = 8504$) = 17.62, $p = .001$), with our direct interventions via emails and posters recruiting more donors in the obligatory-publicity condition than in the voluntary-publicity condition (4.98 vs. 2.17 by email; 2.91 vs. 1.63 by poster; combined χ^2 (1, $N = 8504$) = 5.75, $p = .016$). Beyond our direct interventions, moreover, recruitment by friends was also more effective in the obligatory-publicity condition than in the voluntary-publicity condition (7.06 vs. 1.90 by friends, χ^2 (1, $N = 8504$) = 11.6, $p < .001$).

Donations by Day. Blood collection occurred on 7 September (Wednesday), 8 September (Thursday), and 12 September (Monday). Considerably more donors showed up on the first and third days than on the second day (39.2%, 13.4%, and 47.4% on each day), presumably because the first 2 days were consecutive days in the same week. Since a majority of undergraduate students at this university live at home and commute to school on planned days of the week, the difference in donation rates across days was possibly attributable to a fixed day effect. The relatively short duration of the study made it impossible to control for this fixed effect. However, breaking down the observations by day revealed a similar magnitude of the obligatory-publicity effect on the first and third days, when

FIGURE 3

IN STUDY 2, AMONG STUDENTS WHO WERE REQUESTED TO DONATE BLOOD IN BOTH THE PREVIOUS BLOOD DRIVE (THEN IN YEARS 1–3 OF THEIR UNDERGRADUATE PROGRAM) AND THE CURRENT BLOOD DRIVE (CURRENTLY IN YEARS 2–4), THE OBLIGATORY-PUBLICITY CAMPAIGN ELICITED A HIGHER DAILY DONATION RATE THAN THE VOLUNTARY-PUBLICITY CAMPAIGN IN THE CURRENT YEAR, A SIGNIFICANT TREATMENT EFFECT THAT WAS NOT OBSERVED IN THE PREVIOUS YEAR

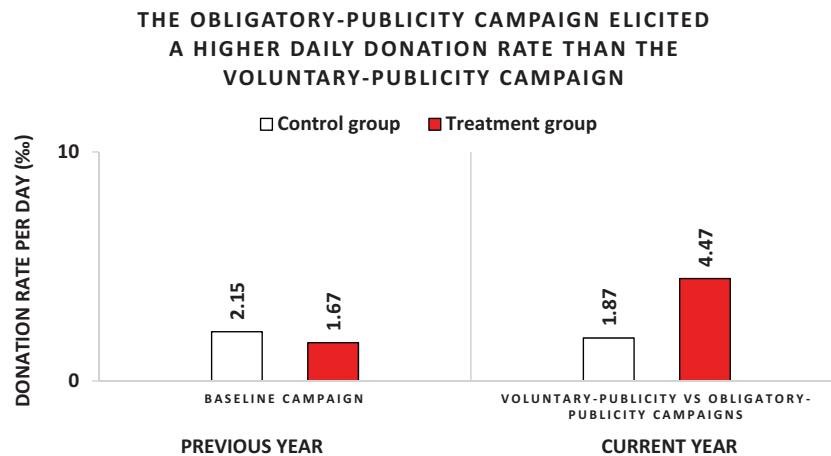


TABLE 2

DIFFERENCE-IN-DIFFERENCE ESTIMATION OF THE EFFECT OF THE OBLIGATORY-PUBLICITY (VS. VOLUNTARY-PUBLICITY) CAMPAIGN IN THE PRESENT (VS. THE PREVIOUS) BLOOD DRIVE ON THE DONATION DECISION IN STUDY 2

	Donate (yes/no)	
	(1)	(2)
Blood drive (present = 1 vs. previous = 0)	.43 (.33)	.43 (.33)
Campaign group (OP = 1 vs. VP = 0)	.25 (.30)	.28 (.30)
Blood drive × campaign group	1.13 (.42)**	1.13 (.42)**
School year (2 - 4)		-.56 (.12)***
Gender (<i>M</i> = 0, <i>F</i> = 1)		-.31 (.20)
<i>N</i>	18,321	18,321
Cox & Snell <i>R</i> ²	.001	.003

Notes.—

***p* < .01.

****p* < .001.

more donors visited the donation site (daily donation rates in the obligatory-publicity vs. voluntary-publicity conditions: first day 6.23 vs. 2.17, second day 1.66 vs. 1.36, and third day 7.47 vs. 2.71).

Conversion of Campaign Promoters. We analyzed the proportion of successful blood donors in each population who subsequently wore the donor stamp, thereby becoming active campaign promoters. The pre-donation screening involved multiple health and travel criteria, and 63.5% of all intended donors succeeded at donating (the typical range in local blood drives is 60–70% in Singapore). Among these successful donors, the donor stamp was worn by only

64.7% of participants in the voluntary-publicity condition versus 95% in the obligatory-publicity condition (5% declined the request after donation and specified religious reasons or medical conditions). Overall, the obligatory-publicity campaign mobilized 2.65 campaign promoters for each one mobilized by the voluntary-publicity campaign.

Other Donor Characteristics. Despite the 2-week lag between the email blast and blood collection, 30.9% of all intended donors explicitly admitted awareness of the donor stamp, and this ratio did not differ between conditions; about half of all intended donors (50.5%) were first-time

blood donors, and this did not differ between conditions (table S3 in the [web appendix](#)).

Adjacent Campaigns. We also scrutinized other variables that might have affected the observed effect in this field experiment. Specifically, we collected data from two other blood drives that were conducted in the weeks before and after the current blood drive in two university residential halls close to campus, which we refer to as Drive X and Drive Y. These blood drives were advertised inside the corresponding residential halls via generic paper posters, which were designed by student volunteers and did not contain our donor stamp information. The majority of students in our study did not live in these two residential halls. Nonetheless, we collected data from both Drive X and Drive Y using the same registration card as in our blood drive to monitor any potential impacts on our study. We found that Drive X did attract a small proportion of students from the population included in our study, divided approximately equally between our voluntary-publicity (2.98) and obligatory-publicity conditions (4.57; χ^2 (1, $N = 8504$) = 1.36, $p = .244$). As directionally more donors were attracted away from the obligatory-publicity condition than from the voluntary-publicity condition, the distraction created by Drive X was unlikely to have inflated the effect that we observed. Last, Drive Y attracted a negligible number of donors away from the population in our experiment (0.71) and therefore could not have meaningfully affected the effect size or the interpretation of our experimental results.

Discussion

Study 2 tested and replicated the obligatory-publicity effect (hypothesis 1) in a large-scale blood drive. The cross-sectional before-and-after analysis, in particular, provided strong evidence that the observed effect was attributable to the campaign strategies, not to unobserved idiosyncratic differences between the matched groups.

The obligatory-publicity strategy not only recruited more donations but also converted more donors into campaign promoters, further raising social awareness of the charitable cause. In addition, we found that the obligatory-publicity campaign generated more peer-to-peer recruitment than the voluntary-publicity campaign. One obvious reason for this finding is that, since the obligatory-publicity campaign converted more donors into campaign promoters, it increased the group's exposure to donor stamps and perhaps recruited more donors who had been less aware of the campaign previously. In addition, based on our theorization that obligatory publicity induces the expectation of more favorable image outcomes, it is possible that donors in the obligatory-publicity campaign were more motivated than those in the voluntary-publicity campaign to display and explain their donor stamps and recruit

their friends. Relatedly, the efforts of donors and prospective donors to recruit friends could have been more effective in the obligatory-publicity condition if those friends similarly responded more positively to the obligatory-publicity campaign than to the voluntary-publicity campaign.

Study 2 has two main limitations. First, the randomization was at the group level instead of the individual level. Second, while the recruitment messages were written to suit the language preferences of the target population, it is uncertain whether they would generalize beyond this social context. We address these issues in study 3 by testing the obligatory-publicity effect in another field experiment with a different population using individual-level randomization and more generic wording.

STUDY 3: A FIELD REPLICATION WITH HELPING BEHAVIORS

In study 3, we tested our main hypothesis (hypothesis 1) in another field experiment in the USA. Study 3 had 2 (obligatory-publicity vs. voluntary-publicity) between-subjects conditions. We designed a volunteer recruitment campaign and used volunteer stickers as the self-promotion device. The obligatory-publicity condition required volunteers to wear the sticker as a prerequisite for volunteering, whereas the voluntary-publicity condition encouraged this behavior but did not require it. We assigned individual participants to the two conditions following a strict double-blind procedure.

Method

We ran the charity campaign in the dining hall of the University of Chicago for 2 weeks. Research assistants recruited one-time volunteers and randomly assigned them to the two conditions. Specifically, research assistants set up a charity recruiting station in the dining hall every afternoon after lunch and before dinner (about 2–4 pm). During the recruiting sessions, they sequentially asked students who were studying in the dining hall to take a simple one minute survey, ostensibly collecting student opinions about St. Jude Children's Hospital, a nonprofit research hospital. Each recruiting session lasted until the research assistants had approached every student in the dining hall, which usually took at least one hour. Data collection ended before exam week, by which time the research assistants had recruited 162 students to complete the questionnaire ($M_{\text{age}} = 22$, 43% female). Students who had participated on a previous day were ineligible to participate again.

Two versions of the questionnaire, identical on the front page, were shuffled and distributed in a random order to students who agreed to answer the questionnaire. On the front page, participants first read a paragraph about the hospital and answered three questions about their

impressions: “How favorable is your impression of . . .,” “How important do you consider the charitable work at . . .,” and “How willing are you to promote campus awareness of the St. Jude Children’s Research Hospital?”; participants responded to each question on a 7-point scale from “not at all” (−3) to “a great deal” (3). We averaged the responses to these questions to obtain participants’ baseline motivation to promote the charitable cause. After that, participants were asked to estimate the percentage of students at the University of Chicago who they believed had heard of the hospital’s charitable work; we included this measure to discern any baseline differences in the anticipated social impact of active campaign promotion (described later). Participants also were asked to indicate their gender and age.

After finishing the questionnaire on the front of the page, participants were asked to flip the page over. The back of the page featured a solicitation for volunteers’ “creative help”—giving about four minutes of their time to color a page of cartoon drawings and encouraging messages to cheer up children recovering at the hospital. In addition, participants could promote campus awareness of this charity campaign by wearing a paper sticker that read, “I provided my creative help to St. Jude Children’s Research Hospital. Have you?” Images of a sample coloring page and the sticker were printed next to the request (figure S1 in the [web appendix](#)).

The requirement for wearing the sticker, however, differed between conditions. In the voluntary-publicity condition, the page read, “If you volunteer for ‘creative help,’ you may wear this sticker if you wish. We will greatly appreciate it if you wear the sticker. . . We give this option to all the University of Chicago students who wish to take part in this charity campaign.” In the obligatory-publicity condition, the page read, “If you volunteer for ‘creative help,’ we request that you wear this sticker at least one day this week. We will greatly appreciate it if you wear the sticker. . . We require this act from all the University of Chicago students who wish to take part in this charity campaign.” Therefore, both conditions explicitly conveyed the purpose of the sticker (to promote awareness of the charitable cause on campus) and implied that the longer students wore the sticker, the more they would promote the charitable cause. The obligatory-publicity condition quantified the specific duration of sticker-wearing as “at least one day” because disposable paper stickers tend to wear off after 1 day. Therefore, the minimum duration of 1 day in the obligatory-publicity condition represented stricter terms and could have raised the bar for volunteering.

As participants returned the completed questionnaires to the recruiters, those who were not interested in volunteering did not interact further with the recruiters, whereas those who were interested received a box of crayons to color one of five cartoon drawings. After participants colored the chosen page and returned the crayons, they

received the stickers and were thanked. The colored pages were mailed to the St. Jude Children’s Research Hospital after the experiment concluded.

Results

Volunteering Rate. A greater proportion of participants volunteered in the obligatory-publicity condition than in the voluntary-publicity condition (41.0% vs. 23.5%, $\chi^2(1, N = 162) = 4.46, p = .045, \eta = .17$). This effect was not attributable to differences in participants’ preexisting attitudes toward the charitable cause, as impressions of the hospital were similarly favorable in the two conditions ($M_{OP} = 1.97$ SD = 1.14 vs. $M_{VP} = 1.94, 1.08, t(160) = .20, p = .841$; relative to the neutral point 0, $ps < .001$). This effect also cannot be explained by differences in the anticipated impact of promoting the hospital on campus, as participants’ predictions of the percentage of students on campus who had heard of the hospital’s charitable work were similar in the two conditions (61.3% vs. 62.5%, Mann–Whitney U test = 3312.0, $p = .910$). These attitudes also did not differ between those who volunteered and those who did not in either condition ($ps > .250$).

Discussion

Studies 1–3 used different operationalizations of obligatory publicity, but we observed consistent effects: by obligating self-promotion as a prerequisite for either an additional contribution (gift matching in study 1) or an initial contribution (donating blood in study 2 and volunteering “creative help” in study 3), the obligatory-publicity campaign recruited more donors than the voluntary-publicity campaign. Based on these findings, we turn to an examination of the mechanism and boundary conditions of the effect in subsequent studies.

STUDY 4: EFFECT ATTENUATED BY LOW SOCIAL IMAGE CONCERN

Our theorization suggests that if the social image concern is low, then the anticipated image outcomes should have little influence on the charitable act, and thus the obligatory-publicity effect should diminish or disappear (hypothesis 2). Study 4 tested this hypothesis by adopting a 2 (campaign strategy: obligatory-publicity vs. voluntary-publicity) $\times$ 2 (social image concern: high vs. low) between-subjects design. To manipulate the strength of social image concern, we asked participants to imagine that they were concerned versus not concerned about their social image in their neighborhood. We pre-registered this study (<https://aspredicted.org/blind.php?x=i4d68i>).

Method

We recruited 850 Prolific workers from the USA and Canada and received 891 total data entries. After excluding 45 responses from duplicate IP addresses and 6 incomplete responses, we obtained 840 valid sets of responses ($M_{\text{age}} = 36$, 47% female, 1% non-binary; $Mdn_{\text{household_income}} = \$50\text{--}80k$).

Participants were first asked to imagine that they lived in a neighborhood in which people were moderately close to each other. Then, we randomly assigned participants to two conditions (social image concern: high vs. low). In the high-social-image-concern condition, participants read, "In this neighborhood, people sometimes judge and talk about each other. You are concerned about how your neighbors perceive you and feel a need to manage your image in the community." In the low-social-image-concern condition, participants read, "In this neighborhood, people don't judge or talk about each other. You are not concerned about how your neighbors perceive you and don't feel any need to manage your image in the community."

Then all participants read, "Today, a fundraiser from a reputable charity organization knocks on your door and asks if you are willing to make a specific donation to help protect senior citizens in your state from COVID-19 infections." Participants read that the fundraiser was carrying a plaque with the words, "Join us to protect our senior citizens from COVID-19!" and requested a one-time donation of \$25. Here, we randomly assigned participants to the obligatory-publicity and voluntary-publicity conditions. In the obligatory-publicity condition, the fundraiser said, "If you donate \$25, I will give you this plaque. We want you to hang it on your door for one week so that others can see it. We request all donors to do it." In the voluntary-publicity condition, the fundraiser said, "If you donate \$25, I will give you this plaque. You may hang it on your door for one week so that others can see it if you would like. We give all donors the option to do it." In both conditions, it was specified that hanging the plaque on the door would greatly help the campaign recruit more donations to fight COVID.

Participants further read, "Since this fundraising campaign started last week, you incidentally saw that about 30% of households in your neighborhood have this plaque on their doors." On the same page, participants received one of the two reminders: "Because people often judge others in this neighborhood, you feel that your action will influence how your neighbors think of you" (high social-image-concern condition) or "Because people do not judge others in this neighborhood, you do not feel that your action will influence how your neighbors think of you" (low social-image-concern condition).

We asked participants if they would donate \$25 to the charitable campaign; this binary choice was our main dependent variable. We also asked those who donated

whether they would actually hang the plaque on the door (yes/no). After that, we included a manipulation check for social image concern by asking participants, "In this scenario, how much do you care about your image in others' eyes?" Participants responded by indicating the extent to which they agreed with three statements: "I care a lot about my image in others' eyes," "I am motivated to achieve a positive image in others' eyes," and "I am concerned about creating a negative image in others' eyes," all on 7-point scales (1 = "strongly disagree," 7 = "strongly agree").

Last, we included two additional attention checks that were not planned or used for screening. The first asked participants to recognize the content of the study in a multiple-choice question (correct answer: "about a charity campaign"). The second asked participants to recognize the campaign strategy in a multiple-choice question (the correct answer depended on their assigned condition). In the end, we measured five individual-level covariates: volunteering frequency, annual donation, household income, gender, and age.

Results

Manipulation Check (Social Image Concern). We collapsed the three items for the manipulation check ($\alpha = .89$). A 2 (social image concern) $\times$ 2 (campaign strategy) ANOVA found a main effect of social image concern ($F(1, 839) = 111.20, p < .001$), a main effect of campaign strategy ($F(1, 839) = 4.90, p = .027$), and no interaction ($F(1, 839) = .92, p = .337$). As these results indicate, participants in the high-social-image-concern conditions were indeed more concerned with social images than participants in the low-social-image-concern conditions ($M_{\text{high}} = 3.90, SD = 1.34$ vs. $M_{\text{low}} = 2.91, SD = 1.34$). Participants in the voluntary-publicity conditions were also more concerned with social images than participants in the obligatory-publicity conditions ($M_{\text{VP}} = 3.54, SD = 1.40$ vs. $M_{\text{OP}} = 3.26, SD = 1.45$; see more details in [table S4](#) in the [web appendix](#)), presumably because the obligatory-publicity campaign could somewhat conceal one's image motive.

Donation Rate. A binary logistic regression revealed a main effect of the campaign strategy ($b_{\text{strategy}} = .61, SE = .21, \text{Wald} = 8.57, p = .003$), a main effect of the image-concern manipulation ($b_{\text{image_concern}} = .78, SE = .20, \text{Wald} = 14.70, p < .001$), and, most importantly, an interaction between the two ($b_{\text{interaction}} = .60, SE = .28, \text{Wald} = 4.40, p = .036$). Specifically, in the high-social-image-concern conditions, the obligatory-publicity strategy was more effective at recruiting donors than the voluntary-publicity strategy (69.90% vs. 55.91% agreed to donate \$25; $\chi^2(1, N=416) = 8.65, p = .003, \eta = .14$). By contrast, in the low-social-image-concern conditions, this effect disappeared (51.52% vs. 51.30%; $\chi^2(1, N=424) < 1, p = .964$).

Individual Differences. The above results held when controlling for the five individual covariates; meanwhile, the decision to give was positively predicted by the frequency of volunteering ($b_{\text{volunteering_frequency}} = .37$, $SE = .10$, $Wald = 13.58$, $p < .001$), negatively predicted by the average annual donation amount ($b_{\text{annual_donation}} = -.16$, $SE = .06$, $Wald = 7.94$, $p = .005$), and negatively predicted by age ($b_{\text{age}} = -.02$, $SE = .01$, $Wald = 14.29$, $p < .001$) as individual covariates.

Converted Campaign Promoters. Of the intended donors in the high-social-image-concern conditions, more in the obligatory-publicity campaign condition than in the voluntary-publicity campaign condition would hang the plaque on their doors (83.94% vs. 61.79%, $\chi^2(1, N = 260) = 16.32$, $p < .001$, $\eta = .25$). The same was true in the low-social-image-concern conditions (69.75% vs. 48.48%, $\chi^2(1, N = 218) = 10.19$, $p = .001$, $\eta = .22$). Overall, campaign strategy and the image-concern manipulation each had a main effect on conversion rate ($b_{\text{strategy}} = 1.17$, $SE = .30$, $Wald = 15.54$, $p < .001$; $b_{\text{image_motive}} = .82$, $SE = .31$, $Wald = 3.91$, $p = .008$), whereas the interaction between the two variables was not significant ($b_{\text{interaction}} = -.28$, $SE = .41$, $Wald = .46$, $p = .500$). As the results show, relative to the voluntary-publicity strategy, the obligatory-publicity strategy was more effective at both recruiting donors and converting those donors into active promoters. The non-significant interaction suggests that the effect of campaign strategy on conversion rate was not significantly mitigated in the low-social-image-concern conditions; this could be because conversion rate depends not only on donation rate, but also on the self-promotion device policy, which, by design, always differed between the obligatory- and voluntary-publicity campaigns.

Attention Checks. Most participants (99.29%) correctly recognized the content of the study, and most participants (84.99%) correctly recalled the campaign strategy to which they were assigned. Excluding participants who failed these attention checks did not significantly influence the results.

Discussion

Study 4 revealed a moderating effect of social image concerns. When participants were concerned about their social image, we replicated the obligatory-publicity effect; when they were not concerned about their social image, the obligatory-publicity effect vanished, and participants were less likely to donate to the charitable cause in general. These results support H2 and are consistent with our theorization that the effect is driven by social image concerns.

These results also suggest a useful boundary condition for the application of the obligatory-publicity strategy. Charity campaigns increasingly take place on social media (Curtis et al. 2010; Lewis et al. 2014). How does the

obligatory-publicity strategy influence different social media users? Based on the results of study 4, we expect that the strategy should be more effective among frequent social media users than among infrequent ones because frequent social media users are presumably more concerned with their social image (Lee, Ahn, and Kim 2014; Tosun 2012). We verified this assumption in a study with 208 MTurkers ($M_{\text{age}} = 31$, 50% female) showing that frequent social media users indicated stronger image concerns than infrequent social media users ($b_{\text{frequency}} = .34$, $SE = .13$, $p = .011$, contrast $t(206) = 2.64$, $p = .009$). Then, we conducted another study with 302 MTurkers ($M_{\text{age}} = 34$, 64% female) in the context of an online charity campaign to test our proposition that the obligatory-publicity strategy is more effective among frequent (vs. infrequent) social media users (see study S1 in the web appendix for details). We found that the obligatory-publicity effect occurred among frequent social media users ($M_{\text{OP}} = 5.96$, $SD = 1.57$, vs. $M_{\text{VP}} = 5.19$, $SD = 1.59$, $t(134) = 2.82$, $p = .006$) but not among infrequent social media users ($M_{\text{OP}} = 4.66$, $SD = 1.87$, vs. $M_{\text{VP}} = 4.70$, $SD = 1.87$, $t(164) = -.15$, $p = .885$; interaction between campaign strategy and social media usage frequency $F(1, 298) = 3.98$, $p = .047$). These results are conceptually consistent with the findings in study 4.

STUDY 5: EFFECT REVERSED WHEN DONATION SIGNALS LOW ALTRUISM

Study 5 tested whether the obligatory-publicity effect is moderated by the level of altruism signaled by the charitable act (hypothesis 3). The study had 2 (campaign strategy: obligatory-publicity vs. voluntary-publicity) $\times$ 2 (altruism signal: high vs. low) between-subjects conditions. We tested our predictions in a tiered fundraising scenario, this time involving a food bank. Orthogonal to the campaign strategy manipulation, we randomly assigned participants into two conditions that varied in the donation threshold for becoming a donor ambassador who has the opportunity to self-promote. We expected the obligatory-publicity effect to attenuate, and possibly reverse, when altruism-signaling value of the donation was low. We pre-registered this study (<https://aspredicted.org/blind.php?x=pi69z2>).

Method

We planned for 800 participants and received 854 responses on MTurk. After excluding 46 responses from duplicate IP addresses and 26 incomplete responses, we obtained 782 valid responses ($M_{\text{age}} = 38$, 43.2% female, .6% (5) non-binary; $M_{\text{household_income}} = \$50\text{--}80\text{k}$).

Participants read that a food bank in their region was fundraising for a “Carrot Campaign,” which would provide food and health assistance to low-income individuals who lost their jobs due to the COVID-19 pandemic. Participants

were asked to imagine that the campaign was occurring in July 2020 (same time as this study), and street canvassers were advertising the campaign throughout the neighborhood; the participants learned about the campaign when walking by a fundraising booth and were told that everyone who donated at least \$x to the food bank in this campaign would become a donor ambassador and receive a donor pin. An image of the donor pin was presented to participants (figure S2 in the [web appendix](#)) and explained as a means to promote greater campaign awareness in the neighborhood.

We randomly assigned participants to one of four conditions, which constituted a 2 (campaign strategy: obligatory publicity vs. voluntary publicity) $\times$ 2 (altruism signaling: high vs. low) design. In the obligatory-publicity conditions, the campaign specified, "All donor ambassadors are required to wear the donor pin in the following week in the neighborhood." The campaign canvassers would confirm with each donor ambassador that they "will commit to wearing the donor pin in the next week as an additional contribution to the campaign." In the voluntary-publicity conditions, the campaign specified, "All donor ambassadors are encouraged to wear the donor pin in the following week in the neighborhood." The campaign canvassers explained to every donor ambassadors that they had "the option of wearing the donor pin for the week as an additional contribution to the campaign."

In the high-altruism-signal conditions, the threshold to qualify as a donor ambassador was \$48; in the low-altruism-signal condition, it was only \$5. In other words, wearing the donor ambassador pin indicated to others that one had donated at least \$48 in the high-altruism-signal conditions, whereas it indicated that one had donated at least \$5 in the low-altruism-signal conditions. This information was repeated on subsequent pages. Then, participants were asked, "How much would you donate to this campaign?" and they indicated their donation on a slider scale between \$0 and \$100 in \$1 increments. Those who donated enough to become a donor ambassador were also asked whether they would wear the donor pin in the following week in the neighborhood (yes/no).

We included two attention checks that asked participants to recognize the assigned campaign strategy and donation threshold (\$5 vs. \$48), both in a multiple-choice question format. Last, the study concluded with the same five individual-level covariates as in study 4.

Results

Manipulation Check (Altruism Signal). To verify that the donation threshold manipulation induced different levels of perceived altruism from the corresponding donations, we recruited another 159 participants ($M_{\text{age}} = 32$, 50% female) from the same population and randomly assigned them to two (high vs. low altruism signal)

between-subjects conditions. Participants read information similar to that in the main study but without any specified campaign strategy. All participants were asked, "If you donated \$48 [\$5] to the food bank to help those in need, and others in your social circle found out about it, how do you think others will perceive you?" Participants filled in the blank in the following sentence, "This donation will suggest to others that I'm _ generous," with one of five options: "not at all (1)," "just a little (2)," "moderately (3)," "very (4)," to "extremely (5)." As intended, participants in the low-altruism-signal condition expected their donation to indicate a lower level of altruism than participants in the high-altruism-signal condition ($M_{\text{low-signal}} = 2.55$, $SD = .75$ vs. $M_{\text{high-signal}} = 3.48$, $SD = .91$; $t(158) = 7.03$, $p < .001$).

Donor Ambassador Status. Our primary dependent variable was the percentage of people who would donate enough to achieve the donor ambassador status, which was to donate at least \$48 in the high-altruism-signal conditions and \$5 in the low-altruism-signal conditions. A binary logistic regression on this variable revealed two strong main effects ($b_{\text{strategy}} = -.87$, $SE = .31$, $\text{Wald} = 7.76$, $p = .005$; $b_{\text{signal}} = -2.32$, $SE = .28$, $\text{Wald} = 68.09$, $p < .001$) and, most importantly, a significant 2-way interaction between the campaign strategy and the altruism signal manipulation ($b_{\text{interaction}} = 1.45$, $SE = .38$, $\text{Wald} = 14.89$, $p < .001$). More specifically, in the high-altruism-signal conditions, the obligatory-publicity strategy was more effective at recruiting donor ambassadors (donors of \$48 or more) than the voluntary-publicity strategy (64.6% vs. 50.7%; $b_{\text{strategy}} = .58$, $SE = .21$, $\text{Wald} = 7.74$, $p = .005$, or $\chi^2(1, N = 399) = 7.80$, $p = .005$, $\eta = .15$). In the high-altruism-signal conditions, however, the obligatory-publicity strategy was relatively less effective at recruiting donor ambassadors (donors of \$5 or more) than the voluntary-publicity strategy (81.4% vs. 91.3%; $b_{\text{strategy}} = -2.34$, $SE = .31$, $\text{Wald} = 7.76$, $p = .005$, or $\chi^2(1, N = 383) = 8.09$, $p = .004$, $\eta = .14$).

Furthermore, focusing instead on donations of \$48 or more across all conditions, significantly fewer participants reached this threshold in the low-altruism-signal conditions (OP 27.2% vs. VP 35.4%) than in the high-altruism-signal conditions (OP 64.6% vs. VP 50.7%; main effect $b_{\text{signal}} = .63$, $SE = .20$, $\text{Wald} = 10.0$, $p = .002$). Thus, even though more donors qualified as donor ambassadors in the low-altruism-signal campaigns, the high-altruism-signal campaigns were more effective at recruiting larger donations.

Donation Amount. We then examined the average intended donation amount. On this continuous dependent variable, we found no main effects but a similar interaction between the campaign strategy and the altruism signal manipulation ($F(1, 778) = 7.35$, $p = .007$, $\eta_p^2 = .01$). In the high-altruism-signal conditions, the obligatory-publicity strategy recruited a higher average donation than the

voluntary-publicity strategy ($M_{OP} = 44.81$, $SD = 27.36$ vs. $M_{VP} = 38.36$, $SD = 27.16$; $F(1, 397) = 5.54$, $p = .019$, $\eta_p^2 = .01$); in the low-altruism-signal conditions; this effect was directionally reversed ($M_{OP} = 28.10$, $SD = 31.26$ vs. $M_{VP} = 32.99$, $SD = 30.70$; $F(1, 381) = 2.37$, $p = .124$). Importantly, in the high-altruism-signal conditions, the effect of the campaign strategy on the amount of donation became insignificant ($b_{strategy} = .16$, $SE = 1.60$, $t < 1$, $p = .922$) when we controlled for the donor ambassador status in a multivariate regression ($b_{status} = 45.24$, $SE = 1.61$, $t = 28.1$, $p < .001$), suggesting that the effect of the campaign strategy on the amount of donation was primarily driven by the decision to reach donor ambassador status, similar to our findings in study 1.

Individual Differences. We repeated the above analyses with the same five individual covariates as in study 4. Similar to our findings in study 4, while none of these covariates changed the above findings, volunteering frequency as a separate covariate positively predicted both the likelihood of becoming a donor ambassador ($b_{volunteering_frequency} = .71$, $SE = .10$, $Wald = 47.36$, $p < .001$) and the average intended donation amount ($b_{volunteering_frequency} = 10.78$, $SE = 1.51$, $t = 7.13$, $p < .001$), whereas the annual donation amount negatively predicted both outcomes ($b_{annual_donation} = -.34$, $SE = .06$, $Wald = 29.72$, $p < .001$; $b_{annual_donation} = -3.86$, $SE = .94$, $t = -4.12$, $p < .001$).

Conversion of Campaign Promoters. In the high-altruism-signal conditions, among those who intended to become a donor ambassador, an impressive majority in both the obligatory-publicity and voluntary-publicity conditions would wear the donor ambassador pin to promote the charitable cause (96.4% vs. 96.5%, $\chi^2(1, N = 227) < 1$, $p > .970$). In the low-altruism-signal conditions, however, participants in the obligatory-publicity condition were significantly less likely to wear the donor ambassador pin (77.7%) than those in the voluntary-publicity condition (93.8%; $\chi^2(1, N = 322) = 16.2$, $p < .001$; interaction $\chi^2(1, N = 559) = 20.0$, $p < .001$). This latter result was unexpected. We surmise that, when the publicized charitable act signaled lower altruism, the obligatory-publicity campaign could have induced reactance among participants who were genuinely interested in giving yet feared to signal lower altruism—a conflict less salient in the voluntary-publicity campaign due to the more flexible policy. Thus, these participants could have declined to wear the pin to express their objection to the campaign policy.

Attention Checks. Most participants (82.7%) correctly recalled the campaign strategy, and most participants (90.4%) correctly recalled the donation threshold. Excluding participants who failed these attention checks did not significantly affect the main findings.

Discussion

Study 5 identified the altruism signal from the charitable act as another moderator of the obligatory-publicity effect. We replicated the obligatory-publicity effect when the publicized charitable act signaled a high level of altruism by setting a higher donation threshold, whereas the effect reversed when the publicized charitable act signaled low altruism by setting a low donation threshold. Importantly, these results are inconsistent with alternative explanations, especially those related to greater perceived norm or importance: if the obligatory-publicity strategy solicited more donations by implying a stronger social norm or making the charitable cause seem more important than the obligatory-publicity strategy, then the obligatory-publicity strategy should have recruited more charitable acts regardless of the altruism signal. Our results, however, showed that obligatory-publicity backfired when the publicizable charitable act signaled a low level of altruism. Thus, these results corroborate our theorization that social image motives drove the effect.

What determines whether the level of altruism signaled by a charitable act is “low” versus “high”? In tiered fundraising campaigns, we observed the obligatory-publicity effect in studies using donation thresholds of \$20 or higher (the [web appendix](#)) among MTurk participants who reported a median annual household income of \$50–80k and a median annual donation of \$100–200. We conjecture that the donation threshold would be higher for populations with more disposable income. Beyond fundraising campaigns, some studies suggest that charitable contributions involving other scarce resources, such as time and personal effort in volunteer work, signal stronger altruism than economically equivalent contributions of money (Brown, Meer, and Williams 2019; Johnson and Park 2019; Reed, Aquino, and Levy 2007; also see Olivola and Shafir 2013). Thus, we surmise that the obligatory-publicity strategy potentially applies more broadly to charity campaigns that recruit non-monetary contributions (e.g., blood donation in study 2, “creative help” in study 3).

GENERAL DISCUSSION

It has been famously quipped, “charity is no longer charity once you publicize it” because the desire to look “pure” is itself deemed “impure.” We suggest that obligatory publicity resolves the tension between pure and impure motives for charitable acts and offers a more effective strategy to promote charitable acts in public. Five experiments, including two field experiments, present consistent evidence that obligatory-publicity campaigns recruit more charitable giving than alternative strategies that are commonly adopted in current practice. Obligatory-publicity campaigns also recruit more campaign promoters and help charities achieve greater social influence. These results

were observed across diverse contexts, with different campaign-strategy wordings, and different self-promotion devices. This obligatory-publicity effect is driven by social image motives, so it disappears in circumstances with weaker social image concerns, and it reverses when the altruism-signaling value of the publicized charitable act is low. These findings suggest that the obligatory-publicity strategy can be employed to foster a win-win between donors and charities.

While our experiments uncover the role of social image motives as a central mechanism for the obligatory-publicity effect, we speculate that the effect is multiply determined. For example, one known factor that influences social behaviors is the perceived social norm (Cialdini and Goldstein 2004); if the increased visibility of an obligatory-publicity campaign is expected to create a stronger norm of participation, then such an expectation could also increase the likelihood that prospective donors will participate. Although we observed the effect even when controlling for this factor (e.g., studies 4 and 5), we acknowledge that social norms may well play a role in generating social influence in real-world obligatory-publicity campaigns.

Relatedly, peer pressure is another potential contributing factor. In an obligatory-publicity campaign, unlike in a voluntary-publicity campaign, *not* using a self-promotion device may itself become a signal of low altruism, though this should occur only if most people give to the campaign. This would not be the case if people can opt out for various reasons, such as (allegedly) failing to receive information about the campaign, being indisposed to help (e.g., not meeting the health screening criteria for blood donation), or already having given to competing charitable causes. Since some charity campaigns in our studies had low participation rates, this form of peer pressure was not a parsimonious explanation for the obligatory-publicity effect. Nevertheless, peer pressure may play a nontrivial role in obligatory-publicity campaigns in which public giving (or the lack thereof) is closely monitored by peers without a convenient exit (e.g., collection baskets in churches; Soetevent 2005).

A third factor is the perceived importance of the charity campaign. Would prospective donors perceive an obligatory-publicity campaign to be more important than a voluntary-publicity campaign? We did not find direct evidence for this factor—participants in studies 2 and 3 rated the charitable cause as similarly important across conditions, and the results of study 5 contradicted the prediction of this alternative account. In practice, however, it is possible (and would be beneficial) for the phrasing of an obligatory-publicity recruitment message to convey greater importance than alternative recruitment messages. Specifically, an obligatory-publicity campaign may be well-poised to present the charity as more “authoritative,” “ambitious,” and “bold,” and these differentiators can

favorably shape a charity’s brand personality (Sargeant, Ford, and Hudson 2008) and potentially enhance its attractiveness to donors of high lifetime value (Michel and Rieunier 2012; Sargeant et al. 2008).

Theoretically, this research makes several contributions. In particular, by offering new insights into the dynamic interplay between genuine altruism and ulterior motives in conspicuous giving, this research addresses a notable paradox in the literature about the relationship between publicity and charitable acts. While some studies report that people are more likely to engage in prosocial behaviors in public than in private due to social image motives, other studies suggest that the publicity of charitable behaviors hurts the donor’s image instead of helping it. Our research reconciles these seemingly contradictory findings by drawing a nuanced distinction between obligatory and voluntary publicity. Our review of the literature suggests that publicity has a positive effect on charitable acts primarily when donors do not have the option to make their contribution private—in other words, when the campaign assumes some form of obligatory publicity (Cotterill, John, and Richardson 2010; Fisher and Ackerman 1998; Karlan and McConnell 2014; Lacetera and Macis 2010; Li and Riyanto 2017; Soetevent 2005; Yoeli et al. 2013). By contrast, when the publicity is voluntary and thus attributable to the donor’s social image motives, publicity generates negative social inference from charitable acts (Berman et al. 2015; Crichter and Dunning 2011; Newman and Cain 2014) and is thus unlikely to increase charitable acts.

Although this research primarily documents the advantages of the obligatory-publicity strategy relative to the voluntary-publicity strategy, the obligatory-publicity strategy has notable advantages over other traditional campaign strategies as well. For instance, in passive-publicity campaigns, which have been examined more extensively in the past, the donors’ charitable acts are publicized only to peer donors and a small, affiliated audience (e.g., by disclosing the donors’ names at related events or in archives; Fisher and Ackerman 1998; Lacetera and Macis 2010; Soetevent 2005). Conversely, both obligatory- and voluntary-publicity campaigns—which collectively may be considered “active-publicity campaigns”—heighten the visibility of donors’ good deeds indiscriminately to anyone who interacts with the donors, thereby capitalizing on donors’ social networks to reach a wider audience of new prospective donors. The free publicity from these active-publicity campaigns, especially the more effective obligatory-publicity campaigns, could reduce expenditures on traditional marketing channels such as mass media, mailing lists, and solicitors, thereby bolstering the charity’s long-term sustainability (Kotler and Kotler 1982). Moreover, obligatory-publicity campaigns have two other potential long-term benefits that are worth investigating in future research. First, because this strategy allows donors to both do good and look good, it has the potential to improve

charities' retention of donors. Second, as a charity recruits more giving with more effective recruitment strategies, the charity may develop a reputation for being efficacious and cost-effective, which also predicts higher long-term contributions (Michel and Rieunier 2012).

Finally, the implications of this research are not limited to the marketing of charity campaigns. The conflict between genuine prosocial intentions and social image motives permeates numerous social phenomena, including interpersonal helping, cooperation, organizational citizenship, social enterprise, and cause-related marketing—in short, any circumstance in which the self-initiated publicity of a prosocial effort and its resulting image benefits trigger doubts about the real motives behind the prosocial effort. The anticipation of such social inferences in turn dampens people's motivation to engage in prosocial efforts. To this end, this research suggests that an effective solution to these dilemmas is the provision of a salient external route of attribution for the prospective social image benefits, such as mandating the publicity of a prosocial effort for reasons that are legitimately associated with the prosocial goal. As a result, a better equilibrium can be reached to promote the greater good.

DATA COLLECTION INFORMATION

The first author collected data in study 1 on Amazon Mechanical Turk and analyzed the data in the fall of 2017. The first author supervised data collection for study 2 by a group of research assistants at the National University of Singapore in the fall of 2017. The first author supervised a designated research assistant to clean the data in study 3 with whom the first author jointly analyzed the data. The first and second authors jointly supervised data collection for study 3 by research assistants at the University of Chicago in the spring of 2016, and the first author analyzed the data. The first author collected data in studies 5 and 4 on MTurk in the summer and winter of 2020 and analyzed the data. Data are available on OSF: <https://osf.io/w9ag4/>

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