When payment undermines the pitch:

On the persuasiveness of pure motives in fundraising

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Abstract

Studies on “crowding out” document that incentives sometimes backfire—decreasing motivation in prosocial tasks. In the present research, we demonstrate an additional channel through which incentives can be harmful beyond motivation. When advocating for a cause, incentivized individuals are perceived as less sincere and are ultimately less effective in persuading others to donate. Further, the negative effects of incentives hold only when the incentive implies a selfish motive; advocates who are offered a matching incentive, which is not incompatible with altruism, perform just as well as those who are not incentivized. Thus, incentives may affect prosocial outcomes in ways not previously investigated: by crowding out individuals’ sincerity of expression and thus their ability to gain support for a cause.

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Incentives sometimes have perverse effects. For activities that provide their own inherent reward, the introduction of an external motivator can displace intrinsic motivation and thereby reduce effort in those activities (for reviews, see Deci, Koestner, & Ryan, 1999; Gneezy, Meier, & Rey-Biel, 2011). Such effects are prevalent in prosocial behavior, where external incentives have been shown to backfire, or “crowd out” a wide range of actions, including volunteering (Gneezy & Rustichini, 2000a), pro-environmental behavior (Cardenas, Stranlund, & Willis, 1999), contributions to public goods (Falkinger et al., 2000), cooperation (Fehr & Rockenbach, 2003), and blood donations (Mellstrom & Johannesson, 2008; but see Lacetera & Macis, 2010).

These findings highlight the incompatibility, in people’s minds, between altruism and self-interest. Incentives represent an economic exchange performed for self-interested gain, which is incongruous with the communal norms associated with helping (Fiske, 1991). Thus, people judge others as less altruistic when they benefit from their good deeds (Lin-Healy & Small, 2013; Newman & Cain, 2014). Moreover, people often seek out costly or painful ways of helping to demonstrate that their motives are pure (Olivola & Shafir, 2013).

Incentives are typically thought to affect behavior through the channel of motivation. Therefore, past investigations of crowding out have examined effort, persistence, and monetary contributions allocated towards helping others. These measures make sense in contexts for which no special skills are needed, such that there is a close correspondence between effort and outcome (e.g., giving blood, recycling). However, sometimes doing good requires more than just effort. Fundraising, in particular, requires the ability to communicate persuasively. The present research investigates this additional channel though which incentives may matter.

Specifically, we examine how incentives affect an advocate’s ability to persuade others to donate to a cause. We predict that, ceteris paribus, the best advocates for a cause are those whose
motives are pure. Without any incentive, a caring individual will express his true concern for a cause in a way that appears sincere to others. However, when an incentive is introduced, the same action becomes disingenuous—impeding an individual from effectively communicating that they care.

We further expect that donors will be sensitive to the sincerity of an advocate’s pitch and this will affect their donations. When evaluating other people’s prosocial behavior, individuals place a strong emphasis on perceptions that they are genuine (Barasch, Levine, Berman, & Small, 2014), and respond negatively towards those with a possible ulterior motive (Fein & Hilton, 1994; Critcher & Dunning, 2011; Lin-Healy & Small, 2013; Newman & Cain, 2013). We predict that donors will detect less sincerity in persuaders who have been selfishly incentivized—even without knowing that incentives are present—and this will reduce their contributions.

**Study 1: Fundraising for a breast cancer charity**

**Method**

The first study took part in two phases. In phase one, 36 volunteers (66.7% female) were recruited at a community event raising money for an organization that supports breast cancer research and awareness. Participants were sampled from this event to target those who are likely to have a strong pre-existing motivation to help the cause. Participants were asked to come independently to an isolated area of the event to participate in a study aimed to benefit the breast cancer organization.

Each participant met first with an instructions assistant, who told the volunteer (hereafter referred to as “persuader”) that he would make a pitch on video camera for the breast cancer organization. The video would later be shown to potential donors, and the persuader’s task was to do his best to persuade those individuals to donate to the cause.
Next, each persuader was assigned to condition in a two-group (Incentive vs. No Incentive) between-subjects design. In both conditions, the persuader read that others would subsequently view the video and have a chance to donate to the organization. In the Incentive condition, the persuader also read the following: “As a bonus, for every $10 that the potential donor gives to your charity organization, we will send you a $1 reward. In other words, the more money that someone donates to the cause, the more money you will be paid.” In the No Incentive condition, this statement was omitted. Each participant then signed a consent form agreeing to be videotaped. In this and in all subsequent studies, no one opted out of the study or refused payment after being assigned to condition, so selection cannot explain the findings.

The participant was then introduced to a condition-blind video assistant, who recorded the persuader’s charity appeal on videotape in a separate area. The video assistant instructed the persuader to begin speaking whenever he was ready. After the video was recorded, the participant was thanked and dismissed.

Phase two of the study consisted of a separate sample of 243 target donors (58.3% female; mean age = 26.0) who signed up to participate in a single week-long lab session at a northeastern university in exchange for payment. The number of target donors was determined by the amount of participants who signed up in advance for the lab session. Target donors were told that they would watch a video of an individual who was asked to make an appeal for a charitable organization that he supports. They were also told that the person in the video would be speaking without a script, and that the video had not been edited in any way. There was no mention of incentives.

Each target donor was assigned to watch one recorded charity appeal video, randomly assigned, which was embedded in a survey. This resulted in six to seven target donors watching
each video from the first stage of the study (243 target donors / 36 videos = 6.75 target donors per video).

After watching the appeal, target donors read that in addition to their standard participation fee of $10, they would receive an additional $3, which they could choose to keep or donate a portion to the cause advertised in the video. They were presented with a multiple choice question to indicate how much they would like to donate (any amount between $0 and $3 in one-dollar increments). All donations were sent to the organization after the conclusion of the study.

Results

*Persuader-level analysis*

Persuader-level analyses consist of coding 1) objective features of the videos, and 2) subjective judgments of the persuaders.

One condition- and hypothesis-blind research assistant coded each video in terms of length, and also whether the persuader spoke of a personal connection to the breast cancer cause. There were no differences across condition in the length of the appeal ($M_{\text{incentive}} = 42.00$ seconds, $M_{\text{no incentive}} = 46.82$ seconds; $t(34) = 0.46, p = .65$), the proportion of persuaders who mentioned that they knew someone who had been affected by breast cancer (incentive: 68%; no incentive: 76%; $\chi^2(1, N = 36) = 0.29, p = .59$), and the proportion who mentioned that they had a family member affected by breast cancer (incentive: 32%; no incentive: 53%; $\chi^2(1, N = 36) = 1.69, p = .19$).

In addition, two independent condition- and hypothesis-blind coders evaluated each persuader on three dimensions: how sincere they seemed in their appeal, how emotional they seemed in their appeal, and how much they seemed to care about the breast cancer organization
(all on 7-point scales from -3 to 3). The two coders’ ratings were highly correlated for each item 
($rs > 0.8$), and all items were averaged to form an overall measure of perceived sincerity ($\alpha = .88$). An independent sample t-test revealed a significant effect of condition on perceived 
sincerity ($t(34) = -2.64, p = .01$). Coders judged the persuaders to be less sincere when they 
received an incentive ($M = .04, SD = 1.60$) than when they did not receive an incentive ($M = 1.27, SD = 1.14$).

Target donor-level analysis

To account for multiple target donors viewing each video, donation results were analyzed 
with a nested one-way ANOVA (i.e., hierarchical ANOVA) that controlled for the groupings of 
persuaders nested within the main factor of incentive condition. Persuaders were treated as 
random effects.

Consistent with our key hypothesis, incentives to persuaders significantly reduced 
donation amounts ($F(1,207) = 6.50, p = .01, \eta^2_p = .030$). Target donors gave less money to 
charity when viewing a video appeal made by a persuader who had received an incentive ($M = $0.52, $SD = $0.88) than by a persuader who had not received an incentive ($M = $0.87, $SD = $1.15). Figure 1 displays the distribution of donations across the two conditions.
Fig. 1: Distribution of donation amounts by persuader incentive condition in Study 1.

We also conducted three alternative analyses for each study: 1) we averaged the target donor responses for each video, and then compared conditions at the persuader-level, 2) we ran nonparametric tests on the averaged persuader-level data, 3) we compared the median target donor response for each persuader across conditions. All results can be found in the Supplemental Material available online.

Study 2: Fundraising for a charity of choice

Study 2 consisted of a different and larger sample of both persuaders and target donors, and also included follow-up surveys for both groups. The goal of this study was to replicate the
previous findings, and to further investigate how target donors perceive persuaders and how persuaders perceive themselves.

Method

The second study followed the same overall design as Study 1, with exceptions as noted. In phase one, we recruited 93 students (64.5% female) from an on-campus service activities fair with representation from a wide variety of community-service organizations, rather than from an event for one specific cause. Participants signed up to come to a laboratory for a study aimed to benefit an organization of their choice.

In the lab, each student (hereafter referred to as “persuader”) met independently with a hypothesis-blind instruction assistant, who told him to make a pitch on video camera for a charitable organization of his choice. Similar to Study 1, the persuader was told that the video would later be shown to potential donors and that his task was to do his best to persuade others to donate to the cause. Each persuader wrote down the name of the organization that he would support in his charity appeal. This step occurred before the manipulation to ensure that persuaders did not choose different causes based on the presence of an incentive. To avoid persuaders selecting causes that could potentially conflict with the values of target donors, persuaders were instructed not to select a religious or political organization. The persuader was then randomly assigned to either an Incentive or a No Incentive condition in the same manner as Study 1. All recruited participants who came to the lab consented to the videotape procedure, and nobody withdrew from the study at any point in time.

Next, each persuader was introduced to a condition- and hypothesis-blind video assistant in a separate room. Because the instruction assistant was aware of the condition assignment
(Incentive vs. No Incentive), she was never present during the video recording task. To standardize the process across participants, the video assistant told each persuader, “When you are ready to begin, just tell me and I’ll start the recording”, and gave no further instruction. If a persuader asked for more guidance, the video assistant simply said, “Please just follow the instructions given to you at the beginning.”

After the persuader finished his charity appeal on videotape, he completed a short survey that asked how much effort he put into the appeal, how sympathetic he felt towards the cause, and how uncomfortable he felt making the appeal (all rated on 7-point scales). The survey also asked the persuaders to describe any personal connections he had to the organization he chose. Finally, the student was thanked and dismissed.

Phase two of the study consisted of a separate sample of 465 target donors (35.1% female; mean age = 30.1) who participated in an online survey via Amazon.com’s Mechanical Turk in exchange for payment. The results from the first study were utilized to determine the necessary sample size of target donors to achieve sufficient power for the second study (see Supplemental Material online for details).

Each target donor was assigned to watch one recorded charity appeal, randomly assigned, which was embedded in an online survey. This resulted in five target donors watching each video from the first stage of the study. Target donors were given the same instructions as in Study 1.

After watching the appeal, target donors read that in addition to their standard participation fee of 50 cents, they would receive an additional 30 cents, which they could choose to keep or donate any portion to the cause advertised in the video. They were presented with a slider scale to indicate how much they would like to donate (from 0 cents to 30 cents). The
payments used in this study reflect the standard compensation expectations of Amazon’s Mechanical Turk workers (Horton & Chilton, 2010).

Finally, target donors evaluated the persuader they viewed on a number of measures regarding their perceived sincerity, including “How sincere was this individual,” “How genuine was this individual,” “How much did the individual care about their cause,” “How deep is this individual’s commitment to their cause,” “How emotional was the individual,” and “How much feeling did the individual express” (averaged to form a six-item measure of perceived sincerity; \( \alpha = .94 \)). In addition, target donors evaluated how uncomfortable the persuader appeared using the following items: “How uncomfortable was the individual” and “How nervous was the individual” (averaged to form a two-item measure of perceived discomfort; \( r(465) = .78, p < .001 \)). All items were rated on seven-point scales.

Results

*Persuader-level analysis*

As in Study 1, persuader-level analyses consist of coding objective features of the videos. In addition, we analyzed persuaders’ responses to the post-video survey.

One condition- and hypothesis-blind research assistant coded each video in terms of length, and also whether the persuader spoke of a personal connection to the cause. There were no differences across condition in the length of the appeal (\( M_{\text{incentive}} = 78.66 \) seconds, \( M_{\text{no incentive}} = 81.46 \) seconds; \( t(91) = .37, p = .71 \)), the proportion of persuaders who mentioned that they volunteered for the cause (incentive: 51%; no incentive: 43%; \( \chi^2(1, N = 93) = 0.46, p = .54 \)), and the proportion who spoke about another personal connection, such as a loved one who had
suffered from the misfortune that the cause seeks to alleviate (incentive: 21%; no incentive: 24%;
\chi^2(1, N = 93) = 0.76, p = .81).

We next examined persuaders’ self-reported responses to the post-video survey. As expected by random assignment, there were no significant differences across condition in the proportion of persuaders who reported that they volunteered for the cause in the past (incentive: 57%; no incentive: 48%; \chi^2(1, N = 93) = 0.35, p = .41) or had another personal connection to the cause (incentive: 23%; no incentive: 33%; \chi^2(1, N = 93) = 0.32, p = .36). There were also no significant differences in how much effort the persuaders reported putting into their charity appeals (M_incentive = 4.79, M_no_incentive = 4.83; t(91) = -0.14, p = .89), how sympathetic they felt towards their cause (M_incentive = 6.32, M_no_incentive = 6.41; t(91) = -0.51, p = .61), and how uncomfortable they felt while making their charity appeals (M_incentive = 3.81, M_no_incentive = 3.89; t(91) = -0.25, p = .80).

In sum, the persuader-level analyses suggest that the incentive manipulation did not affect many concrete aspects of the persuaders’ pitches such as the length of their appeal or whether they made reference to a personal connection to the cause. Moreover, it did not affect the persuaders’ self-assessment of their own effort, sympathy, or discomfort.

Target donor-level analysis

As in Study 1, target donor-level analyses consist of donation amounts from the second phase of the study. In addition, we analyze the judgments that target donors made about the persuader in the target donor survey (i.e., perceived sincerity and discomfort). All results were analyzed with a nested one-way ANOVA (i.e., hierarchical ANOVA) that compared the No
Incentive condition to the Incentive condition while controlling for the groupings of persuaders nested within the main factor of incentive condition. Persuaders were treated as random effects.

Consistent with our key hypothesis, incentives to the persuader significantly reduced donation amounts ($F(1,372) = 11.53, p < .001, \eta_p^2 = .030$). Participants donated less money when the persuader received an incentive for soliciting donations ($M = 8.45, SD = 10.07$) than when the persuader did not receive an incentive ($M = 11.95, SD = 11.95$), even though target donors were unaware of the existence of any incentive. Figure 2 displays the distribution of donations across the two conditions.

![Chart showing distribution of donations by persuader incentive condition](chart.png)

**Figure 2:** Distribution of donation amounts by persuader incentive condition in Study 2.

The above analysis was repeated for the six-item measure of perceived sincerity and the two-item measure of perceived discomfort. Results show that participants judged the persuader
to be less sincere when he received an incentive ($M = 4.71$, $SD = 1.37$) than when he did not receive an incentive ($M = 5.03$, $SD = 1.28$; $F(1,372) = 7.52$, $p < .01$, $\eta^2_p = .020$).

Further, and consistent with self-reports by the persuaders reported above, there were no differences across conditions in perceptions of discomfort ($M_{incentive} = 4.17$, $SD_{incentive} = 1.54$; $M_{no\text{ incentive}} = 4.01$, $SD_{no\text{ incentive}} = 1.55$; $F(1,372) = 1.57$, $p = .21$, $\eta^2_p = .004$). This suggests that incentivized persuaders were not simply feeling intimidated by the prospect of getting feedback or choking under pressure from trying too hard (an unlikely alternative explanation given the small stakes; see Ariely, Gneezy, Loewenstein, & Mazar, 2009).

**Mediation analysis**

We predicted that perceived sincerity would mediate the effect of incentive condition on donation amount. Using bootstrap analyses on the target donor-level data (Hayes, Preacher, & Myers, 2011; MacKinnon, Fairchild, & Fritz, 2007), we find that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero (Indirect Effect = -.85, $SE = .34$; 95% C.I. [-1.57, -.23]), such that incentives decrease the perception that the persuader sincerely cares about a cause ($a = -0.32$, $p < .01$), which in turn decreases how much target donors give to their cause ($b = 2.78$, $p < .001$). Once we include perceived sincerity in the model, the relationship between incentives and donations becomes smaller but not insignificant ($c = -3.50$, $p = .001$; $c' = -2.65$, $p = .01$), suggesting partial mediation. When we include perceived discomfort in the model as an additional mediator, there is not a significant indirect effect of discomfort (Indirect Effect = .02, $SE = .07$; 95% C.I. [-0.08, .26]), and the effect of perceived sincerity is unchanged (Indirect Effect = -.87, $SE = .35$; 95% C.I. [-1.62, -.24]).

**Study 3: Fundraising with matching incentives**
The goal of Study 3 was to replicate the findings and to examine one boundary condition. So far we have shown that incentives have a negative effect on perceived sincerity and donations. However, not all incentives signal selfishness. We expect that when an incentive does not contradict an individual’s pure motives for helping others, it will not hurt persuaders’ effectiveness. Therefore, we include a third condition representing a non-selfish, matching incentive. In addition, this study uses larger incentives and a greater range of possible donation amounts.

Method

The study followed similar procedures as Study 2, with exceptions as noted. In phase one, we recruited individuals in a Northeastern university behavioral lab who had signed up to participate in an hour-long lab session. Our goal was to encourage only people who were intrinsically motivated to help others to participate (i.e., those for whom we predict to be adversely impacted by a personal incentive). All attendees read an instruction sheet notifying them that we were “recruiting students who really care about a cause to participate in a study.” Participants could choose their favorite charity organization and have an opportunity to raise money for their cause. If they chose not to participate, they would be allowed to leave early from the lab session. Lab attendees indicated their desire to participate by checking a “yes” or “no” box on the instruction sheet.

The target sample size was 120 students for this portion of the study (40 students per condition). After six weeks, we recruited 118 participants (58.5% female; approximately 9.8% of the study population).
Each participant (hereafter referred to as “persuader”) then met independently with a hypothesis-blind instruction assistant, who gave him the same instructions as in the previous study. In addition, before random assignment to condition, each persuader wrote down the name of the organization that he would advocate for in his appeal.

The persuader was then randomly assigned to condition in a three-group (Personal Incentive vs. Matching Incentive vs. No Incentive) between-subject design. As in the previous studies, persuaders in the No Incentive condition simply learned about the task. In the Personal Incentive condition, the persuader also read the following: “As a bonus, for every $10 that is donated to your charity organization, we will pay you an additional $10 for you to keep. In other words, the more money people donate to the cause from watching your charity appeal, the more money we will pay you.” Note that in this study, the potential reward for an effective charity appeal was larger than in the previous studies, both in terms of percentage of total money raised (10% in Studies 1 and 2 versus 100% in Study 3) and number of dollars mentioned as a reference point ($1 versus $10).

In the Matching Incentive condition, the persuader instead read the following: “As a bonus, for every $10 that is donated to your charity organization, we will “match” it by giving an additional $10 to the cause. In other words, the more money people donate to the cause from watching your charity appeal, the more money we will give to that cause.” This incentive was designed to be identical to the Personal Incentive condition in terms of wording and incentive size. The only difference was whether the incentive would go to the individual making the appeal or to the cause. Again, no participants declined to participate in the study after learning about the incentives.
Next, each persuader recorded his charity pitch on videotape in a separate room. The video assistant, who was blind both to the hypothesis and to condition, gave the same video recording instructions as in Study 2. Finally, after the persuader finished his charity appeal, he completed the same short survey from the previous study and then was dismissed.

Before conducting phase two of the study, we excluded three videos from the analysis that were deemed unusable: one which was discovered to be a repeat participant already in the sample, and two which lasted over 6 minutes (over 5 standard deviations above the mean time spent on a charity appeal, and too long for our Mturk study timing). The rest of the videos ranged from 18-255 seconds. The authors were blind to condition when making this exclusion decision.

In phase two, we showed the remaining 115 videos to a separate sample of 861 target donors (38.0% female; mean age = 33.0) who participated in an online survey via Amazon.com’s Mechanical Turk in exchange for payment. Each target donor watched one recorded charity appeal, randomly assigned, which was embedded in an online survey. Therefore, 6-8 target donors watched each video.

After watching the appeal, target donors read that in addition to their standard participation fee of 50 cents, they would receive an additional dollar ($1), which they could choose to keep or donate any portion to the cause advertised in the video. They were presented with a slider scale to indicate how much they would like to donate (from 0 cents to 100 cents). A $1 bonus is substantial in the MTurk environment; in addition, this bonus equaled 200% of their payment for participation in the task.

Finally, target donors evaluated the persuader they viewed on the same six-item measure of perceived sincerity ($\alpha = .94$) and two-item measure of perceived discomfort ($r(861) = .75, p < .001$) used in the previous study.
Results

*Persuader-level analysis*

As in the previous two studies, persuader-level analyses consist of coding objective features of the videos, as well as persuaders’ responses to the post-video survey.

A condition- and hypothesis-blind research assistant coded each video in terms of length, and also whether the persuader spoke of a personal connection to the cause. There were no differences across condition in the length of the appeal ($M_{\text{personal incentive}} = 69.79$ seconds, $M_{\text{no incentive}} = 69.29$ seconds, $M_{\text{matching incentive}} = 66.42$ seconds; $F(2,112) = .09$, $p = .92$), the proportion of persuaders who mentioned that they volunteered for the cause (personal incentive: 13%; no incentive: 26%; matching incentive: 16%; $\chi^2(2, N = 115) = 2.58$, $p = .28$), and the proportion who spoke about another personal connection, such as a loved one who had suffered from the misfortune that the cause seeks to alleviate (personal incentive: 31%; no incentive: 53%, matching incentive: 45%; $\chi^2(2, N = 115) = 3.87$, $p = .15$).

We next examined persuaders’ self-reported responses in the post-video survey. As expected by random assignment, there were no significant differences across condition in the proportion of persuaders who reported that they volunteered for the cause in the past (personal incentive: 26%; no incentive: 29%; matching incentive: 26%; $\chi^2(2, N = 115) = 0.12$, $p = .94$) or had another personal connection to the cause (personal incentive: 35%; no incentive: 33%; matching incentive: 32%; $\chi^2(1, N = 115) = 0.11$, $p = .94$). There were also no significant differences in how much effort the persuaders reported putting into their charity appeals ($M_{\text{personal incentive}} = 5.18$, $M_{\text{no incentive}} = 5.26$, $M_{\text{matching incentive}} = 5.53$; $F(2,112) = 1.21$, $p = .30$), how sympathetic they felt towards their cause ($M_{\text{personal incentive}} = 6.26$, $M_{\text{no incentive}} = 6.29$, $M_{\text{matching incentive}} = 6.24$).
\[ F(2,112) = 1.88, p = .16 \], and how uncomfortable they felt while making their charity appeal \( (M_{\text{personal incentive}} = 4.03, M_{\text{no incentive}} = 3.66, M_{\text{matching incentive}} = 3.84; F(2,112) = .41, p = .66) \).

As before, this analysis shows that the incentive did not affect many concrete aspects of the persuaders’ pitches, and it did not affect the persuaders’ self-assessment of their own effort, sympathy, or discomfort.

**Target donor-level analysis**

As in Study 2, target donor-level analyses consisted of donation amounts, as well as the judgments that target donors made about the persuader in the target donor survey. All results were analyzed with a nested one-way ANOVA (i.e., hierarchical ANOVA) that compared the three incentive conditions while controlling for the groupings of persuaders nested within the main factor of incentive condition. Persuaders were treated as random effects.

Consistent with our key hypothesis, there was an overall effect of incentives on donation amounts \( (F(2,746) = 5.19, p < .01, \eta^2_p = .014)\). Replicating findings from the previous studies, participants donated less money when the persuader received a personal incentive for soliciting donations \( (M = 18.83, SD = 27.48) \) than when the persuader did not receive an incentive \( (M = 26.16, SD = 34.35; F(1,503) = 7.86, p < .01, \eta^2_p = .010) \), even though target donors were unaware of the existence of any incentive. Importantly, the matching incentive \( (M = 26.21, SD = 34.37) \) did not differ from the no incentive condition \( (F(1,492) = .00, p = .98, \eta^2_p = .00) \), and did lead to greater donations than the personal incentive condition \( (F(1,497) = 7.63, p < .01, \eta^2_p = .010) \). Figure 3 displays the distribution of donations across the three conditions.
The above analysis was repeated for the six-item measure of perceived sincerity and the two-item measure of perceived discomfort. The overall effect of incentive on perceptions of sincerity was significant ($F(2,746) = 4.12, p = .02, \eta^2_p = .011$). Planned contrasts reveal that participants judged the persuader to be less sincere when he received a personal incentive ($M = 4.67, SD = 1.30$) than when he did not receive an incentive ($M = 4.97, SD = 1.30; F(1,503) = 8.15, p < .01, \eta^2_p = .011$), replicating findings from the previous studies. However, those who received a matching incentive were perceived as marginally more sincere ($M = 4.85, SD = 1.27$), than those who received a personal incentive ($F(1,497) = 2.79, p = .095, \eta^2_p = .004$) and similar to those who received no incentive ($F(1,492) = 1.35, p = .25, \eta^2_p = .002$).

Further, and consistent with self-reports by the persuaders reported above, there were no differences in perceptions of discomfort across conditions ($M_{personal \text{ incentive}} = 4.18, SD_{personal \text{ incentive}} = 1.57; M_{no \text{ incentive}} = 3.95, SD_{no \text{ incentive}} = 1.51; M_{matching \text{ incentive}} = 4.11, SD_{matching \text{ incentive}} = 1.66$);
Note that although the evidence herein suggests that the incompatibility between self-interest and altruism causes incentivized advocates to be less persuasive, this incompatibility does not seem to yield any feelings or displays of discomfort—at least that are detectable as measured.

**Mediation analysis**

Finally, we conducted a bootstrap analysis on the target donor-level data (Hayes, Preacher, & Myers, 2011; MacKinnon, Fairchild, & Fritz, 2007) using incentive condition as the independent variable, sincerity as the mediator, and donation as the dependent variable. Replicating the effects of Study 2, the 95% confidence interval for the comparison between *No Incentive* and *Personal Incentive* did not include zero, indicating that sincerity mediates the effect of incentives on donations (Indirect Effect = \(-2.16, SE = .89; 95\%\) C.I. \([-3.95, -.49]\)). Specifically, we found that incentives decrease the perception that the persuader sincerely cares about a cause (a = \(-0.29, p < .01\)), which in turn decreases how much target donors give to their cause (b = 7.61, p < .001). Once we include perceived sincerity in the model, the relationship between incentives and donations becomes smaller but not insignificant (c = \(-7.33, p < .01\); c' = \(-5.18, p = .04\)), suggesting partial mediation. When we include perceived discomfort in the model as an additional mediator, there is not a significant indirect effect of discomfort (Indirect Effect = \(.22, SE = .26; 95\%\) C.I. \([-0.10, .96]\)), and the effect of perceived sincerity is unchanged (Indirect Effect = \(-2.26, SE = .92; 95\%\) C.I. \([-4.11, -.50]\)).

For the comparison between *Matching Incentive* and *Personal Incentive*, sincerity did not mediate the effect of incentive condition on donations (Indirect Effect = \(-1.40, SE = .88; 95\%\) C.I. \([-3.26, .23]\)). A closer examination of the pathways shows that this is because relative to a matching incentive, a personal incentive only marginally decreases the perception that the
persuader sincerely cares about a cause (a = -0.18, p = .098). Nonetheless, decreased sincerity reduces how much target donors give to their cause (b = 8.02, p < .001), and once we include perceived sincerity in the model, the relationship between incentive condition and donations becomes smaller (c = -7.39, p < .01; c’ = -5.99, p = .02).

**General Discussion**

Individuals oftentimes receive compensation for being spokespeople for causes, soliciting donations, or crafting persuasive messages for charity. The studies presented here attempt to capture what happens in such interpersonal persuasive contexts, whereby the success of an appeal relies on an individual’s ability to communicate pure intentions. We find that tainting intrinsically-motivated persuaders with a personal incentive reduces their persuasiveness: observers detect reduced sincerity and contribute less as a result.

These findings extend previous studies of crowding out, which focused on effort and examined tasks that did not involve skill. The task we employ is one for which little effort is involved—participants commit to the task prior to random assignment, have no time to prepare, and speak on video for a brief amount of time. Further, we find no differences across conditions on self-reported effort or video time lengths. Instead, the success of the task depends on the ability to convey sincerity—a critical skill that is not captured in past research.

Although we find that target donors view incentivized persuaders as less sincere, it remains unclear if incentives actually make persuaders feel less empathic or if they are rendered less capable of communicating their concern. Interestingly, although target donors judged incentivized persuaders to be less sincere, the persuaders’ self-reports of sympathy did not differ
across conditions; participants all reported extremely high levels of sympathy (means > 6 on a 7-point scale). However, their responses may reflect pre-established feelings, or participants may not want to indicate reduced sympathy for self-image or self-presentational reasons. This could also be an instance where observers have insight beyond what the actors themselves report (cf. Ekman, 1993; Vazire and Carlson 2012).

By demonstrating that personal incentives, but not matching incentives, harm persuasiveness, we provide evidence that the incompatibility of self-interest and altruism is necessary for the crowding out of sincerity to occur. Future research can explore additional boundary conditions, as has been done in the literature on incentives and motivation (Deci, Koestner, & Ryan, 1999; Eisenberger, Pierce, & Cameron, 1999; Gneezy, Meier, & Rey-Biel, 2011; Gneezy & Rustichini, 2000a/b; Heyman & Ariely, 2004). It is possible that other forms or sizes of incentives would not undermine sincerity in the same way (e.g., verbal rewards, Cameron, Banko, & Pierce, 2001; gifts, Shaffer & Arkes, 2009; large incentives; Imas, 2014).

In addition, though our research examines advocates for charitable causes, future research can identify other domains in which incentives negatively affect persuasiveness. Wherever a conflict of interest exists (e.g., doctors advocating treatment to patients, product endorsements), it may be the case that incentives diminish sincerity. However, advocating for prosocial causes is likely the most conspicuous conflict because of the direct incompatibility between altruism and self-interest.

In sum, we show how incentives can negatively affect people's ability to advocate for a cause. Nonetheless, it is important to keep in mind that there can still be good reasons to pay for prosocial activities. They might engage people who would otherwise not help at all, and they may help recruit better talent within a competitive landscape (e.g., Ashraf, Bandiera, & Lee,
2015). Future research could examine the combined impact of these elements for a broader understanding of when incentives should be employed. Ultimately, it is important to recognize both the advantages and limits of incentives in a world where sincerity matters.
References


Supporting Online Materials for

When payment undermines the pitch:
On the persuasiveness of pure motives in fundraising

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1. Alternative Analysis Utilizing Persuader-level Mean Donations

In the target donor-level analyses reported in the main text, a nested one-way ANOVA (i.e., hierarchical ANOVA) controlled for the groupings of persuaders nested within the main factor of incentive condition. Another way to analyze the data is by averaging the target donors’ responses for each dependent measure. This reduces the sample size to the number of persuaders (36 in Study 1; 93 in Study 2; 115 in Study 3), which reduces power. However, simple tests can be performed to compare the average between conditions for each measure.

Study 1

An independent sample t-test revealed a significant effect of condition on donation amount ($t(34) = 3.08, p < .01$). Participants gave the cause less money when the persuader received an incentive for raising money ($M = .53, SD = .33$) than when the persuader did not receive an incentive ($M = .90, SD = .39$).

Study 2

An independent sample t-test revealed a significant effect of condition on donation amount ($t(91) = 3.52, p < .001$). Participants gave the cause less money when the persuader received an incentive ($M = 8.45, SD = 4.60$) than when the persuader did not receive an incentive ($M = 11.95, SD = 4.98$). T-tests also revealed significant effects on judgments of perceived sincerity ($t(91) = 2.21, p = .03$), such that persuaders who received an incentive were judged as less sincere ($M = 4.71, SD = .65$) than those who did not receive an incentive ($M = 5.03, SD = .75$).
Study 3

A one-way ANOVA revealed a significant effect of incentive condition on donations ($F(2,112) = 4.12, p = .02$). Participants gave the cause less money when the persuader received a personal incentive ($M = 18.86, SD = 8.99$) than when the persuader did not receive an incentive ($M = 26.24, SD = 13.74; t(76) = 2.49, p = .01$) and when the persuader received a matching incentive ($M = 26.17, SD = 15.50; t(75) = 2.47, p = .02$). There was no difference in donations between persuaders who did not receive an incentive and those who received a matching incentive ($t(76) = .02, p = .98$).

A one-way ANOVA did not reveal a significant effect of incentive condition on perceived sincerity ($F(2,112) = 1.96, p = .15$). However, planned contrasts revealed that participants judged the persuader to be less sincere when he received a personal incentive ($M = 4.68, SD = .62$) than when he did not receive an incentive ($M = 4.97, SD = .65; t(76) = 1.97, p = .05$) and directionally so when the persuader received a matching incentive ($M = 4.85, SD = .64; t(75) = 1.16, p = .25$). There was no difference in perceived sincerity between persuaders who received no incentive and those who received a matching incentive ($t(76) = .81, p = .42$).

2. Alternative Analysis Utilizing Persuader-level Nonparametric Tests

Donation data are usually not normally distributed (see Small, Loewenstein, & Slovic, 2007 for example). A Kolmogorov-Smirnov test rejected the null hypothesis that averaged persuader-level donations were normally distributed in Study 1 ($p < .01$) and Study 3 ($p < .01$), but not in Study 2 ($p = .20$). In addition, in Study 3, the Levene’s homogeneity of variance test rejects the null hypothesis that the variances are equal across the three groups ($F(2,112) = 7.36, p < .001$). The Levene’s test did not reject the null hypothesis in Studies 1 and 2 (Study 1: $F(1, 34) = .61, p = .44$; Study 2: $F(1, 91) = .001, p = .98$). For robustness, we report nonparametric tests
of the effects of incentive condition on donations utilizing the mean donation for each persuader. In all studies, the effects are similar to those reported in the main manuscript using ANOVA.

*Study 1*

Nonparametric Mann-Whitney U tests based on the mean and median donation for each persuader revealed results consistent with the parametric tests reported in the main manuscript (U = 250, z = 2.82, p < .01).

*Study 2*

The Mann-Whitney tests find results consistent with the parametric test reported in the main manuscript (U = 1497, z = 3.20, p < .001).

*Study 3*

Because this study contained three conditions, we conducted a nonparametric Kruskal-Wallis test, which extends the Mann-Whitney test reported in the previous studies to designs with more than two groups. This test finds the same result as the parametric test reported in the main manuscript (H(2) = 6.44, p = .040). According to the analysis on the mean donation, participants donated less money when the persuader received a personal incentive for soliciting donations than when the persuader did not receive an incentive (H = 18.15, p = .02). The matching incentive led to similar donations as no incentive (H = 3.51, p = .65) and greater donations than the personal incentive (H = 14.64, p = .05).
3. Alternative Analysis Utilizing Persuader-level Median Donations

Because the number of donors comprising the persuader-level average is small (ranging from 5 to 8 donors across studies), any extreme responses will have a disproportionate effect on the mean. Therefore, we also perform the same persuader-level analysis using the median donation for each persuader.

Study 1

An independent sample t-test revealed a significant effect of condition on donation amount ($t(34) = 2.14, p = .04$). Participants gave the cause less money when the persuader received an incentive for raising money (Average median = .13, $SD = .33$) than when the persuader did not receive an incentive (Average median = .47, $SD = .60$).

Study 2

An independent sample t-test revealed a marginally significant effect of condition on donation amount ($t(91) = 1.79, p = .08$). Participants gave the cause marginally less money when the persuader received an incentive (Average median = 6.70, $SD = 6.76$) than when the persuader did not receive an incentive (Average median = 9.72, $SD = 9.35$). T-tests also revealed marginally significant effects on judgments of perceived sincerity ($t(91) = 1.66, p = .10$), such that persuaders who received an incentive were judged as less sincere (Average median = 4.89, $SD = .82$) than those who did not receive an incentive (Average median = 5.15, $SD = .76$).

Study 3
A one-way ANOVA revealed a marginally significant effect of incentive condition on median donations ($F(2,112) = 2.76, p = .07$). Participants gave the cause marginally less money when the persuader received a personal incentive ($Average \ median = 8.37, SD = 10.77$) than when the persuader did not receive an incentive ($Average \ median = 15.32, SD = 16.91; t(76) = 1.77, p = .08$) and significantly less than when the persuader received a matching incentive ($Average \ median = 17.03, SD = 22.07; t(75) = 2.21, p = .03$). There was no difference in donations between persuaders who did not receive an incentive and those who received a matching incentive ($t(76) = .43, p = .67$).

A one-way ANOVA revealed a marginally significant effect of incentive condition on perceived sincerity ($F(2,112) = 2.53, p = .08$). Planned contrasts revealed that participants judged the persuader to be less sincere when he received a personal incentive ($Average \ median = 4.76, SD = .11$) than when he did not receive an incentive ($Average \ median = 5.09, SD = .12; t(76) = 2.07, p = .04$) and marginally so when the persuader received a matching incentive ($Average \ median = 5.04, SD = .12; t(75) = 1.78, p = .08$). There was no difference in rated sincerity between persuaders who received no incentive and those who received a matching incentive ($t(76) = .28, p = .78$).

4. Power Analysis

The results from Study 1 were utilized to determine the necessary sample size to achieve sufficient power for Study 2. A nested ANOVA revealed that incentives significantly affected donation amounts ($F(1,207) = 6.50, p = .01, \eta_p^2 = .030$; Cohen’s $d = .34$). Target donors donated less money when viewing a video appeal made by a volunteer who had received an incentive ($M = $0.52, $SD = $0.88) than by a volunteer who had not received an incentive ($M = $0.87, $SD = $1.15). The power analysis results estimated a sample size of 441 participants to achieve 80%
power for a nested ANOVA (Cohen’s $d = 0.3; \alpha = .05; 1- \beta = .80$). Thus, for Study 2, we recruited 465 target donors, or 5 target donors for each of the 93 videos in phase one.

Similarly, the results from Study 2 were used to determine the sample size for Study 3 (given the similar student population sample). In Study 2, a nested ANOVA revealed that incentives significantly affected donation amounts ($F(1,372) = 11.53, p < .001, \eta_p^2 = .030; \text{Cohen’s } d = .32$). Participants donated less money when the persuader received an incentive for soliciting donations ($M = 8.45, SD = 10.07$) than when the persuader did not receive an incentive ($M = 11.95, SD = 11.95$). The power analysis results estimated a sample size of 638 participants to achieve 80% power for a nested ANOVA (Cohen’s $d = 0.3; \alpha = .05; 1- \beta = .80$). Because we did not fully reach our target sample size in phase one, we oversampled in phase two by recruiting 861 target donors, or approximately 7 target donors for each of the 115 videos.