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Keywords: Positive reinforcement, Charitable giving, Experiment, Fundraising

JEL Classification: C90, D91, H40

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1. Introduction:

Feedback (positive or negative reinforcement, PRI and NRI hereafter, respectively), can be used by an institution or individual to encourage (discourage) and acknowledge (censure) increased levels of the actions taken by the feedback recipient. PRI and NRI can be valuable tools for improving a recipient's performance and to attaining an institution's goals. PRI can inform recipients if their actions are moving them toward the desired outcomes and, if not, what changes might be necessary to get on the right path; NRI informs recipients that their actions are not the right ones and that changes are needed (Fishbach and Finkelstein, 2012).

PRI, the focus of this paper, can take many forms. It might be something as casual as a "job well done" compliment, a thank-you note for actions taken, or a token gift of acknowledgment. In other instances, it may be more formal. In the workplace, PRI can take the form of direct performance indicators such as performance reviews comparing performance relative to personal goals, company standards, or relative to one's peers. It can also take the form of indirect performance indicators such as receiving pay raises, promotions, or bonuses. For a review of the evidence of the positive effects of PRI see Villeval (2019).

Our focus in this paper is on the impact of instantaneous PRI on charitable giving. By instantaneous PRIs, we mean that the PRI is given to participants as they are making their decisions, rather than afterwards. The difference between after-the-fact and instantaneous PRI, is that after-the-fact PRI acknowledges a decision that has been made and cannot be changed; its target is future decisions, whereas the target of instantaneous PRI is the decision currently being made, one that has not yet been finalized and can still be altered. Our study offers the first evidence, to our knowledge, of the effect of instantaneous PRI on the decision to give and the decision of how much to give.

We report results from an online experiment testing the impact of instantaneous PRI on charitable giving. Participants are randomly assigned to one of five treatments: 1) a baseline with no PRI; 2) a treatment in which subjects receive a static PRI emoji (a thumbs up emoji, a

general recognized gesture of approval)[1]; 3) a treatment in which subjects receive a dynamic PRI emoji [i.e., a thumbs up emoji that increases (decreases) in size as the size of the donation increases (decreases)]; 4) a second control in which subjects view an irrelevant static emoji; and 5) a third control in which subjects view an irrelevant dynamic emoji that increases (decreases) in size as the size of the donation increases (decreases).

The first set of emojis was introduced in 1999 (Bai et al., 2019). Since then, they have become a standard feature of electronic communication. Emojis have become a universally recognized shorthand ways of expressing emotions and ideas (Grossman, 2018), so much so that certain smartphone keyboards suggest to the user emojis based on the words the user is writing (Correia, 2021). Emojis are used in dating biographies (https://www.tinderpressroom.com/2021-12-06-Tinder-Year-in-Swipe-2021-TM) and have even been adopted by the business world (Robinson, 2019), and are being used in advertising and product packaging (Stark and Crawford, 2015; Das et al., 2019). The uses of emojis in human communication continues to become more prevalent and diversified.

Some charitable organizations have started using emojis in their donation campaigns and materials. For example, the Greater Vancouver Food Bank allowed people to text an eggplant (peach) emoji, resulting in a $5 ($10) donation being made (https://campaignsoftheworld.com/digital/greater-vancouver-food-bank-emoji-to-donate-campaign/), A recent World Wildlife Fund marketing campaign (#endangeredemoji) uses emojis to highlight which animals are endangered (https://fundraising.co.uk/2015/06/05/wwf-uses-emoji-in-endangered-species-fundraising-appeal/). PETA's Cruelty Beyond Words campaign uses emojis to illustrate the harm done to animals (https://www.youtube.com/watch?v=AevC1bPr6UM). It has been suggested that emojis be used to show how much food a person is donating to charity (https://www.rohitbhargava.com/2017/09/emojis-encourage-charitable.html). These examples suggest that charities believe emojis can improve the outcomes of their fundraising campaigns. Given the untapped potential of emojis, it is possible that charities may start (or have even already started) using emojis for instantaneous PRI.

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[1] According to the emoji dictionary, the thumbs up emoji "… is used to express assent, approval, or encouragement in digital communications, especially in Western cultures" (https://www.dictionary.com/e/emoji/thumbs-up-emoji/).

Historically PRI for charitable giving is after the fact in the form of thank-you letters, calls, or gifts from the charities to donors. People in general (Newman and Shen, 2012) and fundraisers in particular (Samek and Longfield, 2019) indicate a belief that thank-you gifts and calls, respectively, will increase future giving; however, evidence of a positive effect is at best mixed and at worst nonexistent. However, Newman and Shen (2012) report that the effect of thank you gifts is negative. Chao (2017) also reports a negative effect of thank-you gifts on giving in a subsequent fundraising drive. He finds that this effect is only evident for gifts that are visually salient and that crowding out is most apparent among higher amount givers. Samek and Longfield (2019) report a null effect for thank-you calls. In contrast, Bittschi et al. (2021) reports evidence in favor of after-the-fact PRI. They find that church members, whose past contributions were recognized by letter, were less likely to cease contributing.[2] Common to each of these studies is the fact that PRI is after the fact; the PRI came sometime after the donation was made.

One exception is Andreoni and Serra-Garcia (2021). In their lab experiment, they provide (somewhat) more instantaneous PRI than a traditional thank-you note; subjects who pledge to give to charity are immediately given a thank-you note. While in the same spirit as our PRI, Andreoni and Serra-Garcia's PRI, though immediate, is still after the fact; i.e., the pledge has been made and can no longer be altered. The thank you is intended to increase the likelihood that the pledge will be fulfilled, not to affect the amount pledged. They report that this results in more donations and less reneging on the pledge.

Before the internet, with the exception of face-to-face or phone solicitations, instantaneous PRI was not possible. However, with the expansion in the use of the internet, there has been considerable growth in online fundraising, especially after September 11, 2001. According to Waters (2007), prior to September 11, 2001, the record for online donations was the $2.7 million collected by the American Red Cross in 1999. By the end of 2001, in excess of $100 million had been collected online solely to assist 9/11 victims. Furthermore, before 2001, only about 50% of the top 400 fundraising agencies had online fundraising capabilities. By 2007, 95% had online fundraising capabilities.

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[2] In Germany, church members are required to make regular payments to their churches, but there is no mechanism enforcing this requirement and members can opt to stop paying at any time without repercussions (Bittschi et al., 2021).

Online fundraising has the advantage of being a low-cost method of soliciting and facilitating contributions (Liang et al. 2019). By 2020, 13% of total charitable fundraising was from online sources and over the prior three years, online giving increased 32% (Blackbaud Institute, 2021). With the increase in online giving, delays in PRI are no longer necessary as instantaneous PRI is possible, making the results of this study especially relevant to charitable fundraisers. Furthermore, instantaneous PRI could prove to be a cost saving measure for charities, eliminating the need for after the fact thank you letters and calls.

We find that, consistent with much of the findings on after-the-fact PRI (i.e., thank-you letters, calls, or gifts), instantaneous PRI has no significant positive effects on donation behavior. If anything, we find that some instantaneous PRI may have a negative effect. Our static thumbs up emoji, while not significantly reducing the frequency of giving, does significantly reduce the average amount given (by approximately 25%) compared to the baseline. The static thumb emoji, being observed regardless of the amount donated, may send a message to potential donors that could be interpreted in a self-serving manner; that it is as okay to give little or nothing as it is to make a more generous donation. This result serves as a cautionary tale to fundraisers; be sure to select any feedback carefully, as it may not only be ineffective, but could backfire.

2. **Experiment**

2.1 Design

The experiment has three parts (see Appendix A for the complete instructions). These are as follows:

1.   <u>A real effort task</u>: Participants are shown a country and then asked to pick, from three options, the capital city. If they answer incorrectly, they receive additional chances until they select the correct answer. This is repeated for 10 countries. For completing this task, participants receive a bonus of 20 Experimental Currency Units (ECUs) where 1 ECU = $0.1 USD. Participants are told they can donate some, none, or all of their bonus ECUs to the charity Feed the Children (FTC).[3] A description of FTC is provided. To assure them that any donations will be implemented, we inform them that after the experimenters make the donations, they

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[3]This is not a surprise for participants. At the beginning of the experiment, participants are told that that they will complete a task and then be able to donate to Feed the Children.

will receive by email a link to a website containing a receipt for the total of all donations to FTC.

2. <u>A real donation dictator game</u> (Eckel and Grossman, 1996): Participants are assigned to play in one of five randomly determined treatments. In each treatment, participants choose how they wish to divide their 20 ECUs between themselves and FTC by moving a slider bar between 0-20. As we were concerned that the starting point for the slider (i.e., 0, 20, or possibly 10) could have an anchoring effect on donations, we decided to randomized the starting point for each participant.

The five treatments are:

Baseline: Participants see the slider bar but no extra images.

Static Baseball: Participants see a static irrelevant emoji (baseball) no matter where they move the slider bar (from 0-20 ECUs).

Dynamic Baseball: Participants see a dynamic irrelevant emoji (baseball) that increases (decreases) in size as they move the bar toward 20 (0). The emoji disappears when the slider bar reaches 0.

Static Thumb: Participants see a static thumbs up emoji no matter where they move the slider bar (from 0-20 ECUs).

Dynamic Thumb: Participants see a dynamic thumbs up emoji that increases (decreases) in size as they move the bar toward 20 (0). The emoji disappears when the slider bar reaches 0.

The thumbs up emoji is, in the United States, a well-recognized sign of approval, giving a person (or people) positive feedback. For example, users on both Facebook and Linkedin can click a thumbs up emoji to show approval of others' posts. The popular media platform Youtube, allows people to rate videos, clicking on a thumbs up emoji if they enjoyed a video, and until recently a thumbs down emoji if they did not enjoy it. Netflix viewers can also use the thumbs up/down emoji to rate what they have watched.

Our main two treatments of interest are Static Thumb and Dynamic Thumb; Static Bsaeball and Dynamic Baseball are included as controls, to ensure that any effects are due to PRI, rather than as the result of using an emoji or an emoji that increases in size. The baseball was chosen as we considered it an emoji that offered no PRI and had no relation to FTC.

3.   A post-donation survey: The survey includes demographic questions and the 60 item HEXACO personality inventory questionnaire (citation).[4] The HEXACO survey was used to create a number of domain-level and facet-level measures and to investigate whether differences on these measures explain in different charitable giving decisions when affected by PRI.

2.2 Implementation

Before data collection, we used G*Power (Faul et al., 2007) to conduct an a priori power analysis. Our goal was to obtain .80 power to detect an effect size of .18 (Cohen's d) at a standard .05 alpha error probability.[5] This necessitated 475 participants in each group for a two-sided t-test.[6] In total, we recruited 2,707 participants using the online platform Amazon Mechanical Turk (Mturk).[7] We use the tool CloudResearch (Litman et al., 2017) to control for data quality and ensure that there are no multiple completions from any single IP address. We restricted our participants to residents of the United States with at least a 90% approval rating on previous tasks. We excluded 332 participants from the data analysis for failing the attention check question (explained in more detail below), leaving us a sample of 2,375 (Table 1 reports the number of retained and excluded participants by treatment). All reported analyses exclude these data points. Payments were made via the Mturk bonus function.[8]

Table 1: Sample size by treatment, retained and excluded

	Retained	Excluded (% of total)
Baseline	483	55 (10.2)
Static Baseball	467	73

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[4] We included the Altruism subscale HEXACO questions (4 in total). As a result, there were 64 questions in our HEXACO survey, instead of the traditional 60.

[5] We planned to investigate the lowest possible effect size given our budget, and hence came up with a Cohen's D of 0.18, which meant a minimum effect size of 0.3 ECUs on the intensive margin at 80% power. However, due to an error (see footnote 6), we ended up being able to detect a minimum effect size of 0.9 ECUs.

[6] We had to amend the preregistration, since we accidently used the standard error instead of the standard deviation for the original power analysis. Due to budgetary constraints, we amended the power analysis to be as close to the original as possible.

[7] The use of online platforms such as Mturk and Prolific has already received significant uptake in experimental/behavioral economics (e.g. Hauser and Schwarz, 2016; Gandullia and Lezzi, 2018; Palan and Schitter, 2018); Gandullia, 2019; Giamattei et al., 2020; Grodeck and Schönegger, 2022). As Gandullia et al. (2020) argued, moving from a university student sample to an online sample may also reduce experimenter demand effects as the experimenters are not physically present at the time of data collection, thus further making plausible this choice of participant recruitment.

[8] Confirming a HIT on Mturk only pays participants the set amount for that HIT. The bonus function allows researchers to pay participants different (extra) amounts, based on the decisions they made.

		(13.5)
Dynamic Baseball	491	66 (11.8)
Static Thumb	459	73 (13.7)
Dynamic Thumb	475	65 (12.0)
$\chi^2(4)$ test p-value	0.401	

The attention check question appears after the last page of the HEXACO survey. The question asks the participants to repeat (to the best of their memory) one of the statements they saw on the last page of HEXACO questionnaire. In Appendix B, Table 1, we provide a random sample of 30 (verbatim) responses to our attention check question from excluded participants. For comparison, we also include 30 randomly selected (verbatim) responses from retained participants. Overall, approximately 33% responded with "good" or some variation of good, 17% responded "nice" or some variation of nice, 22% responded with "no," "none," or "nothing." Participants who failed the attention check did not receive any payment and their tasks were rejected, as is common policy on Mturk.

Appendix B, Table 2, provides a summary of the socioeconomic characteristics and HEXACO scores for the participants (both retained and excluded). We report characteristics across the five treatments for the retained participants only. Successful randomization is indicated by the lack of significant differences in retained participants' characteristics across treatments.[9] Comparing the characteristics of retained and excluded participants, most are significantly different. For example, excluded subjects are 25% more likely to be male, have on average lived in the United States about 8 years longer, and are approximately twice as likely to have a postgraduate degree. Most importantly, the excluded participants, regardless of treatment, almost unanimously donated (average donation rate = 94%), give twice as much to FTC as retained participants (average donation = 10 ECUs), and giving did not differ significantly across the treatments. The donation data combined with the responses to the attention check question suggests that these participants were not giving serious attention to the task.

In total, the retained participants donated 11,457 ECUs ($1145.7) to FTC. On average, 4.8 ECUs were donated and average earnings were $1.52. We used the Otree platform (Chen et

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[9] Tests also indicate no significant difference in excluded participants' characteristics across treatments. Results available upon request.

al., 2016) to facilitate the experiment. The experiment was preregistered on OSF: https://osf.io/x2zge/.

2.3 Hypotheses:

Given the mixed evidence of after-the-fact PRI on charitable giving, we are a priori agnostic about the effects of instantaneous PRI. While we do not have a model that specifies hypotheses, we believe if anything, it is more likely that instantaneous PRI increases donation behavior on both the extensive and intensive margins through the following channels:

a) Instantaneous PRI may enhance both the warm glow and the altruism utility donors receive by donating (Andreoni, 1989; Andreoni, 1990). If so, donors may either be more likely to donate and/or donate more on the margin.

b) Similar to the model and findings of Andreoni and Serra-Garcia (2021), instantaneous PRI may increase social pressure to donate. The external acknowledgment of their action, may pressure donors to either be more likely to donate and/or donate more on the margin.

We expect these channels to be more applicable to Dynamic Thumb than to Static Thumb as the Dynamic Thumb treatment differentiates between the feedback for each donation amount, while Static Thumb is the same for each donation amount. This aspect of Static Thumb could actually lead to backfire effects in Static Thumb, as it may make warm-glow types still receive warm glow for not donating, signal to altruistic types that donating 0 is acceptable, and remove social pressure from not donating. However, while we are again agnostic on this point and run two-sided tests as a result, we remain optimistic for the potential for the Static Thumb treatment to increase giving behavior. Specifically, this leads to the following hypotheses.

H1: Donation Frequency in Dynamic Thumb > Static Thumb > Baseline = Static Baseline = Static Thumb[10]

H2: Mean donation in Dynamic Thumb > Static Thumb > Baseline = Static Baseline = Dynamic Baseline

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[10] Baseline, Static Baseline, and Dynamic Baseline, being control treatments, we expect their effect on giving behavior to be similar.

3 Results

3.1 Donation Behavior

Results 1: We reject H1. Our PRI manipulations have mixed effects. While giving is more frequent in the Dynamic Thumb treatment, the increase is insignificant. We find that giving in the Static Thumb treatment is less frequent, this is only significant compared to the Dynamic Thumb after adjusting for multiple hypothesis testing.[11]

Supporting evidence: Figure 1 reports the frequency of participants who made a positive donation by treatment. We first compare frequency of giving across our five treatments and find no significant difference [$\chi^2(4)$ test p-value = 0.152]. We find no significant difference in giving in our three control treatments [$\chi^2(2)$ test p-value = 0.952], so we pool them. H1 hypothesizes a trend in frequency of donating (DT > Static Thumb > pooled controls). Testing for this hypothesized trend finds no significant trend (Jonckheere–Terpstra test p-value = 0.413). We also performed (pairwise) comparisons of the frequency of donating for the pooled control treatments and our two PRI treatments. Frequency of donating in Static Thumb is significantly less [$\chi^2(1)$ test p-value = 0.058], however this result is no longer statistically significant at the 10% level after adjusting for multiple hypothesis testing; frequency of donating in Dynamic Thumb is insignificantly different [$\chi^2(1)$ test p-value = 0.225]. Finally, we find that the frequency of donating for our Static Thumb treatment is significantly less than in our Dynamic Thumb treatment [$\chi^2(1)$ test p-value = 0.011].

Figure 1: Frequency of giving, by treatment

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[11] We provide robustness checks for multiple hypotheses of our pairwise tests based on List et al. (2019). See Appendix B, Table 3, for all our estimations of outcomes. The majority of significant pairwise comparisons in Results 1 and Results 2 remain significant after adjusting for multiply hypotheses, at the 5% level according to List et al. (2019) Theorem 3.1. Only the result of Control vs Static Thumb for frequency of donations is no longer significant.
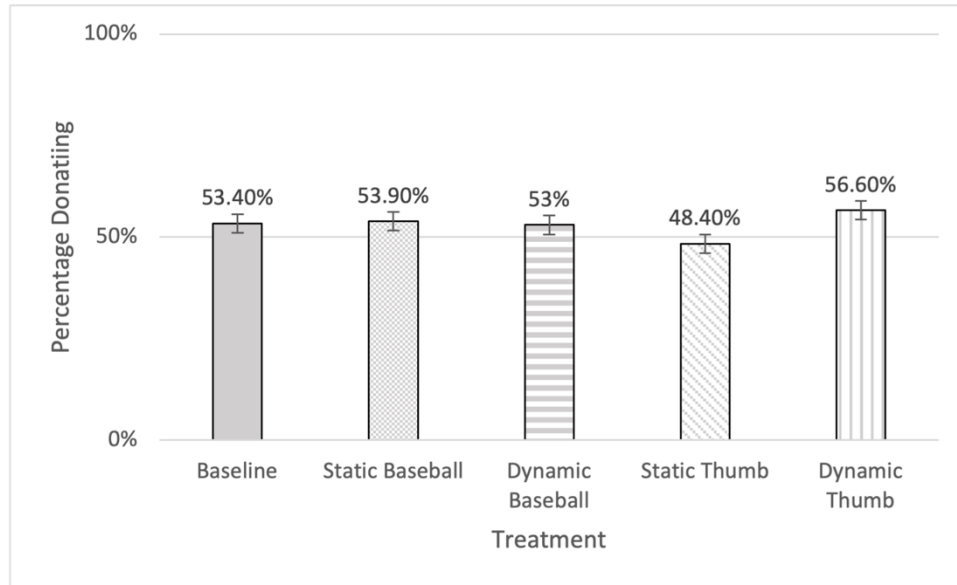
Probit regressions (Table 2) confirm the nonparametric test results. In column 1, we control only for the treatments (Baseline is our omitted group); column 2 includes the donation starting point (Donationstart); for column 3, we add subject characteristics; column 4 adds the subject personality (HEXACO) measures; and column 5 compares the pooled control treatments to the two PRI treatments.[12] In general, with the exception of Static Thumb, we find no significant differences in donating at the extensive margin, and Static Thumb sometimes has the opposite of the hypothesized effect, but this is only significant in columns 3 and 5 respectively.

Results 2: We reject H2. Our two PRI manipulations have mixed effects. The dynamic PRI (i.e., Dynamic Thumb) has the hypothesized positive effect on amount donated, however, the increase is insignificant. The static PRI (i.e., Static Thumb) does have a significant effect on donations; it is, again, the opposite of the expected effect.

Table 2: Probit Regressions, Decision to donate

	Marginal effects (Std. Err.)				
VARIABLES	(1)	(2)	(3)	(4)	(5)
Static thumb	-0.051	-0.051	-0.060*	-0.045	-0.051*
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Dynamic thumb	0.032	0.032	0.034	0.036	0.032
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Static baseball	0.005	0.006	0.005	0.013	

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[12] The full results are reported in Appendix B, Table 4.

	(1)	(2)	(3)	(4)	(5)
	(0.03)	(0.03)	(0.03)	(0.03)	
Dynamic baseball	-0.005	-0.005	-0.005	-0.0001	
	(0.03)	(0.03)	(0.03)	(0.03)	
Donationstart		0.001	0.001	0.001	
		(0.002)	(0.002)	(0.002)	
Subject Demographics	N	N	Y	Y	N
Subject Personality	N	N	N	Y	N
Test (p-value):					
ST=DT=SB=DB=0		0.155	0.152	0.093	0.211
ST=DT		0.012	0.011	0.006	0.019	0.012
Observations			2375		

Note: Probit regression. Marginal effects reported. Standard errors in parentheses. For models 1 – 4, the omitted treatment is Baseline; for model 5, the omitted treatment is the pooled control treatments (Baseline, Static Baseball, and Dynamic Baseball). *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Demographic Controls include age, gender, religion, education status, income, last time donated, how often they donate, and perceived worthiness of Feed the Children. HEXACO Controls include the honesty/humility, emotionality, extraversion, agreeableness, consciousnesses, openness to experience, and altruism scales. ST=Static Thumb, DT=Dynamic Thumb, SB=Static Baseball, DB=Dynamic Baseball. Definitions of control variables are provided in Appendix B, Table 5.

Supporting evidence: Figure 2 reports the mean donation amount in each treatment. We first compare mean donations across our five treatments and find a significant difference in the mean donation amount in each treatment (Kruskal-Wallis test, KW hereafter, p-value = 0.045). Across our three control treatments, the amount donated averages approximately 5 ECUs and differences are not significant [KW p-value = 0.952], so we again pool them. H2, like H1, assumes a trend in amount donated [(Dynamic Thumb > Static Thumb > pooled controls). Testing for this hypothesized trend finds no significant trend (Jonckheere–Terpstra test p-value = 0.217). We next compare (pairwise) the amount donated for the pooled control treatments to our two PRI treatments. The amount donated in Static Thumb averages about 0.85 ECUs less than the amount donated in the pooled control treatments, and the difference is significant (t-test p-value = 0.014). The amount donated in Dynamic Thumb averages about 0.37 ECUs more than the amount donated in the pooled control treatments, but the difference is insignificant (t-test p-value = 0.302). Finally, comparing the mean amount donated for our two PRI treatments, we find that donations average 1.25ECUs more in Dynamic Thumb than in Static Thumb and the difference is significant (t-test p-value =0.004].

Figure 2: Mean giving, by treatment
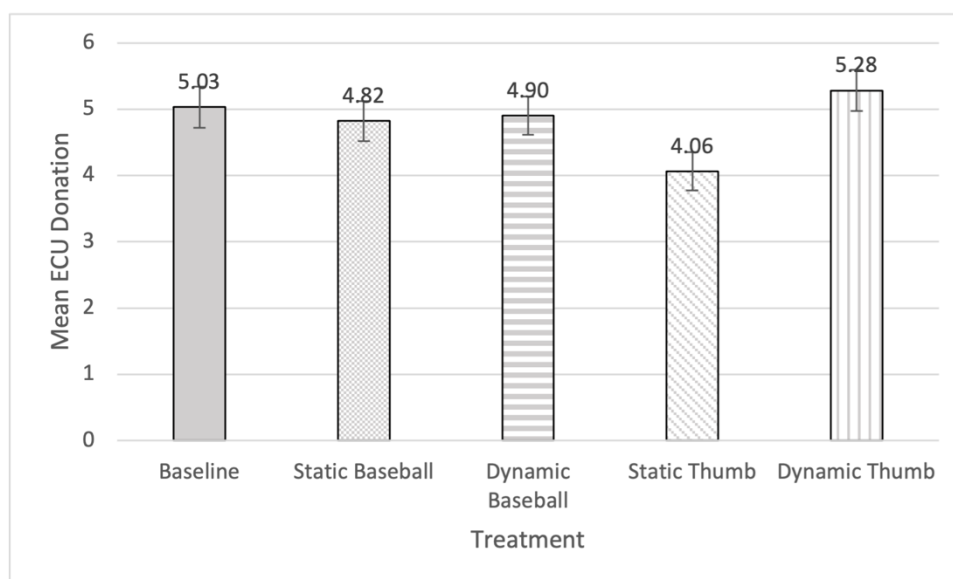
Tobit regressions (censored at 0 and 20) confirm the nonparametric test results (Table 3).[13] In column 1, we control only for the treatments (Baseline is our omitted group); column 2 includes the donation starting point (Donationstart); for column 3, we add subject characteristics; column 4 adds the subject personality (HEXACO) measures; and column 5 compares the pooled control treatments to the two PRI treatments. Again, in general, with the exception of Static Thumb, we find not significant differences in the amount donated, and Static Thumb has opposite the hypothesized effect, significantly reducing donations.

One final point is worth noting: The cursor's initial, randomly determined starting point (Donationstart), while having no significant impact on the decision to donate (see Table 2), for those who do donate it seems to have an anchoring effect; a higher starting point significantly increases the amount donated.

Table 3: Tobit regression, Amount donated

VARIABLES	(1)	(2)	(3)	(4)	(5)
Static thumb	-1.989**	-2.018**	-2.170**	-1.700**	-1.825**
	(0.924)	(0.922)	(0.882)	(0.866)	(0.763)
Dynamic thumb	0.718	0.722	0.869	0.962	0.883
	(0.903)	(0.901)	(0.858)	(0.843)	(0.738)
Static baseball	-0.249	-0.255	-0.317	-0.0991	
	(0.910)	(0.908)	(0.866)	(0.849)	
Dynamic baseball	-0.247	-0.262	-0.307	-0.118	
	(0.900)	(0.898)	(0.857)	(0.841)	
Donationstart		0.112**	0.110**	0.102**	

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[13] The full results are reported in Appendix B, Table 6. Appendix B, Table 7, reports OLS results.

	(0.0496)	(0.0472)	(0.0462)		
Constant	0.961	-0.0853	-20.75***	-12.61***	0.796**
	(0.650)	(0.802)	(2.578)	(3.929)	(0.389)
Subject Demographic	N	N	Y	Y	N
Subject Personality	N	N	N	Y	N
Test (p-value):					
ST=DT=SB=DB=0	0.058	0.052	0.014	0.046	
ST=DT	0.003	0.003	<0.001	0.002	0.003
Observations			2,375		

Notes: Standard errors in parentheses. For models 1 – 4, the omitted treatment is Baseline; for model 5, the omitted treatment is the pooled control treatments (Baseline, Static Baseball, and Dynamic Baseball). *** p<0.01, ** p<0.05, * p<0.1. Demographic Controls include age, gender, religion, education status, income, last time donated, how often they donate, and perceived worthiness of Feed the Children. HEXACO Controls include the honesty/humility, emotionality, extraversion, agreeableness, consciousnesses, openness to experience, and altruism scales. ST=Static Thumb, DT=Dynamic Thumb, SB=Static Baseball, DB=Dynamic Baseball. Definitions of control variables are provided in Appendix B, Table 5.

4. Discussion and Conclusion

With the increase in online giving, charities have the opportunity to provide their donors instantaneous PRI, both signaling to the donor what they consider to be a generous donation and providing positive reinforcement for actions that can be taken in that moment. This differs from after-the-fact PRI, as the target behavior of the feedback has not been locked in and the targeted behavior is the current donation rather than future donations. Our study offers the first evidence, to our knowledge, of the effect of such instantaneous PRI on the decision to give and the decision how much to give.

Our study also provides evidence on the use of emojis in fundraising. Given the prominence of emojis in modern human communication, charities and other not for profit organizations may decide to pivot from words to emojis in their fundraising materials. While we only investigate one out of many emojis (the thumbs up), this paper serves as a starting point for how emojis affect donation behavior.

We fail to reject the null hypotheses that instantaneous PRI has no positive effects on charitable giving, at either the extensive or intensive margin. If anything, we find that some instantaneous PRI may have a negative effect. This is consistent with much of the general findings on after-the-fact PRI (i.e., thank-you letters, calls, and gift). Our static thumbs up emoji reduces the frequency of giving (by approximately 5 percentage points), but this is not significant after adjusting for multiple hypotheses. However, the static thumb significantly reduces the average

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amount given (by approximately 25%). The static thumbs up emoji, being observed regardless of the amount donated, even if that amount is 0 ECUs, may (mistakenly) send the signal that no or little giving is as okay as a more generous donation. This may be one reason why participants donated smaller amounts compared to the Dynamic Thumbs up emoji treatment, where for each different donation amount the varying size of the symbol varies the PRI given. For participants who are looking for excuses to give less, the Static Thumbs up emoji may allow them to give less (or not at all) and feel less guilty for making that decision.

Another possible reason why we find our PRI manipulations to be ineffective, or in the case of Static Thumb even reducing giving behavior, could be due to how the PRI is perceived. Studies show that positive feedback such as gratitude can lead to more positive emotions if it is perceived as authentic. However, this is not the case if the feedback is perceived to be manipulative or strategic (Algoe, 2012; Dwyer, 2015; Algoe et al., 2016). Furthermore, while we only look at one donation decision, practitioners need to consider the effects of instantaneous PRI on future behavior (Meier, 2007; Damgaard and Gravert 2018; Adena and Huck, 2020). These studies show certain interventions can lead to less donations in the long run, even though they increased targeted behavior in the present. In our case, we do not find present benefits of PRI, and it is conceivable to believe that annoyance may lead to fewer donations to charities that use this form of PRI in the long run. These results serve as a cautionary tale to fundraisers; Be sure to select any feedback carefully.

Finally, we concede that our instantaneous PRI choices are possibly weak manipulations. A more solicitous message might prove more effective; for example, a thank-you message, other words of gratitude. Likewise, mechanisms that provide more salient forms of feedback regarding how much impact a donation has and positive reinforcement on how much good a donation can do may prove more effective. For example, the Against Malaria Foundation allows people to choose how many bed nets they want to donate, The End Fund, shows donors how many children are protected from neglected tropical diseases (a group of parasitic and bacterial infectious diseases) by their donations, and Malaria Consortium shows static images of what a £10, £25, and £100 donation can achieve.

Furthermore, people may be more responsive to negative than positive feedback. For example, a thumbs down emoji could be shown if participants donate nothing. We leave it to future studies to explore other forms of instantaneous feedback. Given the exploratory nature of this

study, we choose to begin with weak manipulations. If a positive effect were observed in this instance, more aggressive manipulations should likewise prove effective.

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Appendix A: Screenshot of Instructions

[Introduction]
Thank you for participating in this survey. The survey will last approximately 10 minutes.

In this survey, monetary amounts are not quoted in USD, but in Experimental Currency Units (ECUs). Eventually, the amount of money earned during the experiment will be converted into USD, where: 1 ECU= $0.1 USD.

After you have completed the survey you will be given the opportunity to donate none, some, or all of your earnings to **Feed the Children**.

[Country Task Explanation]

You will receive 20 ECUs for completing the following task.

In this task you have to try and guess the capital city for a given Country. One at a time, a Country's name will be displayed, as well as three cities within that country. Only once you select the correct capital city of that country, will you be allowed to move on to the next Country. There will be 10 different Countries in total.

[Donation Task]

Thank you for completing the survey task. You have earned 20 ECUs. You will now be given the opportunity to donate none, some, or all of your earnings to Feed the Children. If you decide against donating, you will receive the full 20 ECUs

Feed the Children is a non-profit organization focused on alleviating childhood hunger. Their mission is "providing hope and resources for those without life's essentials." It provides food, essentials, education supplies and disaster relief to those in need across the United States and in 10 countries around the world.

[Box to tick] I have read this information. I understand that I earned 20 ECUs for completing the survey and I can donate none, some, or all of the 20 ECUs to Feed the Children.

[Baseline Donation Screens]

How many ECUs do you want to donate?

[slider] 7

Donate

👍

How many ECUs do you want to donate?

[slider] 0

Donate

[Dynamic Thumb Donation Screens]

[Static Baseball Donation Screens]

[Dynamic Baseball Donation Screens]

[Attention Check Screen]

Attention Check:

Please write out (to the best of your ability) one of the four statements you saw on the previous page:

Next

[Summary Screen Example]

Thank you for participating in this survey.

You have earned 13 ECUs (1.3 USD) from today's survey

Your donation of 7 ECUs ($0.7 USD) will be donated to Feed the children in the next few days

The donation receipt for the total donations made by participants in this survey will be published under the following link so you can be sure we actually made the donation to Feed the Children: https://donresweb.z26.web.core.windows.net/

Your personal key for Mechanical Turk is: 9665300967 Please enter your key into the text field on the Mechanical Turk website so we can approve your work. Thank you for participating.

Next

Appendix B: Additional results

Table 1: Random sample of (verbatim) responses by excluded and retained subjects

#	Excluded	Retained
1	Good	people see me as a hard hearted person
2	good	I am seen as someone who could harm someone else
3	capital city of all states	It wouldn't bother me to harm someone I didn't like.
4	good	People think of me as a hard-hearted person.
5	agree	I am a hard-hearted person
6	yeah its very useful this survey	people are angry
7	honestly	People think of me as a hard hearted person
8	workout	It wouldn't bother me to hurt someone I didn't like.
9	agree in the space	People think I am hard hearted
10	do you like that?	People say I am a hard-hearted person
11	very use full survey in this time	work hard to achive my goals
12	about fearness	I feel sympathy for people less fortunate than me
13	Prewriting is the stage of the writing process during which you transfer your ... and other times your instructor will ask you to come up with a topic on your own. ... Narrative: Choose one of the topics below and relate your ideas in a clearly ... contents of a good thesis statement and have seen examples, take a look four pitfalls ...	I am a hard-hearted person
14	.	i have sympathy for someone less fortunate than me
15	feelings	It would affect me to hurt someone I didn't like
16	good	I sympathize with others who are less fortunate than I am.
17	WHAT IS CAPITCAL CITY OF USA	I would find it easy to harm someone I did not know.
18	Interseting	I am a hard-hearted person
19	nice survey	People see me as a hard hearted person
20	very approch	I would be quite bored by a visit to an art gallery
21	(to the best of your ability)	People think o me as a hard hearted person.

22	state	people consider me a hard hearted person
23	very interesed	i am not a hard hearted person to other people.
24	To overwhelm, take control, or gain an advantage over someone or something. I never intend to be mean to Helena, but my nastiness gets the best of me whenever I'm around her. Don't let him get the best of you—just ignore him! We had the best of this game until the other team tied the score.	You are hurting for people's rejection.
25	About symptoms	people think im a hard hearted person
26	My ability to the 100%	it asked if people see me as having a hard heart
27	good	People see me as a hard hearted person.
28	nice	People think that I'm a hard hearted person.
29	agree	am i a hard hearted person?
30	VERY NICE	people see me as a hard hearted person

Table 2: Summary statistics

Variable	Retained					Kruskal-Wallis test (χ^2 test) p-value	Excluded All	Retained versus Excluded Mann-Whitney (Fischer exact test) p-value	Excluded Across Treatments Kruskal-Wallis test (χ^2 test) p-value
	Baseline	Static Baseball	Dynamic Baseball	Static Thumb	Dynamic Thumb				
Mean Age (Std. Err.)	37.27 (0.52)	36.97 (0.54)	37.45 (0.58)	36.23 (0.50)	36.59 (0.51)	.811	36.96 (0.59)	.757	.394
% Male	51.8	50.1	51.3	52.1	55.8	(.483)	65.1%	(< .001)	(.073)
Religious Affiliation Atheism/Agnosticism/ Secularism	161	154	160	158	153	.917	8	< .001	.503
Buddhism	9	3	3	7	6		2		
Christianity	269	265	274	239	264		295		
Hinduism	8	5	8	7	6		7		
Judaism	6	7	4	6	6		3		
Islam	6	6	6	7	8		4		
Sikhism	0	0	1	0	1		0		
Other	24	27	35	35	31		13		
Years in USA (Std. Err.)	35.53 (0.57)	35.49 (0.58)	35.36 (0.61)	34.60 (0.56)	35.57 (0.85)	.876	44.02 (8.34)	.013	.328
Highest Level of Education NA	2	3	3	1	0	.122	1	.001	.674
Primary	1	0	0	0	3		1		
High School	128	117	116	112	131		20		
Undergraduate degree	267	265	264	269	264		198		
Postgraduate degree	85	82	108	77	77		112		
Income per year ($000) < 20	103	94	88	86	92	.826	31	.182	.719
20≤X<40	105	11	134	107	105		97		
40≤X<60	123	116	124	108	124		101		
60≤X<80	70	70	66	72	85		61		
80≤X≤100	39	34	41	40	39		33		
>100	43	43	38	46	30		9		
Feed the Children supports a worthy cause?						.887		< .001	.965
Strongly disagree	6	7	4	5	6		13		

Disagree	6	7	3	6	4		10		
Neither agree nor disagree	75	65	79	75	66		41		
Agree	226	223	234	218	253		208		
Strongly agree	170	165	171	155	146		60		
When did you last donate to charity?									
Have not	37	31	43	28	30		7		
In last 2 weeks	126	112	127	146	128	.140	60	< .001	.249
In last 6 months	181	164	163	153	147		144		
In last year	88	114	102	95	114		84		
In last 5 years	51	46	56	37	56		37		
Times donate in a year									
0	58	53	69	45	52		11		
1-5	254	222	230	222	243		172		
6-10	982	99	115	92	103	.124	113	.055	.749
10-20	39	52	41	92	36		26		
> 20	40	41	36	51	41		10		
Last time you gave to charity before today, what was most important to you?									
Total amount given by everyone	96	96	93	85	96	.196	131	< .001	.958
Amount that you personally gave	159	150	148	125	157		161		
Some other aspect of giving	228	221	250	249	222		40		
Honesty/humility	3.40 (0.03)	3.40 (0.03)	3.38 (0.03)	3.43 (0.03)	3.43 (0.03)	.963	2.91 (0.02)	< .001	.209
Emotionality	3.18 (0.03)	3.25 (0.03)	3.23 (0.03)	3.20 (0.03)	3.26 (0.03)	.732	3.02 (0.02)	< .001	.511
Extraversion	3.06 (0.04)	3.06 (0.04)	3.11 (0.03)	3.05 (0.04)	3.07 (0.03)	.324	3.20 (0.02)	.012	.888
Agreeableness	3.23 (0.03)	3.23 (0.03)	3.28 (0.03)	3.34 (0.03)	3.32 (0.03)	.781	3.10 (0.02)	< .001	.566
Conscientiousness	3.65 (0.03)	3.69 (0.03)	3.66 (0.03)	3.76 (0.03)	3.70 (0.03)	.051	2.97 (0.02)	< .001	.313
Openness to experience	3.61 (0.03)	3.66 (0.03)	3.63 (0.03)	3.64 (0.04)	3.58 (0.03)	.095	3.07 (0.02)	< .001	.713
Altruism	3.84 (0.03)	3.88 (0.03)	3.85 (0.04)	3.90 (0.04)	3.89 (0.04)	.648	3.22 (0.03)	< .001	.769

Donation Start Point	9.53 (0.26)	9.43 (0.27)	9.61 (0.26)	9.64 (0.27)	9.40 (0.26)	.963	10.05 (0.31)	.115	.216
Donation	5.03 (0.31)	4.82 (0.3)	4.90 (0.29)	4.06 (0.29)	5.28 (0.31)	.045	13.00 (0.36)	< .001	.845K
N	483	467	491	459	475		332		

Table 3: Multiple Hypothesis Testing Robustness Check

Outcome	Control/Treatment	DI	(4) Remark 3.1 (Unadjusted).	(5) Thm 3.1	(6) Bonferroni	(7) Holm
Frequency	Control v Static Thumb	0.05	0.068*	0.169	0.408	0.204
Frequency	Control v Dynamic Thumb	0.03	0.216	0.328	1	0.431
Frequency	Static Thumb v Dynamic Thumb	0.08	0.011**	0.044**	0.066*	0.055*
Amount	Control v Static Thumb	0.85	0.013**	0.042**	0.076*	0.051*
Amount	Control v Dynamic Thumb	0.36	0.323	0.323	1	0.323
Amount	Static Thumb v DT	1.22	0.004***	0.018**	0.024**	0.024**

Notes: DI reports the "difference in means." Estimations are based on the procedure in List et al. (2019). Column 4 displays a (multiplicity-unadjusted) p-value computed using Remark 3.1; column 5 displays a (multiplicity-adjusted) p-value computed using Theorem 3.1. Column 6 displays a (multiplicity-adjusted) p-value obtained by applying a Bonferroni adjustment to the p-values in column 4; column 7 displays a (multiplicity-adjusted) p-value obtained by applying a Holm adjustment to the p-values in column 4. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4: Probit regressions, Decision to donate

VARIABLES	(1)	(2)	(3)	(4)	(5)
Static Thumb	-0.0505	-0.0506	-0.0599*	-0.0452	-0.0507*
	(0.0326)	(0.0326)	(0.0341)	(0.0346)	(0.0268)
Dynamic Thumb	0.0322	0.0324	0.0342	0.0360	0.0321
	(0.0321)	(0.0321)	(0.0335)	(0.0341)	(0.0263)
Static Baseball	0.00546	0.00561	0.00462	0.0129	
	(0.0324)	(0.0324)	(0.0338)	(0.0343)	
Dynamic baseball	-0.00463	-0.00470	-0.00462	-0.000719	
	(0.0320)	(0.0320)	(0.0335)	(0.0340)	
donationstart		0.00110	0.00126	0.00111	
		(0.00176)	(0.00184)	(0.00186)	
age			-0.000195	0.000457	
			(0.000970)	(0.000997)	
male_dummy			0.0135	0.00138	
			(0.0218)	(0.0241)	
christianity			-0.0272	-0.0439	
			(0.0490)	(0.0498)	
atheism			-0.177***	-0.154***	
			(0.0494)	(0.0511)	
religion_other			-0.146**	-0.133**	
			(0.0615)	(0.0631)	
undergrad			0.0470*	0.0302	
			(0.0266)	(0.0273)	
postgrad			0.0569	0.0347	
			(0.0346)	(0.0358)	
primaryschool			0.398***	0.411***	
			(0.106)	(0.0919)	
income_20_40			0.0716**	0.0781**	
			(0.0331)	(0.0335)	
income_40_60			0.00684	0.00838	
			(0.0338)	(0.0349)	
income_60_80			0.0120	0.0152	
			(0.0380)	(0.0391)	
income_80_100			0.00237	0.0210	
			(0.0463)	(0.0471)	
income_more100			-0.0980**	-0.0653	
			(0.0460)	(0.0476)	
charity_worthiness			0.114***	0.139***	
			(0.0139)	(0.0147)	
lastdonation_2weeks			0.198***	0.207***	
			(0.0719)	(0.0729)	
lastdonation_6months			0.155**	0.164**	
			(0.0722)	(0.0734)	
lastdonation_5years			-0.0674	-0.0678	
			(0.0647)	(0.0656)	
lastdonation_1year			0.111	0.114	
			(0.0733)	(0.0745)	

often_1_5	0.142**	0.145**
	(0.0614)	(0.0625)
often_10_20	0.154**	0.163**
	(0.0677)	(0.0681)
often_6_10	0.156**	0.151**
	(0.0635)	(0.0649)
often_more20	0.0613	0.0979
	(0.0745)	(0.0745)
honestyhumility		0.0370*
		(0.0216)
emotionality		0.0166
		(0.0204)
extraversion		0.0343*
		(0.0187)
agreeableness		0.0141
		(0.0204)
conscientiousness		-0.169***
		(0.0205)
opennesstoexperience		-0.0282
		(0.0186)
altruism		-0.0222
		(0.0220)
Observations	2,375	

Note: Probit regression. Marginal effects reported. Standard errors in parentheses. For models 1 – 4, the omitted treatment is Baseline; for model 5, the omitted treatment is the pooled control treatments (Baseline, Static Baseball, and Dynamic Baseball). *** p<0.01, ** p<0.05, * p<0.1. Demographic Controls include age, gender, religion, education status, income, last time donated, how often they donate, and perceived worthiness of Feed the Children. HEXACO Controls include the honesty/humility, emotionality, extraversion, agreeableness, consciousnesses, openness to experience, and altruism scales. Definitions of control variables are provided in Appendix B, Table 5.

Table 5: Control variable definitions

Variable	Definition
Age	Subject age
Male	= 1 if male, 0 otherwise
Christianity	= 1 if Christian, 0 otherwise
Atheism	= 1 if Atheism/Agnosticism/ Secularism, 0 otherwise
Hinduism/Judaism/Islam/Sikhism	= 1 if Hinduism, Judaism, Islam, Sikhism, 0 otherwise
Undergraduate	= 1 if Undergraduate degree, 0 otherwise
Postgrad	= 1 if Postgrad degree, 0 otherwise
income_20_40	= 1 if Income was between ≥ $20,000 and < $40,000, 0 otherwise
income_40_60	= 1 if Income was between ≥ $40,000 and < $60,000, 0 otherwise
income_60_80	= 1 if Income was between ≥ $60,000 and < $80,000, 0 otherwise
income_80_100	= 1 if Income was between ≥ $80,000 and < $100,000, 0 otherwise
income_more100	= 1 if Income was > $100,000, 0 otherwise
charity_worthiness	= 0 if Strongly disagree; 1 if Disagree; 2 of Neither agree nor disagree; 3 if Agree; 4 if Strongly agree
lastdonation_2weeks	= 1 if donated in the last 2 weeks, 0 otherwise
lastdonation_6months	= 1 if donated in the last 6 months, 0 otherwise
lastdonation_1year	= 1 if donated in the last year, 0 otherwise
lastdonation_5years	= 1 if donated in the last 5 years, 0 otherwise
often_1_5	= 1 if donated between 1 and 5 times in the last year, 0 otherwise
often_10_20	= 1 if donated between 6 and 10 times in the last year, 0 otherwise
often_6_10	= 1 if donated between 10 and 20 times in the last year, 0 otherwise
often_more20	= 1 if donated more than 209 times in the last year, 0 otherwise
honestyhumility	= 1 if Strongly disagree; 2 if Disagree; 3 of Neither agree nor disagree; 4 if Agree; 5 if Strongly agree
emotionality	= 1 if Strongly disagree; 2 if Disagree; 3 of Neither agree nor disagree; 4 if Agree; 5 if Strongly agree
extraversion	= 1 if Strongly disagree; 2 if Disagree; 3 of Neither agree nor disagree; 4 if Agree; 5 if Strongly agree
agreeableness	= 1 if Strongly disagree; 2 if Disagree; 3 of Neither agree nor disagree; 4 if Agree; 5 if Strongly agree
conscientiousness	= 1 if Strongly disagree; 2 if Disagree; 3 of Neither agree nor disagree; 4 if Agree; 5 if Strongly agree
opennesstoexperience	= 1 if Strongly disagree; 2 if Disagree; 3 of Neither agree nor disagree; 4 if Agree; 5 if Strongly agree
altruism	= 1 if Strongly disagree; 2 if Disagree; 3 of Neither agree nor disagree; 4 if Agree; 5 if Strongly agree

Table 6: Tobit regression, Amount donated

VARIABLES	(1)	(2)	(3)	(4)	(5)
Static Thumb	-1.989**	-2.018**	-2.170**	-1.700**	-1.825**
	(0.924)	(0.922)	(0.882)	(0.866)	(0.763)
Dynamic Thumb	0.718	0.722	0.869	0.962	0.883
	(0.903)	(0.901)	(0.858)	(0.843)	(0.738)
Static Baseball	-0.249	-0.255	-0.317	-0.0991	
	(0.910)	(0.908)	(0.866)	(0.849)	
Dynamic baseball	-0.247	-0.262	-0.307	-0.118	
	(0.900)	(0.898)	(0.857)	(0.841)	
donationstart		0.112**	0.110**	0.102**	
		(0.0496)	(0.0472)	(0.0462)	
age			0.00891	0.0201	
			(0.0247)	(0.0245)	
male_dummy			0.291	0.108	
			(0.561)	(0.596)	
christianity			0.00379	-0.343	
			(1.216)	(1.194)	
atheism			-3.855***	-3.129**	
			(1.269)	(1.261)	
religion_other			-3.070*	-2.664*	
			(1.630)	(1.603)	
undergrad			2.229***	1.828***	
			(0.696)	(0.692)	
postgrad			2.772***	2.104**	
			(0.904)	(0.898)	
primaryschool			7.580	7.693	
			(6.408)	(6.270)	
income_20_40			1.129	1.218	
			(0.869)	(0.854)	
income_40_60			0.271	0.306	
			(0.880)	(0.876)	
income_60_80			0.860	0.894	
			(0.987)	(0.981)	
income_80_100			-0.381	0.174	
			(1.196)	(1.184)	
income_more100			-2.410**	-1.344	
			(1.228)	(1.222)	
charity_worthiness			3.183***	3.607***	
			(0.367)	(0.374)	
lastdonation_2weeks			4.410**	4.322**	
			(2.098)	(2.067)	
lastdonation_6months			3.891*	3.835*	
			(2.045)	(2.015)	
lastdonation_5years			-1.578	-1.597	
			(1.800)	(1.770)	
lastdonation_1year			2.843	2.714	
			(2.070)	(2.036)	

often_1_5			3.381**	3.245*	
			(1.712)	(1.684)	
often_10_20			5.470***	5.479***	
			(1.968)	(1.934)	
often_6_10			4.770***	4.328**	
			(1.823)	(1.793)	
often_more20			2.720	3.320*	
			(2.039)	(2.010)	
honestyhumility				1.339**	
				(0.554)	
emotionality				0.276	
				(0.514)	
extraversion				1.060**	
				(0.474)	
agreeableness				-0.250	
				(0.513)	
conscientiousness				-4.516***	
				(0.522)	
opennesstoexperience				-0.425	
				(0.473)	
altruism				0.0413	
				(0.543)	
Constant	0.961	-0.0853	-20.75***	-12.61***	0.796**
	(0.650)	(0.802)	(2.578)	(3.929)	(0.389)
Observations			2,375		

Notes: Standard errors in parentheses. For models 1 – 4, the omitted treatment is Baseline; for model 5, the omitted treatment is the pooled control treatments (Baseline, Static Baseball, and Dynamic Baseball). *** p<0.01, ** p<0.05, * p<0.1. Demographic Controls include age, gender, religion, education status, income, last time donated, how often they donate, and perceived worthiness of Feed the Children. HEXACO Controls include the honesty/humility, emotionality, extraversion, agreeableness, consciousnesses, openness to experience, and altruism scales. Definitions of control variables are provided in Appendix B, Table 5.

Table 7: OLS regression, Amount donated

VARIABLES	(1) donation	(2) donation	(3) donation	(4) donation	(5) donation
Static Thumb	-0.968**	-0.975**	-1.022**	-0.811**	-0.859**
	(0.428)	(0.427)	(0.411)	(0.406)	(0.351)
Dynamic Thumb	0.253	0.263	0.252	0.306	0.363
	(0.424)	(0.423)	(0.408)	(0.402)	(0.347)
Static Baseball	-0.205	-0.197	-0.284	-0.187	
	(0.426)	(0.425)	(0.409)	(0.403)	
Dynamic baseball	-0.127	-0.132	-0.199	-0.124	
	(0.420)	(0.420)	(0.404)	(0.398)	
donationstart		0.0684***	0.0670***	0.0636***	
		(0.0231)	(0.0223)	(0.0219)	
age			0.0146	0.0205*	
			(0.0117)	(0.0117)	
male_dummy			0.201	0.0583	
			(0.265)	(0.282)	
christianity			0.138	-0.0420	
			(0.590)	(0.582)	
atheism			-1.435**	-1.167*	
			(0.608)	(0.605)	
religion_other			-1.113	-0.941	
			(0.766)	(0.757)	
undergrad			1.174***	0.988***	
			(0.322)	(0.321)	
postgrad			1.479***	1.218***	
			(0.425)	(0.423)	
primaryschool			1.842	1.951	
			(3.174)	(3.124)	
income_20_40			0.314	0.359	
			(0.406)	(0.401)	
income_40_60			0.186	0.192	
			(0.410)	(0.410)	
income_60_80			0.463	0.465	
			(0.462)	(0.461)	
income_80_100			-0.298	-0.100	
			(0.560)	(0.559)	
income_more100			-1.082*	-0.679	
			(0.566)	(0.567)	
charity_worthiness			1.184***	1.424***	
			(0.165)	(0.169)	
lastdonation_2weeks			1.460	1.371	
			(0.898)	(0.886)	
lastdonation_6months			1.437*	1.370	
			(0.868)	(0.856)	
lastdonation_5years			-0.376	-0.426	
			(0.727)	(0.716)	
lastdonation_1year			1.086	0.990	

			(0.880)	(0.866)	
often_1_5			0.667	0.667	
			(0.720)	(0.709)	
often_10_20			2.077**	2.149**	
			(0.865)	(0.852)	
often_6_10			1.615**	1.480*	
			(0.785)	(0.774)	
often_more20			0.591	0.975	
			(0.896)	(0.885)	
honestyhumility				0.501**	
				(0.253)	
emotionality				0.0627	
				(0.240)	
extraversion				0.487**	
				(0.219)	
agreeableness				-0.192	
				(0.239)	
conscientiousness				-1.975***	
				(0.238)	
opennesstoexperience				-0.143	
				(0.218)	
altruism				-0.126	
				(0.256)	
Constant	5.027***	4.375***	-3.625***	0.791	4.917***
	(0.298)	(0.371)	(1.143)	(1.818)	(0.173)
R-squared	0.004	0.007	0.096	0.128	0.096
Observations			2,375		

Notes: Standard errors in parentheses. For models 1 – 4, the omitted treatment is Baseline; for model 5, the omitted treatment is the pooled control treatments (Baseline, Static Baseball, and Dynamic Baseball). *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Demographic Controls include age, gender, religion, education status, income, last time donated, how often they donate, and perceived worthiness of Feed the Children. HEXACO Controls include the honesty/humility, emotionality, extraversion, agreeableness, consciousnesses, openness to experience, and altruism scales. Definitions of control variables are provided in Appendix B, Table 5.