Signaling Emotion and Reason in Human Cooperation
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We explore the relationship between decision modes (emotion vs. reason) and cooperation in prisoner’s dilemmas. We find that deciding emotionally is correlated with cooperation and people (correctly) perceive emotion to be a signal for cooperation. However, people fail to realize the strategic benefits of signaling emotion.

[to cite]:

[url]:
http://www.acrwebsite.org/volumes/1021644/volumes/v44/NA-44

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Affective and Contextual Influences on Charitable Behavior

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Paper #1: Request Framing Moderates Affective Preferences in Charitable Giving
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Paper #2: Understanding and Overcoming Overhead Aversion in Charity
Elizabeth Keenan, Harvard Business School, USA
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Paper #3: Voting for Charity: The Benefits for Firms of Direct Consumer Involvement in Charitable Campaigns
Grant Donnelly, Harvard Business School, USA
Duncan Simester, Massachusetts Institute of Technology, USA
Michael Norton, Harvard Business School, USA

Paper #4: Signaling Emotion and Reason in Human Cooperation
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SESSION OVERVIEW
Charitable giving and socially responsible initiatives are pervasive across consumer contexts. Research in these areas has explored the affective influences on individual giving decisions (Aknin, Dunn, & Norton, 2012; Genevsky, Vastfjall, Slovic, & Knutson, 2013; Small & Verrochi, 2009), as well as the effects of socially responsible initiatives by firms on consumer responses (Bodur, Gao, & Grohmann, 2014; Torelli, Monga, & Kaikati, 2012). Despite this work, the field is lacking a cohesive framework that connects the affective and contextual factors in prosocial behavior across different levels of analysis.

The four papers in this session incorporate a complimentary set of research questions and methodologies to explore charitable giving at the individual level, as well as with regards to customer engagement with firms. This session will advance our understanding of the roles of affect and context in charitable giving behavior. Specifically, this set of presentations explores questions about charitable behavior that span the consumer-firm relationship. How do features of donation requests interact to influence charitable giving decisions? How do features of the organization affect giving behavior? How can communication of motives and charitable initiatives be optimized to increase giving and improve customer engagement?

The first presentation by Alexander Genevsky, Brian Knutson, and Carolyn Yoon addresses a core question in the study of prosocial behavior: are affective influences on giving absolute, or are they moderated by contextual factors? Across six studies they demonstrate that request framing moderates the influence of affective facial expressions on charitable giving. Further, they demonstrate that experienced positive affect of potential donors is the psychological mechanism that underlies this effect. These finding have important implications for the effective crafting of donation requests.

The second presentation by Elizabeth Keenan and Ayelet Gneezy uses a combination of laboratory and field experiments to examine how aversion to overhead costs of charitable organizations affects donations. They find that overhead costs diminish donations, but the effect disappeared when donors are not responsible for these fees. In a field study, they find that informing donors of a seed grant covering organizational overhead increased subsequent donations. Their findings contribute to our understanding of decision making in the prosocial sector and make practical suggestions for improved solicitation practices.

The third presentation by Grant Donnelly, Duncan Simester, and Michael Norton presents a unique perspective on the effectiveness of firm’s social responsibility initiatives. By asking customers for input regarding the recipient of the firm’s donations, rather than simply informing them, they find significant increases in both purchasing behavior and membership renewals. These findings highlight the economic benefits of empowering customer roles in firm’s socially responsible initiatives.

The final presentation by Alixandra Barasch, Emma Levine, David Rand, Jonathan Berman, and Deborah Small explores the roles of emotion and reasoning in cooperation. Across a series of studies they demonstrate that emotional decisions are correlated with cooperation, and that players are able to accurately identify emotion as associated with cooperative actions. Intriguingly however, they find that emotion is not strategically used to communicate cooperative intent.

All presentation are unpublished work. Presentations 1 and 3 have completed data collection and analysis, and are preparing drafts of working papers. Presentation 2 is a working paper. Presentation 4 has completed data collection and analysis.

Request Framing Moderates Affective Preferences in Charitable Giving
EXTENDED ABSTRACT

Objective
Affective features of requests for charity can influence donor behavior (Genevsky et al., 2013). Affective features are not presented in isolation, however, since they necessarily occur within the context of other features of solicitations. Thus, request framing may moderate the influence of affective features on donor behavior. While some research has investigated the influence of affective features of aid requests (Genevsky et al., 2013; Small & Verrochi, 2009) and message framing (Chang & Lee, 2009) on charitable giving, no work has fully explored the interaction between these factors, or the psychological mechanisms responsible for these relationships.

Studies of predictors of prosocial behavior suggest that emotions might influence giving, but they have now begun to examine the limits of these influences. This research has generated a number of compelling but competing hypotheses. On one hand, some findings suggest that appeals evoking negative emotions (e.g., guilt or distress) may promote charitable behavior (Carlson & Miller, 1987; R B Cialdini et al., 1987; Robert B. Cialdini, Darby, & Vincent, 1973; Small & Verrochi, 2009) negative-state relief, attentional focus, and responsibility/objective self-awareness, are examined in an expanded analysis of published research. For this purpose, judges assessed for each of 85 negative affect conditions the contextual levels of the variables relevant to each theory by reading relevant material that was excerpted from the method section of each article. Higher
order partial correlations were then calculated between each variable and the 85 helpfulness effect sizes. The results are consistent with the attentional focus and the responsibility/objective self-awareness models. Both increased perceptions of responsibility for causing the negative event and attentional focus on another (as opposed to oneself). Alternatively, other evidence indicates that inducing positive affect (e.g., joy or warmth) can promote charitable behavior (Aknin et al., 2012; Andreoni, 1990; Carlson, Charlin, & Miller, 1988; Genevsky et al., 2013).

Drawing from a rich literature on message framing grounded in prospect theory (Kahneman & Tversky, 1979) indicating that framing can influence individual decisions (Chen, Monroe, & Lou, 1998; Heath, Chatterjee, & France, 1995; Levin, 2013; Puto, 1987; Sinha & Smith, 2000), we hypothesize that the framing of donation messages may moderate the impact of affective features on charitable giving. In a series of studies utilizing online and in-laboratory samples, and hypothetical as well as incentive compatible paradigms, we investigate whether message request framing moderates the influence of affective facial expressions on charitable giving.

Methods

In six studies, we explored the role of positive and negative affective features, request framing, and their interaction on charitable giving behavior. In all studies, affect was manipulated with respect to the facial expressions of potential donation recipients depicted in images accompanying the aid requests. In study 1, we directly assessed the influence of positive and negative facial expressions on charitable giving as well as the potentially moderating effect of request framing as an opportunity or threat. In studies 2 and 3, we tested the limits of these effects by exploring multiple novel aid scenarios (study 2) and directly manipulating the framing of a single aid scenario (study 3). In study 4, we expanded on the previous binary preference design with a willingness-to-pay assessment of charitable giving. In study 5, we recruited community members to the laboratory and replicated the findings with an incentive-compatible donation task. Finally, in study 6, we directly assessed affective responses in potential donors. We then conducted mediated moderation analyses to assess the ability of experienced affect to account for the influence of affective facial expressions of potential recipients as well as request framing on charitable giving.

Results

In study 1, participants donated more to individuals with happy expressions than sad and neutral expressions. This preference was significantly moderated by the context framing of aid scenarios. Specifically, direct comparison of happy and sad expressions indicated that participants gave more when expressed affect and request framing were congruent. Studies 2 and 3 replicated these findings with a series of threat and opportunity scenarios, as well as by reframing a single aid scenario. These replications suggest that the observed framing moderation generalizes to different scenarios of opportunity versus threat framing.

Study 4, extended the binary choice designs utilized in studies 1, 2, and 3 to a willingness to donate assessment. Request framing again moderated the influence of affective stimuli on charitable giving. Study 5 utilized an incentive compatible donation paradigm and recruited participants to the laboratory to verify further generalizability of these findings. Study 6 included affect ratings, to assess the role of experienced affect as a potential mediator of these effects. Analyses indicated fully mediated moderation, such that the level of positive aroused affect elicited in potential donors across request framing conditions explained the moderating role of message content on affective stimuli.

Conclusions

In six studies utilizing online and in-laboratory samples, and hypothetical as well as incentive-compatible procedures, we investigated the influence of affective facial expressions of potential recipients and request framing on charitable giving. Across studies, we found reliable interactions of affect and framing, such that framing of requests moderated the influence of affective features on charitable giving. Utilizing a mediated moderation framework, we further identified experienced affect as the psychological mechanism driving the influence of emotional expression and framing on charitable giving. These findings extend previous efforts to understand the factors that influence prosocial behavior by linking affective features and request framing. The findings thus have significant implications for enhancing charitable giving and informing best practices in crafting persuasive messages.

Understanding and Overcoming Overhead Aversion In Charity

EXTENDED ABSTRACT

In this research we explore individuals’ aversion to overhead spending and its effect on charitable giving. While concerns about charity overhead spending receive ample media attention, only a handful of studies have looked at the extent to which individuals’ behavior is influenced by overhead spending information, and no research has investigated the factors underlying this relationship.

Individuals are averse to overhead such that donations decrease as overhead increases, though only when donors’ personal contributions are used (in part) to cover overhead (Gneezy, Keenan, and Gneezy, 2014). Gneezy et al. (2014) suggest that donors are motivated to give based on the impact they feel when they know they are helping the cause directly, rather than when their contribution is used to cover overhead costs. As a result, informing donors that initial large donations have been used to cover overhead costs, making their potential donation “overhead-free”, significantly increases giving compared to traditional fundraising techniques (2014). While effective, the “overhead-free” approach simply bypasses individuals’ reluctance to donate due to overhead-related concerns rather than targeting the aversion itself. As noted by the authors, “this method could lead to a growing unpopularity of overhead costs among donors, causing a race to the bottom among nonprofit organizations soliciting gifts to cover overhead costs.” Charities already struggle to communicate to donors the importance of overhead costs and the overhead-free approach may undermine ongoing communication efforts. Moreover, the approach may not be practical for charities without access to large gifts to cover overhead costs.

The current research aims to gain insight into the mechanisms underlying the relationship between overhead and giving, and to explore ways to overcome overhead aversion more directly. We focus on two fundamental factors that have been previously identified as drivers of giving—to do good and to feel good. Given the aversion donors have for overhead, we propose that if a portion of a donor’s gift is used to cover overhead it will interfere with her sense of doing good and feeling good. In particular, individuals may be more likely to feel they have made a positive impact when they know they have helped the cause directly rather than contributed to the salary of a charity’s staff member. This reasoning is consistent with the theory of impact philanthropy, which proposes that some donors—the impact philanthropists—are motivated by the opportunity to personally...
make a difference (Duncan, 2004). According to this model, the impact philanthropist would prefer to target a specific charitable cause rather than overhead because she perceives that the former is more impactful. Moreover, if her donation is used to cover overhead, not only will she feel less impactful, she may also feel less happy about her donation (Cryder, Loewenstein, & Seltman, 2013). Ultimately, the negative effect of overhead on donors’ perceived impact and happiness could lead to a decrease in donations. This suggests that increasing potential donors’ sense of impact and resulting happiness, even when part of their donation is allocated to overhead, may mitigate the negative effect of overhead on donations.

In Experiment 1 we explore whether the relationship between overhead and donations is mediated by the perceived impact of one’s own donation and the positive emotions associated with giving. Participants (N=602) read one of five descriptions of a hypothetical charity in which the overhead level varied: low (5%), moderate (25%), high (55%), plus two control conditions. Participants were then asked: (1) how much they would like to donate to the charity (from $0 to $25), (2) “To what extent do you believe your donation will make a positive difference?”, and (3) “How happy do you feel about your donation?” (2 and 3 were answered on a 7-pt scale).

As expected, donations decreased as overhead increased. Participants in the 5% overhead condition donated significantly more ($M=10.61) than participants in both the 25% ($M=8.63; p=0.04) and 55% ($M=7.15; p<0.01) overhead conditions. Similar to the donation results, there was a negative effect of increasing overhead level on participants’ reported sense of impact and happiness. We evaluated perceived impact and happiness sequentially as mediators and found that they mediate the relationship between overhead level and donation amount (indirect effect = -0.01, SE = .0028; 95% CI [-0.0151, -0.0039]) such that the higher the overhead level, the lower the perceived impact and happiness one experiences, which negatively impacts donations.

In an effort to mitigate the effect of overhead, in Experiment 2 we provided potential donors with additional information that highlights the importance of overhead with emphasis on the ways that overhead is meaningful and significant (i.e., impactful). In a 2x2 between-subjects design, participants (N=601) were randomly assigned to read a description of a hypothetical charity that had low (5%) or high (55%) overhead and did or did not include the following statement: “Most donors prefer for their donations to be used directly on programming costs. What these individuals do not understand, however, is that in order for a charity to successfully fulfill its mission it must also incur administrative and fundraising costs, making donations on overhead also meaningful and significant.” Two controls conditions were also used in which the overhead level was not specified. Participants were then asked how much they would like to donate to the charity (from $0 to $25).

As in Experiment 1, donations decreased as overhead increased. Participants in the 55% overhead condition donated significantly less ($M=7.36) than participants in both the 5% ($M=9.90; p=0.01) and 5% with impact statement ($M=9.94; p<0.01) conditions. Yet, when the impact statement was included in the 55% overhead condition, the differences were not significant ($M=8.48) vs. $M=9.94 and $M=9.94, ns). This distinction between conditions suggests that reading a statement about the impact of overhead increased donations despite high overhead and provides some preliminary evidence that highlighting the meaning and significance of overhead can help donors overcome overhead aversion.

Additional lab and field studies are currently underway to build on the above findings and identify effective methods for overcoming donors’ overhead aversion and, ultimately, to increase donations in real world contexts.

**Voting for Charity: The Benefits for Firms of Direct Consumer Involvement in Charitable Campaigns**

**EXTENDED ABSTRACT**

Recently, a new form of corporate social responsibility has emerged, which invites the customer to select the cause they wish to support through the purchasing of a specific item (Robinson, Irmak & Jayachandr, 2012). While research has evaluated consumer impressions to voting empowerment in corporate social responsibility activities (Robinson, Irmak & Jayachandr, 2012), we evaluate such empowerment in ‘pure’ donations and the resulting financial decisions of voting and non-voting consumers. Across two field studies at multiple store locations of a large grocery retailer, we give some consumers the opportunity to vote for the cause that the firm will support, while others are merely informed of the firm’s charitable actions. Consumers given the opportunity to “vote for charity” upon entering a retailer exhibited increased purchasing and membership renewals during in-store visits.

Study 1 was designed to investigate whether inviting customers to participate in a firm’s corporate giving program affects the customer’s subsequent purchasing behavior. The study was conducted with the cooperation of a large retailer similar to Costco. This field experiment was conducted over 10 weekdays at one of this retailer’s New England stores. Two research assistants were positioned at the front entrance of the store and intercepted customers as they entered the store. They implemented two experimental conditions. In the “voting” condition, the assistants gave the customers a 1-page description of three local charitable organizations, stating that this store planned to give a total of $15,000 that month to these charities. Customers were asked to help the retailer decide which charity should receive the largest grant. The charity that received the most customer votes would receive a $2,500 grant, while the other two charities would receive a $1,000 grant.

In the second treatment, the “information” condition, the assistants gave the customers the same 1-page description. However, they did not ask them to vote on which charity should receive the grants. The information condition was designed to serve as a control condition. It controls for the possibility that merely providing information about the retailer’s charitable giving could influence customer behavior.

The days were divided into two day-parts: mornings (9am – 1pm) and afternoons (2pm – 6pm) and the experimental treatments were rotated between these day parts across the 10 test days. We received transaction data that included a time stamp and we used this time stamp to match the transactions to the treatments. In particular, for the morning day-part we used transactions between 9am (the retailer opened at 9am each morning) and 1:15pm. For the afternoon day-part, we used transactions between 2:30pm and 6:15pm.

Across the 10 days we observed 5,010 baskets in the information condition and 5,048 baskets in the voting condition. In our initial analysis we measured basket size using dollar revenue, with a log transformation to control for outliers. The average log revenue in the voting condition is 4.02, compared to 3.98 in the information condition. The difference between these averages is significant (p < 0.05, t = 1.99). The use of the log transformation means that the exponent of the difference between the two conditions reveals the % difference in the basket sizes. Giving customers a choice about which charity would receive the next grant increased their average basket sizes by...
4.2%. The median basket size is $248, and so this translates to a $10.41 increase in the average basket size.

In our next analysis we investigate whether the voting treatment had a stronger impact on purchases of items associated with pro-social behaviors. To identify these items a research assistant visited one of the retailer’s stores and identified products with 15 different packaging labels. The findings reveal that items with pro-social labels on their packaging contributed a significantly higher proportion of units in the voting condition (than in the information condition). Allowing customers to vote on the next recipient of a charitable gift increased their purchases of pro-social items. The effect was strongest for the “Charitable or Ecological” and “Organic” pro-social labels.

We conducted a second study to evaluate the impact of voting on membership decisions. This field experiment was conducted over three weekends in four New England stores of the same retailer that participated in Study 1. At the time of the study the retailer was conducting a promotional campaign encouraging new members to visit the store for a 2-month trial membership. When a prospective customer visits the store to enact a trial membership, the customer service representative asks the customer if they would like to upgrade to a full membership. The focus of this study is investigating whether prospective members are more likely to upgrade in the voting condition than in the information condition.

All membership enquiries are processed at a membership service desk at the front of the store. The treatments were implemented by positioning an assistant near this desk. The assistants intercepted customers as they approached the line. They then implemented the same voting and information treatments that were used in the first study. The three charitable organizations were different at each store and were local to each store. The total donation in this study was $5,000 for each store, distributed as $3,000 to the charity receiving the most votes, and $1,000 to each of the other two charities.

In this second study, the treatments were rotated between successive customers. To match the treatments with the outcomes, the customers took their survey and voting forms (for those that voted) to the membership service desk to complete. After completing the transaction, the membership service representative then marked the form to indicate why the customer visited and the outcome of the transaction.

The voting condition had a positive impact on the proportion of new members that chose upgraded memberships. In the information condition, 30.6% of the new members chose the regular or rewards membership. In the voting condition, 55.0% converted to the regular or rewards membership. This difference in the conversion rate (55.0% versus 30.6%) is statistically significant \( p < 0.01 \). Increasing the conversion rate by even a small percentage has the potential to create tremendous economic benefits for this retailer.

### Signaling Emotion and Reason in Human Cooperation

**EXTENDED ABSTRACT**

Consumers are often faced with decisions to cooperate or to act selfishly. While cooperation is essential to social life, it can be threatened by beliefs about whether others will cooperate or pursue their own self-interest. Therefore, it is important to understand why people choose to cooperate and how they infer that others are cooperative. One important factor for both decision-making and signaling cooperation is whether a person relies on emotion or reason when making decisions.

Past theoretical and empirical scholarship provides mixed evidence about whether reason or emotion promotes social good. On one hand, utilitarian philosophy argues that relying on reason produces the greatest social good (Baron 1993; Bentham 1843/1948; Singer 2009). However, recent empirical evidence suggests the opposite: deliberation leads to lower rates of cooperation in economic games (Rand, Green, and Nowak 2012) and calculative mindsets increase selfishness (Wang, Zhong, and Murnighan 2014).

Emotion has also been characterized as both generous and selfish. Feelings of sympathy and empathy inspire prosocial deeds (Batson 1990; Loewenstein and Small 2007) and yet, it is often argued that feelings represent impure altruism. For example, individuals often feel good as a result of helping others, leading scholars to question whether individuals are motivated by their selfish desire to feel happy (Andreoni 1990).

Recent research on the lay theories behind this association finds that emotion is seen as a positive signal of moral character (Barash et al., 2014). Individuals who experience emotion towards a cause, or who feel happy as a result of supporting a cause, are seen as more moral than individuals who lack emotion. This is because emotion is perceived to be an untainted signal of individuals’ pure intentions to help others.

We build on these findings and explore whether emotion can signal cooperation and, in turn, promote cooperative decisions from others. We contrast emotion- and reason-based decisions and explore four fundamental questions. First, we examine the actual association between decision modes (relying on emotion versus reason) and cooperation (RQ1). Second, we examine lay theories regarding this relationship – whether people have correct or incorrect beliefs about the frequency of cooperation among emotional and rational actors (RQ2). Third, we examine how individuals respond to others who signal emotion and reason in cooperative contexts (RQ3). Fourth, we test whether people will strategically signal their decision mode in these contexts (RQ4). We examine these questions in a series of sequential dyadic prisoners’ dilemma (PD) games in which players can send and receive signals about whether emotion or reason guided their decisions.

In **Study 1** (\( N = 498 \)), Player A in the PD made a decision (cooperate or defect), and then reported whether they made their decision using emotion or reason. Player As who made a decision using emotion were more likely to cooperate (64%) than those who made a decision using reason (27%; \( \chi^2 = 21.00, p < .01; \) RQ1).

Player B subsequently learned whether his partner made his decision using emotion or reason, though Player B never learned their partner’s actual decision (cooperate or defect). Player Bs who learned that their partner made a PD decision using emotion were more likely to predict that their partner cooperated (62% vs. 25%; \( \chi^2 = 28.40, p < .01; \) RQ2) and were more likely to respond with cooperation (36% vs. 19%; \( \chi^2 = 7.46, p < .01; \) RQ3). This suggests that participants use their partner’s emotional cue not just in understanding how they make their decision, but also in deciding how they will respond to their partner.

The findings above are robust across different measures of emotion and reason. For example, we found the same pattern of results when we used a continuous measure to depict the degree to which Player A relied on emotion versus reason. We also found that there is no additional effect of decision mode once cooperative behavior is known.

In **Study 2** (\( N = 477 \)), we sought to explore the discrete emotions that players feel and that observers perceive in cooperative contexts. We found that both players and observers associate emotional decision-making with more positive, other-focused emotions (e.g., empathy, sympathy; \( F(1,473) = 60.78, p < .01 \)) and more negative, self-focused emotions (e.g., fear, guilt; \( F(1,473) = 23.45, p < .01 \)) than reason-based decision-making. Nonetheless, observers still be-
lieved that players who made decisions based on emotion were more likely to cooperate than those who made decisions based on reason (64% vs. 24%: \( \chi^2 = 35.25, p < .01; \text{RQ2} \)). As in Study 1, this belief was correct: players who made their decision using emotion were more likely to cooperate (65% vs. 23%: \( \chi^2 = 30.41, p < .001; \text{RQ1} \)).

In our final three studies, we explored whether or not decision-makers strategically signal emotion in cooperative contexts in order to induce their partners to cooperate and thus maximize their own payoffs (RQ4). Across all three studies, we replicated the result that emotional decision-makers are more likely to cooperate. However, we found no evidence that individuals strategically signal emotion to their partners. Individuals were no more likely to report that they made their decision emotionally when they were told their decision mode will be shared with their partner (Study 3, \( N = 470; 24\% \) vs. 22\% reported emotion as their decision mode: \( \chi^2 = .10, p = .75 \)) or when they could choose whether to share it with their partner (Study 4, \( N = 186; 48\% \) vs. 52\% reported emotion as their decision mode: \( \chi^2 = .06, p = .81 \)). Additionally, emotional decision-makers did not disproportionately choose to send this information to their partners (Study 5, \( N = 590; B = .32, SE = .48, p = .51 \)).

Taken together, we demonstrate that emotion is and is perceived to be a signal of cooperation, but that decision-makers are not strategic about signaling emotion. This research provides basic insight into the nature of human cooperation and ultimately identifies ways that individuals can improve joint decision-making in cooperative contexts.

**REFERENCES**


