



## Reports

# Mixed reasons, missed givings: The costs of blending egoistic and altruistic reasons in donation requests <sup>☆</sup>

Daniel C. Feiler <sup>a,\*</sup>, Leigh P. Tost <sup>b</sup>, Adam M. Grant <sup>c</sup>

<sup>a</sup> Tuck School of Business, Dartmouth College, USA

<sup>b</sup> Ross School of Business, University of Michigan, USA

<sup>c</sup> The Wharton School, University of Pennsylvania, USA

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## ABSTRACT

Do people give more when benefits to others and oneself are emphasized? We propose that mixing egoistic and altruistic reasons reduces the likelihood of giving by increasing individuals' awareness that a persuasion attempt is occurring, which elicits psychological reactance. In Experiment 1, university alumni were less likely to give money to their alma mater when an electronic donation request emphasized both egoistic and altruistic reasons, compared to either reason alone. In Experiment 2, undergraduates reported lower giving intentions when a donation request emphasized an altruistic and an egoistic reason, compared to either altruistic or egoistic reasons alone. In Experiment 3, undergraduates reported lower intentions to give to the Make-A-Wish Foundation when the donation request featured both egoistic and altruistic reasons; this effect was mediated in two stages by increased persuasion awareness and heightened psychological reactance. This research sheds light on when messages that purport to align self-interest and other-interest can backfire.

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## Introduction

Psychologists have a longstanding interest in prosocial behaviors—actions that benefit other people and groups through giving time or money (Latané & Darley, 1970; Penner, Dovidio, Piliavin, & Schroeder, 2005). Research suggests that the vast majority of prosocial behaviors occur in response to direct requests for help or assistance. In emergency situations, direct requests are known to encourage helping by reducing pluralistic ignorance and diffusion of responsibility, enabling bystanders to define the situation as an emergency and feel personally responsible for helping (Cialdini, 2001; Shaffer, Rogel, & Hendrick, 1975). At work, as much as 75–90% of help exchanged is initiated by a direct request from a coworker, supervisor, or subordinate (Anderson & Williams, 1996). In volunteering, direct requests are the most commonly cited reason for becoming involved: over 43% of American volunteers report that they started volunteering in response to a request from an organization, boss or employer, coworker, relative, or friend (Bureau of Labor Statistics, 2009). Direct requests are especially common in the context of charitable giving, which is an important contributor to the economic, social, psychological, and physical well-being of modern

societies (Brooks, 2006; Liu & Aaker, 2008). However, many direct requests still fall short of motivating people to give (Schwarzwald, Bizman, & Raz, 1983; Weyant, 1996).

As such, it is theoretically and practically important to understand how the characteristics of requests affect the likelihood of giving. Studies have shown that people are more likely to comply with requests when they are given a reason (Langer, Blank, & Chanowitz, 1978), but little research has addressed how the content of these reasons matter. Psychologists have long argued that people give for two basic reasons: egoistic and altruistic (Batson, 1998; Boice & Goldman, 1981; Cialdini, Brown, Lewis, Luce, & Neuberg, 1997; Paulhus, Shaffer, & Downing, 1976; White & Peloza, 2009). Egoistic giving is based on the primary goal of protecting and enhancing one's identity, image, and emotions, while altruistic giving is based on the primary goal of protecting and enhancing the well-being of others. Indeed, research reveals that in addition to benefiting others, the act of giving offers the egoistic benefits of promoting happiness and reducing negative emotions for the giver (e.g., Dunn, Aknin, & Norton, 2008; Harbaugh, Mayr, & Burghart, 2007; Penner et al., 2005). Importantly, egoistic and altruistic reasons are independent: people can give because they are seeking to benefit themselves, to benefit others, or a combination of the two (De Dreu, 2006; Pruitt & Rubin, 1986).

Since individuals can be motivated to give for both egoistic and altruistic reasons, one might predict that giving is increased when both types of reasons are presented. A single action that can fulfill multiple motives may be particularly attractive: having more good reasons for engaging in a behavior should make one more likely to do it (Schwartz, 2011; Thompson, Hamilton, & Rust, 2005). Consistent with this notion, studies

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\* Corresponding author at: The Tuck School of Business, Dartmouth College, 100 Tuck Hall, Hanover, NH 03755, USA.

E-mail address: [daniel.c.feiler@dartmouth.edu](mailto:daniel.c.feiler@dartmouth.edu) (D.C. Feiler).

have shown that increasing the sheer number of arguments in a message can enhance its persuasiveness (Petty & Cacioppo, 1984). For audiences who are not invested in an issue, the number of arguments serves as a heuristic cue for the quality of the argument, such that more reasons are more persuasive because argument quantity is used as a signal of argument strength (Ranganath, Spellman, & Joy-Gaba, 2010). For audiences who are invested in an issue, as long as the arguments are strong, more reasons are more persuasive because they present a more compelling rationale (Petty & Cacioppo, 1984). Therefore, one might expect that highlighting both egoistic and altruistic reasons may result in higher giving than highlighting only one of these reasons.

However, we predict the opposite: emphasizing both egoistic and altruistic reasons for giving reduces the likelihood of giving. As Schwartz (2011, p. 17) stated, “reasons don’t always add; sometimes they compete.” We base this prediction on theories of persuasion knowledge (Friestad & Wright, 1994) and psychological reactance (Brehm, 1966). Together, these two theoretical perspectives suggest that presenting both egoistic and altruistic reasons will enhance the salience of the persuasive intent of the message, leading individuals to resist social influence by choosing not to give. On these grounds, we predict that simultaneously emphasizing both egoistic and altruistic reasons reduces the likelihood of giving relative to either type of reasoning alone.

First, we predict that the perceived persuasive intent of a request will be higher when egoistic and altruistic reasons are presented together, relative to when either reason is presented alone. Research shows that egoistic values emphasizing pleasure, power and achievement tend to be negatively correlated with altruistic values emphasizing concern for others (Schwartz, 1992; Schwartz & Bardi, 2001). In addition, recent research suggests that self-focused and other-focused traits are often perceived as being conceptually opposed to one another (Suitner & Maass, 2008). If indeed individuals believe that people differ in their relative prioritizations of egoistic vs. altruistic values, then a message that highlights both egoistic and altruistic reasons for giving will appear to be designed to simultaneously appeal to multiple audiences, which can be a critical cue that draws attention to the persuasive intent of the message.

Further, a single individual may hold both egoistic values (e.g., improve one’s own well-being, maximize outcomes to the self) and altruistic values (e.g., help others, contribute to the social good). These personal goals are conceptually distinct and often have incompatible means for attainment (Riediger & Freund, 2004), as is the case when an individual must divide resources between oneself and others (Eckel & Grossman, 1996), such as in social dilemmas (Weber, Kopelman, & Messick, 2004). When egoistic and altruistic reasons for an action are presented together, individuals are likely to shift to a more deliberative and comparative mode of thinking (Small, Loewenstein, & Slovic, 2007) because of the distinct nature of these motives. As a consequence, rather than focusing on the benefits of giving (Zhong, 2011), individuals are more likely both to identify flaws in the reasons and to consider the motivation behind the construction of the message, thereby heightening persuasion awareness.

Thus, we expect that mixing egoistic and altruistic messages increases persuasion awareness. According to psychological reactance theory, individuals are motivated to resist having their behavior controlled by others (Brehm, 1966). As a result, research suggests that social influence attempts are more effective when recipients are not aware that a message has persuasive intent (Friestad & Wright, 1994). Indeed, studies indicate that when recipients are made aware of the persuasive intent underlying a message, they find the message less persuasive and are more likely to resist (Williams, Fitzsimons, & Block, 2004). Persuasion awareness triggers a change of meaning in which recipients disengage from processing the content of a message and focus their attention on protecting themselves against social influence (Friestad & Wright, 1994).

We therefore expect that by appearing to appeal to multiple audiences and multiple distinct goals, mixing egoistic and altruistic reasons for giving will raise persuasion awareness and motivate individuals to resist persuasion. On the other hand, highlighting only one type of reason (altruistic or egoistic) is less likely to make salient the persuasive intent of a message and trigger reactance, because a consistent line of argument is used. Therefore, we expect that highlighting both egoistic and altruistic reasons reduces the likelihood of giving relative to presenting either type of reason alone. In our studies, we explore how messages that highlight both egoistic and altruistic reasons to give can backfire.

## Overview of experiments

We test these hypotheses in three experiments focusing on the prosocial behavior of giving money (Liu & Aaker, 2008). Experiment 1 is a field experiment with university alumni. We randomly assigned alumni to receive email messages highlighting egoistic, altruistic, or mixed reasons for giving, and then tracked their actual donation behavior. Experiment 2 is a laboratory experiment with undergraduates designed to constructively replicate the findings of Experiment 1 and rule out alternative explanations by teasing apart the number and content of reasons: are individuals less willing to donate when egoistic and altruistic reasons are mixed, but not when two egoistic or two altruistic reasons are presented? Experiment 3 is a laboratory experiment to test the mechanisms that explain why mixing egoistic and altruistic reasons reduces the willingness to donate: are the effects of mixed reasons mediated by increased persuasion awareness and heightened psychological reactance?

## Experiment 1

### Method

We conducted a randomized, controlled field experiment at a large public U.S. university. A development officer sent emails to alumni who had never donated to the university, who were assigned by a random number generator to one of four conditions. In two of the conditions, the request highlighted a single reason for giving (egoistic or altruistic). In the other two conditions, the request highlighted both egoistic and altruistic reasons for giving. We counterbalanced the order of the two reasons: one message presented the egoistic reason before the altruistic reason, and the other message did the opposite.

In all conditions, the message featured a paragraph about recent events at the university, after which the manipulations were introduced. In the egoistic condition, the request described how giving is beneficial to the self: “Alumni report that giving makes them feel good.” In the altruistic reason condition, the request described how giving is beneficial to others: “Giving is your chance to make a difference in the lives of students, faculty, and staff.” In the combined conditions, the request featured both pieces of information. The manipulations were followed by a one-sentence request for a donation and a link to the university’s donation webpage.

The emails were initially sent to 2000 alumni in each of the four conditions. The development officer tracked the rates at which each message was actually received and opened (as opposed to rejected by the email server before participants could open the message), which ranged between 10.8% and 14.2%, yielding a sample size of 994 alumni who accessed the donation requests. Over the following three months, the development officer tracked alumni donations in direct response to these email solicitations.

### Results and discussion

Donation rates were higher in the altruistic-only condition (6.56%) and the egoistic-only condition (6.48%) than in the two

**Table 1**  
Experiment 1 donation rates by condition.

Condition	Percentage donations	Natural frequency
1. Egoistic reason	6.48%	14/216
2. Altruistic reason	6.56%	16/244
3. Egoistic + altruistic reason	2.80%	7/250
4. Altruistic + egoistic reason	3.17%	9/284

mixed reasons conditions (2.80% and 3.17%; see Table 1). A pairwise comparison showed that the order of the egoistic and altruistic reasons did not affect donation rates when reasons were mixed,  $\chi^2(1) = .06$ ,  $p = .80$ . As the primary test of our hypothesis, we compared giving rates with one type of reason (altruistic or egoistic) to giving rates with mixed reasons for giving (altruistic and egoistic). The contrast showed that mixing reasons significantly decreased giving rates relative to presenting a single type of reason,  $\chi^2(1) = 6.96$ ,  $p < .01$ ,  $p_{rep} = .96$ . In sum, alumni were more than twice as likely to give when the messages highlighted an altruistic or egoistic reason (6.52%, 30/460) than when altruistic and egoistic reasons were combined (3.00%, 16/534).<sup>1</sup> The use of a randomized, controlled field experiment lends internal and external validity to these results.

Although the absolute number of people donating in this study may seem small, the experiment meets the two criteria set forth by Prentice and Miller (1992) for determining when small effects are impressive: using minimal manipulations and influencing a dependent variable that is difficult to change. First, we found that changing only a handful of words in an email message more than doubled the rate of people giving actual money. Second, we demonstrated these effects with a “non-donor” pool of alumni who had never before given to the university, whose behavior would likely be especially difficult to change.

The results of Experiment 1 supported our prediction that mixing altruistic and egoistic reasons yields less giving than an altruistic or egoistic reason alone. However, it may be the case that simply presenting two reasons, rather than combining egoistic and altruistic reasons, was responsible for the decrease in giving in the mixed reasons condition. Although past research suggests that more reasons should be more persuasive (Petty & Cacioppo, 1984), perhaps multiple reasons of any kind are counteractive for eliciting donations. Our next study is designed to address this alternative explanation by including conditions with two altruistic reasons or two egoistic reasons to compare with mixed reasons.

## Experiment 2

### Method

We conducted an online experiment with 159 undergraduates in a subject pool at a private U.S. university. We used four different reasons for giving: two prosocial reasons and two selfish reasons (see Table 2). In a pre-test presented at the end of an unrelated study ( $n = 264$ ), we asked participants to rate the extent to which they thought each of the four reasons was “a good reason for alumni to donate money to their university” using a 5-point scale. These ratings reflect people’s lay theories about the legitimacy of different reasons to give to a university (see Table 2). The reasons were used to generate messages that were purportedly written by the university’s

<sup>1</sup> We also conducted pairwise comparisons of the mixed reasons condition with each of the two single-reason conditions. The proportion of giving was significantly lower in the mixed reasons condition than in the altruistic reason condition,  $\chi^2(1) = 5.39$ ,  $p < .05$ ,  $p_{rep} = .93$ , and the egoistic reason condition,  $\chi^2(1) = 4.86$ ,  $p < .05$ ,  $p_{rep} = .92$ .

development office. There were five different reason conditions: mixed, one altruistic, two altruistic, one egoistic, and two egoistic. We predicted that the mixed condition would produce lower giving intentions than the other conditions which highlighted a single type of reason. As a conservative test of the undermining effect of mixing altruistic and egoistic reasons, for the mixed reasons condition, we selected the higher-rated altruistic reason and the higher-rated egoistic reason to use in combination (reasons 1 and 3 in Table 2). In the one altruistic reason condition, the message contained only the higher-rated altruistic reason for giving. Likewise, the one egoistic reason message contained only the higher-rated egoistic reason. Finally, the two altruistic and two egoistic reason conditions contained both the stronger and the weaker reasons of their respective type.

In each condition with multiple reasons, the order of reasons was counterbalanced, which did not affect the results. To control for existing stances on donating to one’s alma mater, at the beginning of the study, we asked participants how they felt about donating to their university after they graduate. They indicated whether they were 100% certain that they would donate, not certain but open to the possibility of donating, or 100% certain that they would never donate. We controlled for certainty to give (2.5% of participants; coded 1 if certain to give, otherwise 0) and to never give (25.2% of participants; coded 1 if certain to never give, otherwise 0) as separate covariates in the analysis.<sup>2</sup> For our dependent variable, in light of extensive research showing that behavioral intentions are strong predictors of actual behavior (Ajzen, 1991; Armitage & Conner, 2001; Gollwitzer, 1999), we measured giving intentions with the statement, “It is probable that I will give to [university] in the first five years after I graduate” (1 = disagree strongly, 7 = agree strongly).

### Results and discussion

Table 3 presents the adjusted means and standard errors by condition. Replicating the main finding of Study 1, a planned contrast found that presenting a single altruistic reason or a single egoistic reason ( $M = 4.51$ ) yielded significantly higher giving intentions than when altruistic and egoistic reasons were mixed ( $M = 3.80$ ),  $t(152) = 2.23$ ,  $p < .05$ ,  $p_{rep} = .92$ . Giving intentions were also significantly higher when presenting two altruistic reasons or two egoistic reasons ( $M = 4.51$ ) than when altruistic and egoistic reasons were mixed ( $M = 3.80$ ),  $t(152) = 2.24$ ,  $p < .05$ ,  $p_{rep} = .92$ .<sup>3</sup> Overall, using a single type of reasoning (egoistic or altruistic, one or two reasons;  $M = 4.51$ ) resulted in significantly higher giving intentions than mixing egoistic and altruistic reasons,  $t(152) = 2.45$ ,  $p < .02$ ,  $p_{rep} = .94$ . As a general test of the effect of the sheer number of reasons, a planned contrast found that providing two reasons ( $M = 4.27$ ) yielded no significant difference in giving intentions than providing only one reason ( $M = 4.51$ ),  $t(152) = 0.99$ ,  $p > .3$ .<sup>4</sup>

In sum, these results suggest that the combination of egoistic and altruistic reasons, rather than the number of reasons, is the active ingredient behind our Experiment 1 findings. Furthermore, this experiment replicated the finding that appeals involving

<sup>2</sup> The same findings hold if these participants are dropped from the sample instead of controlled for with covariates.

<sup>3</sup> Giving intentions were significantly higher when only altruistic reasoning was included in the message (one or two reasons;  $M = 4.51$ ) than when egoistic and altruistic reasons were mixed ( $M = 3.80$ ),  $t(152) = 2.21$ ,  $p < .05$ ,  $p_{rep} = .91$ . Similarly, providing only egoistic reasoning (one or two reasons;  $M = 4.52$ ) yielded significantly higher giving intentions than when egoistic and altruistic reasons were mixed,  $t(152) = 2.26$ ,  $p < .05$ ,  $p_{rep} = .92$ .

<sup>4</sup> This finding is consistent with prior research showing that more reasons are not necessarily more persuasive: the quantity effect depends on the quality of the reasons and the motivation of the audience to process the message (Petty & Cacioppo, 1984). It may be the case that our second reasons were not sufficiently high-quality to influence participants, or that participants carefully scrutinized the message rather than using the number of arguments as a heuristic cue.

**Table 2**  
Pre-test of experiment 2 reasons.

Type	Reasons to give to the university	A good reason to give?
1. Altruistic	Alumni support helps to fund need-based scholarships so that students from low-income families can come to [university]	4.3 (.94)
2. Altruistic	Alumni gifts help faculty members by supporting their cutting-edge research.	3.9 (.97)
3. Egoistic	Alumni report that supporting [university] with a gift makes them feel good.	3.5 (1.13)
4. Egoistic	Giving to [university] increases its prestige and the value of your degree as an alumna/alumnus.	3.1 (1.22)

Note.  $N = 264$ . The prompt was, "Please rate the degree to which each of the following is a good reason for alumni to donate money to their university." The scale ranged from 1 (not at all a good reason) to 5 (an extremely good reason). Standard deviations are in parentheses.

only altruistic reasoning or only egoistic reasoning elicited greater giving intentions than appeals that combined egoistic and altruistic reasoning. In our next experiment, we examine the mechanisms responsible for this effect: persuasion awareness and psychological reactance.

### Experiment 3

To directly examine mediating mechanisms – as well as introduce a control condition and constructively replicate our results with a different sample, context, manipulations, and dependent measures (Lykken, 1968) – we conducted a third experiment.

#### Method

We conducted an experiment with 88 undergraduates from an applied psychology course at a U.S. university. We sent an electronic link to 184 students to participate in a brief study in exchange for the opportunity to enter a lottery to win an iPad, yielding a response rate of 47.8%. The experiment used a 2 (egoistic reason: yes, no)  $\times$  2 (altruistic reason: yes, no) between-subjects factorial design. The stimulus was an online request to donate to the Make-A-Wish Foundation. In all conditions, participants read an introductory paragraph:

The Make-A-Wish Foundation is an international non-profit organization that grants wishes for children with life-threatening medical conditions. The [state] chapter has granted more than 1800 wishes in the past two decades with donations from people like you.

The second paragraph contained our manipulations:

Egoistic reason: Donors report that giving makes them feel good, and view it as a personally gratifying and worthwhile experience. Thus, making a donation can benefit you personally.

Altruistic reason: Donors report that giving is an altruistic act that makes it possible for a sick child's dream to come true. In addition, donations help family members create lasting positive memories and escape from the sadness, stress, and grief associated with the prospect of losing a child. Thus, making a donation can benefit wish children and their families.

Mixed reasons: Donors report that giving is an altruistic act that makes it possible for a sick child's dream to come true, and helps family members create lasting positive memories and escape

from the sadness, stress, and grief associated with the prospect of losing a child. In addition, donors report that giving makes them feel good, and view it as a personally gratifying and worthwhile experience. Thus, making a donation online can benefit wish children, their families, and you personally.

We counterbalanced the order of the altruistic and egoistic reasons, and this did not affect our results. In the control (no reason) condition, no second paragraph was provided. For all participants, the request concluded, "Would you support this cause and make a donation?"

We then measured dependent and mediating variables using a 7-point Likert-type scale anchored at 1 = disagree strongly and 7 = agree strongly. We measured giving intentions using three items adapted from existing behavioral intention measures (Ajzen, 1991; Perugini & Bagozzi, 2001): "I plan to give to the Make-A-Wish Foundation," "I am likely to contribute to the Make-A-Wish Foundation," and "There is a good chance that I will contribute to the Make-A-Wish Foundation" ( $\alpha = .92$ ). We measured persuasion awareness using the following five items adapted from existing measures (Sagarin, Cialdini, Rice, & Serna, 2002; Williams et al., 2004): "I felt that others were intruding on my beliefs," "I felt the message was coercive," "I felt the message was controlling," "I could tell that someone was attempting to influence me," and "I felt that the request was based on an ulterior motive" ( $\alpha = .73$ ). To assess psychological reactance, we used three items adapted from existing measures (Jonason & Knowles, 2006): "I wanted to resist the attempts of others to influence me," "I wanted to do the opposite," and "I felt compelled to resist" ( $\alpha = .88$ ). Because measuring the dependent variable before the mediators reverses their expected causal order, but measuring the mediators first can bias scores on the dependent variable (Campbell & Stanley, 1966), we counterbalanced the order of the dependent and mediating measures, such that half of the participants reported giving intentions before the mediators, and half reported them afterward. Controlling for the timing of these variables in our analyses did not substantively affect the results.

#### Results and discussion

To examine whether our measures of persuasion awareness, reactance, and giving intentions loaded on distinct factors, we conducted a confirmatory factor analysis. The three-factor model fit the data quite well,  $\chi^2(41) = 71.94$ , CFI = .96, SRMR = .06 and chi-square difference tests showed that the three-factor model was better fitting than all alternative nested models.<sup>5</sup>

<sup>5</sup> The two-factor model with persuasion awareness and psychological reactance on the same factor showed the next best fit,  $\chi^2(43) = 88.85$ , CFI = .93, SRMR = .07, but was significantly poorer than the three-factor model,  $\chi^2(2) = 16.91$ ,  $p < .001$ . The two-factor model with persuasion awareness and giving intentions on the same factor ( $\chi^2(43) = 336.14$ , CFI = .58, SRMR = .19) and persuasion awareness and giving intentions on the same factor ( $\chi^2(43) = 341.48$ , CFI = .57, SRMR = .19) achieved significantly worse fit, as did the one-factor model ( $\chi^2(44) = 352.13$ , CFI = .56, SRMR = .19).

**Table 3**  
Experiment 2 giving Intentions by condition.

Reason type	Number of reasons	Adjusted mean	St. Error	<i>n</i>
Egoistic	1	4.34	0.45	32
	2	4.70	0.45	31
Altruistic	1	4.69	0.47	31
	2	4.33	0.47	32
Mixed	2	3.80	0.44	33

**Table 4**  
Experiment 3 means and standard deviations by condition.

Condition	Giving intentions	Persuasion awareness	Psychological reactance
1. Egoistic reason ( $n = 22$ )	4.11 (1.45)	2.98 (0.82)	2.73 (1.40)
2. Altruistic reason ( $n = 22$ )	4.12 (1.31)	2.82 (0.77)	2.42 (1.00)
3. Mixed reasons ( $n = 22$ )	3.36 (1.48)	3.52 (1.36)	3.36 (1.78)
4. Neither reason ( $n = 22$ )	3.52 (1.28)	2.97 (0.80)	2.94 (1.04)

Note. Standard deviations are in parentheses.

Means and standard deviations by condition appear in Table 4. Giving intentions were higher when presented with only an altruistic or egoistic reason (4.12 and 4.11, respectively) than when presented with mixed reasons or no reason (3.36 and 3.52, respectively). A  $2 \times 2$  ANOVA indicated a significant interaction between the egoistic and altruistic reason manipulations,  $F(1, 84) = 5.30, p < .05, p_{rep} = .92$ . No other effects were significant. A planned contrast analysis showed that giving intentions were significantly lower in the mixed-reasons condition than in either the egoistic or altruistic reason conditions,  $t(84) = 2.09, p < .05, p_{rep} = .89$ . The mixed-reasons condition was not significantly different from the control condition,  $t(84) = 0.36, p > .7, p_{rep} = .35$ .<sup>6</sup>

We predicted that mixing altruistic and egoistic reasons would heighten the participants' awareness of the persuasive intent of the message and, in turn, elicit psychological reactance and consequently diminish giving intentions. An assumption underlying this prediction is that the mixed condition should elicit the highest levels of both persuasion awareness and reactance. To examine this expectation, we conducted two  $2 \times 2$  ANOVAs, which indicated a marginally significant interaction between the egoistic and altruistic reasons for persuasion awareness ( $F(1, 84) = 2.80, p < .10, p_{rep} = .81$ ) and a significant interaction between egoistic and altruistic reasons for psychological reactance ( $F(1, 84) = 4.05, p < .05, p_{rep} = .88$ ). We then conducted a planned contrast analysis on both mediators, comparing the mixed condition to the other three conditions, and we found that the mixed condition elicited significantly more persuasion awareness,  $t(84) = 2.49, p < .05, p_{rep} = .94$ , and more reactance,  $t(84) = 2.02, p < .05, p_{rep} = .88$ , than the other three conditions (see Table 4 for means).

To test the predicted three path mediated effect, we examined the indirect effect of message (1 = mixed, 0 = single; the control condition was excluded because we aim to explain the difference between mixed- and single-reason messages<sup>7</sup>) on giving intentions as mediated in two steps by persuasion awareness and reactance. To do so, we followed the advice of Taylor, MacKinnon, and Tein (2008). We first regressed the measure of persuasion awareness on the dummy variable for mixed reasons ( $b = .62, t = 2.34, p = .02$ ); we then regressed the measure of reactance on the measure of persuasion awareness ( $b = 1.04, t = 8.86, p < .001$ ); we then regressed the measure of giving intentions on the measure of reactance ( $b = -0.30, t = -2.56, p = .01$ ). Having demonstrated that each of the three paths were significant in the expected direction, we conducted a bootstrap analysis, constructing bias-corrected confidence intervals using 1000 random samples with replacement from the full sample (MacKinnon,

<sup>6</sup> Giving intentions were marginally significantly higher when only the altruistic reason was included in the message ( $M = 4.12, SD = 1.31$ ) than when egoistic and altruistic reasons were mixed ( $M = 3.36, SD = 1.48$ ),  $t(84) = 1.82, p = .07, p_{rep} = .84$ . Similarly, providing only the egoistic reason ( $M = 4.11, SD = 1.45$ ) yielded marginally significantly higher giving intentions than when egoistic and altruistic reasons were mixed,  $t(84) = 1.80, p = .08, p_{rep} = .84$ .

<sup>7</sup> The control condition yielded a low giving rate because no persuasive reason was provided and not because of heightened persuasion awareness and psychological reactance, therefore it would be inappropriate to include it in the mediation analysis.

Fairchild, & Fritz, 2007). The 95% confidence intervals for the size of the indirect effect excluded zero (indirect effect:  $-.32, SE = .19$ , confidence interval:  $-.01, -.75$ ), indicating that the indirect effect was significant. In addition, including the two mediators reduced the effect of message on giving intentions to non-significance (direct effect:  $-.63, SE = .36, p > .05$ ). These results indicate that persuasion awareness and psychological reactance fully mediated the negative effects of combining egoistic and altruistic reasons on giving intentions.

## General discussion

In showing how mixing egoistic and altruistic reasons can undermine giving, this paper offers two key contributions to psychological research. First, our findings run counter to the traditional conception that more reasons are often more persuasive (e.g., Petty & Cacioppo, 1984; Ranganath et al., 2010). We find that more reasons in the form of combining egoistic and altruistic reasons can potentially be undermining for persuasion to give. Second, our findings suggest that altruistic or egoistic reasons alone elicit greater giving than combined egoistic and altruistic reasons and shed light on the mediating mechanisms that underlie this effect. We show how mixing egoistic and altruistic reasons may reduce giving by raising awareness of the persuasive intent of the donation request, eliciting psychological reactance.

We proposed that mixing egoistic and altruistic reasons heightens persuasion awareness by (1) appearing to appeal to different types of people (i.e., multiple audiences) and by (2) causing people to shift to a more deliberative mindset as they consider distinct motives that often have incompatible means for attainment. However, in testing whether mixing reasons produces persuasion awareness and reactance, we did not explore whether the path from mixed reasons to persuasion awareness was explained by appearing to appeal to multiple audiences and shifting to a more deliberate mindset. Future research should explore these micro-mediators (Cook & Campbell, 1979).

An unexpected finding emerged in each of the experiments: an egoistic reason for giving was as effective as an altruistic reason in eliciting giving. Therefore, our results do not simply show that an inferior reason can undermine the persuasiveness of an effective reason (Shafir, Simonson, & Tversky, 1993), but rather that two types of reasons that are successfully persuasive individually may fail when presented together. Although evidence that egoistic messages for giving can succeed is not unprecedented in the literature (Clary, Snyder, Ridge, Miene, & Haugen, 1994; White & Peloza, 2009), future studies are necessary to unpack when egoistic reasons can motivate prosocial behaviors as effectively as altruistic reasons. Some of the egoistic reasons in our studies may have been motivating because they emphasized more intangible psychological benefits that still assume the presence of altruistic motives: giving to others should only feel good if one values the welfare of others or perceives it as normative to do so (Schwartz, 2009). Alternatively, it may be the case that our messages limited the effectiveness of altruistic reasons, as we did not make the individual recipients clearly identifiable (Small et al., 2007) or provide a strong opportunity to empathize with them (Batson, 1998), which may have prevented participants from fully perceiving the impact of giving (Grant et al., 2007) and contemplating empathic joy (Smith, Keating, & Stotland, 1989). However, our findings do suggest that in some cases egoistic reasons for prosocial behavior may be surprisingly effective and should be considered as an alternative persuasion approach.

More broadly, this research opens up a number of interesting channels for future research. In particular, future studies should examine boundary conditions of the undermining effects of mixing egoistic and altruistic reasons. Our research has shown that combining egoistic and altruistic reasons in the domain of an activity that is

commonly perceived as altruistic (i.e., giving) undermines the persuasive appeal of the message. However, would this effect generalize to settings in which egoistic motives are more normative, such as negotiations? For example, would a negotiator find a combination of egoistic and altruistic reasons for accepting a deal more or less appealing than an egoistic or altruistic reason alone?

In addition, future studies should examine whether these effects generalize to other forms of giving, including donating time to organizations, providing help to coworkers, or providing material gifts to those in need. For example, it is important to determine whether appeals for volunteering can be undermined by mixing altruistic and egoistic reasons (see Kiviniemi, Snyder, & Omoto, 2002). Future research in this area could also explore whether giving histories, personality traits, and demographic factors affect who is more likely to give in response to each message, and whether our effects generalize beyond the likelihood of giving to the amount given.

We also recommend exploring strategies for counteracting the psychological reactance that is prompted by mixing egoistic and altruistic reasons. For instance, introducing the reasons as questions (“how do you think giving will make you and/or others feel?”) may prevent reactance by minimizing the salience of the persuasive intent of the message (Williams et al., 2004). Researchers may also investigate whether our effects vary as a function of whether prosocial behaviors are publicly visible (e.g., Ariely, Bracha, & Meier, 2009; Griskevicius, Tybur, & Van den Bergh, 2010; Hardy & Van Vugt, 2006). We suspect that when the visibility of the prosocial behavior is high, mixing egoistic and altruistic reasons will be particularly detrimental, as individuals may also be worried that others will perceive their behavior as disingenuous. For example, we expect this to be the case for public environmental decisions in which appeals may highlight the monetary savings and/or the environmental benefit of energy conservation. Finally, it may be informative to explore how activating accuracy, affiliation, and self-concept goals, which are important determinants of compliance (Cialdini & Goldstein, 2004), affects reactions to mixed reasons. In the meantime, although people often believe that multiple reasons should be more persuasive than a single reason (Rackham, 2007), our research suggests that the type of reasons matters. Mixing egoistic and altruistic reasons may backfire, resulting in missed giving.

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