

# Sympathy and callousness: The impact of deliberative thought on donations to identifiable and statistical victims

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Received 7 July 2005

Available online 3 March 2006

## Abstract

When donating to charitable causes, people do not value lives consistently. Money is often concentrated on a single victim even though more people would be helped, if resources were dispersed or spent protecting future victims. We examine the impact of deliberating about donation decisions on generosity. In a series of field experiments, we show that teaching or priming people to recognize the discrepancy in giving toward identifiable and statistical victims has perverse effects: individuals give less to identifiable victims but do not increase giving to statistical victims, resulting in an overall reduction in caring and giving. Thus, it appears that, when thinking deliberatively, people discount sympathy towards identifiable victims but fail to generate sympathy toward statistical victims.

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**Keywords:** Identifiable victim effect; Sympathy; Generosity

“If I look at the mass, I will never act. If I look at the one, I will.”

— Mother Teresa

Charities struggle to raise money to feed the thousands of starving children in third world countries and advocates struggle to raise public support for highway safety measures that would reduce future accident fatalities. Yet, people often become entranced by specific, identifiable, victims. In 1987, one child, “Baby Jessica,” received over \$700,000 in donations from the public, when she fell in a well near her home in Texas. Similarly, the plight of a wounded Iraqi boy, Ali Abbas, captivated the news media in Europe during the Iraq conflict and £275,000 was quickly raised for his medical care. More than \$48,000 was contributed to save a dog stranded on a ship adrift on the Pacific Ocean near Hawaii (Song, 2002).

These cases demonstrate that when an identifiable victim is made into a cause, people appear to be quite compassionate and generous. However, at other times, people appear rather self-interested and callous—giving nothing despite the enormity of need. In this paper, we examine the consequences of attempting to debias the effect by educating people about it—by teaching them about the inconsistent sympathy evoked by statistical and identifiable victims.

Debiasing the discrepancy in giving is important because concentrating large sums of money on a single victim is inefficient. In many cases, society would be better off, if resources were spread among victims such that each additional dollar is spent where it will do the most good. Yet, when making a decision to donate money toward a cause, most people probably do not calculate the expected benefit of their donation. Rather, choices are made intuitively, based on spontaneous affective reactions (see Schwarz & Clore, 1983; Slovic, Finucane, Peters, & MacGregor, 2002). To the extent that an

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identifiable victim is more likely to evoke sympathy and move people to give, excessive resources are likely to be allocated toward identifiable as compared to statistical victims (Small & Loewenstein, 2003).

Can individuals be taught to value life consistently? From a utilitarian perspective, it is straightforwardly normative to value lives equivalently. However, there is no “correct” value of a life or answer to the question of how much one should give to help someone in need. Therefore, it cannot be argued that the “identifiable victim effect” is a bias to give *too much* to identifiable victims or to give *too little* to statistical victims. The bias is simply that people care inconsistently. Therefore, an interesting and practical second question concerns the direction of correction for the effect. To the extent that debiasing the identifiable victim effect does lead to a more consistent treatment of statistical and identifiable victims, will it tend to increase generosity toward statistical victims or to decrease generosity toward identifiable victims?

### The identifiable victim effect

Prior research delineates two contributing factors behind the identifiable victim effect. First, when valuing life and other commodities with non-transparent market values, people show greater sensitivity to proportions than to absolute numbers of lives (Baron, 1997; Featherstonhaugh, Slovic, Johnson, & Friedrich, 1997; Friedrich et al., 1999; Jenni & Loewenstein, 1997). For example, an event or calamity that causes 10 deaths within a very small community of 200 evokes a great amount of concern. Ten deaths out of 200 is a fairly large proportion. However, people exhibit much less concern if that same event or calamity causes 10 deaths throughout a large population of many million people. Ten deaths out of many million is merely a “drop in the bucket.”

This “proportion of the reference group effect” results, because it is difficult to evaluate the goodness of saving a stated number of lives, since an absolute number of lives does not map easily on to an implicit scale (Slovic et al., 2002). Proportions of lives are, however, at least superficially easy to interpret, since the scale ranges from 0 to 100%. A high proportion elicits, for example, stronger support for life-saving interventions, even when the absolute number of lives saved is small. In contrast, interventions that save larger numbers of absolute lives but smaller numbers of relative lives are likely to evoke weaker support.

For a proportion to dominate evaluation, a particular reference group (denominator) must be salient. Intuitively, the reference group for an identifiable victim is itself; there was only one “Baby Jessica” to be saved. Therefore, an identifiable victim represents the highest

possible proportion of a reference group (1 of 1, or 100%). Extraordinarily generous behavior toward identifiable victims, then, could simply result from the tendency for altruistic behavior to increase with the proportion of the reference group.

In addition to the proportion effect, there is also a qualitative distinction between identifiable and statistical victims. Small and Loewenstein (2003) and Kogut and Ritov (2005a) both found that the individuals gave more to help an identifiable victim than a statistical victim, even when controlling for the reference group. In one study, Small and Loewenstein (2003) modified the dictator game to produce a situation in which fortunate participants who retained their endowment could contribute a portion of it to “victims” who had lost theirs. The identity of victims (based solely on a number) either had already been determined (identifiable) or was about to be, but had not yet been, determined (unidentifiable). Gifts to determined victims were significantly greater than gifts to undetermined victims. A field experiment examining donations to Habitat for Humanity to build a house for a needy family replicated this result. Identifiability was manipulated by informing respondents that the family either “*has been selected*” or “*will be selected*.” In neither condition were respondents told which family had been or would be selected; the only difference between conditions was in whether the decision had already been made. Contributions to the charity were significantly greater, when the family had already been determined. Kogut and Ritov (2005a) likewise found that a single, identified victim (identified by a name and face) elicited greater emotional distress and more donations than a group of identified victims and more than both a single and group of unidentified victims. Moreover, emotional distress partially accounted for differences in contributions.

This finding parallels our conjecture that identifiable targets stimulate a more powerful emotional response than do statistical targets. Recent dual process models in social cognition identify two distinct modes of thought: one deliberate and calculative and the other affective (e.g., Chaiken & Trope, 1999; Epstein, 1994; Kahneman & Frederick, 2002; Sloman, 1996). The affective mode may dominate depending on a variety of factors, including when the target of thought is specific, personal, and vivid (Epstein, 1994; Sherman, Beike, & Ryalls, 1999). The deliberative mode, in contrast, is more likely to be evoked by abstract and impersonal targets. The identifiable victim effect, it seems, may result from divergent modes of thought, with greater felt sympathy for identifiable victims because they invoke the affective system.

Indeed, there is some evidence that identification intensifies feelings. In a study that compared punitive actions taken against statistical and identified *perpetrators* (a target that evokes negative rather than positive

feelings), Small and Loewenstein (2005) found greater anger toward identifiable perpetrators, and also found that affective reactions mediated the effects of identifiability on punitiveness. Thus, it makes sense that the discrepancy in giving toward identifiable and statistical victims is similarly mediated by affect (sympathy).

### *Two hypotheses*

Several theorists, beginning with Zajonc (1980), have proposed that the affective system is a faster, more automatic system, whose output occurs before the output of the deliberate system, which involves slower, more effortful processing (see also Epstein, 1994; Shiv & Fedorikhin, 1999; Strack & Deutsch, 2004; Wilson & Brekke, 1994; Wilson, Lindsey, & Schooler, 2000). Offshoots of this research have also shown that it is possible to ‘overshadow’ or suppress these initial affective reactions by inducing people to think in a deliberative fashion (Wilson & Brekke, 1994; Wilson et al., 2000). As a body, this research suggests that inducing people to weigh the scope of predicaments and to deliberate about alternative uses for money might diminish the impact of an affective response toward identifiable victims. Yet, the primacy of the affective system also implies that when an affective reaction is initially weak, as is true of sympathy toward *statistical* victims, then supplementing this reaction with more deliberation should not result in much of a difference, since this latter processing is similarly unfeeling. This logic implies that reasoning about identifiability is likely to have an asymmetric effect on generosity toward identifiable and statistical victims, decreasing giving directed toward identified victims but not increasing it toward statistical victims. Such an asymmetry lends itself to two predictions regarding the effects of debiasing identifiability:

**Hypothesis 1.** Thinking analytically about the value of lives should reduce giving to an identifiable victim.

**Hypothesis 2.** Thinking analytically about the value of lives should have no effect on giving to statistical victims.

These are the two central predictions that we test in the four studies reported below.

### **Overview of studies**

Each of the four studies attempted to manipulate the level of analytic thought when people made decisions involving statistical and identifiable victims. Study 1 examines the impact on generosity toward statistical and identifiable victims of explicitly informing people about the identifiable victim effect. Study 2 rules out a potential artifactual explanation for the findings from

Study 1. Study 3 attempts to teach the same lesson in an implicit, rather than explicit manner. By providing victim statistics alongside of a request for donations to an identifiable victim, we confront individuals with both targets, but do not directly inform them of any bias. Finally, Study 4 examines how priming a calculating mode of thought versus a feeling mode of thought influences donation decisions to both presentations of targets (identifiable and statistical).

### **Study 1**

This study examined generosity toward an identifiable victim or statistical victims following an intervention that taught donors about the tendency for individuals to give more to identifiable victims than to statistical victims. We tested the effects of the intervention on giving behavior toward both presentations of victims.

#### *Method*

The experiment consisted of a  $2 \times 2$  between subjects design. The first factor was identifiability, each participant received a description of either an identifiable or a statistical victim. The second factor was the intervention, half of the participants received a brief lesson about research demonstrating a discrepancy in giving toward identifiable and statistical victims, the other half received no such intervention.

#### *Participants*

An experimenter approached individuals ( $N = 121$ ), who were seated alone, in the student center at a university in Pennsylvania and asked them if they would complete a short survey in exchange for \$5.00. The experimenters knew that there were different versions of the charity request, but did not know which version each participant received and was not informed about the specific research hypotheses.

#### *Procedures*

Participants completed a survey about their use of various technological products. The survey was wholly unrelated to the present research and contained no experimental manipulations. After completing the survey, each participant received five one-dollar bills, a receipt, a blank envelope, and a charity request letter. The experimenter instructed the participant to read the letter carefully before signing the receipt and then to return both the letter and receipt sealed in the envelope.

The letter informed the participant of the opportunity to donate any of their just earned five dollars to the

organization *Save the Children*. All participants were told that “any money donated will go toward relieving the severe food crisis in Southern Africa and Ethiopia.” The donations in fact went directly to Save the Children.

### Intervention

Half of the participants (randomly assigned) first read a brief lesson about the research on identifiability. The lesson consisted of the following text:

We’d like to tell you about some research conducted by social scientists. This research shows that people typically react more strongly to specific people who have problems than to statistics about people with problems. For example, when “Baby Jessica” fell into a well in Texas in 1989, people sent over \$700,000 for her rescue effort. Statistics—e.g., the thousands of children who will almost surely die in automobile accidents this coming year—seldom evoke such strong reactions.

### Identifiability

In the statistical victim condition, the charity request letter described factual information taken from the *Save the Children* website (<http://www.savethechildren.org/>) about the problems of starvation in Africa. In the identifiable victim condition, participants saw a picture of a little girl and read a brief description about her. Again, the picture and description were taken directly from the website. The stimuli are reproduced in the appendix.

Finally, the letter instructed all participants:

Now that you have had the opportunity to learn about how any money you donate will be used, please fill out the following page and include it with any money you donate in the envelope you have been given. Even if you do not choose to donate, please fill out the form and return it to us in the envelope.

The following page asked participants to indicate the amount of their donation, \$0, \$1, \$2, \$3, \$4, or \$5. Then, participants were asked several questions about their affective and moral reactions to the situation described on a 5-point likert scale ranging from 1 (Not at all) to 5 (Extremely). The questions included: (1) How upsetting is this situation to you? (2) How sympathetic did you feel while reading the description of the cause? (3) How much do you feel it is your moral responsibility to help out with this cause? (4) How touched were you by the situation described? and (5) To what extent do you feel that it is appropriate to give money to aid this cause? These five items produced a reliable scale ( $\alpha = .87$ ), which we heretofore will refer to as *feelings*.

The experimenter gave the participant space and a few minutes to read the letter, and to donate privately the amount that they chose without any social pressure from the experimenter to give.

### Results and discussion

Fig. 1 presents means for each of the four treatments. To assess the effects of the manipulations on giving behavior, we subjected participants’ donations to a  $2(\text{identifiability}) \times 2(\text{intervention})$  ANOVA. Both factors, identifiability and the intervention, resulted in main effects. Participants who faced an identifiable victim gave more ( $M = \$2.12$ ,  $SD = \$2.13$ ) than those who faced a statistical victim, ( $M = \$1.21$ ,  $SD = 1.67$ ),  $F(1, 115) = 6.75$ ,  $p < .05$ ,  $\eta_p^2 = .06$ ; The intervention reduced donations ( $M = \$1.31$ ,  $SD = \$1.82$ ) relative to no intervention ( $M = \$2.00$ ,  $SD = \$2.03$ ),  $F(1, 115) = 4.15$ ,  $p < .05$ ,  $\eta_p^2 = .04$ . However, as revealed by a significant interaction between the treatments ( $F(1, 115) = 5.32$ ,  $p < .05$ ,  $\eta_p^2 = .04$ ), the intervention had an asymmetric impact on generosity in the two identifiable conditions; learning about identifiability decreased giving only toward identifiable victims. Post-hoc contrast tests reveal a significant difference between the identifiable/no intervention cell ( $M = \$2.83$ ,  $SD = \$2.10$ ) and the other three ( $M = \$1.26$ ,  $SD = \$1.74$ ),  $t(117) = -4.06$ ,  $p < .001$ .

Given the large number of zeros in the dependent variable and the non-normal distribution, we also analyzed the data with an ordered probit regression (Kennedy, 1998). The results were consistent with those obtained using simple ANOVA, there was a significant effect of identifiability  $X^2(1) = 10.06$ ,  $p < .01$ , no effect of the intervention  $X^2(1) = .01$ ,  $p = .92$ , and a significant interaction between identifiability and the intervention  $X^2(1) = 4.72$ ,  $p < .03$ . In all subsequent studies, we also replicated the main analyses with ordered probit and obtained qualitatively similar results, but report only the ANOVA results.

A two-way ANOVA with *feelings* as the dependent variable revealed no significant main effects for either the identifiability factor [ $F(1, 114) = 1.80$ ,  $p = .18$ ] or the intervention [ $F(1, 114) = .24$ ,  $p = .63$ ], and the interaction term was insignificant as well,  $F(1, 114) = 2.00$ ,  $p = .16$ . The same pattern held, when the *feelings* factor

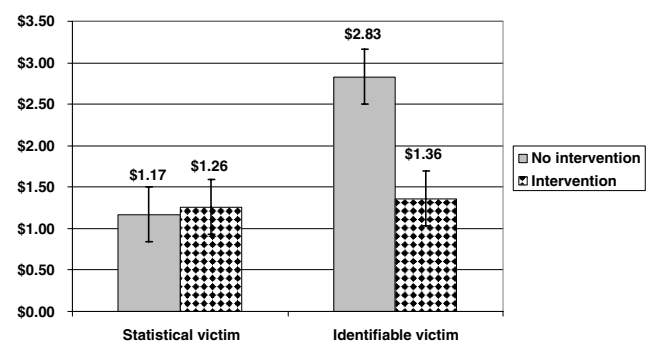


Fig. 1. Effects of teaching about identifiability on donations in Study 1.

score was replaced by each of the five items that made up the *feelings* scale. However, correlations between *feelings* and donations reveal an interesting pattern. In the three cells for which donations were relatively low (statistical/no intervention, statistical/intervention, and identifiable/intervention), the Pearson correlation between the factor score of the 5 *feelings* items and *donations* are all relatively small (.39, .33, and .34, respectively). However, in the identifiable/no intervention condition, the correlation between *feelings* and *giving* is relatively strong,  $r = .55$ ,  $p < .01$ . This is at least suggestive that affect and behavior are particularly linked when people face an identifiable victim.

These results are consistent with our prediction that forcing people to think more analytically about the choice to give has an asymmetric effect. Reactions to the affective target, the identifiable victim, were negatively affected by the teaching intervention, but reactions to the non-affective target, statistical victims, were not affected significantly.

## Study 2

A limitation of the first study is a potential demand effect that we were made aware of after running it. Participants may have attempted to correct for their gut intentions about how much to give to please the researchers after learning about the bias. If this were true, one would expect participants to give more to statistical victims in addition to giving less to identifiable victims. However, it is possible that participants inferred that the bias was specifically located on donations to identifiable victims. The intervention stated that people give “more” to identifiable victims than to statistical victims, and “more” could potentially be interpreted as “too much.” If this is true, then the results of Study 1 may simply be due to experimental demand rather than to learning about identifiability per se.

If the intervention in Study 1 had stated “People give *less* to statistical victims” rather than stating the equivalent but alternatively-framed “People give *more* to identifiable victims,” would the results have been the reverse? Indeed, a large body of research demonstrates the powerful influence of cognitive frames on judgment. In the current study, we test whether alternative frames used to describe the bias in the intervention would affect the level of donations.

## Method

Study 2 employed a  $2 \times 2$  factorial design manipulating (a) identifiability and (b) frame of the intervention. Half of participants were exposed to an identifiable victim and the other half to statistical victims. Since the

purpose was to test differences among frames in the intervention rather than comparing the presence versus the absence of an intervention, as in Study 1, all individuals received a teaching intervention. For half of the participants, the discrepancy in giving described in the intervention was framed as “more to identifiable victims.” For the other half, the discrepancy was framed as “less to statistical victims.”

## Participants

As in Study 1, a hypothesis-blind experimenter approached individuals in public places around a university in Pennsylvania and asked them to complete a short survey in exchange for \$5. The sample consisted of 99 individuals who consented to fill out the survey.

## Procedures

The basic procedures followed those in Study 1. After participants completed their surveys, the experimenter paid them \$5 in one-dollar bills and gave them a receipt, an envelope and a charity request letter. The experimenter instructed them to read the letter and to return it with the receipt sealed in the envelope.

## Framing the intervention

To test for the possibility that the response to the intervention revealed in Study 1 was due to the frame of the intervention, we manipulated the frame between subjects. Half of the participants read an intervention with the frame *more to identifiable victims*:

...research shows that people typically react more strongly to specific people who have problems than to statistics about people with problems. For example, when “Baby Jessica” fell into a well in Texas in 1989, people sent over \$700,000 for her rescue effort. Statistics—e.g., the 10,000 children who will almost surely die in automobile accidents this coming year—seldom evoke such strong reactions.

The other half read the alternative *less to statistical victims* frame:

...research shows that people typically react less strongly to statistics about people with problems than to specific people who have problems. For example, statistics—e.g., the 10,000 children who will almost surely die in automobile accidents this coming year—seldom evoke strong reactions. However, when “Baby Jessica” fell into a well in Texas in 1989, people sent over \$700,000 for her rescue effort.

All other information described about the cause was identical to Study 1.

## Results

Fig. 2 presents the basic pattern of results. We performed a 2(identifiability)  $\times$  2(frame) ANOVA on donations. Although there appears to be a main effect of identifiability on donations in the graph, statistical analysis revealed no significant main effects for either factor [ $F(1,95) = .073$ ,  $p = .79$  and  $F(1,95) = 1.00$ ,  $p = .32$ , respectively], nor a statistical interaction [ $F(1,95) = .01$ ,  $p = .94$ ]. Most importantly, there is no observable trend in the data toward giving more to identifiable victims (either relatively or absolutely) under the “more” than under the “less” frame. We further tested for simple effects of identifiability within each frame. The frame did not significantly affect donations to statistical victims [ $F(1,95) = .073$ ,  $p = .79$ ] nor did it affect donations to identifiable victims [ $F(1,95) = 1.009$ ,  $p = .32$ ].

The lack of any effect of framing in this study indicates that the results of the intervention in Study 1 cannot be attributed to the frame of the intervention or experimental demand. Although framing is clearly important in many contexts, framing a discrepancy as more to X versus less to Y does not appear to matter. If the intervention had stated that individuals typically give *too much* to identifiable victims, then experimental demand would be expected. However the terms “more” and “less” convey little about the correct level of giving so subjects cannot gain insight about the desired effect of the researchers.

## Study 3

In Study 3, we attempt to debias identifiability in a more implicit manner. Rather than explicitly teaching participants about the discrepancy, we preceded a request for money for an identifiable victim with the simultaneous presentation of both victim statistics *and* a description of the identifiable victim.

Kogut and Ritov (2005b) gave some individuals an opportunity to give any amount or nothing to either or both a single, identified victim or a group of identified

victims, while others only had the option of giving to one of the two targets (single or group). Although, they gave more to a single identified victim than to a group of identified victims when evaluated separately, they gave similar amounts to each when evaluated jointly. Moreover, more people donated and the mean donation was higher in separate evaluation than in joint evaluation. This result suggests that comparative evaluation blunts caring, possibly because it requires analytic, deliberative thought.

In the present study, we jointly present an identified victim with victim statistics. It is possible that this double presentation could have an additive effect, such that participants would give the most when faced with greatest information. However, we hypothesized that this presentation would reduce caring, since the provision of victim statistics would remind potential donors of the many other victims who would *not* receive help. This joint presentation should force people to compare the relative importance of helping one victim to the importance of helping the multitudes.

## Method

This study consisted of three conditions: (1) Identifiable victim, (2) Statistical victims, and (3) Identifiable victim *with* statistical information. The third condition served as the “implicit” intervention.

## Participants

A hypothesis-blind experimenter approached individuals, who were seated alone, in the university center and courtyard at a University in Pennsylvania, and asked if they would complete a short survey in exchange for \$5.00. A total of 159 individuals agreed to participate.

## Procedures

As in Studies 1 and 2, participants completed a survey about their use of various technological products. Again after completing the survey, each participant received five one-dollar bills, a receipt, a blank envelope, and a charity request letter, informing the participant of the opportunity to donate to *Save the Children*.

The stimuli for the identifiable victim and the statistical victims were identical to those used in Studies 1 and 2. In the identifiable victim with statistical information condition, the request was identical to the identifiable victim condition, with the addition of the statistical information provided in the statistical victim condition. In other words, participants faced a choice of whether to help an identifiable victim, but were confronted by victim statistics before making a choice. Once again, the letter instructed all participants to indicate on paper

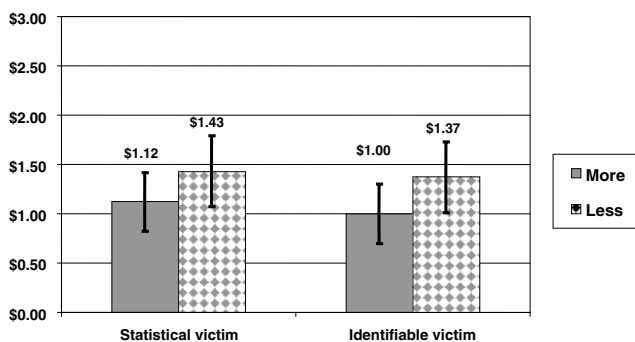


Fig. 2. Null effects of framing on donations in Study 2.

the amount they chose to donate, and to include it with any money they donated in an envelope.

### Results and discussion

The main hypothesis in this study is that showing statistical information in conjunction with an identifiable victim will reduce giving relative to just showing an identifiable victim. The means for the three conditions, reported in Fig. 3, are consistent with this pattern. We conducted a one-way ANOVA on donations, which revealed a significant effect of identifiability  $F(2) = 5.67, p < .01, \eta_p^2 = .07$ . We then performed Bonferroni-adjusted pairwise comparisons, which revealed that individuals who faced an identifiable victim donated more than those who faced victim statistics,  $p < .01$ , and also donated more than those who faced an identifiable victim in conjunction with statistics,  $p < .05$ . Thus, the main hypothesis was supported. There was no difference between individuals, who faced statistics only and those who faced an identifiable victim in conjunction with victim statistics,  $p = 1.0$ .

Apparently, statistical information dampens the inclination to give to an identifiable victim. This result is consistent with the tendency to give less to an identifiable victim after learning about the discrepancy in giving. When jointly evaluating statistics and an individual victim, the cause evidently becomes less compelling. This could occur in part because statistics diminish the reliance on one's affective reaction to the identifiable victim when making a decision.

We have argued that asymmetric effects of the intervention in this and the previous two studies result from processing differences inherent in reactions to the two victim presentations. However, an alternative explanation is possible. Perhaps people do not contribute to the statistical victims, because they feel that any contribution would not make an appreciable contribution to the problem. Such an account would be consistent with the literature, reviewed earlier, show-

ing that people are sensitive not only to the absolute number of victims but to the size of the reference group (Baron, 1997; Featherstonhaugh et al., 1997; Jenni & Loewenstein, 1997). In fact, such a 'drop in the bucket' effect may also have contributed to the discrepancy in treatment of the statistical versus identifiable victims in the first two studies, though it is difficult to explain the effect of the teaching intervention in such terms. In the next study, we avoid this possible confound by directly manipulating modes of processing information (e.g., feeling based vs. calculation based).

### Study 4

Unlike the previous studies in this paper, Study 4 does not incorporate an attempt to teach individuals about the identifiability effect, either explicitly or implicitly. Instead, we use an intervention designed to induce either a calculation-based or a feeling-based mode of thought. By doing so, we test whether it is possible to reverse the dominant reaction to each victim presentation. Importantly, this approach avoids the confound just discussed between modes of processing and the drop in the bucket effect. We would not expect the latter to be affected by an intervention targeted only at mode of processing.

Altering mode of thought could lead to several different patterns. First, it could have no effect on giving, if the initial response to a presentation of a cause is powerful and uncompromising. If instead, processing modes are flexible and only loosely dependent on the target, then inducing feeling-based processing could lead to greater caring and giving, whereas inducing calculation-based processing could lead to reduced caring and giving.

We contend, in accordance with the primacy of affect, that it should be more feasible to reverse reactions based on feeling than to add feelings where they do not automatically arise. If this reasoning is correct, then inducing a calculating mode should lessen caring toward identifiable victims, since the impact of the initial affective reaction to them can be mitigated by deliberate thinking. Caring about statistical victims, in contrast, should be less amenable to induced feeling.

### Methods

This study employed a priming task developed by Hsee and Rottenstreich (2004) to manipulate a calculating mode versus a feeling mode of processing. This priming task was crossed with a manipulation of identifiability, such that the design was a  $2(\text{identifiability}) \times 2(\text{priming})$  between-subjects design.

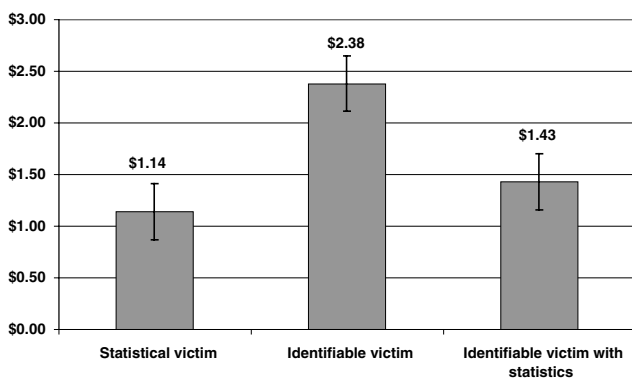


Fig. 3. Donations to separate and joint presentation of victim types in Study 3.

## Participants

Students and other people on campus at a University in Pennsylvania ( $N = 165$ ) were recruited to complete a few short questionnaires. Each received a packet of questionnaires and received \$5 in one dollar bills for participating.

## Procedures

The questionnaire packet consisted first of the survey on the use of technology as in Studies 1, 2, and 3. Second, in the packet was a short questionnaire which served as the priming manipulation. In the calculation-priming condition, the questionnaire was entitled “Calculations Questionnaire.” It instructed participants to work “carefully and deliberatively to calculate the answers to the questions posed below”: Five questions followed, which were all similar to the first one: “If an object travels at five feet per minute, then by your calculations how many feet will it travel in 360 seconds? \_\_\_\_\_ feet.”

In the feeling-priming condition, the questionnaire was entitled “Impression Questionnaire” and instructed participants to “base your answers to the following questions on the feelings you experience”: Representative of these questions was: “When you hear the word “baby” what do you feel? Please use one word to describe your predominant feeling: \_\_\_\_\_.”

After completing the packet, including the prime, participants received \$5 in one dollar bills an envelope, a receipt and a charity request of the same nature as the previous studies, which they were instructed to read before leaving, as in previous studies. The procedure for donating their earnings by sealing it in the envelope anonymously was identical to the previous studies.

## Results and discussion

As is evident from Fig. 4, which presents means for the four conditions, the results support our hypotheses

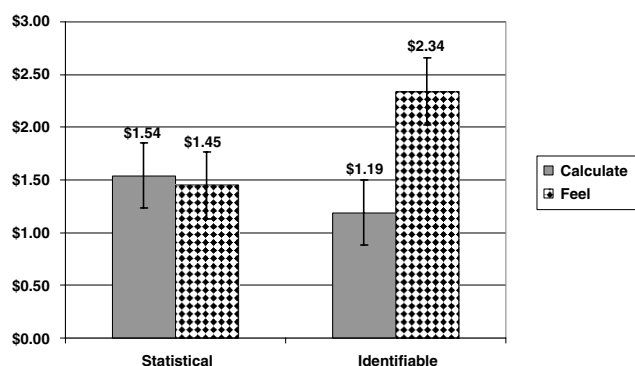


Fig. 4. Donations following processing primes in Study 4.

that calculative thought lessens the appeal of an identifiable victim, but feeling-based thought does not improve the appeal of statistical victims. A two-way ANOVA revealed that the priming manipulation had a marginal effect on generosity,  $F(1, 160) = 3.49$ ,  $p = .063$ ,  $\eta_p^2 = .02$ , and no main effect of victim type,  $F(1, 160) = .87$ ,  $p = .35$ ,  $\eta_p^2 = .01$ . However, the primes interacted with victim type,  $F(1, 160) = 4.67$ ,  $p < .04$ ,  $\eta_p^2 = .03$ . When primed to calculate, participants donated significantly less to the identifiable victim than when primed to feel,  $F(1, 160) = 3.49$ ,  $p < .01$ ,  $\eta_p^2 = .05$ . However, priming had no effect on donations to statistical victims,  $F(1, 160) = .87$ ,  $p = .35$ ,  $\eta_p^2 = .01$ .

These results strongly support the notion that modes of processing, and specifically the distinction between affect and deliberation, play an important role in the identifiable victim effect and in the impact of explicit and implicit education about the effect. Priming analytic thinking reduced donations to an identifiable victim relative to a feeling-based thinking prime. Yet, the primes had no distinct effect on donations to statistical victims, which is symptomatic of the difficulty in generating feelings for these victims.

## General discussion

Certain victims trigger a disproportionate level of sympathy. In the current paper, we find that debiasing, through deliberative thinking, reduces the discrepancy in giving to statistical and identifiable victims. We contend that deliberative thinking reduces the reliance on sympathy when evaluating an identifiable victim.

Our findings resonate with the ‘affect heuristic’ (Slovic et al., 2002) and the ‘feelings as information’ (Schwarz & Clore, 1983) frameworks. Consistent with the affect heuristic (Slovic et al., 2002), stimuli that generate sympathetic affect induce individuals to place a high value on the identifiable victim.

A key aspect of the “feelings as information” framework (Schwarz & Clore, 1983) is that the impact of feelings on evaluative judgments depends on the perceived informational value of the feelings. The finding from our studies that generosity is reduced when additional information is given, either in the form of an intervention (Study 1) or additional statistics (Study 3), could be interpreted in such terms. Perhaps these interventions led people to believe that their feelings were less relevant to the decision of how much to give than was true in the absence of the interventions.

The finding that sympathetic reactions are undermined by deliberative thinking further supports the two systems approach, in which an affective response can be blunted or controlled through thoughtful deliberation (see Epstein, 1994; Shiv & Fedorikhin, 1999; Strack & Deutsch, 2004; Wilson et al., 2000). Although



donations to identifiable victims decreased following the intervention, it is possible that the feelings persevered. In a study on prejudice, Wilson et al. (2000) demonstrated that initial negative information that was later deemed to be false had a lasting impression at an implicit level but not an explicit level. Essentially, people could override the discredited initial affective attitude when they had capacity and motivation, but the affective attitude persevered in implicit attitude measures. Thus, the reduction in donations to an identifiable victim following intervention in our studies may represent a change only in the explicit attitudes of participants.

An unresolved question is how people manage their sympathy and prevent it from contaminating their judgments and decisions. Wilson, Gilbert, and Wheatley (1998) outline five strategies which people believe they can adopt to avoid contamination: exposure control, preparation, resistance, remediation, and behavior control. Any of these might be involved in our interventions. Participants could have skipped over the charity request after reading the intervention as a means to control exposure to the sympathetic plea; they could prepare themselves by strengthening their mental defenses against their feelings and resist their feelings once exposed; finally, they could attempt to undo the effects of their sympathy and/or attempt to prevent their feelings from influencing their behavior. Future research could tease apart the mix of mental strategies involved in correcting for unwanted sympathy when trying to make efficient and fair decisions.

Our findings also dovetail with research on proportional reasoning, which shows that people value lives less as the denominator of the proportion increases (Baron, 1997; Featherstonhaugh et al., 1997; Friedrich et al., 1999; Jenni & Loewenstein, 1997). For example, Study 3 in this paper demonstrates that providing statistics reduced generosity toward an identifiable victim. One possible mechanism through which this effect may have occurred is by effectively priming a large denominator. However, our other studies show that other methods (explicit teaching and inducing an analytic mindset) that are unlikely to prime large denominators have a similar effect. Thus, while the proportion effect undoubtedly contributes to the disproportionate weight placed on identifiable victims, it is unlikely that it, alone, accounts for the identifiable victim effect.

#### *Implications for social welfare*

The results from these studies might appear to be somewhat discouraging. On the one hand, teaching about identifiability led individuals to donate similar amounts regardless of whether victims were identifiable or not. Hence, it at least increased people's consistency toward the two types of victims. Yet, the intervention

had a pernicious effect on overall caring, since people gave *less* after each of our interventions in the identifiable condition, but gave no more to statistical victims. Insight, in this situation, seems to breed callousness.

In some ways, this conclusion seems well founded. Faced with almost any disaster of any magnitude, it is almost always possible to think of worse things that have happened or even that are currently happening in the world. The deaths of 9/11, for example, compared with the slaughter in Rwanda, seem almost inconsequential. But the slaughter in Rwanda, in turn, is dwarfed by the problem of AIDS in Africa. Thinking about problems analytically can easily suppress sympathy for smaller-scale disasters without, our research suggests, producing much of an increase in caring for larger-scale disasters.

However, we believe that this simple interpretation is probably somewhat off the mark. A more precise account of what is going on is that, in certain situations, affective responses to victims diverge from more deliberative responses. It is possible that deliberate thinking could sometimes lead to more charity. For example, contrary to the difference between statistical and identifiable victims, we often experience little visceral sympathy for needy victims who are from other countries or of a different race or socioeconomic status, but thinking about their plight may lead us to recognize their deservingness. In such instances, we conjecture, interventions that encourage deliberate thinking like those presented in the four studies just presented might lead to greater generosity rather than less.

Some support for this is evident in a study by Skitka, Mullen, Griffen, Hutchinson, and Chamberlin (2002). In this study, participants read about a number of individuals with AIDS who differed in how they contracted the disease. For each case, participants judged whether the individual was to blame for their situation and how deserving he/she was of subsidies for drug treatment. Half of the participants performed this task while under cognitive load, thereby reducing the ability for deliberate thinking. Under cognitive load, both self-described liberals and conservatives were less likely to provide subsidies to blameworthy than to non-blameworthy individuals. Conservatives followed the pattern without load, yet, liberals provided just as much assistance to blameworthy individuals as to non-blameworthy individuals. Thus, deliberative thinking increased generosity, at least for liberals.

Other evidence that deliberation can generate affect comes from Drolet and Luce (2004). They find that cognitive load mitigates the affective turmoil of emotion-laden trade-off decisions. This suggests that affect does not always have primacy. Rather, in certain cases cognitive resources are necessary to generate affect. Future research would benefit from delineating when affect is automatic and when requires deliberation.

### A second best optimum

Improvements to social welfare could certainly be made, if dollars of aid were shifted from identifiable victims like Baby Jessica and Ali Abbas to other more desperate victims. However, it is possible that the failure to equate marginal benefits per aid dollar is still consistent with a “second best” optimum (Loewenstein, Small, & Strnad, 2006). Although the money spent on Baby Jessica and Ali Abbas could save more lives *in theory* if not concentrated as such, the absence of identifiability effects might reduce the impetus to give at all. Thus, although victim identification may distort aid allocation somewhat, its impact generates more aid than any other pitch. Charities certainly recognize this, at least implicitly, when they employ a poster child to raise money for a general cause.

### Conclusion

In sum, our results demonstrate that sympathy for identifiable victims diminishes with deliberative thought, but remains consistently low for statistical victims. This pattern holds with various manipulations of deliberative thought, including explicit debiasing interventions, providing statistics, and priming an analytic mindset.

These findings support the more general notion that certain stimuli naturally evoke more affect than others and that cognitive deliberation can undermine outcomes that typically arise when choices are made affectively. In this case, encouraging people to think about their choices had an unfavorable effect on social welfare. Future research is likely to reveal conditions in which deliberation increases generosity and yields social benefits.

### Acknowledgments

This research was supported by the Russell Sage Foundation and the Center for Integrated Study of the Human Dimensions of Global Change, a joint creation of the National Science Foundation (SBR-9521914) and Carnegie Mellon University. We thank Linda Babcock, Margaret Clark, and Jennifer Lerner for helpful comments and Jennifer Cerully and Nadia Tuma for research assistance.

### Appendix A. Statistical Victim

Food shortages in Malawi are affecting more than three million children.

In Zambia, severe rainfall deficits have resulted in a 42 percent drop in maize production from 2000. As a result, an estimated three million Zambians face hunger.

Four million Angolans—one third of the population—have been forced to flee their homes.

More than 11 million people in Ethiopia need immediate food assistance.

### Appendix B. Identifiable Victim

Any money that you donate will go to Rokia, a 7-year-old girl from Mali, Africa. Rokia is desperately poor, and faces a threat of severe hunger or even starvation. Her life will be changed for the better as a result of your financial gift. With your support, and the support of other caring sponsors, Save the Children will work with Rokia's family and other members of the community to help feed her, provide her with education, as well as basic medical care and hygiene education.

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