



# Victims of misfortune may not “deserve” help: A possible factor in victim-devaluation

Pascal Boyer <sup>a, \*</sup>, Eric Chantland <sup>b</sup>, Lou Safra <sup>c</sup>

<sup>a</sup> Dept of Psychological & Brain Sciences and Dept of Anthropology, Washington University in St. Louis, St. Louis, MO, USA

<sup>b</sup> Dept of Anthropology, Washington University in St. Louis, St. Louis, MO, USA

<sup>c</sup> Center for Political Research-CEVIPOF, Sciences Po (CNRS UMR 7048), Paris, France.

## ARTICLE INFO

### Keywords:

Victim blame  
Cooperation  
Misfortune  
Reputation  
Just world beliefs

## ABSTRACT

Why do people blame, devalue or derogate the victims of misfortune? The literature suggests general factors like a belief in a just world or a desire to distance oneself from misfortune, but the empirical results are often unclear. Here we suggest another potential factor in victim-devaluation in particular. Attitudes to victims should be seen in the context of human cooperation, as victims can be a source of costs for others and, therefore, may constitute poor potential cooperation partners. If that is the case, devaluation should be associated with a reluctance to offer help to victims. As predicted, across six pre-registered studies, we found that participants' reluctance to donate their own money (their bonus for participation), or allocate other people's money to a victim predicted the devaluation of the victim's character. Both devaluation and willingness to help were influenced by manipulating the victim's apparent competence, and the victim's concern for other people's possible costs, two crucial dimensions of cooperative potential. These results are consistent with the overall hypothesis that people's intuitions about a victim's cooperation potential are relevant to victim-devaluation.

## 1. Introduction

### 1.1. The phenomenon of victim-devaluation

We know from experience that people often blame the victims of various kinds of misfortune, e.g., assault or accident. They for instance state that the victim somehow “had it coming”, to use a common phrase, because they were reckless, did not take sufficient precautions, provoked someone to attack them, etc.

Over several decades, experimental studies also revealed the counter-intuitive phenomenon, that people often seem motivated to *devalue* or *derogate* individual victims of misfortune. In the first studies that documented this striking reaction, participants observed a confederate of the experimenters being shocked with electrodes, ostensibly as a negative reward for their wrong test answers (Lerner, 1965a; Lerner & Matthews, 1967; Lerner & Simmons, 1966). In these and many subsequent studies, participants tended to devalue the victims, e.g., finding them undesirable as a potential friend (Godfrey & Lowe, 1975), all the more so if the participants themselves were unable to help (Lerner & Simmons, 1966). Devaluation seems to be a fast, automatic response to information about misfortune (Harvey, Callan, & Matthews, 2014).

Although the phenomenon is commonly called “victim-derogation” in the early literature on the topic, we describe it as “victim-devaluation”, to mark a clear distinction between a question of character-evaluation (Does being a victim results in being devalued in the eyes of others?) on the one hand, and the question of communication (Are people motivated to tell others that you are of low value, if you are a victim?) on the other. Our studies only concerned the first question. We measured participants' evaluation of a victim's character, not their willingness to convey that evaluation to others.

Note that victim-devaluation is independent from assessments of responsibility. True, the two are often associated when experimental protocols leave open the possibility that victims could have avoided misfortune (Harvey et al., 2014; Strömwall, Alfredsson, & Landström, 2013), see survey in (Hafer & Bègue, 2005). However, in many studies, participants who could not see the victims as responsible still devalued them (Correia et al., 2012; Lerner, 1965a).

### 1.2. Current explanations of victim-devaluation

Lerner originally proposed that people generally hold a “belief in a just world” (BJW) whereby bad things mostly happen to bad people. As

\* Corresponding author.

E-mail addresses: [pboyer@wustl.edu](mailto:pboyer@wustl.edu) (P. Boyer), [Eric.c@wustl.edu](mailto:Eric.c@wustl.edu) (E. Chantland), [Lou.safra@sciencespo.fr](mailto:Lou.safra@sciencespo.fr) (L. Safra).

<https://doi.org/10.1016/j.evolhumbehav.2024.01.005>

Received 17 August 2023; Received in revised form 18 January 2024; Accepted 23 January 2024

1090-5138/© 20XX

cases of misfortune in many cases seem to clash with that assumption, people might want to preserve their belief by assuming that the victim was not a good person after all (Lerner, 1965b, 1980). After these initial studies, a large experimental literature confirmed the correlation between individual levels of belief in a just world, measured through normed instruments on the one hand and victim derogation or blame on the other (Furnham, 2003; Rubin & Peplau, 1975). However, the vast literature on BJW also produced mixed or confusing results, see (Hafer & Bègue, 2005; van der Bruggen & Grubb, 2014) for reviews.<sup>1</sup> There were also methodological issues since the Just World Belief questionnaires (Lipkus, 1991; Rubin & Peplau, 1975) included items that were very close to the statement that accident victims are bad people. Therefore, participants in a typical design were asked to a) to express their agreement with the idea that victims are generally bad people, and b) provide their estimate of how “bad” a particular victim was. In essence, one was probing the same question twice.

Another interpretation posits a mechanism of “defensive attribution”, whereby people faced with evidence of misfortune would try to maintain a belief that they have control over their lives so that such events could not possibly happen to them (Shaver, 1970; Walster, 1966). Here, too, empirical studies gave mixed and often confusing results (Burger, 1981; Dalbert, 2009; Furnham, 2003).<sup>2</sup>

### 1.3. An evolutionary perspective: Help and “deservingness”

What are the motivations that could explain a propensity to derogate victims? Previous studies in the victim-blame and victim-derogation literature did not ask participants whether one should help the victims. But potential help certainly is a relevant dimension of people's attitudes in such situations. People who experience illness, accidents, economic downturn or familial problems generally need, request and often receive help from relatives, friends and acquaintances. In collective terms, communities offer support to those afflicted by misfortune, from informal support to institutional social welfare. So the possibility and the desirability of help are certainly relevant when people learn of some individual's misfortune.

#### 1.3.1. Evolutionary context. Human cooperation and social support

Human fitness crucially depends on cooperation with genetically unrelated individuals. Two crucial features of human cooperation are relevant here. The first one is partner-choice, that is, when an agent intends to engage in some cooperative action, they can select among potential partners who may differ in capacities or dispositions (André & Baumard, 2011; Noe & Hammerstein, 1995). All else being equal, agents will select partners that promise optimal returns from collaboration. There is ample evidence that people choose partners in terms of both competence and cooperative dispositions (André, 2010; Delton & Robertson, 2012; Smith & Apicella, 2020; van Leeuwen, Park, & Penton-Voak, 2012). The second crucial feature of human cooperation

<sup>1</sup> For example, people can have very different just world beliefs about different domains of misfortune (Furnham, 2003, p. 800). Also, the correlation between BJW and victim condemnation fails to appear in many cases of violent crime, where it should be highest, as people would be most motivated to preserve their just world belief (Ash & Lira Yoon, 2019). Indeed, women with the highest BJW score are the least prone to derogating victims of rape (Kleinke & Meyer, 1990).

<sup>2</sup> One implication of the model was that people would attribute more responsibility to the victim if the misfortune was more serious, in order to maintain the belief that “this very bad thing could not happen to me”. In Burger's meta-analysis, six studies showed this effect, but fifteen did not (Burger, 1981, p. 501). The model would also suggest that participants would try to distance themselves from victims (van der Bruggen & Grubb, 2014, p. 525). But the results are mixed, as the prediction holds for sexual assault (Donovan, 2007; Grubb & Harrower, 2008) but not always in other domains (Correia et al., 2012, p. 749), casting doubt on the generality of such effects.

is reputation, the fact that each agent chooses partners on the basis of information about their past behavior (Krasnow, Cosmides, Pedersen, & Tooby, 2012). Here, human communication is crucial, as it provides agents with vastly superior information about potential partners, compared to other animals who must evaluate partners of the basis of directly witnessed interactions (Bshary & Grutter, 2005). In the small-scale societies of human evolutionary environments and also (in a different way) in modern mass-communication societies, people can easily access information about potential partners that help evaluate the potential benefits but also the costs of cooperating with them (Barclay, 2015; Delton & Robertson, 2012).

#### 1.3.2. Special features of victims as potential cooperators

Given these features of cooperation, it is relevant to consider in what way the fact that someone is the victim of misfortune would affect these appraisals of potential costs and benefits. Three considerations are relevant here:

*Victims create costs for others.* When people are victims of misfortune, they generally require social support, with direct and opportunity costs for people beyond the victim. Archeological and anthropological evidence strongly suggests that a) accidents and illness were and are a common occurrence for foragers, causing severe effects on people's productive capacities (Sugiyama & Sugiyama, 2003); b) victims of misfortune received considerable help in the form of social support, food, protection, etc. (Hill, Hurtado, & Walker, 2007). For archeological evidence that people received social support and survived bone injuries or congenital illnesses, see (Grauer, 2011; Weston, 2011). This would imply that cooperating with victims constitutes an investment whose long-term return is uncertain (as it always is), but that additionally involves an up-front, unavoidable cost.

*The victims' fate may suggest poor cooperation potential.* Victims may be seen as poor cooperation partners. To the extent that people's past performance cues provide cues to future behavior, this would trigger a motivation to avoid cooperation with them. The victims' misfortune may indicate incompetence, which would decrease their value as potential partners. It might also indicate negligence, as well as callousness in engaging in behaviors that may create costs for others, to the extent that others are required to help victims. These two factors, specific manifestations of a more general “warmth-competence” distinction (Eisenbruch & Krasnow, 2022; Wojciszke, 2005), would probably have a different impact on help to victims, as incompetence may be domain-specific (so that there could still remain some cooperation potential in that person), whereas low concern for others would be seen as relevant to cooperation in many different domains.

*Helping victims contributes to one's own cooperation reputation.* Despite the previously mentioned reasons to avoid cooperation with victims, the fact that social support for victims is widespread in human societies would suggest that, under specific circumstances, some fitness benefits offset the various costs of social support. Individuals may help, not in the expectation of reciprocation, but as a way of communicating to third parties their willingness to be generally generous cooperators. A motivation to help those in need makes sense in a species where cooperation is based on reputation with a long horizon for future cooperation, and could also signal that the helper has abundant enough resources to be a desirable partner (Sugiyama & Sugiyama, 2003; Tooby & Cosmides, 1996).

### 1.4. The present studies: Devaluation and reluctance to help

In the present studies, we tested some implication of the cooperation perspective. If devaluation is motivated by a desire to distance oneself from possible cooperation with a victim, then we should expect a direct correlation between a) people's reluctance to provide help for victims and b) their tendency to derogate the victim. We considered the voluntary donation a fairly clear indication of the participants' view of

the victim as a cooperation partner, in the sense that, all else being equal, people would not want to help those who are unlikely to reciprocate. The second measure, about the victim's character, is a standard measure of what is called victim devaluation in the literature, see for instance (Lerner, 1965a). To the extent that victims as seen as poor cooperation prospects, participants would be reluctant to offer help to the victims, since such offers (in general) suggest that the recipient of help is “deserving” (Petersen, Sznycer, Cosmides, & Tooby, 2012), i.e. is a potential cooperator (Delton & Robertson, 2012).

In these studies, we asked participants to contribute some of their own money to helping people like the victim of this accident (studies 1–4) or to provide direct help to that victim (study 5). In studies 1–2, these were presented as real, not hypothetical donations from our participants, and in study 3 the donation was actually taken from the participants' bonus. So, the protocol in effect asked the participants whether people like the victims described were worth helping, which should be directly affected by the participants' estimate of that person's potential as a cooperator. Second, we asked participants to evaluate the victim's character, as well as other features of the situation. Derogating victims, in such a context, might indicate either simple self-interest, or a combination of self-interest with the representation of the victim as not “deserving” of help. In addition, study 4 measured the effect of donations given from our lab rather than the individual's own funds. So we checked whether the correlation of devaluation and help to victims would persist, when the participants are not asked to bear the costs of such help.

In these first four studies, we used vignettes that presented victims in a way that was ambiguous, so that the participants' reactions could vary as regards the character of the victim. For instance, we presented individuals whose possible negligence caused some disaster – e.g., not monitoring a frying pan leads to a kitchen fire, but negligence might be a rare occurrence in that persons' behavior, or it may stem from habitual carelessness. Also, these individuals' misfortune resulted in serious hardship for other people – e.g., the kitchen fire left them with such injuries, and, therefore, their parents will have to work extra jobs to help them with medical bills. But, again, this is ambiguous as the victim might genuinely need that help, or they may just have exploited their family's generous dispositions. By contrast, in study 5, we systematically manipulated two factors that would be crucial to cooperation motivations, namely, whether the victim was competent or not, and whether they show concern for other people's interests.

As mentioned above, people's evaluations of a victim of misfortune in terms of future cooperation could be affected both by perceived competence (the person was not capable of carrying out the task) and by cooperative dispositions (did the victims consider that their own costs could create costs for others?). In study 5, we explored the effects of these two factors on our participants' judgments about the victims' character and potential for future cooperation.

Although we also asked participants to attribute possible “blame” to the victim, our predictions focused on the question of character, which was at the origin of this literature, and is conceptually clearer than that of blame (see comments in General Discussion below). The inclusion of a blame question in our studies also helped clarify the process involved in motivating devaluation. If participants find victims undesirable cooperation partners, they would be motivated to derogate them and deny them their help. But that would not predict a specific effect on blame. If on the other hand victim-devaluation is part of a general negative “halo effect” on the victim, then blame and devaluation should be systematically correlated.

## 2. Study 1

### 2.1. Rationale

In this exploratory study, we aimed to evaluate the extent to which experimental participants' willingness to help victims of an accident would correlate with their judgments about the character of that victim. Participants were presented with a vignette describing a victim whose misfortune created costs for others, e.g., a person whose negligence led to a kitchen fire, and heavy medical bills for both the victim and their family. We then asked the participants whether they would contribute part of their promised bonus to a charity that specifically helps people like the victim. We measured participants' voluntary donation as well as their estimates of the victim's character.

### 2.2. Methods

#### 2.2.1. Pre-registration, IRB and data deposit

The study design and planned analysis were pre-registered with the Open Science Foundation, 1/9/2023 at <http://osf.io/dxbav>. The data and registered analyses are deposited at <http://osf.io/mhkya> (study Blame23). The study was approved by the Washington University in St. Louis Human Subjects Committee.

#### 2.2.2. Participants

We estimated an optimal sample size using G\*Power software (<http://www.gpower.hhu.de/>) with these parameters: 0.90 power,  $\alpha = 0.05$  (two-tailed) for a small predicted effect size of 0.15, which would require that  $N > 374$ .

We recruited 428 participants in the US, using the Amazon MTurk platform, all 18+ years old, all native English Speakers. Of these, 425 successfully answered attention questions (see description in Procedure below). Only these participants' responses were used in our analyses. Of these 425 participants, 230 identified as men, 192 as women and 3 as other, 345 self-identified as White-Caucasian and 80 as other ethnicities. Age ranged from 21 to 78,  $M = 42.9$ .

#### 2.2.3. Materials

The materials consisted in two vignettes, presented as newspaper stories (complete materials in Online Supplementary Materials, section 1). In one story, a person was listening to music as she walked across a street and was hit by a van. In the other one, a hiker went walking into a forest without asking the locals about bear presence and was attacked by a bear. The two stories concluded with the same passage emphasizing the costs to others: “[His/]Her family will have to pay for her medical bills. This is a disaster for [his/]her family, as [his/]her parents had planned to retire this year. Now they will go back to work and [his/]her brother will take an extra weekend job, to help pay the bills.”

#### 2.2.4. Design and procedure

Participants were randomly assigned to one of the two stories. After reading the consent form, participants were [1] invited to read the newspaper story at their pace. They had to [2] answer several attention questions about the story, a) Was that a serious accident?, b) Did the victim survive?, c) Will the victim need help? (Participants who had more than one wrong answer were excluded from further analyses). There followed [3] a donation request, with this text:

“Thanks for providing the right answers to the survey questions. There is a 50¢ bonus for these right answers. To help people like Brophy who will have difficulty paying expense medical bills, our Psychology Lab has decided that we should contribute to the Missouri Medical Bills Charity. You too can help us! You can donate part of your bonus payment today to our Charity Fund. You can donate part of your bonus. Choose how much to give by moving the cursor below, from 0 to 50¢. Thank you!”

[4] Participants were presented with two statements and one question. They were asked for agreement, on a 1–7 Likert scale, with the statements a) “[name] is to blame for what happened”, and b) “[name] could have avoided that accident, by being more responsible”. The question was c) “What is your opinion on [name]’s character?” with answers on a 1–7 Likert scale, from “totally negative” to “totally positive”. [5] Participants then provided demographic information and read the debriefing form. Note that participants were reminded but not required to answer every question given to them. Therefore, subsequent analyses were sometimes run using partial responses.

### 2.3. Results

#### 2.3.1. Range of donations

Donations ranged from 0 (minimum possible) to 50 (maximum possible),  $M = 14.33$ ,  $SD = 18.48$ , see breakdown in Table 1.

#### 2.3.2. Association between donation and judgments about the victim

We measured the association between the absolute level of money donated and the different ratings on the victim by conducting pre-planned bivariate correlations of donation amount on character, blame, and avoidance. See breakdown in Table 2. As per pre-registered design, we also computed a “Fault” variable adding the blame and evitability score.

In an non-preregistered analysis, we also measured a negative correlation between character and blame,  $R^2 = 0.042$ ,  $t(421) = -4.309$ ,  $p < .001$ . For all bivariate correlation between dependent variables as well as analysis for extraneous variables like sex and age, see supplementary materials (see OSM, section 1).

### 2.4. Discussion

In this exploratory study, we observed the expected correlation between level of voluntary donation and estimates of character. Note that there seemed to be no association between donation levels and blame. Although the different judgments (i.e., blame and character) about the victim correlated with each other, which could suggest a halo effect, the reluctance to help was only related to participants’ estimate of their character, consistent with a specific association between victim devaluation and willingness to cooperate with them.

However, conclusions should be tentative as most donations occurred at three distinct levels (0, ~50% and 100%). Also, we had no clear prior evidence how the vignettes used would influence participants’ impressions of undesirable character traits. We designed further studies to address these issues.

**Table 1**

Study 1. Mean victim ratings and donations to victims as % of possible maximum, (SEM).

Story	Character	Blame	Evitability	Donation (%)
Bear attack	5.196 (0.073)	2.471 (0.118)	3.636 (0.128)	28.242 (2.528)
Car accident	5.005 (0.072)	3.233 (0.124)	4.394 (0.114)	29.065 (2.562)

**Table 2**

Study 1. Correlation between victim-ratings and voluntary donation.

	$R^2$	$t$	$p$
Character	0.06	$t(419) = 5.194$	$< 0.001$
Blame	0.001	$t(417) = -0.608$	0.544
Evitability	0.001	$t(419) = -0.79$	0.43
Fault	0.001	$t(417) = 0.776$	0.44

## 3. Study 2

### 3.1. Rationale

The point of this study was to replicate the effects of Study 1 with more appropriate materials. To provide those, we ran a pre-test of very short descriptions of situations, asking participants to rate them in terms of negligence. This pre-test is described in Supplementary Materials (see SOM section 2).

From this pre-test, we selected four stories with high negligence ratings and presented them in the same design as in Study 1, save for one modification. As the donations in the previous study tended to “bunch up” at the 0, 50% and 100% levels, we replaced the slider with a forced choice between six possible values for the participant’s donation, which did not include a 50% point. All other design features were identical to the previous study.

### 3.2. Methods

#### 3.2.1. Preregistration, review board, data registry

The study design and planned analyses were pre-registered with the Open Science Foundation, 1/9/2023, <https://osf.io/hnxz5>. The data and registered analyses are deposited at <https://osf.io/mhkya> (study Blame24). The study was approved by the Washington University in St. Louis Human Subjects committee.

#### 3.2.2. Participants

We recruited 431 English speaking US residents from Amazon mTurk. Among these, 391 participants answered the attention questions correctly, ranging in age from 20 to 72,  $M = 35.58$ . There were 173 women and 218 men, and 53 of these identified as non-white.

#### 3.2.3. Materials

We used four different vignettes (see details in SOM, section 3), presented as genuine newspaper stories, describing situations in which a person’s negligence had caused some misfortune (e.g., texting while driving, leaving a gun unsecured), which then created costs for the victim’s family (helping to pay compensation or medical bills).

#### 3.2.4. Design and procedure

These were identical to Study 1, except that participants were offered six forced-choice alternatives for the donation level, at 0¢, 15¢, 25¢, 35¢, 45¢ or 60¢, out of a 60¢ bonus.

### 3.3. Results

#### 3.3.1. Donation levels

The overall ratings and donation levels for all four stories are summarized in Table 3 below.

#### 3.3.2. Correlation of donation amount and judgments about the victim

We measured the association between the absolute level of money donated and the different ratings on the victim by conducting planned

**Table 3**

Study 2. Victim evaluation and donation levels for each story (SEM).

Story	Character	Blame	Evitability	Donation %
Camping	5.337 (0.111)	5.375 (0.121)	5.933 (0.112)	56.26 (3.628)
Car	5 (0.147)	5.337 (0.156)	5.843 (0.114)	50.157 (3.755)
Gun	5.19 (0.129)	5.596 (0.095)	5.96 (0.098)	53.356 (3.688)
Kitchen	5.312 (0.124)	5.573 (0.125)	5.99 (0.119)	52.24 (3.708)



bivariate correlations of donation amount on character, blame, and avoidance. See Table 4 for breakdown.

In a non-preregistered analysis, in a contrast from the previous study, we measured a positive correlation between character and blame,  $R^2 = 0.01$ ,  $t(384) = 1.981$ ,  $p = .048$ . For all bivariate correlation between dependent variables as well as analysis for extraneous variables like sex and age, see supplementary materials (see SOM section 4).

### 3.4. Discussion

Using pre-tested materials, more reliable in their negligence ratings than in Study 1, the present study provides similar results and additional support for the notion of victim-devaluation explanations as correlated with a motivation to avoid helping victims.

Strikingly, this study also confirms the finding that the level of voluntary donation was not associated with either the “avoid” variable or on “blame” judgments. Note that the avoid variable may be ambiguous. Asking participants whether the victim “could have avoided” that accident may lead some participants to focus on the material process (e.g., whether oil in a pan will catch fire) rather than on the victim's behavior. As for blame, the result would confirm that the level of cooperation expressed in donation amounts are indeed specifically tied to victim devaluation, rather than to a generally negative impression of the victim – see General Discussion.

## 4. Studies 3a and 3b

### 4.1. Rationale

Previous studies showed that the participants' estimate of the victim's character correlated with the amount of money those participants donated. One may object that some participants familiar with psychology experiments may not have believed that the deduction from their bonus would be real and that this disbelief influenced the correlation between donation and victim-devaluation. Indeed, if there is nothing at stake, being charitable to “worthy” victims is simple and cost-free. So, we ran a replication of Study 2, in which we provided additional emphasis that the deduction from their bonus payment would actually occur.

### 4.2. Methods, study 3a

#### 4.2.1. Registration, IRB and data registry

The study was pre-registered with the Open Science Foundation, <https://osf.io/2g6qy>. The data and registered analyses are deposited at <https://osf.io/mhkya> (study Blame26A). The study was approved by the Washington University in St. Louis Human Subjects committee.

#### 4.2.2. Participants

We recruited 440 English speaking US residents from Amazon mTurk. Among these, we excluded 40 participants who failed the attention test (see procedure below). The remaining 400 participants ranged in age from 21 to 70,  $M = 35.5$ . There were 130 women, 268 men and 2 identified as other, and 43 of these identified as non-white.

**Table 4**  
Study 2, test of correlation between victim evaluation and donation.

	$R^2$	$t$	$p$
Character	0.129	$t(386) = 7.564$	$< 0.001$
Blame	$< 0.001$	$t(385) = -0.188$	0.851
Evitability	0.001	$t(388) = -0.669$	0.504

### 4.2.3. Materials, design and procedure

The procedure was identical to Study 2, save for the following modifications. The consent form emphasized that the donation was real, and that the donated amount would indeed be subtracted from the participant's bonus. Also, the donation question (how much of his or her bonus the participant wishes to give away) listed the choices as “x for me, y for charity”, e.g. “15¢ for me, 45¢ for charity”. The participants were also reminded of their donation level before the victim evaluation questions, e.g., “Your choice was x for me and y for charity”.

## 4.3. Results

### 4.3.1. Donation levels

The overall ratings and donation levels for all four stories are summarized in Table 5 below.

### 4.3.2. Association between donation and judgments about the victim

We measured the association between the absolute level of money donated and the different ratings on the victim by conducting pre-planned bivariate correlations of donation amount on character, blame, and avoidance, see Table 6.

In a non-preregistered analysis, there was no significant correlation between character and blame,  $R^2 = 0.005$ ,  $t(396) = 1.444$ ,  $p = .15$ . For all bivariate correlation between dependent variables as well as analysis for extraneous variables like sex and age, see supplementary materials (section 5).

### 4.3.3. Additional tests. Effect of belief

A majority of participants espoused believing that the donations would really be taken from them based on their selection ( $M = 3.957$ , close to “somewhat yes”). In essence, participants believed their donations would come at a cost which would benefit another person. Controlling for belief, donation no longer predicted character evaluations  $\beta_1 = 0.315$ ,  $SE = 0.202$ ,  $t(395) = 1.559$ ,  $p = .12$  instead showing belief as a positive predictor of character  $\beta_2 = 0.183$ ,  $SE = 0.063$ ,  $t(395) = 2.914$ ,  $p = .004$ . This effect likely stems from the fact that the correlation of donation level and character was weak enough that adding a factor made it non-significant.

### 4.4. Study 3b, replication of study 3

As the results of study 3a, compared to those of studies 1 and 2, showed a weaker association, we conducted a straight replication of this study. Our assumption was that the effect shown in 3a was spuriously low compared to study 1 and 2 due to random chance. Therefore, we were interested in replicating the study to see if the effect was con-

**Table 5**  
Study 3. Mean victim evaluation and donation levels by story (SEM).

Story	Character	Blame	Evitability	Donation %
Camping	4.972 (0.117)	5.404 (0.108)	5.78 (0.1)	32.128 (3.188)
Car	5.242 (0.128)	5.429 (0.135)	5.677 (0.126)	27.96 (3.181)
Gun	4.78 (0.155)	5.69 (0.13)	5.87 (0.124)	28.54 (3.186)
Kitchen	5.055 (0.11)	5.359 (0.136)	5.791 (0.117)	29.75 (3.315)

**Table 6**  
Study 3. Correlation of victim evaluation with donation level.

	$R^2$	$t$	$p$
Character	0.01	$t(397) = 2.027$	0.043
Blame	0.004	$t(397) = -1.279$	0.202
Evitability	0.005	$t(397) = -1.442$	0.15

sistent. The data and registered analyses are deposited at [https://osf.io/mhkyA/?view\\_only=881316044ca8496ea1c0730c66a208bb](https://osf.io/mhkyA/?view_only=881316044ca8496ea1c0730c66a208bb) (study Blame26B).

#### 4.4.1. Participants

We recruited 504 English-speaking US residents from the MTurk platform. Among these, we excluded those who failed the attention test (see procedure below). There remained 384 participants, age ranging 20 to 72,  $M = 33.7$ . There were 172 females and 212 males, and 41 identified as non-white minorities.

#### 4.4.2. Materials, design and procedure

Identical to study 3a.

#### 4.4.3. Results

Table 7 below summarizes average ratings and donation levels.

Table 8 below summarizes the correlations between victim ratings and donation levels. In contrast to studies 1, 2 and 3a, there was no significant correlations in this study. (Bivariate correlations are indicated in supplementary materials, section 6.1.3.)

#### 4.5. Discussion, studies 3a and 3b

Study 3a showed the same pattern as the previous studies. Again, we found that, across the various situations described, participants' donations correlated with their estimates of the victims' character, but not with blame or the possibility of avoiding misfortune. Emphasis on the fact that donations were real, and would be actually deducted from the participants' bonuses, did not change that pattern. The mean donation level was lower than in previous studies, as was the correlation coefficient between character ratings and donation level.

An attempted replication of this study failed to produce significant results. There is no straightforward explanation for this difference. The participants in 3a and 3b were recruited from same online platforms, and we have no evidence for a general difference between the populations recruited.

### 5. Study 4

#### 5.1. Rationale

Overall results so far suggested a correlation between donation to the victim and estimates of the victim's character, which could be interpreted as effects of the participants' appraisal of the victim as a potential cooperation partner. However, these results are also compatible with a more direct association between the two dependent variables, as

**Table 7**  
Study 3b. Average victim ratings and donations, by story.

Story	Character	Blame	Avoidable	Donation %
Camping	5.515 (0.122)	5.495 (0.147)	5.737 (0.127)	38 (3.537)
Car	5.221 (0.144)	5.537 (0.13)	5.674 (0.135)	26.074 (3.042)
Gun	5.489 (0.126)	5.606 (0.108)	5.809 (0.102)	35.128 (3.77)
Kitchen	5.223 (0.139)	5.625 (0.109)	5.625 (0.133)	26.948 (2.702)

**Table 8**  
Study 3b. Correlations between victim ratings and donation.

	$R^2$	$t$	$p$
Character	0.004	$t(380) = 1.19$	0.24
Blame	0.01	$t(382) = 1.95$	0.052
Evitability	0.004	$t(382) = 1.26$	0.21

participants may be simply motivated to avoid costs for themselves, and then to justify a non-donation by claiming that the victim was somehow not deserving.

To adjudicate between these two interpretations, we tested a modified design, in which the request for cooperation was maintained, but at no direct costs to the participants. Specifically, we told participants that our lab would contribute some extra money to a charity to help people like the victim, but we asked them to tell us what level of donation would be appropriate. If previous results were driven by self-interest, participants should be indifferent to the victim's character. If the partner evaluation systems were involved in previous results, they would still be activated, and result in the same correlation as before between donation and character estimates.

#### 5.2. Methods

##### 5.2.1. Pre-registration, IRB, data repository

This study was pre-registered at <https://osf.io/wv8zs>. It was approved by the Washington University in St. Louis Human Subjects committee. The data and registered analyses are deposited at <https://osf.io/mhkyA>. (study Blame25).

##### 5.2.2. Participants

We recruited 390 English-speaking US residents from Amazon mTurk. Among these, we excluded 30 participants who failed the attention test (see procedure below). The remaining 358 participants ranged in age from 20 to 69,  $M = 36.4$ . There were 191 women and 167 men, and 36 of these identified as non-white.

##### 5.2.3. Materials

These were identical to Study 3a and 3b.

##### 5.2.4. Design and procedure

These were identical to study 3a and 3b, with one exception. The question about a possible donation from the participant was replaced with this text:

“Thanks for providing the right answers to the survey questions. You have read the account of S. Clarkson who will have difficulty paying expense medical bills. To help people like that, our Psychology Lab has decided that we should contribute to the Missouri Medical Bills Charity. Each time someone participates in our study, we pledged to donate some of our money to that charity. How much do you think we should contribute to help people like S. Clarkson? Choose how much we should give, by choosing an option below, from 0 to 60¢.”

#### 5.3. Results

##### 5.3.1. Donation levels

The overall ratings and donation levels for all four stories are summarized in Table 9 below.

**Table 9**  
Study 4. Average victim-ratings and donation levels by story (SEM).

Story	Character	Blame	Evitability	Donation %
Camping	5.436 (0.12)	5.453 (0.147)	5.957 (0.123)	65.242 (2.677)
Car	5.205 (0.149)	5.299 (0.143)	5.659 (0.138)	64.716 (2.742)
Gun	5.1 (0.13)	5.303 (0.136)	5.744 (0.107)	63.289 (3.073)
Kitchen	5.071 (0.152)	5.565 (0.121)	5.881 (0.112)	63.212 (2.625)

5.3.2. Association between donation amount and judgments about the victim

Table 10 below summarizes the bivariate correlations of donation amount with character, blame, and evitability ratings.

In an non-preregistered analysis, we measured a positive correlation between character and blame,  $R^2 = 0.051$ ,  $t(353) = 4.354$ ,  $p < .001$ . For all bivariate correlation between dependent variables as well as analysis for extraneous variables like sex and age, see supplementary online materials (SOM section 7).

5.4. Discussion

The results replicate the effects observed in previous studies (1,2,3) as donation levels correlated with character estimates, but not with blame or evitability. This similarity with previous studies is remarkable, as we changed one crucial element of our design, and asked participants to evaluate appropriate donations from a third-party (our lab) rather than themselves. Unsurprisingly, donation levels in this study were higher than in the previous ones, as participants were more generous with our money than their own.

This recurrent correlation suggests that, in these different studies, the participants' character estimate is linked to their consideration of the victim as generally deserving of help, whether or not they themselves are invited to provide that help.

6. Study 5

6.1. Rationale

The aim of study 5 was to assess the contribution to victim-devaluation of two factors mentioned in introduction, the victim's perceived incompetence and willingness to create costs for others. In the stories used in studies 1–4, the implications of the victim's behavior were left to the participants' interpretation. In the cases we described, people may have been accidentally negligent, e.g., texted while driving that one particular time, or negligence may be a character trait, e.g., they would always do it when convenient. In the same way, the fact that negligence created costs for others may be interpreted as morally repugnant (the victim is not concerned about the fact that her behavior costs others dearly) or not (the victim regrets creating those costs for others).

That is why, in study 5, we systematically manipulated these two factors, competence (the victim embarked on a task that she knew / did not know how to carry out) and concern (the victim was concerned / not concerned that her behavior could create costs for others). We used two situations from the previous studies (fixing someone's computer, taking a group on a mountain trek) and described the main character as clearly competent or not (he's done it before with / without success) and concerned or not (he demonstrates that he wants to avoid / does not care about potential costs for others).

The design of this study also allowed us to address two possible ambiguities about the previous results. Studies 1–4 described a single individual, asked questions about him or her, but we then asked participants to contribute to helping "people like" the victim we had described. The formulation may be of interest when considering the implications of misfortune for people's perceptions of general norms or policies, but it might have led some participants to dissociate help from

**Table 10**  
Study 4. Correlations of victim ratings and donation levels.

	$R^2$	$t$	$p$
Character	0.041	$t(355) = 3.913$	$<0.001$
Blame	0.009	$t(354) = 1.801$	0.072
Evitability	0.001	$t(354) = 0.482$	0.63

judgments. To address this potential problem, in this study we only used questions about direct help for the person in question.

Finally, this modified designed included two questions about possible future cooperation with the victim, a) whether they would like to have that person as a work colleague, and b) whether they would like to associate with that person in organizing some event. These were added to the questions used in the previous studies, concerning victim's character, blame, and possible help to the victim.

6.2. Methods

6.2.1. Pre-registration, IRB and data deposit

The design and analysis plan were pre-registered at <http://osf.io/vc5yg>.

The data and registered analyses are deposited at <https://osf.io/mhkya> ("study Blame100"). The study was approved by the Washington University in St. Louis Human Subjects committee.

6.2.2. Participants

With a target N of 640, we recruited 750 participants from Prolific.com, all of them 18 or over and US residents. Among these, we excluded those who failed the attention test (see procedure below). There remained 732 participants, 329 females, 393 males and 10 who identified as other. For ethnicity, 174 of participants identified as non-White minorities. Participants' age ranged 18 to 77,  $M = 38.02$ .

6.2.3. Materials

The two vignettes described a computer repair and a mountain trek. In both stories, the operation failed, with serious costs for the main character (the "victim") and lesser costs for the other people involved (see complete stories in SOM, section 8). The main character was described as competent or not, e.g., "He does it often and so far has avoided getting into any difficult situations, as he is a trained guide and ranger" vs. "In the past he has often been caught in mud slides or small avalanches, as he is not a trainer guide or ranger". The main character was also described as concerned about others or not, e.g., "He says 'I always take extra precautions. I don't want people to run into danger in the mountains'", vs. "He says 'There's always a risk. But if people decide to hike here, it is at their peril'."

6.2.4. Design and procedure

We varied three factors between subjects, namely, Story (mountain, computer), Concern (concerned, unconcerned) and Competence (competent, incompetent) in a 2\*2\*2 design. Participants were randomly assigned to one of these eight cells.

After reading a consent form, the participants first answered two attention or "catch" questions. Participants had to get both questions correct in order to be included in the analysis and given the 40 cent bonus.

We then asked two manipulation check questions, assessing whether the participants saw the character as competent/incompetent, and as concerned/ unconcerned with others, as intended in our manipulation.

There followed a series of dependent variable questions:

- [CHAR] What is your impression of this person's character? [1–7 from totally negative → totally positive].
- [BLAME] Do you think this person is to blame for what happened? [1–7 Likert scale, from "absolutely yes" to "absolutely no"].
- [CONTRIB] Would you be willing to help someone like that, with your own money? [1–7 Likert scale, from "absolutely yes" to "absolutely no"].
- [COOP1] Would you like to have this person as a member of your team at work? [1–7 Likert scale, from "absolutely yes" to "absolutely no"]

5. [COOP2] Would you like to collaborate with this person, e.g., to organize a picnic, a charity event? [1–7 Likert scale, from “absolutely yes” to “absolutely no”].

This was followed by debriefing.

### 6.3. Results

#### 6.3.1. Descriptives

Table 11 below summarizes the descriptive statistics. We combined the two cooperation questions (COOP1 and COOP2) into a single “Cooperation” judgment, as the results to the two questions were highly related, achieving a 0.909 Cronbach alpha, far above the threshold of 0.7 stipulated in pre-registration. The differences in ratings between the two stories (computer and mountain trek) are described in SOM, section 8.2.1.

#### 6.3.2. Analysis

**6.3.2.1. Manipulation checks.** Are competence and concern identified as such? We conducted two-way ANOVAs to check whether participants judged the main character of the story as competent / incompetent, and concerned / unconcerned, as predicted. Both manipulated factors affected the subjects' judgments in the predicted direction, both  $p < 0.001$ . (See details in SOM, section 8.1.1).

**6.3.2.2. Correlations between judgments.** In keeping with the previous studies, there was a positive correlation between the participants' evaluation of the victim's character and their willingness to help him or her,  $R^2 = 0.389$ ,  $t(730) = 21.54$ ,  $p < .001$ .

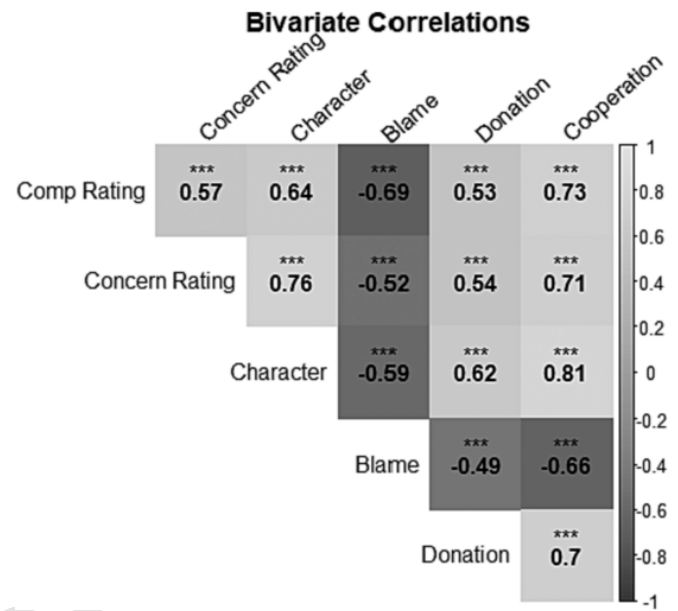
As per pre-registration, we conducted a series of regression analyses to elucidate the relations between judgments. [1] A linear regression showed that contribution/donation positively predicted cooperation ratings,  $R^2 = 0.496$ ,  $t(730) = 26.80$ ,  $p < .001$ . [2] A linear regression showed that character positively predicted cooperation ratings,  $R^2 = 0.664$ ,  $t(730) = 37.98$ ,  $p < .001$ . [3] A linear regression showed that contribution/donation positively predicted cooperation ratings,  $R^2 = 0.496$ ,  $t(730) = 26.80$ ,  $p < .001$ .

A correlogram (Fig. 1) summarizes the bivariate correlations between manipulation and dependent variables. Note that the numbers within each box are the “r” effect size and can be positive or negative.

**6.3.2.3. Effects of independent variables.** The main analysis of interest was determining if altering perceived competence and concern of an individual affects their status as a worthy contributor and onlookers' willingness to help said individual. We ran a MANOVA using Concern and Competency as factors predicting Character, Cooperation, Contribution/Donation, and Blame. First, 4 outliers were found and removed. Afterwards, a Box's M-test for Homogeneity of Covariance Matrices was conducted and was significant ( $p = .001$ ) indicating that there was heterogeneity of variance. A MANOVA using the Pillai test statistic showed that there was a main effect of Concern ( $F [4721] = 32.207$ ,  $p < .001$ ) and Competency ( $F [4, 721] = 79.72$ ,  $p < .001$ ) on the Character, Cooperation, Donation, and Blame. How-

**Table 11**  
Study 5, average ratings for the four dependent variables, broken down by condition in the 2\*2 design (SEM).

		Character	Donation	Blame	Cooperation
Competent	Concerned	5.321 (0.08)	4.152 (0.104)	3.592 (0.11)	4.81 (0.087)
	Unconcerned	4.391 (0.105)	3.522 (0.113)	3.935 (0.14)	3.929 (0.113)
Incompetent	Concerned	3.967 (0.107)	3.044 (0.116)	5.33 (0.095)	3.146 (0.105)
	Unconcerned	3.044 (0.085)	2.522 (0.097)	5.39 (0.101)	2.288 (0.082)



**Fig. 1.** Study 5, table of correlations between dependent variables. Numbers within squares indicate effect size while shade indicates directionality. P values: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

ever, there was no interaction between Competency and Concern ( $F [4, 721] = 0.417$ ,  $p = .797$ ). This shows that an individual's perceived competency and concern separately devalues them and affects onlookers' willingness to help. See Fig. 2 for mean differences for each dependent variable of interest. For specific pairwise comparisons, See details in SOM, section 8.1.4.

### 6.4. Discussion

Study 5 results confirm the association between character evaluation (devaluation) and willingness to offer help to a victim, already observed in studies 1–4. The design allowed us to evaluate the connection between willingness to help and other aspects of cooperation, which was assumed in studies 1–4 but not directly examined. The results suggest that participants' donations are indeed correlated to whether they see the victim of misfortune as a potential partner for cooperation, in work or informal settings.

The design also allowed us to evaluate the effects of two crucial dimensions of cooperation, perceived competence and perceived concern for other individual's costs. The manipulated variables did affect participants' judgments of the victim's character in the predicted direction. One would expect such effects from the extensive literature on impression formation and cooperation, but this study shows that these factors also contribute to evaluation of character and willingness to help the victim of misfortune.

## 7. General discussion

### 7.1. Summary of results

In these pre-registered studies, we presented participants with imagined scenarios describing a case of misfortune. We hypothesized that, consistent with the cooperative interpretation of victim-devaluation, estimates of a victim's character would be correlated with the evaluator's motivation to accept costs in order to help the victim. We asked participants to evaluate the victim's character, but also the extent to which he or she was to blame for what happened, and whether he or she could have avoided that misfortune by doing things differently. In studies 1–3, we also asked participants to contribute a voluntary dona-



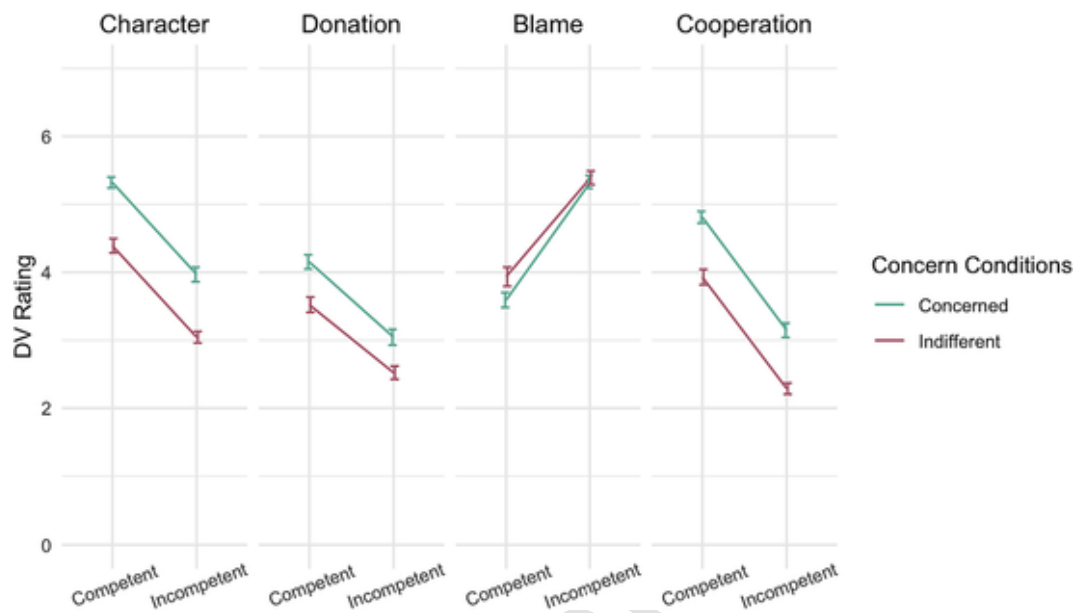


Fig. 2. Study 5, main effects of competency and concern factors on mean dependent variable ratings.

tion to a charity that helped people like the victim, by sacrificing some amount of their bonus for participation. In study 4, the donation was supposedly coming from our lab, but the participant was asked to tell us what the appropriate amount would be.

In study 5, we also manipulated the perception of the victim in terms of both competence and concern for others. If people's evaluation of a victim's character is linked to cooperation, it should be affected by two factors that are known to modify the value of a prospective cooperator, namely their competence and their concern (often glossed as “warmth”). As a further test of the cooperative model, we asked participants to evaluate whether they would consider interacting with the victim, as a work colleague or as a partner in some collective action.

A central result is that we observed a significant correlation between character estimate of the victim (that is, victim-devaluation) on the one hand, and reluctance to contribute towards helping the victim, on the other. This held in studies 1, 2, 3a and 5, when participants considered giving their own resources, but also in study 4, when they allocated a third-party's money. In study 5, both variables of competence and concern had significant effect on judgments about victim's character, but also the participants' willingness to help the victim.

To quantitatively assess the robustness of the effects across our four studies, we conducted an internal meta-analysis on the pre-registered correlations. We first transformed the correlation coefficients into effect-sizes and then conducted our meta-analysis using the *metafor* R package (Viechtbauer, 2010). Our meta-analysis suggested that the correlation between character evaluations and donations was overall significant across our six studies, while the correlations between donations and blame and evitability ratings were not statistically significant across our four studies (Table 12). These results confirmed the specific

Table 12  
Meta-analysis.

	Estimate	SE	z-value	p
Character	0.34	0.10	3.32	<0.001
Blame	-0.07	0.09	-0.81	0.419
Evitability	-0.01	0.02	-0.38	0.702

Regression coefficients of the association between donations to the victim and ratings of victim's character, blame and evitability, computed across six studies (Studies 1, 2, 3a, 3b, 4 and 5).

association between donation levels and evaluations of victims' character.

### 7.2. Relevance to the cooperation-based model

These studies were motivated by a novel model of victim-devaluation, from the general perspective of cooperation and partner-choice (Baumard, André, & Sperber, 2013; Delton & Robertson, 2012). The model specifies that people may see the victims of misfortune as poor cooperation prospects, notably as their misfortune may suggest incompetence, or indifference to creating costs for others.

The present studies did not directly test the model, but only some of its implications.

The first, crucial implication is that the model would predict a strong association between derogating the victim, on the one hand, and being unwilling to help them (that is, see them as potential cooperation partners), on the other. Our results support that conjecture.

By contrast, there was not always a correlation between donation levels and the other two questions concerning the victim: whether they were to blame or whether they could have avoided the accident. If our participants' impression of the victims created a general “halo”, for instance an overall negative impression, we would expect the scores on character to be systematically correlated with those on blame in particular. But that was not always the case. The correlation was negative in study 1, positive in studies 2, 4 and 5, and non-significant in studies 3a and 3b. Overall, the correlation was not significant in our meta-analysis (see above). This would suggest, first, that our participants focused on character but did not always form a general impression of the victim; second, that “blame” may be a more complex concept than is sometimes assumed in the literature, see section 6.3 below.

The second implication of the model is that victim devaluation would be influenced by perception of the victim as either incompetent or careless (in particular, careless about the possible costs created for others). These two factors are crucial in assessing the value of potential cooperators (Eisenbruch & Krasnow, 2022). Our study 5 results suggest that, consistent with previous results, both factors matter to people's willingness to help the victim, and, consistent with our model, both factors matter to victim-devaluation.

However, note that the previous literature on cooperation suggests that “warmth” (that is, a general disposition to offer fair, mutually advantageous cooperation) matters more than competence (Eisenbruch &

Krasnow, 2022), in modern industrial places (Cottrell, Neuberg, & Li, 2007) as well as foraging communities (Smith & Apicella, 2020), which makes sense as (in)competence may be domain-specific, while cooperative dispositions would affect all domains of cooperation. In contrast with this general conclusion, our results suggest that competence mattered more than concern (an equivalent of “warmth” in the context of our vignettes) – see analysis in SOM, section 8.1.3. The specific situations described in our studies may explain this. Our participants were asked to evaluate people they would never meet. Indeed, competence matters as much as, or more than warmth for distant social relations (Abele & Brack, 2013).

### 7.3. Connections between devaluation and “blame”

Why devalue victims? Beyond testing the general models (Just World belief for instance), the literature so far also explored many additional factors that may contribute to that motivation, for instance, the fact that victim-devaluation could boost one's prior beliefs (Lambert, Burroughs, & Nguyen, 1999) or one's feeling of group identity (Correia et al., 2012).

Here we focused on another factor, the fact that judging victims in a particular manner could be seen in the context of the potential interaction between the victim and the person making that judgment.

We found a clear correlation between help and devaluation, but not with blame. In the literature, the questions of victim-devaluation and victim-blame are often associated or even confused. There is, however, no clear model of the relations between these two aspects of people's attitudes. One reason may be that the connection between the overarching abstract models (e.g., just-world, defensive attribution) and empirical predictions (blame, derogation, avoidance of the victim) is often a matter of judgment calls. Indeed, on the basis of the same general models, some researchers predicted (and observed) a positive correlation between blame and devaluation (Correia et al., 2012) while others predicted (and observed) the opposite, negative correlation (Haynes & Olson, 2006).

Uncertainties about blame may stem from the fact that the notion itself is somewhat ambiguous. Saying that “X is to blame for this” may involve: 1) a causal judgment: we believe that the upshot (e.g., an accident) would not have occurred, if X had behaved differently; 2) a character assessment: X's behavior indicates that she is not a good person, with whom we want to associate; 3) a moral norm: people should not in general behave the way X did in this situation. It may be the case that participants activate one or several of those understandings, in combinations that are not controlled in studies of victim-blame. Indeed, the complexity of blame judgments is emphasized in cognitive psychology models, see, e.g., (Malle, Guglielmo, & Monroe, 2014; Monroe & Malle, 2017), but largely ignored in studies of victim-blame.

### 7.4. Outstanding questions and conclusion

The specific features of these studies naturally limit the scope of possible inferences, for several reasons. We used a narrative format (newspaper stories), questions and requests for donations that participants may not have taken literally. Indeed, when we asked participants the final question, whether they thought their donation was “for real”, the responses were quite diverse. Also, we limited ourselves to situations that only activate moderate moral emotions. By contrast, many studies in the victim-blame literature focused on the victims of serious crime, sexual assault in particular (Lambert & Raichle, 2000; Strömwall et al., 2013; van der Bruggen & Grubb, 2014). We simply do not know whether the motivation to help we evaluated here is activated in the same way in these tragic situations.

Despite these limitations, the results suggest that some implications of the model may be valid, which should motivate further research on the cooperation-based understanding of victim-blaming, on aspects of

the model that could not be tested here. In particular, the model requires that people spontaneously evaluate misfortune, such as accidents or illness, in terms of possible costs for people besides the victim, and that they also spontaneously evaluate both the costs of helping and the reputational costs of not helping. These spontaneous inferences are yet to be established.

As mentioned in the introduction, people do not just form an estimate of a victim's character, they may also be motivated to convey that estimate to others. The processes are distinct. Devaluation – often called “derogation” in early studies, see e.g., (Casebolt, 1995; Cialdini, Kenrick, & Hoerig, 1976; Mills & Egger, 1972; Murrell & Jones, 1993) affects one's propensity to interact with the target. Overt derogation – also called “derogation” in more recent studies, see e.g., (Buss & Dedden, 1990) aims at motivating third-parties to modify their interaction with the victim (as well as justifying one's own behavior towards the victims in the eyes of others). The latter process is clearly crucial to the creation of shared opinion about victims, and certainly affects people's notion that victims should be blamed. But our studies are only informative as regards the process of private evaluation of character. Strategic considerations may affect people's statements about misfortune. Our protocols simply do not allow us to disentangle the contribution of such strategic factors to our participants' judgments.

Questions of victim-devaluation and victim-blame are of great social relevance. A widespread reaction to the AIDS epidemic was to blame victims, homosexuals in particular (Crandall, Glor, & Britt, 1997). Many people in Europe considered (and some still consider) Jews at least partly to blame for the Holocaust, e.g., because in their view Jewish people's behavior somehow provoked the Nazis into persecuting them (Dean, 2017; Weiss-Wendt, 2008). Studying the dynamics of social judgment that emerge in the context of small-scale interactions may help explain these widespread social attitudes.

### Funding

Pascal Boyer and Eric Chantland were supported by a grant from the Templeton Religion Trust, Grant 0490. The authors report no competing interests.

### CRedit authorship contribution statement

**Pascal Boyer:** Conceptualization, Formal analysis, Methodology, Supervision, Writing – original draft, Writing – review & editing. **Eric Chantland:** Conceptualization, Formal analysis, Project administration, Software, Writing – original draft, Writing – review & editing. **Lou Safra:** Conceptualization, Formal analysis, Methodology, Writing – review & editing.

### Acknowledgments

[We thank Niklas Andersson, Christophe Heintz, Pierre Liénard, Hugo Mercier & Daniel Sznycer for comments on the hypotheses and experimental design.]

### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.evolhumbehav.2024.01.005>.

### References

- Abele, A.E., & Brack, S. (2013). Preference for other persons' traits is dependent on the kind of social relationship. *Social Psychology*, 44(2), 84–94.
- André, J.-B. (2010). The evolution of reciprocity: Social types or social incentives? *American Naturalist*, 175, 197–210. <https://doi.org/10.1086/649597>.
- André, J.-B., & Baumard, N. (2011). Social opportunities and the evolution of fairness. *Journal of Theoretical Biology*, 289, 128–135.
- Ash, J., & Lira Yoon, K. (2019). Negative emotions and emotion avoidance in victim

- derogation. *Personality and Individual Differences*. <https://doi.org/10.1016/j.paid.2019.109674>.
- Barclay, P. (2015). Reputation. In D., Buss (Ed.), *The handbook of evolutionary psychology* (pp. 810–828). New York: Wiley.
- Baumard, N., André, J.-B., & Sperber, D. (2013). A mutualistic approach to morality: The evolution of fairness by partner-choice. *Behavioral and Brain Sciences*, 36(1), 59–78.
- van der Bruggen, M., & Grubb, A. (2014). A review of the literature relating to rape victim blaming: An analysis of the impact of observer and victim characteristics on attribution of blame in rape cases. *Aggression and Violent Behavior*, 19, 523–531. <https://doi.org/10.1016/j.avb.2014.07.008>.
- Bshary, R., & Grutter, A.S. (2005). Punishment and partner switching cause cooperative behaviour in a cleaning mutualism. *Biology Letters*, 1, 396–399. <https://doi.org/10.1098/rsbl.2005.0344>.
- Burger, J.M. (1981). Motivational biases in the attribution of responsibility for an accident: A meta-analysis of the defensive-attribution hypothesis. *Psychological Bulletin*, 90(3), 496.
- Buss, D.M., & Dedden, L.A. (1990). Derogation of competitors. *Journal of Social and Personal Relationships*, 7(3), 395–422.
- Casebolt, J.R. (1995). *Error management and attributional derogation of AIDS victims*. USA: U North Carolina at Chapel Hill.
- Cialdini, R.B., Kenrick, D.T., & Hoerig, J.H. (1976). Victim derogation in the Lerner paradigm: Just world or just justification? *Journal of Personality and Social Psychology*, 33(6), 719–724. <https://doi.org/10.1037/0022-3514.33.6.719>.
- Correia, I., Alves, H., Sutton, R., Ramos, M., Gouveia-Pereira, M., & Vala, J. (2012). When do people derogate or psychologically distance themselves from victims? Belief in a just world and ingroup identification. *Personality and Individual Differences*, 53(6), 747–752. <https://doi.org/10.1016/j.paid.2012.05.032>.
- Cottrell, C.A., Neuberg, S.L., & Li, N.P. (2007). What do people desire in others? A sociofunctional perspective on the importance of different valued characteristics. *Journal of Personality and Social Psychology*, 92(2), 208.
- Crandall, C.S., Glor, J., & Britt, T.W. (1997). Aids-related stigmatization: Instrumental and symbolic attitudes. *Journal of Applied Social Psychology*, 27, 95–123. <https://doi.org/10.1111/j.1559-1816.1997.tb00625.x>.
- Dalbert, C. (2009). Belief in a just world. *Handbook of individual differences in social behavior* (pp. 288–297).
- Dean, C.J. (2017). *Aversion and erasure: The fate of the victim after the holocaust*. Cornell University Press.
- Delton, A.W., & Robertson, T.E. (2012). The social cognition of social foraging: Partner selection by underlying valuation. *Evolution and Human Behavior*. <https://doi.org/10.1016/j.evolhumbehav.2012.05.007>.
- Donovan, R.A. (2007). To blame or not to blame: Influences of target race and observer sex on rape blame attribution. *Journal of Interpersonal Violence*, 22(6), 722–736.
- Eisenbruch, A.B., & Krasnow, M.M. (2022). Why warmth matters more than competence: A new evolutionary approach. *Perspectives on Psychological Science*, 17(6), 1604–1623.
- Furnham, A. (2003). Belief in a just world: Research progress over the past decade. *Personality and Individual Differences*, 34, 795–817.
- Godfrey, B.W., & Lowe, C.A. (1975). Devaluation of innocent victims: An attribution analysis within the just world paradigm. *Journal of Personality and Social Psychology*, 31(5), 944.
- A.L., Grauer (Ed.). (2011). *A companion to paleopathology*. New York, NY: Wiley.
- Grubb, A., & Harrower, J. (2008). Attribution of blame in cases of rape: An analysis of participant gender, type of rape and perceived similarity to the victim. *Aggression and Violent Behavior*, 13(5), 396–405.
- Hafer, C.L., & Bègue, L. (2005). Experimental research on just-world theory: Problems, developments, and future challenges. *Psychological Bulletin*, 131(1), 128.
- Harvey, A.J., Callan, M.J., & Matthews, W.J. (2014). How much does effortful thinking underlie observers' reactions to victimization? *Social Justice Research*, 27(2), 175–208. <https://doi.org/10.1007/s11211-014-0209-3>.
- Haynes, G.A., & Olson, J.M. (2006). Coping with threats to just-world beliefs: Derogate, blame, or help? 1. *Journal of Applied Social Psychology*, 36(3), 664–682.
- Hill, K., Hurtado, A.M., & Walker, R.S. (2007). High adult mortality among Hiwi hunter-gatherers: Implications for human evolution. *Journal of Human Evolution*, 52(4), 443–454.
- Kleinke, C.L., & Meyer, C. (1990). Evaluation of rape victim by men and women with high and low belief in a just world. *Psychology of Women Quarterly*, 14(3), 343–353.
- Krasnow, M.M., Cosmides, L., Pedersen, E.J., & Tooby, J. (2012). What are punishment and reputation for? *PLoS One*, 7.
- Lambert, A.J., Burroughs, T., & Nguyen, T. (1999). Perceptions of risk and the buffering hypothesis: The role of just world beliefs and right-wing authoritarianism. *Personality and Social Psychology Bulletin*, 25, 643–656.
- Lambert, A.J., & Raichle, K. (2000). The role of political ideology in mediating judgments of blame in rape victims and their assailants: A test of the just world, personal responsibility, and legitimization hypotheses. *Personality and Social Psychology Bulletin*, 26(7), 853–863.
- van Leeuwen, F., Park, J.H., & Penton-Voak, I.S. (2012). Another fundamental social category? Spontaneous categorization of people who uphold or violate moral norms. *Journal of Experimental Social Psychology*, 48, 1385–1388. <https://doi.org/10.1016/j.jesp.2012.06.004>.
- Lerner, M.J. (1965a). The effect of responsibility and choice on a partner's attractiveness following failure. *Journal of Personality*, 33(2), 178–187. <https://doi.org/10.1111/j.1467-6494.1965.tb01380.x>.
- Lerner, M.J. (1965b). Evaluation of performance as a function of performer's reward and attractiveness. *Journal of Personality and Social Psychology*, 1, 355–360. <https://doi.org/10.1037/h0021806>.
- Lerner, M.J. (1980). *The belief in a just world: A fundamental delusion*. New York: Plenum Pub Corp.
- Lerner, M.J., & Matthews, G. (1967). Reactions to suffering of others under conditions of indirect responsibility. *Journal of Personality and Social Psychology*, 5(3), 319.
- Lerner, M.J., & Simmons, C.H. (1966). Observer's reaction to the "innocent victim": Compassion or rejection? *Journal of Personality and Social Psychology*, 4(2), 203–210. <https://doi.org/10.1037/h0023562>.
- Lipkus, I. (1991). The construction and preliminary validation of a global belief in a just world scale and the exploratory analysis of the multidimensional belief in a just world scale. *Personality and Individual Differences*, 12(11), 1171–1178.
- Malle, B.F., Guglielmo, S., & Monroe, A.E. (2014). A theory of blame. *Psychological Inquiry*, 25(2), 147–186.
- Mills, J., & Egger, R. (1972). Effect on derogation of a victim of choosing to reduce his distress. *Journal of Personality and Social Psychology*, 23(3), 405.
- Monroe, A.E., & Malle, B.F. (2017). Two paths to blame: Intentionality directs moral information processing along two distinct tracks. *Journal of Experimental Psychology: General*, 146(1), 123.
- Murrell, A.J., & Jones, J.M. (1993). Perceived control and victim derogation: Is the world still just? *Journal of Social Behavior and Personality*, 8(3), 545–554. Retrieved from <http://libproxy.wustl.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=1994-09468-001&site=ehost-live&scope=site>.
- Noe, R., & Hammerstein, P. (1995). Biological markets. *Trends in Ecology & Evolution*, 10, 336–339. (334).
- Petersen, M.B., Sznycer, D., Cosmides, L., & Tooby, J. (2012). Who deserves help? Evolutionary psychology, social emotions, and public opinion about welfare. *Political Psychology*, 33, 395–418.
- Rubin, Z., & Peplau, L.A. (1975). Who believes in a just world? *Journal of Social Issues*, 31(3), 65–89.
- Shaver, K.G. (1970). Defensive attribution: Effects of severity and relevance on the responsibility assigned for an accident. *Journal of Personality and Social Psychology*, 14, 101.
- Smith, K.M., & Apicella, C.L. (2020). Partner choice in human evolution: The role of cooperation, foraging ability, and culture in Hadza campmate preferences. *Evolution and Human Behavior*, 41(5), 354–366.
- Strömwall, L.A., Alfredsson, H., & Landström, S. (2013). Rape victim and perpetrator blame and the Just World hypothesis: The influence of victim gender and age. *Journal of Sexual Aggression*, 19, 207–217. <https://doi.org/10.1080/13552600.2012.683455>.
- Sugiyama, L.S., & Sugiyama, M.S. (2003). Social roles, prestige, and health risk. *Human Nature*, 14(2), 165–190.
- Tooby, J., & Cosmides, L. (1996). Friendship and the banker's paradox: Other pathways to the evolution of adaptations for altruism. In W.G., Runciman, & J.M., Smith (Eds.), *Evolution of social behaviour patterns in primates and man* (pp. 119–143). Oxford, England UK: Oxford University Press.
- Viechtbauer, W. (2010). Conducting meta-analyses in R with the metafor package. *Journal of Statistical Software*, 36, 1–48.
- Walster, E. (1966). Assignment of responsibility for an accident. *Journal of Personality and Social Psychology*, 3, 73.
- Weiss-Wendt, A. (2008). Why the Holocaust does not matter to Estonians. *Journal of Baltic Studies*, 39(4), 475–497.
- Weston, D. (2011). Nonspecific infection in paleopathology: Interpreting periosteal reactions. In A.L., Grauer (Ed.), *A companion to paleopathology* (pp. 492–512). Wiley.
- Wojeiszke, B. (2005). Morality and competence in person- and self-perception. *European Review of Social Psychology*, 16(1), 155–188.