

**Victims of misfortune are blamed for imposing costs on others:  
Testing a cooperation-dilemma factor in victim-blame.**

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**UNDER REVIEW – PLEASE DO NOT CITE**

**Abstract.** In four pre-registered studies, we tested implications from a cooperation model that explains victim-blaming and victim-devaluation as the result of cooperation dilemmas, as a way for people to avoid the costs of helping victims (who seem to be unpromising cooperation partners) without paying the reputational cost of being seen as ungenerous, reluctant cooperators. An implication of this perspective is that, if a victim of misfortune is seen as imposing costs on others by requesting help (as opposed to bearing the costs), they will be seen as persons of low character, avoided as future cooperators, and partly responsible for their misfortune (seen as negligent). The four studies presented here support this interpretation, as participants attribute lower character and lower future cooperator potential, as well as more negligence, to people who impose costs on others. The effect is not confounded by familiar or social obligations, as it occurs in the same way when the targets for help are the victim's parents, siblings, best friends or communities. Contrary to expectations, negligence attributions were not modulated by the victim's being described as poor (in need of help) or rich (not in need).

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## 1. Introduction

Victims of misfortune are often blamed for their own fate – “blame” here includes devaluation (the victim is seen as of bad character), loss of potential value as a partner (one would rather not interact with them in the future) and increased negligence attribution (it is said that they “had it coming” by not taking sufficient precautions) (Correia et al., 2012; Lerner, 1965; van der Bruggen & Grubb, 2014). Among the factors that influence victim-blame, the social psychology literature identified both a) general attitudes like people’s Belief in a Just World (Dalbert, 2009; Lerner, 1980) or a “defensive attribution” (Shaver, 1970) based on a need to see oneself as immune from misfortune; and b) particular biases or stereotypes concerning the category of person who happens to be a victim (Donovan, 2007; Grubb & Harrower, 2008; Lambert & Raichle, 2000; Pedersen & Strömwall, 2013). In this series of studies, we examine another potential factor, which stems from the human psychology of cooperation.

Humans are an exceptionally cooperative species (Boyd & Richerson, 2009), which is made possible by a suite of specialized psychological capacities and preferences (Cosmides & Tooby, 2005). Among the relevant processes here are a) partner-choice and b) reputation maintenance. First, establishing and maintaining successful cooperation requires that agents prefer partners with whom interaction is likely mutually profitable (André & Baumard, 2012) for instance because they are competent or generous. We know that such choice does occur in the most diverse societies (Apicella, Rozin, Busch, Watson-Jones, & Legare, 2018; Eisenbruch & Krasnow, 2022). Second, to benefit from cooperative interactions, one needs to be seen by others as a potentially useful partner. As a result, one depends on one’s own history of cooperative behavior that others have information on

(Krasnow, Cosmides, Pedersen, & Tooby, 2012). Evidence shows that reputation (in this narrow sense) plays a role even in cognitively simpler species like cleaner fish (Bshary & Grutter, 2006) or bats (Denault & McFarlane, 1995), as individuals identified as cheaters or poor reciprocators enjoy fewer cooperation opportunities. Humans have vastly more developed communication and memory capacities, which is why a history of fair or generous behaviors is crucial to being chosen as a cooperation partner (Milinski, Semmann, & Krambeck, 2002; Raihani & Bshary, 2015; Sylwester & Roberts, 2010).

In terms of cooperation, other people's misfortune creates a dilemma. On the one hand, one should be motivated to restrict or deny help to victims of misfortune, as extending help is a costly behavior and therefore fitness-decreasing; at the same time, however, one should also be motivated to provide help, as one's likelihood to be chosen as a future cooperation partner depends on one's reputation for generous attitudes. The dilemma was probably salient in human evolution, as we know from anthropological and archaeological data that costly help was indeed provided in prehistoric and recent small-scale societies – see surveys in (Roberts & Manchester, 2005, p. 99ff; Sugiyama, 2004).

In this context, describing the victim as unattractive, a bad cooperator or someone (at least partly) responsible for their own misfortune, could provide a way of denying help without losing one's generous cooperator's reputation, thereby avoiding the dilemma. That would be consistent with the anthropological literature, which suggests that the most popular explanation of misfortune is either to blame agents (witches, gods, etc.) or the victims themselves (in terms of karma, taboo violations, etc.), in preference to explanations by impersonal forces and mechanical processes (Planer & Sterelny, 2024).

In the present studies, we investigate an implication of this evolutionary understanding of attitudes to victims. Victims of misfortune (accidents, illness, family issues, economic hardship, etc.) often need and request help from their social environment, including friends, relatives or their commu-

nities. Does this request by itself contribute to a negative attitude to victims? Our hypothesis was that, all else being equal, participants would judge that a victim who imposed costs on others, compared to those who bore the costs of unfortunate events themselves, a) is of lower character, b) offers lesser cooperation potential in the future, and c) is potentially more responsible for what happened to them. Indeed, to justify denying help, a convenient reason would be that the victim was negligent, in other words “failed to think”, which people generally judge reprehensible (Sarin & Cushman, 2024).

Cooperation models predict that attitudes towards those who request help would be modulated by perceived need. There should be an intuitive difference between victims who request help because they have no other remedy, on the one hand, and those who simply prefer that others bear the cost, even if they could do it themselves, on the other. The latter attitude amounts to an exploitative strategy. We know that such strategies are available to human minds and that humans are strongly motivated to detect and reject them (Buss & Duntley, 2008; Petersen, 2013).

Studies 1-4 evaluate the effects of requesting help on judgments of character and cooperation potential. Studies 3-4 also explore the effects of perceived victim need on these judgments. All studies follow the same protocol, with a short description of the victim’s misfortune and their request for help (or decision to bear the costs of the mishap), followed by participants’ responses on prompts concerning character, cooperation potential, and in studies 3-4, negligence as a factor in their misfortune.

All these studies were approved by [local] Human Subjects Committee. Designs and analysis plans were pre-registered at <http://www.osf.io>, see details in SOM for each study.

## 2. Study 1

### 2.1. Presentation

These four versions of Study 1 use an identical set of materials describing accidents that befell the victim (either a car crash or a kitchen fire), followed by a sentence mentioning that they either bore the costs themselves (Cost Self condition) or asked some other person to help them (Cost Others condition). We varied the target of requests for help – the victim’s sibling (Study 1A), parents (1B), best friend (1C) or their community (1D).

### 2.2. Methods

#### 2.2.1. Participants

For each section of this study, we recruited ~200 participants from the Prolific participants, all of them adult US residents. This N was based on the results of previous similar studies, with power estimated at  $(1-\beta) > .85$  and significance level  $\alpha < .05$ . See SOM for the detailed Ns for each version of this study, as well as mean age and breakdown by gender and ethnicity.

#### 2.2.2. Materials

Vignettes. The complete materials can be found in SOM, section 3.1. Table 1 summarizes the conditions, with sample materials. Vignettes chosen after a pretest of four misfortunate related vignettes. We chose the vignettes of a kitchen fire and car accident illustrated in table 1 which elicited both a strong, yet similar effects compared to the other vignettes (more details in SOM section 1).

Story	Kitchen	Car
Accident	[PERSON] left a frying pan full of oil cooking on the stove then went to the bathroom. A fire started and damaged the kitchen’s walls and ceiling. He and his family are poor.	[PERSON] was driving while calling a friend on his phone. He crashed into another car and now must get the car replaced. He and his family are poor.
Cost_Self	He decided to pay for the repairs out of his own savings.	He decided to pay for another car out of his own savings.

Cost_Others: Sibling (1A)	He asked his sister to pay for the repairs out of her savings.	He asked his sister to pay for another car out of her savings.
Cost_Others: Parents (1B)	She asked her father to pay for the repairs out of his savings.	He asked his mother to pay for another car out of her savings.
Cost_Others: Best Friend (1C)	She asked her best friend to pay for the repairs out of his savings.	He asked his best friend to pay for another car out of her savings.
Cost_Others: Community (1D)	She asked her church community to pay for the repairs out of their savings.	He asked his senior center to pay for another car out of their savings.

*Table 1. Sample of materials used in Studies 1A-1D. [Name] is varied between stories, gender is counterbalanced in the actual studies, and we used the appropriate pronouns in each version.*

### Questions.

1. Character question [Char], using 1-7 Likert scale with prompt “What is your impression of [PERSON]’s character?” from Extremely negative to Extremely positive.

2. Cooperation potential: [Coop1] using 1-7 Likert scale with prompt “Would you like to have [PERSON] as a member of your team at work?”

3. Cooperation potential [Coop2] using 1-7 Likert scale with prompt “Would you like to collaborate with [PERSON], e.g., to organize a picnic, a charity event?”

4. Attention question [Catch1] used a 1-7 Likert scale with prompt “Please select the option "Definitely yes" below.” This question was used for the first story displayed to participants.

5. Attention question [Catch2] used a 1-7 Likert scale with prompt “Please select the option "Probably not" below.” This question was used for the second story displayed to participants.

### *2.2.3. Design and procedure*

Design: Independent variables: Story (within subject), Cost Others vs. Cost Self (within subjects), and victim’s gender (within subjects). Dependent variables: Character estimation (Char), Cooperation potential judgment (combination of Coop1 and Coop2 responses).

## 2.3. Results

Detailed reports on the results of each version of this study can be found in SOM, section 3.4 (Study 1A), 4.4 (1B), 5.4 (1C) and 6.4 (1D). Here we provide a summary of the results and analyses of interest.

1. There were no stable or important effects of gender, ethnicity or age for any of the dependent variables (Character and Cooperation potential).

2. In all four versions of the study, responses to the two questions concerning Cooperation potential (COOP1 and 2) were highly similar, with Cronbach's  $\alpha > .9$ , so that these responses were combined as a Cooperation potential dependent variable for analyses.

3. Concerning the variables of interest, we entered the results of each version of the study in a separate MANOVA, with the manipulated variable (Cost Others vs. Cost Self) as factor and the dependent variables of Character and Cooperation potential judgments. Each demonstrated high significance ( $ps < .0001$ ) and are presented in detail in the detailed results sections in SOM. Table 2 below provides the mean and SEM for each condition, with a two-tailed t-test of the difference between Cost Others and Cost Self. In each we show that those who made others pay the cost of their misfortunate engender lower ratings of Character and Cooperation compared to those who paid the cost themselves.

	DV	Condition: Cost Others $M$ ( $SE$ )	Condition: Cost Self, $M$ ( $SE$ )	Test of difference
Study 1A: Self vs. sibling	Char	2.54 (.069)	4.57 (.106)	$t_{[198]} = -17, p < .001$
	Coop	2.57 (.076)	4.18 (.088)	$t_{[198]} = -15.4, p < .001$
Study 1B: Self vs. best friend	Char	2.55 (.077)	4.56 (.103)	$t_{[198]} = -15.2, p < .001$
	Coop	2.70 (.081)	4.26 (.094)	$t_{[198]} = -14.1, p < .001$
Study 1c: Self vs. parents	Char	2.49 (.088)	4.64 (.119)	$t_{[196]} = -14.6, p < .001$
	Coop	2.45 (.085)	4.28 (.101)	$t_{[196]} = -116, p < .001$
Study 1D: Self vs. Community	Char	2.46 (.076)	4.79 (.118)	$t_{[197]} = -16.2, p < .001$
	Coop	2.46 (.079)	4.40 (.100)	$t_{[197]} = -15.6, p < .001$

*Table 2. Breakdown of results of the four versions of Study 1, with effect of the manipulated variable (Cost to self vs. others) on the Character and Cooperation potential judgments, with  $M$  and ( $SEM$ ) and results of a two-tailed  $t$ -test comparison for each pair of conditions.*

## 2.4. Discussion

In all four versions of this study, participants assigned a lower character evaluation as well as a lower cooperation potential to victims of misfortune who had chose to request help from relatives, friends or acquaintances, compared to victims who chose to bear the costs themselves. This is consistent with our predictions, based on a cooperation perspective on attitudes to victims. This would suggest that, to some extent, victims who request help from others are implicitly seen as potential exploiters (hence the character rating) and unlikely to be good partners in cooperative endeavors. The difference is significant in all versions of this study and the effect is large, with a Cohen's  $d$  between 1.3 and 1.7. Interestingly, there are no differences related to the targets of requests for help, as the judgments are highly similar for people who ask their parents, siblings, best friends or community centers (for details see SOM, section 1.4). We did not register any hypotheses concerning such differences, as the cooperation model does not imply spe-



cific predictions in this domain, and therefore did not plan to test for possible differences. One might have expected a slightly different results as far as parents are concerned, given that parents frequently help their children in such cases of misfortune. Our results may suggest that, for the US participants in our studies, people who have their own cars and kitchens are deemed to be economically independent, which would explain why requesting help from parents is seen as evidence of poor character.

### 3. Study 2.

#### 3.1. Presentation

In this study, in addition to questions of victim value (character and cooperation questions) we added a question asking the degree certain causes explained the misfortune described in the vignette. For each situation, we asked participants how likely it was that the incident was caused as a result of the victim's own negligence, of the victim having received wrong information, or the victim having defective equipment.

Here we hypothesized that a victim's request for help from others would provide a clue that further interaction with that victim would not be beneficial. This in turn would justify finding reasons for denying them help, including by claiming they brought the misfortune onto themselves. So, we predicted that there would be significantly higher judgements of negligence in the Cost Others condition than the Cost Self condition. The hypothesis is focused on the difference in negligence judgments between these two conditions. We had no particular predictions concerning participants' judgments about the relative importance, in their view, of negligence compared to wrong information or defective materials in explaining the incident. To simplify the design, we only used the "request from a friend" version of our vignettes (as in version B of Study 1 above).

## 3.2. Methods

### 3.2.1. *Participants*

201 participants were recruited by the Prolific platform, all US residents, ages 19 to 72,  $M=37.98$ , among whom 122 women, 77 men, 2 identified as “other”, and 143 participants identified as White and 58 identified as non-white minorities or other.

### 3.2.2. *Materials*

The vignettes were identical to those of study 1B above (two kinds of accidents, and requests for help from a best friend). There was an additional question, asking the participants to rate on three separate 1-7 Likert scales how likely it was that the accident was caused by negligence (with examples of what that could consist of), by the victim having wrong information (with illustrations of that kind of cause), and finally, by the materials being defective (again with illustrations). See details in SOM, section 8.1.

### 3.2.3. *Design and procedure*

These were identical to Study 1B above, with the exception that an additional question asking about the causes for the misfortune was used after judgments of character and cooperation.

## 3.3. Results

The detailed report on the results of each version of this study can be found in SOM, sections 8.3 and 8.4. Here we provide a summary of the results and analyses of interest.

1. No participants failed the catch questions for inattention
2. Ratings on the Coop1 and Coop2 questions achieved an interitem reliability (Cronbach’s  $\alpha$ ) of .915 and were therefore combined into a single Cooperation variable.
3. Participants’ judgments were entered into a MANOVA with Cost (Cost Self vs. Cost Others) as a factor while Character, Cooperation and Negligence cause ratings were included as dependent variables. We found

that having the cost paid by another person (Sibling) engendered lower ratings for Character and Cooperation,  $F_{[2, 198]} = 122, p < .001$ . Table 3 below summarizes the results of individual two-tailed t-tests measuring the difference in ratings between the Cost Self and Cost Others conditions, as concerns the variables of interest. As is shown, not only are character and cooperation ratings lower for victims who have others pay the cost, but also negligence ratings are significantly higher compared to those who paid the cost themselves.

Dependent variable	Condition: Cost Others M (SE)	Condition: Cost Self, M (SE)	Test of difference
Character	2.46 (.073)	4.46 (.104)	$t_{[199]} = -15.4, p < .001$
Cooperation	2.54 (.082)	4.11 (.091)	$t_{[199]} = -13.9, p < .001$
Negligence	6.39 (.062)	6.03 (.073)	$t_{[199]} = 4.26, p < .001$

*Table 3. Results of Study 2, with effect of the manipulated variable (Cost Self vs. cost Others) on the Character, Cooperation and Negligence judgments, with M and (SEM) and results of a two-tailed t-test comparison for each pair of conditions.*

In exploratory analysis (beyond registered analysis), we found that the manipulated variable (Cost Self vs. Cost Others) had no significant effect on the participants' judgments concerning the role of wrong information or defective material as possible causes of the incident. The combined External cause rating reached  $M = 2.47$  ( $SE = .091$ ), in the Cost Self condition and  $M = 2.43$  ( $SE = .09$ ) in the Cost Others condition, difference  $t_{[200]} = 0.43, p = .668$ .

### 3.4. Discussion

These results replicate those of Study 1, as victims who requested help from others (in this case their best friend) are judged of lower character and of lower cooperation potential than victims who did not request help. In addition, consistent with the cooperation model of victim-blaming, people who had requested help were judged to be more negligent than those who bore

the costs of their misfortune. This difference between conditions did not occur when participants were considering the possible impact of external causes (Bad information or defective equipment), suggesting that the effect of the cost manipulation is specific to the negligence attribution.

## 4. Study 3

### 4.1. Presentation

Studies 1-2 suggested that participants attribute lower character and cooperation potential, as well as possible negligence, to people who request help. But we did not consider one crucial variable in attitudes to such requests, namely the degree of need of the requester. Our cooperation models include the detection and avoidance of exploitation – for instance, by requesting help when one could remedy one’s problems without creating costs for others. The detection of exploitation should then depend on the way participants perceive the absolute need of the victim. In our previous studies, we indicated that the victim and family were poor, i.e., potentially high need, but it is not clear whether this affected participant’s perceptions of the victim’s cooperation potential especially in a misfortunate scenario. In this study, we added a new manipulation, by describing the victim as explicitly “poor” or “well-off”. Consistent with cooperation psychology, we predicted that the effect of requesting help on character, cooperation potential and negligence attribution, would be greater when the victim was described as rich, as that would imply that their request for help was not the consequence of absolute need.

### 4.2. Methods

#### 4.2.1. *Participants*

We recruited 199 participants from the Prolific platform. We excluded the data of 2 participants, whose responses to catch questions suggested lack of attention (see attention check in study 1 materials). There remained 197 participants, ages 19 to 81,  $M=36.76$ , 114 women, 79 men, 4 identified

as “other”. 121 participants identified as White and 76 identified as non-white minorities.

#### *4.2.2. Materials*

These were identical to those used in Study 2, except that each story described the victim and their family as either “poor” or “well-off”. Additionally, we also ask about participants’ annual income using a 1-7 Likert scale with values scaled between “under \$15,000 a year” to “above \$150,000 a year”. See full materials in SOM section 9.1.

#### *4.2.3. Design and procedure*

This study is identical to study 2 except in two respects. First, we added a question about participants income in order to account for potential confounds of participant’s income affecting perceived “richness” of the victim as saying the victim is “well-off” could be interpreted differently between individuals. Secondly, the study is completely between-subjects design rather than the within-study design. This means participants only see one story instead of two. This was done because interpreting the results is much easier in a 2\*2 between subject design rather than a mixed factorial design. As the cost condition had already been demonstrated to have a robust effect size, any decrease in power that within-subjects design gives would be negligible and deemed not worth it at the time. Finally, a between-subjects design is also nice as it isolates the effects of the Need condition (“poor” vs. “well-off”) while avoiding possible effects of one story on the other. Because we only have one story per participant, we instead only showed one catch question (catch 1) per participant rather than two in the prior studies.

### **4.3. Results**

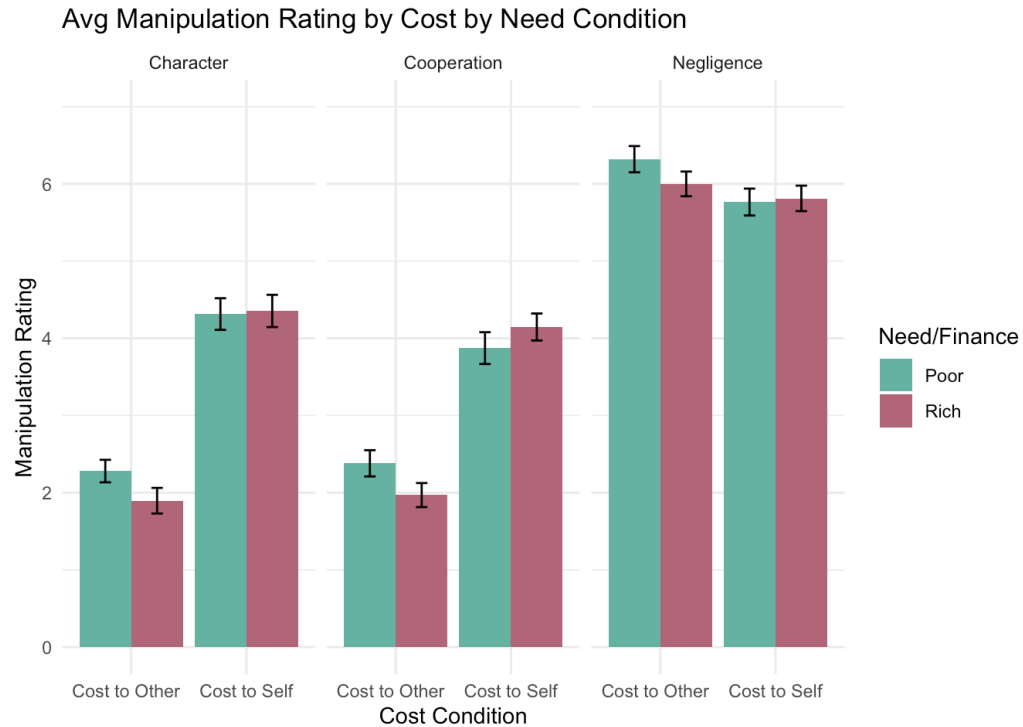
This is a summary of the results of interest. See full details in SOM, sections 9.3 and 9.4.

1. Two participants failed the catch question. Data removed from analysis.

2. The Coop1 and Coop2 ratings had a Cronbach  $\alpha$  of .931 and were combined into a Cooperation potential variable.

3. Considering the variables of interest, Table 4 provides the descriptive statistics for the effects of Cost and Need on the three dependent variables of Character, Cooperation and Negligence. As we had two independent variables (Cost and Need), we analyzed these results by running three separate 2\*2 ANOVAS with Cost and Need as factors, and Character, Cooperation and Negligence ratings as the respective dependent variables of each ANOVA (see full details in SOM, section 9.4).

The Cost factor had a significant effect on Character,  $F_{[1, 193]}=149, p <.001$ , on Cooperation,  $F_{[1, 193]}=105, p <.001$ , as well as on Negligence,  $F_{[1, 193]}=5.01, p=.026$ . This suggests that Cooperation, and Character ratings were lower and negligence ratings higher for those who had others pay the price compared to those who paid the price themselves. However, unlike the Cost conditions, the Need (whether described as “poor” or “well-off”) did not significantly affect Character,  $F_{[1, 193]}=0.865, p=.354$ , Cooperation,  $F_{[1, 193]}=0.142, p=.707$ , or Negligence,  $F_{[1, 193]}=0.650, p=.421$ , nor was there a significant interaction with Cost and Need on Character,  $F_{[1, 193]}=1.336, p=.249$ , Cooperation,  $F_{[1, 193]}=3.674, p=.057$ , or Negligence,  $F_{[1, 193]}=1.2, p=.274$ . However, note that there appears to be a trending interaction of Need by Cost on Cooperation ( $p=.057$ ), we will touch on this later in general discussion.



*Figure 1. Mean differences of Character, Cooperation and Negligence cause ratings as a function of manipulated cost (cost to self vs. cost to others), and manipulated Need (victim described as “poor” vs. “well-off”)*

	Poor victim		Rich victim	
Dependent variable	Cost to others	Cost to self	Cost to others	Cost to self
Character	2.28 (.146)	4.31 (.205)	1.90 (.166)	4.35 (.209)
Cooperation	2.38 (.17)	3.87 (.206)	1.97 (.156)	4.15 (.175)
Negligence	6.32 (.171)	5.76 (.174)	6.0 (.16)	5.81 (.165)

*Table 4. Results of Study 3. Effects of two manipulated variables (cost to self vs. cost to others, and victim described as “poor” vs. “well-off”) on the Character, Cooperation and Negligence ratings, with M and (SEM) for each result.*

## 4.4. Discussion

These results are consistent with those of Studies 1-2, confirming that participants attribute lower character, lower cooperation potential and higher negligence to those who request help from others rather than bearing the cost of their misfortune. Note that this study used the variable in a between-subject design, so that we can safely infer that the effect of this variable also occurs though participants are not provided with the contrast between two kinds of victims.

By contrast, there was no effect of our Need manipulation, as participants did not rate the behavior of “well-off” victims differently from “poor” ones. However, we did not have an independent check of the way our participants interpreted those words, whether these words elicited different representations of the victims’ resources, and with what variance, a problem that we tried to remedy in the next study.

## 5. Study 4

### 5.1. Presentation

We replicated the design of Study 3 and requested the participants to provide us with an estimate of the victim’s income, still described in our vignettes as “poor” or “well-off”. As this was intended as a check on the results of Study 3, and we had no further need to confirm the Cost conditions effects, we only used Cost Others stories. The participants were only shown one story in which the victim requested help from their best friend.

### 5.2. Methods

#### 5.2.1. *Participants*

We recruited 200 participants, all US residents, on the Prolific platform. We excluded the data of 3 participants, whose responses to catch questions suggested lack of attention (see attention check in study 1A materials, SOM section 3.1). There remained 197 participants, ages 18 to 70,  $M=37.7$ , 112



women, 82 men, 3 identified as “other”. 115 participants identified as White and 72 as non-white minorities.

### 5.2.2. Design and procedure

These were identical to Study 3 above, with the exception of an additional question concerning the victim’s income level, with a 1-7 Likert scale with values scaled between “under \$15,000 a year” to “above \$150,000 a year”. Details in SOM, section 10.2.

## 5.3. Results

This is a summary report. See details in SOM, sections 10.3. and 10.4.

1. As the ratings for Coop1 and Coop2 questions showed interitem reliability (Cronbach  $\alpha = .85$ ) we combined them in a Cooperation variable.

2. One of the study’s main goals was to validate the financial need manipulation. Participants indeed viewed poor described people as significantly poorer than “well-off” people,  $t_{[60.78]} = -21.74$ ,  $p < .001$ . (Figure 2).

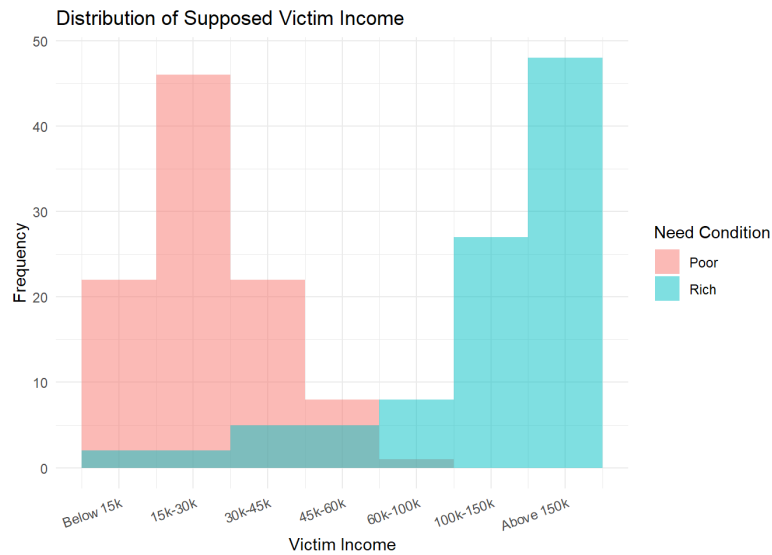


Figure 2. Results of Study 4. Distribution of victim income ratings between need conditions

3. Our initial assumptions were that ratings of victim income would be extremely platykurtic between Need conditions and thus explain study 3’s insignificant findings for the Need condition. However, as Victim Income is

strongly bimodal and thus non-normal, it may produce biased findings, should we use it as a regressor to test our hypotheses as detailed in our pre-registration (see SOM section 10.4. for detailed analysis). Instead, we conducted individual independent sample t-tests of Need conditions (“poor” vs. “well-off”) predicting Character, Cooperation, and Negligence ratings. The results are summarized in Table 5. As a reminder, note that participants only saw the victim requesting help from others (Cost Others) rather than paying for the misfortune themselves (Cost Self). These results suggest that financial need, i.e., how justifiable it is to request help from others, significantly affected both Character and Cooperation ratings. That is, “poor” described victims had higher ratings for Character and Cooperation than “well-off”. However, we do not observe an effect for Negligence.

Dependent variable	Poor victim, Cost to others	Rich victim, Cost to others	Test of difference
Character	2.45 (.1)	1.72 (.093)	$t_{[195]} = -5.36, p < .001$
Cooperation	2.48 (.117)	2.05 (.112)	$t_{[195]} = -2.68, p = .008$
Negligence	6.28 (.091)	6.30 (.125)	$t_{[195]} = 0.085, p = .933$

*Table 5. Results of Study 4. Effects of the manipulated variable (victim described as “poor” vs. “well-off”) on the Character, Cooperation and Negligence ratings, with M and (SEM) for each result.*

## 5.4. Discussion

This study was meant to provide a manipulation check for the description of the victim as “poor” or “well-off”. The results seem to validate that manipulation, as the participants’ estimates of the victim’s income were centered on the “between \$15K and \$30K/year” and “above \$150K” values for the “poor” and “well-off” victim respectively.

This meant that ratings of victim income were starkly bimodal and thus non-normal, making it questionable to use Victim Income as regressor in our original planned analysis. Instead, using the original Need conditions as

predictors we found that, in contrast to study 3, the victim’s “need” had the predicted effect on the participants’ evaluations of the victim’s character and cooperation potential.

One explanation of why we found an effect of Need on Character and Cooperation in this study but did not observe it in Study 3, may be simply because of insufficient power in Study 3. Although nonsignificant, study 3 showed an inkling of an interaction where Cooperative and character ratings are lower for rich victims compared to poor victims but only when costing others. When costing oneself, the direction is reversed, albeit less extreme where rich victims have *higher* cooperation and character ratings compared to poor participants. Thus, this burgeoning interaction would inhibit us seeing a main effect of Need for study 3. In fact, when we only use data from the Cost Others condition for study 3, as we had done in study 4, we see much stronger trending main effects on Cooperation ( $p=.086$ ) and Character ( $p=.078$ ). As study 4 did not use the Cost Self condition (granting us effectively twice as many subjects) and was all between subjects (reducing the effect of possible “bleed” from one story to the next in within subjects’ experiments), we had more power to observe the effect of Need. So, the recent results suggest that how “needy” or financial inclined a victim is may affect assumptions of their worthiness as a collaborator. That is, when people know you could have helped yourself, but you ask other people to help you anyway, this incurs a reputational cost. You may be seen as a leech who does not benefit the fitness of the community you prey upon. Likewise, asking for help still incurs a reputational cost, but is far less if the help might be warranted due to your financial standing.

## 6. General Discussion

In these four studies, we tested implications of a cooperation-dilemma approach to attitudes to victims. We hypothesized that when victims of misfortune request help from others, they might be considered less promising cooperation partners, compared to victims who bore the cost of their predicament. This would reflect in victim devaluation (the victim is seen as of

lesser character), an effect documented in the first studies of victim-blame (Lerner, 1965), as well as cooperation potential and attributions of negligence. In this perspective, one would also expect that this effect is amplified if the victims have sufficient resources to address their misfortune, in which case their requests for help might be perceived as exploitative.

The results of our pre-registered studies bear out the first set of predictions. In studies 1-3, victims who requested help from others were consistently judged as of lower character and poorer cooperation potential than those who helped themselves. In studies 2-3, people who imposed costs on others by requesting help were also judged as probably more negligent than victims who did not. These effects were similar with different targets of requests for help, including parents, sibling, best friend or community.

The results were more ambiguous as concerns our manipulation of the apparent “need” of the victims (describing them as “poor” vs. “well-off”). In Study 3, this categorical variable did not have a significant effect on measures of the victim’s character or cooperation potential. In Study 4 by contrast, we found such effects, as a rich victim was seen as of poorer character and cooperation potential, as predicted. Study 4 also verified that participants did see the victims as belonging to different income strata. Rerunning study 3 analysis using only the Cost Others condition (the one exclusively tested in study 4) shows a trending effect and might suggest that there is an underlying interaction between Cost (to self vs. others) and Need (rich vs. poor) that remained in our studies, due to low power.

Against our expectations, the Need manipulation had no effect on the “negligence” variable. Our pre-registered hypothesis predicted a positive effect of negligence by need (rich vs. poor). We expected our rich vs. poor description to cue different levels of need (the victim does not really need the help they seek, vs. the victim may well be in real need) and therefore serve as a signal that the rich victim may be exploiting others by requesting help. The results suggest that that was not the case.

One possible interpretation is that, when victims inflict cost on others, they are judged to be highly negligent (as demonstrated in all four studies), and that this effect crowds out whatever small differences would be caused

by the Need (rich vs. poor) manipulation. Indeed, the negligence scores were very high in study 4 ( $M > 6.3$ ) which would be close to a ceiling effect.

Another more radical interpretation is that the need manipulation is intrinsically ambiguous and could justify equal amounts of negligence attribution in the rich or poor conditions. In the cooperation model of victim-blame, negligence attribution conveys that the victim is a poor potential cooperation partner and, therefore, one can forgo helping them and still retain one's own reputation as a fair cooperator. That may well be what happens for poor victims, as supported by studies 1-4. But a motivation to deny help to rich victims – and therefore accuse them of negligence – could be motivated by another factor, namely that there is no moral requirement to help them in the first place, and therefore no need to justify denying them help. In brutal terms, one might need to rationalize why one didn't help a homeless person (in need), but rarely do people feel guilty not contributing to a rich person's Porsche fund. If that is the case, we would expect that, though participants believe the rich victim is a poor cooperator for costing others, we should expect a null effect of Need on negligence. We should conclude that our need manipulation, in its present form, may simply be irrelevant to the exploitation-avoidance mechanisms we were trying to elicit.

These results are generally consistent with the cooperation-dilemma understanding of victim-blame, as the fact that a victim imposes costs on others seems to reflect in outsiders' judgments about that person's character and cooperation potential. These are of course only preliminary results, for two main reasons. First, our studies only provide an indirect test of the cooperation-dilemma model, as the participants' behavior is consistent with but not direct evidence of the fact that cooperation intuitions are activated by situations of misfortune. Second, we only tested the participants' attitudes to victims of some relatively banal situations (a kitchen fire and a car crash) with moderate consequences. By contrast, a large part of the victim-blame literature focuses on tragic events such as illness murder, assault and rape – see e.g., (Grubb & Harrower, 2008; Kleinke & Meyer, 1990; McKelvie, Mitchell, Arnott, & Sullivan, 1993; Strömwall, Alfredsson, & Landström, 2013). In our perspective, if victimization elicits devaluation of

the victim when they request help after a moderate misfortune, this effect would probably be amplified when the misfortune was tragic, as helping those victims would be much more costly than in the case of banal accidents. An alternative hypothesis would state that being informed of instances of crime, illness and rape engages motivational processes entirely different from the dilemmas of cooperation. Only studies that systematically vary the severity of victimization would address that question.

## 7. References

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