

**Abstract**

Decision-makers must often choose whether to commit necessary evils (i.e., cause harm to produce a benefit), such as allocating punishments or redistributing resources. Existing work using classic ethical dilemmas (e.g., trolley problems) suggests that people react poorly to necessary evils and condemn those who commit them. However, four preregistered studies (total  $N = 1,622$ ), using both survey experiments and incentive-compatible games, reveal that targets judge decision-makers who commit a broad range of everyday necessary evils more positively than decision-makers expect. Decision-makers overestimate how negatively targets will react and underestimate how much instrumental value targets recognize. As a result, decision-makers overestimate the reputational costs of performing necessary evils, which can serve as a barrier to performing them. This research highlights the theoretical importance of studying social-moral phenomena (such as instrumental harm) in everyday contexts and provides practical insight into how to encourage decision-makers to perform societally beneficial, but seemingly harmful actions.

### **Statement of Relevance**

Improving social welfare often necessitates causing harm. For example, punishment can encourage good behavior and restore equality, but requires harming a transgressor in some way, such as by imposing sanctions or causing embarrassment. Similarly, redistribution can promote fairness and provide resources to parties who may derive greater value from them, but requires taking resources from advantaged parties. In this work, we examine how people who are harmed by these actions (which we refer to as 'necessary evils'), judge the decision-makers who enact them. Although past work suggests that decision-makers who commit harmful actions, even when instrumentally beneficial, are judged poorly, we found that the targets of harm judge decision-makers who commit necessary evils more positively than decision-makers expect. Importantly, decision-makers' expectations are linked to their propensity for performing a necessary evil, suggesting that decision-makers may often forgo reputationally-sound opportunities to improve social welfare.

### **Decision-Makers Overestimate the Reputational Costs of Necessary Evils**

Many important social and moral decisions require causing harm in order to produce a benefit. For example, leaders may need to take resources from one person or group and redistribute them to another to establish equality, judges may need to discipline a transgressor to restore justice, and doctors may need to inflict physical harm to protect patients' health. These decisions can be considered "necessary evils" (Molinsky & Margolis, 2005), acts that cause interpersonal harm (e.g., discomfort, anxiety, monetary losses, or pain) to another person in order to achieve a greater good for that person or society more broadly. These actions produce a necessary benefit, but they require the evil of harm to do so. How do the targets of harm react to necessary evils?

Existing work on instrumental harm within classic ethical dilemmas (e.g., trolley problems) suggests targets will react poorly. People often judge decision-makers who are willing to inflict pain and suffering in order to achieve a greater good as untrustworthy (Everett et al., 2016), as poor friends and relationship partners (Everett et al., 2018), and as generally bad people (Uhlmann et al., 2013). However, existing work on instrumental harm has primarily operationalized harm as sacrifice - the literal killing of one person to save others (see Bauman et al., 2014 for a review). In everyday life, necessary evils are much less extreme (though no less important). Whether people penalize necessary evils broadly, and importantly, whether decision-makers anticipate this, remains an open question.

In the present research, we hypothesize that decision makers typically overestimate the reputational costs of necessary evils because they focus narrowly on the harm caused by necessary evils rather than attending to the instrumental value necessary evils create. Decision-makers may be sensitive to the harm necessary evils inflict on targets and expect to incur a

reputational cost because they are averse to *causing* harm (Cushman et al., 2012; Miller & Cushman, 2013; Miller et al., 2014). However, targets may actually perceive decision-makers more positively because their perspective allows them to more easily appreciate the abstract instrumental value associated with necessarily evils, rather than the harm involved in performing them. This theorizing is consistent with recent research demonstrating that targets are often appreciative of tradeoffs between harm and instrumental value in everyday life. Despite the emotional harm and distress that can be imposed by difficult conversations and critical feedback, recipients of these conversations typically appreciate the conversations much more than communicators expect (Levine et al., 2020; Levine, 2022; Abi-Esber et al., 2022; Dorison & Minson, 2022). The truth, even when harmful, can prompt growth and learning that targets desire.

By examining the (expected and actual) reputational consequences of necessary evils, the present work makes several contributions. First, we extend our understanding of the relationship between harm and reputation. Whereas several articles have demonstrated that causing harm damages reputation (Schein & Gray, 2015; Uhlmann et al., 2013), we challenge the presumption that causing harm is always reputationally costly. We reveal that the social consequences of harm for reputation are more complex than prior research has assumed. In doing so, we highlight the need to concurrently examine judgments of instrumental value when studying dilemmas involving harm, and to study the psychology of instrumental harm using more ecologically valid methods.

We further identify how harm aversion can bias decision-makers' social expectations and resulting decisions. Past work featuring extreme instances of sacrificial harm (e.g., smothering a crying baby) has shown that people's willingness to engage in instrumental harm is undermined

– in part – by their self-presentation concerns (Reynolds et al., 2019), and that these concerns may be well-founded (Rom & Conway, 2018). In contrast, we reveal that reputational concerns stemming from harm aversion may lead people astray when considering the ordinary, but difficult decisions, required in most hierarchical relationships, including parent-child, leader-follower, doctor-patient, and mentor-mentee relationships. Since decision-makers (mistakenly) believe they will incur a reputational penalty for necessary evils, they may forgo reputationally sound opportunities to create value for others and society. Ultimately, by studying a psychological barrier to creating good for others, this research has implications for leadership, morality, and social welfare.

### **Research Overview**

Across four preregistered studies, we test whether decision makers overestimate the reputational costs of necessary evils. First, we establish that targets of necessary evils evaluate decision-makers more favorably than decision-makers expect using a recall paradigm (Study 1). Second, we replicate our effects in an incentive-compatible game that models punishment decisions (Study 2). Third, we replicate our effects in a new incentive-compatible game that models redistribution decisions, and we examine the degree to which expectations of harm and instrumental value explain why decision makers overestimate the reputational costs of necessary evils (Study 3). Finally, we test interventions that can improve decision makers' accuracy about the reputational consequences of necessary evils (Study 4). In each study, we investigate decision-makers' beliefs about how targets will judge them as a result of their decision to perform a necessary evil. We compare decision-makers' beliefs to targets' actual judgments and find that decision-makers *overestimate* the reputational costs of necessary evils.

Across our studies, stopping rules for data collection were decided ex ante. Based on our past research and piloting, we aimed to recruit 100-200 participants per cell in each study. We conducted post-hoc power analyses for each study with  $\alpha = .05$  in G\*power, version 3.1 (Faul et al., 2007). Our sample sizes yielded powers of .78, .99, .99, and .99 to detect our focal effects of reputation in Studies 1-4 respectively. At the end of each study, participants provided demographic information.

### **Open Practices Statement**

Raw data, syntax, and survey materials for Studies 1-4 are available on the Open Science Foundation website (<https://tinyurl.com/NecessaryEvilsOSF>). We report all measures and conditions we collected. The designs and analysis plans for Studies 1-4 were preregistered on AsPredicted.

### **Study 1**

In Study 1, we use a recall paradigm to examine the predicted and actual reputational consequences of performing necessary evils.

### **Method**

**Participants.** As preregistered ([https://aspredicted.org/NVL\\_F5B](https://aspredicted.org/NVL_F5B)), we aimed to recruit 200 participants who could successfully recall either performing or being the target of a necessary evil (based on assignment to condition), from a community behavioral science research laboratory. Two hundred twenty-one participants began the study, 90.5% ( $n = 200$ ) of whom could recall a necessary evil and thus were eligible for the full study ( $M_{\text{age}} = 33.31$ ,  $SD_{\text{age}} = 14.24$ ; 144 women, 50 men, 6 non-binary).

**Procedure.** Each participant was randomly assigned to recall a necessary evil from the perspective of either Decision-Maker or Target. Decision-Makers recalled a situation in which

they caused harm to achieve a greater good, and Targets recalled a situation in which someone caused them harm to achieve a greater good. We present examples of the participants' recalled necessary evils in Table 1.

After recalling the situation, Decision-Makers predicted Targets' judgments of their reputation. Targets, conversely, indicated their actual judgments of the Decision-Makers' reputation. We measured reputation using a composite of three items on a 1 (strongly disagree) to 7 (strongly agree) scale ( $\alpha = .894$ ): "[The Target / I] liked [me / the Decision-Maker] for committing this act", "[The Target / I] respected [me / the Decision-Maker] for committing this act", "[The Target / I] thought [I / the Decision-Maker] was a good person for committing this act".

**Table 1. Examples of recalled text from Study 1.**

Perspective Condition	What harm was caused?	What was the greater good that the act achieved?
<b>Decision-Maker</b>	I had to dismiss an employee that I knew was hurting financially. He was not doing his job well and I felt very badly letting him go.	Our company had a sharp increase [in] sales. I believe it was because I hired a new person that was a real go-getter.
	As a dental student, I give injections which can be painful to patients. However, it makes the procedure more tolerable.	I was able to do the procedure without the patient feeling anything so their dental health improved.
<b>Target</b>	My father fired me from family business to make me understand the negative impact I was having on the company.	It taught me to take employment seriously and made me a better person.
	A friend went behind my back to tell my family about a problem I was having.	I was able to get help from my family.

## Results

As predicted, Decision-Makers believed Targets had more negative impressions of them ( $M = 3.28$ ,  $SD = 1.52$ ) than Targets actually did on average ( $M = 3.84$ ,  $SD = 1.77$ ),  $t(198) = 2.43$ ,  $p = .016$ ,  $d = 0.343$ . Study 1 provides initial evidence that decision-makers overestimate the

reputational consequences of necessary evils. However, it is possible that decision-makers and targets systematically recalled different types of necessary evils, or that decision-makers generally evaluate necessary evils they are about to perform differently than those that they can recall performing. Studies 2 and 3 address these limitations by examining necessary evils within behavioral games that hold the necessary evil constant across perspectives.

## Study 2

In Studies 2 and 3, we use two incentive-compatible designs to examine the expected and actual reputational consequences of necessary evils. In Study 2, we examine the context of punishment. Punishment is often considered a necessary evil (Molinsky & Margolis, 2005; Margolis & Molinsky, 2008) because it requires harming a transgressor in some way, either by imposing sanctions or causing embarrassment, but concurrently serves a variety of instrumental functions, such as communicating norms (Trevino, 1992), promoting good behavior in others (e.g., Balliet et al., 2011; Clutton-Brock & Parker, 1995; Dickinson et al., 2015), or restoring equality between a transgressor and a victim (Bone & Raihani, 2015). Here, we test whether decision-makers overestimate the reputational costs of punishing targets who acted selfishly in an economic game.

## Method

**Participants.** As preregistered ([https://aspredicted.org/ZWC\\_V8C](https://aspredicted.org/ZWC_V8C)), we recruited a sample of 400 participants from Academic Prolific ( $M_{\text{age}} = 36.42$ ,  $SD_{\text{age}} = 12.16$ ; 181 women, 205 men, 13 non-binary, 1 not listed).

**Procedure.** Participants were randomly assigned to one of two conditions in a between-subjects design (Perspective: Decision-Maker vs Target). Targets and Decision-Makers served as the two key players in a third-party punishment game adapted from prior research (Jordan et al.,



2016), which we referred to as “The Decision Game.” In the Decision Game, Targets were given 30 cents and made a decision that influenced the payment of themselves and a partner<sup>1</sup>. Targets made one of two possible choices: They either selected “Do share: give 15 cents [to your partner] and keep 15 cents”, or “Do not share: give 0 cents [to your partner] and keep 30 cents”. Targets who chose to *not* share advanced in the study<sup>2</sup>.

Decision-Makers were given 20 cents and learned they faced a punishment decision. Decision-Makers could either select “Do punish: pay 5 cents in order to cause [the Target] to lose 15 cents”, or “Do not punish: pay nothing and do not cause [the Target] to lose anything”. Before making their punishment decision, Decision-Makers made predictions about how the Target would judge their reputation if they decided to punish them. We measured reputation using the same three-item composite from Study 1 ( $\alpha = .853$ ). Then, the Decision-Maker chose whether or not to actually punish the Target. To make their punishment decision reputationally consequential, Decision-Makers learned they would receive an additional \$1.00 bonus payment if the Target judged their reputation in the top 10% of Decision-Makers.

Targets who chose not to share in the Decision Game and proceeded in the study learned that the Decision-Maker punished them, and then provided judgments of the Decision-Maker. For study payments, all Targets ( $n = 200$ ) were matched with one of the Decision-Makers who ultimately chose to punish the Target in the Decision Game ( $n = 62$ ; each Decision-Maker was matched with multiple Targets). To issue study payments to the remaining Decision-Makers who chose not to punish the Target in the Decision Game ( $n = 138$ ), we recruited a separate, non-

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<sup>1</sup> Targets’ partners were completely passive participants that were not recruited in Study 2. We recruited a separate sample of participants to serve as partners of Targets and issued bonus payments according to the decisions made in the present study.

<sup>2</sup> Targets who chose to share were not focal to this study because it would not be reasonable for Decision-Makers to punish them. Thus, they were redirected to complete a non-related study. As preregistered, we continued data collection until we recruited 200 Targets who chose “do not share” in the Decision Game.

focal sample of Targets to learn they were not punished, and paid bonuses accordingly. This additional sample was recruited only to ensure study payments were issued without deception; they did not complete any other measures.

## Results

Consistent with Study 1, Decision-Makers overestimated the extent that performing the necessary evil (i.e., punishing the Target) would undermine their reputation. Decision-Makers believed that Targets would have more negative impressions of them ( $M = 2.26$ ,  $SD = 0.90$ ) than Targets actually did ( $M = 3.06$ ,  $SD = 1.55$ ),  $t(398) = 6.32$ ,  $p < .001$ ,  $d = 0.632$ . Of the 200 Decision-Makers, 69.0% ( $n = 138$ ) chose to not punish the Target. Importantly, Decision-Makers' reputational concerns predicted their ultimate decision of whether to punish the Target. To the extent Decision-Makers believed that punishment would result in less favorable judgments of their reputation, Decision-Makers were less likely to punish the Target,  $r(200) = .181$ ,  $p = .010$ . This suggests that expected reputational consequences may explain decision-makers' aversion to performing necessary evils.

## Study 3

In Study 3, we use an incentive-compatible design to test the expected and actual reputational consequences of another real necessary evil: the redistribution of resources. Decision-makers often face opportunities to redistribute resources (e.g., money, land, opportunities) from advantaged groups or people to disadvantaged groups or people in order to foster equality (Edwards & McCarthy, 2004). In doing so, the decision-maker necessarily harms the advantaged target by causing them to lose resources, but simultaneously creates good by promoting fairness and giving resources to parties who may derive greater value from them (Dawes et al., 2007; Elenbaas et al., 2016; Alesina & Angeletos, 2005; Wienk et al., 2022). Here,

we examine whether decision-makers overestimate the reputational costs of taking money from a target endowed with an inequitable share of resources in an economic game and redistributing it to a less advantaged person.

We further extend our investigation by examining the predicted and actual reputational consequences of performing versus *not* performing a necessary evil. We also measure the mechanisms underlying our effects: we expect that decision-makers uniquely overestimate how much targets react negatively to necessary evils and underestimate how much targets recognize the instrumental value of necessary evils, which both contribute to decision-makers' reputational expectations.

## Method

**Participants.** As preregistered ([https://aspredicted.org/QBB\\_7PK](https://aspredicted.org/QBB_7PK)), we recruited a sample of 400 participants from Academic Prolific ( $M_{\text{age}} = 36.69$ ,  $SD_{\text{age}} = 12.31$ ; 174 women, 221 men, 5 non-binary).

**Procedure.** Participants were randomly assigned to a condition in a 2 (Perspective: Decision-Maker vs. Target) x 2 (Decision: Redistribute vs. Keep) between-subjects design. Targets and Decision-Makers served as the two key players in a novel paradigm called the Choice Game. In the Choice Game, Targets were endowed \$2.00 and were paired with a third-party partner who was endowed \$0.00<sup>3</sup>. Decision-Makers faced a redistribution decision. Specifically, the Decision-Maker could take \$1.00 from the Target and give it to the third party.

Decision-Makers were assigned to imagine they either redistributed the money or kept the original allocation of money. Then, Decision-Makers made predictions about how the Target would judge their reputation, the Target's emotional reaction, and the Target's belief that their

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<sup>3</sup> As in Study 2, Targets' partners were completely passive participants that were not recruited in Study 3, and we recruited a separate sample of participants to serve as Targets' partners and issued bonus payments accordingly.

decision has instrumental value. Finally, the Decision-Maker chose whether to redistribute the money or keep the original allocation of money.

Targets were assigned to a Decision-Maker who either redistributed the money or kept the original allocation of money.<sup>4</sup> Then, Targets reported their judgments of the Decision-Maker's reputation, their negative emotional reaction, and how much they believed the Decision-Maker's choice had instrumental value.

We measured reputation using the same three-item composite as Studies 1 and 2 ( $\alpha = .875$ ). The target's negative reaction was measured using a composite of three items on a 1 (strongly disagree) to 7 (strongly agree) scale ( $\alpha = .950$ ): "[I / The Target would] feel angry", "[I / The Target would] sad", and "[I / The Target would] feel upset" (adapted from Levine & Cohen, 2018). Instrumental value was also measured using a composite of three items on a 1 (strongly disagree) to 7 (strongly agree) scale ( $\alpha = .930$ ): "[The Decision-Maker's / The Target would believe my] choice in the Decision Game promotes important norms", "[The Decision-Maker's / The Target would believe my] choice in the Decision Game is valuable to Receiver B's well-being", and "[The Decision-Maker's / The Target would believe my] choice in the Decision Game helps create fairness broadly".

## Results

**Reputation.** To examine whether Decision-Makers overestimate the extent to which redistribution undermines Targets' judgments of their reputation, we conducted a 2 x 2 ANOVA on judgments of reputation using Perspective and Decision as independent variables<sup>5</sup>.

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<sup>4</sup> As in Study 2, there was not 1:1 matching of Targets and Decision-Makers. When issuing study payments, Targets were matched with either one of the Decision-Makers who chose to redistribute the money ( $n = 153$ ) or one of the Decision-Makers who kept the original allocation of money ( $n = 45$ ).

<sup>5</sup> See SOM 1.1 for full ANOVA results, including overall main effects, for which we did not have theoretical predictions.

As predicted, we found a significant interaction between Perspective and Decision,  $F(1, 396) = 82.16, p < .001, \eta_p^2 = .172$ . To decompose this interaction, we first consider whether Decision-Makers are miscalibrated about the reputational consequences of performing versus not performing necessary evils. When the Decision-Maker redistributed the money (i.e., performed a necessary evil), they expected the Target to judge them more negatively ( $M = 4.11, SD = 1.10$ ) than the Target actually did ( $M = 5.70, SD = 1.00$ ),  $t(196) = 10.63, p < .001, d = 1.511$ , consistent with our prior studies.. However, when the Decision-Maker kept the original allocation of money, they expected the Target to judge them more *positively* ( $M = 4.84, SD = 1.17$ ) than the Target actually did ( $M = 4.42, SD = 1.15$ ),  $t(200) = 2.57, p = .011, d = 0.361$ .

Next, we consider whether Decision-Makers expected performing the necessary evil (versus not performing the necessary evil) to be more reputationally costly than Targets believed. Decision-Makers believed Targets would judge their reputation more favorably if they kept the original allocation of money ( $M = 4.84, SD = 1.17$ ) than if they redistributed the money ( $M = 4.11, SD = 1.10$ ),  $t(196) = 4.51, p < .001, d = 0.640$ . However, there was actually a reputational benefit to performing the necessary evil. Targets judged Decision-Makers who redistributed the money as having a better reputation ( $M = 5.70, SD = 1.00$ ) than Decision-Makers who kept the original allocation of money ( $M = 4.42, SD = 1.15$ ),  $t(200) = 8.44, p < .001, d = 1.188$ . These results are depicted in Figure 1.

**Targets' reaction.** We conducted a 2 x 2 ANOVA on targets' reaction using Perspective and Decision as independent variables. Consistent with our reputation measure, we found the predicted significant interaction between Perspective and Decision,  $F(1, 396) = 111.17, p < .001, \eta_p^2 = .219$ . When the Decision-Maker redistributed the money, they significantly overestimated how much Target would react negatively ( $M = 4.21, SD = 1.33$  vs.  $M = 1.94, SD = 0.99$ ),  $t(196)$

= 13.65,  $p < .001$ ,  $d = 1.940$ . However, when the Decision-Maker kept the original allocation of money, they did not mispredict the Target's negative reaction ( $M = 1.79$ ,  $SD = 1.12$  vs.  $M = 1.97$ ,  $SD = 1.19$ ),  $t(200) = 1.11$ ,  $p = .267$ ,  $d = 0.157$ .

This interaction also reveals that Decision-Makers expected performing the necessary evil (vs. not performing the necessary evil) to lead to more negative reactions than Targets actually experienced. Decision-Makers believed Targets would react more negatively if they redistributed the money ( $M = 4.21$ ,  $SD = 1.33$ ) than if they kept the original allocation of money ( $M = 1.79$ ,  $SD = 1.12$ ),  $t(196) = 13.91$ ,  $p < .001$ ,  $d = 1.977$ . However, Targets actually reacted similarly when the money was redistributed ( $M = 1.94$ ,  $SD = 0.99$ ) and when the original allocation of money was kept ( $M = 1.97$ ,  $SD = 1.19$ ),  $t(200) = 0.18$ ,  $p = .860$ ,  $d = 0.025$ . See Figure 1.

**Instrumental value.** We conducted a 2 x 2 ANOVA on instrumental value using Perspective and Decision as independent variables. As predicted, we found a significant interaction between Perspective and Decision,  $F(1, 396) = 16.09$ ,  $p < .001$ ,  $\eta_p^2 = .039$ . When the Decision-Maker redistributed the money, they significantly underestimated how much the Target believed their decision had instrumental value ( $M = 4.75$ ,  $SD = 0.99$  vs.  $M = 5.65$ ,  $SD = 0.91$ ),  $t(196) = 6.61$ ,  $p < .001$ ,  $d = 0.939$ . However, when the Decision-Maker kept the original allocation of money, the Decision-Maker did not mispredict the Target's judgment of instrumental value ( $M = 2.80$ ,  $SD = 1.42$  vs.  $M = 2.74$ ,  $SD = 1.35$ ),  $t(200) = 0.32$ ,  $p = .753$ ,  $d = 0.044$ .

Decision-Makers also mispredicted the degree to which Targets believed that performing the necessary evil (vs. not performing the necessary evil) had instrumental value. Decision-Makers expected Targets to believe that redistributing the money ( $M = 4.75$ ,  $SD = 0.99$ ) had

greater instrumental value than maintaining the original allocation of money ( $M = 2.80$ ,  $SD = 1.42$ ),  $t(196) = 11.15$ ,  $p < .001$ ,  $d = 1.585$ . However, Targets' actual judgments revealed an even greater recognition of the instrumental benefits of redistributing the money ( $M = 5.65$ ,  $SD = 0.91$  vs.  $M = 2.74$ ,  $SD = 1.35$ ),  $t(200) = 17.87$ ,  $p < .001$ ,  $d = 2.515$ . See Figure 1.

**Decision-Maker's redistribution choice.** Of the 198 Decision-Makers, 77.3% ( $n = 153$ ) chose to redistribute the money. This proportion was similar whether Decision-Makers were assigned to imagine redistributing the money (78.6%) or keeping the original allocation of money (76.0%). Importantly, Decision-Makers' reputational concerns predicted their ultimate decision of whether to redistribute the money. Among the Decision-Makers assigned to imagine redistributing the money, expecting a reputational penalty of redistribution was significantly associated with choosing to keep the original allocation of money,  $r(98) = .234$ ,  $p = .021$ . Among the Decision-Makers assigned to imagine keeping the original distribution of money, expecting more favorable reputations of keeping the original allocation of money was somewhat, but not significantly, associated with choosing to keep the original allocation of money,  $r(100) = .173$ ,  $p = .086$ . Following the results from Study 2, this suggests that expected reputational consequences – particularly of *performing* necessary evils – may guide decision-makers decisions.

**Mediation analysis.** We conducted a moderated mediation analysis using the bootstrap procedure with 10,000 samples (Hayes, 2013) to explore the process by which perspective influences judgements (and predictions) of reputation. We tested a model using perspective (0 = Target, 1 = Decision-Maker) as the independent variable, decision (0 = Keep, 1 = Redistribute) as the moderator, targets' reaction and instrumental value as simultaneous mediators, and reputation as the dependent variable.

When the original allocation of money was kept, neither the Target's (expected) reaction (indirect effect = 0.08,  $SE = 0.07$ ; 95% CI [-0.06, 0.23]), nor the Target's (expected) judgment of instrumental value (indirect effect = 0.02,  $SE = 0.07$ ; 95% CI [-0.11, 0.16]) mediated the relationship between perspective and reputation. However, when the money was redistributed, we find evidence of significant mediation through both the Target's reaction (indirect effect = -0.99,  $SE = 0.12$ ; 95% CI [-1.22, -0.77]) and judgments of instrumental value (indirect effect = -0.31,  $SE = 0.06$ ; 95% CI [-0.43, -0.21]). Specifically, Targets react less negatively to necessary evils and believe there is more instrumental value in necessary evils than Decision-Makers expect, which contributes to Targets making more positive judgments of Decision-Makers' reputation than Decision-Makers expect. Thus, we find evidence of moderated mediation through both Target's reaction (index of moderated mediation = -1.07,  $SE = 0.15$ ; 95% CI [-1.37, -0.79]) and judgments of instrumental value (index of moderated mediation = -0.33,  $SE = 0.09$ ; 95% CI [-0.52, -0.16]). We interpret our mediation results cautiously, however, noting that the reported analyses are compatible with only one of several possible causal models.



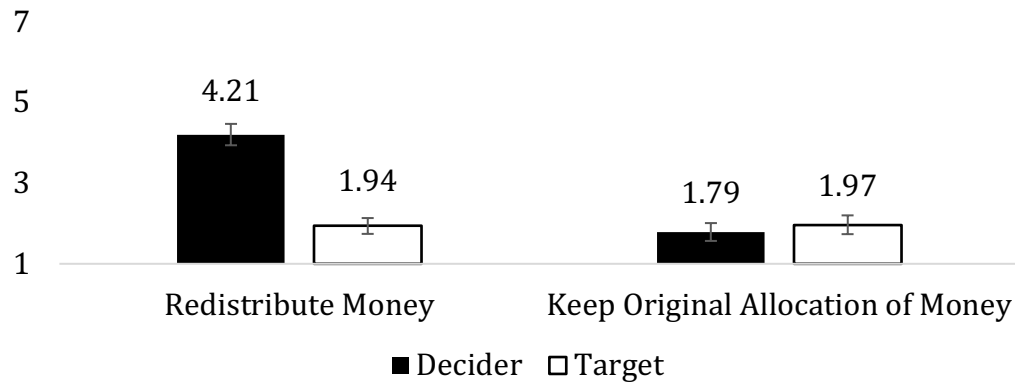
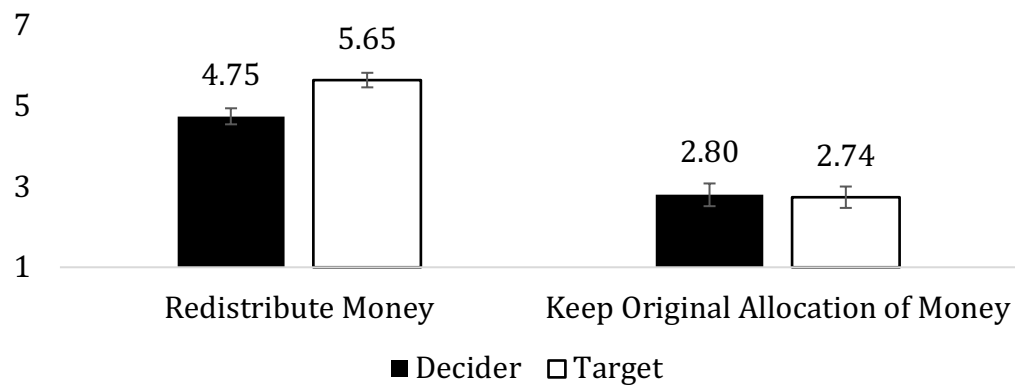
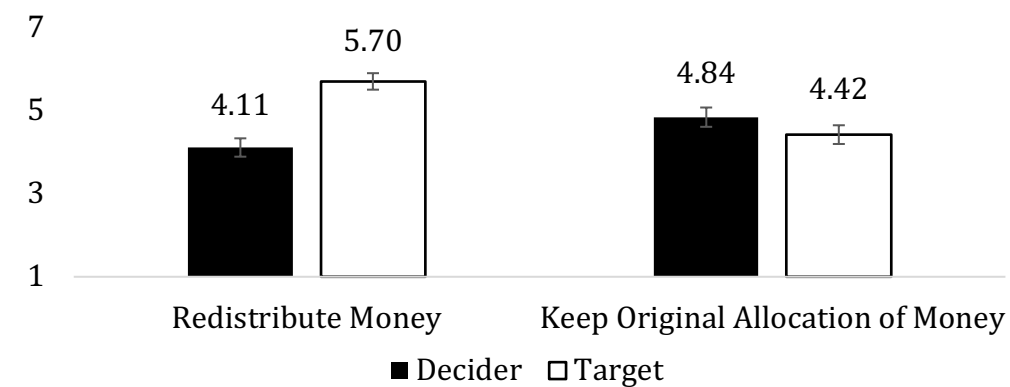
**Figure 1. Reputation, Targets' Reaction, and Instrumental Value Results from Study 3****Panel A. Targets' (Expected) Negative Reaction****Panel B. Targets' (Expected) Judgment of Instrumental Value****Panel C. Targets' (Expected) Judgment of Reputation**

Figure 1. Error bars represent 95% confidence intervals around the mean. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

### Study 4

In Study 4, we examine two potential interventions to calibrate decision-makers to targets' actual judgments of their reputation following a necessary evil. In the first intervention, we tested a classic debiasing strategy (e.g., Kardas et al., 2022): informing decision-makers of their bias by telling them that that targets of necessary evils generally react more positively and are more understanding of the value underlying tough decisions than decision-makers expect. In the second intervention, we informed decision-makers that the specific target of the necessary evil tends to react positively and understands the value of tough decisions. We expected that the first intervention would not completely debias decision-makers because it did not provide assurance that decision-makers would not be resented by the specific target they harmed. Even when decision-makers know that most *social* interactions go smoothly, or that their decisions are *typically* rewarded, all social decisions still involve some risk (Fetchenhauer & Dunning, 2012). Without experience or feedback that leads a decision-maker to believe that this particular decision will not be penalized, decision-makers may still form pessimistic expectations. Therefore, we test whether target-specific knowledge is more effective in calibrating decision-makers expectations.

### Method

**Participants.** As preregistered ([https://aspredicted.org/YJV\\_DCV](https://aspredicted.org/YJV_DCV)), we recruited a sample of 600 participants from Academic Prolific ( $M_{\text{age}} = 38.64$ ,  $SD_{\text{age}} = 10.82$ ; 227 women, 369 men, 4 non-binary).

**Procedure.** Participants were randomly assigned to one of four conditions in a between-subjects design: one Target condition and three Decision-Maker conditions (Control, Specific-Knowledge, General-Knowledge condition). Participants imagined a start-up on the verge of

bankruptcy. A manager (i.e., the Decision-Maker) was faced with a decision: whether or not to give an employee (i.e., the Target) a pay cut to save the company. Targets learned the Decision-Maker gave them the pay cut, and then, Targets judged the Decision-Maker. Decision-Makers in the Control condition made predictions of how the Target would judge them if they performed the necessary evil (i.e., give the Target the pay cut). Decision-Makers in the General-Knowledge and Specific-Knowledge conditions received additional information before making their predictions.

Decision-Makers in the General-Knowledge Condition read the following:

*Recent research in behavioral science has found that most managers overestimate how harshly employees react to these types of decisions. Employees typically recognize the value of these decisions more often than managers expect.*

Decision-Makers in the Specific-Knowledge condition read the following:

*The employee you are considering giving a pay cut to seems to understand the need for these types of decisions. This employee typically reacts positively and recognizes the value of hard decisions made by management.*

We measured reputation using the same three-item composite as Studies 1-3 ( $\alpha = .953$ ). The target's (expect) reaction was measured using the same three-item composite as Study 3 ( $\alpha = .888$ ). To measure instrumental value, we updated the items from Study 3 to better reflect the stimuli in the scenario ( $\alpha = .903$ ): "[The Decision-Maker's / The Target would believe my] decision promotes important norms", "[The Decision-Maker's / The Target would believe my] decision is good for the start-up's well-being", and "[The Decision-Maker's / The Target would believe my] decision helps the functioning of the start-up". We also preregistered one additional exploratory item measuring Decision-Makers' willingness to perform the necessary evil.

Specifically, we asked participants in the three Decision-Maker conditions (Control, General-Knowledge, Specific-Knowledge) to indicate their willingness to perform the necessary evil (i.e., give the pay cut) using a single item on a 1 (not willing at all) to 7 (very willing) scale: “How willing are you to give a pay cut to the employee?”.

## Results

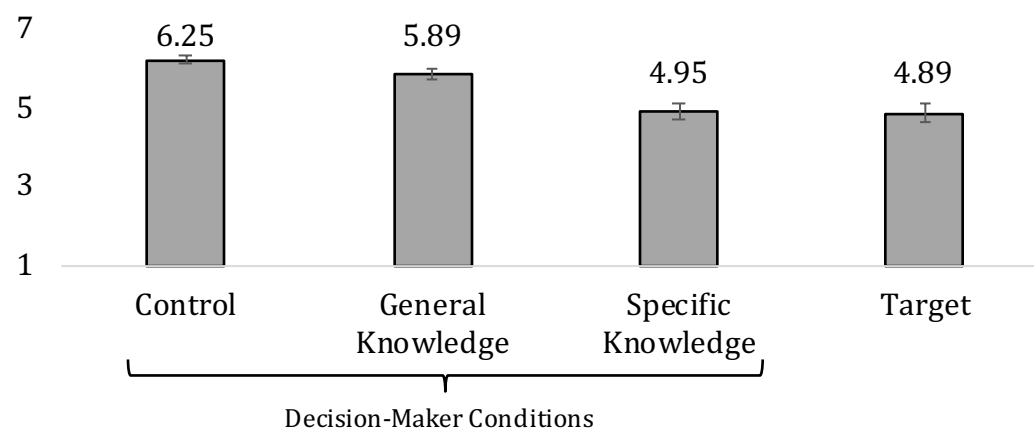
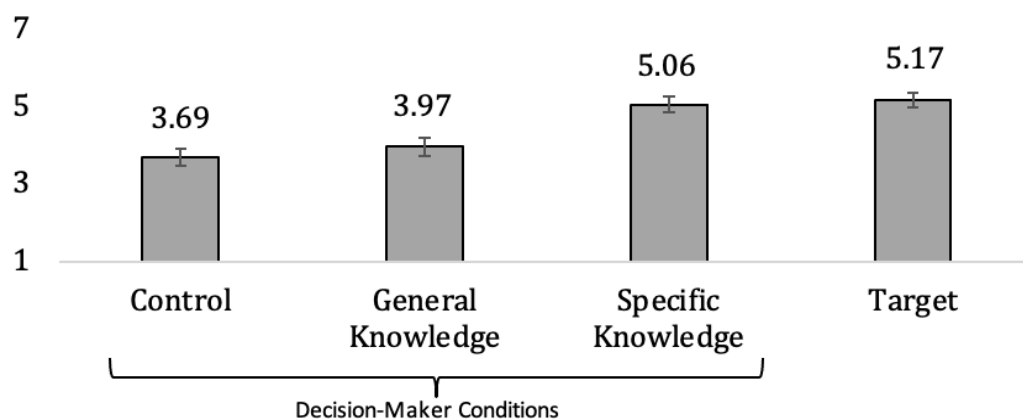
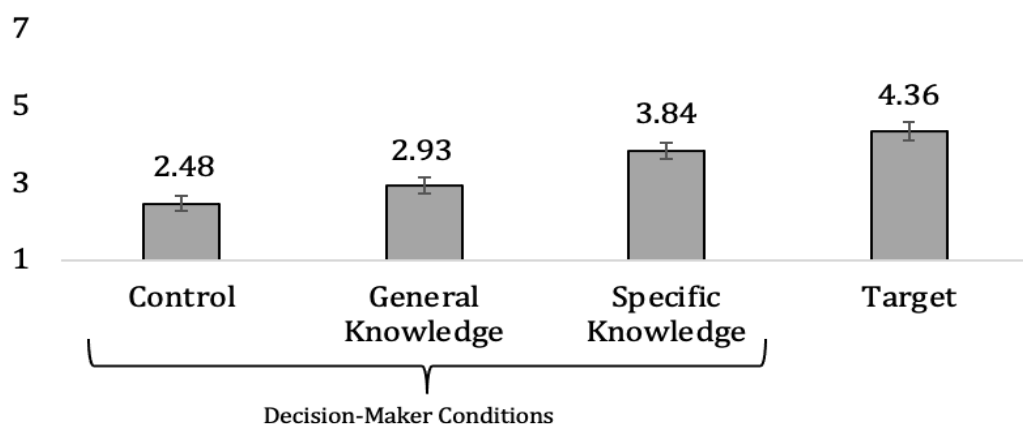
**Reputation.** A one-way ANOVA revealed an effect of Condition on reputation,  $F(3, 596) = 60.66, p < .001, \eta^2 = .234$ . Replicating our results from Studies 1-3, Decision-Makers in the Control condition ( $M = 2.48, SD = 1.29$ ) overestimated the reputational cost of performing the necessary evil, relative to the Target’s actual judgment ( $M = 4.36, SD = 1.43$ ),  $t(297) = 12.00, p < .001, d = 1.388$ . Decision-Makers in the General-Knowledge condition ( $M = 2.93, SD = 1.32$ ) and the Specific-Knowledge condition ( $M = 3.84, SD = 1.34$ ) believed performing the necessary evil was less reputationally costly than Decision-Makers in the Control Condition ( $M = 2.48, SD = 1.29$ ),  $t(299) = 3.04, p = .003, d = 0.351$  and  $t(298) = 8.99, p < .001, d = 1.039$ , respectively. Although both interventions improved the accuracy of Decision-Makers’ predictions, Decision-Makers in both the General-Knowledge condition and the Specific-Knowledge condition still overestimated how negatively Targets of necessary evils would judge their reputation,  $t(298) = 9.03, p < .001, d = 1.042$  and  $t(297) = 3.27, p = .001, d = 0.378$ , respectively. A comparison of the two interventions, however, revealed that Decision-Makers in the Specific-Knowledge condition were significantly more accurate in predicting Targets’ judgments of their reputation than Decision-Makers in the General-Knowledge condition,  $t(299) = 5.93, p < .001, d = 0.684$ .

**Targets’ reaction.** A one-way ANOVA revealed an effect of Condition on Targets’ emotional reactions,  $F(3, 596) = 49.56, p < .001, \eta^2 = .200$ . Replicating our results from Studies 1-3, Decision-Makers in the Control condition ( $M = 6.25, SD = 0.79$ ) overestimated Targets’

negative emotions following the necessary evil ( $M = 4.89$ ,  $SD = 1.50$ ),  $t(297) = 9.85$ ,  $p < .001$ ,  $d = 1.140$ . Decision-Makers in the General-Knowledge condition ( $M = 5.89$ ,  $SD = 0.96$ ) and the Specific-Knowledge condition ( $M = 4.95$ ,  $SD = 1.36$ ) believed performing the necessary evil would lead Targets to react more negatively than Decision-Makers in the Control Condition ( $M = 6.25$ ,  $SD = 0.79$ ),  $t(299) = 3.62$ ,  $p < .001$ ,  $d = 0.418$  and  $t(298) = 10.20$ ,  $p < .001$ ,  $d = 1.178$ , respectively. Although the General-Knowledge intervention improved how accurately Decision-Makers predicted Targets' negative reaction, they still overestimated how much Targets of necessary evils would react negatively,  $t(298) = 6.86$ ,  $p < .001$ ,  $d = 0.792$ . In contrast, the Specific-Knowledge condition sufficiently improved Decision-Makers' accuracy in predicting Targets' negative reaction such that Decision-Makers' predictions were well-calibrated to Targets' actual reports,  $p = .733$ . A comparison of the two interventions revealed that Decision-Makers in the Specific-Knowledge condition were significantly more accurate in predicting Targets' emotional reaction than Decision-Makers in the General-Knowledge condition,  $t(299) = 6.93$ ,  $p < .001$ ,  $d = 0.799$ .

**Instrumental value.** A one-way ANOVA revealed an effect of Perspective condition on instrumental value,  $F(3, 596) = 48.22$ ,  $p < .001$ ,  $\eta^2 = .195$ . Replicating our results from Studies 1-3, Decision-Makers in the Control condition ( $M = 3.69$ ,  $SD = 1.33$ ) underestimated Targets' judgments of instrumental value produced by the necessary evil ( $M = 5.17$ ,  $SD = 1.17$ ),  $t(297) = 10.26$ ,  $p < .001$ ,  $d = 1.186$ . Decision-Makers in the General-Knowledge condition ( $M = 3.97$ ,  $SD = 1.52$ ) predicted that Targets would recognize somewhat, but not significantly, more instrumental value than Decision-Makers in the Control Condition ( $M = 3.69$ ,  $SD = 1.33$ ),  $t(299) = 1.69$ ,  $p = .092$ ,  $d = 0.195$ . Decision-Makers in Specific-Knowledge condition ( $M = 5.06$ ,  $SD = 1.27$ ) predicted that Targets would report greater instrumental value than Decision-Makers in the

Control Condition ( $M = 3.69$ ,  $SD = 1.33$ ),  $t(298) = 9.12$ ,  $p < .001$ ,  $d = 1.053$ . Although the General-Knowledge intervention marginally improved Decision-Makers' accuracy in predicting Targets' judgments of instrumental value, they still underestimated how much Targets would report that the necessary evil was instrumentally valuable,  $t(298) = 7.70$ ,  $p < .001$ ,  $d = 0.890$ . In contrast, the Specific-Knowledge condition sufficiently improved Decision-Makers' accuracy in predicting Targets' judgments of instrumental value such that Decision-Makers' predictions were well-calibrated to Targets' actual reports,  $p = .408$ . A comparison of the two interventions revealed that Decision-Makers in the Specific-Knowledge condition were significantly more accurate in predicting Targets' judgments of instrumental value than Decision-Makers in the General-Knowledge condition,  $t(299) = 6.75$ ,  $p < .001$ ,  $d = 0.778$ .

**Figure 2. Reputation, Targets' Reaction, and Instrumental Value Results from Study 4****Panel A. Targets' (Expected) Negative Reaction****Panel B. Targets' (Expected) Judgment of Instrumental Value****Panel C. Targets' (Expected) Judgment of Reputation***Figure 2. Error bars represent 95% confidence intervals around the mean.*

**Willingness.** A one-way ANOVA revealed that Decision-Makers' reported willingness to perform the necessary evil did not significantly differ across the Control ( $M = 4.60$ ,  $SD = 2.02$ ), General Knowledge ( $M = 4.42$ ,  $SD = 2.06$ ), and Specific-Knowledge ( $M = 4.77$ ,  $SD = 1.93$ ) conditions,  $F(2,448) = 1.15$ ,  $p = .319$ . However, consistent with the real decision to perform the necessary evil in Studies 2 and 3, Decision-Makers' predicted reputation following the necessary evils was associated with their reported willingness to perform the necessary evil across the Control,  $r(150) = .381$ ,  $p < .001$ , General Knowledge,  $r(151) = .284$ ,  $p < .001$ , and Specific Knowledge,  $r(150) = .530$ ,  $p < .001$ , conditions.

### General Discussion

Using multiple samples and contexts, four main experiments reveal that necessary evils do not undermine reputational judgments as much as past research presumes: targets judge decision-makers who commit necessary evils more positively than decision-makers expect. We document the robustness of these effects across four supplemental studies (three preregistered), which suggest that decision-makers also overestimate how much performing necessary evils harms judgments of moral character and leadership potential (see SOM 2.1-2.4), and that these effects may persist even in cases of sacrificial harm (see Study S4). Broadly, this work sheds light on the social causes and consequences of everyday necessary evils—including redistribution and punishment, as well as negative feedback, painful medical procedures, and tough love—and highlights how harm aversion can bias decision-makers' social expectations and resulting decisions.

This work also documents the broader consequences of inflicting harm. Decision-makers' expectation that necessary evils would be reputationally costly were generally wrong. In Study 3,



targets judged decision-makers who performed the necessary evil more positively than decision-makers who did not perform the necessary evil. Scholars have long claimed that inflicting harm undermines reputation, but this research offers one perspective that harm may even enhance reputation when it is necessary to generate instrumental value. These biases may have implications for the performance of necessary evils by leaders in organizations. By avoiding necessary evils, leaders in organizations may forgo opportunities that are instrumentally valuable for their employees and organizations, and simultaneously maintain a strong reputation.

More research is needed, however, to understand the boundaries of these effects. One limitation of the current research is that our participants were primarily from behavioral research labs and online panels. Decision-makers who are frequently in the position of performing necessary evils (e.g., human resources professionals, law enforcement, health care workers) may have expertise that affords a more calibrated sense of their reputational consequences. Furthermore, harm may be delivered unjustly in the real-world, leading necessary evils to be, and be seen as, more evil. For example, though our results suggest that targets who are reasonably punished respect the authority figures who punish them, we do not expect this to be the case if a target believes they are innocent, if the punishment is not proportional to the offense, or if the punishment reflects bias or discrimination. Similarly, though our results suggest that targets of redistribution do not react poorly to redistribution *per se*, they may if they believe redistributive policies are unfair. In these cases, we expect targets to perceive necessary evils to have low instrumental value, which should attenuate their reputational benefits. Future research should investigate how contextual and individual differences influence the perceived harm and benefits of necessary evils, and therefore their reputational consequences.

Though we demonstrated that the expected reputational costs of necessary evils may bedevil decision-makers' propensity to perform necessary evils (Studies 2 and 3), more work is needed to understand how to promote necessary evils, when appropriate. Study 4 suggests that providing decision-makers with general information about their tendency to overestimate the reputational costs of necessary evils is not as effective as providing specific information about how the target of a necessary evil will react. However, even when decision-makers believed the target in question would recognize the value of the necessary evil and not judge the decision-maker harshly, they did not report being more likely to perform the necessary evil relative to decision-makers in a control condition. Future studies should test the effectiveness of target-specific interventions, as well as others, on real decision-maker behavior.

### **Conclusion**

Decision-makers anticipate necessary evils to be reputationally costly, and, in turn, often avoid choosing to perform them. Our research suggests that these expectations and resulting decisions may be misguided. Necessary evils in everyday life are not as emotionally harmful and are more instrumentally valuable than they initially seem, and in fact, can even enhance a decision-maker's reputation. There may be quite a deal of good in everyday necessary evils, at least more than decision-makers often believe.

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