

The Scope-Severity Paradox: Why Doing More Harm Is Judged to Be Less Harmful

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Abstract

Punishment should be sensitive to the severity of the crime. Yet in three studies the authors found that increasing the number of people victimized by a crime actually *decreases* the perceived severity of that crime and leads people to recommend *less* punishment for crimes that victimize *more* people. The authors further demonstrate the process behind the scope-severity paradox—the victim identifiability effect—and test a strategy for overcoming this bias. Although Studies 1 and 2 document this phenomenon in the lab, in Study 3 the authors used archival data to demonstrate that the scope-severity paradox is a robust, real-world effect. They collected archival data of actual jury verdicts spanning a 10-year period and found that juries required defendants to pay higher punitive damages when their negligent behavior harmed fewer people.

Keywords

ethics, morality, judgment, decision making, deviance, psychology and law

One death is a tragedy; one million is a statistic.

Joseph Stalin

A universal principle of both legal and psychological standards of justice is that punishment should be sensitive to the severity of the crime. From early biblical notions of “an eye for an eye” to the modern legal standard that “punishment should fit the crime,” almost all countries and cultures endorse the notion that crimes that do greater harm are thought to be worse than crimes that harm less (Mead, 1918). Murdering many people, for instance, warrants greater punishment than the murder of just one. The present article asks a simple question: How does the number of people victimized by a crime influence the perceived severity of that crime. The legal standard is clear: Increasing the number of victims should proportionally increase the severity of the criminal act. Yet we hypothesized that this legal standard might not reflect psychological realities. Specifically, we predicted that increasing the number of people victimized by a crime might actually *decrease* the perceived harm of the act.

Theoretical Foundation

According to legal doctrine, people should be sensitive to the scope of a crime. The Eighth Amendment’s requirement that punishment must be proportional to a crime exemplifies this ideology. Yet people are notoriously insensitive to the magnitude of outcomes. When asked how much they would pay to save 2,000, 20,000, or 200,000 migrating birds from drowning in uncovered oil ponds, for instance, participants stated a mean

willingness to pay \$80, \$78, and \$88, respectively (Desvousges et al., 1993). This violation of rational choice is known as scope insensitivity or scope neglect. Similar research has demonstrated that people were willing to pay only 28% more to protect 57 forest preserves than what they would pay to protect a single preserve (McFadden & Leonard, 1993) and were willing to spend the same amount of money to clean up hundreds of polluted lakes compared to the cleanup of one polluted lake (Kahneman, 1986).

Instead of drawing on the magnitude of an outcome, people’s judgments tend to be driven by their emotional reactions to that outcome (Loewenstein, 1996). And people have stronger emotional reactions to specific, identified victims than to abstract victims who have not been personally identified (Schelling, 1968). For instance, Small and Loewenstein (2003) have demonstrated that, in the context of charitable contributions, identifiable victims evoked greater sympathy and thus received more donations than statistical victims. Similarly, Small and Loewenstein (2005) found that perpetrators who were identifiable evoked greater anger, and were thus punished more harshly, than nonidentifiable perpetrators. Identification, of course, is much easier with a small group of victims. We can

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learn the rich personal history of one victim (e.g., a child trapped in a well) but rarely have the time to find out the details about many victims (e.g., 30 miners trapped in a collapsed mine). Along these lines, Kogut and Ritov (2005) demonstrated that a single victim evoked greater sympathy and raised more donations than did a group of victims.

The existing literature on the victim identifiability effect has documented the difficulty abstract victims have in receiving both emotional and financial support. But we believe that victim identifiability also has important consequences for the *perpetrators* who victimize. We hypothesize that perpetrators who harm more people will receive less punishment than those who harm fewer people. This prediction not only violates established legal notions of justice but also signifies an additional misfortune for abstract victims.

In sum, the research on scope neglect suggests that increasing the number of victims of a crime might not increase the perceived severity of the crime. Instead, these judgments may be more sensitive to the emotional reactions elicited by the crime. Because small groups are more easily identifiable and thus provoke stronger emotional responses, we reasoned that increasing the number of people victimized by a crime might actually decrease the perceived severity of that offense—a biased judgment we refer to as the scope-severity paradox.

The Present Studies

Study 1 asked participants to evaluate a scenario in which few or many people were victimized by fraud and then asked them to evaluate the severity of the crime and recommend an appropriate punishment. We predicted that participants who read about a small number of victims would rate the crime to be both more severe and deserving of more punishment than participants who read the vignette involving a large number of victims. Study 1 also tested our prediction that the heightened identifiability of the small group of victims drives this effect. Study 2 tested whether we could correct the victim-scope bias by experimentally manipulating the identifiability of the victims. Study 2 also examined an additional implication of the scope-severity paradox. We reasoned that if increasing the number of victims makes unethical behavior seem less severe, then increasing the number of victims might also make it easier for people to *commit* unethical acts themselves.

The goal of Study 3 was to test whether the scope-severity paradox is a real-world phenomenon. To do this we collected archival data of actual jury verdicts spanning a 10-year period. Using Westlaw's database of U.S. jury verdicts, we collected data on the awards that juries granted to plaintiffs for the three most common categories of toxic tort cases—asbestos cases, toxic mold cases, and lead poisoning cases—between 2000 and 2009. If the scope-severity paradox is a robust decision bias, then we should find that juries require defendants to pay higher punitive damages when their negligent behavior harmed fewer people.

Study 1

In Study 1 we asked participants to read a vignette about a case of fraud. We systematically varied the number of people victimized by the fraud. Participants were told that either 3 people (small scope) or 30 people (large scope) were defrauded by a financial advisor. All other information in the vignette was kept the same. After reading the vignette, participants were asked to evaluate the severity of the crime and recommend a punishment for the perpetrator. We also asked participants to describe one of the victims in this case. We suspected that participants in the small scope condition would describe the typical victim in greater detail (i.e., make the victim more identifiable) than participants in the large scope condition. And we expected this difference in identifiability would mediate the relationship between the scope of the crime and the perceived severity of the offense.

Method

A total of 60 students (38 females and 22 males) were randomly assigned to the small or large scope condition. Participants filled out demographic information and then read the following vignette: "Frank Aaker is a high profile financial advisor. Last month, Mr. Aaker was found guilty of fraud. He ran a ponzi scheme that defrauded (3 or 30) people out of their life savings." After reading the vignette, participants were asked to evaluate the severity of the offense and make a sentencing recommendation. Specifically, participants were told, "Some crimes are more severe than others. Assault and murder, for instance, are far more severe offenses than shoplifting. Please indicate the severity of this crime." Responses were made on a 10-point scale from 1 (*not at all severe*) to 10 (*extremely severe*). Next, participants were told, "Mr. Aaker's crimes carry a maximum sentence of 10 years in jail. Please indicate how many years you believe he should be imprisoned."

After making a sentencing recommendation, participants were asked to describe one of the victims. "We would now like you to describe one of the people victimized by this crime. Please list whatever traits come to mind when you imagine one of the victims." We then had two coders (blind to condition) count the number of traits participants used to describe the imagined victim.

Results

In line with our prediction, we found that participants in the small scope condition judged the fraud case to be more severe ($M = 6.37$, $SD = 1.67$) compared to participants in the large scope condition ($M = 5.51$, $SD = 1.33$), $F(1, 59) = 4.88$, $p = .03$, $\eta^2 = .08$. Likewise, we predicted that participants in the small scope condition would recommend greater punishment (i.e., a longer jail sentence) for the perpetrator. As predicted, the small scope condition recommended a longer jail sentence ($M = 5.86$, $SD = 2.06$) compared to the large scope condition ($M = 4.83$, $SD = 2.01$), $F(1, 59) = 3.76$, $p = .05$, $\eta^2 = .06$.

We argue that these effects are because of differences in the identifiability of the victim. As expected, participants in the small scope condition described a hypothetical victim in greater detail ($M = 9.89$, $SD = 4.58$), on average describing the victim with three additional traits, compared to participants in the large scope condition ($M = 6.80$, $SD = 2.97$), $F(1, 59) = 9.72$, $p = .003$, $\eta^2 = .14$. Crucially, although scope of the crime was correlated with the perceived severity of the crime, $r(60) = -.28$, $p = .03$, we found that identifiability (i.e., the number of traits listed) mediated this relationship, $z = -2.79$, $p = .005$. Of course, during the natural reporting and analysis of a crime, one can learn far more specific, vivid information about a small number of victims. But our findings suggest that even when information is held constant, people form more vivid mental representations of a small number of victims.

Study 2

In Study 2, participants read about a food processing company that learned that some of its product was unsafe but decided not to inform the public or recall the product. Participants learned that either 2 (small scope) or 20 (large scope) consumers were made seriously ill from the tainted food. Participants were then asked to determine the appropriate punishment for the company's executives.

One goal of Study 2 was to test whether we could correct the victim-scope bias by experimentally manipulating the identifiability of the victims. In the low identification conditions, participants were given only a basic description of the victims (similar to Study 1), whereas participants in the high identification conditions received a photograph of one of the victims along with the victim's name and occupation.

Finally, Study 2 examined an additional implication of the scope-severity paradox. We reasoned that if increasing the number of victims makes unethical behavior seem less severe, then increasing the number of victims might also make it easier for people to act unethically. To test this idea, we asked participants to decide whether they would "blow the whistle" if they learned their company was selling tainted food. We predicted that increasing the number of victims would encourage unethical behavior.

Method

A total of 91 university students (51 female and 40 males) participated for course credit. Participants provided demographic information and then read the following vignette:

The top executives at MorningStar, a food manufacturer, learned several weeks ago that food at their plant was tainted with a poisonous chemical. After much debate the executives decided not to recall the food or inform the public about the tainted food. They reasoned that recalling the food or informing the public not to buy their food would bankrupt the company. The tainted food eventually made two (or twenty) people seriously ill.

Participants in the high identification conditions were then given a color photograph depicting one of the victims, a 22-year-old woman named Anna Veil. Her occupation was listed as "student." Participants in the low identification condition did not receive this information. Participants then evaluated the severity of the crime (identical to Study 1) and made a sentencing recommendation, prompted by the question: "The MorningStar executives were later found guilty of violating a number of food safety laws. The penalty for these crimes carries a maximum of 15 years in prison. What jail sentence would you recommend?"

Last, we asked participants to imagine the following scenario:

Now imagine that you work for MorningStar and you receive an e-mail about the tainted food and your company's decision to cover it up. You realize you can blow the whistle on your company by sharing this information with the media. Sharing this information would help prevent consumers from eating tainted food. On the other hand, you feel loyalty to your company and fear you will lose your job if MorningStar discovers you leaked this information.

We then asked participants, "What would you do in this situation?" Responses were made on the following 5-point scale: -2 (*definitely cover it up*), -1 (*probably cover it up*), 0 (*not sure what I would do*), 1 (*probably go to the media*), 2 (*definitely go to the media*).

Results

Results revealed a significant interaction between the scope of the victims (small vs. large) and the identifiability of the victims (photo vs. no photo) on the perceived severity of the crime, $F(3, 90) = 6.59$, $p = .01$, $\eta^2 = .07$, and recommended punishment for the crime, $F(3, 90) = 3.74$, $p = .06$, $\eta^2 = .04$. Specifically, when identifiability was low (no photograph of the victims), participants in the small scope condition rated the crime to be more severe ($M = 6.25$, $SD = 1.93$) than did participants in the large scope condition ($M = 4.57$, $SD = 1.28$), $F(1, 44) = 11.34$, $p = .002$, $\eta^2 = .20$. This finding replicates the scope-severity effect observed in Study 1. However, when identifiability was enhanced with a photograph, the scope-severity paradox (partially) evaporated. Rating in the small scope condition ($M = 6.26$, $SD = 1.42$) did not differ from rating in the large scope condition ($M = 6.34$, $SD = 1.77$), $p = ns$ (see Figure 1).

A similar pattern of results was observed for punishment recommendations. When identifiability was low, participants in the small scope condition recommended greater punishment ($M = 5.79$, $SD = 2.06$) than did participants in the large scope condition ($M = 4.23$, $SD = 1.79$), $F(1, 44) = 7.36$, $p = .01$, $\eta^2 = .15$. When identifiability was enhanced with a photograph, rating in the small scope condition ($M = 5.82$, $SD = 1.82$) did not differ from ratings in the large scope condition ($M = 5.80$, $SD = 1.99$), $p = ns$.

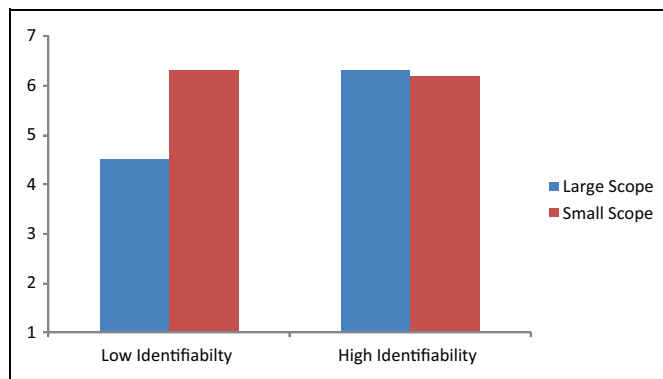


Figure 1. Perceived severity of the crime by identification with the victim and scope of the crime.

Results also reveal a significant interaction between the scope and the identifiability of the victims (photo vs. no photo) on decisions to “blow the whistle,” $F(3, 90) = 3.90, p = .05, \eta^2 = .04$. As predicted, when identifiability was low, participants in the small scope condition stated a greater intention to “blow the whistle” ($M = 1.62, SD = 0.64$) compared participants in the large scope condition ($M = 1.14, SD = 0.91$), $F(1, 44) = 4.27, p = .04, \eta^2 = .09$. When identifiability was enhanced with a photograph, intentions in the small scope condition ($M = 1.39, SD = 0.72$) did not differ from rating in the large scope condition ($M = 1.52, SD = 0.66$), $p = ns$.

Study 2 suggests making the victim more vivid can partially overcome the scope-severity paradox. In the large scope condition, showing a photograph of a victim elevated the perceived severity of the crime. But perceptions nevertheless remained scope insensitive, as the large scope condition did not judge the crime to be *more* severe than the small scope condition. Study 2 also demonstrated another perverse consequence of the scope-severity paradox. Participants were less inclined to make a difficult but ethical decision when more victims were involved. And just like with punishment recommendations, making the victim more identifiable partially correct this bias.

Study 3

Study 3 examined whether we could observe the scope-severity paradox in real jury verdicts. To do this, we examined toxic tort cases—civil suits against defendants who allegedly harmed plaintiffs by negligently exposing them to a toxic substance (e.g., asbestos, lead paint, or toxic mold). We chose this setting because tort cases are decided by juries, thus simulating the random selection of a laboratory experiment, their outcomes are fully disclosed and available on the Westlaw database, and their outcomes are purely monetary awards assessed from the defendant, affording an easily quantifiable proxy for the perceived severity of the defendant’s negligent action. Moreover, toxic tort cases, as opposed to other classes of tort cases, frequently involve multiple individuals alleging exposure to the toxic substance, providing the variance in the number of harmed individuals that we needed to test our hypotheses.

In toxic tort cases, each plaintiff claims that he or she has been harmed in some way by the defendant’s negligent behavior involving a toxic substance. When the parties in a tort case do not negotiate a settlement out of court, a jury makes a judgment of an appropriate monetary award to grant the plaintiff, referred to as the plaintiff’s “damages.” In line with the prior studies, we formed the counterintuitive hypothesis that the amount of damages awarded would be inversely related to the number of plaintiffs in a case.

Method

Using Westlaw’s database of U.S. jury verdicts, we collected data on the awards that juries granted to plaintiffs for the three most common categories of toxic tort cases: asbestos cases, toxic mold cases, and lead poisoning cases. Westlaw is a comprehensive legal resource that includes a searchable database with information on the jury verdicts of tort (noncriminal) cases in all 50 states. Each case entry in the Westlaw database includes the names of all plaintiffs and defendants in the case, the verdict, a breakdown of the amount awarded to the plaintiff, and a discussion of the harms alleged by each plaintiff.

In the 10-year period between 2000 and 2009, a search of the verdicts of all asbestos, lead poisoning, and toxic mold cases yielded a total of 136 cases in which the plaintiffs were granted an award from the jury. Our sample does not include the sizable number of toxic tort cases that are settled out of court, as these settlements are not publically available. One portion of the damages award, the “punitive damages award,” reflects a sum that the jury can make the defendant pay for purely punitive reasons, an amount meant to punish the defendant and demonstrate society’s disapproval of its behavior. This aspect of the punitive damages award makes it an apt proxy for punishment. The database disclosed the amount of damages awarded in all but three of the cases, yielding a final sample of 133 cases. This included 78 asbestos cases, 30 toxic mold cases, and 25 cases involving lead poisoning. The cases took place in 19 different states, with the most cases occurring in California ($n = 36$), Texas ($n = 32$), and New York ($n = 31$). The number of plaintiffs across all cases ranged from 1 to 32 ($M = 2.74, SD = 3.49$).

Results

To test our hypothesis, we employed robust ordinary least squares regressions of the amount damages on the number of plaintiffs in a case. Because the raw forms of punitive damages, damages per plaintiff, and number of plaintiffs were positively skewed, we used their logged transformations in the models. In Model 1, our dependent variable was the *punitive damages award*, which captured the extent to which juries deemed defendants should be punished. In Model 2, our dependent variable was the *total award per plaintiff*, which captured the jury’s valuation of each plaintiff’s harm. We controlled for the type of harm suffered in each case by including dummy variables to indicate whether any plaintiff was found to have experienced

Table 1. Robust Ordinary Least Squares Regression Results of the Logged Dollar Amount of Punitive and Total Per Plaintiff Damages Awarded in Toxic Tort Cases, 2000–2009

	<i>M</i>	<i>SD</i>	Model 1 Log punitive damages	Model 2 Log total award per plaintiff
Log # plaintiffs	0.705	0.68	−1.647* (−2.48)	−0.521* (−2.59)
Death dummy	0.309	0.46	2.737 (1.31)	0.0194 (0.04)
Malignant dummy	0.265	0.44	0.0470 (0.03)	1.042* (2.20)
Brain damage dummy	0.110	0.31	−0.0385 (−0.03)	1.409*** (3.60)
Consortium dummy	0.375	0.49	1.328 (0.94)	0.320 (0.82)
Tort cat: Asbestos	0.588	0.49	−0.0605 (−0.03)	2.324*** (3.92)
Tort cat: Lead	0.191	0.39	0.151 (0.14)	1.374** (2.86)
Log # defendants	0.897	1.28	−0.506 (−1.84)	−0.0374 (−0.47)
Corporation dummy	0.919	0.30	−0.798 (−0.56)	−0.259 (−0.64)
Constant			11.26** (3.24)	13.35*** (16.77)
Observations			133	133
<i>R</i> ²			.345	.591

Note: *t* statistics are in parentheses. Fixed effects for year are included in the model but are not shown here.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

death, malignant disease, brain damage, or loss of consortium as a result of the defendant's negligence. We also included fixed effects indicating the type of tort case—*asbestos*, *lead*, or *toxic mold*—and the year of the case. Finally, we controlled for the number and type of defendant in each case by including the *logged number of defendants* and a dummy variable that was coded 1 if any defendant was a *corporation*.

The results, displayed in Table 1, confirm our predictions. In Model 1, we found a significant negative association between the number of plaintiffs and the punitive damages awards. That is, juries have historically punished defendants less harshly when their offense harmed more people. In Model 2, we found a significant negative association between the number of plaintiffs and the total damages award per plaintiff. This suggests that juries have historically compensated each victim less in tort cases when there are more victims.

Discussion

Legal standards of justice call for punishment to be sensitive to the scope of the crime. Yet in three studies we found that increasing the number of people victimized by a crime reduced the perceived severity of the crime. In Study 1 we found that increasing the number of people victimized by fraud reduced the perceived severity of that crime and led people to recommend a less punitive jail sentence for the perpetrator. In Study 2 we replicated

this effect and found evidence for another implication of the scope-severity paradox. Participants were more likely to engage in unethical behavior when the consequence of that behavior affects more victims. Study 3 looked to archival data to test whether the scope-severity paradox occurs outside the laboratory. Examining the punitive damages awards assessed from defendants in toxic tort cases between 2000 and 2009, we found that juries assessed larger punitive damages from defendants whose offense harmed fewer plaintiffs.

We argue that the scope severity paradox occurs because of the diminishing identifiability of a large number of victims. In Study 1, participants in the small scope condition described a hypothetical victim in richer detail compared to participants in the large scope condition. In Study 2 we attempted to correct the scope-severity paradox by manipulating identifiability with the victim. We found this to be only partially effective. Making a victim identifiable erased differences between the small and large scope conditions. Although this was an improvement, it did not fully correct perceptions of severity, as participants in the large scope condition did not come to see the offense as more serious than the small scope condition, as should rationally be the case.

These findings, taken together, suggest that the scope-severity paradox is likely to prove especially problematic in situations involving mass crimes, such as genocide, where harms are extreme and widely dispersed among a large

population of people. People presented with such situations may have particular difficulty grasping the extent and severity of the harms that have occurred. In such cases, our findings emphasize the important psychological role that salient accounts from individual members of harmed populations can play in helping others to grasp the severity of mass crimes, as epitomized by the compelling accounts of the Holocaust proffered to us in the diary of Anne Frank or the autobiographical account of Elie Wiesel.

We believe there are some important boundaries to these effects. First, we believe that the scope-severity paradox exists only when people evaluate *isolated* unethical acts. Had we asked people to comparatively evaluate two offenses of varying scope, we strongly suspect that people would be more scope sensitive. Of course, in many (if not most) cases people are evaluating crimes in isolation. Future research should examine whether the scope-severity paradox can be corrected by giving participants comparative information. For example, giving jurors comparative information about the scope of the crime might help to ensure that jury decisions more closely coincide with legal standards of justice.

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Bios

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