
On the Assignment of Punishment: The Impact of General-Societal Threat and the Moderating Role of Severity

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This article reports experiments assessing how general threats to social order and severity of a crime can influence punitiveness. Results consistently showed that when participants feel that the social order is threatened, they behave more punitively toward a crime perpetrator, but only when severity associated with a crime was relatively moderate. Evidence is presented to suggest that people can correct—at least to a degree—for the “biasing” influence of these inductions. Finally, threats to social order appear to increase punitiveness by arousing a retributive desire to see individuals pay for what they have done, as opposed to a purely utilitarian desire to deter future wrongdoing. The authors suggest that individuals sometimes act as intuitive prosecutors when ascribing punishment to an individual transgressor based on their perception of general societal control efficacy.

Keywords: *punishment; attribution*

The psychological processes underlying attributions of responsibility and justifications for punishment have been of considerable interest for social psychologists. Research in this domain has focused on how the severity of a crime or accident influences individuals' assignment of responsibility and punishment (Darley, Carlsmith, & Robinson, 2000; Feather, 1998; Robinson & Darley, 1995; Walster, 1966). Consider the following scenario: a carjacker jumps into an occupied vehicle and, in one condition, the occupant safely removes himself from the vehicle, and in another, the occupant dies from a heart attack. Assume, furthermore, that it is possible to hold constant the intentionality and foreseeability of the

carjacker's behavior. In both conditions, assume the carjacker is interested only in stealing the vehicle and having the occupant exit. Nonetheless, few doubt that the carjacker will be punished more harshly when the occupant dies.

Examining consequence severity effects within an intuitive-scientist framework, the effects look like an irrational intrusion of the certainty-of-hindsight bias into the judgment process (Hawkins & Hastie, 1990). Surely, we learn nothing new about the moral character of the carjacker in the high-severity versus the low-severity condition. It would seem that as soon as observers learn of the outcome, they assimilate it to a causal scheme that portrays the outcome as retrospectively inevitable, they erroneously infer that they knew what was coming all along, and they judge that the carjacker should have known his actions would end with the loss of a human life. The psycho-logic, if not the logic, is straightforward: if the consequence was more foreseeable, the actor was more negligent, and therefore more culpable and deserving of punishment.

Authors' Note: This research was supported in part by National Institutes of Mental Health (NIMH) Individual Training Grant 5F31MH12849-03 to the first author and is based on work supported under a National Science Foundation Graduate Research Fellowship to the fourth author. Correspondence regarding this article can be addressed to Derek D. Rucker, Department of Psychology, Ohio State University, 1885 Neil Avenue Mall, Columbus, OH 43210-1222; e-mail: rucker.46@osu.edu.

PSPB, Vol. 30 No. 6, June 2004 673-684

DOI: 10.1177/0146167203262849

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THREATS TO SOCIAL ORDER

Whereas the literature documenting the consequences of severity focuses on case-specific factors, recent theorizing and research has suggested that factors unrelated to a specific case also intrude into the decision process of assessing culpability for norm violations and appropriate societal reactions to those violations. One such factor is the perceived stability of the social order. The social order can be thought of as lying on a continuum. At one end, the social order is stable—society and its citizens are perceived to be safe and unthreatened by the crime, the crime is being handled within acceptable levels, and the crime is not viewed as a problem for society. At the other end, the social order is threatened—a crime goes unchecked by law enforcement, control of the crime is viewed as unacceptable, and the crime represents a serious threat to society.

Drawing on the classic theoretical observations of Durkheim (1925/1976), on how people respond to affronts to the collective conscience, and of Kelley (1971), on when people are prone to make attributions as if they were “society’s watchdogs,” Tetlock and colleagues (Goldberg, Lerner, & Tetlock, 1999; Lerner, Goldberg, & Tetlock, 1998; Tetlock, 2002) have argued that individuals will assign greater punishment when they perceive the social order to be threatened. In this view, people feel prudent to become wariest of situational justifications and excuses for violating society’s rules to the degree they have been induced to believe (or were predisposed to believe) that society is threatened by the crime, that misconduct is on the rise, and that growing percentages of misconduct are going unpunished. Once this “prosecutorial mind-set” is activated, many people believe it is acceptable to place greater weight on punishing norm violators (minimizing Type II errors of letting the guilty off) and less weight on protecting the innocent from the wrath of the collective (minimizing Type I errors). Such a policy preference places harsher punishment on an individual norm violator solely because of the actions of other norm violators. Although this policy preference is rarely stated so baldly (bordering as it does on a taboo trade-off; Tetlock, Kristel, Elson, Green, & Lerner, 2000), individuals might feel more justified in adopting a hard-line stance to the degree that they believe society is already making more Type II errors than Type I errors.

According to this perspective, manipulating people’s perceptions of the social order should directly influence punitiveness. Individuals should be inclined to mete out harsher punishment for a crime when they believe a tiny percentage as opposed to the vast majority of criminals are being punished for a crime. Likewise, as demonstrated by Lerner et al. (1998), individuals should be more inclined to ascribe harsher punishment to one per-

petrator when they believe that a perpetrator of an unrelated wrongdoing went unpunished, demonstrating a “carry-over” effect. The failure of one individual to go unpunished gives rise to the desire to see others pay for what they have done, which is most easily implemented by increasing punishment. In this article, we clarify the circumstances under which threats to social order prompt individuals to enforce harsher punishment on individual norm violators. We examine recent research that challenges the idea that threats to social order instill harsher punishment and attempt to resolve inconsistencies in the evidence.

Threats to social order can come in a multitude of forms. One type of threat to social order stems from the perception that criminals are escaping punishment (e.g., conviction rates are low). For most individuals, this would be a clear threat to social order because low conviction rates suggest the crime is a problem, represents a threat to society, and is not being properly handled by law enforcement. According to Tetlock (2002), this type of threat to social order should be met with harsher punishment. Similarly, Sunstein, Schkade, and Kahneman (2000) proposed that if individuals seek a policy of optimal deterrence, individuals should be more punitive when criminals are escaping punishment. In a test of this hypothesis, Sunstein et al. manipulated whether participants learned that victims typically received compensation in 1 out of 100 cases, 1 out of 10 cases, or 1 out of 5 cases. In this scenario, threats to social order (and also punishment) should be greatest when wronged individuals are least likely to receive compensation (i.e., 1 out of 100 cases). However, contrary to the predictions following manipulations of threat to social order, Sunstein et al. (2000) found participants punished equivalently (i.e., assigned equal monetary damages) irrespective of the rate of detection. This led Sunstein and colleagues to conclude that individuals do not proscribe to a policy of optimal deterrence; it also creates a puzzle for prior theorizing on threats to social order.

Of course, what one finds in this domain—as in many other areas of behavioral and social science—hinges, in part, on what specific situation one considers. There are several possible methodological explanations for why Sunstein et al. (2000) did not have fertile ground for finding effects of threats to social order. First, the threat to social order may have been disturbingly high even in the designed-to-be-reassuring, effective-detection condition (1 in 5). In this case, victims are not being compensated 80% of the time; an 80% failure rate—realistic though it may be—could be more than sufficient to make people feel like the social order is under siege. In fact, there may have been a ceiling effect such that people were equally threatened by the state of the social order regardless of the rate of detection, rendering the

threat to social order manipulation ineffective. If true, the null hypothesis results of Sunstein and colleagues (2000) would not be surprising.

A second explanation for the null effects observed in Sunstein et al. (2000), examined in this article, has to do with the fact that the consequences to the victim were consistently severe. For example, one study described a case where a child's parents were suing a company for packaging pills in a bottle that was not childproof. In this scenario, the parents' child was reported to have ingested pills that caused long-term damage to her immune system from which she would suffer for the rest of her life and that would very likely shorten her life expectancy. The other scenarios used in this research also had clearly severe consequences such as facial disfigurement and the painful aftermaths of bungled surgery. As a further testament to the severity of the crimes, the primary dependent measures used in the study, monetary damages awarded to the victim, averaged between \$773,987 and \$1,115,628. It is possible that threats to social order only operate when other catalysts for increasing punishment, such as severe consequences, are not present. If so, this might explain why threats to social order did not affect punitiveness in the research of Sunstein et al. In the present research, we test the idea that effects of threats to social order might be obscured when severity associated with a crime is high.

Several results might follow from a crossing of severity of a crime or its consequences with threat to social order. The simplest result takes the form of a purely additive hypothesis: Increasing crime severity and increasing threats to social order lead to harsher punishment independently of one another. An alternative hypothesis posits an interaction of the following form: Both crime severity and threats to social order serve as triggers for motivating individuals to increase punishment, and once either trigger is pulled, individuals are inclined to assign harsher punishment; pulling the second trigger has no additional consequences. This hypothesis suggests increasing threats to social order would increase punitiveness only if severity had not already motivated individuals to be more punitive.

In this view, although it is possible that high severity coupled with high threat to social order stimulates the most punishment for norm violators, it is equally possible that there will be a constraint on threats to social order when severity is high. This might explain the null effects observed in Sunstein et al. (2000) where severity, as noted in our previous discussion, seemed constrained to be high. A priori, it is unclear which interaction will occur; therefore, the first goal of the present research was to examine the nature of the interaction.

In this research, we manipulate threat to social order in two ways. In the first three experiments, we vary peo-

ple's perceptions of the number of criminals being caught and convicted for a specific type of crime. Similar to Sunstein et al. (2000), we impose a threat to social order by informing people about relevant conviction rates, but we use conviction rates pretested to elicit varying degrees of threat to social order. In the fourth experiment, we manipulate threat to social order by informing participants that crime is on the rise. Although different in nature, both of these variables constitute a threat to social order. As will be discussed, both of these manipulations lead individuals to perceive the crime as a greater threat to society, that society's citizens are unsafe, and that law enforcement is unable to control the crime. We predict that, all else being equal, people will be more punitive when a threat to social order is present. We also examine whether effects of threats to social order on punishment are augmented or constrained by severity factors.

EXPERIMENT 1

Experiment 1 examined whether manipulating participants' perceptions of threat to social order influenced the amount of punishment assigned to an individual perpetrator. Furthermore, threat to social order, operationalized via conviction rates, was crossed with severity. Specifically, participants made judgments of punitiveness for crimes that pilot testing revealed to be relatively moderate (ATM theft) versus severe (carjacking).¹

Method

PARTICIPANTS

In this experiment, 84 Ohio State University undergraduates participated in exchange for partial fulfillment of a course requirement in their introductory psychology courses. Participants were randomly assigned to conditions in a 2 (crime severity: moderate, severe) \times 2 (threat to social order: low, high) between-participants design.

PROCEDURE

The experimenter informed participants that they would be participating in a study interested in their perceptions of appropriate punishments for different crimes. Participants were given a packet that provided information about the conviction rate for a crime (i.e., how many perpetrators were convicted) and completed questions assessing the degree of punishment an individual who committed that crime should receive. After participants completed the packet, they were thanked and debriefed.

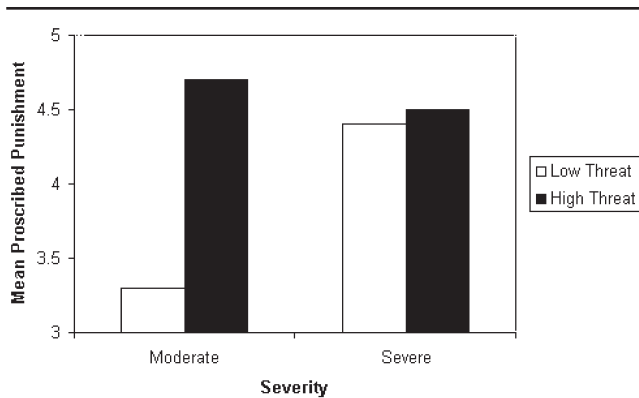


Figure 1 Crime Severity \times Threat to Social Order interaction on punishment, Experiment 1.

INDEPENDENT VARIABLES

Crime severity. Participants in the moderate crime condition were asked how much punishment to give someone who committed ATM theft (stealing money from an ATM machine); participants in the severe crime condition were asked how much punishment to give someone who committed carjacking (forcibly removing someone from their car and stealing the car).

Threat to social order. Threat to social order was operationalized by varying the conviction rate of crime perpetrators. Participants in the low-threat condition were told that a full 92% of crime perpetrators were convicted; participants in the high-threat condition were told that only 8% of crime perpetrators were convicted.²

DEPENDENT MEASURES

To assess punitiveness, participants were asked to what extent punishment for the crime should be increased, prison time for the crime should be increased, and the degree to which the current amount of punishment would be sufficient. All questions were assessed on 7-point scales and were aggregated to form a measure of punitiveness (Cronbach's $\alpha = .85$).

Results

There was a significant main effect of threat to social order on punitiveness such that participants assigned more punishment when threat to social order was high ($M = 4.63$, $SD = 1.27$) as opposed to low ($M = 3.86$, $SD = 1.51$), $F(1, 80) = 6.69$, $p = .01$, $\eta^2 = .08$. Consistent with past research, participants also assigned more punishment when the crime was severe ($M = 4.43$, $SD = 1.28$) than when the crime was moderate ($M = 4.06$, $SD = 1.58$), but this difference was not statistically significant, $F(1, 80) = 1.90$, $p = .17$, $\eta^2 = .02$. These findings are qualified, however, by a significant Crime Severity \times Threat to Social Order interaction, $F(1, 80) = 4.28$, $p < .05$, $\eta^2 = .05$

(see Figure 1). When the crime was moderate, participants were more punitive when threat to social order was high ($M = 4.72$, $SD = 1.37$) than when threat to social order was low ($M = 3.33$, $SD = 1.48$), $t(42) = 3.23$, $p < .005$, $\eta^2 = .20$. However, when the crime was severe, participants were equally punitive regardless of whether threat to social order was low ($M = 4.36$, $SD = 1.40$) or high ($M = 4.52$, $SD = 1.15$), $t(38) = .38$, $p = .71$, $\eta^2 = .00$.

Discussion

The current experiment shows that people do take the general security of the social order into account in deciding how harshly to punish norm violators. Supporting the trigger hypothesis, generic threats to social order increased punitiveness only when another much investigated catalyst of punishment—severity of norm violation—was not present.³

EXPERIMENT 2

Although Experiment 1 sheds some new light on when threats to social order are likely to affect punishment decisions, because we used different crimes, these crimes may have varied in ways other than the pretested attribute of severity. This challenge does not undercut the finding that a general threat to social order can increase punitiveness, but it does raise questions about our conclusions regarding the interaction of threat to social order with crime severity. One method of addressing the possibility of confounds associated with different crimes is to use identical crimes that differ only in consequence severity (cf. Shaver, 1970; Walster, 1966). By operationalizing severity as the outcome associated with an identical crime, we stand to conceptually replicate the findings of Experiment 1, remove potential confounds, and increase the generalizability of our findings. To accomplish this, in Experiment 2, all participants read a short vignette describing an instance of carjacking. However, some participants were informed that the carjacking had moderate consequences for the victim and other participants were told that the carjacking had severe consequences.⁴

Method

PARTICIPANTS

Ninety-seven Ohio State University undergraduates participated in exchange for partial fulfillment of a course requirement in their introductory psychology courses. Participants were randomly assigned to one condition in a 2 (consequence severity: moderate, severe) \times 2 (threat to social order: low, high) between-participants design.

PROCEDURE

Participants were told that the experiment was interested in the appropriate punishment for various crimes. A packet of materials was given to participants that listed the crime type and the conviction rate for the crime. Participants then read a crime scenario about a carjacking, which either had moderate or severe consequences for the victim. After completing the dependent measures, participants were thanked and debriefed.

CRIME SCENARIO

Participants read the following piece of information about the crime:

While sitting at a stoplight, a carjacker forced open the driver's door of Roger Berger's car. The carjacker shoved a pistol into Roger's face and demanded that Roger get out of the car. Roger reached across the seat and fumbled with the passenger door trying to get out of the car. Just as he got out the door, the carjacker stomped on the accelerator and took off. As the car sped away, the passenger door slammed shut and Roger stood in the road watching his car disappear around the corner.

INDEPENDENT VARIABLES

Consequence severity. Following the description of the crime (described above), participants in the moderate severity condition received the following information:

Roger was shaken but physically unharmed. He stood in the street for a moment in disbelief that what had just happened had actually happened. As he began to get over the shock, he was glad that at least his car was insured and his losses would be minimal.

Participants in the high-severity condition received the following information:

The stress and the excitement of the theft were too much for Roger. He clutched at the stabbing pain in his chest and collapsed on the pavement. By the time the paramedics arrived, Roger was dead.

Threat to social order. Participants in the high threat to social order condition were told that less than 8% of carjackers were convicted. Participants in the low threat to social order condition were told that 92% of carjackers were eventually convicted.

DEPENDENT MEASURES

Punitiveness was assessed by asking participants to what extent punishment for the crime perpetrator should be increased, prison time for the crime perpetrator should be increased, and the degree to which the current amount of punishment would be sufficient for the crime perpetrator. All questions were assessed on 7-point

scales and were combined to form an aggregate measure of punitiveness (Cronbach's $\alpha = .72$).

Results

Participants assigned more punishment when threat to social order was high ($M = 4.97$, $SD = 1.32$) than when threat to social order was low ($M = 4.41$, $SD = 1.52$), $F(1, 93) = 4.07$, $p < .05$, $\eta^2 = .04$. Participants also punished the perpetrator more when the outcome of the crime was severe ($M = 5.12$, $SD = 1.18$) than when the outcome was moderate ($M = 4.29$, $SD = 1.55$), $F(1, 93) = 9.41$, $p < .01$, $\eta^2 = .09$. These main effects were clearly qualified, however, by a significant Consequence Severity \times Threat to Social Order interaction, $F(1, 93) = 4.64$, $p = .03$, $\eta^2 = .05$. Replicating the findings of Experiment 1, threats to social order had no effect on punitiveness when the consequences of the crime were severe; participants were equally punitive when threat to social order was low ($M = 5.14$, $SD = 1.27$) as when it was high ($M = 5.10$, $SD = 1.10$), $t(45) = .11$, $p = .91$, $\eta^2 = .00$. However, when consequence severity was moderate, threat to social order had a significant impact on punitiveness. A high threat to social order led participants to be more punitive ($M = 4.85$, $SD = 1.50$) compared to a low threat to social order ($M = 3.72$, $SD = 1.41$), $t(48) = 2.74$, $p < .01$, $\eta^2 = .14$.

Discussion

The results of Experiment 2 provide a conceptual replication of Experiment 1. As in Experiment 1, threat to social order affected punitiveness only when severity was constrained to be moderate. Taken together, Experiments 1 and 2 shed light on why threats to social order, operationalized by conviction rate, might have had no effect on punishment in the research of Sunstein et al. (2000). As discussed earlier, this research contained crimes that appeared to be inherently severe and, therefore, based on the findings of the present research, involved circumstances where a threat to social order would have little impact. By operationalizing severity in terms of the outcomes of a crime rather than type of crime, Experiment 2 also attenuates concerns that the results of Experiment 1 may be due to confounds.

EXPERIMENT 3

Experiment 3 had two goals. First, we wanted to specify more precisely the locus of the effect of threats to social order. From the previous experiments, it cannot be ascertained whether the observed results spring from a leniency bias such that individuals punish less when threats to social order are low, an increase in punishment when threat to social order is high (as proposed by Tetlock, 2002), or a mixture of the two. The locus of our effects can be determined by adding a control condition

in which no information is given about threat to social order.

Second, we examined whether people were willing and able to correct for the influence of threat to social order when so instructed. This parallels a situation in which a defense attorney asks a jury to ignore general information about a crime when making sentencing recommendations. Examining whether people correct for the bias when instructed to do so can also give us insight into how people view threats to social order. To the extent that people view this as a bias and are aware of the direction of the bias, they should correct for the bias when instructed to do so (Petty & Wegener, 1993). However, if people are unaware of the bias or see their response as a justified response given the looming threat to the overall social order, people should be unwilling to correct for any influence of the threat to social order.

Method

PARTICIPANTS

Eighty-one Ohio State University undergraduates participated in exchange for the partial fulfillment of a course requirement in their introductory psychology courses. Participants were randomly assigned to control, low threat to social order, or high threat to social order conditions.

PROCEDURE

The same materials were used as in Experiment 2. However, given that we were now reasonably confident in the reliability of the Specific Severity \times Generic Threat interaction and our questions were focused on conditions where we expected to observe an effect of threat to social order, we constrained severity to be moderate. In addition, we added a control condition to help gauge the locus of our effects. After participants had made their judgments of punitiveness, they were asked to assign punishment a second time. This second set of measures was preceded by instructions asking participants not to let their judgments of punitiveness be influenced by the conviction rate at large.

INDEPENDENT VARIABLES

Threat to social order. Participants in the high threat to social order condition were told that less than 8% of carjackers were convicted. Participants in the low threat to social order condition were told that 92% of carjackers were convicted. Participants in the control condition were not given any information about the number of carjackers convicted.

Correction. After participants had made their initial judgments of punitiveness, they were asked to make the second judgments again but this time were admonished to not allow the information about the number of car-

jackers convicted to influence their judgments. Specifically, participants were told the following:

A goal of this study is to obtain an accurate measure of how much punishment the perpetrator deserves. It is important that your judgments not be influenced by the conviction rate at large. Therefore, we would like you to evaluate the perpetrator again, making sure that the arrest rate for the crime of carjacking does not influence your responses.

Because they had no information about conviction rate, participants in the control condition did not receive correction instructions or a second measurement of punishment.

DEPENDENT MEASURES

Punitiveness at Time 1 and Time 2 was assessed using the same items as in Experiment 2.

Results

OVERALL EFFECTS

The omnibus ANOVA on punitiveness at Time 1 was significant, $F(2, 78) = 10.85, p < .001, \eta^2 = .21$. Examining the simple effects, the control condition ($M = 3.78, SD = 1.45$) did not differ from the low threat to social order condition ($M = 3.50, SD = 1.54$), $t(51) = .94, p = .35, \eta^2 = .02$. However, participants in the high threat to social order condition ($M = 5.11, SD = 1.35$) allocated significantly more punishment relative to both the control, $t(52) = 3.48, p = .001, \eta^2 = .19$, and the low threat to social order conditions, $t(53) = 4.39, p < .001, \eta^2 = .27$.

CORRECTION

There was a significant Judgment (Time 1, Time 2) \times Condition (low threat to social order, high threat to social order) interaction, $F(1, 53) = 13.82, p < .001, \eta^2 = .21$. There was no effect of correction instructions on punishment when threat to social order was low, $F(1, 26) = .68, p = .41, \eta^2 = .03$. However, when threat to social order was high, individuals significantly reduced the punishment they assigned to the perpetrator after being told to correct ($M = 4.42, SD = 1.40$ vs. $M = 5.11, SD = 1.35$), $F(1, 27) = 15.76, p < .001, \eta^2 = .37$. It is important to note that at Time 2 the difference between punishment in the low conviction and high conviction remained significant, $t(52) = 2.28, p < .05$. These findings suggest that people were able to correct for the influence of threats to social order but did not do so sufficiently.

Discussion

Experiment 3 contributes to our investigation of threat to social order on punishment in two important ways. First, the experiment establishes the locus of the effect. The results of this study support Tetlock's (2002)

argument that people react to a threat to social order by increasing punishment rather than becoming lenient when informed that the social order is unthreatened. Second, Experiment 3 provides the first empirical demonstration of individuals' ability to correct for threats to social order when deciding on punishment for an individual transgressor. It appears that people do possess naïve theories concerning the factors that shape punishment judgments and that these theories are accurate inasmuch as they correctly alert people to the direction of the effects of social instability, operationalized via conviction rates, on punishment. When threat to social order was low (i.e., conviction rates were 92%), participants did not show any change in punishment when they were instructed to correct for potential bias. They correctly realized that there was no need to modify their judgments because they were not influenced by the conviction rate information. When there was a high threat to social order, however, people did recognize that they may have imposed a harsher punishment and did moderate their recommended punishment. It is worth noting, however, that people did not correct "sufficiently" inasmuch as they still imposed more punishment when the threat to social order was high. This result raises two possibilities that future work might address. Participants may have underestimated the impact of the irrelevant cue—conviction rates—on their judgments or they may have consciously or unconsciously disagreed with the experimenter that conviction rates should be treated as completely irrelevant. The latter is, of course, a widely defended position in the political arena in which rhetoric about cracking down in the midst of increases in crime or decreases in apprehensions is commonplace (Tetlock, 2002).

EXPERIMENT 4

The results of Experiments 1 through 3 clearly support the proposition that a threat to social order, operationalized via conviction rates, causes individuals to ascribe harsher punishment to individual norm violators, provided severity is moderate. However, as described earlier, a threat to social order can take numerous forms. For example, the perception that a particular crime is on the rise also should create a threat to social order. Manipulating threat to social order in such a manner would have an added advantage of disentangling our manipulation from the notion of punishment or conviction; that is, our previous manipulations may have primed participants to focus on increasing punishment because the threat is in the form of a lack of punishment. By operationalizing threat to social order in the form of a marked increase in crime, we can further demonstrate that threats to social order increase punitiveness

even when the threat is not directly tied to amount of punishment.

A second goal of Experiment 4 was to examine the processes mediating the connection between threats to social order and increased punishment. In a now classic analysis of the psychological wellsprings of the desire to punish, Miller and Vidmar (1981) distinguished between two motivations for punishment: retribution and behavioral control. Retribution motives reflect deeply held beliefs about justice and the need to reaffirm those beliefs. Punishment based on retribution is driven by a desire to see individuals pay for what they have done and to pay their debt to society. For example, an individual who punishes based on wanting to see a criminal get their "just deserts" and pay for their crime or pay their debt to society would be punishing based on a retributive motive. In contrast to retribution, behavioral control is concerned with deterring future threats rather than making criminals atone for past atrocities.

Congruent with the differential motives for punishment described by Miller and Vidmar (1981), Tetlock (2002) has suggested that the intuitive prosecutor mind-set may emerge in one of two forms: a forward-looking intuitive prosecutor or a backward-looking intuitive prosecutor. In the forward-looking variant, the intuitive prosecutor stresses the efficiency logic of *homo economicus*; given resource constraints, the group's goal is to identify cost-effective forms of punishment that promote specific and general deterrence (minimize the likelihood that offenders or others will act in the proscribed manner). In the backward-looking mind-set, the intuitive prosecutor is not concerned with deterring future wrongdoing but instead is concerned with making sure norm violators pay for what they have done. The best way to reaffirm the victim's dignity is to impose punishments that inflict pain equal to (or greater than) that suffered by the victim.

Either retributive or deterrence motivations could plausibly mediate the effects of threats to social order on punitiveness. Specifically, it could be that threats to social order make salient the need to set examples for potential future criminals (general deterrence) or the need to make sure the individual perpetrator is discouraged from future crimes (specific deterrence). By increasing punishment, individuals may believe that general and/or specific deterrence might be realized. However, it is equally plausible that a threat to social order increases punitiveness through an increased desire to see crime perpetrators pay for what they have done or get their "just deserts." As in the Lerner et al. (1998) research, the realization that some perpetrators are going unpunished may strengthen individuals' need to see other criminals pay their debt to society. The reasoning may be, "This crime poses a threat to our society

so I want to be sure that anyone who is caught pays their debt fully." One method of ensuring that people pay their debts to society is to ascribe as harsh a punishment as possible (constrained only by cultural norms of proportionality and methods of delivery). Items were included in Experiment 4 to assess each of these potential mediators.

A final goal of Experiment 4 was to rule out another potential interpretation of our threat to social order manipulation. It is possible that our manipulation of threat to social order is actually a severity manipulation; that is, a low threat to social order may cause individuals to perceive a crime committed by a perpetrator to be less severe than when there is a high threat to social order present. This would challenge the notion that threats to social order are psychologically distinguishable from severity manipulations. To examine this possibility, we explicitly asked participants how severe they felt the crime was.

Method

PARTICIPANTS

One-hundred and thirty Ohio State University undergraduates participated in this study in exchange for partial course credit.⁵ Participants were randomly assigned to one of four experimental conditions in a 2 (consequence severity: moderate, severe) \times 2 (threat to social order: low, high) between-participants design.

PROCEDURE

The procedure for Experiment 4 is essentially identical to that of Experiment 2, except (a) threat to social order was induced via an alternative manipulation, (b) additional measures were included to assess the potential mediators described earlier, and (c) a manipulation check was included to ensure that our new manipulation also affected perceived threat to social order.

INDEPENDENT VARIABLES

Threat to social order. Threat to social order was manipulated by informing participants about the current state of the crime. In the low-threat condition, participants were told that the crime was under control and that instances of the crime were actually declining. In contrast, participants in the high-threat condition were told that instances of the crime were increasing. Specifically, participants in the high-threat condition read the following:

In recent years, the crime of carjacking has been subject to a tremendous and fast increase. State and local authorities have little control of the crime, having been unable to reduce the occurrence of this crime, and there is no sign of reducing the problem in the near future. Recently, David Jeffries, an official of the Justice Depart-

ment, stated, "This is a crime for which the public is at great risk and I regret to report that it looks like incidents of this crime will continue to worsen in the years to come."

DEPENDENT MEASURES

Punitiveness. Punitiveness consisted of an aggregate measure using the same items as in the previous experiments (Cronbach's $\alpha = .80$).

Motives for punishment. To assess motives for punishment, participants were asked to what extent their punishment concerns were driven by a desire for deterrence (both general and specific) and retribution. To assess specific deterrence, participants were asked to what extent their punishment decisions were based on a desire to make sure "this carjacker is discouraged from ever doing anything like this again" and "to discourage him from committing the crime again" (Cronbach's $\alpha = .64$). To assess general deterrence, participants were asked to what extent their punishment decisions were based on a desire to make sure "other people get the message that the carjacker's behavior is unacceptable to society" and "to prevent future occurrences of this crime" (Cronbach's $\alpha = .54$). To assess retribution, participants were asked to what extent their punishment decisions were based on a desire to make "the carjacker pay for what he has done to others" and to "pay his debt to society" (Cronbach's $\alpha = .78$).

Severity. To assess severity, participants were asked how severe they thought the crime was (1 = *not at all severe*, 7 = *extremely severe*).

Manipulation checks. To be certain that our new manipulation of threat to social order was having the intended effect, we included five measures to measure threat to social order (Cronbach's $\alpha = .76$). These five items were identical to items used to previously establish that our conviction rate information influenced threat to social order (see Note 2).

Results

MANIPULATION CHECK

Participants in the high-threat condition ($M = 4.20$, $SD = 1.11$) reported that threat to social order was greater than participants in the low-threat condition ($M = 3.42$, $SD = .99$), $t(128) = 4.26$, $p < .001$, $\eta^2 = .12$.

PUNISHMENT

There was a main effect for severity on punishment such that individuals punished more when severity was high ($M = 4.78$, $SD = 1.63$) than when severity was moderate ($M = 3.90$, $SD = 1.54$), $F(1, 126) = 10.65$, $p = .001$, $\eta^2 = .08$. There was no main effect of threat to social order on punishment, $F(1, 126) = .177$, $p = .67$, $\eta^2 = .00$. These findings were qualified, however, by a significant interaction,

$F(1, 126) = 5.53, p = .02, \eta^2 = .04$, between threat to social order and consequence severity such that participants were more punitive when threat to social order was high and severity was moderate ($M_{\text{for low threat}} = 3.51, SD = 1.59$; $M_{\text{for high threat}} = 4.28, SD = 1.42$), $t(68) = 2.12, p = .04, \eta^2 = .06$, but this difference did not appear when severity of the crime was constrained to be high ($M_{\text{for low threat}} = 5.06, SD = 1.54$; $M_{\text{for high threat}} = 4.53, SD = 1.70$), $t(58) = 1.26, p = .21, \eta^2 = .03$.

Finally, we examined whether different goals for punishment mediated judgments of punishment. For the present analyses, results are only reported for the moderate severity condition because the interaction described above demonstrates that threat to social order only influences punishment judgments in that condition. First, threat to social order did not have an impact on deterrence motives, even when breaking the motive down into specific, $t(68) = .61, p = .54, \eta^2 = .00$, and general components, $t(68) = .11, p = .91, \eta^2 = .00$. However, threat to social order did have a significant direct effect on retribution motives, $t(68) = 2.31, p = .02, \eta^2 = .07$. Specifically, participants in the high-threat condition reported that retribution concerns were a more important guiding goal in their decision ($M = 6.20, SD = .68$) than did participants in the low-threat condition ($M = 5.63, SD = 1.30$).

Finally, we also examined whether crime severity was affected by threat to social order but found that individuals saw the crimes as equally severe regardless of whether threat to social order was high ($M = 4.17, SD = 1.29$) or low ($M = 4.37, SD = 1.46$), $t(68) = .61, p = .55, \eta^2 = .00$.⁶

MEDIATION

According to Baron and Kenny (1986), mediation can be established by demonstrating that (a) there is a direct effect of the independent variable (i.e., threat to social order) on the dependent variable (i.e., punishment), (b) there is a significant effect of the independent variable on the proposed mediator (i.e., desires for retribution), (c) the proposed mediator is correlated with the dependent variable after controlling for the independent variable, and (d) the effect of the independent variable on the dependent variable drops when the mediator is included in a simultaneous regression (Baron & Kenny, 1986). As seen in Figure 2, all of these requirements are met. First, there is a significant effect of threat to social order on punishment ($\beta = .25$), $t(68) = 2.12, p = .04$, and on the proposed mediator, desires for retribution ($\beta = .27$), $t(68) = 2.31, p = .02$. Second, desires for retribution were correlated with punishment when controlling for threat to social order ($\beta = .33$), $t(68) = 2.83, p < .01$. Finally, the direct effect of threat to social order was no longer significant ($\beta = .16$), $t(68) = 1.38, p = .17$, when controlling for desires for retribution. Thus,

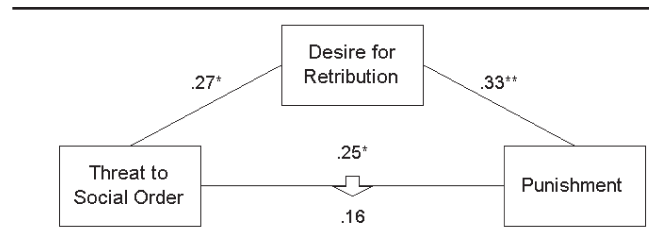


Figure 2 Mediation of threat to social order by desires for retribution, Experiment 4.

* $p < .05$. ** $p < .01$.

mediation has been demonstrated using the criteria set forth by Baron and Kenny (1986).

Mediation also can be demonstrated by showing that the indirect effect (i.e., the path through the mediator) is significantly different from zero. The indirect effect is the product of two regression coefficients; specifically, the product of the regression weight linking the independent variable to the mediator (denoted a) and weight linking the mediator to the dependent variable (denoted b). Shrout and Bolger (2002) suggest that a formal test of mediation be conducted using a bootstrapping technique that involves computing confidence intervals around the product term ($a*b$). If zero falls outside of this 95% confidence interval, the indirect effect is significant and mediation can be said to have occurred. To implement this approach, we used SPSS syntax provided by Preacher and Hayes (in press). This approach provided results consistent with the mediation analyses described earlier. Specifically, zero fell outside our 95% confidence interval around the indirect effect, which ranged from .03 to .62. These results provide convergent evidence that desires for retribution mediate the effects of threats to social order on punishment.⁷

Discussion

Experiment 4 demonstrates that threat to social order imposed in a different manner, namely, indications that crime was on the rise, replicated the previous studies as a threat to social order was met with harsher punishment for the individual perpetrator, provided the severity of the crime was moderate. An equally important contribution of this study is the light it sheds on the motives behind the power of threats to social order to increase punishment. Although we commonly hear claims of rising (or falling) threats to social order in our political exchanges, little research has directly manipulated social order to examine causality and the mechanisms underlying the effects of manipulating threats to social order. This study provides evidence that threats to social order incite desires for retribution. Threats to social order lead people to express an increased need to have criminals pay for their crimes and pay their debt to society. This in-

creased need produced harsher punishment in individuals and is consistent with the notion of a retributive motive discussed by Miller and Vidmar (1981) and supports Tetlock's (2002) proposition that threats to social order drive "intuitive prosecutors" to be punitive as a result of retributive desires.

GENERAL DISCUSSION

The results of our experiments significantly advance our understanding of the psychological processes underlying attribution of responsibility and allocation of punishment. First, we clarify the conditions under which threats to social order are most likely to increase punitiveness. The impact of threat to social order on punishment is most pronounced when other instigators of punitiveness, such as severity, are not present. Research that constrains severity to be high should find little evidence that punitiveness is affected by threats to social order. Indeed, this might very well explain why Sunstein et al. (2000) did not find an effect of threat to social order on punitiveness. Recall that Sunstein et al. (2000) focused on acts of gross negligence that involved dire consequences such as facial disfigurement and long-term immune system damage.

The present research also provides an initial exploration of people's ability to correct for threats to social order. When instructed to correct, participants corrected in the appropriate direction, suggesting that they had a reasonably accurate naïve theory of the influence that conviction rates had on their judgment. The failure to correct sufficiently could have occurred for a host of reasons. One possibility is that participants—or at least a significant subset of them—underestimated the magnitude of the bias. A second possibility is that participants—or at least a significant subset of them—may not have seen this effect as a bias and therefore were unwilling to alter their judgments even when instructed to do so. The nature of this incomplete correction is an interesting issue in its own right that future research may profit from examining.

Finally, the present research also suggests that threats to social order motivate people to punish more via activation of retributive motives (i.e., a backward-looking focus on paying for what criminals have done) rather than via activation of behavioral-control motives (i.e., a forward-looking focus on deterring future wrongdoings). This research is consistent with some past work in the area that suggests that the moral meaning of law breaking—a backward-looking perspective (including its implications for the strength of the social order) may be an important determinant of the punishment assigned to a given perpetrator (see Tyler & Boeckmann, 1997). In accordance with that research, the current work suggests that concerns about the state of the social

world and the extent to which a particular crime is problematic are important factors to consider when investigating the punitiveness people feel toward rule breakers.

Future Directions

The classic study of attribution and punishment portrayed humans as "intuitive scientists" motivated by a need for accuracy. The intuitive scientist metaphor suggests individuals strive to accurately understand the causal scheme of their environment (Jones & Davis, 1965; Ross, 1977). Tetlock has proposed an alternative functionalist framework organized around the assumption that human beings often act as "intuitive prosecutors" motivated by a need to see norm violators atone for what they have done. The intuitive prosecutor metaphor suggests that individuals sometimes cast accuracy aside in favor of making attributions and assignments of punishment that fulfill various needs. Rather than seeing the intuitive prosecutor as solely a chronic state, Tetlock (2002) has suggested that the intuitive prosecutor is a mind-set that can be activated by various situational manipulations, such as threats to social order.

Across four experiments, we found strong evidence that when severity was moderate, individuals punished more when threat to social order was high than low. Despite the reliability of this effect, one clear direction for future research is to evaluate additional psychological and political moderator variables of the effects of threats to social order on punishment. Results reported in a recent article by Carlsmith, Darley, and Robinson (2002) found no evidence that threats to social order increased punitiveness, even for a relatively minor crime, embezzlement, with mild consequences, suggesting factors besides consequence severity might moderate effects of threats to social order. It is worth noting that this pursuit of moderator variables is likely to require some subtle judgment calls. Whereas Sunstein et al. (2000) might have failed to find threat effects because they focused on offenses with severe consequences, other investigators, such as Carlsmith et al. (2002), may have failed for precisely the opposite reason—because they zeroed in on a norm violation, embezzlement, likely to be of relatively low immediate personal concern to their subject population. The crime of embezzlement, regardless of detection rate, is a crime that will not affect most people, particularly financially strapped college students. In contrast, the crimes investigated in this study (ATM theft and carjacking) are a real possibility for the general population, regardless of occupation or size of bank account. It is possible that threats to social order are effective at inducing the prosecutorial mind-set only when they have some fairly direct personal relevance to observers (see, e.g., the Jones & Davis, 1965, argument

concerning the power of personalism and hedonic relevance to activate correspondent inferences). Understanding the interplay of threats to social order with these variables is a complicated and exciting task for future research.

Although the present results clearly demonstrate that threats to social order are likely to induce harsher punishment when severity is relatively moderate, the possibility remains that other factors may contribute to the lack of threat to social order effects reported by Sunstein et al. (2000). One possibility is that these researchers used tort cases and manipulations of threat to social order that were not strong enough to elicit threat. Although we see no theoretical reason why tort cases would not be subject to threats to social order, and we see some empirical reasons for suspecting that tort cases are subject to such influences (Lerner et al., 1998), this issue remains one for future research to explore. Likewise, although the present research used conviction rates pretested to produce a perceived threat to social order, it remains unclear whether threat was created in the research of Sunstein et al. (2000). Future research should attend to this issue.

A final direction for future research concerns extending the generalizability of the present findings. In particular, it would be useful to operationalize threats to social order in other ways and to extend the findings of the present research to more real-world situations. With regard to the former, it would be useful to demonstrate that other operationalizations of threats to social order have similar effects on punishment. With regard to extending the research to more real-world domains, one interesting direction would be to examine how threats to social order affect judgments in the process of jury decision making, not only on scales and punishment but the actual thought processes that occur in the presence of a threat to social order. We believe these are both important and promising directions for future research.

Conclusion

Just as the well-documented severity effect can be examined from alternative normative interpretations as a bias from the standards of scientific rationality or as a sound social-control strategy, so too can the threat to social order effects examined here. On one hand, people think of themselves as fair and pay homage to basic norms of procedural justice that stipulate that they should apply justice equally across cases and that justice should be scaled to each individual case in proportion to the degree of negligence or malevolence that the perpetrator displayed under the idiosyncratic circumstances surrounding the offense. Many (although not all) may feel it odd, even indefensible, to punish a norm violator

less severely in a community with a low base rate of crime (and high arrest and conviction rates) and more severely in a community with a high base rate of crime (and low arrest and conviction rates). This sort of justice feels palpably unequal and perhaps discriminatory. It could lead one, for example, to argue for punishing criminals in inner cities more harshly than criminals in suburbs.

On the other hand, some legal theorists argue that it is perfectly reasonable for individuals to act like intuitive prosecutors and impose harsher penalties when the social order is under siege (see Polinsky & Shavell, 1998). As discussed earlier, this policy orientation could take the form of the forward-looking intuitive prosecutor mind-set focused on deterrence or the backward-looking mind-set focused on retribution. The present research suggests that threats to social order are mostly the result of the latter mind-set, focused on retribution. Although this form of retributive justice is often portrayed as a mindlessly vengeful limbic reaction to transgressions, some legal theorists argue that the desire for retribution is rooted in a more reasoned calculus in which people implicitly think along the following lines: The transgressor treated the victims contemptuously, the damage to the victims' dignity (or lives) is real, the transgressor appears to see himself or herself as above the victims and our laws, the punishment should inflict the transgressor to a degree commensurate with the humiliation inflicted on the victims, and anything less fails to reaffirm the dignity of the victims and indeed adds to the original insult.

Our empirical results cannot resolve the ethical impasse over whether one is justified in scaling punishment differentially as a function of the threat to social order associated with the failure to detect/punish norm violation. Psychological data can, however, speak directly to the questions of what types of people are more likely to feel justified in using conviction rate information and to justify its use in either retributive or deterrence terms. Tetlock et al. (2003) review arguments and present some evidence that the more inclined observers are to harbor little trust in human nature and considerable trust in authority figures, the greater the likelihood that those observers will feel fully justified in ratcheting up punishment of specific offenders as threats to the general social order rises. A challenge for work at the interface of political psychology and social cognition is to disentangle when resistance to "correcting" threat-induced effects is better viewed as a cognitive defect (of which participants are to some degree embarrassed and from which they retreat when challenged) and when it is better viewed as a product of deep-rooted skepticism toward one's fellow human beings (a prudent social control policy that any right-thinking person would embrace).

NOTES

1. In a pilot study, 79 participants rated the severity of various crimes on 7-point scales (where 1 = *not at all severe*, 7 = *extremely severe*). Order of crimes was counterbalanced, and a within-participants ANOVA revealed that participants saw carjacking ($M = 5.23$, $SD = 1.17$) as significantly more severe than ATM theft ($M = 4.16$, $SD = 1.4$), $F(1, 78) = 46.23$, $p < .001$, $\eta^2 = .37$.

2. A pilot study was carried out to ensure that the manipulation of threat to social order used in the present research did affect perceived threat to social order. Specifically, 66 participants were told that the conviction rate for a crime was either 8% or 92%. All participants were then asked how threatening the crime was for society, how problematic the current state of the crime was, how threatened the average person should feel by this crime, how safe members of society are from this crime, and how effective law enforcement was at controlling the crime (Cronbach's $\alpha = .76$). As expected, individuals reported that the threat to social order was greater when 8% of perpetrators were being convicted ($M = 4.55$, $SD = 1.06$) as opposed to when 92% of perpetrators were being convicted ($M = 3.35$, $SD = .65$), $t(63) = 5.62$, $p < .001$, $\eta^2 = .33$.

3. Likewise, these results suggest that severity only has an effect when threats to social order are constrained to be low. When threat to social order was low, participants ascribed more punishment when the crime was severe ($M = 4.36$, $SD = 1.40$) versus moderate ($M = 3.33$, $SD = 1.48$), $t(1, 41) = 2.19$, $p = .02$, $\eta^2 = .12$. However, when threat to social order was high, participants ascribed equal punishment whether the crime was moderate ($M = 4.72$, $SD = 1.37$) or severe ($M = 4.52$, $SD = 1.15$), $t(39) = .55$, $p = .61$, $\eta^2 = .01$.

4. Although carjacking is typically perceived as a relatively severe crime, as in Experiment 1, we manipulated our portrayal of the crime in the present study to suggest the specific instance of carjacking was relatively minor. Likewise, a mild crime such as ATM theft could be manipulated to be severe.

5. Two participants were dropped from the analyses because they reported having been a victim of carjacking in the past and therefore may have derived their punishment decision on factors beyond those presented in the scenario (original $N = 132$). The inclusion of these individuals in our analyses does not significantly alter our results.

6. There was a main effect of severity overall, however, such that individuals saw the crime as more severe in the high-severity condition ($M = 5.58$, $SD = 1.42$) than in the moderate-severity condition ($M = 4.27$, $SD = 1.37$), $t(128) = 5.34$, $p < .001$, $\eta^2 = .18$, confirming that our manipulation of severity was successful.

7. Additional evidence for the distinct role of retributive motives comes from examining the relationship between retribution motives and deterrence motives. Retribution motives were only mildly correlated with both specific deterrence ($r = .38$, $p < .001$) and general deterrence ($r = .37$, $p < .001$), with the two deterrence constructs being correlated as well ($r = .46$, $p < .001$). This suggests that retributive motives are distinct from concerns for specific and general deterrence. Furthermore, in a simultaneous regression with retribution, general deterrence, and specific deterrence predicting punishment, only retribution significantly predicted punishment ($\beta = .35$), $t(66) = 2.77$, $p < .01$; β s for both deterrence measures $> .10$. This provides further support to our argument that in the present research, the key mediating variable between threats to social order and punishment is retribution and not motives related to specific or general deterrence.

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Received September 9, 2002

Revision accepted July 4, 2003