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Chapter 2
Why Leaders Punish: A Power Perspective
Leaders of all sorts frequently install sanctions to induce compliance with rules (Parks et al., 2013). Managers publicly reprimand employees for bad behavior and policy-makers implement policies with a mandatory minimum for punishments. Yet, punishment is not always effective and can even be counterproductive (Gneezy & Rustichini, 2000; Van Dijk, Mulder, & De Kwaadsteniet, 2014). If punishment can be problematic, what do leaders then aim to achieve with their punishments? In the current paper, we argue that leaders’ power affects what they aim to achieve with punishments. Specifically, we propose that power increases the tendency to punish to deter rule breaking instead of giving rule breakers their just deserts, and that this power-deterrence link can be explained by power fostering a distrustful mindset.

Addressing this question is important because the managers and policy-makers who design and implement punishments have, by definition, a form of power—that is, they possess and can allocate critical resources. Yet, little is known about how power affects how and why they punish. Answering this fundamental question about power and punishments can provide important insights into the punitive practices of leaders such as managers and policy-makers, and in what ways their punishments are effective in inducing rule-abiding behavior (e.g., Arvey & Ivancevich, 1980; Ball, Trevino, & Sims, 1994). Gaining more insight into how and why power affects punitive practices may therefore help organizations and governmental institutions design more effective sanction policies.

**Power and Punishment Motives**

Power can be defined as asymmetric control over critical resources (Magee & Galinsky, 2008); that is, power entails the capacity to control the outcomes of others. Power provides the benefit of controlling one’s own and others’ monetary (e.g., salary), social (e.g., inclusion) or physical (e.g., housing) resources. Importantly, having power goes hand in hand with the ability to implement punishments such as salary cuts, fines, or prison-sentences.

The motives that guide such punishments are typically classified into deterrence motives or just desert motives (Carlsmith et al., 2002). The deterrence motive of punishment reflects the desire to deter people from engaging in uncooperative, rule-breaking behavior (see Bentham, 1789/1988 and Hobbes, 1651/1988). For example, managers can punish employees publicly to set an example and deter future rule breaking by other employees. In contrast, the just deserts motive is mainly concerned with giving offenders their deserved punishment (i.e., their “just deserts”; Darley, 2009). Punishments based on this motive are generally proportionate to the severity of the offence but insensitive to the likelihood of deterring uncooperative, rule-breaking behavior (Carlsmith et al., 2002; Kant, 1780/1952; Vidmar & Miller, 1980). Thus, the deterrence and just deserts motives reflect different punishment goals. The deterrence motive aims to deter
future rule-breaking behavior from all individuals through the installment and implementation of punishments. Instead, the just deserts motive aims to achieve retributive justice by retroactively and proportionally punishing individual rule breakers.

Research has suggested that people generally prefer punishments that restore retributive justice by giving offenders their just deserts (Aharoni & Fridlund, 2011; Carlsmith, 2006; Carlsmith et al., 2002; Darley, 2009). We argue, however, that power increases reliance on deterrence, but not just deserts, as a punishment motive. We propose that power increases distrust, which in turn increases the reliance on deterrence as a punishment motive and increases the use of punishments that are suitable as a deterrent—for instance, punishments that are public or have a mandatory minimum.

**Power and Distrust**

Asymmetric control over resources benefits power holders. For example, managers can award themselves salaries and bonuses that are bigger than those typically given to employees (Kipnis, Castel, Gergen, & Mauch, 1976). This is possible because power holders are less dependent on others (Fiske, 1993; Lee & Tiedens, 2001) and therefore enjoy greater freedom to act according to their personal desires (Galinsky, et al., 2003; Lammers et al., 2011). Indeed, it is easier for power holders to disregard social norms (Keltner et al., 2003) and focus on accomplishing their own goals (Guinote, 2007a; Maner & Mead, 2010) instead of having to devote attention to what others think and feel (Goodwin et al., 2000). Power, in other words, is beneficial for those who hold it. Power holders are therefore motivated to protect their beneficial position (Fehr et al., 2013; Maner, Gailliot, Butz, & Peruche, 2007) and prevent others from obtaining access to their power (Case & Maner, 2014; Lammers & Stapel, 2011; Mead & Maner, 2012).

One way in which power holders can lose resource control is to be too trusting of others. Trust entails an expectation of benign behavior from others—that is, behavior that furthers the interests of the trustee (Colquitt, Scott, & LePine, 2007; Lewicki, Tomlinson, & Gillespie, 2006). Trust further entails an expectation of the other party’s benign intent. Trust can therefore be distinguished from being assured that others take your interests into account. In contrast to trust, assurance is not based on an expectation of benign intent, but on the idea that others further your interest because this is in their self-interest (Yamagishi & Yamagishi, 1994). Thus, trusting others means expecting others to take your interests into account, even when this is not in the other’s self-interest. We similarly operationalize trust as an expectation of cooperative intent, which we define as expecting others to further your interest in interest-conflicting situations (cf. Balliet & Van Lange, 2013; Mulder et al., 2006). For instance, in the classic trust game, trusting
others means giving away control over one’s money based on the expectation that others will cooperate and give control over this money back at the end of the game. When one’s trust is met, one keeps control over the money. However, when one’s trust is abused, one loses control over the money to the other (Berg, Dickhaut, & McCabe, 1995). Trusting others to cooperate can then be considered a form of potential resource sharing (i.e., power sharing) that opens up a power holder for loss of resource control (Kramer, 1999; Mayer, Davis, & Schoorman, 1995; Zand, 1997). Indeed, expecting benign intentions from others has been shown to be an important antecedent of opening oneself up to these others’ potentially exploitative behaviors (Lount & Petitt, 2012). Managers that trust their employees to stick to organizational rules may fail to take the appropriate actions required to prevent employees’ rule-breaking acts that undermine this manager’s power position. Because power holders such as managers are motivated to stay in power, we predict that power fosters an individual’s expectation that others cannot be trusted to cooperate (i.e., choose other-interest over self-interest).

This prediction rests on the notion that power facilitates goal-directed behavior (Guinote, 2007b) and that an important goal of people in power positions is to maintain their privileged position within the power hierarchy (Williams, 2014; Willis & Guinote, 2011). Research has demonstrated that people exhibit a strong tendency to retain obtained power (Fehr et al., 2013)—a tendency that strongly increases with individuals’ increasing degree of loss aversion. This suggests that power is especially desirable once you obtain it and that power holders are strongly motivated to retain this desirable power (i.e., power-endowment effect). Since trusting people’s inclination to cooperate increases vulnerability to potentially losing resources and thus power to others, we predict that power holders are likely to distrust others to cooperate. These predictions depart from previous research on how power can make people less averse to losing resources (Anderson & Galinsky, 2006; Inesi, 2010). In contrast to this previous research, the current theorizing revolves around power holders potentially losing resources to others. We suggest that a loss of resources may be threatening to power holders when others are able to gain such resources and hereby undermine a power holder’s resource control. As such, we hypothesize that power fosters distrust as a resource-protection strategy.

**Distrust and Punishment Motives**

We have hypothesized so far that power holders become more distrustful due to their power. We further propose that this increased distrust in turn increases the reliance on deterrence, rather than just deserts, as a punishment motive. We base this prediction on the notion that uncooperative, rule-breaking behavior is expected when distrust is high (Mayer et al., 1995; Mulder et al., 2006). Distrust may therefore increase the belief that people need to be
deterred with punishments from breaking rules that promote cooperation. In contrast, punishments that aim to give offenders their just deserts are more concerned with restoring retributive justice through proportionate punishments. Punitive responses that give offenders their just deserts have been robustly linked to factors that have little to do with decreasing the future likelihood of rule breaking (e.g., moral outrage and concern for social cohesion, see Carlsmitth et al., 2002; Tyler & Boeckman, 1997). We therefore predict that distrust increases the reliance on deterrence as a punishment motive whereas it does not affect the reliance on the just deserts motive. This conjecture corresponds with the view of seventeenth-century philosopher Thomas Hobbes (1651/1996), who in his book *Leviathan* argued that—because people generally care little about others—punishments should deter people from breaking rules that promote cooperation. In sum, we propose that power increases reliance on such Hobbesian philosophy; that is, an individual will be more inclined to distrust others and therefore rely more on deterrence as a punishment motive.

**Punishment Preferences**

How might such an increased reliance on deterrence as a punishment motive affect punishment preferences? We address two ways in which punitive practices are likely to be affected by the increased reliance on deterrence rather than just deserts—that is, public punishments and punishments with a mandatory minimum.

Power holders can use public punishment to deter rule-breaking behavior. Microsoft, for example, prominently displayed its lawsuits against piracy on its website, probably in an attempt to deter piracy through reminding everyone of the enforced rule and ensuing punishment (Xiao & Houser, 2011). Publicly communicating the names of rule-breakers may serve as a similar deterrent; government-officials sometimes implement policies that publicly communicate the names of offenders as a way to show the consequences of rule breaking and hereby deter future rule breaking from others. For instance, a Texas judge recently convicted a drunk driver to publicly wear a sign stating that he killed someone while driving drunk (Texas Judge, 2012). Similarly, both India and parts of Australia recently started publicly naming and shaming offenders in an attempt to deter crime (see Langlois, 2012). Setting a mandatory punishment minimum provides another way in which rule breaking can be deterred (Gabor & Crutcher, 2002). Setting a guaranteed minimum for a punishment may deter rule-breaking behavior through increasing the certainty of punishment severity. In other words, by increasing the extent to which potential offenders can be sure of receiving a fixed punishment upon breaking a rule.

From the perspective of deterrence theory, private punishments serve less purpose than public punishments, since private punishments have less potential to deter rule breaking.
Similarly, raising a mandatory minimum for punishment guarantees that offenders are less likely to think they can “get away” with breaking rules (Nagin, 1998). Just-deserts theory makes less clear predictions about these types of punishments—giving offenders their just deserts revolves around proportionate punishments instead of revenge, which is the desire to make the offender suffer (often disproportionately; see Gerber & Jackson, 2012 for empirical evidence of the distinction between just deserts and revenge). Instead of wanting the offender to suffer disproportionally, the just-deserts motive aims to achieve proportionality between the rule-breaking act and punishment (i.e., balance). Crucially—for just-deserts theory—private punishments are often sufficient because there is little need for the punishment to publicly deter others and private punishments can give offenders their deserved punishment without making them suffer disproportionally (Carlsmith et al., 2002). Moreover, for just-deserts theory, mandatory minimum punishments are often unnecessary. Just-deserts theory predicts that rule-breaking acts have to be punished on the basis of the characteristics of the act, such as extenuating circumstances—no mandatory minimum is required as some offences might go unpunished. Thus, in just-deserts theory there is generally less purpose for public punishments and mandatory minimum punishments than in deterrence theory. Deterrence theory proposes that one should frequently use public punishments and mandatory minimum punishments, as they can be efficient in preventing future rule breaking.

The majority of states in the USA implement some form of mandatory minimum for punishments, even when the public considers such policies harsh and unjust (see “Mandatory Minimum”, 2007). Furthermore, punishments that are implemented publicly are frequently considered to be ineffective or to violate offenders’ privacy (Jabour, 2013). Nevertheless, power holders frequently install and implement such punishments against the wishes and preferences of their employees or the general public. Our theorizing provides an explanation for this phenomenon: Power increases distrust in others and therefore increases the reliance on deterrence as a punishment motive. This increased reliance on deterrence, in turn, facilitates the use of public punishments and punishments with a mandatory minimum.

**Research overview**

We tested the hypothesized effect of power on deterrence through distrust across nine studies. The predictions and the specific studies that test every prediction are depicted in Figure 2.1. Because every proposed relationship is new and lacks empirical validation from previous research, we decided to first test every prediction separately (i.e., power increasing distrust, distrust increasing deterrence, and power increasing deterrence) in a correlational and causal
manner before testing the full mediation model. This gave us the advantage to increase generalizability and replicability, and to establish the causality of the effects.

First, we describe the six studies that test the hypothesized links between power and distrust, distrust and deterrence, and power and deterrence, respectively. Next, we describe three studies that test the mediating role of distrust. Across all these studies, we used different instantiations of power—from measuring a general sense of power (Studies 2.1a and 2.4a), to power primes (Studies 2.3b and 2.4b) and structural manipulations of power (Studies 2.1b, 2.3a and 2.4c). We also measured (Studies 2.1a, 2.1b, 2.2a, 2.4a, and 2.4b) and manipulated distrust (Studies 2.2b and 2.4c), and measured punishment motives across a number of different situations—from the problem of tax fraud (Studies 2.4a and 2.4b) and academic plagiarism (Study 2.3b) to cooperation in social dilemmas (Studies 2.1b, 2.2b, and 2.4c) and less specific situations (Studies 2.1a, 2.2a, and 2.4a). We also included cross-cultural samples from the USA (Studies 2.1a, 2.2a, 2.4a, and 2.4b), the Netherlands (Studies 2.1b, 2.2b, 2.3b, and 2.4c) and a sample of Western European countries included in the European Value Survey (Study 2.3a).

To demonstrate that the effect of power on deterrence is mediated by distrust specifically, we also assessed the role of victim identification and the importance of group interest. Previous research has demonstrated that power can increase a focus on the welfare of the entire group relative to the individual (Magee & Smith, 2013) and decrease identification with victims (Galinsky et al., 2006; Van Kleef et al., 2008). To rule out that the effect of power on deterrence is explained by one of these variables instead of distrust, we assessed them in Study 2.4c. Moreover, in order to address the extent to which self-reported punishment motives translate into actual punitive practices (see Carlsmith, 2008), we measured the extent to which power holders use public punishments (Study 2.3b) and mandatory minimum sentences (Study 2.4a) as a way to deter rule breaking.

In our studies, we excluded participants who misreported their power position or failed to follow instructions with regard to writing an autobiographical story about power. Consistent with the recommendations of Simmons, Nelson, and Simonsohn (2011), we made sure that every condition had at least 20 participants, although most studies reported have considerably more participants per condition (i.e., more than 40; cf. Simmons, Nelson and Simonsohn, 2013). All items in the studies could be answered on seven-point scales (1 = disagree completely; 7 = agree completely), unless stated otherwise and all participants provided informed consent and were debriefed after completing the study.
Studies 2.1a and 2.1b: Power and Distrust

We tested the hypothesized power-distrust relationship in two studies. Specifically, we tested in Study 2.1a whether chronically experiencing power (i.e., trait power) is associated with a general distrust towards others, and we tested in Study 2.1b whether occupying a structural position of power causes people to become more distrustful.

**Study 2.1a Method**

**Participants, design, and procedure.** A total of 165 participants (75 males, $M_{age} = 32.03$ years, $SD_{age} = 10.88$) were recruited from the Mechanical Turk website (see for a discussion of this platform as a research tool, Buhrmester, Kwang, & Gosling, 2011) and were paid $0.50 for their participation.

**Generalized sense of power.** Participants completed the generalized sense of power scale taken from Anderson and Galinsky (2006, see also Anderson, John, & Keltner, 2011). The scale assesses the extent to which people experience power in their everyday lives. Specifically, the scale is comprised of four items measuring high power (e.g., “In my relationships with others, I think I have a great deal of power”; “If I want to, I get to make the decisions”) and four items measuring low power (e.g., “Even if I voice them, my opinions have little sway”; “My ideas and opinions are often ignored”). The low-power items were reverse coded and averaged with the high-power items to form the generalized sense of power scale (cf. Anderson et al., 2011; $M = 4.78$, $SD = 0.85$; Cronbach’s $\alpha = .74$). To disentangle the high- versus low-power subscales and
indicate if the experience of power or powerlessness drives the scale’s effect, we also computed separate high- and low-power scales with the items measuring high and low power, respectively. A factor analysis (PCA) confirmed that the high- versus low-power items loaded onto two different components (Eigenvalue = 2.99 and 2.34, respectively) without cross-loadings and with a total of 66.55% variance explained for. Both the low-power subscale (α = .87) and high-power subscale (α = .76) had sufficient reliability and did not correlate significantly (r = .05, p = .49).

**General distrust.** Participants then completed a seven-item scale measuring their general trust towards others (M = 4.95, SD = 0.98; α = .81). We adapted and extended items from the general trust scale (Yamagishi, 1986). Items included, “In general, I believe that people will break the rules whenever they can get away with it”, “When it really comes down to it, most people only think about what is good for themselves but forget what is good for others”, and “Most people can be trusted to cooperate with others” (reverse-coded).

**Results and discussion**

A regression analysis in which trust was regressed on power showed that, as predicted, the generalized sense of power scale was negatively associated with trusting others (β = -.17, t(165) = 2.21, p = .028). We repeated this regression analysis with the four-item scale that measured high power and the four-item scale that measured low power, respectively. Results demonstrated that the high-power subscale was negatively associated with trust (β = -.28, t(165) = 3.71, p < .001), whereas the low-power subscale was unrelated to trust (β = .021, t(165) = .79, p = .49). This provides preliminary support for our hypothesis that high power decreases trust. To examine whether power causes people to become more distrustful, we conducted Study 2.1b.

**Study 2.1b Method**

**Participants, design, and procedure.** Ninety-eight Dutch university students (68 females, M_{age} = 22.53 years, SD_{age} = 3.30) participated in exchange for €1 and were assigned to one of two conditions (power position vs. neutral position).

**Role-based power manipulation.** All participants were told that they would play in a “business simulation” in which they could earn extra money by working together with other participants. Depending upon condition, participants were then informed that they were assigned to a powerful manager position or they received no information about their power position (cf. Lammers, Galinsky, Gordijn, & Otten, 2012). As managers, participants were led to believe that they had control over how money would be allocated to the other participants. The other participants (described as “workers”) allegedly were unaware of this resource control of the participant.
Interpersonal trust. The business simulation was in reality a social dilemma game. The social dilemma comprised of a collective resource of 30 chips, with each chip worth $0.10. Every individual group member could take between 0 and 10 chips out of this collective resource. Consistent with previous social dilemma games, money that was left in the collective resource was multiplied by two and divided equally amongst the group members. This way, taking money out of the collective resource only benefitted the individual group members (Van Lange et al., 2013). Previous research has demonstrated that there exists a strong rule (e.g., norm) to cooperate in such dilemma situations (Fehr & Fischbacher, 2004; Fehr & Gächter, 2002).

Participants assigned to the managerial position had full control over the money in the common resource. This manipulation is consistent with the definition of power as control over valuable resources (Magee & Galinsky, 2008). Nothing was mentioned about a power position to participants in the control condition.

All participants then indicated to what extent they trusted the other group members to cooperate on a three-item scale. Items included “I think group members cannot be trusted to cooperate”, “Group members will weigh their self-interest more than the interests of others”, and “Group members cannot be trusted to maximize the group’s outcomes” ($\alpha = .64$).

Power manipulation check. Participants indicated whether they occupied a managerial position (yes, no) and how powerful they felt on one item (i.e., “I feel powerful). Six participants wrongly reported their power position and were therefore left out of the analyses. Including or excluding these six participants from the analyses did not change the results of these analyses.

Confirming the validity of the power manipulation for those who correctly reported their power position, participants in the high-power condition ($M = 4.07, SD = 1.88$) felt more powerful than participants in the control condition ($M = 3.06, SD = 1.76; t[90] = 2.64, p = .010, d = 0.56$).

Results and discussion

Participants in the high-power condition placed less trust in other participants’ inclination to cooperate ($M = 4.94, SD = 1.14$) than participants in the control condition ($M = 5.55, SD = 0.87; t[90] = 2.77, p = .007, d = 0.58$). Thus, taken together, Studies 2.1a and 2.1b provide converging evidence for the hypothesis that power increases distrust.

Studies 2.2a and 2.2b: Distrust and Deterrence

In the following two studies, we tested the second hypothesized relationship. More specifically, in Study 2.2a we measured participants’ chronic distrustfulness towards others and their desired punishment motives. We expected that participants who are chronically distrustful rely more on deterrence, but not just deserts, as a punishment motive. In Study 2.2b, we
experimentally manipulated distrust and subsequently measured participants’ punishment motives. We expected the experimental manipulation of distrust to cause participants to rely more on deterrence, but not just deserts, as a punishment motive.

Study 2.2a Method

Participants, design, and procedure. A total of 125 participants (75 males, $M_{age} = 32.03$ years, $SD_{age} = 10.88$) were recruited from the Mechanical Turk website and were paid $0.50 for their participation.

General trust. Participants completed the same general distrust scale as in Study 2.1a ($M = 4.95$, $SD = 1.01$; $\alpha = .83$).

Punishment motives. Participants indicated their preference for deterrence ($M = 4.82$, $SD = 1.27$; $\alpha = .82$) on a four-item scale (e.g., “In general, punishments should be aimed at deterring crime”; “Punishments should be aimed at preventing crime”). Participants also indicated their preference for just deserts ($M = 4.59$, $SD = 1.33$; $\alpha = .85$) on a four-item scale (e.g., “In general, punishments should give offenders their just deserts”; “Punishments should make offenders pay for their wrongdoings”). These items measuring deterrence and just deserts were adapted from past work examining punishment motives (De Keijser, Van der Leeden, & Jackson, 2002). The deterrence and just deserts motives were moderately correlated ($r = .42$, $p < .001$) and a factor analysis resulted in a two-factor solution with deterrence (Eigenvalue = 3.83) and just deserts (Eigenvalue = 1.65) items loading on two different factors with one cross loading and a total of 68.39% variance accounted for.

Results and discussion

Two separate linear regression analyses regressing deterrence and just deserts on distrust showed that general distrust was positively associated with deterrence ($\beta = .34$, $t(124) = 4.00$, $p < .001$) but not with just deserts ($\beta = .11$, $t(123) = 1.17$, $p = .24$). This provides initial support for the hypothesis that distrust increases reliance on deterrence as a punishment motive. To examine whether distrust causes reliance on deterrence, Study 2.2b was conducted.

Study 2.2b Method

Participants, design, and procedure. Eighty-five Dutch university students (71 females, $M_{age} = 22.40$ years, $SD_{age} = 5.01$) participated in exchange for €1 and were assigned to one of two conditions (distrust vs. trust).

Trust manipulation. All participants were told that they would participate in a social dilemma (cf. Study 2.1b but nothing was mentioned about a business simulation and no power
position was manipulated). Importantly, it was explained to participants in the distrust condition that “previous social dilemma experiments demonstrated that participants generally cannot be trusted to act cooperatively”, whereas participants in the trust condition were told that “previous social dilemma experiments demonstrated that participants generally can be trusted to act cooperatively”.

Punishment motives. It was then explained that fines are sometimes introduced in social dilemma situations. Such fines decrease the amount of money that participants who act uncooperatively can earn in the social dilemma game. Participants had to indicate whether they thought that in the current social dilemma such fines should deter, or give others their just deserts. More specifically, participants indicated their preference for deterrence ($\alpha = .83$) and just deserts ($\alpha = .87$) on two six-item scales. Sample items for deterrence included, “Fines are needed to prevent group members from acting uncooperatively”, “Fines should deter uncooperative behavior”, and “Fines should act as a deterrent to group members”. Sample items for just deserts included, “Fines are needed to give group members who act uncooperatively their deserved punishment”, “Fines should make uncooperative group members pay for their behavior”, and “Fines should give uncooperative group members their just deserts”. The deterrence and just deserts motives were moderately correlated ($r = .45, p < .001$) and a factor analysis resulted in a two-factor solution with deterrence (Eigenvalue = 5.19) and just deserts (Eigenvalue = 2.47) items loading on two different factors with one cross loading and a total of 63.89% variance accounted for.

Trust manipulation check. Lastly, participants indicated to what extent they distrusted their group members in the social dilemma (i.e., “group members cannot be trusted to act cooperatively”). Confirming the validity of the trust manipulation, participants distrusted group members’ inclination to cooperate more in the distrust ($M = 5.05, SD = 1.39$) compared to the trust condition ($M = 4.37, SD = 1.68; t[83] = 2.02, p = .047, d = .44$).

Results and discussion

Distrustful participants were more likely to indicate that fines should deter uncooperative behavior ($M = 5.35, SD = 0.69$) compared to trusting participants ($M = 4.67, SD = 1.35; t[83] = 2.96, p = .005, d = 0.65$). However, the experimental manipulation of distrust did not affect the extent to which participants relied on just deserts as a punishment motive ($M_{\text{distrust}} = 4.35, SD_{\text{distrust}} = 1.23; M_{\text{trust}} = 4.38, SD_{\text{trust}} = 1.32; t[83] = .11, p = .91, d = 0.02$). In sum, Studies 2.2a and 2.2b provide evidence that people increasingly rely on deterrence, but not just deserts, as a punishment motive when they believe others cannot be trusted.
Studies 2.3a and 2.3b: Power and Deterrence

In the third series of studies, we examined the hypothesized power-deterrence relationship. In Study 2.3a, we used data from the European Value Survey to test whether occupying a real-life power position was associated with relying on deterrence as a motive for punishment. We then investigated in Study 2.3b whether experimentally manipulating power through a priming procedure impacts reliance on deterrence, and we tested how reliance on deterrence affects the use of public punishments.

Study 2.3a Method

Participants, design, and procedure. A total of 6,147 participants (3,274 females, $M_{\text{age}} = 42.49$ years, $SD_{\text{age}} = 18.36$) who participated in the European Value Survey from 1981 were analyzed (EVS, 2011). We selected this value survey because it was the only value survey we were able to trace that measured people’s power positions and punishment motives. This dataset consists of survey-data that was collected through face-to-face interviews in over ten European countries such as the UK and France, totaling more than 12,000 interviews. Importantly, this dataset gave us the advantage of testing the hypothesis that power is associated with more reliance on deterrence as a punishment motive in a representative, large-scale European sample.

Managerial position. Power was determined by categorizing participants into those who occupied a power role and those who did not. Specifically, we coded those who occupied a managerial position as 1 and those who did not occupy a managerial position (i.e., skilled-workers, clerks, and unskilled workers) as 0. We reasoned that occupying a managerial position entails controlling and managing subordinates—that is, having power. In total, 14.5% of participants occupied a managerial position.

Punishment motives. Punishment motives were assessed with the question “When a person is sentenced by a court of law, what should be the main aim of imprisonment? Participants could choose between four options: a) to re-educate the prisoner, b) to make those who have done wrong pay for it, c) to protect other citizens, and d) to act as a deterrent to others. We analyzed these response options in two ways. First, we created a variable in which we coded the just deserts option (i.e., option b) as 0 and the deterrence option (i.e., option d) as 1 and left the other two options (a and c) out of the analyses. However, aiming to protect citizens through imprisonment can be argued to be similar to deterring rule breakers, since both these motives are focused on preventing further rule breaking (Carlsmith et al., 2002; Darley, Carlsmith, & Robinson, 2000). We therefore created another variable in which the just deserts option (i.e., option b) was again coded as 0 but this time we combined the deterrence option (i.e., option d) with the protect-citizens option (i.e., option c) and coded this as 1.
Results and discussion

Results are presented in Table 2.1. In agreement with our predictions, participants’ punishment motives were affected by whether they occupied a managerial position or not. More specifically, for both contrasts (just deserts versus deterrence and just deserts versus deterrence/protecting citizens) managers were more likely to indicate that imprisonment should act as a deterrent compared to non-managers ($\chi^2 = [1, n = 4196] = 31.42, p < .001, d = 0.17$; $\chi^2 = [1, n = 6147] = 72.06, p < .001, d = 0.22$, respectively). This provides preliminary support for the hypothesis that power is associated with more reliance on deterrence. To further demonstrate that it is power that increases reliance on deterrence, we manipulated power in Study 2.3b. Moreover, Study 2.3b also tested whether power increases the use of public punishments as a means to deter rule breaking. This would demonstrate how reliance on deterrence could directly affect power holders’ punitive practices.

Table 2.1. Managers and non-managers’ preferred imprisonment motive for Study 2.3a.

<table>
<thead>
<tr>
<th>Contrasts</th>
<th>Managerial Position</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Just Deserts</td>
<td>342  (66%)</td>
</tr>
<tr>
<td>Deterrence</td>
<td>179  (34%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contrasts</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Just Deserts</td>
<td>343  (38.5%)</td>
<td>2828 (53.8%)</td>
</tr>
<tr>
<td>Deterrence/Protect</td>
<td>549 (61.5%)</td>
<td>2427 (46.2%)</td>
</tr>
</tbody>
</table>

The European value survey also contained a question relating to how much “control participants had over their lives” (ranging from 1 “none at all” to 10 “a great deal”). Importantly, managers felt like they had more control over their lives ($M = 6.75, SD = 2.06$) than non-managers ($M = 6.43, SD = 2.28$; $t(11696) = 6.15, p < .001, d = 0.12$). Moreover, this control-over-life item was positively associated with relying on deterrence as a punishment motive ($B = .05, t(9181) = 3.80, p < .001$). This provides additional evidence for our usage of managerial position as a proxy of power and further corroborates the link between power and deterrence.

\footnote{The European value survey also contained a question relating to how much “control participants had over their lives” (ranging from 1 “none at all” to 10 “a great deal”). Importantly, managers felt like they had more control over their lives ($M = 6.75, SD = 2.06$) than non-managers ($M = 6.43, SD = 2.28$; $t(11696) = 6.15, p < .001, d = 0.12$). Moreover, this control-over-life item was positively associated with relying on deterrence as a punishment motive ($B = .05, t(9181) = 3.80, p < .001$). This provides additional evidence for our usage of managerial position as a proxy of power and further corroborates the link between power and deterrence.}
Study 2.3b Method

Participants, design, and procedure. Forty-eight participants (32 females, $M_{age} = 20.10$ years, $SD_{age} = 1.68$) at a Dutch University participated in exchange for €1 and were randomly assigned to one of the two power conditions (high vs. low power).

Power manipulation. Depending on condition, participants recalled a powerful or powerless event in their lives (cf. Galinsky et al., 2003). Specifically, participants in the high [low] power condition were asked to, “Please recall a particular incident in which you had power over another individual or individuals [someone else had power over you]. By power, we mean a situation in which you [someone else] controlled the ability of another person or persons to get something they wanted, or were in a position to evaluate those individuals [controlled your ability to get something you wanted or was in the situation to evaluate you]. Please describe this situation in which you had [no] power—what happened, how you felt, etc”.

Punishment motives and public punishments. Participants then read a small excerpt about plagiarism. This excerpt was allegedly part of an unrelated experiment. The excerpt was introduced as a survey deployed by the university. It explained that the university had recently adopted a system that automatically tracks down plagiarism in student assignments. It also explained that the university desired the input from students to align their sanction policies with the opinions of students. In reality, the university adopted a system to track down plagiarism, but never deployed such a survey. This was explained to participants during the debriefing at the end of the experiment.

After reading the excerpt, participants indicated on a five-item scale to what extent the specific punishments that offenders (i.e., students that commit plagiarism) receive should be publicly made known to other students. Sample items included, “The punishment should be made known to other students” and “Punishments for plagiarism should be kept private” (reverse-coded; $\alpha = .85$). Participants also indicated on a five-item scale the extent to which the names of offenders should be publicly made known to others students. Sample items included, “The names of offenders should be made known to other students” and “The names of offenders should be kept private” (reverse-coded; $\alpha = .87$). The public-punishment and public-naming scales were moderately correlated ($r = .30, p = .040$) and a factor analysis resulted in a three-factor solution with public naming (Eigenvalue = 4.55) and public punishment (Eigenvalue = 2.51) items loading on two different factors with four items also loading on a third factor (Eigenvalue = 1.05), and a total of 78.49% variance explained for.

Participants then indicated their preference for deterrence as a punishment motive on two items (i.e., “Overall, punishments for plagiarism should be aimed at deterring all students from committing plagiarism” and “Overall, punishments for plagiarism should prevent all...
students from committing plagiarism”; Spearman-Brown $\rho = .66$). They also indicated their preference for just deserts as a punishment motive on two items (i.e., “Overall, punishments for plagiarism should be aimed at giving offenders a punishment he/she deserves” and “Overall, punishments for plagiarism should give offenders a proportionate punishment”; $\rho = .97$). The deterrence and just-deserts motives were correlated ($r = .31, p = .030$) and a factor analysis resulted in a two-factor solution with deterrence (Eigenvalue = 2.32) and just deserts (Eigenvalue = 1.12) items loading on two different factors without cross-loadings and a total of 86.02% variance accounted for. Note that for the reliability of two-item scales, the Spearman-Brown statistic is preferred over both the Pearson correlation and Cronbach’s alpha (Eisinga, Te Grotenhuis, & Penzer, 2013).

**Power manipulation check.** Lastly, participants indicated on a fourteen-item scale to what extent they felt powerful (e.g., “I feel powerful”; “I feel like I can control others”, $\alpha = .94$). Importantly, participants felt more powerful in the high-power condition ($M = 5.29, SD = 0.59$) compared to the low-power condition ($M = 2.70, SD = 0.71; t[46] = 13.57, p < .001, d = 4.00$), hereby confirming the validity of the power manipulation.

**Results and discussion**

Participants in the high-power condition were more favorable towards implementing public punishments ($M = 3.60, SD = 1.52$) than participants in the low-power condition ($M = 2.61, SD = 1.59; t[46] = 2.20, p = .033, d = 0.65$). They were also more favorable towards publicly naming the offenders ($M = 2.41, SD = 1.42$) than participants in the low-power condition ($M = 1.50, SD = 0.69; t[46] = 2.77, p = .007, d = 0.81$). Importantly, with regard to the underlying motive for such punishments, participants in the high-power condition considered the deterrence of plagiarism more important ($M = 2.97, SD = 1.64$) than participants in the low-power condition ($M = 1.98, SD = 1.09; t[46] = 2.45, p = .018, d = 0.72$). No effect of power, however, was found on the just-deserts motive for punishment. Just deserts was considered of equal importance by participants in the high-power ($M = 2.90, SD = 1.93$) as those in the low-power condition ($M = 2.73, SD = 1.55; t[46] = .34, p = .73, d = 0.10$).

Lastly, two bootstrap analyses with 5,000 resamples indicated that powerful participants’ reliance on deterrence as a punishment motive mediated their increased favorability towards using public punishments (95% CI = [0.022, 0.55]) and public naming (95% CI = [0.029, 0.47]) as a punitive policy measure. More specifically, the significant effect of power on public punishment ($\beta = .31, p = .033$) and public naming ($\beta = .39, p = .007$) decreased to non-significance ($\beta = .19, p = .19$) and marginal significance ($\beta = .23, p = .08$) after deterrence (which was predicted by condition [$\beta = .34, p = .018$] and in itself significantly predicted public
punishment ($\beta = .42, p = .003$) and public naming ($\beta = .53, p < .001$) was added to the model. Although just deserts predicted public punishment ($\beta = .49, p < .001$) and public naming ($\beta = .49, p < .001$), it did not mediate the effect of power on public punishments (95% CI = [-0.17, 0.31]) and public naming (95% CI = [-0.10, 0.27]). In other words, power increased participants’ favorability towards public punishments as a way to deter plagiarism.

These results support the hypothesis that power increases reliance on deterrence. Merely inviting participants to think of a situation in which they experienced power, as opposed to powerlessness, was sufficient to elicit the hypothesized effects. Interestingly, results further demonstrated that reliance on deterrence directly affected power holders’ punitive practices by increasing power holders’ favorability towards public punishments.

Studies 2.4a, 2.4b, and 2.4c: Testing the Mediation Model

Studies 2.4a, 2.4b, and 2.4c were conducted to test the full theoretical model. Study 2.4a tested the mediation model while measuring people’s generalized sense of power, whereas Study 2.4b experimentally manipulated power with a priming procedure. Study 2.4c investigated the power-deterrence link when trust is directly manipulated, while ruling out that power-deterrence link can be explained by power increasing a focus on the group or decreasing identification with those who are potentially victimized by punishment. In addition, Study 2.4a tested the idea that deterrence increases the endorsement of mandatory minimum punishments.

Study 2.4a Method

Participants, design, and procedure. A total of 146 participants (88 males, $M_{\text{age}} = 33.01$ years, $SD_{\text{age}} = 11.79$) were recruited from the Mechanical Turk website and were paid $0.50 for their participation.

Generalized sense of power. To measure participants’ generalized sense of power, they first completed six items of the Anderson and Galinsky’s Generalized Sense of Power scale used previously in Study 2a (2006; $M = 3.40, SD = 1.21; \alpha = .60$). Consistent with Study 2a, we also computed a low-power and high-power subscale. A factor analysis (PCA) confirmed a two-factor solution with high- (Eigenvalue = 3.33) and low-power (Eigenvalue = 1.32) items loading on two different factors with no cross loadings and a total of 77.49% variance accounted for. Both the low-power subscale ($\alpha = .74$) and high-power subscale ($\alpha = .89$) had sufficient reliability and correlated moderately ($r = -.34$).

General distrust. Next, participants completed the eight-item scale used previously in Study 2a ($M = 4.79, SD = 1.09; \alpha = .87$).
Punishment motives. Participants then read a small excerpt about the enforcement of tax laws in the USA. The excerpt explained that taxes are used to benefit society as a whole but that individual taxpayers might sometimes be tempted to evade taxes. Participants indicated their preference for deterrence ($M = 4.53, SD = 1.40; \alpha = .87$) as a motive for the punishment of tax frauds on a four-item scale. They also indicated their preference for just deserts ($M = 5.54, SD = 1.03; \alpha = .71$) as a motive for the punishment of tax frauds on a three-item scale. Sample items included, “punishments should give offenders their just deserts”, “punishments should make tax frauds pay for their behavior”, “punishments should deter tax fraud”, and “punishments should prevent tax payers from committing tax fraud”. The deterrence and just deserts scales were marginally correlated ($r = .15, p = .060$) but loaded unto two different components (Eigenvalue = 3.03 for deterrence and 1.85 for just deserts) without cross-loadings and a total of 69.65% variance accounted for. Lastly, participants indicated to what extent there should be set a mandatory minimum for sentences and fines that tax frauds receive ($M = 4.60, SD = 1.72$).

Results and discussion

A set of linear regression analyses regressing all variables on the generalized sense of power showed that power was positively associated with generalized distrust ($\beta = .33, t[144] = 4.21, p < .001$), relying on deterrence as a motive for punishments ($\beta = .37, t[144] = 4.51, p < .001$), and a preference for mandatory minimum punishment ($\beta = .16, t[144] = 1.98, p = .050$). Similarly, analyses regressing all variables on generalized distrust showed that distrust was positively associated with relying on deterrence as a punishment motive ($\beta = .35, t[144] = 4.51, p < .001$) and being favorable towards mandatory minimum punishment ($\beta = .33, t[144] = 4.17, p < .001$). However, analyses regressing just desert on power and distrust showed that both power and distrust were not reliably associated with just deserts ($\beta = -.10, t[144] = -1.26, p = .21; \beta = .14, t[144] = 1.73, p = .09$, respectively). Interestingly, we replicated these effects with the high-power subscale. This subscale was associated with generalized distrust ($\beta = .26, t[144] = 3.21, p = .002$), relying on deterrence as a motive for punishments ($\beta = .29, t[144] = 3.69, p < .001$) and mandatory minimum punishments ($\beta = .16, t[144] = 1.99, p = .048$) but not with just deserts ($\beta = -.09, t[144] = 1.07, p = .29$). The low-power subscale, however, showed no association with distrust ($\beta = .12, t[144] = 1.50, p = .14$), deterrence ($\beta = .13, t[144] = 1.55, p = .12$), just deserts ($\beta = .02, t[144] = .28, p = .78$) or mandatory minimum punishments ($\beta = .02, t[144] = .28, p = .78$). Lastly, deterrence but not just deserts was associated with mandatory minimum punishments ($\beta = .15, t[144] = 1.82, p = .070; \beta = .05, t[144] = .65, p = .52$, respectively).
Mediation analyses. To test whether distrust mediated the effect of power on the deterrence motive and preferences for mandatory minimum punishment, we conducted a set of regression analyses using coefficients from 5,000 resamples bootstrap samples. For the endorsement of deterrence, results showed that the confidence interval for the indirect effect of distrust did not contain zero (95% CI = [0.03, 0.26]). More specifically, adding distrust as a mediator slightly decreased the effect of power on deterrence (from $\beta = .37$, $t_{[144]} = 4.78$, $p < .001$ to $\beta = .29$, $t_{[144]} = 3.56$, $p < .001$). Similarly, a 5,000 resamples bootstrap analysis showed that for the endorsement of a mandatory punishment minimum, the confidence interval for the indirect effect of distrust did not contain zero (95% CI = [0.03, 0.26]). More specifically, adding distrust as a mediator decreased the effect of power on mandatory minimum punishment (from $\beta = .16$, $t_{[144]} = 1.98$, $p = .050$ to $\beta = .06$, $t_{[144]} = .73$, $p = .47$). Thus, the results indicate that distrust mediated the effect of a generalized sense of power on the endorsement of deterrence and mandatory minimum punishments.

Next, we explored to what extent power predicted the implementation of punishments with a mandatory minimum through the mediating effect of distrust predicting deterrence (i.e., power $\rightarrow$ distrust $\rightarrow$ deterrence $\rightarrow$ mandatory punishment minimum). By doing so, we could further validate our reasoning by showing that experiencing power was positively associated with the implementation of punishments with a mandatory minimum through the relationship between distrust and deterrence. We tested this multiple-step model using a macro from Hayes, Preacher and Myers (2011). The overall mediation (95% CI = [0.09, 0.39]), separate effect of distrust (95% CI = [0.023, 0.20]) and the combined effect of distrust through deterrence (95% CI = [0.01, 0.09]) were significant using 5,000 resamples and a 95% bias-corrected confidence interval. The combined effect of distrust through deterrence could be replicated with the high-power subscale (95% CI = [0.01, 0.15]) but not the low-power subscale (95% CI = [-0.02, 0.01]). Thus, people who feel relatively powerful are favorable towards implementing mandatory punishment minimums as a way to deter those they do not trust. In Study 2.4b, we manipulated power to provide support for the causal link between power, distrust and deterrence.

Study 2.4b Method

Participants, design, and procedure. Seventy-three participants from the USA (45 males, $M_{age} = 32.18$ years, $SD_{age} = 12.09$) were recruited from the Mechanical Turk website and participated for $0.50$.

Power manipulation. Participants were informed that they would be completing a study on their attitudes toward tax fraud and were randomly assigned to one of the two power
conditions (high vs. low power). Participants had to write an autobiographical story about
themselves experiencing high or low power (cf. Study 2.3b). Five participants completed the
study but were not included in the analyses because they either wrote about events unrelated to
power or they failed to write more than one word. Importantly, one coder, blind to conditions
and hypotheses, rated each story that revolved around power using a seven-point scale measuring
how much power the participant reported having. Participants described themselves as more
powerful in the high-power stories ($M = 5.41$, $SD = 0.99$) than low-power stories ($M = 2.50$, $SD
= 1.02$; $t_{[66]} = 11.94$, $p < .001$, $d = 2.94$), hereby confirming the validity of the power
manipulation.

**Distrust.** Next, participants read an excerpt about tax fraud in the United States (cf.
Study 2.4a). Participants’ distrust towards taxpayers’ tendency to pay their taxes was measured
with four items ($\alpha = .80$). Sample items included, “I believe that taxpayers will evade taxes
whenever they can get away with it” and “When it really comes down to it, most taxpayers will be
tempted to commit tax fraud”.

**Punishment motives.** Subsequently, participants indicated their preference for
deterrence on one item (e.g., “A punishment should primarily be aimed at deterring taxpayers”) as a motive for punishment. They also indicated their preference for just deserts on one item
(e.g., “A punishment should primarily give taxpayers their just deserts”) as a motive for
punishment.

**Results and discussion**

Participants in the high-power condition were more distrustful towards taxpayers ($M = 4.84$, $SD = 0.98$) than participants in the low-power condition ($M = 4.07$, $SD = 1.56$; $t_{[66]} = 2.40$, $p = .019$, $d = 0.59$). Importantly, with regard to the underlying motive for punishments, participants in the high-power condition considered the deterrence of tax fraud more important
($M = 4.74$, $SD = 1.11$) than participants in the low-power condition ($M = 4.00$, $SD = 1.65$; $t_{[66]} = 2.16$, $p = .035$, $d = 0.53$). The just-deserts motive for punishment, however, was considered
less important by participants in the high-power condition ($M = 5.24$, $SD = 1.54$) as compared to
participants in the low-power condition ($M = 6.32$, $SD = 1.01$; $t_{[66]} = 3.45$, $p = .001$, $d = 0.85$).

**Mediation analysis.** To test whether distrust mediated the effect of power on the
deterrence motive, we conducted a set of regression analyses using coefficients from 5,000
resamples bootstrap samples. Results showed that the 95% confidence interval for the indirect
effect of distrust did not contain zero [0.02, 0.35, see Figure 2.2]. Distrust did not mediate the
effect of power on just deserts [-0.13, 0.03]. In Study 2.4c, we aimed to replicate these findings
while experimentally manipulating distrust. We also aimed to rule out that the effect of power on
deterrence is caused by lower levels of victim identification or an increased focus on the welfare of the group relative to the individual group member.

**Figure 2.2.** Mediation analysis for Study 2.4b. High power is coded as 1, low power as -1. Beta weights are unstandardized, *p < .05.

**Study 2.4c Method**

**Participants, design, and procedure.** Ninety-four participants from a Dutch university (60 females, \(M_{\text{age}} = 22.19\) years, \(SD_{\text{age}} = 2.75\)) participated for €1 and were assigned to a 2 (power: high vs. control) x 2 (trust: distrust vs. control) between-participants design.

**Trust manipulation.** All participants were told that they would participate in a social dilemma (cf. Study 2.2b). Importantly, it was explained to participants in the distrust condition that “previous social dilemma experiments demonstrated that participants generally cannot be trusted to act cooperatively”, whereas participants in the control condition did not receive this information.

**Role-based power manipulation.** Depending upon condition, participants were informed that they were assigned to a powerful manager position or they received no information about their power position (cf. Study 2.1b). As managers, the participants were led to believe that they had control over how money would be allocated to other group members. That is, participants assigned to the managerial position had full control over the money in the common resource. Participants were told that the other group members were unaware of the participant’s power.

**Punishment motives.** Participants were led to believe that they were in this game together with three other participants (cf. Studies 2.1b and 2.2b). Again, there was a collective resource of 30 chips, with each chip worth €0.10 and every individual group member could take
between 0 and 10 chips out of this collective resource. Chips that were not taken by individual group members were multiplied by two and at the end of the game evenly distributed among the group members.

The actual social dilemma was then played. Player A took 7 out of 10, player B took 1 out of 10 and Player C took 10 out of 10 coins out of the collective resource. In other words, it was clear that Player A and C acted uncooperatively. Participants had to indicate whether they thought that Player A and C should be punished to deter selfish behavior, or give them their just deserts. More specifically, participants indicated their preference for deterrence on a four-item scale ($\alpha = .90$) and just deserts on a three-item scale ($\alpha = .92$). Sample items for deterrence included, “They should be punished to prevent uncooperative behavior” and “Uncooperative group members should be fined to deter them”. Sample items for just deserts included, “They should be punished to give them their just deserts” and “Uncooperative group members should pay for what they have done”. The deterrence and just-deserts motives were significantly correlated ($r = .51, p < .001$) and a factor analysis resulted in a two-factor solution with deterrence (Eigenvalue = 4.29) and just deserts (Eigenvalue = 1.41) items loading on two different factors without cross loadings and a total of 81.42% variance accounted for.

Possible alternative explanations. To rule out some alternative explanations for the power-deterrence relationship, we also measured the extent to which participants focused on the welfare of the entire group versus the individual and the extent to which they identified with group members who would be potentially punished. Both constructs could potentially explain the power-deterrence link through power increasing people’s focus on the welfare of the group (cf. Magee & Smith, 2013), or power decreasing identification with the victim (cf. Van Kleef et al., 2008). More specifically, we measured both group orientation ($\alpha = .78$; e.g., “At this moment, I consider the group interest more important than the interest of the individual group member”; “Group-interest should guide decisions to a stronger extent than self-interest”) and victim identification ($\alpha = .95$; e.g., “I feel sorry for group members who will be punished”; “I identify with uncooperative group members”) with four items.

Trust manipulation check. Before group members made their decision, participants also indicated to what extent the group members in the social dilemma could be trusted to act cooperatively on a three-item scale ($\alpha = .89$; e.g., “Group members can generally be trusted to act cooperatively”; “I trust group members to value the collective interest over their own”; “Group members will leave most chips in the common pool”). We conducted an analysis of variance (ANOVA) with power and trust and their interaction as independent variables, and trust as dependent variable. This analysis yielded a (marginally significant) main effect of power ($F[1, 90] = 3.19, p = .077, \eta^2_p = .03$) and a (marginally significant) main effect of trust $F[1, 90] = 3.00, p =$
Although no significant interaction effect emerged ($F[1, 90] = 0.95, p = .33, η^2_p = .01$) the means do demonstrate that in the control condition power holders ($M = 4.01, SD = 1.62$) distrusted marginal significantly more than non-power holders ($M = 3.22, SD = 1.78$; $t[45] = 1.92, p = .060, \eta^2_p = .06$) whereas power holders distrusted as much ($M = 4.25, SD = 1.38$) as non-power holders in the distrust condition ($M = 4.03, SD = 1.49$; $t[45] = 0.53, p = .59, \eta^2_p = .01$).

**Power manipulation check.** At the end of the experiment, participants indicated to what extent they had a position of power on a three-item scale ($α = .91$; “I hold a position of power”, “I feel like I can control others’ outcomes”, and “I feel powerful”). Confirming the validity of the power manipulation, participants felt more powerful in the high-power conditions ($M = 5.12, SD = 1.05$) compared to the control conditions ($M = 3.71, SD = 1.92$; $F[1, 90] = 17.79, p < .001, \eta^2_p = .17$). We found no main effect for trust ($F[1, 90] = 0.12, p = .73, \eta^2_p = .00$) and no interaction effect between power and trust ($F[1, 90] = 1.11, p = .29$).

**Results and discussion**

We conducted two separate analyses of variances (ANOVA) with power and trust, and their interaction as independent variables, and deterrence and just deserts as dependent variables, respectively (see Figure 2.3). We observed a main effect of power for deterrence ($F[1, 90] = 4.68, p = .033, \eta^2_p = .05$) but not for just deserts ($F[1, 90] = .46, p = .49, \eta^2_p = .01$) No main effect of distrust was observed for deterrence ($F[1, 90] = .31 p = .58, \eta^2_p = .01$) or just deserts ($F[1, 90] = .12, p = .73, \eta^2_p = .00$) Importantly, an interaction effect between power and distrust emerged for deterrence ($F[1, 90] = 3.69, p = .058, \eta^2_p = .04$) but not for just deserts ($F[1, 90] = 2.70 p = .11, \eta^2_p = .03$). More specifically, power only increased reliance on deterrence when nothing was mentioned about the trustworthiness of group members ($t[45] = 2.92, p = .005, d = 0.87$). However, when participants were distrustful, no effect of power on deterrence emerged ($t[45] = .17, p = .87, d = 0.05$).
Possible alternative explanations. Correlations between punishment motives, group focus, and victim identification are reported in Table 2.2. Both deterrence and just deserts correlated positively with victim identification but negatively with being focused on the welfare of the group. We conducted two separate analyses of variances (ANOVA) with power and trust, and their interaction as independent variables, and group focus and victim identification as dependent variables, respectively. We found no main effect of power or distrust, or interaction effect between power and distrust for victim identification (F[1, 90] = .08, p = .78, η^2_p = .00; F[1, 90] = .00, p = .96, η^2_p = .00 and F[1, 90] = .03, p = .87, η^2_p = .00, respectively) or group focus (F[1, 90] = 1.16, p = .28, η^2_p = .01; F[1, 90] = .02, p = .89, η^2_p = .00 and F[1, 90] = .38, p = .54, η^2_p = .00, respectively). In other words, power did not affect victim identification or group focus in the distrust or control condition. The effect of power on deterrence could therefore not be explained by either one of these variables.

These results strongly suggest that distrust is the default for participants with power. Indeed, when trust was low, the relationship between power and deterrence was attenuated; participants in the control condition relied on deterrence to the same extent as participants who occupied a position of power. Distrust, in other words, made participants in the control condition prefer deterrence—just like power holders. Importantly, victim identification and group focus could not explain why power increased reliance on deterrence. Taken together, 2.4a,
2.4b, and 2.4c provide converging support for the hypothesis that distrust plays a unique and pivotal role in explaining why power holders rely on deterrence as a punishment motive.

**Table 2.2. Correlation table for Study 2.4c.**

<table>
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<th>Just Deserts</th>
<th>Victim Identif.</th>
<th>Group Focus</th>
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<td>-.30*</td>
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*Note. N = 94, *p < .05, **p < .01, ***p < .001.*

**General Discussion**

Leaders frequently punish to induce compliance with rules (Parks, Joireman, & Van Lange, 2013). Yet, punishment is not always effective and can even be counterproductive (Gneezy & Rustichini, 2000; Van Dijk et al., 2014). If punishment can be problematic, what do leaders then aim to achieve with their punishments?

Nine studies demonstrated that power increased reliance on deterrence as a punishment motive. Specifically, results indicated that power led to an increased reliance on deterrence, but not just deserts, as a punishment motive and, as a consequence, made participants more favorable towards the implementation of punishments that are public or have a mandatory minimum. In addition and importantly, results revealed why this occurred. Power undermined individuals’ trust in others, such that the expectation that others are more likely to break the rules accounted for the observed relationship between power and deterrence. Together, these studies provide converging support for the hypothesis that power affects the reliance on deterrence through a decreased trust in others.

**Theoretical Implications**

The present research makes several important contributions to the literature on power and punishment. First, it provides an understanding why and how those in power punish. It demonstrates that power can lead people to punish to deter. So far, research has demonstrated that power affects the severity of punishments (Van Prooijen, Coffeng, & Vermeer, 2014; Wiltermuth & Flynn, 2013) or has provided suggestions as to why those in power punish others.
(Butterfield, Treviño, & Ball, 1996; Butterfield et al., 2005). However, little research to date has provided empirical evidence as to what powerful individuals seek to achieve with such punishments. The current research demonstrates that power increases reliance on deterrence, but not just deserts, as a punishment motive. That is, power does not necessarily decrease a concern with retributive justice, but it increases a concern for deterring rule breaking. These findings are consistent with our reasoning that distrust—elicited by power—increases punishment behavior aimed at deterring rule breaking instead of achieving retributive justice. Note that the current results do not show that power holders consider deterrence more important than just deserts. Instead, the current results demonstrate that due to their power, powerful individuals consider deterrence more important than individuals without power. The advantage of gaining knowledge about the effects of power on punishment motives is that it gives insight into what powerful individuals actually try to achieve with punishments. The current findings imply, for example, that the height of fines and the length of sentences can depend on whether those in power believe that punishments have the potential to deter rule-breaking behavior. Moreover, few studies have yet documented the psychological underpinnings of deterrence. Research on retributive justice has mainly focused on the use of justice as a punishment motive (Darley, 2009). Our work shows that taking the social hierarchy of an organization or society into account when investigating people’s punishment motives may provide important additional insights.

Secondly, the current research broadens our understanding of the psychological effects of power and the determinants of interpersonal distrust by demonstrating that power can undermine the trust that individuals have in others, even before others’ actual trustworthiness can be inferred from their behavior or other (social) cues. This suggests that powerful individuals in an organization or society (e.g., managers, and policy-makers) tend to approach others (e.g., employees, citizens) in a more distrustful manner. This might seem at odds with research that has documented how the psychological state of status that is often associated with a hierarchical position can increase interpersonal trust (Lount & Pettit, 2012) and acts of justice (Blader & Chen, 2012). Importantly, although power and status often go together, they are conceptually distinct (Magee & Galinsky, 2008). Power refers to asymmetric control over resources, whereas status is the respect and admiration that one has in the eyes of others. Although we did not experimentally distinguish power from status, our findings suggest that power may affect interpersonal trust differently than status.

More specifically, power might impact trust through affecting people’s resource-control goals. Research suggests that power holders prefer to strive for goals that maintain and protect their resource control (Fehr et al., 2013; Willis & Guinote, 2011) and that powerful individuals are better able to achieve such control goals than powerless individuals (Magee & Galinsky, 2008;
Smith, Jostmann, Galinsky & Van Dijk, 2008). The current research suggests that distrust might be a consequence of such a heightened resource-control goal, since trust invites potential exploitation and, thus, loss of power. The notion that the motivation to retain power undermines trust in others is further consistent with research showing that power holders’ focus on their own resources makes them cynical about others’ generous acts (Inesi, Gruenfeld, & Galinsky., 2012). Our theorizing revolves around trust as an expectation of others’ cooperative intent. People’s (potential) uncooperative behaviors are relevant to power holders because through such acts, power holders can lose resources and thus power. Thus, it seems unlikely that this relationship between power and distrust originates from power making people simply more action-oriented (Galinsky et al., 2003), unless such action is in the service of gaining, maintaining or protecting resources (Keltner et al., 2003). This also implies that power may not undermine trust in others when this trust assessment is irrelevant for the power holder’s resource-control (i.e., when the other cannot gain resources through an untrustworthy act; cf. Inesi et al., 2012).

Our theorizing has implications for the emerging literature on people’s motivation to acquire and maintain power or status. Individuals vary in the degree to which they are motivated for prestige (status attainment and maintenance) or power (power attainment and maintenance; see Anderson, Willer, Kilduff, & Brown, 2012). The current theorizing and obtained results suggest that distrust and power motivation may be intrinsically linked—being motivated to attain power may foster distrust about others’ underlying intentions. When striving for a high ranked power position that is available to only one (or a few) individual(s) it may be functional to assume that others are (also) power hungry, instead of losing your coveted position to those you assumed not to desire it. Being distrustful about others’ intentions may in turn also foster power motivation as a way to be less dependent on those you expect to be exploitative. Although speculative, these propositions provide a new perspective on the psychology of power motivation and offer suggestions as to why some individuals prefer to strive for respect and admiration, but not power (Anderson et al., 2012; Joseph, Sellers, Newman, & Mehta, 2006). That is, striving for power may be accompanied by viewing others as distrustful, corrupt, and exploitative—a state of mind that might be aversive to many. Striving for status, however, may foster a more trusting mindset, since status is dependent on the respect and admirations of others and distrusting these others is a form of disrespect (Tyler & Blader, 2003).

Practical Implications

Within an organization or society, those individuals who design and implement punishments have, by definition, a form of power. Managers, for example, regularly punish to induce rule compliance (Kerr, 1975; Magee, Kilduff, & Heath, 2011). Similarly, policy-makers are
frequently responsible for designing systems that aim to influence the behavior of people through providing punitive incentives (e.g., fines). The current research indicates that merely due to their power position, such managers and policy-makers may focus more on punishments that deter undesired behavior.

This provides an intriguing speculative psychological explanation for why countries with the most unequal distribution of incomes (i.e., resources) also imprison the most people (see Wilkinson & Pickett, 2007, 2009). For instance, the USA’s relatively unequal distribution of incomes compared to other Western countries has been linked to USA’s higher imprisonment rates (Wilkinson & Pickett, 2007, 2009). The USA’s imprisonment rates (576 people per 100,000) are four and a half time higher than that of the UK (142 people per 100,00) and fourteen times higher than those of Japan (40 people per 100,000)—all of which are rich, industrialized and educated countries (United Nations, 2000). The same pattern can be found for USA states—more unequal states imprison more people than less unequal states (Wilkinson & Pickett, 2007). Interestingly, the relationship between inequality and imprisonment rates does not seem to be explained by unequal countries and states being less educated or people more poor (Wilkinson & Pickett, 2007, 2009). What, then, explains the effect of inequality on imprisonment rates? Some have suggested that citizens demand more severe punishments in unequal societies (Downes & Hansen, 2006). Although this is likely to be partially true, the current research provides an alternative explanation. That is, with increasing power differentials, powerful policy-makers and judges become more concerned with the deterrence of crime. Since relatively unequal societies by definition have greater power differentials, higher imprisonment rates can reflect power holders’ increased concern with the deterrence of crime. Inequality might therefore also affect imprisonment rates through its psychological effect on powerful individuals who design and implement punishments. For instance, in the USA, increases in the use of mandatory minimum sentences as a deterrent cause rule breakers to receive longer sentences for minor crimes, hereby increasing imprisonment rates (Chemerinsky, 2004).

Relatedly, the increased reliance on deterrence instead of just deserts can also lead punishments and punitive policies to misalign with what employees or citizens consider fair and just (Darley, 2009). This may elicit negative attitudes towards the punishers (e.g., judges, managers; Ball, Treviño, & Sims, 1994) and undermine the effectiveness of their policies through reducing people’s compliance with the very rules those punishments try to uphold (Magee et al., 2011; Tannenbaum, Valasek, Knowles, & Ditto, 2013; Tyler, 2006). Indeed, the tendency of power-holders to punish an employee publicly or to implement a mandatory minimum for punishments has in the past been perceived as unjust and counterproductive (Jabour, 2013; Robinson, 2005). Similarly, the current findings also suggest that punishments that aim to deter
are driven by distrust. This may have the consequence that such punishments signal distrust to those who are (potentially) subjected to them. Managers and policy-makers may, in other words, communicate through their punitive policies that rule-breaking behavior is expected and widespread. Ironically, this might have the exact opposite effect of those intended. Punishments that increase distrust have been shown to increase rule-breaking behavior (Mulder et al., 2006). Those in power can therefore create a self-fulfilling prophecy with their punishments. They may feel that people will break the rules when not deterred by punishments, but people increasingly break the rules because punishments signal distrust, leading those in power to further enforce punishments to deter more rule breaking. This cycle of increasing distrust and punishment could undermine people’s compliance with the rules that punishments try to uphold and hereby severely undermine cooperation within an organization or society.

Taken together, this suggests that power holders’ reliance on deterrence as a punishment motive can have detrimental consequences. Managers and policy-makers should therefore be aware of the effect that power has on their punitive decisions.

Possible limitations and directions for future research

Whereas the current research provides convergent support for our hypotheses across different samples and measures, there are some issues to be noted. For instance, participants were not confronted with severe moral transgressions that evoke strong emotional reactions (e.g., rape or murder). It is possible that giving offenders their just deserts becomes more important in situations that involve severe moral transgressions because the need to restore retributive justice might be higher upon observing a blatant injustice. Power holders might therefore rely more on just deserts as a punishment motive when confronted with a severe moral transgression. Since judges deal with such issues on a regular basis, understanding the effects of power on their punitive decision-making may prove interesting future research. Relatedly, in the current studies scenarios revolved around unknown others with whom participants had little to no interaction. In organizational settings, managers often have to decide on how to punish an employee who they know very well. It could be that familiarity with the rule breaker moderates the extent to which power holders punish to deter. We believe investigating the boundary conditions will prove an interesting avenue for future research.

There may also be additional structural reasons for power holders’ increased concern with deterring rule breaking. Since rule compliance can (although imperfectly) be measured but retributive justice often cannot due to its subjective nature, power holders are generally held accountable for how well they can prevent rule breaking instead of provide fair and just punishments. Combined with the psychological effects of power on deterrence, this may further
facilitate reliance on deterrence as a motive for punishment. Moreover, when managers and policy-makers are made responsible and accountable for deterring rule breaking through punishments, they may experience a greater sense of power. This power may further increase their belief that deterrence is needed. For example, a manager might be made responsible for preventing employees’ unethical behavior. This can instill a sense of power into the manager that propels further reliance on deterrence as a punishment motive. Power holders are generally also less susceptible to being punished than their less powerful counterparts. This difference between the powerful and powerless may also affect reliance on deterrence and just deserts, and thus affect punishment preferences. Indeed, since power holders are less likely to be punished, a punishment that is proportionate may become less important to power holders. This might further facilitate the use of punishments that deter instead of punishments that provide offenders their just deserts. It should be noted, however, that the current research clearly shows the mediating role of distrust—an effect that cannot be easily explained by power holders’ decreased susceptibility to punishment. A decreased susceptibility to being punished is more likely to decrease, instead of increase, distrust towards others since punishment is a threat (Keltner et al., 2003) and feeling threatened can increase distrust towards others (Kramer & Schaffer, 2014). Our results suggest that losing resources may be threatening to power holders when others are able to gain their (lost) resources. Future research could experimentally manipulate whether power holder’s trust could lead to resource loss to others (or not), to further verify our theorizing.

In sum, we believe that some of the above factors can further facilitate power holders’ reliance on deterrence opposed to just deserts. Considering the problems that can be associated with using deterrence as a punishment motive, we believe that investigating these issues further to be an important direction for future research.

Conclusion

We presented nine studies that examined how power changes why people punish. Across a range of different instantiations of power, measurements of distrust, and rule-breaking acts, we consistently observed that power undermines trust and that this distrust increases the reliance on deterrence as a punishment motive, and facilitates the use of punishments to achieve this (i.e., public punishments; punishments with a mandatory minimum). In doing so, the current work broadens our knowledge about power, punishment motives, and trust. It also provides practical implications for managers and policy-makers about how their power can bias their punitive decisions and, ironically, undermine their effectiveness.