

Moral Punishment in Everyday Life

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Abstract

The present research investigated event-related, contextual, demographic, and dispositional predictors of the desire to punish perpetrators of immoral deeds in daily life, as well as connections among the desire to punish, moral emotions, and momentary well-being. The desire to punish was reliably predicted by linear gradients of social closeness to both the perpetrator (negative relationship) and the victim (positive relationship). Older rather than younger adults, conservatives rather than people with other political orientations, and individuals high rather than low in moral identity desired to punish perpetrators more harshly. The desire to punish was related to state anger, disgust, and embarrassment, and these were linked to lower momentary well-being. However, the negative effect of these emotions on well-being was partially compensated by a positive indirect pathway via heightened feelings of moral self-worth. Implications of the present field data for moral punishment research and the connection between morality and well-being are discussed.

Keywords

morality, moral punishment, experience-sampling, social closeness

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Whether a coworker claims your achievement for his own, your child disobeys you, or a stranger jumps the queue ahead of you, there are many situations in daily life in which we feel a desire or urge to punish someone for his or her moral transgression. The desire for moral punishment (also referred to as punitiveness) seems ubiquitous across cultures and fulfills an integral part of our evolved moral makeup as human beings. Assuming that the key purpose of moral systems is to orchestrate and coordinate social interactions, moral punishment plays an essential role in maintaining and reinforcing an established moral system (and the ensuing social harmony) as part of a “virtuous” cycle. Specifically, moral values set the abstract background from which moral rules and their corresponding legal regulations are derived to demarcate the proper from the improper way of conduct, the right from the wrong deed. To sanction immoral behavior and deter future wrongdoings, societies seek to identify and punish the perpetrators of immoral deeds. From the perspective of a virtuous cycle, moral punishment can, thus, be regarded as the corrective “whip” that acts as a negative reinforcer of desired values and cooperative behavior. Put simply, punishment serves to keep established moral systems intact (Fehr & Gächter, 2002; Rockenbach & Milinski, 2006).

Moral Punishment Research

Scholars of morality have delved into the questions of *why* we punish offenders. The emerging consensus is that there

are at least three possible motives or rationales at play, *retribution* of the wrong done, *prevention* of future transgressions, and *reformation* of the offender, even though laypeople seem to primarily focus on the retribution rationale (Carlsmith, Darley, & Robinson, 2002; Darley, Carlsmith, & Robinson, 2000). Because moral punishment involves a relationship between offender and enforcers, moral punishment research can be divided into two major research foci. One focus is on the perpetrator’s cognitions, feelings, and behavior before and after a possible immoral act, asking questions such as the following: How do would-be-perpetrators simulate the negative consequences of their conduct, integrating moral (and legal) punishment into their cost–benefit analysis? Under what conditions and in what form is moral punishment most effective at preventing (would-be) perpetrators from future wrongdoings? The other, complementary focus is on the cognitions, feelings, and behaviors of possible enforcers who are the victim of or observe/judge moral transgressions, asking

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questions such as, what are the key factors that determine how harshly or mildly we want to punish an offender, what obstacles and barriers keep people from punishing, and so forth.

The Present Research

In the present work, we adopt this second research focus, asking a number of basic research questions related to the antecedents and consequences of the *desire for punishment* in everyday life. Thus, rather than actual punishing behavior, the primary focus of this research is on the motivational basis of punishment, for both conceptual and practical reasons. The broader literature on punishment rests on the assumption that the desire for punishment, a mental state, is a central predictor of actual punishment behavior, much in the same way as intentions are an important predictor of actual behavior in other areas of psychology (Ajzen, 1991; Armitage & Conner, 2001). Although (or, precisely because) their correspondence may not be perfect, due to general and specific enactment constraints—including feasibility concerns and normative concerns (e.g., Strimling & Eriksson, 2014), lack of opportunities, and delegation to authorities—getting a more fine-grained understanding of the motivational foundation of actual punishment is of interest in its own right. Psychologists and economists wanting to understand the function of and ulterior motives behind punitive sentiments as well as the neural systems that trigger the desire for punishment (e.g., Bone & Raihani, 2015; Carlsmith et al., 2002; Fehr & Gächter, 2002; Fehr & Rockenbach, 2004; Knoch, Gianotti, Baumgartner, & Fehr, 2010; McCullough, Kurzban, & Tabak, 2013) will benefit from a focus on the motivational basis underlying moral punishment.

Our approach is distinct from traditional punishment research in terms of its methodology. Traditional moral punishment research has mostly focused on hypothetical scenarios, vignettes, and thought experiments to tap into the motivation to punish, as well as economic games and other experimental paradigms to study actual punishment in the laboratory. However, despite the control and standardization that these approaches enable, they are limited by the artificial nature of the stimuli used and the social relationships created, as well as the nonnatural settings in which they are embedded. In spite of considerable scientific and practical interest in issues of moral punishment, little research has taken the study of moral punishment out of these artificial settings (for notable exceptions see, for example, field research on moral punishment in lawmakers or field observation studies of direct and indirect punishment, or the public display of disapproval; Balafoutas, Nikiforakis, & Rockenbach, 2014, 2016; Brauer & Chekroun, 2005; Chekroun & Brauer, 2002; Englich, Mussweiler, & Strack, 2006). Our study is part of the current movement to study morality closer to where moral experiences actually happen. To this end, we utilized an ecologically valid approach,

experience-sampling (Csikszentmihalyi & Larsen, 1987), to maximize the representativeness of—and, thus, the generalizability to—the settings and situations in which transgressions and the desire for punishment naturally occur. Experience-sampling entails the repeated, context-sensitive assessment of people's thoughts, emotions, or behaviors as they occur in their everyday environments. By being as close as possible in time and space to when and where morally relevant situations occur, we sought to gain novel insights into the base rates, triggering conditions, and interindividual differences of the desire for punishment and its associated emotional experiences.

Research Questions and Hypotheses

Drawing on previously unpublished data and analyses from a project on Everyday Morality (Hofmann, Wisneski, Brandt, & Skitka, 2014), we address a number of key research questions regarding the desire for punishment in victims and observers in everyday life contexts.

How Frequently Do People Want to Punish? Is Punishment Aligned With the Perceived Wrongness of the Act?

Very little is known about the base rates of the desire to punish moral offenders in daily life. The present dataset allows a rough approximation to this question. Specifically, we looked at the percentage of punishment desires as a proportion of the overall number of reported occasions and explored the distribution of strong and weak desires for punishment in the case a transgression was observed. We also investigated whether the desire to punish is aligned with the perceived wrongness (i.e., severity) of the immoral act, as basically all psychological accounts of punishment (i.e., retribution, prevention, reformation) predict. Thus, finding a significant relationship between perceived wrongness and the desire to punish would be consistent with the basic notion that laypeople calibrate their desire to punish to how unjust they perceive the act to be as they navigate the everyday moral landscape.

Victim Versus Observer Perspective

Morality and justice research has argued that it is important to consider the perspective of the adjudicator. Is he or she directly involved as a victim of the transgression, or is he or she indirectly involved as (a more or less neutral) observer of some wrongdoing? (Miller, 2001; Schmitt, Gollwitzer, Maes, & Arbach, 2005). In the present research, the victim (i.e., second party) perspective was captured by asking participants to indicate whether they were the target of an immoral act; the observer (i.e., third party) perspective was captured in two facets: (a) whether participants witnessed an immoral act in their immediate surroundings or (b) whether they learned about an immoral act more indirectly such as through

the media or gossip. One prediction was that punishment inclinations of victims, due to the higher degree of personal involvement and harm may be more intense than those of observers, consistent with some experimental games research comparing second- and third-party punishment (Fehr & Fischbacher, 2004; but see Leibbrandt & López-Pérez, 2012, who did not find such a general trend across 10 economic games). However, these possible differences may not be very large, given others have argued that observers' reactions to the immorality they experience secondhand can often be as passionate as reactions from the victim's perspective (e.g., Miller, 2001). A further interesting question with regard to the two facets of third-party perspective was whether punishment judgments from witnessing immorality as a close bystander would be more similar in intensity to those of victims or more similar to those of observers who merely learned about immorality through media or gossip.

Does Social Closeness to the Perpetrator and to the Victim Matter?

Since the middle ages, Lady Justice has often been depicted wearing a blindfold, representing impartiality. According to this ideal, justice should be applied without regard to the social position and ties of the offender. The immoral deed is all that matters as a basis for moral (and legal) judgment. But are ordinary humans like that? After all, decades of research on decision making has painted a picture of humans as often influenced by supposedly irrelevant factors, thus deviating from rational models (Kahneman, 2011). In the present research, we scrutinized the potential biasing influence of one important aspect of social ties, social closeness, both with regard to the relationship between the perpetrator and the adjudicator and between the victim and the adjudicator.

That is, we investigated whether the desire for punishment may be less harsh if the moral offender is a close rather than distant other. Such a social bias is likely because it may be easier for people to forgive the deed of a close other through empathizing (i.e., trying to understand the motives and circumstances of the deed) and because people know that they will have to get along with that person in the future again. Likewise, if the victim is a close other, observers may empathize more, thus taking a stronger stand and care for the victim and, consequently, demanding harsher punishment.

Some prior research has addressed issues of social closeness both from an in-group/out-group and from an evolutionary perspective. For instance, research on the role of race in courtroom settings finds prejudiced responses of White juries to Black suspects and of Black juries to White suspects (Sargent & Bradfield, 2004; Sommers & Ellsworth, 2000). Similar in-group favorability effects have been found in experimental settings using economic games (Bernhard, Fischbacher, & Fehr, 2006; Schiller, Baumgartner, & Knoch, 2014) and in the neuroscientific literature (Molenberghs

et al., 2014). Moreover, using fictional vignettes, evolutionary psychology research has shown that people punish perpetrators most leniently for the same deed if the victim was a close kin (family member), and increasingly more harshly in the case of a friend (schoolmate) or a stranger (foreigner), respectively (Lieberman & Linke, 2007; Linke, 2012). The present data from everyday life allowed us to extend and generalize these prior findings regarding social closeness across a more diverse number of social categories from actual everyday interactions and by creating continuous measures of social closeness to the perpetrator and to the victim.

Are There Differences by Type of Moral Foundation?

Influential taxonomies of moral dimensions posit a number of core moral foundations underlying morality, such as care/harm, fairness/unfairness, loyalty/betrayal, authority/subversion, sanctity/degradation, and liberty/oppression (Graham et al., 2013; Graham et al., 2011). In our own work, on which the present analyses build, we have identified two possible additional dimensions, honesty/dishonesty and self-discipline/lack of self-discipline (Hofmann et al., 2014). We, thus, explored whether the average desire for punishment varies across moral foundations.

Do Some Individuals Want to Punish More Harshly Than Others?

We scrutinized a number of demographic (gender, age, religiosity, political orientation) as well as dispositional predictors (moral identity, moral conviction, moral intuition) that have been or may be implicated in moral judgment and decision making.

Gender. Prior research into gender differences in punitiveness has yielded little evidence of general sex differences (Kutateladze & Crossman, 2009; Mackey & Courtright, 2000; Moiscuc, Brauer, Fonseca, Chaurand, & Greitemeyer, in press). Some studies do report significant differences with regard to narrower issues such as a stronger tendency among males to support the death penalty; Others do not show such topic-related differences (Kutateladze & Crossman, 2009, for an overview). In light of the meager prior evidence for reliable and generalizable gender differences, we expected little evidence for gender differences. However, because earlier work relied mostly on survey data and hypothetical scenarios, we refrained from making a strong prediction.

Age. There appears to be scarce research directly investigating age trends in punitiveness across the age spectrum from adulthood to older age. A great deal of research has focused on moral development and moral reasoning in children and teenagers, and its comparison with adults (Eisenberg,

Cumberland, Guthrie, Murphy, & Shepard, 2005; Haidt, Koller, & Dias, 1993), which is outside the scope of this research. Other research has investigated positive behaviors such as generosity (Bekkers, 2007). Some opinion poll data show a tendency among older people to hold more punitive sentiments toward six common crimes (McCorkle, 1993). Across multiple norm-violation scenarios and a large sample covering the full age range, Moissuc et al. (in press; Sample 3) found a reliable positive correlation between age and the self-reported tendency to confront perpetrators. Another scenario-based study found that older computer users were less permissive toward illegitimate use of a computer than younger ones (Gattiker & Kelley, 1999). The present database allowed us to add to this knowledge base by testing for a possible, more general relationship between age and the desire to punish in daily life.

Religiosity. Do religious people punish more or less harshly than nonreligious people? Research on the connection between religiosity and morality has mostly focused on prosocial behaviors (Everett, Haque, & Rand, 2016; Shariff & Norenzayan, 2007). Some scenario-based research suggests that religiosity reduces the acceptability of ethically questionable behaviors (Conroy & Emerson, 2004) as well as taboo violations (Piazza & Sousa, 2014). Experimental research using second- or third-party punishment games such as the ultimatum game tends to find mixed evidence, with some studies reporting an association between religiosity measures or religious primes and punishment, especially when reminded of their religion (Laurin, Shariff, Henrich, & Kay, 2012), whereas other studies do not (Henrich et al., 2010; McKay, Efferson, Whitehouse, & Fehr, 2011). There are a number of possible reasons why religion may not exert a strong effect on punishment: First, it has been argued that moral systems (and associated punishment) need not be based on a religious foundation (e.g., Dawkins, 2006). Second, opposing effects may cancel each other out. That is, null effects of religion on punishment may be due to the “opposing effects of general religiosity, which appears to increase punitiveness, and the specific belief in powerful, intervening Gods, which appears to reduce it” (Laurin et al., 2012, p. 3279). We, therefore, did not entertain a strong prediction regarding the role of religiosity.

Political orientation. Does political orientation moderate the desire to punish perpetrators? Research investigating how members of various political orientations approach and respond to immoral issues suggests a number of reasons for why conservatives, in particular, may be less forgiving on average. First, conservatives place a greater emphasis on personal agency in general, which may result in the internal attribution of more responsibility to the perpetrators of immoral acts rather than to external circumstances (Schlenker, Chambers, & Le, 2012; Weiner, Osborne, & Rudolph, 2011), and, hence, a stronger average desire for punishment. Consistent

with this idea, conservatism is associated with a stronger belief in individual causality for crime and a punitive stance on crime. Liberalism, in contrast, is associated with belief in economic and external causes of crime and stronger endorsement of a rehabilitation over punitiveness goal when thinking about sentencing goals (Carroll, Perkowitz, Lurigio, & Weaver, 1987).

Moreover, political conservatives tend to score higher on measures of right-wing authoritarianism (Jost, Glaser, Kruglanski, & Sulloway, 2003). Although this construct is complex (some have argued, too complex, for example, Funke, 2005), one of the key components is punitiveness and punishment of people who step outside of the norm and violate moral values. This suggests that one of the characteristics of conservative orientation may be higher punishment intentions. Drawing on these notions, we were interested in whether data from everyday life would confirm a stronger desire for punishment in conservatives.

Moral identity. Building on a social-cognitive model of moral functioning, Aquino and Reed (2002) define moral identity as a self-conception organized around a set of moral traits. Morality, in other words, is more central to the self for those high, as compared with low, on the trait. Individuals high in moral identity have been shown to engage in more everyday prosocial behaviors and engage in less antisocial behaviors (Aquino & Reed, 2002; for a review, see Shao, Aquino, & Freeman, 2008). However, no work we are aware of has directly linked moral identity to punishment. A straightforward hypothesis is that people high in moral identity may want to punish perpetrators of immoral deeds more; that is, given that they care more about following moral ideals and principles, they may hold higher expectations of others as well and use punishment as a means to reinforce the moral system they partake in. However, some research using specific scenario settings has also shown that people high in moral identity have a wider, more inclusive moral circle (Reed & Aquino, 2003); such a wider moral circle may potentially also extend to perpetrators, resulting in a more balanced, milder desire to punish on average. In light of these competing predictions, it seems important to clarify the general role of moral identity across a wide range of settings.

What Are the Emotional Correlates of the Desire to Punish?

Finally, we investigated how the desire for punishment relates to moral emotions, and whether desiring to punish someone can be regarded as a negative or positive state (or a “mixed” state (i.e., a combination of positive and negative emotion). In terms of moral emotions, we expected that the desire for punishment would be associated with moral emotions involved in the experience of transgressions (Rozin, Lowery, Imada, & Haidt, 1999). This includes anger directed

at the perpetrator in particular, but possibly also disgust, and contempt. In terms of discriminant validity, there is little reason to assume the desire for punishment would be associated with the cardinal self-conscious emotions of guilt and shame, which tend to be involved in transgressions committed by oneself, as well as positive moral emotions such as elevation and gratitude, which tend to be evoked in response to moral rather than immoral deeds (see Hofmann et al., 2014).

What Are the Implications for Well-Being?

One recent trend in morality research is to uncover the relation between moral cognitions, emotions, and behaviors on one hand and people's momentary or long-term levels of well-being on the other (Bleidorn & Denissen, 2015; Emmons & McCullough, 2003; Hofmann et al., 2014). Due to the presumably salient negative moral emotions such as anger and disgust in response to immoral events, we expected the desire to punish to have a predominantly negative affective "tone." Hence, we expected a negative overall relationship with momentary affective well-being that is partially accounted for by the abovementioned moral emotions. At the same time, however, desiring to punish the transgressor of an immoral deed may remind people of the moral values they subscribe to and stand for. This may lead them to see themselves in a particularly moral light. Taking on the identity of a moral agent who defends a moral world order may infuse punishers with what may be termed a heightened sense of moral self-worth. Such a heightened state of moral self-worth would be positive in affective tone, and hence should contribute positively to momentary affective well-being. From a moral systems perspective, because punishment is often costly, a heightened sense of self-worth may be seen as an immediate emotional "reward" that, at least partially, compensates for the negative feelings otherwise endured. In sum, we pursued the complex and novel idea that the desire to punish may be best described as a double-edged sword - a combination of both negative and positive emotional aspects, which may partially compensate each other.

Method

Sample size was determined by trying to recruit as many participants as possible to maximize representativeness and power. Materials, data, and syntax are available online at (<https://osf.io/2jqhm/>).

Participants

A heterogeneous sample of participants throughout the United States and Canada was recruited in two waves via various forms of advertising (for further details, see Hofmann et al., 2014, and supplementary material). Of these, 758 provided data for the present punishment analyses. The gender proportion in this subsample was balanced (50.7% female).

The average age was 32.2 years ($SD = 9.78$ years), ranging from 18 to 68 years. The sample was predominantly U.S. based (93.9%; Canada, 6.1%); 77.6% of participants were Caucasian, 5.1% were African American, 7.1% Hispanic/Latino, 5.9% Asian, 0.4% Native American or Pacific Islander, and 3.8% were of Other backgrounds.

Experience-Sampling Procedure and Protocol

The study was approved by the institutional review board of the University of Chicago. Each participant was randomly signaled via text message 5 times daily for 3 days between 9 a.m. and 9 p.m. (for procedural details, see Hofmann et al., 2014). At each assessment, participants indicated whether they committed, were the target of, witnessed, or learned about a moral or immoral act within the last hour, or "none of the above." For each moral/immoral event, participants entered via text entry what the event was about. These text entries were coded for type of moral foundation (see supplementary material). They then judged the perceived wrongness of the act "Taken together, how morally right or wrong was this?" on an initial scale from -3 (*totally wrong*) to $+3$ (*totally right*), which was recoded for the present analyses such that higher scores indicate more perceived wrongness. Subsequently, participants provided additional contextual information on the event (e.g., location), including an open-text assessment of who committed the moral/immoral act, and indicated their current emotional state regarding nine distinct moral emotions (anger, disgust, contempt, embarrassment, guilt, shame, pride, elevation, gratitude) on a scale from 0 (*not at all*) to 5 (*very much*) each. Note that pride was added only at Wave 2 (74% of the overall sample); hence, analyses involving pride were conducted with this subset of cases.

In the case of an immoral act that they were the target of, witnessed, or learned about, participants were further asked to report their desire to punish the offender. Specifically, they indicated on 7-point scales from 0 (*not at all*) to 6 (*very much*): (a) To what extent the offender should be punished for the immoral act, (b) to what extent they wanted to personally punish the offender, and (c) to what extent the offender should be required to restore the damage done by the immoral act. Because of their high intercorrelations, we combined these three items into a broad and reliable compound score representing the desire to punish the perpetrator. Multilevel reliability analysis following the multilevel confirmatory factor analysis approach recommended by Geldhof, Preacher, and Zyphur (2014) showed satisfactory within-level ($\alpha_w = .71$) and between-level estimates of internal consistency ($\alpha_b = .76$).¹

Participants also provided information on the perpetrator (actor) and the victim (target) of the immoral act. Perpetrator information was provided via open text entry and was later coded into 10 categories (for details, see supplementary material): stranger, professional relation, no concrete person/entity (e.g., organization, corporation), neighbor/acquaintance, distant relative (other than close family), (close) family member,

Table 1. Means and Intercorrelations.

	<i>M</i>	<i>SD</i>	α	(1)	(2)	(3)	(4)	(5)
(1) Sex	0.51	0.50	—	—				
(2) Age	32.23	9.78	—	-.046	—			
(3) Religiosity	2.92	2.21	—	.239	-.014	—		
(4) Moral identity	5.31	0.82	.86	.141	.082	.308	—	
(5) Generalized moral conviction	3.84	0.79	.69	-.012	.147	.057	.344	—
(6) Moral intuition	3.64	1.03	.76	.197	-.025	.246	.171	.077

Note. Correlations significant at $p < .05$ are printed in bold. Sex was coded 0 (male) 1 (female). Political orientation, a multinomial variable, is not included here.

friend, partner/spouse, ex-partner, and uncodeable/missing. Victim information was assessed via a multiple-choice selection with 13 options and later reduced to the following categories for analysis (for details, see supplementary material): stranger; professional relation, no concrete person/entity, neighbor/acquaintance, family member, friend, partner/spouse, self, and uncodeable/missing. In addition, participants indicated their (overall) perceived closeness to the victim (“How close do you feel to the target of the moral act?”), including themselves, on a scale from -3 (*very distant*) to $+3$ (*very close*). Unfortunately, we did not assess perceived closeness to the perpetrator, but instead inferred closeness to the perpetrator from the type of perpetrator information provided by the open text entries (see supplementary material).

Finally, a small number of state measures were assessed on 7-point scales, including moral self-worth (“How moral [virtuous] or immoral do you feel at the moment?”) from -3 (*very immoral*) to $+3$ (*very moral*), momentary well-being (“How happy do you feel at the moment?”) from -3 (*very unhappy*) to $+3$ (*very happy*), and sense of purpose (“Do you feel that your life has a clear sense of purpose at the moment?”) from 0 (*not at all*) to 6 (*very much*).

Demographic and Dispositional Measures

During a brief intake survey upon study registration, demographic information such as sex, age, religiosity and political orientation, and an established measure of moral identity (Aquino & Reed, 2002) was assessed. We developed and included two further ad hoc measures for exploratory purposes, a broad three-item measure of *generalized moral conviction*, and a two-item measure of *moral intuition*. The assessment of demographic and dispositional variables is described in further detail in the supplementary material. Their means and intercorrelations are presented in Table 1.

Analytic Procedures and Strategy

All core analyses—except descriptive raw data calculations—were conducted within a multilevel framework with random intercepts and fixed effects using the SPSS MIXED procedure for multilevel regression models. To identify the independent contribution of each predictor candidate of the

desire to punish in our main analysis, we chose the following three-step multiple regression strategy: First, we built a Level 1 model including only the occasion-specific variables: perceived wrongness, perspective, and perpetrator and victim type. In the second step, we substituted the categorical type of perpetrator and victim information with the continuous closeness to perpetrator and victim data. In the third step, we added demographic and dispositional predictor variables. Furthermore, in light of the number of missing codings for moral foundation (3.5%), we decided to include moral foundations as part of a sensitivity analysis only (summarized in the text and reported in full in Supplementary Table S2).

Continuous variables at Level 1 were person-mean centered (Enders & Tofighi, 2007). In the third step, we added the demographic measures and the three moral traits. Continuous variables at Level 2 were grand-mean centered to estimate the effects of all predictors at the mean/average of the others. Similarly, all categorical variables (perspective, perpetrator type, victim type, moral foundations, sex, political orientation) were effects coded, indicating category deviations from the grand average. As base categories, we chose perspective: learned about; perpetrator type/victim type: uncodeable/missing; moral foundations: lack of self-discipline; sex: male; and political orientation: other.

Multilevel mediation analyses presented in Figures 4 and 5 were conducted using the MLmed macro by Rockwood and Hayes (2017), which follows the approach outlined in Zhang, Zyphur, and Preacher (2009) and Preacher, Zyphur, and Zhang (2010). Both the within- and between-person effects of the model were estimated in one model, and Monte Carlo estimation was used to estimate indirect effects. All random intercepts were included in the model. Preliminary tests indicated that none of the Level 1 effects of X on the two mediator variables or of the two mediators on Y was random; hence, no random slope effects were specified for the final model.

Results

Descriptive and Frequency Data

Overall, there were a total of 1,360 relevant occasions including punishment data, stemming from 758 participants. Of these occasions, 165 (12.1%) were related to being the

Table 2. Multilevel Regression Models Predicting Desire for Punishment From Occasion-Specific Variables (Perceived Wrongness, Perspective, Type of Actor) at Level 1 and Demographic/Dispositional Variables at Level 2.

Predictor	Model 1 (base predictors)			Model 2 (closeness data)			Model 3 (plus dispositional)		
	B/F	SE (B)	p	B	SE (B)	p	B	SE (B)	p
Intercept	2.87	0.16	<.001	3.12	0.06	<.001	3.08	0.08	<.001
Level 1: Event predictors									
Perceived wrongness	0.57	0.06	<.001	0.55	0.06	<.001	0.57	0.06	<.001
Perspective	F(2, 1,281) = 11.28		<.001	F(2, 1,282) = 15.11		<.001	F(2, 1,268) = 11.41		<.001
Type of perpetrator	F(9, 1,270) = 4.93		<.001						
Type of victim	F(8, 1,247) = 0.97		.459						
Closeness to perpetrator				-0.25	0.05	<.001	-0.26	0.05	<.001
Closeness to victim				0.09	0.03	<.001	0.09	0.03	.001
Level 2: Demographic and dispositional predictors									
Sex							0.01	0.05	.817
Age							0.02	0.005	<.001
Religiosity							-0.04	0.03	.137
Political orientation							F(5, 657) = 3.34		.005
Moral identity							0.19	0.07	.004
Generalized moral conviction							0.01	0.07	.889
Moral intuition							0.08	0.05	.088

Note. Continuous predictors are displayed with their regression coefficient (B) and SE, categorical predictors with three or more categories with their fixed effect F value. Sex was effects coded (-1 = male, 1 = female). Type of perpetrator, type of victim, and closeness to perpetrator were rated by independent coders or participants, respectively, closeness to victim was self-reported.

victim of an immoral act, 317 (23.3%) to witnessing an immoral act in one's immediate surroundings, and 878 (64.6%) to learning or hearing about an immoral act more indirectly. Scaled to the total number of responses in the original dataset (13,240; including nonmoral events and committed acts), this amounts to second- or third-party moral punishment being relevant on about 10.3% of all occasions.

The average punishment score across all responses was 3.26, and showed considerable variation, $SD = 1.60$ (range = 0-6). Visual inspection of punishment scores suggested a normal distribution. The average perceived wrongness of the reported immoral acts (on the recoded scale from -3 [*very moral*] to +3 [*very immoral*]) was 2.23, $SD = 0.97$. A multi-level null model with random intercept only showed that 73.4% of the overall variance in the desire for punishment could be attributed to the within-person (event) level whereas 26.6% could be attributed to stable differences between persons.

Predicting the Desire to Punish

Perceived wrongness. Table 2 summarizes the multilevel regression analysis results for Model 1 (base predictors), Model 2 (closeness data), and Model 3 (Model 2 plus dispositional variables). As expected, perceived wrongness had a significant positive effect on the desire to punish across all models, such that acts perceived as being relatively more immoral were evoked a desire to punish more harshly.

Perspective. Controlling for the other variables in the model, there was also a remaining significant overall effect of perspective (see Table 2), such that desire for punishment was descriptively strongest when participants were the target of an immoral act, $M = 3.22$, $SE = 0.47$; comparatively high when they learned about an immoral act, $M = 2.92$, $SE = 0.13$; and somewhat weaker when the transgression was witnessed in one's more immediate environment, $M = 2.47$, $SE = 0.14$ (estimates derived from Model 1). Simple comparisons showed that, due to the relatively large standard error for the first ("target of") category, only the difference between learned about and witnessed acts was significant, $p < .001$, all other $ps > .143$.³

Type of perpetrator and victim and social closeness. Regarding the type of perpetrator in question (and controlling for wrongness of the act and perspective in these analyses), there was evidence for differentially severe desire of punishment as a function of social distance. These effects are illustrated in Figure 1. Strangers and perpetrators belonging to more abstract entities such as organizations and corporations were associated with above-average desire for punishment. There was also a marginally significant tendency for perpetrators falling into the professional category to be associated with an above-average desire for punishment. Conversely, friends and one's own partner/spouse were systematically related to a lower desire for punishment. It is noteworthy that this advantage did not extend to close family members for whom mean desire for punishment was very close to the average.⁴

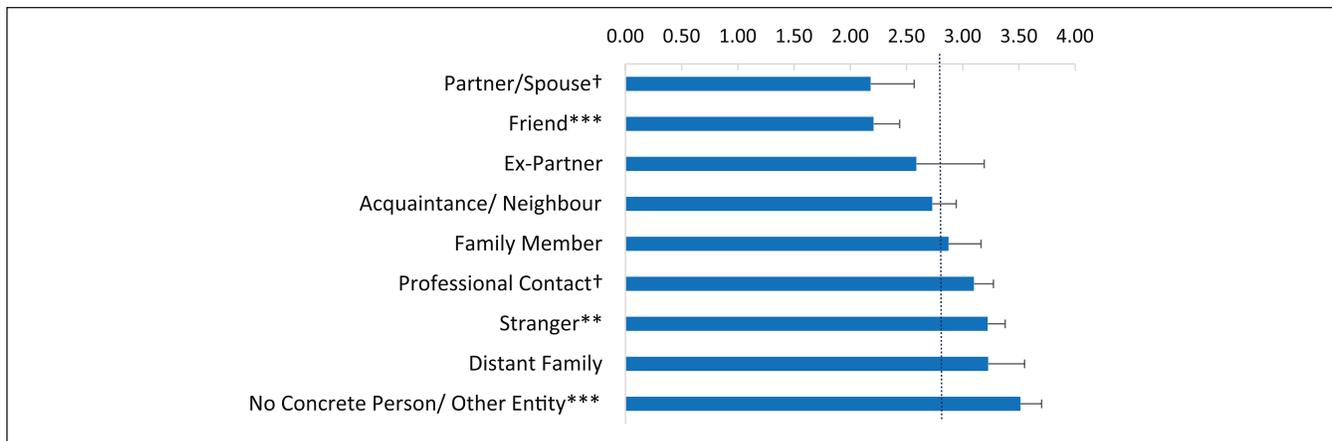


Figure 1. Estimated mean desire to punish by type of relationship with the perpetrator of the immoral act (Model 1).

Note. Asterisks denote significant deviations from the grand average (vertical line). Error bars indicate standard errors.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

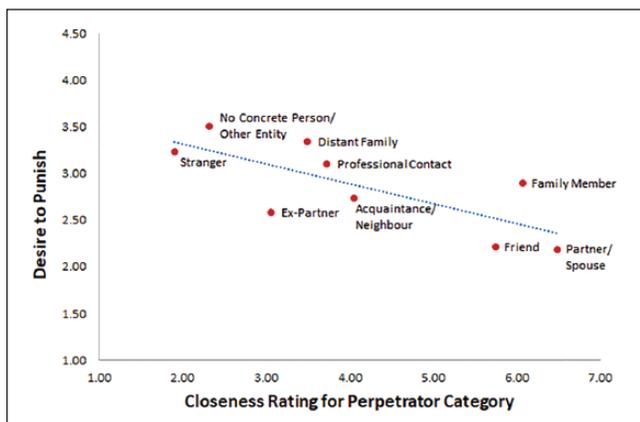


Figure 2. Estimated mean desire to punish by average perpetrator closeness as judged by independent raters (Model 1). Note. The dotted line represents the estimated linear trend among data points.

Substituting the categorical type of perpetrator information with independent raters' continuous assessments of social closeness (Model 2), there was a highly reliable negative relationship between social closeness to the perpetrator and punitive desire. Figure 2 plots these closeness ratings against the desire for punishment for the various social categories. Family members emerged as the strongest outlier from the general trend, as a social category rated as quite close on average, but being associated with a harsher desire for punishment than would be expected based on the regression. Another exception from the general trend were ex-partners. These were punished less severely, on average, than what would be expected based on their social distance rating (Figure 2).

No discernible effect emerged for type of victim category (see Table 2, Model 1). However, substituting the categorical information with participants' own closeness ratings to the victim (Model 2) revealed a small positive

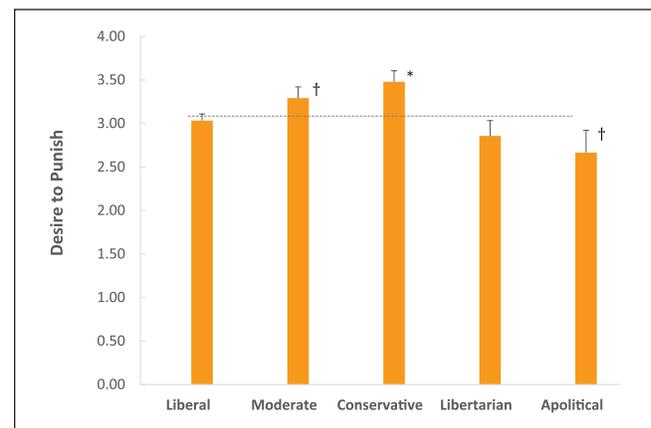


Figure 3. Desire to punish by political orientation (Model 3).

Note. Asterisks indicate significant deviations from the grand average (vertical line) at $p < .05$ († $p < .10$). Error bars indicate standard errors. Base category (other) not shown.

linear trend, such that participants desired to punish those more who offended close rather than distant others (including themselves). The fact that there was no categorical effect and only a comparatively weak continuous trend despite a more fine-grained (i.e., event-based) and first-person assessment suggests that the desire for punishment may be more strongly driven by the attention to the perpetrator (actor) rather than the victim.

Demographic and dispositional predictors. The addition of demographic and dispositional variables in Model 3 revealed a number of additional insights: There was no gender effect in the desire to punish. Also, religiosity did not affect the desire for punishment. However, increasing age was associated with increasing punitiveness. Moreover, regarding political orientation, significant above-average desire to punish was obtained for conservatives. The mean estimates per category are illustrated in Figure 3. There was also a

(marginally significant) tendency for moderate people to desire above-average and for apolitical people to desire below-average levels of punishment.

Regarding psychological traits associated with moral perception and judgment, the only trait that emerged as a reliable predictor was moral identity (see Table 2, Model 3). As expected, people high in moral identity expressed a stronger desire to punish, on average, than those low in moral identity. Given the role of moral identity, we also conducted an exploratory multilevel mediation model in Mplus linking all demographic predictors (sex, age, religiosity, political orientation) to moral identity in the context of Model 3 (see Supplementary Figure S1). This model allowed us to probe whether moral identity—a latent psychological construct—transports possible effects of (surface) demographic predictors on the desire for punishment. The only reliable indirect effect of demographic variables through moral identity was for religiosity (see Supplementary Figure S1). Thus, although religiosity was not directly associated with stronger punishment (see Table 2), this demographic variable was indirectly linked to higher desire for punishment via higher moral identity.

Although our main interest was in moral identity as a broad trait, we conducted additional exploratory analyses investigating the two subfacets of the scale, internalization and symbolization separately. Estimating Model 3 using the separate scale scores revealed that the above overall effect of moral identity was primarily driven by the symbolization subscale, $B = 0.19$, $p < .001$, rather than the internalization subscale, $B = -0.06$, $p = .361$.

Moral foundations sensitivity analysis. Sensitivity analyses showed that adding moral foundations to the model did not change any of the above conclusions and that moral foundations accounted for additional variation in the desire for punishment, over and above all other factors in the model (see Supplementary Table S2). As depicted in Supplementary Figure S2, estimated desire for punishment (Model 3) was significantly above average for immoral acts of harm and oppression, and significantly below average for immoral acts of degradation, with marginal trends for above-average and below-average levels with regard to unfairness and disloyalty, respectively.

The Desire for Punishment and Moral Emotions

Zero-order correlations among the desire for punishment and moral emotions are shown in Supplementary Table S3. We conducted two multiple multilevel regression models to determine the strongest emotional associates of the desire for punishment (Supplementary Table S4). These were anger, disgust, and contempt. Guilt, shame, and embarrassment were unrelated to the desire for punishment, as were pride, elevation, and gratitude.

Linking Punishment and Well-Being

To investigate whether being in a state of wanting to punish a perpetrator may have both a negative effect on momentary well-being (as transmitted via punitive emotions) and an opposing positive effect (as transmitted via increased feelings of moral self-worth), we conducted an exploratory multilevel mediation model linking the desire for punishment to well-being, separating these negative and positive aspects. To do so, we formed a composite measure of punitive emotions by averaging anger, disgust, and contempt ratings due to their high intercorrelations (see Supplementary Table S3), resulting in satisfactory internal consistencies at both Level 1 ($\alpha_w = .74$) and Level 2 ($\alpha_b = .88$). In line with earlier research, this composite may also be labeled a broad measure of moral outrage (Brandt, Crawford, & Van Tongeren, in press; Salerno & Peter-Hagene, 2013). Results are presented in Figure 4, separating within- (upper panel) and between- (lower panel) participant effects. For both levels, the overall (i.e., total) effect from the desire for punishment to well-being was significantly negative. At both levels, there was a significant negative indirect effect of the desire to punish on happiness via punitive emotions, as well as a marginally significant within-level and significant between-level positive indirect effect via moral self-worth. Together, the inclusion of punitive emotions and moral self-worth as mediators reduced the total negative effect to a nonsignificant residual effect at both the within and between level of analysis. Keeping in mind the correlational nature of these findings, one possible interpretation is that feelings of moral self-worth, derived from the desire to morally punish a given perpetrator, may partially compensate for an otherwise more negative association with happiness that may come along with a punitive want and the associated emotional moral outrage. Results were quite consistent across levels of analysis, pointing to both more stable (i.e., people who tend to punish more harshly than others tend to experience these compensatory effects more strongly) and contextual effects (i.e., situations invoking a stronger desire for punishment tend to elicit these compensatory effects more strongly). Results at the contextual level may have been somewhat weaker due to the small number of observations per persons, which renders estimating the within-person component more difficult.

Further exploratory analyses showed that the mediation pattern for momentary well-being was somewhat distinct from the pattern for sense of purpose: As can be seen from Figure 5, there was no overall relationship between sense of purpose and the desire to punish at the within-person level, and sense of purpose was not affected via negative moral emotions. Again, however, moral self-worth accounted for a small portion of the variance at the within-person level. This effect was also present at the between-person level, indicating that people who tend to experience a stronger desire to punish, on average, also experience greater feelings of moral self-worth, and these feelings of self-worth are associated

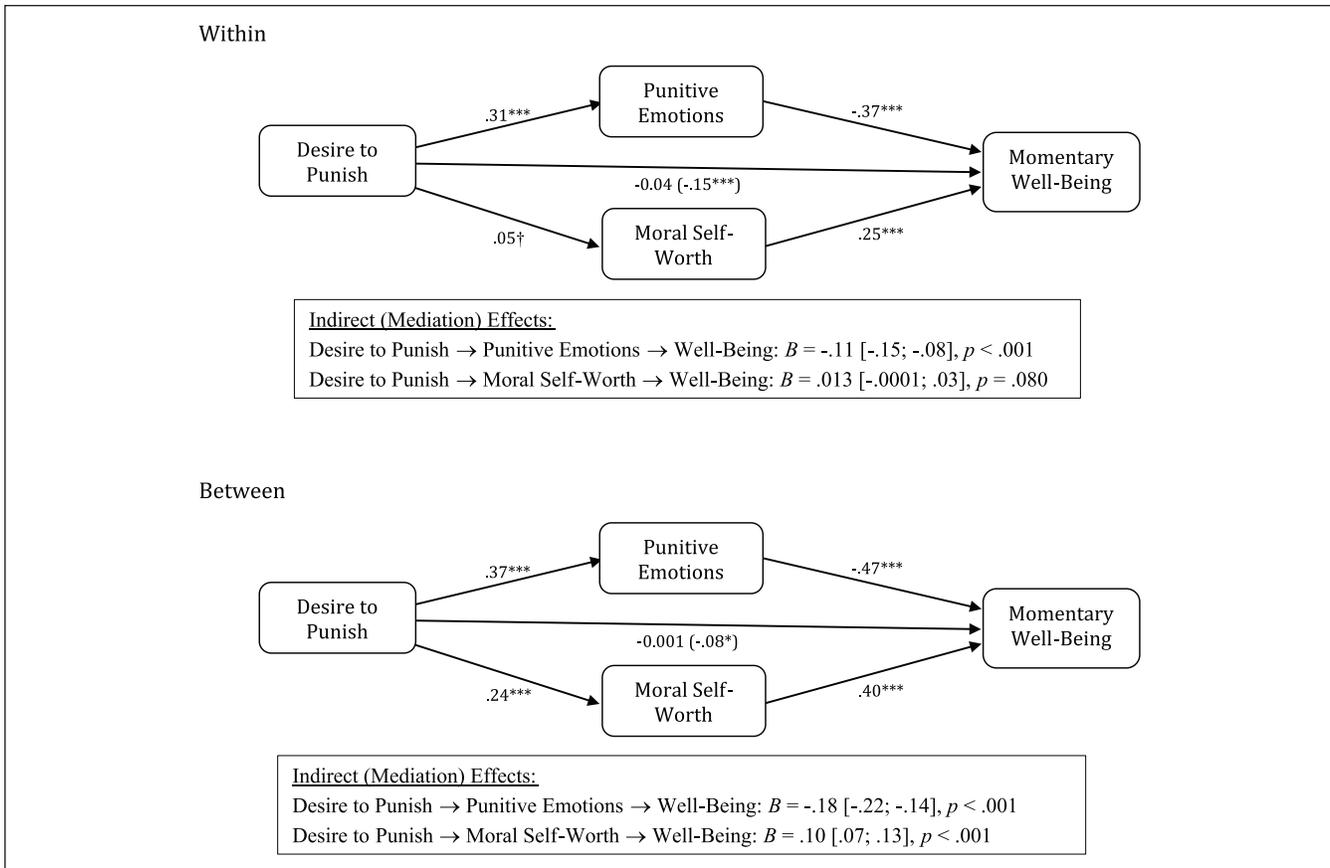


Figure 4. Multilevel mediation models on the relationship between the desire to punish and well-being, separately for the within- and between-person level of analysis.

Note. The model separates a negative mediation pathway via punitive emotions (composite of anger, disgust, and contempt) from a positive mediation pathway via moral self-worth. Parameters are unstandardized regression coefficients. Parameters in parentheses denote total effects when omitting the intervening mediator variables from the model. The box summarizes the estimated mediation effects.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

with sense of purpose. However, moral outrage did not subtract very much from this presumably more cognitive effect linking moral self-worth and purpose.

Discussion

Utilizing data from people's everyday experiences of moral transgressions, the present study provides a unique window into people's reactions to immoral events in terms of the desire to punish transgressors and of the emotional correlates and consequences thereof. In contrast to specific scenario and game settings typically studied in the laboratory, the present study took a broad, ecologically valid approach in the hope of both replicating earlier work, providing more generalizable insights, and discovering overlooked connections and open research questions. The main insights from this endeavor can be summarized as follows:

First, there was clear support for the idea that people seek to punish in relation to the perceived wrongness of a given transgression, as evidenced by a substantial linear

relationship. This lends further direct support to models of punishment that emphasize the retributive character inherent in human moral punishment, which have been shown to be the prevalent layperson's approach to punishment (Carlsmith et al., 2002). However, it certainly does not rule out other functional accounts of punishment, which emphasize deterrence or reformation motives. These accounts may require additional parameters not assessed in this research, such as whether the violation was hard to detect and punishment could be administered publicly (Carlsmith et al., 2002) and whether there is an expectation that the offender will be able to improve himself or herself.

Second, generalizing across many settings and types of social relationships, we find that the desire to punish is not impervious to factors that should be normatively irrelevant. We found that people wish to punish those perpetrators more harshly who are further away in social distance and who transgressed against victims who are socially close rather than distant to them. These results appeared stronger at the level of perpetrator closeness, which may be a result of

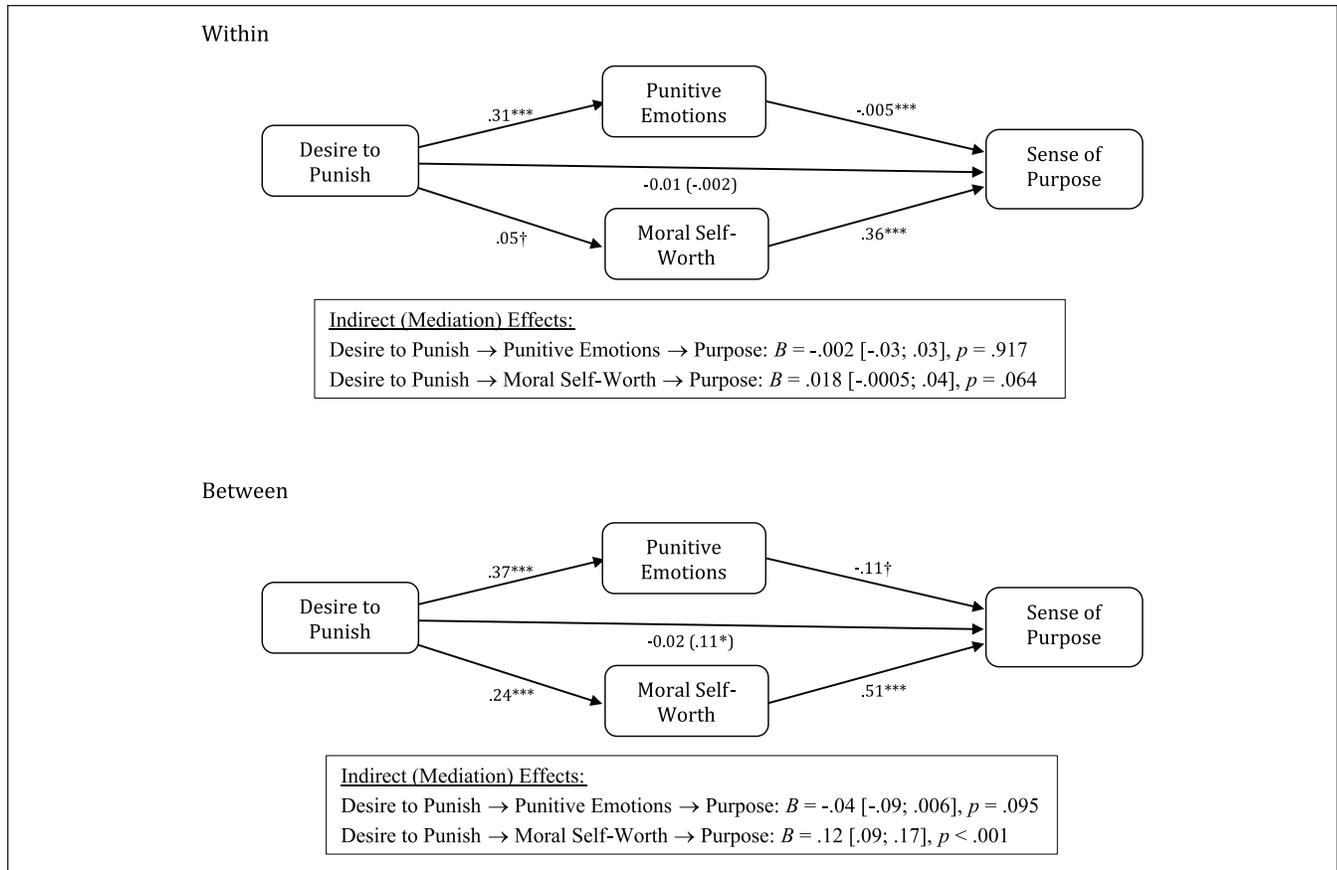


Figure 5. Multilevel mediation models on the relationship between the desire to punish and sense of purpose, separately for the within- and between-person level of analysis.

Note. See Figure 4 notes for details.

asymmetrical attention allocation toward the agent rather than recipient of the immoral deed. Both social distance effects, however, were statistically detectable when employing continuous measures of social closeness. This suggests that earlier models of kin selection (e.g., Lieberman & Linke, 2007) or in-group favoritism (Bernhard et al., 2006) may be summarized more parsimoniously as typical instances of a more general, continuous social distance metric that may underlie people's tendency to favor close others—irrespective of the specific source of closeness (such as same vs. different group memberships, kin-based relationships, intimate relationships, similarity in attitudes and beliefs, and more). This also allows for new predictions under circumstances where formal, objective and perceived, subjective closeness diverge. For instance, people may want to punish own but subjectively distant kin more harshly than nonkin but subjectively very close friends.

Third, next to these contextual effects, there was clear evidence for generalizable individual differences in the desire to punish perpetrators in quotidian life. The desire to punish, in other words, may be driven not only by situational characteristics of the immoral acts experienced but also by a personal disposition to respond to perceived transgressions with the

wish that the wrongdoer be punished. We differentiated our analysis in terms of surface-level demographics and deep-level dispositional constructs. At the surface level, there were no (independent) general effects of gender or religiosity, but reliable and separable effects for age and political orientation, such that older people as well as more conservative people tended to be higher on punitiveness.

At the level of deep-level constructs, there was strong evidence for people high in moral identity wanting to punish perpetrators more harshly. However, there were no effects for generalized moral conviction and moral intuition, for which we had constructed brief exploratory measures. These ad hoc measures may have been suboptimal for capturing the intended constructs of interest. The moral identity effect is consistent with the idea that people high on the trait see morality as central to who they are as a person and how they act out their morality in socially symbolic ways to others. The additional finding that the symbolization subscale was a more potent contributor to this effect undergirds the public dimension of the moral self (Aquino & Reed, 2002). Being motivated to support punishment in speech and action may constitute a powerful way of signaling to the self and others that one cares deeply about norm violations and wishes to

reinforce the set of moral rules and regulations to which one subscribes. Note that the positive link between moral identity and punitiveness is not supportive of an alternative, moral-circle account according to which people high in moral identity may excuse the wrongdoings of others more readily resulting in weaker calls for punishment.

Conceptualizing moral identity as a possible deep-level mediator of surface-level demographic effects revealed that religiosity was *indirectly* linked to more severe desires for punishment via heightened moral identity. Note that the above-mentioned effects of age and political orientation, however, cannot be accounted for via moral identity (or any of the other predictors in the model). This raises the interesting question of the active ingredient(s) in these two demographics. Regarding age, we can only speculate that the heightened desire for punishment may reflect age-related changes in moral development across the adult life span (Kohlberg, 1976), heightened perceived vulnerability (Kutateladze & Crossman, 2009), or age declines in cognitive flexibility/executive functioning (Jurado & Rosselli, 2007). Regarding political orientation, conservatives displayed above-average desire for punishment, replicating earlier findings (Carroll et al., 1987; Jacobs & Carmichael, 2004).

Fourth, the intense sampling of moral experiences as well as emotional states allowed us to link the desire for punishment with common moral emotions, and to explore possible overlooked links with momentary well-being. The desire for punishment was most strongly associated with anger, disgust, and contempt, which we labeled punitive emotions. This suggests that the desire for punishment may be regarded as a clearly negative psychological state. However, more fine-grained analyses painted a more nuanced picture: Bridging morality and happiness research, we found that the desire for punishment may better be described as a “double-edged sword”: On one hand, the experience of a transgression is associated with punitive emotions, contributing to the negative overall “tone” of moral punishment. On the other hand, there was evidence of a silver lining such that desiring to punish a perpetrator was associated with a heightened sense of moral self-worth, which, in turn, was positively associated with momentary well-being. These results suggest that moral punishment may contain both these emotional elements. Perhaps, this is part of a mechanism that may offer some (immediate) emotional compensation to those who desire to punish defectors in the service of upholding an established moral value or rule (see De Quervain, Fischbacher, Treyer, & Schellhammer, 2004, for related neuropsychological evidence). Although the present results are only a first step, we believe that further insights into the function of morality may be gleaned by a closer connection between morality science and well-being research.

A second avenue for future research (and, ideally, experimental research to follow-up on) may be given by the side

finding that some moral foundations appear to be more strongly connected with punitive desires than others. Specifically, there was some indication that, controlling for the perceived wrongness of the act and other possible confounding variables in our model, moral violations of harm may be associated with a stronger desire for punishment than violations of purity. One possibility is that, due to the prototypicality of harm for judgments of immorality (Schein & Gray, 2017), perceived harm may be an especially salient and easy-to-process cue in driving punishment decisions whereas other domains such as impurity may be “fuzzier” and harder to judge. Another possibility is that the perception of harm may trigger a stronger desire to reciprocate harm in moral perceivers (i.e., personal or vicarious revenge), whereas violations of purity may trigger displays of moral condemnation intended to shame the perpetrator.

Limitations

The specific advantages of the current experience-sampling approach—to be as close as possible to where (im)moral actions happen in people’s natural environments—naturally implies some sacrifice of internal validity. Despite our attempt to simultaneously include a range of contextual and dispositional variables in our multiple regression models, there is always a possibility of important omissions and confounded variables. For instance, we were able to partially compensate one such omission, perceived social closeness to the perpetrator, with independent raters’ assessments of average social closeness. The present results are encouraging, in that a robust effect of outsiders’ social closeness ratings on participants’ subjective desire for punishment was obtained despite having to revert to coarser graining. Even stronger social distance effects may have emerged with a subjective measure of social closeness.

Furthermore, the correlational nature of our findings clearly precludes any causal conclusions. For all these reasons, the present findings need to be integrated with those gained through other approaches in the hope that the plurality of methods may provide a better triangulation of moral punishment than any one method alone. The high degree of correspondence among our findings from the “trenches” of everyday morality and those of earlier approaches, such as with regard to proportionality, social closeness, political orientation, and moral identity is encouraging, in our view, and we look forward to seeing more cross talk among internally and externally valid approaches in the years to come.

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Notes

1. For exploratory reasons, we had also included two additional questions on the extent to which they felt the offender had done direct or indirect damage to themselves, as well as the extent to which the offender should restore that damage done to themselves. However, because these items were narrower in scope and because participants may have had a difficult time assessing this issue for the majority of events in which they were in an observer perspective, we decided not to include these items in the punishment score.
2. As suggested by a reviewer, we conducted a sensitivity analysis to explore whether perceived severity may act as a mediator variable of the effects of the remaining predictor variables. Omitting perceived severity from Models 1 to 3 had only very small effects on the magnitude of estimates, and none of the statistical conclusions for the remaining variables was affected by its inclusion versus exclusion, suggesting little potential for mediation.
3. One possible interpretation of the observed pattern is in terms of a combination of personal involvement and fear of counterpunishment (Balafoutas, Nikiforakis, & Rockenbach, 2016): When being the target of or witnessing an immoral deed, the subject directly observes the transgression. This may imply having a relatively clear assessment of the possibly negative consequences that may result from counterpunishment. When being the target, people may be more ready to punish and more willing to accept possible counterpunishment as compared with when being only indirectly affected as a witness. In the “learned about” category, the situation is indirect, so there is no fear of counterpunishment.
4. The relatively higher than expected desire for punishment toward close family members runs counter to scenario-based research arguing in favor of traditional kin altruism theory (Lieberman & Linke, 2007; Linke, 2012). The findings warrant further scrutiny. Perhaps, family members feel some obligation to keep “their own” in line to appease other people who may be offended or hurt by their actions.

Supplemental Material

Supplementary material is available online with this article.

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