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This is an **author produced version** of a paper published in:

Social Influence 10.3 (2015): 180-192

DOI: <http://dx.doi.org/10.1080/15534510.2015.1031170>

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RUNNING HEAD: Priming Justice Increases Punishment

*The Accessibility of Justice-related Concepts Can Validate
Intentions to Punish*

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Submitted to the journal *Social Influence*

WORD COUNT: 4,987 text words (excluding abstract, references,
and footnotes)

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24 February 2015

Abstract

The present study examined the impact of the accessibility of justice-related concepts when assigning punishment. Across two experiments, participants first were paired with either a pro-social or anti-social target. Next, participants received either an ethics prime (experiments 1 and 2) or a legality prime (experiment 2) compared to a control prime (experiments 1 and 2). Finally, participants reported their intentions to punish the target by taking money from him in an economic game (experiment 1) or their behavioral intentions to punish the target (experiment 2). We predicted and found that punishment assignment was greater for those participants who were paired with the anti-social target and activated the idea of justice-related concepts than for those who did not activate it.

Keywords: social justice, just deserts, self-validation, priming, punishment, retributive justice

People need to know that offenders are punished for their offenses (e.g. Carlsmith, Darley, & Robinson, 2002; Darley, Carlsmith, & Robinson, 2000; Wenzel & Thielmann, 2006). In addition, the idea of punishment as a means for retribution in modern western civilizations has been the key in constructing judicial and law systems (e.g. Carlsmith, 2006; Carlsmith et al., 2002). Indeed, in order to protect their ideal of justice, societies require just deserts punishments (Darley, 2001). In the same vein, the status degradation and the disempowerment imposed by the legal system to the offender is a punishment that serves a just deserts perspective (Darley & Pittman, 2003). That is, it is not only a legal issue that maintains social order, but also responds to a psychological need for citizens who live in society, which need to know that their environment is a safe and just place where people obtain what they deserve (Lerner, 1980; Lerner & Miller, 1978).

Research on social justice over 30 years has provided invaluable insight into motives for punishment (for a review, see Carlsmith & Darley, 2008). One theoretical approach to study this phenomenon has been formulated by the just deserts belief. This belief implies the conviction that one gets what he or she deserves (Carlsmith et al., 2002; Gerber & Jackson, 2013; Wenzel & Thielmann, 2006), and it is based on the idea that justice can only be restored when the individuals who harm society by breaking its rules are sanctioned. Thus, punishment is seen as an appropriate sanction when is proportional to the harm inflicted by offenders (Carlsmith et al., 2002).

From a just deserts approach, punishment presents more than one characteristic: punishment can be imposed unilaterally, the offender does not have to agree with it, he does not have to admit it, nor does he have to be affected by feelings of remorse. Furthermore, this notion of punishment, in itself, is able to restore the idea of justice that has been defied by the offenders (Feather, 1996, 1998).

For instance, in a recent study, Gromet and Darley (2006) concluded that in order to achieve perception of justice, at least for serious offenses, the legal system must impose retributive justice measures (e.g., imprisonment) because participants did not reach this perception simply with restorative justice measures (e.g., compensation for the victim, offender

repentance or rehabilitation). In line with that, they argue that there are two steps for achieving a sense of justice in ordinary citizens: (1) repair the damage caused to the victim, and (2) to punish offenders who have committed offenses. They found that only the second step is essential in achieving this perception of justice.

Literature has proposed a theoretical model to explain this second step of justice perception: the Retribution Model (just deserts), which suggests that people support punishment by its capacity to make criminals pay for their offenses (Bohm, 1987; Vidmar & Miller, 1980). When people are in charge of assigning punishment, their motives to punish are consistent with a just deserts notion of justice (Carlsmith et al., 2002).

Self-validation and justice accessibility

Following these findings, it is crucial to study under which conditions this need for punishment might be increased. Drawing on the self-validation hypothesis in persuasion (Petty, Briñol, & Tormala, 2002; for a review, see Briñol & Petty, 2009), people's reliance on and use of their social judgments can vary as a function of other variables. We hypothesize that one of these variables that might increase people's reliance on their judgments (and therefore, their use) may be justice accessibility. The core idea of self-validation is that thoughts alone are not sufficient for predicting subsequent social judgments. Rather, people must also rely on their thoughts for them to have a marked influence on resulting judgments. People facing an anti-social person might generate thoughts about punishing him for their actions. Then, increasing confidence in the validity of their thoughts should increase intentions to punish, but increasing doubt about their validity of their thoughts should decrease intentions to punish. However, when thoughts are primarily favorable such as when people face a pro-social target, increasing confidence in their judgments should decrease intentions to punish, but increasing doubt about their judgments should increase intentions to punish. Justice accessibility might validate (i.e., increase validity in one's thoughts) people's intentions to punish more (vs. less) a target compared with a control condition for several reasons. One reason is that priming justice can validate people's thoughts by

leading them to feel good because the environment, including their thoughts, is a safe, secure place (Briñol, Gascó, Petty, & Horcajo, 2013; Briñol, Petty, & Barden, 2007; Paredes, Stavradi, Briñol, & Petty, 2013). A second reason might be that priming justice makes feel participants that they are in a position to judge, therefore they are powerful (Briñol, Petty, & Stavradi, 2012; Briñol, Petty, Valle, Rucker, & Becerra, 2007; DeMarree, Briñol, & Petty, 2014; DeMarree et al., 2012). A third possibility is that priming justice might self-affirm people because the priming matches with their personal values of justice or honesty (Briñol, Petty, Gallardo, & DeMarree, 2007).

For all this reasons, we hypothesize that justice accesibility should increase reliance on one's thoughts that ultimately should lead to increase intentions to punish anti-social targets and decrease intentions to punish pro-social targets. In this research, we increased justice accessibility through a priming technique. Past literature on the automaticity of human behavior suggests that priming a concept automatically activates in our mind schemes related to that concept (Bargh, 2006; Dijksterhuis & Bargh, 2001).

As a consequence of this activation, the concept that has been activated is temporarily more accessible for those who have been exposed to the prime and it is more likely for them to use it to interpret, perceive, and judge information. The specific content of the priming task was related to different codes of ethics (deontology) or to different articles of the Spanish Constitution. In fact, a number of academics have shown that there exists a relationship between deontology, legality and justice (Haidt & Kesebir, 2010; Kant, 1785/2011; Sokoloff, 2005). There is a common element underlying these concepts: the presence of a normative code that guides how people have to behave in order to reach moral good, utility, virtue, happiness, and so on. (Haidt & Kesebir, 2010). There are other concepts that imply a normative code that recommends how to behave in harmony and virtuously such as religion (e.g., the Ten Commandments, see Mazar, Amir, & Arieli, 2008).

Moreover, findings claim that making the idea of justice more accessible in people's minds has led those individuals either to behave consistently with the idea of justice made accessible when giving forgiveness or revenge (Strelan, Feather,

& McKee, 2008; Van Tongeren, Welch, Davis, Green, & Worthington, 2012) or to reduce their dishonesty (Mazar et al., 2008). For instance, Van Tongeren et al. (2012) found that by making the idea of retributive justice more accessible or salient this leads religious people to have more negative evaluations of moral transgressors compared to those who have in mind the idea of forgiveness. Recently, the evidence on the spontaneous activation of social justice inferences suggests that people can infer the morality of an event they face via automatic judgments of that event (Ham & van den Bos, 2011) which, in turn, leads to think that justice judgments can be influenced by automatic clues or stated through low-effort processes. We think that intentions to punish can be validated via priming justice-related concepts through a more effortful, self-validation process.

Experiment 1

In this study, we examined the effect of the accessibility of ethics when people encounter a target who behaves either in a prosocial or an anti-social way. We predict that people's desire to punish a person who breaks the rules by harming innocent people will be stronger when the idea of ethics was made accessible in people's minds. On the other hand, in accord with a self-validation account, we expect the pro-social neighbor to be judged more favorably following the ethics prime because people might rely on their positive thoughts and punish the target even less compared with the control condition.

Method

Participants and design

Eighty-eight undergraduate students at a large northern university were randomly assigned to a 2 (Target: pro-social neighbor vs. anti-social neighbor) \times 2 (Prime: ethics vs. control) between-subjects factorial design. Participants' ages ranged from 18 to 56, $M(\text{age}) = 25.49$, $SD = 8.19$. Four participants were removed from the final sample due to the fact that they were immigrant people¹. The data from the remaining 84 participants (36 men, 48 women) was retained in the final sample. The statistical power achieved in this study to detect the key two-way interaction was .64.

Procedure

Participants were induced to believe that they were going to be involved in a research in which personality scales related to economic dilemmas in the academic and professional context were being tested. They were told that their responses were completely anonymous and would be used to validate those economic dilemmas. Once the informed consent was obtained, all participants received written instructions asking them to complete several tasks. In the first manipulation, participants were induced to think that they were going to read an interview extracted from a real radio program about people's behaviors toward immigrant neighbors. Then, each participant was randomly assigned to a condition in which the interview presented a target who behaved in a pro-social or anti-social manner with their neighbors. Next, as part of the second task, the accessibility of justice was manipulated by procedures of priming in which participants had to fill in missing words from a selection of ethics codes or from a selection of neutral instructions. After completing these tasks, as part of an economic dilemma game, all participants had to decide the amount of money they wanted to take away from the presented target's winnings during the game. Finally, all participants completed some ancillary measures, and were debriefed, thanked, and dismissed. None of the participants expressed any suspicion about our research, nor could they guess our hypotheses.

Independent Variables

Target. Participants read an interview presenting a neighbor who behaves in a pro-social or anti-social manner with their neighbors. In the pro-social version of the interview, the neighbor collects money to help their neighbors who cannot pay the rent. In contrast, in the anti-social version of the interview, the neighbor steals the money of a lost wallet that he finds in the lift. The interviews were designed and pretested to being similar in all aspects but differ only in the pro-sociality of the action committed by the target

Prime. Participants completed a paragraph-completion task. Instructions asked participants to determine what word was the appropriate for filling in the blank. Participants were told that no

words were more appropriate than others. Prime words included in the paragraph were associated with ethics (e.g., honesty, confidence, integrity, righteous, loyal, truthful, diligent, and so on) or with neutral topics (e.g., box, department, detergent, softener, computer, and so on). These words were part of three paragraphs belonging to the codes of ethics of physicians, lawyers and psychologists or part of three paragraphs belonging to the instructions sheet of computers, washing machines, and LEGO constructions. The length of the paragraphs in both conditions was equal. Similar task have been used successfully to prime other constructs (e.g., Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001; Kay & Ross, 2003; Srull & Wyer, 1979) and this task was conceptually similar to those used in past research that has primed the construct of justice or honesty (Mazar et al., 2008).

Dependent Measures

Economic Game. Following the prime induction, participants were asked to take part in an economic decision-making task. Participants were told to imagine they were playing with the presented person in the interview (i.e., the target) for actual money. This task was a version of the Dictator Game (e.g., Bolton, Katok, & Zwick, 1998; see also Experiment 1, DeMarree et al., 2012). In this version of the Dictator Game, participants were told to imagine that they would be the administrators of the game. In this game, they had not won anything, and the target had won €100. As administrators, participants had the power to decide whether the target kept their winnings or, on the contrary, take away a percentage of the money from him. Values on this dependent measure went from 0 to 100% (i.e., this is equals to €0–€100). Higher values on this task thus represent greater intentions to punish the target.

Manipulation Check. After participants completed the dependent measure, they were asked to indicate, on a number of 9-point scales, the perceived morality and tolerance of the target. Since ratings on these two items were highly correlated ($r = .87, p < .001$), we thus averaged and computed a composite measure of target's morality.

Results

Economic game. The 2×2 ANOVA revealed a main effect for Target such that participants who read the immoral neighbor interview reported more intentions to take money from the target ($M = 34.66, SD = 42.41$) than those who read the moral neighbor interview ($M = 13.09, SD = 24.65$), $F(1, 80) = 9.53, p = .003, \eta^2 = .11$. A significant main effect for Prime also emerged, $F(1, 80) = 6.85, p = .011, \eta^2 = .08$, showing that participants reported more intentions to take money from the target when they were in a moral prime ($M = 32.95, SD = 39$) than in a control prime ($M = 14.72, SD = 30.63$). More germane to our primary concerns, these main effects were qualified by a significant two-way interaction between Target and Prime, $F(1, 80) = 5.19, p = .025, \eta^2 = .06$. As predicted and illustrated in Figure 1, for participants who read the immoral neighbor interview, those who received a moral prime reported more intentions to take money from the target ($M = 52.50, SD = 7.29$) than those who received a control prime ($M = 17.67, SD = 7.11$), $F(1, 80) = 11.70, p = .001, \eta^2 = .13$. For participants who read the moral neighbor interview, as expected, there was no difference across conditions. Specifically, those receiving the moral prime slightly reported more intentions to take money from the target ($M = 14.93, SD = 7.11$) than those receiving the control prime ($M = 11.91, SD = 6.95$), $F(1, 80) = .059, p = .81, \eta^2 = .001$, although this difference was not significant.

To put it differently, in the moral prime condition, participants who read the immoral neighbor interview reported more intentions to take money from the target ($M = 52.50, SD = 7.29$) than did those who read the moral neighbor interview, ($M = 14.33, SD = 7.11$), $F(1, 80) = 14.05, p < .001, \eta^2 = .15$. On the other hand, among participants in the control prime condition, there was no difference in the money taken between those who read the immoral neighbor interview ($M = 17.67, SD = 7.11$) and those who read the moral neighbor interview ($M = 11.91, SD = 6.95$), $F(1, 80) = .34, p = .56, \eta^2 = .004$.

Manipulation Check. The 2×2 ANOVA only revealed a main effect for Target such that participants who read the moral neighbor interview reported more perceived morality of the target ($M = 7.79, SD = 1.29$) than those who read the immoral neighbor interview ($M = 2.68, SD = 1.34$), $F(1, 80) = 312.348, p < .001, \eta^2 = .80$. No other main effect or interaction emerged, $ps > .49$.

Discussion

The present study shows that the desire to punish an offender who breaks the rules is greater when the idea of ethics is accessible in people's minds than when it is not. Thereby, justice accessibility increases the punishment received by an offender when he behaves in an anti-social way. These results show for the first time what happens when the idea of justice is made accessible in people's minds following the reading of an anti-social (vs. pro-social) target description. The effect found here is partially supported by the self-validation hypothesis (Briñol & Petty, 2009) since participants relied more on their intentions to punish the target when received the ethics prime compared with the control condition but only for the anti-social target. It can be argued that the null effect for the pro-social target might be due to a floor effect. Interestingly, the differences in the control condition yielded unexpected results in which judging an anti-social target did not differ from judging a pro-social target enough to hold statistical significance, although the data approach this threshold. Normally, one would expect the desire to punish the anti-social target to be significantly greater when compared with the pro-social target, regardless of the more accessible idea in one's mind. Moreover, the current experiment presents other limitations. First, the study did not achieve a sufficient statistical power (.80) to detect the key two-way interaction. Second, the dependent variable had variance concerns due to its metric (from 0 to 100). This situation led participants to rate their desire to punish on the extremes (0 or 100) which, in turn, led to an increase in the variance. Finally, the dependent variable lacked reliability because it was measured with one indicator rather than a set of items. The second experiment was designed to address these limitations.

Experiment 2

Experiment 2 was conducted in order to reach different objectives. First, we aimed to provide a direct as well as a conceptual replication of the previous study by adding a different priming induction as a new condition in which participants had to fill in words related to legal justice. In the first experiment, participants had to fill in ethics-relevant concepts such as loyalty or righteousness. Since there were only ethics-relevant concepts in the manipulation, we

aimed to extend these results to the legal justice arena by priming only concepts related to legality such as “law”, “fundamental rights”, “norm”, and so on in one condition. Since ethics and legality are two related concepts that imply a normative code that recommends people how to behave in harmony and virtuously, we hypothesize that there will be no dramatic differences between how the ethics and legality prime affect behavioral intentions to punish. This would be the case also for other procedures to manipulate a normative code such as Christian morality (e.g., the Ten Commandments, see Mazar et al., 2008) or the lex talionis (“an eye for an eye”). Second, as we lacked statistical power to detect the key finding, we increased the sample size required to achieve sufficient power. Finally, we changed the dependent variable for two reasons: (a) variance concerns due to the metric of the scale (using a nine-point scale instead of a measure from 0 to 100), and (b) reliability concerns (using six items instead of just one measure of punishment intentions).

Method

Participants and design

One hundred and seventy seven undergraduate students at a large northern university were randomly assigned to a 2 (Target: moral neighbor vs. immoral neighbor) \times 3 (Prime: moral vs. justice vs. control) between-subjects factorial design. Participants’ ages ranged from 17 to 30, $M(\text{age}) = 18.76$, $SD = 1.85$ (77 men, 100 women). In order to improve the statistical observed power found in the first study, we conducted an anticipatory power analysis using the statistical software *G*Power* (Faul, Erdfelder, Lang, & Buchner, 2007), aiming to achieve a power of .80. This value was calculated as a function of the effect size of the interaction uncovered in Experiment 1 ($\eta^2 = .06$). Results of this analysis suggested that we needed a sample size of at least 123 subjects in case of four conditions. Since we added one experimental condition (two cells), we included 54 more participants. This study achieved a statistical observed power to detect the key two-way interaction of .90.

Procedure

The procedure was largely the same as in Experiment 1.

Independent Variables

Target. As in Experiment 1, participants read an interview presenting a neighbor who behaves in a pro-social or anti-social manner with their neighbors.

Prime. Participants completed the same paragraph-completion task as in Experiment 1 with an additional condition. In this new condition, the words they had to fill in were part of three paragraphs belonging to three articles of the Spanish Constitution. Prime words included in these paragraphs were associated exclusively with legal terms (e.g., norm, human rights, judicial system, law, democracy, public order, and so on).

Dependent Measures.

Behavioral Intentions of Punishment. Following the prime induction, participants were asked on a set of nine-point scales their desire to punish the target with different types of punishment including positive and negative punishment, direct and indirect, and social and physical (i.e., “To what extent do you want to punish the target?”, “To what extent do you want to punch the target?”, “If you knew the target, how likely would it be for you to stop talking to him?”, “How likely would it be for you to get angry with the target?”, “How likely would it be for you to ignore the target?”, “To what extent do you want a misfortune to happen to the target?”). Ratings on these items were highly inter-correlated ($\alpha = .86$) and were thus averaged to create a behavioral intention index of punishment.

Manipulation Check. As in Experiment 1, participants were asked to indicate the perceived morality and tolerance of the target. Since we added one condition related to legal justice, participants were also asked about the perceived justice. Ratings on these three items were highly correlated ($\alpha = .93$), and then were averaged to compute a measure of target’s pro-sociality.

Results

Behavioral Intentions of Punishment. The 2×3 ANOVA revealed a main effect for Target such that participants who read the immoral neighbor interview reported more intentions to punish

the target ($M = 4.72$, $SD = 1.62$) than those who read the moral neighbor interview ($M = 2.13$, $SD = 1.32$), $F(1, 171) = 146.80$, $p < .001$, $\eta^2 = .46$. More germane to our primary concerns, these main effects were qualified by a significant two-way interaction between Target and Prime, $F(1, 171) = 5.11$, $p = .007$, $\eta^2 = .056$. As predicted and illustrated in Figure 2, for participants who read the immoral neighbor interview, those who received a justice prime ($M = 5.15$, $SD = 1.25$) or a moral prime ($M = 5.03$, $SD = 1.88$) reported more intentions to punish the target than those who received a control prime ($M = 4.08$, $SD = 1.45$), $F(1, 171) = 4.85$, $p = .009$, $\eta^2 = .054$ ⁱⁱ. For participants who read the moral neighbor interview, as expected, there was no difference across conditions. Specifically, those receiving the control prime ($M = 2.40$, $SD = 1.59$) slightly reported more intentions to punish the target than those receiving the moral prime ($M = 2.09$, $SD = 1.25$) and justice prime ($M = 1.87$, $SD = 1.01$), $F(1, 171) = .106$, $p = .35$, $\eta^2 = .01$, although none of these pairs of differences was statistically significantⁱⁱⁱ.

Described differently, in the justice prime condition, participants who read the immoral neighbor interview reported more intentions to punish the target ($M = 5.15$, $SD = 1.25$) than did those who read the moral neighbor interview, ($M = 1.87$, $SD = 1.01$), $F(1, 171) = 69.50$, $p < .001$, $\eta^2 = .29$. Among participants in the moral prime condition, those who read the immoral neighbor interview reported more intentions to punish the target ($M = 5.03$, $SD = 1.88$) than did those who read the moral neighbor interview, ($M = 2.09$, $SD = 1.25$), $F(1, 171) = 62.43$, $p < .001$, $\eta^2 = .27$. Finally, among participants in the control prime condition, those who read the immoral neighbor interview also reported more intentions to punish the target ($M = 4.08$, $SD = 1.45$) than did those who read the moral neighbor interview, ($M = 2.40$, $SD = 1.59$), $F(1, 171) = 21.41$, $p < .001$, $\eta^2 = .11$.

Manipulation Check. As in Experiment 1, the 2×3 ANOVA only revealed a main effect for Target, $F(1, 171) = 347.27$, $p < .001$, $\eta^2 = .67$. No other main effect or interaction emerged, $ps > .59$.

Discussion

The present study successfully replicated the results found in Experiment 1. The present experiment increased the statistical

power of Experiment 1, used a more reliable dependent measure, managed to explain the odd results found in the control prime condition in the previous study and extended the results to legality accessibility in addition to ethics accessibility. The results showed that the desire to punish an anti-social target was greater when the idea of ethics or legality was accessible in people's minds than when it is not (control prime). Thereby, the accessibility of justice-related concepts increased the punishment received by an offender when he behaved in an anti-social way.

General Discussion

Across two experiments, we predicted and found that punishment assignment was greater for those participants who were paired with an anti-social target and activated the idea of ethics or legality (i.e., justice-related primes) than for those who did not activate it (i.e., control prime). We have shown that the desire to punish an anti-social target can be increased by a priming procedure that would make accessible either ethics (Experiments 1 and 2) or legality (Experiment 2). As we have pointed out, ethics and legality are the two normative codes very related to each other; therefore, it is not surprising to find out that they produce virtually the same results in the desire to punish an anti-social target.

Drawing on the self-validation hypothesis (Petty et al., 2002; for a review, see Briñol & Petty, 2009), participants who read the pro-social neighbor message generated positive thoughts toward the target and those who read the anti-social neighbor message generated negative thoughts toward the target (with the possibility of generating thoughts about punishment). Then, the ethics or legality prime played a self-validating role, leading participants to rely more on their thoughts in these conditions than in the control condition. As a result, people relied more on their previous generated thoughts in response to the target and they behaved accordingly to those thoughts (taking more money from him or punishing him). The future research should examine what type of validation would take place (i.e., content-dependent or content-independent) when thoughts elicited by the message are directly relevant to justice (Clark,

Wegener, Briñol, & Petty, 2009; Clark, Wegener, Sawicki, Petty, & Briñol, 2013).

Nevertheless, since the effect is more prominent in the anti-social condition, it could be argued that justice accessibility (vs. control) operates as a negative cue or bias, making people punishing the target in the anti-social condition. However, we argue that this explanation is not very plausible, since the intentions to punish a pro-social target were attenuated for those who received the ethics and legality prime (vs. control), although in this latter conditions the effect is not that clear as it is in the anti-social target condition. In other words, as explained earlier, participants who were presented the pro-social neighbor reported fewer intentions to punish the target in the justice-related prime conditions than in the control condition. For this reason, we argue that a better explanation for the pattern presented is that people used their judgments (which ultimately lead them to use their intentions to punish) more in the justice-related prime (vs. the control) conditions because a negative bias effect could not as easily account for the effect in the pro-social target condition. As noted, this validation pattern could occur because a justice-related prime might make people feel good, safe, powerful or self-affirmed that subsequently leads to a greater judgment usage (see for example Petty, Briñol, Tormala, & Wegener, 2007).

An alternative explanation is that selfishness is responsible for the effect. Participants who were paired with an anti-social individual and had ethics or legality primed felt justified to act selfishly. That is, punishment serves as a justification (i.e., participants invoke just deserts so they can profit) rather than as an end (i.e., participants punish the individual because he deserves it). However, we cannot address whether confidence, selfishness or restoring justice are responsible for these results due to a lack of mediational analysis.

In closing, the present study has a series of limitations. First, it is desirable that the results were generalized to other economic games and real-life situations, such as field experiments in which there were more external validity. Second, it would be a better approach to measure actual behavior of punishment rather than people's intentions. Third, the results must also be replicated using other priming techniques in

order to assure that different procedures to make accessible the idea of justice might lead to similar outcomes such as providing a prime with the Ten Commandments or the lex talionis.

Finally, the present study might have applications to real-life situations. For instance, when there is a trial that requires the presence of a jury to determine the defendant's guilt, any element of the courtroom that can serve as a justice prime (e.g., swear to the Bible or the scale of justice) can potentially make momentarily more accessible the idea of justice in jurors' minds, leading them to adopt higher punishments against defendants who will be tried.

References

- Bargh, J. A. (2006). What have we been priming all these years? On the development, mechanisms, and ecology of perception on social behavior. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 33, pp. 1–40). New York: Academic Press.
- Bargh, J. A., Gollwitzer, P. M., Lee-Chai, A., Barndollar, K., & Trötschel, R. (2001). The automated will: Nonconscious activation and pursuit of behavioral goals. *Journal of Personality and Social Psychology, 81*(6), 1014-1027. doi:<http://dx.doi.org/10.1037/0022-3514.81.6.1014>
- Batson, C. D. (1991). *The altruism question: Toward a social-psychological answer*. Hillsdale, NJ: Lawrence Erlbaum.
- Batson, C. D. (1997). Self–other merging and the empathy–altruism hypothesis: Reply to Neuberg et al.(1997). *Journal of Personality and Social Psychology, 73*(3), 517-522.
- Bohm, R. M. (1987). American death penalty attitudes: A critical examination of recent evidence. *Criminal Justice and Behavior, 14*(3), 380-396. Retrieved from <http://search.proquest.com/docview/617444866?accountid=14478>
- Bolton, G. E., Katok, E., & Zwick, R. (1998). Dictator game giving: Rules of fairness versus acts of kindness. *International Journal of Game Theory, 27*, 269-299.
- Braithwaite, J. (2002). *Restorative justice and responsive regulation*. Oxford University Press: Oxford, UK.
- Braithwaite, J., & Strang, H. (2001). *Restorative justice and civil society*. Cambridge University Press: Cambridge, UK.

- Briñol, P., & Petty, R. E. (2009). Source factors in persuasion: A self-validation approach. *European Review of Social Psychology*, 20(1), 49-96.
- Carlsmith, K. M. (2006). The roles of retribution and utility in determining punishment. *Journal of Experimental and Social Psychology*, 42(4), 437-451.
doi:<http://dx.doi.org/10.1016/j.jesp.2005.06.007>
- Carlsmith, K. M., & Darley, J. M. (2008). Psychological aspect of retributive justice. In *Advances of Experimental Social Psychology*, vol. 40, edited by Mark P. Zanna, 193-236. San Diego, CA: Elsevier Academic Press.
doi:[http://dx.doi.org/10.1016/S0065-2601\(07\)00004-4](http://dx.doi.org/10.1016/S0065-2601(07)00004-4)
- Carlsmith, K. M., Darley, J. M., & Robinson, P. H. (2002). Why do we punish?: Deterrence and just deserts as motives for punishment. *Journal of Personality and Social Psychology*, 83(2), 284-299.
doi:<http://dx.doi.org/10.1037/0022-3514.83.2.284>
- Darley, J. M. (2001). Citizens' sense of justice and the legal system. *Current Directions in Psychological Science*, 10(1), 10-13. doi:<http://dx.doi.org/10.1111/1467-8721.00103>
- Darley, J. M., & Pittman, T. S. (2003). The psychology of compensatory and retributive justice. *Personality and Social Psychology Review*, 7(4), 324-336.
doi:http://dx.doi.org/10.1207/S15327957PSPR0704_05
- Darley, J. M., Carlsmith, K. M., & Robinson, P. H. (2000). Incapacitation and just deserts as motives for punishment. *Law and Human Behavior*, 24(6), 659-683.
Retrieved from
<http://search.proquest.com/docview/619512380?accountid=14478>
- Dijksterhuis, A., & Bargh, J. A. (2001). The perception-behavior expressway: Automatic effects of social perception on social behavior. *Advances in Experimental Social Psychology*, 33, 1-40.
- Feather, N. T. (1996). Reactions to penalties for an offense in relation to authoritarianism, values, perceived responsibility, perceived seriousness, and deservingness. *Journal of Personality and Social Psychology*, 71(3), 571-587.
doi:<http://dx.doi.org/10.1037/0022-3514.71.3.571>

- Feather, N. T. (1998). Reactions to penalties for offenses committed by the police and public citizens: Testing a social-cognitive process model of retributive justice. *Journal of Personality and Social Psychology, 75*(2), 528-544. doi:<http://dx.doi.org/10.1037/0022-3514.75.2.528>
- Gerber, M. M., & Jackson, J. (2013). Retribution as revenge and retribution as just deserts. *Social Justice Research, 26*(1), 61-80. doi:<http://dx.doi.org/10.1007/s11211-012-0174-7>
- Gromet, D. M., & Darley, J. M. (2006). Restoration and retribution: How including retributive components affects the acceptability of restorative justice procedures. *Social Justice Research, 19*(4), 395-432. doi:<http://dx.doi.org/10.1007/s11211-006-0023-7>
- Ham, J., & van den Bos, K. (2011). On justice knowledge activation: Evidence for spontaneous activation of social justice inferences. *Social Justice Research, 24*(1), 43-65. doi:<http://dx.doi.org/10.1007/s11211-011-0123-x>
- Kant, I. (2011). *Groundwork of the metaphysics of morals*. Cambridge University Press, New York, NY. (Original work published 1785). Retrieved from <http://search.proquest.com/docview/864619252?accountid=14478>
- Kay, A. C., & Ross, L. (2003). The perceptual push: The interplay of implicit cues and explicit situational construals on behavioral intentions in the prisoner's dilemma. *Journal of Experimental Social Psychology, 39*(6), 634-643. doi:[http://dx.doi.org/10.1016/S0022-1031\(03\)00057-X](http://dx.doi.org/10.1016/S0022-1031(03)00057-X)
- Lerner, M. J. (1980). *The belief in a just world: A fundamental delusion*. New York: Plenum Press.
- Lerner, M. J., & Miller, D. T. (1978). Just world research and the attribution process: Looking back and ahead. *Psychological Bulletin, 85*(5), 1030-1051. doi:<http://dx.doi.org/10.1037/0033-2909.85.5.1030>
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research, 45*(6), 633-644. doi:<http://dx.doi.org/10.1509/jmkr.45.6.633>
- Mikula, G., Scherer, K. R., & Athenstaedt, U. (1998). The role of injustice in the elicitation of differential emotional reactions. *Personality and Social Psychology Bulletin, 24*, 769-783.

- Petty, R. E., Briñol, P., & Tormala, Z. L. (2002). Thought confidence as a determinant of persuasion: The self-validation hypothesis. *Journal of Personality and Social Psychology, 82*, 722-741.
- Srull, T. K., & Wyer, R. S. (1979). The role of category accessibility in the interpretation of information about persons: Some determinants and implications. *Journal of Personality and Social Psychology, 37*(10), 1660-1672. doi:<http://dx.doi.org/10.1037/0022-3514.37.10.1660>
- Steele, T., & Wilcox, N. (2003). A view from the inside: The role of redemption, deterrence, and masculinity on inmate support for the death penalty. *Crime & Delinquency, 49*(2), 285-312. doi:<http://dx.doi.org/10.1177/0011128702251064>
- Strelan, P., Feather, N. T., & McKee, I. (2008). Justice and forgiveness: Experimental evidence for compatibility. *Journal of Experimental Social Psychology, 44*(6), 1538-1544. doi:<http://dx.doi.org/10.1016/j.jesp.2008.07.014>
- Thomas, C. W. (1977). Eighth amendment challenges to the death penalty: the relevance of informed public opinion. *Vanderbilt Law Review, 30*, 1005-1030.
- Thomas, C. W., & Howard, R. (1977). Public attitudes toward capital punishment: a comparative analysis. *Journal of Behavioral Economics, 6*, 189-216.
- Tyler, T.R., Boeckmann, R.J., Smith, H.J., & Huo, Y.J. (1997). *Social justice in a diverse society*. Westview Press: Denver, CO.
- Van den Bos, K., Maas, M., Waldring, I. E., & Semin, G. R. (2003). Toward understanding the psychology of reactions to perceived fairness: The role of affect intensity. *Social Justice Research, 16*, 151-168.
- Van Tongeren, D. R., Welch, R. D., Davis, D. E., Green, J. D., & Worthington, E. L. (2012). Priming virtue: Forgiveness and justice elicit divergent moral judgments among religious individuals. *The Journal of Positive Psychology, 7*(5), 405-415. doi:<http://dx.doi.org/10.1080/17439760.2012.707228>
- Vidmar, N., & Miller, D. T. (1980). Social psychological processes underlying attitudes toward legal punishment. *Law & Society Review, 14*, 565-602.

Wenzel, M., & Thielmann, I. (2006). Why we punish in the name of justice: Just desert versus value restoration and the role of social identity. *Social Justice Research, 19*(4), 450-470.
doi:<http://dx.doi.org/10.1007/s11211-006-0028-2>

Figure 1. Experiment 1. Taken percentage of money as a function of Target and Prime.

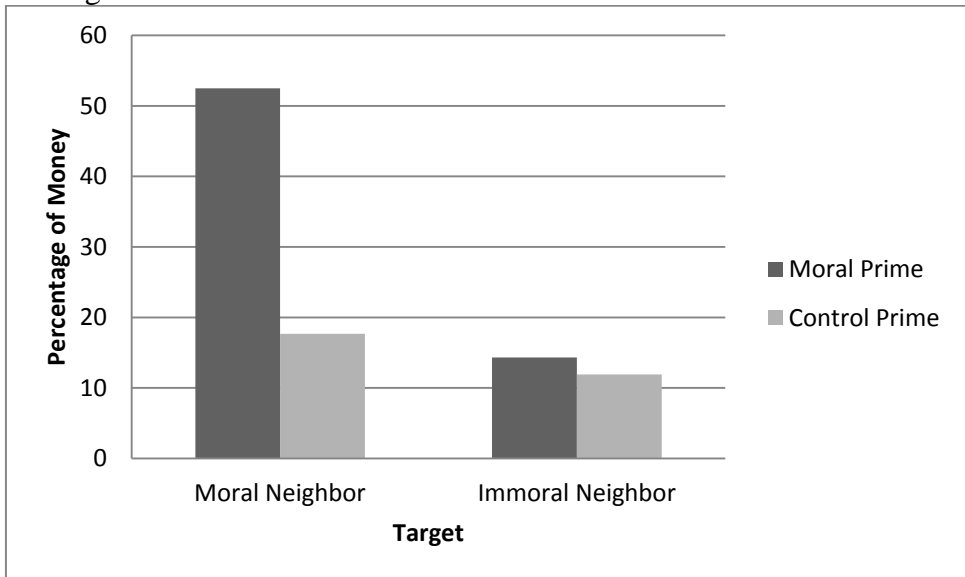
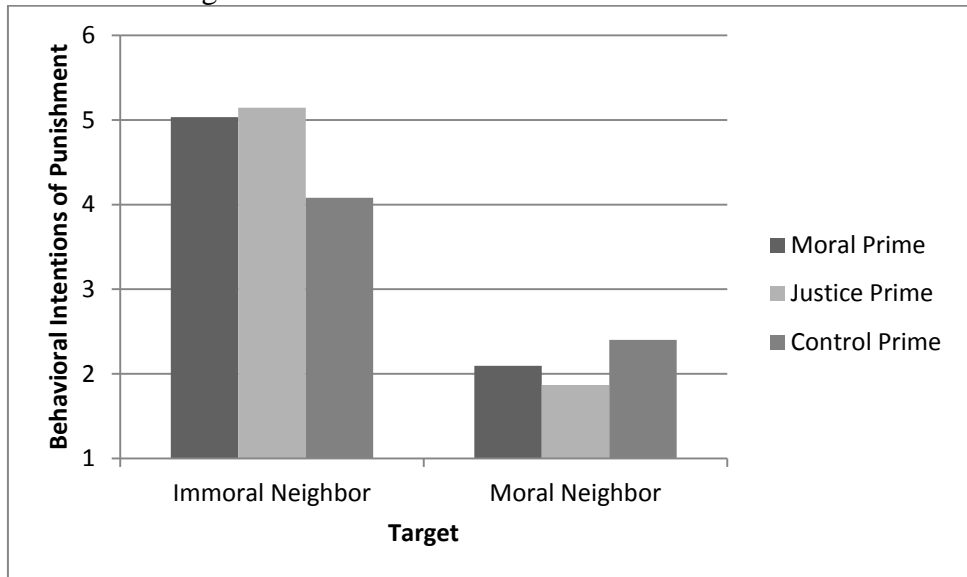


Figure 2. Experiment 2. Behavioral Intentions for Punishment as a function of Target and Prime.



ⁱ When the four participants were included in the analysis, the 2-way interaction remained significant, $F(1, 84) = 3.977, p = .049, \eta^2 = .05$.

ⁱⁱ Pairwise comparisons were conducted between contrasts. The difference between control and moral prime was statistically significant, $t(171) = -2.58, p = .011$, as well as the difference between control and justice prime, $t(171) = -2.75, p = .007$, but the difference between justice and moral prime did not yield significance, $t(171) = .29, p = .77$. The difference between the moral and justice primes taken together and the control prime was also statistically significant, $t(171) = -3.11, p = .002$.

ⁱⁱⁱ Pairwise comparisons were conducted between contrasts. The difference between control and moral primes did not yield significance, $t(171) = 0.84, p = .4$, nor did the difference between control and justice prime, $t(171) = 1.44, p = .15$, nor the difference between justice and moral prime, $t(171) = -.60, p = .55$.