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Assigning Legal Punishment: Individual Differences in Justice Sensitivity
and Selective Attention

An Honors Paper for the Department of Psychology

By Emily C. Weinberger

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and Selective Attention

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Abstract

Selective attention and justice sensitivity (JS), a personality trait reflecting individual differences in perceptions of injustice, have been shown to affect how people assign punishments. In the present study peoples' decision-making processes were investigated to better understand the inconsistencies in legal punishment decisions, particularly when using retributive versus restorative justice. Subjects participated in three phases of the experiment. First, subjects completed a justice sensitivity scale and then rated the appropriateness of punishment options to handle a criminal scenario. Second, participants' selective attention was indicated by their recall of pertinent features from three ambiguous criminal scenarios. Finally, participants were primed with either restorative justice or neutral control words, and rated the appropriateness of punishment options to handle a new criminal scenario. Results revealed no significant associations between JS and ratings of punishment options, although patterns suggested negative relationships between observer JS and retributive justice ratings, and victim JS and restorative justice ratings. Results did show a significant effect of JS in predicting the facts remembered, such that as observer JS increased, more restorative justice facts were recalled, and as victim JS increased, fewer restorative justice facts were recalled. No significant effect of the restorative justice prime was observed. These results may contribute to better understanding of criminal justice policy in the United States.

Assigning Legal Punishment: Individual Differences in Justice Sensitivity
and Selective Attention

According to the Bureau of Justice Statistics, the United States has the highest rate of incarceration in the world. The rate of detention for countries comparable to the United States is approximately 100 prisoners per 100,000 people, while the U.S. rate is about 500 prisoners per 100,000 people (Carson, 2014). Since 1978, the number of people sentenced to state and federal prisons has increased significantly, representing an “addiction to incarceration” in the United States (Pratt, 2008). The high rates of recidivism, or future reoffending (i.e., more than 67 percent of released prisoners are arrested for a new crime within three years), show incarceration to be an unsustainable solution in the U.S., both economically and socially (Cooper, Durose, & Snyder, 2014; Bergseth & Bouffard, 2007). The statistics are apparent, yet the rush to incarcerate is still prevalent among judges, juries, and the public alike. Additionally, assignment of punishment varies drastically from case to case, and this inconsistency in legal punishment poses problems for the perceived fairness of the U.S. justice system. Pratt (2008) used an evidence-based approach to demonstrate how addiction to incarceration is fueled by American citizens’ misconceptions about crime, punishment, and the effectiveness of imprisonment. These discrepancies are partially rooted in the founding principles of the United States legal system.

The criminal justice system is built upon two philosophical viewpoints, which can be traced back to the 18th century. These fundamental theories, Kantian theory and utilitarian theory, are often described as the basis for the U.S. legal system, although they do not co-exist compatibly (Schroeder, Steel, Woodell, & Bembenek, 2003). While they

both endorse the idea of traditional punishment, they do so with opposing goals. Kant's (1724-1804) theory (Carlsmith, Darley, & Robinson, 2002) follows a retrospective approach and suggests a "just deserts" justification for the use of punishment, such that an offender deserves a sanction that is proportional to the moral wrongdoing committed. Following this theory, the appropriate punishment is determined by assessing the magnitude of the harm done and the perpetrator's "internal wickedness" (Carlsmith et al., 2002). Most central to this psychology of punishment is the notion that the punisher does not need to be concerned with future outcomes. This concept contradicts the utilitarian approach, which emphasizes punishment only for the purpose of future benefit, both for the offender and society.

Utilitarians, such as Jeremy Bentham (1748-1832) and Stuart Mill (1806-1873), contend that the purpose of punishment is to deter future crime, and that an offender should receive punishment that is sufficient to prevent a repeat offense (Carlsmith et al., 2002). In opposition to Kantian theory, this approach does not focus on the idea of internal wickedness, but instead assumes that a criminal, like other citizens, acts rationally. Bentham stated, "If the apparent magnitude, or rather value of the pain be greater than the apparent magnitude or value of the pleasure or good he expects to be the consequence of the act, he will be absolutely prevented from performing it" (Bentham, 1962, p. 396). This represents the cost-benefit approach, which encourages offenders to consider the situation in a way that will make criminal activity the unattractive option (Carlsmith et al., 2002; Carlsmith, 2008).

The development of the psychology of punishment has its foundations in both the Kantian and utilitarian viewpoints. When people are transgressed or observe unfairness,

human instinct is to reinstate a sense of peace, whether that is by getting even or repairing the harm that was done. Retributive justice, most simply defined as punishment of offenders with the objective of getting even, is closely related to Kant's "just deserts" theory. Retributive justice is considered to be the traditional approach to punishment, and views crime as an offense against the state. Empirical research has indicated that people generally show an overwhelming preference for retributive justice, as the idea of "an eye for an eye" has defined many peoples' perceptions of justice from a young age (Bergseth & Bouffard, 2007; Strelan, Feather, & McKee, 2008). However, Carlsmith et al. (2002) demonstrated that people often show inconsistencies in their motives and behaviors when assigning appropriate punishment. When they had subjects read cases about a variety of criminal activities and choose the appropriate punishment relative to the offense, a majority of people chose punishments that were highly sensitive to retributive factors (aligned with Kantian theory), rather than deterrence factors (utilitarian theory). However, when subjects were asked to endorse qualities of punishment that were either associated with deterrence or retribution (i.e., prevent future harm versus appease society's sense of moral outrage), subjects most often endorsed deterrence qualities (Carlsmith et al., 2002). This contradiction between participants' beliefs and actions suggests that people may support utilitarian policies in the abstract, but then rely on their intuitive theories of retributive justice when pressured to make a legal decision (Carlsmith, 2008).

In the late 1900s, those involved in legal policy work began to realize the discrepancy between peoples' beliefs and actions, and the futile effects of traditionally punishing all types of offenders. It was recognized that victims were ill served by the

current processes of punishment, as offenders often did not take responsibility or understand the effects of their actions on others when they were punished. This led to the development of a new and innovative response to crime called restorative justice, which moved away from traditional punishment. While retributive justice focuses on the crime against the state, restorative justice views wrongdoings as actions against victims and communities (Cormier, 2002). The central feature of restorative justice is to repair the harm associated with the crime and to reduce the likelihood of future offenses. The ideal form of restorative justice processes involves a safe and respectful encounter between the parties (i.e., offender, victim, and community), in which they discuss the crime, its effects, and reach an agreement regarding ways of repairing the harm (Gal & Moyal, 2011). Restorative justice approaches have gained popularity in the United States and elsewhere since the 1970s, and are used in a variety of settings, most commonly in the criminal justice system and in public schools. Punishment outcomes for an offender are decided upon using community-based sanctions, non-adversarial and informal processes, victim-offender mediation, family group conferences, circle sentencing, and decision-making by consensus (Bazemore & Umbreit, 2001). These processes emphasize the active role of the victim in promoting offender accountability, with the objective of meeting the needs of the victim. Often surprising to those unfamiliar with restorative justice practices, the final sentencing decision using the restorative approach can be the same as when using a retributive approach; however, the process used to reach the decision differs (Strelan et al., 2008).

While retributive justice utilizes only the court, judge, and jury system to come to a conclusion with minimal input from the offender or victim involved, restorative justice

is conducted very differently (Bergseth & Bouffard, 2007). Restorative justice stresses the importance of *process* in reaching a punishment decision, as people judge the legitimacy of laws and the legal system based upon the perceived fairness of the manner in which police and courts exercise their authority. People care more about how they are treated in the decision-making process than they do about the outcome (Thibaut & Walker, 1975; Tyler, 1988). This fairness perception is formulated based upon the following four factors: the degree to which the accused has a voice and can express opinions or concerns, the neutrality and factuality of the decision-making processes used, the respectfulness of interpersonal treatment, and the degree to which it is perceived that authorities are acting with benevolent motives. If people perceive the process to be more just, then they will respond more positively to the sentence they are receiving (Fagan & Piquero, 2007).

Approaching the justice system with restorative justice practices has been shown to be more effective in reducing recidivism than traditional retributive processes. An early meta-analysis of restorative justice programming in 1998 indicated an average eight percent reduction in the reoffending rate of those who had participated in programs involving restorative features, such as community service or restitution with the victim (Bonta, Wallace-Carpretta, & Rooney, 1998). Additionally, Bergseth and Bouffard (2007) conducted a 3-year longitudinal study looking at juvenile offenders in restorative justice programs compared to traditional court processing. Bivariate and multivariate analyses revealed that youth referred to restorative justice processing experience fewer new police contacts, and a smaller proportion of these youth commit a more serious offense again, compared with those in the retributive system. The positive effect of

restorative justice on offenders has been attributed to its emphasis on procedural fairness, the procedure used by the decision maker, and reintegrative shaming, a type of punishment focusing on the offender's behavior, used to invoke remorse and shame in order to bring the offender closer to the community (Ahmed, Harris, Braithwaite, & Braithwaite, 2001; Tyler, 1988). Restorative justice is most effective in reducing recidivism in situations involving violent crimes or crimes that have induced significant emotional harm to the victims. In these cases, victim-offender mediations can have a transformative power over the offender and also benefit the victim by increasing satisfaction, forgiveness, and understanding (Gal & Moyal, 2011; Sherman & Strang, 2007).

While the benefits of restorative justice have been substantiated, traditional retributive practices continue to be the most commonly used legal punishment process in the United States today. The aim of the present study is to examine why this discrepancy continues to exist and to address peoples' tendency to assign punishment in ways that differ from their justifications for it. A possible explanation of this discrepancy could be the existence of personality differences among those who perceive the injustices, such that individual dispositions and perspectives guide decision-making more strongly than factual evidence.

Individual differences in perceptions of fairness can be explained by justice sensitivity (JS), a personality trait that reflects the importance of justice issues in peoples' everyday lives. Justice sensitivity provides an explanation for how individuals process justice-related information. People high in overall JS tend to perceive injustice more frequently, ruminate about it, and react to it with stronger emotions compared to people

low in JS (Baumert & Schmitt, 2009; Baumert, Gollwitzer, Staubach, & Schmitt, 2011). They also generally possess a low perceptual threshold for injustice, react to unfairness with strong emotions (often anger), have increased cognitive activity about injustice (repetitive and intrusive thoughts), and a high motivation to reinstate justice (Thomas, Baumert, & Schmitt, 2012). The individual differences in sensitivity to justice issues have been shown to be stable over time and across situations (Baumert & Schmitt, 2009; Lovas & Wolt, 2002; Schmitt, 1996; Schmitt, Gollwitzer, Maes & Arbach, 2005; Van den Bos, Mass, Waldring & Semin, 2003). This suggests that the inconsistencies in the way people assign and justify punishment may be related to individual differences in JS, which drive preferences for retributive or restorative processes. Justice sensitivity is categorized into four different types: victim, observer, beneficiary, and perpetrator sensitivity. While all types of JS are positively correlated, indicating an overall concern for justice, JS is not a unitary construct. Emotional and behavioral reactions tend to differ for each type of JS, which accounts for the unique elements and variability between each (Schmitt, Baumert, Gollwitzer, & Maes, 2010). Whereas victim sensitive people are mostly concerned with personal fairness, observer, beneficiary, and perpetrator sensitivities are concerned with fairness for others.

Victim sensitivity is a self-related concern for justice. Those who are victim sensitive react strongly to situations that advantage others and disadvantage the self, such as when others are undeservingly better off than you. Anger is the most typical reaction for victim-sensitive individuals who are experiencing injustice. Victim JS also promotes antisocial behavior, as individuals will often commit selfish acts in order to balance their personal justice account (Schmitt et al., 2010; Thomas et al., 2012).

In contrast, observer sensitivity is a general concern for justice. Individuals high in observer sensitivity will respond mostly with moral outrage, which is a special type of anger that ignites in direct relation to a violation of a moral standard. These individuals become concerned when they notice that someone else is being treated unfairly or worse than others. Beneficiary and perpetrator sensitivities are similar to observer sensitivity. For beneficiary sensitivity, people experience existential guilt when they benefit from an injustice caused to someone else. For perpetrator sensitivity, people respond with active guilt due to personally discriminating or exploiting someone (Schmitt et al., 2010; Thomas et al., 2012).

While each type of justice sensitivity (JS) activates different social-cognitive processes, this personality trait has been shown to correlate with particular behaviors. Individuals high on victim JS compared to those high on observer JS demonstrate the largest contrast in behaviors. Those who score high on victim sensitivity tend to exhibit angry emotions and a desire to punish the perpetrator in response to an unjust scenario (Thomas et al., 2012). When playing social dilemma games, victim-sensitive players are more likely to make unfair offers when they have the power to distribute money between themselves and another person without the deciding power. This tendency toward immoral choices is a behavioral consequence of victim-sensitivity (Gollwitzer, Schmitt, Schalke, Maes, & Baer, 2005). The antisocial behavior that is correlated with victim-sensitivity can also be explained as an increased self-concern that manifests as greater protest when treated unfairly, combined with less likelihood to forgive (Thomas et al., 2012). In a study by Bobocel (2013), individuals with more self-concern rated higher distress over their personal interests and goals in the workplace than those of their

colleagues. When asked to recall a specific unfair event at a time when they were treated unequally, the people with a higher self-concern (rather than an other-orientation) were less likely to have forgiven the transgressor. While this research did not explicitly test for JS, it can be expected that the personalities of those with high self-concern would also correlate to high victim-sensitivity. Based upon the definition of retributive justice, following the “just deserts” theory, it can be predicted that victim sensitive people would have a preference for retributive punishments, and this would be particularly enhanced when they are the victims themselves.

Those who score high on observer sensitivity show a tendency to respond to injustice with moral outrage, rather than general anger. Observer sensitive individuals have an urge to restore justice not only by punishing the perpetrator, but also by compensating the victim (Thomas et al., 2012). This moral outrage exhibited by observer sensitive people is supported by Baumert and Schmitt (2009), who found that people high in observer sensitivity perceive greater injustice in ambiguous situations than those lower in observer sensitivity. After watching an ambiguous clip from the movie, *Life Stinks*, these individuals rated the main character with more justice-related adjectives, rather than neutral or positive words unrelated to justice, indicating their moral concern for fairness. An increased awareness of injustice is associated with an increase in prosocial behaviors for those with high observer JS, such that individuals will act in a manner to aid others. In studies using social dilemma tasks, such as the ultimatum game, observer sensitivity was found to correlate with the likelihood of intervening against people acting unfairly toward others. Observer-sensitive people were also more likely to spend their own money if they could prevent a third unknown person from being exploited (Fetchenhauer & Huang,

2004; Thomas et al., 2012). In the context of the present study, it can be hypothesized that observer sensitive people would value the *process* used in reaching a punishment decision. It is expected that they would prefer a punishment option that included reconciliation with the victim and increased perceived fairness, regardless of the outcome. Therefore, observer sensitive people should show a preference for restorative justice processes of punishment. The finding that personal attitudes can shape the endorsement of sentencing goals supports this prediction. Those supporting rehabilitative goals were most likely to rate empirically supported sentencing interventions as effective, while those with a “punishment orientation” were most likely to endorse “get tough” punishment programs (Perelman & Clements, 2009). While research indicates that individuals’ justice sensitivity levels influence their behaviors in inequitable situations, along with subsequent decisions regarding the assignment of punishment, there has been less consideration of the potential cognitive mechanisms mediating this relationship.

Selective attention is an inherent aspect of human cognition, and a force that influences decision-making processes. Previous studies have shown how human attentional abilities can motivate decisions that are made, as attention determines which informational contents will be acquired or missed. Attention can be thought of as a tool, used to filter what we see to fit our current needs (Treisman, 2006). With countless stimuli in the world around us, attentional selection is needed to determine what information is necessary to transfer into visual short-term memory. Through many competitive interactions, detectors signal the presence of task-relevant features, which will then be attended. Decisions are made based upon the attended information at encoding, which is manipulated and stored (Smith & Sewell, 2013).

In a legal context, it is likely that selective attention guides judges and the public to the decisions they make regarding offenders. The inconsistencies of these decisions and apparent biases may be a result of people selectively attending to specific aspects of a situation, which reduces their attentional resources that could be allocated elsewhere, and results in varying decisions. Extensive research on attention and memory has found that people often miss critical features of scenes (Christianson, Loftus, Hoffman, & Loftus, 1991; Loftus, Loftus, & Messo, 1987). When people direct their attention to central and emotionally evocative targets in a crime scene (i.e., a weapon or woman getting hit by a car), they are then less likely to attend to or accurately remember other targets, including the perpetrator (i.e., the man holding the weapon or the type of car). Missing these critical features hinders their ability to develop an unbiased verdict (Christianson et al., 1991; Loftus et al., 1987). Similar findings have indicated that when the camera angle led mock jurors to orient visual attention to both the suspect and officer during a police interrogation, they were more likely to render an innocent verdict than those who selectively attended only to the suspect (Lassiter, Geers, Handley, Weiland, & Munhall, 2002). Justice concepts are likely held in memory, and activated by attending to their features. Following this model, it is revealed that humans have the ability to “activate justice” (Karremans & Lange, 2005). Individual differences in JS may direct people to selectively attend to different features of a crime scenario, thus activating justice in a variety of ways.

The availability of justice or injustice concepts in memory represents a cognitive parameter that may underlie the differences in justice sensitivities. People high in JS have been shown to have a memory advantage for unjust information, such that their attention

is more directed to the unjust concepts. This results in increased information-processing of the unjust stimuli. Baumert et al. (2011) found that when subjects were asked to read two newspaper articles (one unjust and one neutral), individuals with high JS performed more accurately on a true-false test about what they had read in the unjust article. In another task, Baumert et al. (2011) used a visual probe task to measure peoples' natural tendencies for attending to information. People with high JS selectively attended to injustice-related stimuli, as they were more accurate at identifying the position of a line in a probe task when it was in the physical location of the injustice-related word. Consistent with these results is the finding that individual personality differences or social group identifications guide attention and result in varying judgments. Granot, Balcetis, Schneider, and Tyler (2014) found that subjects' personalities and group identification biased the way in which they encoded information in videos depicting crime scenes where the targets' culpability was ambiguous. The differences in encoding influenced the punishment decisions they made for the target (offender). These findings provide evidence that inherent personality traits direct selective attention, and suggest that similar findings may be obtained for JS.

Bobocel (2013) also found that personality differences are reflected in how people attend. People rated as having a "strong-other orientation" (a focus on interests of others), chronically attended to information about group function, others' needs, issues regarding social inclusion, and external processes when making a decision. Those with a "weak-other orientation" attended to scenarios in a less holistic manner. The present study is interested in how Bobocel's findings may be applied to differences in JS, such that observer and victim sensitivity may be differentially related to strong-other and weak-

other orientations, which would be expected based upon the distinct behaviors associated with JS. Therefore, it is hypothesized that individual JS will direct attention to features that will result in a preference for either retributive or restorative justice processes.

Selective attention to a variety of specific features has been shown to associate with a preference for either retributive or restorative justice punishments. For retributive justice, the features more commonly attended and considered are: the motivation of the perpetrator, the magnitude of the harm, and an absence of mitigating circumstances (i.e., any external attribution for the crime). However, for restorative justice processes, attention is directed to information regarding the likelihood of recidivism, personal record of the perpetrator, crime frequency, self-control of the perpetrator, and amount of publicity (Carlsmith et al., 2002; Giacomantonio & Pierro, 2014). This suggests that a societal inclination toward punitive or rehabilitative goals varies across circumstances and offender types. For example, offenders who would otherwise be identical are more likely to receive harsher sentences when previous convictions are revealed than if it was the perpetrator's first offense (Perelman & Clements, 2009). In ambiguous scenarios, those including both retributive and restorative justice features, an individual's personality may be utilized to aid in resolving that ambiguity. Because JS has been shown to be an important factor in how people perceive fairness, it can be suggested that JS may guide individuals to attend to specific features that coincide with their perceptions of justice. It is also important to consider how other forces could influence how and to what people are attending.

Priming can subconsciously bias people to attend to specific features, which suggests that selective attention is susceptible to change. While the personality trait of JS

may guide attention and individuals' conscious attitudes, research on priming suggests that unconscious factors could also bias selective attention during the encoding of information. In research by Strelan et al. (2008), subjects read a variety of scenarios set in either a criminal, intimate relationship, or workplace context. They were asked to indicate how likely they were (as an observer) to forgive the transgressor. Each scenario described the offense and final solution, but primed subjects using a restorative, retributive, or neither approach. Most importantly, the transgressor of each scenario was punished in the same way, but the different primes altered the process used to reach that decision. It was found that people were more likely to forgive the offender, regardless of the social context, when primed with restorative, rather than retributive justice characteristics. This indicates that different features based on the prime of the justice concept may alter the processing used to make a decision (i.e., to forgive). Similarly, Van den Bos, Miedema, Vermunt, and Zwenk (2011) found that subliminal activation of the self, based on primes, can impact peoples' ratings of how fair they perceive a situation to be. They discovered that when words, such as "I," "me," and "my," were presented on a computer screen for 20 msec, subjects were subconsciously primed to activate their self-concept. Participants were then asked to imagine the outcome of a situation in which money was distributed unequally between the subject and a partner on a project. On a seven point Likert scale, participants rated their anger regarding the outcome, and how fair they perceived it to be. Subjects who received the self-activating primes had significantly amplified ratings of negative affect, such that they expressed more anger and felt the situation was less fair than subjects who had received control words.

While results indicate that selective attention can be subconsciously altered to influence judgments, no previous research has explored the consistency of JS itself in predicting judgments and decisions. JS has been thought of as a personality trait, which is consistent across both context and time (Baumert & Schmitt, 2009; Baumert et al., 2011). However, studies have demonstrated that justice can be activated through priming; therefore it would be expected that the relationship between JS and judgments could also be altered. The fairness heuristic theory (Lind, 2001, 2002) is closely related to the concept of JS. According to this theory, humans quickly form overall fairness judgments in social interactions and then use these impressions (consciously or unconsciously) as a heuristic to decide how to behave in future decisions. Each person holds an overall perception of organizational justice, which is influenced by the degree to which they focus on their own interests versus the interest of others, similar to victim and observer JS. Most importantly as an indicator of the susceptibility of human judgment is Lind's (2001, 2002) finding that people often revise or update their overall justice perceptions. Lind coined the terms "judgment mode" and "phase-shifting" events. In judgment mode, people carefully weigh new information to reformulate their overall impressions of fairness. This mode is induced by a phase-shifting event, which is a major event that raises fears of exploitation or exclusion. This evidence, combined with the effects of priming on modifying attention, suggests that an individual's judgments could be altered, too.

The goal of the present study is to build upon previous findings that individual differences in JS affect assignment of punishment. The current study is interested in assignment of punishment in the legal context, and expands upon prior research by

exploring the role of attention as a cognitive mediator of JS, along with investigating the consistency of human decision-making across time. Many other studies have explored harshness of punishment outcomes, but the present study is focused on the processes used to reach a punishment decision. Specifically, this study is comprised of three phases that will address the following three questions: (1) How do individual differences in JS affect assignment of punishment? (2) Do individual differences in JS influence selective attention (as measured through memory), and (3) Through priming, can an individual's punishment decisions be altered?

In the first phase, subjects' justice sensitivity will be measured on the Justice Sensitivity Scale, and then they will be asked to rate the appropriateness of two punishment options (retributive or restorative process), and make one forced-choice decision in a Criminal Decision Making Task. Both options in the task have the same punishment outcome, but utilize different processes. It is expected that subjects high on victim JS will rate the retributive option as more appropriate, and those high on observer JS will give preference to the restorative option.

In the second phase, it will be determined if individuals' JS guides their selective attention. This may suggest that attentional forces mediate individual JS and assignment of punishment. Participants will read three ambiguous scenarios that include both restorative and retributive features. The subjects will be asked to recall the most important features that they would use in assigning punishment, as an indicator of the information to which they were selectively attending during encoding. It is hypothesized that subjects high on victim JS will recall more retributive features and subjects high on observer JS will recall more restorative features.

In the third phase, subjects will be primed in a lexical decision task with restorative justice words (e.g., mediation) or neutral control words (e.g., pencil) to reveal if the relationship between JS and their criminal decision can be influenced subconsciously. Following the lexical decision task, participants will fill in a word completion task to verify priming. Finally, participants will complete a second Criminal Decision Making Task, very similar to that of Phase 1. If individuals' judgments can be altered, then it is expected that subjects receiving restorative justice related primes will be able to more easily activate concepts of justice and forgiveness. Therefore, even participants with high victim justice sensitivity will rate the restorative justice process option as more appropriate than those not primed with justice words, suggesting an interaction of the prime and JS on the decisions. If the results reveal that the relationship between JS and assignment of punishment can be altered, then important information could be provided for criminal justice policy, such that subconscious information may significantly affect the perceptions and decision of judges and juries.

Method

Participants

Fifty undergraduate students (24 male, 26 female) from a small college in New England participated in the present study. Students participated in exchange for partial credit for their Introduction to Psychology course. All subjects had normal or corrected-to-normal vision, and were native English speakers. None of the participants had known criminal records.

Materials

A variety of tasks were presented in three different phases. In the first phase, a Justice Sensitivity Scale (Schmitt et al., 2010) and a Criminal Decision Making Task were presented on paper. The Justice Sensitivity Scale consisted of four parts with 10 questions each, which tested victim, observer, beneficiary, and perpetrator sensitivity in that order (i.e., “It bothers me when others receive something that ought to be mine” or “It bothers me when someone gets something they don’t deserve”). The Criminal Decision Making Task included a short scenario about a burglary followed by two punishment options: a restorative or retributive process (Strelan et al., 2008). The options had the same punishment outcome, but differed in their processes.

In the second phase, three ambiguous criminal scenarios were designed to specifically emphasize a mixture of restorative and retributive features. One scenario was about a drug addict (Alex) who committed a burglary, one was about a man (Robert) who beat his wife, and one was about a man (Jake) who was driving while intoxicated. The text used in the three ambiguous scenarios was made up of half restorative features (i.e., external attribution for the crime, first time offense, no harm done, and no publicity of the event), and half retributive features (i.e., internal attribution of the crime, a repeated offense, harm done, and publicity of the event).

In the third phase, two word lists were generated. List 1 contained 16 words related to restorative justice and 16 non-words with a comparable number of syllables to the restorative justice words. List 2 contained 16 neutral words unrelated to justice (controls) and the same 16 non-words as on List 1. Lists were presented on personal Dell computers using E-Prime Software (Schneider, Eschman, & Zuccolotto, 2002). A word

completion task (Karremans & Lange, 2005) consisted of eight different restorative justice words and eight different control words (i.e., ME_IA_I_N for MEDIATION or SC__EN__E for SCIENCE).

The experimental materials are provided in the appendices.

Procedure

Subjects participated in three phases of decision-making tasks. In Phase 1, the participants had 15 minutes to complete the Justice Sensitivity Scale. Participants read each statement on the survey and circled their responses using pen and paper. They responded to the statements on a 5-point Likert scale, with responses ranging from “not at all like me” (0) to “exactly like me” (5). As in previous studies, the scales yielded good internal consistencies of .83 (victim JS) and .85 (observer JS). Next, subjects rated the appropriateness of two punishment options (restorative or retributive processes) in a Criminal Decision Making Task on a 7-point Likert scale, with responses ranging from “not at all appropriate” (0) to “very appropriate” (7). Finally, they made one forced-choice decision in the Criminal Decision Making Task. The order in which the options were presented was counterbalanced so that not every participant received the options in the same order.

In Phase 2, participants were measured on their memory, as an indicator of selective attention. They read three different ambiguous criminal scenarios, which were presented to subjects in a counterbalanced order. After reading each scenario, participants turned the paper over to the other side and were given three minutes to recall the four most important features that they would use in assigning punishment, without looking back at the scenario.

In Phase 3, participants completed a lexical decision task to words on a restorative justice list or a neutral control list. Subjects were randomly assigned to the two groups. Each stimulus was presented for 500 msec and participants responded whether the item was a word or non-word by pressing the appropriately labeled button. Following the priming task, participants were given five minutes to fill in a word completion task, comprised of 16 words, half of which were restorative justice words and half of which were control words that were different from the initial lists. The word completion task was used to determine if the priming manipulation was effective. Finally, participants completed a second Criminal Decision Making Task by rating the appropriateness of two punishment options (restorative or retributive process) and making a forced-choice decision of one option. The options in the second Criminal Decision Making Task were presented in a counterbalanced order. The experimenter then debriefed the subjects and thanked them for their participation.

Thus, the current study manipulated three independent variables and measured nine dependent variables. In Phase 1, each participant was identified by two justice sensitivity scores (victim and observer). In Phase 3, two list types were presented, such that stimuli were either restorative justice words or neutral control words. Nine dependent variables were separately measured in each phase. In Phase 1, participants' ratings of the appropriateness of the punishment options (restorative and retributive process) were obtained. Additionally, participants' responses (restorative or retributive process) to the forced-choice question were obtained. In Phase 2, number of facts recalled was measured. Facts were only counted as "accurately recalled" if they matched the designated features (restorative or retributive) from the scenario read. In Phase 3,

participants' ratings of the punishment options and responses to the forced-choice question were obtained (as in Phase 1). Finally, both accuracy and response time data were measured on the lexical decision task.

Results

In Phase 1 of the study, subjects completed the Justice Sensitivity Scale and the first Criminal Decision Making Task. The justice sensitivity (JS) scores could range from 0 to 50, and were determined for victim JS and observer JS for each participant. The scores on the Criminal Decision Making Task ranged from 0 to 7 for both the restorative and retributive options, in which 0 represented "not at all appropriate" and 7 represented "very appropriate." A linear regression was conducted to examine the relationship between JS (observer and victim) and the continuous scores on the restorative and retributive options. Observer JS ($M = 27.7$, $SD = 7.9$) and victim JS ($M = 26.6$, $SD = 7.7$) were positively correlated, $r = .279$, $p = .05$. Individuals' justice sensitivity scores did not significantly predict their ratings on the restorative justice option on the Criminal Decision Making Task, $R^2 = .059$, $F(2, 47) = 1.476$, $p = .239$, nor their ratings on the retributive justice option, $R^2 = .063$, $F(2, 47) = 1.579$, $p = .217$. However, the patterns of effects were as predicted. As victim JS increased, the ratings for the restorative justice option tended to decrease, $b = -.212$, $t(47) = -1.438$, $p = .157$, and as observer sensitivity increased, the ratings for the retributive justice option tended to decrease, $b = -.259$, $t(47) = -1.764$, $p = .084$. This trend was only found in the negative directions for the relationship between JS and punishment option ratings. Participants high on victim JS did not provide high ratings for the retributive option, nor did participants high on observer JS provide high ratings for the restorative option. These results suggest that subjects

could more easily discard their less favorable decision, by rating the option very low on the scale (i.e. would give a 0 or 1), rather than commit to endorsing their more favorable decision, (i.e., would give a 3 or 4 instead of a 6 or 7).

Also in Phase 1, participants made a forced-choice on the Criminal Decision Making Task in response to the question, “If you could only choose one punishment, which would it be?” Scores were either a “1” or “2,” which corresponded to “restorative justice option” or “retributive justice option.” A binary logistic regression was conducted to examine how JS scores predicted the forced-choice decision. The patterns of results between justice sensitivity and the forced-choice for the restorative and retributive options were not significant, but they did reveal the predicted patterns, $b = -.153$, Wald $\chi^2(1) = 1.928$, $p = .165$ (for observer sensitivity) and $b = .080$, Wald $\chi^2(1) = 1.67$, $p = .196$ (for victim sensitivity). Although non-significant, as observer sensitivity scores increased, the change in the odds of choosing the retributive justice option (rather than the restorative justice option) was .858, such that individuals are less likely to choose the retributive option if they have higher observer sensitivity. Similarly, although non-significant, as victim sensitivity scores increased, the change in the odds of choosing the retributive justice options (rather than the restorative justice option) was 1.08; individuals are more likely than not to choose the retributive justice option if they have higher victim sensitivity.

In Phase 2, participants completed a free recall memory task on three different scenarios (Alex, Robert, and Jake). The facts recalled from each scenario were coded as “retributive justice facts” or “restorative justice facts.” The percentages of retributive and restorative facts recalled were computed for each participant on each scenario. In

addition, a second researcher coded the facts recalled by participants for 10 percent of the presented scenarios. The inter-rater reliability was .94. To determine whether the percentages could be collapsed across all three scenarios, a reliability analysis was conducted. The analysis revealed that participants' responses on all three scenarios (for restorative justice facts) had poor internal consistency ($\alpha = .307$). However, the internal consistency increased when the Robert scenario was removed ($\alpha = .426$). Similarly, subjects' responses (for retributive justice facts) increased internal consistency from $\alpha = .472$ to $\alpha = .486$, when the Robert scenario was removed. Cronbach's alphas decreased significantly if either the Alex or Jake scenarios were removed for restorative or retributive facts, indicating a higher correlation in responses between these two scenarios. As a result of this preliminary analysis, responses to the Robert scenario were removed from further analyses.

A linear regression using the percentage of facts recalled across the Alex and Jake scenarios revealed that individuals' justice sensitivity scores (from Phase 1) significantly predicted the facts recalled in the scenarios in Phase 2, $R^2 = .151$, $F(2, 47) = 4.164$, $p = .022$. As individuals increased on victim sensitivity, they recalled a significantly lower percentage of restorative justice facts across the two scenarios, $b = -.368$, $t(47) = -2.631$, $p = .011$, as illustrated in Figure 1. As individuals increased on observer sensitivity, they recalled a marginally significantly higher percentage of restorative justice facts across the two scenarios, $b = .262$, $t(47) = 1.872$, $p = .067$, as illustrated in Figure 2. The impact of individuals' JS on the types of facts recalled suggests that this personality trait has an effect on what people selectively attend, as measured by memory.

In Phase 3, participants completed a lexical decision task to either restorative justice words or control words, depending on the prime condition to which they were assigned. They also completed a second Criminal Decision Making Task, with scores ranging from 0 to 7 for both the restorative and retributive options. Similar to Phase 1, a linear regression was conducted to examine the relationship between JS (observer and victim) and the continuous scores for the restorative and retributive options. The prime condition was also examined in the analysis. Results revealed that the type of JS and prime condition alone did not significantly predict participants' ratings on the restorative justice option in the second Criminal Decision Making Task, $R^2 = .076$, $F(3, 46) = 1.255$, $p = .301$, nor their ratings on the retributive justice option, $R^2 = .083$, $F(3, 46) = 1.384$, $p = .259$. A linear regression also revealed that the interaction between prime condition and JS did not significantly predict subjects' ratings on the retributive justice option, $R^2 = .065$, $F(2, 47) = 1.631$, $p = .207$, nor their ratings on the restorative justice option, $R^2 = .098$, $F(2, 47) = 2.551$, $p = .089$. The lack of significant differences may be further explained by the high internal consistency between the ratings of decisions in Phase 1 and Phase 3, such that ratings for the restorative justice option had a consistency of $\alpha = .63$ and ratings for the retributive justice option had a consistency of $\alpha = .78$.

Participants also made a forced-choice decision on the second Criminal Decision Making Task, with scores of "1" or "2," which corresponded to "restorative justice option" or "retributive justice option." A binary logistic regression was conducted to determine how justice sensitivity scores (from Phase 1) and prime condition (restorative justice or control) predicted the new forced-choice decision (restorative justice or retributive justice option) on the second Criminal Decision Making Task. Results

revealed no significant effect of the prime condition by victim justice sensitivity, $b = -.045$, Wald $\chi^2(1) = .249$, $p = .618$, nor observer justice sensitivity, $b = 0.84$, Wald $\chi^2(1) = 1.072$, $p = .300$ on subjects' choice of punishment. The results suggest that the restorative justice prime had no influence on participants' activation of justice-related concepts or subsequent decisions.

Also in Phase 3, performance on the word completion task was examined in the context of the prime conditions (control or restorative justice) of the lexical decision task. The number of restorative justice and control words completed, and number of words left blank on the task were counted and converted to percentages for each participant. Independent samples t-tests revealed no significant effects of the prime condition (restorative justice or control) on performance in the word completion task. Both subjects in the restorative justice (29.5%) and control (27.3%) conditions accurately completed an equal number of restorative words, $t(48) = .844$, $SE = 2.62$, $p = .403$. Comparably, both subjects in the restorative justice (42.1%) and control (43.5%) conditions accurately completed an equal number of control words, $t(48) = -1.01$, $SE = 1.43$, $p = .506$. Although the differences were non-significant, it should be noted that the results trend in the expected direction, such that those in the restorative justice condition had a slightly higher completion of restorative justice words on the word completion task than subjects in the control condition. However, these data indicate that the primes used in the restorative justice condition did not increase accessibility of justice-related concepts. This failure to prime justice-related concepts suggests that the lexical decision task was not an effective priming manipulation.

Finally, two 2 x 2 x 2 repeated measures Analyses of Variance (ANOVA) were conducted on the response time data and accuracy data from the lexical decision task. Lexicality (word or non-word) was a within-subjects variable. Prime condition (restorative justice or control words) and justice sensitivity (victim or observer) were between-subjects variables. With regards to the response time data, as expected, the results revealed a significant main effect of lexicality, such that words (787.2 ms) were faster to respond to than non-words (1102.6 ms), $F(1, 35) = 118.24$, $MSe = 187829.3$, $p = .001$. No significant interaction was found between lexicality, prime condition, and justice sensitivity for response time, $F(1, 35) = .093$, $MSe = 1484.77$, $p = .762$. Similarly for the accuracy data, a significant main effect of lexicality was found, such that words (95.8%) were more accurately responded to than non-words (78.2%), $F(1, 35) = 37.84$, $MSe = 6004.07$, $p = .001$. No significant interaction was found between lexicality, prime condition, and justice sensitivity for accuracy of responses, $F(1, 35) = .522$, $MSe = 87.51$, $p = .463$. The lack of significant interaction suggests that performance on the lexical decision task was not affected by one's justice sensitivity and assigned prime condition.

Discussion

The present study investigated the relationship between the personality trait, justice sensitivity (JS), selective attention, as measured by memory, and assignment of punishment to criminal cases. The study was completed in three phases to consider: (1) How individual differences in JS affect the assignment of punishment, (2) If individual JS influences selective attention (as measured through memory), and (3) If an individual's punishment decisions can be altered through priming.

The results in Phase 1, examining the relationship between JS and both the ratings and forced decisions on the Criminal Decision Making Task, were not significant. However, the patterns suggest that individuals higher on victim JS give lower ratings for the restorative justice options, and individuals higher on observer JS give lower ratings for the retributive justice scenarios. Patterns were consistent on the forced-choice decision, such that people with higher observer sensitivity had greater odds of choosing the restorative option, and people with higher victim sensitivity had greater odds of choosing the retributive option. These results are supported by the significant correlations between JS and behaviors found in the previous literature (Baumert & Schmitt, 2009; Gollwitzer et al., 2005; Thomas et al., 2012). It has been shown that individuals with high victim sensitivity have a stronger desire to punish a perpetrator, whereas individuals with high observer sensitivity have an urge to restore justice by repairing harm between the perpetrator and victim (Thomas et al., 2012). Research using online-based public good games demonstrated that people high on victim (versus observer) JS react differently toward injustice, such that their responsiveness to unjust cues and their subsequent decisions in the game are mediated by their JS (Gollwitzer et al., 2005). The current study expands on these findings by attributing “punishing a perpetrator” to retributive justice, and “repairing harm” to restorative justice; therefore suggesting that JS is also correlated to specific types of justice processes, which are based upon differing behaviors and motivations. It should also be noted that the marginally significant patterns were found only for the negative correlations (i.e., victim sensitivity with *lower* restorative justice ratings, but no correlation to the retributive justice ratings). The patterns suggests that individuals can more easily move away from a less favorable decision, but will have

more difficulty consistently committing to a decision in which they believe. This finding is consistent with findings of Carlsmith (2008), which revealed that people are unable to articulate their true motivations for assigning punishment. This trend of low confidence in decision-making strategies may explain why the positive relationships between JS and the punishment decision were not as strongly correlated as expected.

The lack of statistically significant results in Phase 1 of the present study may be due to differences in study design from that of previous literature. While Gollwitzer et al. (2005) demonstrated the peoples' JS significantly impacts their decisions, it is important to note that the situations with which the subjects were presented directly affected them (i.e., being cheated during a game). The scenarios used in the current study never placed the subject in the role of the victim, with the goal of understanding how victim and observer JS function in unbiased settings. However, it is plausible that the personality trait, JS, has a more significant impact when being utilized in situations with "higher-stakes" to the decision-maker. Additionally, Strelan et al. (2008) used scenarios from the Criminal Decision Making Task utilized in the present study, but their scenarios were designed to prime restorative or retributive justice processes in order to affect participants' associations of forgiveness with restorative or retributive justice. While Strelan et al. found significant results, the present study adapted the Criminal Decision Task to be the dependent variable in Phase 1. This methodological decision may have been too ambitious for the current study design, as the scenarios were not initially intended to be used as "outcomes." Finally, much of the previous research on JS has been conducted in countries outside of the United States of America. The U.S. has an exceptionally punitive criminal justice system, which may have impacted the

expectations and decisions of the participants in the current study to a greater extent than would have been the case in other places around the world. Future research should replicate these studies using cross-cultural comparisons.

In Phase 2, consistent with the hypothesis, the experiment revealed a significant effect of justice sensitivity in predicting selective attention during encoding, when measured through a memory task. When the items recalled in the Alex and Jake scenarios were collapsed for each subject, results showed a positive relationship between observer JS and recall of restorative justice facts, and a negative relationship between victim JS and recall of restorative justice facts. While these results cannot be generalized to all individuals and contexts, the findings suggest that an individual's JS affects to what people selectively attend.

The findings in Phase 2 were expected, as research using personality traits of "strong-other orientation," which is related behaviorally to "observer sensitivity" and "weak-other orientation," related to "victim sensitivity," reveals differences in attention by personality trait (Bobocel, 2013). In earlier work, people rated as having a strong-other orientation were more likely than people with a weak-other orientation to attend to external forces, issues regarding social inclusion, and effects on others when making a decision (Bobocel, 2013). In the current study, the features recalled from the scenarios followed a similar pattern as Bobocel's (2013) findings, such that as observer sensitivity increased, people were more likely to recall facts coded as "restorative justice facts" that pertained to the external forces of the scenario, amount of harm done, and effects on others. Previous findings have also examined how observer JS alone correlates with memory, revealing that people with a higher observer JS more accurately remember

injustice-related stimuli than people with a lower observer JS (Baumert et al., 2011). The results from the current study can build upon this finding, by suggesting that not only does JS guide individuals' general attention and memory, but also the type of JS (victim versus observer) can impact the *type* of justice-related stimuli attended and recalled (restorative or retributive). The present findings thus implicate more specific comparisons between justice sensitivities than previous literature has revealed in explaining the role of JS on selective attention and memory. However, because selective attention is measured indirectly in the experiment, it is also valuable to consider other factors and cognitive forces that may be accounting for the increased memory recall for restorative versus retributive facts.

It is important to note that Phase 2 of the experiment initially included three ambiguous scenarios: Alex, Jake, and Robert. Due to low internal consistency across the three scenarios, the Robert scenario was removed in the subsequent analyses. Although all three scenarios included the same number of retributive and restorative facts, subjects had higher overall recall for the Robert scenario and particularly higher recall for restorative justice facts, when compared to memory on the Alex or Jake scenarios. It is plausible that the unique type of relationship between the victim and offender in the Robert scenario (husband and wife) compared to the other scenarios (offender and stranger, and boss and employee) influenced subjects' attention differently for Robert. This may be explained by research on restorative justice practices, which suggest that restorative justice is most effective in situations of crimes involving violence and/or emotional harm (Sherman & Strange, 2007). It is possible that effects of violence and emotional harm were more pronounced in the Robert scenario, compared to Alex or Jake;

therefore, the scenario was inadvertently biased toward restorative justice, which made the Robert scenario an outlier. Future research should conduct pilot studies to test for internal consistency across scenarios before using them in the experiment.

In Phase 3, contrary to expectations, the restorative justice prime condition in the lexical decision task had no significant effect on participants' accessibility to justice-related concepts nor on their judgments in the second decision-making task. The results revealing no significant differences on performance for the word completion task across prime conditions was surprising due to findings in the previous literature. Karremans et al. (2005) found that when subjects received a justice-related prime, they were able to complete more justice words on a word completion task, indicating greater cognitive accessibility of justice-concepts. However, Karemans et al.'s (2005) study differed from the present experiment in that the researchers used pictures as primes, instead of words. They also asked their subjects questions pertaining to the image (i.e., how beautiful, nice, and recognizable the image was), which may have encouraged deeper processing of the information. It is likely that the restorative justice prime manipulation used in the lexical decision task in the current study was not a sensitive enough measure to change the accessibility of justice-related concepts for the subjects. Additionally, because this task took place in Phase 3 of the experiment, it is likely that the prime was confounded by the previous justice-related information that the subjects processed in Phases 1 and 2 (i.e., the JS scale, scenarios in the Criminal Decision Task, and the three ambiguous scenarios). It is also possible that participants were experiencing fatigue at this point in the study, and therefore were less conscientious in their decision-making. Finally, individual differences in competency on word tasks may have impacted participants' performance, such that the

words they completed were related to their overall word completion skill, rather than the influence of the prime.

Results also revealed no significant effect of the prime alone, or an interaction of the restorative justice prime and JS on predicting the decision in the second Criminal Decision Making Task in Phase 3. Previous findings have shown that people can be primed to activate their self-concept (analogous to victim sensitivity), such that a higher self-concept encourages people to express more anger and perceive greater unfairness (Van den Bos et al., 2011). Similarly, Strelan et al. (2008) found that people were more likely to forgive an offender when primed with a restorative justice scenario. While these studies did not look at JS directly, it was expected that the present study would yield similar findings. However, due to the lack of significant differences on the word completion task, it can be discerned that the prime was ineffective in the present study. Furthermore, when examining the results from the lexical decision task, the failure to find differences in response times and accuracies in the task across prime conditions suggests why no robust effects were obtained on the decision in Phase 3.

The lack of statistically significant findings in Phases 1 and 3 of the study may be due to the small sample size ($N = 50$). In contrast, previous studies looking at JS and assignment of punishment or responses to transgression have used larger samples, leading to greater power. Gollwitzer et al. (2005) included 324 total participants, and Strelan et al. (2008) included 173; therefore increased power may have allowed their results to reach significance. Both of these studies also had more variability in the sample, such as an age range of 18-53 in Gollwitzer et al. (2005). The present study used a very homogenous sample, as all participants were recruited from an elite, private liberal arts

institution and ranged in age from 18-22. Future studies should not only consider expanding the sample, but should also measure other demographic variables, as it is possible that factors such as gender, political ideology, and personal experience with the criminal justice system, may significantly predict the punishment assignment decisions made by participants. A larger sample size, in combination with these additional covariates, might help reveal significant correlations between JS and punishment decisions.

Another limitation to the present study could be the scenarios used. All of the “offenders” described in the criminal scenarios were male characters, which was an intentional manipulation designed to eliminate gender bias. However, having all male characters not only reinforces the pervasive assumption that all offenders are males, but it also could influence the way in which subjects may perceive the scenario, thus confounding the effects of justice sensitivity and attention on the decisions made. Previous literature found that assignment of legal punishment varies based on gender of the offender. Gunn (2013) revealed that judges significantly base their decision-making on legal rules and principles when sentencing male defendants, but they base their decisions on factors external to the law when sentencing female defendants. Gunn also found that women receive significantly harsher sentences than men because punishments for females are based more on “moral” rather than “legal” culpability.

Additionally, the objective in the current study was to make the scenarios and punishment process decisions as realistic as possible in order to replicate how restorative and retributive processes play out in the U.S. justice system. For example, the restorative justice process option in the Criminal Decision Making Task utilizes a victim-offender

mediation tactic. While this is representative of reality, it is also limiting because the option does not include other forms of restorative justice, which may be more appealing or appropriate to some decision-makers. The present study did not take into account the actual variability in the justice processes.

The logical next step for future research would be to examine the potential direct mediation between JS, selective attention (and memory), and punishment decisions. Due to the complexity of the present study, which used three phases, it is impossible to see this direct mediation; although the patterns found in Phases 1 and 2 suggest that selective attention *may* directly mediate the relationship between JS and the punishment decision. It would be beneficial for future studies to combine Phases 1 and 2 of the present study to observe this relationship directly. By combining these phases, a subject could complete the Justice Sensitivity Scale, followed by a free recall task on one ambiguous scenario (as an indicator of selective attention), and then complete a Criminal Decision Making Task to assign a punishment to that particular scenario. This would help determine a precise relationship between these variables, which would be expected. Previous research has found that attentional forces affect decision-making, such that when people direct their attention to specific types of targets in a crime scene, they are most likely to remember those targets and assign punishment based on their meaning, without considering other targets in the scene (Christianson et al., 1991; Loftus et al., 1987).

Results from the present study have important implications for understanding judge and juror decision-making in the criminal justice system, along with public perceptions of justice. While the findings cannot be generalized to all types of populations and experiences, the results from Phases 1 and 2 suggest that an individual's

JS may correlate to a preference for restorative or retributive processes, and also predict what information is selectively attended and remembered from a criminal case. These conclusions reveal the potential subjectivity of the U.S. legal system, as people are attending to information and making decisions based upon their individual personalities. This suggests that the criminal justice system is more biased and variant than many assume it to be. With this information at hand, it is important to raise awareness about the inconsistencies in assignment of punishment, and to consider how policymakers and courts can be more objective in their analyses of criminal cases and subsequent decisions. The results from the current study propose that as victim and observer sensitivities increase, the biases also increase (i.e., people are more likely to attend to a higher percentage of retributive versus restorative facts). In the context of the criminal justice and court systems, this would suggest that perhaps the most objective judges, juries, and decision-makers would be people who score fairly equally on the victim and observer JS scales. People who are not strongly polarized in their justice sensitivity may be able to interpret cases more impartially, thus attending to both retributive and restorative types of facts, and also assigning punishment that is based less on their personal views.

The lack of significant results in Phase 3 also has implications for how to approach issues of justice in the United States. While a variety of reasons may have resulted in an ineffective priming task, it is also possible that subconscious information is not enough to sway people from their ingrained beliefs and decisions. More explicit and targeted information may be needed in order to alter peoples' attitudes and judgments. These results suggest a need for education about restorative and retributive justice processes, and improvements in the way in which society discusses issues of justice. If

this education can be more explicit and omnipresent in communities, then people will have a better understanding of the way in which sanctions influence criminal offenders, so that individuals can make more informed decisions when assigning punishment. This would hopefully reduce the subjectivity of decisions made in the legal system, which appear to be based largely on individual personality traits and attentional forces. Policy makers and court staff should begin to take into account the role of individual bias in assignment of legal punishment. The long-term goal would be to encourage judges, juries, and community leaders to support sanctions based upon knowledge and information of their effectiveness, rather than on personal beliefs and opinions.

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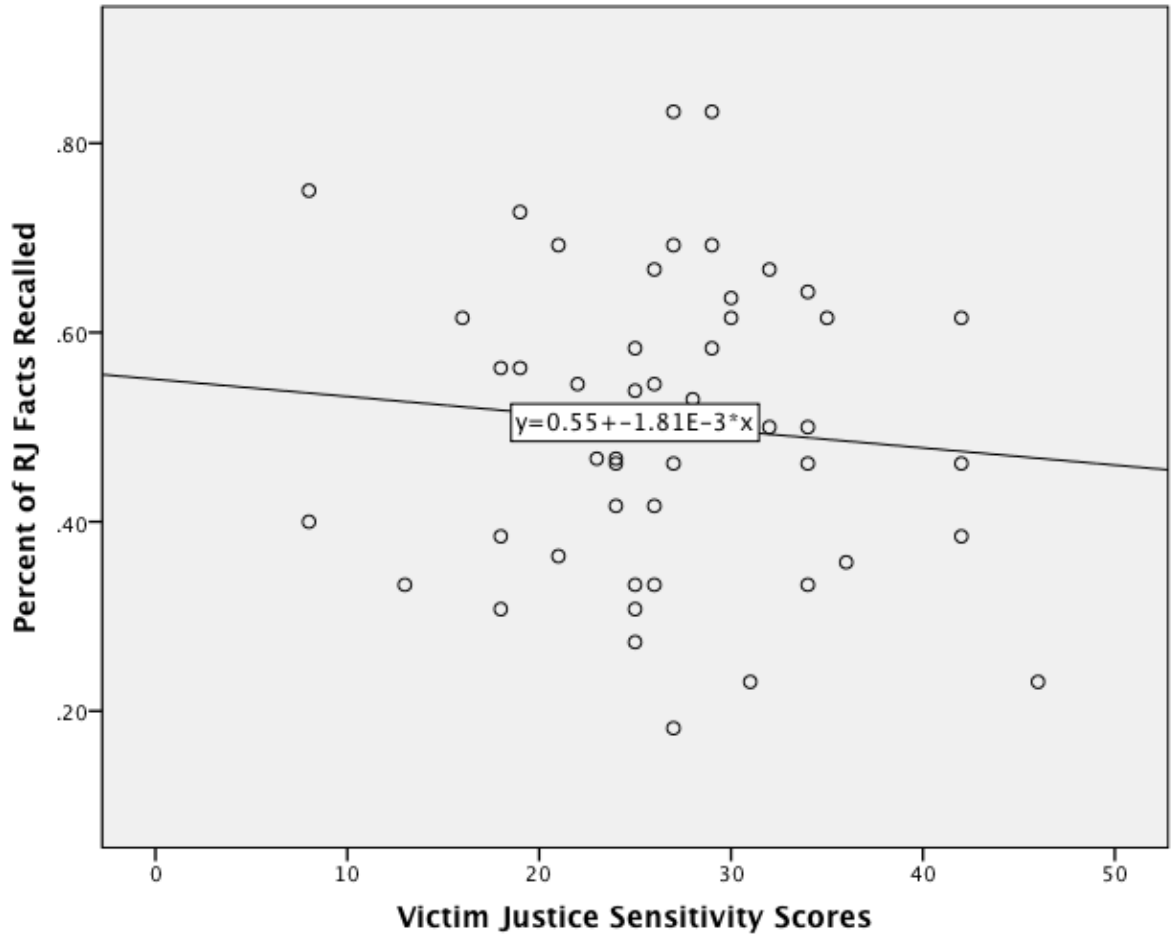


Figure 1. Relationship between victim justice sensitivity and the percent of restorative justice facts recalled.

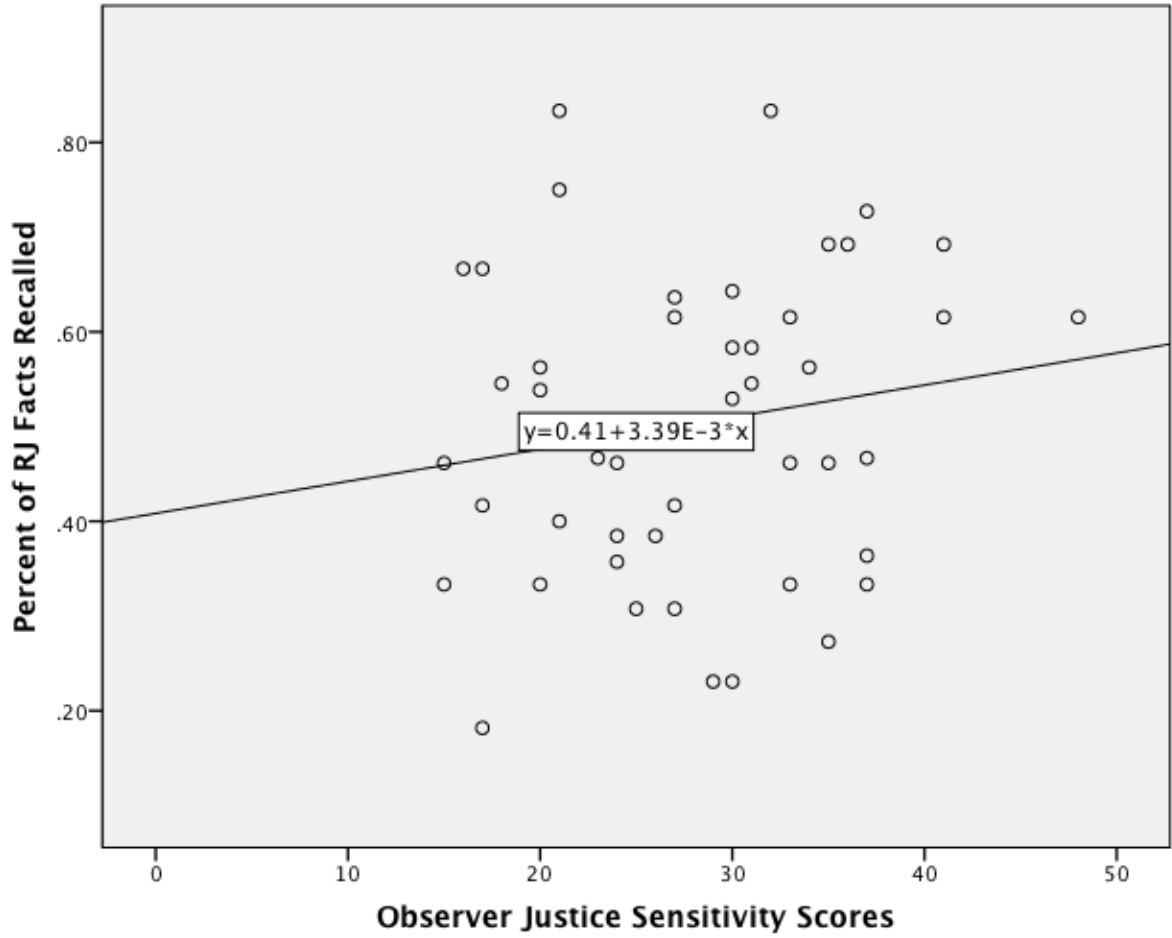


Figure 2. Relationship between observer justice sensitivity and the percent of restorative justice facts recalled.

Appendix A

Materials used in Experimental Phase 1.

Subject #: _____

Justice Sensitivity Scale

How Do You React in Unfair Situations?

People react quite differently in unfair situations. Use the following scale to indicate how much you agree with each statement. Please be honest and thoughtful in your responses.

Not at all						Exactly
0	1	2	3	4		5

Part I: We will look at situations to the advantage of others and to your *own disadvantage*.

1. It bothers me when others receive something that ought to be mine.

0	1	2	3	4	5
---	---	---	---	---	---

2. It makes me angry when others receive a reward that I have earned.

0	1	2	3	4	5
---	---	---	---	---	---

3. I cannot easily bear it when others profit unilaterally from me.

0	1	2	3	4	5
---	---	---	---	---	---

4. It takes me a long time to forget when I have to fix others' carelessness.

0	1	2	3	4	5
---	---	---	---	---	---

5. It gets me down when I get fewer opportunities than others to develop my skills.

0	1	2	3	4	5
---	---	---	---	---	---

6. It makes me angry when others are undeservingly better off than me.

0	1	2	3	4	5
---	---	---	---	---	---

7. It worries me when I have to work hard for things that come easily to others.

0 1 2 3 4 5

8. I ruminate for a long time when other people are treated better than me.

0 1 2 3 4 5

9. It burdens me to be criticized for things that are overlooked with others.

0 1 2 3 4 5

10. It makes me angry when I am treated worse than others.

0 1 2 3 4 5

Part II: We will look at situations in which you notice or learn that *someone else* being treated unfairly, put at a disadvantage, or used.

1. It bothers me when someone gets something they don't deserve.

0 1 2 3 4 5

2. I am upset when someone does not get a reward he/she has earned.

0 1 2 3 4 5

3. I cannot easily bear it when someone unilaterally profits from others.

0 1 2 3 4 5

4. It takes me a long time to forget when someone else has to fix others' carelessness.

0 1 2 3 4 5

5. It disturbs me when someone receives fewer opportunities to develop his/her skills than others.

0 1 2 3 4 5

6. I am upset when someone is undeservingly worse off than others.

0 1 2 3 4 5

7. It worries me when someone has to work hard for things that come easily to others.
- 0 1 2 3 4 5
8. I ruminate for a long time when someone is treated nicer than others for no reason.
- 0 1 2 3 4 5
9. It gets me down to see someone criticized for things that are overlooked with others.
- 0 1 2 3 4 5
10. I am upset when someone is treated worse than others.
- 0 1 2 3 4 5

Part III: We will look at situations that turn out to *your advantage* and to the disadvantage of others.

1. It disturbs me when I receive what others ought to have.
- 0 1 2 3 4 5
2. I have a bad conscience when I receive a reward that someone else has earned.
- 0 1 2 3 4 5
3. I cannot easily bear it to unilaterally profit from others.
- 0 1 2 3 4 5
4. It takes me a long time to forget when others have to fix my carelessness.
- 0 1 2 3 4 5
5. It disturbs me when I receive more opportunities than others to develop my skills.
- 0 1 2 3 4 5

6. I feel guilty when I am better off than others for no reason.

0 1 2 3 4 5

7. It bothers me when things come easily to me that others have to work hard for.

0 1 2 3 4 5

8. I ruminate for a long time about being treated nicer than others for no reason.

0 1 2 3 4 5

9. It bothers me when someone tolerates things with me that other people are being criticized for.

0 1 2 3 4 5

10. I feel guilty when I receive better treatment than others.

0 1 2 3 4 5

Part IV: We will look at situations in which you treat *someone else unfairly*, discriminate against someone, or exploit someone.

1. It gets me down when I take something from someone else that I don't deserve.

0 1 2 3 4 5

2. I have a bad conscience when I deny someone the acknowledgement he or she deserves.

0 1 2 3 4 5

3. I cannot stand the feeling of exploiting someone.

0 1 2 3 4 5

4. It takes me a long time to forget when I allow myself to be careless at the expense of someone else.

0 1 2 3 4 5

5. It disturbs me when I take away from someone else the possibility of developing his or her potential.

0 **1** **2** **3** **4** **5**

6. I feel guilty when I enrich myself at the cost of others.

0 **1** **2** **3** **4** **5**

7. It bothers me when I use tricks to achieve something while others have to struggle for it.

0 **1** **2** **3** **4** **5**

8. I ruminate for a long time when I treat someone less friendly than others without a reason.

0 **1** **2** **3** **4** **5**

9. I have a bad conscience when I criticize someone for things I tolerate in others.

0 **1** **2** **3** **4** **5**

10. I feel guilty when I treat someone worse than others.

0 **1** **2** **3** **4** **5**

Subject #: _____

Criminal Decision Making Task:

Please read the following short scenario:

Mark is a 20-year old man who has been convicted of burglary and vandalism of private property belonging to a woman named Michelle.

Consider Punishment #1:

Mark is offered the opportunity to enter a diversionary program in the legal system called "Victim-Offender Mediation." Michelle, the victim, will have the opportunity to explain to Mark how she feels about what Mark has done. Mark will also get to explain his side of things, take responsibility for his actions, and apologize. A police representative and social worker are present during the conversations. After all parties have talked through their various issues, they all- Mark included- discuss the most appropriate way of dealing with Mark's actions. The goal of this process is to increase Mark's accountability, reconcile with the victim, and reduce the likelihood of future offenses. They come to the conclusions that Mark will receive a six-month prison sentence and \$300 fine.

How appropriate is punishment #1 to handle the crime committed by Mark?

Not at all
appropriate

Very
appropriate

0 1 2 3 4 5 6 7

Consider Punishment #2:

Mark appears before a judge in court, who reviews all in the information about his case. This includes the psychological and material loss and damage Mark has caused Michelle, and Mark's own background and events that led to committing the offenses. The judge alone decides the most appropriate way of dealing with Mark's actions, as this crime is viewed as an action against the state. The goal of this process is to give Mark the punishment he deserves, proportional to the wrongdoing he committed in order to deter future crime. The judge comes to the conclusions that Mark will receive a six-month prison sentence and a \$300 fine.

How appropriate is punishment #2 to handle the crime committed by Mark?

Not at all
appropriate

Very
appropriate

0 1 2 3 4 5 6 7

If you could only choose one punishment, which would it be?

(Indicate 1 or 2): _____

Appendix B

Materials used in Experimental Phase 2.

Subject #: _____

Read the following scenarios. Pay close attention to any information you believe may be relevant to each case.

Scenario #1:

Alex is a 32 year old cocaine addict and drug dealer. Alex was never well supported as a child, growing up with very little money, but with positive parental role models. He is often described as an irresponsible, but caring man. Alex deals drugs now because he has two children of his own and cannot hold a stable job, but needs to provide for his family. This past month he was running short on money to buy drugs, so he decided to break into the local auto body shop, where he planned to steal some metal and aluminum, which he could later sell for money. Upon entering the shop through the window, the owner, Billy, appeared and screamed, "Hey you! Get out of here!" Alex, drugged up at the time, pushed Billy to the ground, and left him there with a bloody nose and bruised cheek. This was Alex's first offense for physical altercations or burglary. Alex ran out quickly with the materials in hand. A woman standing on the street witnessed the event and reported it promptly, although the event was not publicized in town.

Without looking back at the scenario, what are the 4 most important facts about Alex or the situation that you would consider in deciding appropriate punishment for Alex?

- 1.
- 2.
- 3.
- 4.

Scenario #2:

Robert is a 50-year old man who has been married to Laurie for the past 20 years. When Robert was young, his father often beat him. However, Robert did feel supported while growing up and had a positive adult figure in his life. People often describe Robert as unstable, manipulative, irritated, and unable to control his emotions. For many years of their marriage, Robert has been verbally abusing Laurie and often threatens her with violence because he is suffering from severe depression and psychotic disorders. He had never physically hurt Laurie until last week when he became particularly angry and hit her repeatedly with his belt. She was afraid, and experienced lasting pain and bruises from the impact. Robert and Laurie's neighbor, who was standing in her window,

witnessed the event take place in their home, and she reported it promptly, although the event was not publicized in town.

Without looking back at the scenario, what are the 4 most important facts about Robert or the situation that you would consider in deciding appropriate punishment for Robert?

- 1.
- 2.
- 3.
- 4.

Scenario #3:

Jake is a 20-year-old man who went to an underage drinking party last night in his hometown. Jake is regularly bullied at school and has been struggling socially with his peers. His father left his family when he was very young. His mother is a supportive parent and positive role model. People often describe Jake as devious and neglected. At 1:00 am, he decided to drive his vehicle home so that his mother would not worry about where he was when she woke up in the morning. Jake was intoxicated, he swerved off the road and totaled the car. This was not the first time Jake had been caught driving drunk. Luckily, he did not hurt himself or the driver of the car he hit on the way off the road. Another man who was at a bar across the street witnessed the crash, and he reported it promptly. The police arrived at the scene and arrested Jake for his illegal blood alcohol content level. The incident was not publicized in town.

Without looking back at the scenario, what are the 4 most important facts about Jake or the situation that you would consider in deciding appropriate punishment for Jake?

- 1.
- 2.
- 3.
- 4.

Appendix C

Materials used in Experimental Phase 3.

Lexical Decision Task: Word Lists (primes presented on computer screen)**Word List #1****Restorative justice words**

Accountability
Justice
Forgiveness
Reconciliation
Fairness
Healing
Rehabilitation
Communication
Reintegration
Inclusion
Mediation
Empowerment
Apology
Prosocial
Morality
Responsibility

Nonwords

Tranabilination
Torrel
Fortimer
Ballatimerian
Hanness
Cornemagination
Posteriation
Trappeling
Grannel
Missionel
Wallifango
Empodiment
Soronty
Protonal
Vinarition
Bossiparinator

Word List #2**Control words**

Onomatopoeia
Table
Banana
Unconditionally
Friendship
Pencil
Discontinuity
Possibilities
Evolutionist
Volleyball
Memorable
Calculator
Certificate
Telephone
Preferable
Overpopulation

Nonwords

Tranabilination
Torrel
Fortimer
Ballatimerian
Hanness
Cornemagination
Posteriation
Trappeling
Grannel
Missionel
Wallifango
Empodiment
Soronty
Protonal
Vinarition
Bossiparinator

Subject #: _____

Word Completion Task

In 5 minutes, complete as many of the following words as you can.

1. R __ P A __ R
2. T __ A __ S __ O __ M A __ I __ N
3. S __ L L __
4. C __ O __ E __ A T __ O N
5. __ O M M __ N I __ Y
6. __ Y N __ __ A L
7. P __ C T __ R E
8. R E __ T O __ A __ I __ E
9. V __ C __ I __
10. R __ D __ C U __ O U __
11. U __ D __ R S __ A __ D __ N __
12. S C __ E __ C E
13. C __ __ Z Y
14. C __ A S __ I F __ C A __ I __ N
15. F __ R G __ __ E
16. O __ C U __ A __ __ O N

Subject #: _____

Criminal Decision Making Task:

Please read the following short scenario:

Nathan works in a privately owned toy store where he is responsible for closing up shop every night alone. For the past two months, Nathan has been stealing money from the cash drawer, with the hope that his boss, Trevor, would not find out since he has been stealing small amounts at a time. Yesterday, Trevor discovered what Nathan had been doing and called the police.

Consider **Punishment #1:**

Nathan is offered the opportunity to enter a diversionary program in the legal system called "Victim-Offender Mediation." Trevor, the victim, will have the opportunity to explain to Nathan how he feels about what Nathan has done. Nathan will also get to explain his side of things, take responsibility for his actions, and apologize. A police representative and social worker are present during the conversations. After all parties have talked through their various issues, they all- Nathan included- discuss the most appropriate way of dealing with Nathan's actions. The goal of this process is to increase Nathan's accountability, reconcile with the victim, and reduce the likelihood of future offenses. They come to the conclusions that Nathan must pay back the money he stole, spend one month in prison, and complete 50 hours of community service.

How appropriate is punishment #1 to handle the crime committed by Nathan?

Not at all									Very
appropriate									appropriate
0	1	2	3	4	5	6	7		

Consider **Punishment #2:**

Nathan appears before a judge in court, who reviews all of the information about his case, including the loss and damage Nathan has caused Trevor, and Nathan's own reasoning and events that led to committing the offenses. The judge alone decides the most appropriate way of dealing with Nathan's actions, as this crime is viewed as an action against the state. The goal of this process is to give Nathan the punishment he deserves, proportional to the wrongdoing he committed in order to deter future crime. The judge comes to the conclusions that Nathan must pay back the money he stole, spend one month in prison, and complete 50 hours of community service.

How appropriate is punishment #2 to handle the crime committed by Nathan?

Not at all									Very
appropriate									appropriate
0	1	2	3	4	5	6	7		

If you could only choose one punishment, which would it be?

(Indicate 1 or 2): _____