

## Effects of perspective taking on courtroom decisions

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### Abstract

Four experiments examined the hypothesis that perspective taking with a defendant would lead to greater empathy, which would mediate lowered perceptions of culpability, with lowered culpability mediating a lower probability of guilt and recidivism. Experiments 1 and 2 established that perspective taking leads to a lower probability of guilty verdicts and recidivism, mediated by a decreased perception of the defendant's culpability. Experiment 2 showed that it does so by increasing empathy. Experiment 3 showed that perspective taking also heightens the perception of culpability through increased empathy for the victim. Experiment 4 showed that decreased culpability is in part driven by leniency, which is also a function of empathy. We tie our findings into other research investigating links between empathy and perspective taking.

Despite the justice system's noble intentions to afford everyone a fair and impartial trial, research shows that jurors' biases can influence the outcome of a trial. Those biases typically come from two different sources: external (e.g., pretrial publicity; Hope, Memon, & McGeorge, 2004) and internal (e.g., people's preconceived notions or stereotypes; Skorinko & Spellman, 2013). In addition, jurors come to trials with different attitudes, experiences, knowledge, and beliefs. Thus, when a case has missing or ambiguous information, jurors may rely on their own private information to create a "story" of the case, and different stories may lead to different verdicts (Pennington & Hastie, 1986).

In addition to pretrial information and individual "story" construction, the manner in which jurors think about people involved in the trial may also affect the perceptions of and decisions made in a case. Potentially, one biasing influence on juror reasoning involves the extent to which jurors take the perspective of an actor involved in the legal action. That is, perspective taking might influence how jurors view defendants, victims, or evidence presented during trials. In fact, because trial consultants recommend that lawyers (defense attorneys in particular) attempt to get jurors to take the perspective of their clients (Minick, 2006), jurors may commonly take the perspective of one of the parties involved in a trial. The present research therefore examines the effects that

perspective taking has on mock jurors' perceptions of defendant guilt, culpability, and recidivism.

Very little published research, to our knowledge, has examined the effects of perspective taking on legal decision-making, although some research investigated role-playing and empathy in this realm. For instance, one sociological study investigated role-playing on jury behavior, but found no significant differences on any variables (Kerr, Nerenz, & Herrick, 1979). Another study investigated the effects of empathizing with the defendant and found that empathy influenced perceptions of the defendant, but only when jurors were not instructed to focus on the facts of the case (Archer, Foushee, Davis, & Aderman, 1979). In other words, thinking about the facts of the case "overruled" empathy felt for the defendant.

More generally, research on the interpersonal effects of perspective taking demonstrates that perspective taking often leads to positive and beneficial changes in how targets (i.e., actors whose perspectives have been taken) are perceived. For example, perspective takers value targets more than non-perspective takers (Batson, Eklund, Chermok, Hoyt, & Ortiz, 2007), feel more nurturant toward them (Batson, Lishner, Cook, & Sawyer, 2005), and are more willing to forgive their transgressions (McCullough, Worthington, & Rachal, 1997). Moreover, perspective taking leads to greater cooperation

(Parker & Axtell, 2001), faster and more successful conflict resolution (Franzoi, Davis, & Young, 1985; Galinsky, Maddux, Gilin, & White, 2008; Takaku, Weiner, & Ohbuchi, 2001), and decreases egocentric biases and more realistic judgments of fairness (Caruso, Epley, & Bazerman, 2006).

While perspective taking is considered a cognitive process (Galinsky, Wang, & Ku, 2008), where people often “anchor” on available information (e.g., Epley & Waytz, 2009; Skorinko & Sinclair, 2013), one argument is that perspective taking benefits interpersonal relationships because perspective takers are more likely to attempt to understand the target’s feelings (Hodges & Wegner, 1997). Indeed, individuals instructed to take the perspective of or empathize with targets feel more empathy toward them (Batson, 1987, 1991; Batson, Early, & Salvarani, 1997), show greater sensitivity to the their plights (Clare & Jeffrey, 1972), and are more likely to engage in prosocial helping behavior (Batson, Batson, & Griffitt, 1989; Batson, Polycarpou, et al., 1997; Cialdini, Brown, Lewis, Luce, & Neuberg, 1997; Coke, Batson, & McDavis, 1978; Davis, 1983; Dovidio, Allen, & Schroeder, 1990). In addition to increasing understanding, research shows that perspective taking enhances perceptions of connectedness and similarity between perceivers and targets (Cialdini et al., 1997; Goldstein & Cialdini, 2007; Laurent & Myers, 2011; Maner et al., 2002; Myers & Hodges, 2011; Neuberg et al., 1997).

While research has found that perspective takers may make inadequate adjustments away from their own egocentric perspectives or may anchor onto available stereotypes (e.g., Epley, Keysar, van Boven, & Gilovich, 2004; Frantz & Janoff-Bulman, 2000; Skorinko & Sinclair, 2013), in many cases, perspective taking results in more positive perceptions of a target. Consistent with this, in one study, when participants imagined they were the perpetrator of a crime, they blamed the victim more than themselves for the crime, but when they imagined themselves as the victim, more blame was placed on the perpetrator than on themselves (Catellani & Milesi, 2001).

Taken together, it appears likely that in a legal context, perspective taking will likely work to shift perceptions of targets in a predictable way. Taking the perspective of a defendant should lead to less blame, perhaps because of increased empathy toward the defendant. On the other hand, taking the perspective of a victim should increase blame of the defendant, perhaps through increased empathy toward the victim.

## The present research

Very little research has investigated how perspective taking influences decision-making, particularly in legal contexts. The current research seeks to close this gap by examining how perspective taking influences courtroom decisions. Because of the robustness of findings linking perspective taking, through empathy, to a variety of outcomes (e.g., Archer et al.,

1979; Batson, 1991; Batson, Polycarpou, et al., 1997), we predict that empathy should in part explain the link between perspective taking and outcomes, working to increase favorability toward the defendant when the defendant serves as a target, but working to decrease favorability toward the defendant when the victim serves as a target.

In four experiments, we test the effects of perspective taking on mock jurors’ decisions by instructing participants to take the perspective of one of the actors involved in a trial and then by measuring perceptions of the defendant’s culpability, decisions about the defendant’s guilt, and the likelihood that the defendant would commit a similar crime in the future. Experiment 1 establishes that taking the defendant’s perspective increases favorability toward the defendant. Experiment 2 extends this by investigating the role of empathy for the defendant in affecting outcomes. Experiment 3 shifts the target of perspective taking to the victim, testing whether empathy for the victim creates a sense that the defendant is *more* culpable and thus more likely to be guilty. Finally, Experiment 4 investigates an additional mechanism linking perspective taking and empathy to outcomes, specifically exploring whether perspective taking serves as a cue to be more lenient toward the defendant.

## Experiment 1

In Experiment 1, perspective taking was manipulated in juror instructions given prior to the reading of a trial summary and again during the defense attorney’s closing statement. Our prediction was that perspective taking would lower the perceptions of the defendant’s culpability (e.g., defendant’s responsibility for the crime and the likelihood of having committed the crime), and that culpability would mediate the effects of condition on decisions concerning guilt and recidivism.

## Method

### Participants

One hundred nine undergraduates (61 women, 48 men) from a medium-sized southeastern public university participated for course credit. The majority were in the first or second year in college (62% first year, 25% second year, 8% third year, and 5% fourth or fifth year). The majority of the sample identified as White (62%), with remaining participants reporting a mix of racial/ethnic backgrounds (17% Asian, 11% Black, 4% Hispanic, 2% Middle Eastern, 2% Multiracial, 1% Native American, and 1% Other).

### Procedure and materials

After giving informed consent, participants read juror instructions. These instructions provided information about

the crime committed (e.g., vehicular manslaughter) and asked the mock jurors to read the background and trial summary carefully and make a decision regarding the defendant's guilt. Half the participants read only these standard juror instructions (control condition). The remaining participants read the same instructions but were additionally instructed to take the perspective of the defendant, using adapted "imagine-self" instructions from past research (Batson, Early, et al., 1997; Galinsky & Moskowitz, 2000). These instructions read:

Imagine the day of the crime from the defendant's perspective. In other words, imagine that you were that person. See the events of the day through the defendant's eyes and experience these events as if you were walking in the defendant's shoes.

Participants in the perspective taking condition saw an additional perspective taking prompt during the defense attorney's closing arguments:

Ladies and Gentlemen of the jury, I want you to imagine how you would feel if you were in my client's shoes. You are all upstanding citizens, like my client, so how would you feel if you were wrongly accused of a crime that you did not commit? How would you feel if you were put in jail because a family needed to blame someone for the death of their loved one? How would you feel if the evidence provided against you was all circumstantial and nothing concrete?

All of other information provided in the trial summaries was exactly the same in the control and perspective taking conditions (see Appendix A for the Defense's Closing Arguments).

All participants next read a brief crime report and a short trial summary about a man accused of committing vehicular manslaughter by striking and killing a young boy who was standing on a sidewalk next to his older sister (who witnessed the crime). Vehicular manslaughter was used because it has no ethnic or gender stereotypes associated with its commission (Skorinko & Spellman, 2013; Sunnafrank & Fontes, 1983). The information provided made it unclear whether the defendant committed the crime.<sup>1</sup> For instance, the victim's sister (a child) reported the make and model of the vehicle to the police, but only remembered three characters from the license plate involved in the accident (that matched the make and model of the defendant's car). However, the

<sup>1</sup>The trial summary was pretested to ensure that evidence regarding the defendant's guilt was ambiguous (i.e., neither guilty nor innocent). Ten participants read the trial materials, rendered a verdict, and reported their thoughts on the evidence provided by the prosecution and defense. Approximately half the participants rendered guilty verdicts and the other half rendered non-guilty verdicts. In addition, all participants indicated that there was sufficient evidence for both sides (prosecution and defense).

defense demonstrated that five other vehicles (of the same make and model) had license plates that also matched two of the characters remembered by the witness.

After reading the trial summary, participants rendered a verdict, and answered questions regarding culpability and recidivism. The guilt of the defendant was assessed with a single item ("How do you find the defendant for the felony of hit-and-run?") that had two possible responses ("Guilty" or "Not Guilty"). A composite measure of culpability was created from two questions relating to the defendants' responsibility for the victim's injuries (i.e., "How responsible for the injuries sustained by the victim do you believe the defendant is?"), and the likelihood of the defendant having committed the crime ("In your personal opinion, regardless of the court's finding, how likely is it that the defendant committed the crime?";  $\alpha = .89$ ). Both questions were measured on 7-point Likert-type scales (1 = "not at all" to 7 = "very much"). Higher numbers indicate greater perception of culpability. We also assessed recidivism through a single question: "How likely is it that the defendant would commit a similar crime in the future?" (1 = "not at all" to 7 = "very much"). We also assessed basic demographic information (e.g., gender, ethnicity), and participants were debriefed and thanked after completion of the questionnaire.

## Results and discussion

Our primary hypothesis, as outlined above, was that the perspective taking manipulation would lower perceivers' (i.e., mock jurors) assessments of the defendant as culpable, providing a link for the perspective taking manipulation to affect likelihood of guilt verdicts and belief that the defendant would commit a similar crime in the future. As expected, perspective takers ( $M = 3.36$ , standard deviation [ $SD$ ] = 1.21) found the defendant to be less culpable than did control participants ( $M = 3.93$ ,  $SD = 1.33$ ),  $F(1, 107) = 5.41$ ,  $p = .02$ ,  $d = .45$ .<sup>2</sup> The perspective taking manipulation did not directly affect the likelihood (a) of finding the defendant guilty ( $p = .36$ ) or (b) that the defendant would commit a similar crime in the future (recidivism;  $p = .91$ ). In addition, the correlation between guilt and recidivism, while in the expected direction, was not significant ( $r = .15$ ,  $p = .13$ ).

### Path analyses

Theoretically, our expectation was that perceived culpability of the defendant would mediate the effects of perspective taking on participants' verdicts and recidivism. We therefore

<sup>2</sup>Initially, we included participant gender as a potential factor in the current experiment (as well as in each reported experiment). Because participant gender had no main or interactive effects in any experiment, we removed it from all models.

tested our hypotheses directly with path analyses,<sup>3</sup> using Mplus (Muthén & Muthén, 1998–2010) and AMOS 6.0 (Arbuckle, 2006), two programs that allow tests of indirect effects to be conducted using bootstrapping to estimate standard errors of indirect effects. For simplicity, we examined guilt and recidivism in separate models, using Mplus (Muthén & Muthén, Los Angeles, CA) to explore mediation of guilt (a dichotomous outcome) and AMOS to explore mediation of recidivism (a continuous outcome). In both cases, we used 5,000 bootstrap replications to estimate standard errors. We provide coefficients, bias-corrected standard errors,  $R^2$  of endogenous variables, significance levels, and 95% confidence intervals (CIs).

Using guilt (0 = *not guilty* and 1 = *guilty*) and recidivism, respectively, as the dependent variables, predicted by both perspective taking condition (0 = *control*, 1 = *perspective taking*) and culpability (which was also predicted by condition), we found that perspective taking condition directly predicted culpability,  $B = -.57$ ,  $CI_{.95} = (-1.05, -.08)$ ,  $p = .02$ ,  $R^2 = .05$ , but not guilt or recidivism, respectively,  $ps = .97, .38$ . However, lower culpability predicted a lower probability of guilt,  $B = .58$ ,  $CI_{.95} = (.46, .71)$ ,  $p < .001$ ,  $R^2 = .55$ , as well as lower perceived recidivism,  $B = .28$ ,  $CI_{.95} = (.12, .45)$ ,  $p = .001$ ,  $R^2 = .09$ . Importantly, the indirect effects of perspective taking condition on guilt and recidivism were significant, respectively,  $B = -.33$ ,  $CI_{.95} = (-.63, -.03)$ ,  $p = .03$ ;  $B = -.16$ ,  $CI_{.95} = (-.63, -.36, -.04)$ ,  $p = .01$ . Thus, perspective taking led to less perceived culpability, and this lessened culpability indirectly resulted in perspective takers seeing the defendant as less guilty and less likely to commit a similar crime in the future.

## Experiment 2

One limitation to Experiment 1 was the presentation of the perspective taking instructions. While instructing participants to perspective take prior to other tasks replicates past research (such as Batson et al., 2007; Galinsky & Moskowitz, 2000), this procedure is not representative of the legal process. Judges issue juror instructions prior to a trial; however, these instructions do not prompt jurors to perspective take with either side (American Bar Association, 2012). Therefore, in Experiment 2, to increase ecological validity and examine whether perspective taking could be evoked in a more naturalistic and courtroom-appropriate fashion, perspective taking was manipulated *only* in the defense's closing arguments to the jury. In addition, because past research has shown that empathizing with a male defendant influences

perceptions of the defendant and his behavior (Archer et al., 1979) and that empathy for a target mediates willingness to help the target (see, e.g., Batson, 1991, 2010, for reviews), we examined whether empathy for the defendant might, at least in part, explain why participants saw the defendant as less culpable.

Experiment 2 had two additional goals. First, we wanted to reduce the seriousness of the crime from vehicular manslaughter to a hit-and-run where the victim is neither seriously injured nor killed. Second, we wanted to rule out whether matches between defendant, victim, and participant gender moderated our results. Perceived similarity between perspective takers and targets can increase perspective taking with a target (Ames, 2004a, 2004b; Goldstein & Cialdini, 2007; Maner et al., 2002). Gender is one easily identifiable surface-level variable that could promote a perception of similarity, especially in the courtroom (Harrison, Price, & Bell, 1998; Kammeyer-Mueller, Livingston, & Liao, 2011). Manipulating defendant and victim gender therefore allowed an empirical examination of whether gender similarity would moderate the effects our perspective taking manipulation; if it did not, it would allow greater generalization of our findings.

We expected to replicate the findings from Experiment 1, but to also extend them by showing that perspective taking would increase empathy for the defendant, which would mediate perceptions of defendant culpability, which would then mediate (as in Experiment 1) guilt and recidivism decisions. Finally, we examined whether combinations of participant, defendant, and victim gender moderated the effects of perspective taking.

## Method

### Participants

Participants were 90 undergraduates (42 female, 48 male) from a medium-sized northeastern private university who participated for extra credit. Participants were evenly spread throughout their undergraduate career (21% first year, 26% second year, 27% third year, and 26% fourth or fifth year). Most of the sample (81%) self-identified as White, with 7% identifying as Hispanic 6% as Asian, 4% as Multiracial 1% as Black, and 1% as Other.

### Procedure and materials

The materials and procedure were similar to those used in Experiment 1 with a few exceptions. First, the crime the defendant was being tried for was changed from vehicular manslaughter to a hit-and-run to reduce the seriousness of the offense (i.e., the death of the victim). This change was made because the seriousness of a crime may also influence decisions made in the courtroom (e.g., Costanzo & Costanzo,

<sup>3</sup>See, e.g., Hayes, 2009; MacKinnon, Krull, & Lockwood, 2000; MacKinnon, Lockwood, Hoffman, West & Sheets, 2002; MacKinnon, Fairchild, & Fritz, 2007; Preacher and Hayes, 2008; Shrout and Bolger, 2002; Rucker et al., 2011; Zhao, Lynch, and Chen, 2010, for discussions of directly testing proposed theoretical models and examining hypothesized indirect effects, even in the absence of significant total effects.



1992), and because, like vehicular manslaughter, it is not associated with any particular ethnic group or gender (Skorinko & Spellman, 2013). Second, we presented the victim as a single person similar in age to the defendant to ensure that a discrepancy between the ages of the defendant and victim played no role in our manipulation. Third, defendant and victim genders were manipulated to include all four possible combinations. Fourth, to increase ecological validity and to have a subtler manipulation, instructions to perspective take were manipulated solely during the defense's closing arguments.

Evidence in the case was again deliberately left ambiguous as to the defendant's guilt.<sup>4</sup> For example, the defendant was described as driving in a neighborhood around the same time that the victim was hit by a car and as having left the scene of the accident. However, the defense claimed that the defendant drank responsibly and did not drive down the street where the victim was hit on that particular evening. Participants in both conditions saw the same prosecution and defense statements; however, only participants in the perspective taking condition read this prompt toward the end of the defense's closing statement (see Appendix B for the trial summary):

Ladies and Gentlemen of the jury, I am here to ask you to imagine how you would feel if you were in my client's shoes. You are all upstanding citizens, like my client, so how would you feel if you were wrongly accused of hitting an innocent victim with your car when you know that you were not even in that vicinity at the time of the crime? How would you feel if you were put in jail because the government needed to blame someone for the injury against an innocent victim? How would you feel if the evidence provided against you was all circumstantial and nothing concrete?

As in Experiment 1, we measured guilt (dichotomous variable), culpability (2-item measure;  $\alpha = .83$ ), and recidivism (continuous variable). In addition, empathy toward the defendant was measured with three items ( $\alpha = .80$ ; "How much empathy did you feel for the defendant in this case?" "How easily could you put yourself in the defendant's shoes?" and "How motivated were you to put yourself in the defendant's shoes?"). Three items also assessed empathy toward the victim ( $\alpha = .75$ ; "How much empathy did you feel for the victim in this case?" "How easily could you put yourself in the victim's shoes?" and "How motivated were you to put yourself in the victim's shoes?"). As in Experiment 1, basic demo-

<sup>4</sup>The trial summary was pretested to ensure that guilt was ambiguous. Ten participants read the trial, rendered a verdict, and reported their thoughts on the evidence provided by the prosecution and defense. Approximately half the participants rendered guilty verdicts and the other half rendered non-guilty verdicts. All participants indicated that there was sufficient evidence for both sides (prosecution and defense).

graphic information was assessed, and participants were debriefed and thanked after participating.

## Results and discussion

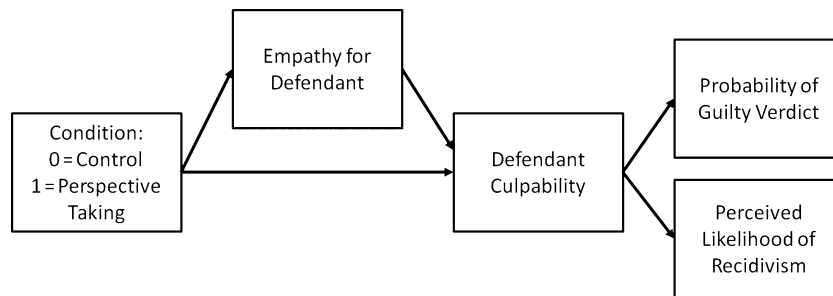
Our first tests focused on the effects of perspective taking on defendant culpability, but here, also on empathy toward the defendant and victim. Initially, we examined all dependent variables using a 2 (participant gender)  $\times$  2 (defendant gender)  $\times$  2 (victim gender)  $\times$  2 (perspective taking vs. control) design. However, no main or interactive effects involving participant, defendant, or victim gender were found. The only significant predictor was perspective taking condition. Therefore, we collapsed across participant, defendant, and victim gender for all analyses. Replicating the finding from Experiment 1, perspective takers ( $M = 4.12$ ,  $SD = 1.37$ ) found the defendant to be less culpable than control participants ( $M = 4.83$ ,  $SD = 1.33$ ),  $F(1, 88) = 6.25$ ,  $p = .01$ ,  $d = .53$ . In addition, perspective takers ( $M = 4.37$ ,  $SD = 1.27$ ) reported more empathy for the defendant than control ( $M = 3.64$ ,  $SD = 1.06$ ),  $F(1, 88) = 8.83$ ,  $p = .004$ ,  $d = .62$ . Empathy for the victim was not significantly affected by perspective taking with the defendant. No total effect of perspective taking on guilt or recidivism was found, although condition marginally affected recidivism,  $F(1, 88) = 3.22$ ,  $p = .08$ ,  $d = .38$ , with perspective takers ( $M = 2.80$ ,  $SD = 1.31$ ) reporting a somewhat lower likelihood that the defendant would commit a similar crime in the future relative to control ( $M = 3.31$ ,  $SD = 1.40$ ). Unlike in Experiment 1, guilt and recidivism were significantly correlated in Experiment 2 ( $r = .41$ ,  $p < .001$ ).

## Path analyses

As in Experiment 1, we used path analyses to test our primary hypotheses. Our prediction was that empathy for the defendant would mediate the effects of condition on perceived culpability, which would then mediate the effects of perspective taking condition on guilt and likelihood of recidivism. Analyses were again conducted in two models separately examining guilt and recidivism as dependent variables.

In the first model (see Figure 1), perspective taking condition (0 = control, 1 = perspective taking) was treated as a predictor of both culpability and empathy for the defendant, with empathy for the defendant also predicting culpability, and culpability predicting guilt.<sup>5</sup> Perspective taking condition significantly predicted empathy for the defendant,  $B = .73$ ,  $CI_{.95} = (.25, 1.22)$ ,  $p = .003$ ,  $R^2 = .09$ , but no longer directly

<sup>5</sup>In other models, culpability was treated as a predictor of empathy, with both empathy and culpability treated as predictors of guilt. However, in no model did empathy significantly predict guilt, and culpability never significantly mediated the effects of condition on empathy, so we retained our preferred theoretical model.



**Figure 1** Hypothesized path model from Experiment 2. Coefficients and significance levels are reported in text.

predicted culpability ( $p = .17$ ). Empathy for the defendant significantly predicted culpability,  $B = -.29$ ,  $CI_{.95} = (-.54, -.05)$ ,  $p = .02$ ,  $R^2 = .12$ , and culpability significantly predicted guilt,  $B = .55$ ,  $CI_{.95} = (.43, .68)$ ,  $p < .001$ ,  $R^2 = .56$ . In addition, empathy for the defendant marginally mediated the effects of condition on culpability,  $B = -.22$ ,  $CI_{.95} = (-.43, .008)$ ,  $p = .06$ , and culpability significantly mediated the effects of empathy for the defendant,  $B = -.16$ ,  $CI_{.95} = (-.32, -.01)$ ,  $p = .04$ , and perspective taking condition,  $B = -.36$ ,  $CI_{.95} = (-.71, -.01)$ ,  $p < .05$ , on guilt.

Using recidivism as a dependent variable, and examining the same model, results were very similar.<sup>6</sup> Perspective taking condition significantly predicted empathy for the defendant,  $B = .73$ ,  $CI_{.95} = (.26, 1.20)$ ,  $p = .002$ ,  $R^2 = .09$ , and marginally predicted culpability,  $B = -.52$ ,  $CI_{.95} = (-1.09, .05)$ ,  $p = .08$ ,  $R^2 = .11$ . Empathy for the defendant significantly predicted culpability,  $B = -.26$ ,  $CI_{.95} = (-.49, -.01)$ ,  $p < .05$ , and lower culpability significantly predicted lower recidivism,  $B = .55$ ,  $CI_{.95} = (.38, .73)$ ,  $p < .001$ ,  $R^2 = .31$ . In this model, all indirect effects were significant, with empathy for the defendant significantly mediating the effects of condition on culpability,  $B = -.19$ ,  $CI_{.95} = (-.45, -.03)$ ,  $p = .02$ , and culpability significantly mediating the effects of empathy for the defendant,  $B = -.14$ ,  $CI_{.95} = (-.28, -.01)$ ,  $p = .04$ , and condition,  $B = -.39$ ,  $CI_{.95} = (-.76, -.08)$ ,  $p = .01$ , on recidivism.

These findings replicate and extend the findings from Experiment 1, showing that even a subtle perspective taking manipulation can lead to a lowered perception of defendant culpability, and that greater empathy for a defendant, at least in part, explains the relationship between perspective taking and lowered culpability. Furthermore, perspective taking worked through both empathy and perceptions of the defendant's culpability to drive a lower predicted probability of guilt, as well as a lower expectation that the defendant would commit a similar crime in the future.

<sup>6</sup>Model fit was good,  $\chi^2(2, N = 90) = 2.19$ ,  $p = .34$ , comparative fit index (CFI) = 1.0, root mean square error of approximation (RMSEA) = .03,  $p$  close = .41.

Notably, these relationships held whether the defendant or victim was male or female, whether male or female participants assessed the case, and across various combinations of these variables. This is important because it shows that perspective taking can exert its effects regardless of the gender of the observer (i.e., participant), the target (i.e., the defendant), and others (i.e., the victim), increasing the generalizability of the finding.

### Experiment 3

An interesting question that arises from Experiments 1 and 2 is whether a defendant can be made to seem *guiltier* and *more likely* to commit a similar crime in the future, rather than less so, as a function of perspective taking for the victim rather than the defendant. If so, then it would show that the effects of perspective taking on legal decision-making are not specific only to decreasing culpability, but to increasing culpability. Furthermore, it would also show how perspective taking can work indirectly to affect outcomes for targets whose perspectives have not been taken (e.g., Laurent & Myers, 2011; Shih, Wang, Bucher, & Stotzer, 2009). That is, it would show that the effects of perspective taking can “reach beyond” the target and the target's group to impact decisions about other actors whose perspectives have not been taken.

Experiment 3 examined this question. Using a similar design to Experiment 2, participants were extolled by the prosecuting attorney rather than the defense attorney to take the perspective of the victim rather than the defendant. Our predictions were that perspective taking would *increase* rather than decrease perceptions of culpability, guilt, and likely recidivism. Furthermore, we expected that perspective taking for the victim would affect empathy for the victim, but not the defendant, which should lead to a *greater* perception of the defendant's culpability, which should further lead to a heightened perception of the defendant's guilt and likelihood of recidivism. We were uncertain whether perspective taking would directly affect perceptions of the defendant's culpability, as the focus should be squarely on the victim, resulting in

increased empathy for the victim that should then affect perceptions of the defendant's culpability and other downstream variables.

## Method

### Participants

Participants were 123 undergraduates (63 female, 59 male, 1 unreported) from a medium-sized northeastern private university who participated for course credit. The majority of participants were in the first or second year in college (42% first year, 28% second year, 15% third year, and 15% fourth or fifth year). Most (81%) of the sample identified as White (7% Asian, 3% Black, 3% Hispanic, 1% Middle Eastern, 4% Multiracial, and 1% Other). One participant did not report racial/ethnic background.

### Procedure and materials

Experiment 3 replicated Experiment 2 except participants were prompted to take the victim's perspective in the prosecution's (rather than the defense's) closing statement. Specifically, participants read the same trial summary as in Experiment 2 with the same facts (see Appendix B), with the perspective taking prompt removed from the defense's closing statement. Half of the participants read the following perspective taking prompt toward the end of the prosecution's closing statement:

Ladies and gentlemen of the jury, I am here to ask you to imagine how you would feel if you were in my client's shoes. You are all upstanding citizens, like my client, so how would you feel if one night you were minding your own business, walking down a main, well-lit street you have walked down many times before and suddenly out of the blue you were struck down by car? How would you feel, helpless on the ground, as emergency crews rushed you to the hospital? And, how would you feel if you knew the person responsible for your pain, your suffering, and all your injuries most

likely had been drinking too much that night and had been caught drinking and driving before?

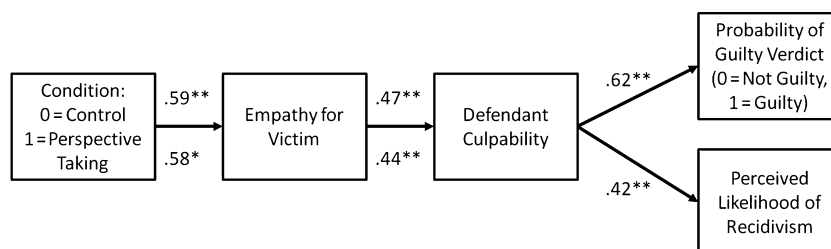
As in Experiments 1 and 2, we measured guilt, culpability, and recidivism. We made one small change to the culpability measure by asking an additional question ("How confident are you that the defendant committed the crime?"), making this a 3-item composite ( $\alpha = .89$ ). As in Experiment 2, we measured empathy for the defendant and the victim with the same sets of items used in Experiment 2 (for the defendant,  $\alpha = .80$ ; for the victim,  $\alpha = .79$ ).

## Results and discussion

We again initially probed for gender effects (defendant, victim, and participant, including all possible interactions) using a factorial design, but again, no effects involving gender emerged, so all reported analyses collapse across gender. Our first hypothesis was that taking the perspective of the victim would affect empathy for the victim rather than for the defendant. Furthermore, we did not expect the culpability of the defendant to be affected directly by perspective taking condition; rather, we expected it to be affected through increased empathy for the victim. Results supported this hypothesis. Perspective takers ( $M = 5.45$ ,  $SD = 1.21$ ) reported more empathy for the victim than did control ( $M = 4.86$ ,  $SD = 1.31$ ),  $F(1, 121) = 6.52$ ,  $p = .01$ ,  $d = .47$ , and no other dependent variables were directly affected by condition. However, empathy for the victim was correlated with defendant culpability ( $r = .40$ ,  $p < .001$ ), guilt ( $r = .30$ ,  $p = .001$ ), and recidivism ( $r = .26$ ,  $p = .003$ ), but not with empathy for the defendant ( $r = .04$ , *ns*). Greater culpability was strongly related to guilt ( $r = .72$ ,  $p < .001$ ) and recidivism ( $r = .42$ ,  $p < .001$ ), and recidivism and guilt were again positively associated ( $r = .38$ ,  $p < .001$ ).

### Path analyses

We next estimated two path models (Figure 2) similar to those in Experiment 2, with the exception being that we



**Figure 2** Effects of perspective taking on probability of guilt verdicts and perceived likelihood of recidivism, mediated by defendant culpability and empathy for the victim. Paths were estimated in two separate models, but are pictured together for simplicity. Coefficients above paths are for the model examining guilt, where direct/indirect paths involving guilt are probit coefficients. Coefficients below paths are for the model examining recidivism. All coefficients are unstandardized, and all indirect effects were significant,  $p_s < .05$ . \*\* $p \leq .01$ .

examined empathy for the victim rather than for the defendant as a mediator of culpability.<sup>7</sup> In the model examining guilt as an outcome, perspective takers (coded 1) had more empathy for the victim than control (coded 0),  $B = .59$ ,  $CI_{.95} = (.14, 1.03)$ ,  $p = .009$ ,  $R^2 = .05$ , empathy for the victim significantly predicted culpability,  $B = .47$ ,  $CI_{.95} = (.27, .64)$ ,  $p < .001$ ,  $R^2 = .18$ , and culpability significantly predicted a greater probability of a guilty verdict,  $B = .62$ ,  $CI_{.95} = (.53, .70)$ ,  $p < .001$ ,  $R^2 = .76$ . All indirect effects were also significant—perspective takers found the defendant to be more culpable, mediated by empathy for the victim,  $B = .27$ ,  $CI_{.95} = (.04, .51)$ ,  $p = .02$ , greater empathy for the victim led to a higher probability of finding the defendant guilty, mediated by culpability ( $B = .29$ ,  $CI_{.95} = [.16, .42]$ ,  $p < .001$ ), and the indirect effect of perspective taking condition on the probability of guilt was also significant,  $B = .17$ ,  $CI_{.95} = (.02, .32)$ ,  $p = .03$ .

Using likelihood of recidivism as an outcome, the results were almost exactly identical.<sup>8</sup> Perspective taking condition predicted victim empathy,  $B = .58$ ,  $CI_{.95} = (.12, 1.02)$ ,  $p = .01$ ,  $R^2 = .05$ , empathy predicted culpability,  $B = .44$ ,  $CI_{.95} = (.24, .62)$ ,  $p < .001$ ,  $R^2 = .16$ , and culpability predicted likelihood of recidivism,  $B = .42$ ,  $CI_{.95} = (.26, .56)$ ,  $p < .001$ ,  $R^2 = .18$ . Empathy with the victim also mediated the effects of perspective taking condition on culpability,  $B = .26$ ,  $CI_{.95} = (.07, .50)$ ,  $p = .006$ , culpability mediated the effects of empathy with the victim on recidivism,  $B = .18$ ,  $CI_{.95} = (.08, .31)$ ,  $p < .001$ , and perspective taking indirectly predicted a higher perceived likelihood of recidivism,  $B = .11$ ,  $CI_{.95} = (.03, .25)$ ,  $p = .005$ .

These findings extend the findings of Experiments 1 and 2 by showing that a defendant can be made to seem *more* culpable, guilty, and recidivist as a result of perspective taking. Of particular note, while these outcomes were directed toward the defendant (e.g., a perception that the defendant is more culpable), here, the defendant never actually served as a target whose perspective was taken. Instead, taking the perspective of the *victim* made participants respond in a way that maps onto what was likely perceived to be the victim's desire to view the defendant as more responsible for the crime. This joins a growing body of research that shows that perspective takers may merge self-related attributes and target-relevant attributes, may behave in ways that are similar to the target (Galinsky, Wang et al., 2008; Goldstein & Cialdini, 2007), and may respond in ways that a target might be expected to respond (Catellani & Milesi, 2001; Laurent & Myers, 2011; Shih et al., 2009; Skorinko, Sinclair, & Conklin, 2012).

Also of interest is that the effects of perspective taking on culpability, guilt, and recidivism were all transmitted through

<sup>7</sup>In both models, direct paths from condition to culpability, and from empathy to outcomes (guilt and recidivism) were never significant, and were therefore removed from the models prior to reporting results.

<sup>8</sup>Model fit was good,  $\chi^2(3, N = 123) = 3.86$ ,  $p = .28$ , CFI = .98, RMSEA = .048,  $p$  close = .40.

empathy for the victim. This joins a substantial body of work demonstrating that perspective taking can increase empathy for targets (Batson, 1987, 1991, 2010; Batson, Polycarpou, et al., 1997). However, our findings demonstrate that perspective taking, through empathy, can not only affect decision-making in a legal context, but it can also affect decisions for actors whose perspective was never taken.

## Experiment 4

While Experiments 1–3 show that empathy is an important mediating factor in legal domains, these three experiments do not investigate any further underlying mechanisms that may account for the relationship between *empathy* itself and perceived *culpability*. One factor that may be influencing decisions is that taking the perspective of the defendant serves as an unconscious cue to be more lenient toward the defendant. In other words, when perspective takers imagine themselves “walking in the target's shoes,” the empathy that is evoked probably makes the perceiver imagine what they would want from others, if in the same situation as the defendant—leniency. It also seems likely that when asked to be lenient, perceivers might spontaneously ask themselves whether the defendant *deserves* leniency, perhaps by empathizing with the target, or even by spontaneously considering how it would feel to be in the target's position. Experiment 4 addresses the role of leniency by directly investigating whether suggestions to be lenient with a defendant work in the same way as do suggestions to take a defendant's perspective. We hypothesized that asking mock jurors to be lenient would work similarly to asking them to take the defendant's perspective, because perspective taking serves as a cue to be lenient.

## Method

### Participants

Participants were 223 undergraduates (91 female, 126 male; 6 unreported) from a medium-sized northeastern private university who participated for course credit (29% first year, 18% second year, 27% third year, and 26% fourth or fifth year). A majority (72%) of the sample identified as White (13% Asian, 4% Black, 5% Hispanic, 1% Middle Eastern, 2% Multiracial, and 3% Unreported).

### Procedure and materials

The procedure was identical to Experiment 3, except that another condition (i.e., a leniency prompt) was added. Thus, all participants read the same trial summary (see Appendix B), with one-third reading the no prompt version, one-third reading the same perspective taking prompt used in Experiment 2, and one-third reading the following leniency prompt:



Ladies and Gentlemen of the jury, I am here today to ask you to be kind and considerate when thinking about your decision in this case. My client, who is an upstanding citizen just like you all, was wrongly accused of hitting an innocent victim, and this necessitates your consideration and your kindness and when making a decision about this case.

As in Experiments 1–3, we measured guilt, culpability, and recidivism. We used the same 3-item index for culpability used in Experiment 3 ( $\alpha = .91$ ). As in Experiment 2, we measured empathy for the defendant and the victim. Empathy for the defendant was the same 3-item composite used in Experiments 2 and 3, although we added an additional question relating to sympathy for the defendant (“How much sympathy did you feel for the defendant?”;  $\alpha = .82$ ). Empathy for the victim was the same 3-item index used in Experiments 2 and 3 ( $\alpha = .79$ ). One additional question was added to assess leniency toward the defendant: “When considering the case, to what extent did you feel a sense of leniency toward the defendant?”

## Results and discussion

We first examined the effects of condition on all dependant variables, using a three-level, one-way analysis of variance (control, leniency, and perspective taking), followed by planned comparisons between control and the combined perspective taking and leniency conditions, as well as post hoc Tukey’s honestly significant difference tests to probe pairwise differences among conditions.<sup>9</sup> For culpability, condition had a marginally significant effect,  $F(2, 220) = 2.96, p = .054$ . The follow-up contrast testing the control condition against the combined perspective taking and leniency conditions was significant,  $p = .02$ . Post hoc tests showed that perspective takers ( $M = 4.51, SD = 1.59$ ) thought the defendant was less culpable than control participants ( $M = 5.09, SD = 1.54, p = .05, d = .37$ ), but did not differ from the leniency condition ( $M = 4.62, SD = 1.32, p = .89, d = .08$ ). Leniency did not differ from control ( $p = .16, d = .33$ ).

For empathy for the defendant, an omnibus effect also emerged,  $F(2, 220) = 3.60, p = .03$ , and the combined perspective taking and leniency conditions reported more empathy toward the defendant than the control condition ( $p = .01$ ). Again, perspective takers ( $M = 3.61, SD = 1.49$ ) felt more empathy than control participants ( $M = 3.07, SD = 1.20, p = .04, d = .40$ ), but not more than participants in the leniency condition ( $M = 3.56, SD = 1.23, p = .97, d = .04$ ). Leniency resulted in marginally more empathy than the

control condition ( $p = .08, d = .40$ ), suggesting that asking for leniency worked in a similar way to asking participants to take the defendant’s perspective.

An overall effect of condition on leniency was also found,  $F(2, 220) = 3.56, p = .03$ , and the contrast comparing the control condition to the perspective taking and leniency conditions combined was significant ( $p = .01$ ). Follow-up tests showed that perspective taking ( $M = 3.46, SD = 1.42$ ) marginally differed from the control condition ( $M = 3.01, SD = 1.15, p = .08, d = .35$ ) but not from the leniency condition ( $M = 3.55, SD = 1.20, p = .90, d = .07$ ). The leniency condition resulted in more self-reported leniency for the defendant than control ( $p = .04, d = .46$ ).

No other total effects of condition emerged. Correlations among all dependent measures (i.e., culpability, empathy for defendant, leniency, guilt, and recidivism) were all significant (all  $p < .001$ ) and ranged from a low of  $r = .28$  (between empathy for the defendant and guilt) to  $r = .66$  (between culpability and guilt).

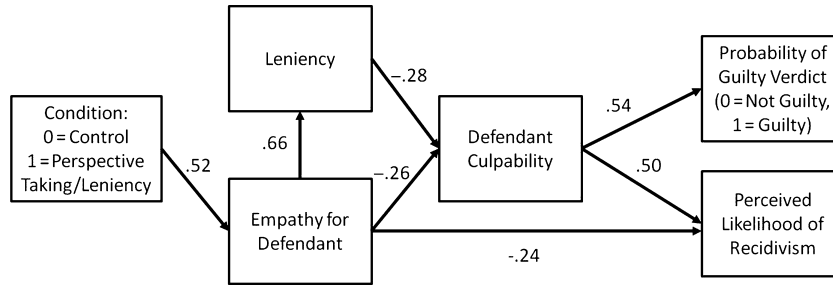
## Path analyses

Initially, we investigated three separate sets of path models, each with the same sets of paths, but with different contrast variables serving as exogenous predictors. Specifically, the contrasts pitted the control condition against the perspective taking condition, control against the leniency condition, and perspective taking against leniency. However, because all models looked extremely similar, we report only the last set of these analyses (control vs. perspective taking and leniency combined; see Figure 3).

Using guilt as an outcome, the first model treated perspective taking condition (0 = control, 1 = perspective taking/leniency) as a predictor of empathy with the defendant, with empathy predicting both leniency and culpability, leniency also predicting culpability, and culpability predicting guilt.<sup>10</sup> All direct and indirect paths were significant. Relative to the control condition, perspective taking/leniency led to greater empathy with the defendant,  $B = .66, CI_{.95} = (.28, 1.05), p = .001, R^2 = .05$ , greater empathy led to greater leniency,  $B = .67, CI_{.95} = (.57, .77), p < .001, R^2 = .49$ , and lower culpability,  $B = -.29, CI_{.95} = (-.51, -.06), p = .01, R^2 = .25$ . Greater leniency was also associated with lowered culpability,  $B = -.32, CI_{.95} = (-.54, -.09), p = .007$ , and lower culpability predicted a lower probability of a guilty verdict,  $B = .54, CI_{.95} = (.46, .62), p < .001, R^2 = .61$ . Additionally, relative to control, the combined perspective taking and leniency conditions worked through empathy to increase leniency,  $B = .44,$

<sup>10</sup>Other models were also examined (using both guilt and recidivism as distal outcomes), but in no model did any predictor other than culpability ever predict either of these variables (an exception to this is noted in text, for the model predicting recidivism), and when empathy was included in the model, condition did not significantly predict any variable other than empathy.

<sup>9</sup>As in Studies 2 and 3, we varied defendant and victim gender, and initially explored each of these factors as predictors of all dependant variables. Again, no effects involving gender emerged, so analyses collapsed across all gender variables.



**Figure 3** Effects of perspective taking and leniency conditions (relative to control) on probability of guilty verdicts and perceived likelihood of recidivism, mediated by defendant culpability, leniency, and empathy for the defendant. Paths were estimated in two separate models, but are pictured together for simplicity. Because coefficients from both models were very similar, those not directly involving guilt or recidivism are from the model predicting recidivism (all coefficients are reported in the text). Direct and indirect paths involving guilt are probit coefficients. All coefficients are unstandardized. All direct and indirect paths are significant,  $p \leq .01$ .

$CI_{.95} = (.16, .72)$ ,  $p = .002$ , worked through empathy and leniency to lower culpability,  $B = -.33$ ,  $CI_{.95} = (-.56, -.10)$ ,  $p = .005$ , and was mediated by each of these to lower probability of guilt,  $B = -.18$ ,  $CI_{.95} = (-.31, -.04)$ ,  $p = .009$ ; greater empathy with the defendant led indirectly to lower culpability through leniency,  $B = -.21$ ,  $CI_{.95} = (-.37, -.05)$ ,  $p = .008$ , and to a lower probability of guilt through leniency and culpability,  $B = -.27$ ,  $CI_{.95} = (-.36, -.18)$ ,  $p < .001$ . Finally, greater leniency led indirectly through culpability to a lower probability of guilt,  $B = -.17$ ,  $CI_{.95} = (-.30, -.04)$ ,  $p = .01$ .

The model treating recidivism as an outcome was almost exactly the same, with the exception that even when culpability was treated as a predictor of recidivism, empathy with the defendant continued to have a significant direct association with recidivism.<sup>11</sup> Relative to control, the combined perspective taking and leniency conditions resulted in higher empathy with the defendant,  $B = .52$ ,  $CI_{.95} = (.18, .89)$ ,  $p = .006$ ,  $R^2 = .03$ , and greater empathy predicted greater leniency,  $B = .66$ ,  $CI_{.95} = (.56, .75)$ ,  $p < .001$ ,  $R^2 = .47$ , lower culpability,  $B = -.26$ ,  $CI_{.95} = (-.44, -.10)$ ,  $p = .006$ ,  $R^2 = .32$ , and lower recidivism,  $B = -.24$ ,  $CI_{.95} = (-.38, -.09)$ ,  $p = .002$ ,  $R^2 = .34$ . Greater leniency also predicted lower culpability,  $B = -.28$ ,  $CI_{.95} = (-.43, -.11)$ ,  $p = .001$ , and lower culpability predicted lower recidivism,  $B = .50$ ,  $CI_{.95} = (.38, .62)$ ,  $p < .001$ . All indirect effects were again significant and mediated by the same variables. Specifically, significant indirect effects were found from perspective taking condition to leniency,  $B = .34$ ,  $CI_{.95} = (.12, .61)$ ,  $p = .006$ , culpability,  $B = -.25$ ,  $CI_{.95} = (-.45, -.08)$ ,  $p = .006$ , and recidivism,  $B = -.25$ ,  $CI_{.95} = (-.45, -.10)$ ,  $p = .004$ ; from empathy to culpability,  $B = -.21$ ,  $CI_{.95} = (-.34, -.09)$ ,  $p = .001$ , and recidivism,  $B = -.24$ ,  $CI_{.95} = (-.34, -.15)$ ,  $p < .001$ , and from leniency to culpability,  $B = -.16$ ,  $CI_{.95} = (-.27, -.07)$ ,  $p = .001$ .

<sup>11</sup>This model fit the data well,  $\chi^2(4, N = 223) = 4.81$ ,  $p = .31$ , CFI = 1.0, RMSEA = .03,  $p$  close = .56.

As in Experiment 2, Experiment 4 found that perspective taking worked through empathy to decrease perceptions of the defendant's guilt and likelihood that the defendant would commit a crime similar to the one being currently adjudicated. However, using both experimental and measurement methods, we found that empathy not only works directly to lower perceptions of the defendant as culpable—driving a lowered probability of guilt and likelihood of recidivism—but also works through making perceivers feel more lenient toward the defendant. We believe this because (a) greater empathy for the defendant mediated greater leniency, which then mediated decreased culpability, and (b) when participants were simply asked to be lenient toward the defendant, the findings looked almost exactly the same as when they were asked to take the perspective of the defendant. This strongly suggests that, at least in the case of legal reasoning, perspective taking works to affect outcomes by increasing empathy toward the target of perspective taking (e.g., the defendant), which affects a willingness to be lenient, which then affects lowered responsibility, and through this, guilt. We discuss this and other findings below.

## General discussion

The four experiments reported here provide an applied and theoretical addition to the literature on perspective taking, fitting in with and extending past research that shows how taking the perspective of a target often—but not always—leads to viewing the target more favorably (e.g., Archer et al., 1979; Batson et al., 2007; Clore & Jeffrey, 1972; McCullough et al., 1997). In the experiments reported here, taking the perspective of a criminal defendant led to seeing the defendant as less culpable than not taking the defendant's perspective, which led to perceptions of the defendant as less guilty and less likely to recidivate. In addition, we showed that taking the perspective of a victim of a crime increases the perception of a

*defendant's* culpability, guilt, and likelihood of recidivism, demonstrating that the effects of perspective taking can reach beyond the target to affect perceptions of actors whose perspectives have not been taken.

Experiments 2 and 4 further demonstrated that empathy for the defendant transmitted the effects of perspective taking to other variables; and in Experiment 3, we uniquely demonstrated that empathy for the *victim* can also impact perceivers' judgments of the defendant, even when the defendant's perspective has not been taken. Interestingly, while empathy itself was target-specific and not just a generalized effect (e.g., increased empathy for the defendant and not the victim when the defendant was the target), the downstream effects of empathy were always directed at the defendant, likely because the defendant provided an outlet for perceivers to render judgments. Last, Experiment 4 extended the first three experiments by showing that perspective taking with a defendant can serve as a cue for perceivers to be lenient. This is important because it demonstrates a new, additional mechanism by which empathy—a variable that itself transmits the effects of perspective taking to outcomes—can transmit its effects to other targets, at least in a legal decision-making context.

These findings extend our knowledge in several important ways, but also provide solid links to existing research. For example, our findings align with work showing that perspective taking leads perceivers to value targets more than control participants (e.g., Batson et al., 2007). Our findings also provide further evidence that perspective taking increases empathetic feelings that result in greater sensitivity to the plight of the target (Archer et al., 1979; Batson et al., 2005; Clore & Jeffrey, 1972). In addition, the current studies are consistent with the idea that jurors may bias their perceptions of culpability, recidivism, and guilt based on whose perspective has been taken in the courtroom (Catellani & Milesi, 2001; Frantz & Janoff-Bulman, 2000).

Our studies also add peripherally to work on the role of gender in empathy, which has returned mixed results in different studies. For example, some studies show that men score lower than women on self-reported empathy and perspective taking measures (Eisenberg & Lennon, 1983; Hoffman, 1977; Hoffman & Levine, 1976), while other reviews have found no differences between men and women in their *actual* ability to perspective take or feel empathy (Maccoby & Jacklin, 1974). Although our findings are consistent with this latter idea, an interesting area for future research is whether this will hold true when the crime committed is stereotypic of men or women (Skorinko & Spellman, 2013).

While the current research highlights the roles of empathy and leniency, we acknowledge that other underlying causal mechanisms may play a role in how perspective taking affects decision-making in legal settings. Here, we experimentally examined one possible alternative mechanism—perceived

similarity (e.g., Goldstein & Cialdini, 2007; Maner et al., 2002)—by measuring participants' gender and varying the gender of defendants and victims. However, as operationalized here, similarity had no effect on outcomes. Still, future research should investigate the similarity hypothesis further, because other forms of similarity (e.g., race, socioeconomic status, age, etc.) may be more salient in courtroom contexts than gender appeared to be here.

Another mechanism that deserves attention in future research on perspective taking in the courtroom is self–other merging, because past research has found this variable to be one of the routes by which perspective taking influences interpersonal perception. That is, perspective takers are hypothesized to see targets as more “self-like” (Davis, Conklin, Smith, & Luce, 1996; Galinsky, 2002; Galinsky, Ku, & Wang, 2005; Galinsky & Moskowitz, 2000; Galinsky, Wang et al., 2008), but also to see themselves as more “like” the target (Galinsky et al., 2008; Goldstein & Cialdini, 2007; Laurent & Myers, 2011). It seems likely that, along with empathy, self–other merging could work to influence perceptions of a defendant in a criminal setting, and this might be tested as a competing or complementary mediator in future work.

While the current research confirms our theoretical model linking perspective taking, through empathy, to culpability and other outcomes, it is not without limitations. One such limitation is that the current research focuses on interpersonal rather than intergroup contexts within the courtroom. In an actual courtroom setting, jurors would likely be aware of their own group memberships, as well as the group memberships of defendants and victims of crime, and these intergroup variables might affect how perspective taking operates during actual jury deliberation. While we did test the effects of defendant, victim, and participant gender, there are a number of other intergroup factors that should be examined in future research. For instance, past research shows that a black defendant is more likely to be seen as responsible for a crime when the victim of the crime is White (Hymes, Leinart, Rowe, & Rogers, 1993; Klein & Creech, 1982; Sweeney & Haney, 1992; Williams & Holcomb, 2001). Similarly, the stereotypicality of a crime plays a significant role in determining if a defendant is likely to be viewed as responsible for the crime (Gordon, Michels, & Nelson, 1996; Skorinko & Spellman, 2013; Sunnafrank & Fontes, 1983; Willis Esqueda, 1997). In addition, the racial composition of jury panels also matters because research demonstrates that when a jury is exclusively White, jurors are less favorable toward a Black defendant than when the jury is racially mixed (Sommers, 2006).

Race also matters in perspective taking, with past research suggesting that perspective taking can reduce stereotyping (e.g., Galinsky & Moskowitz, 2000; Galinsky, Wang et al., 2008; Skorinko & Sinclair, 2013; Vescio, Sechrist, & Paolucci, 2003). However, we also know that perspective takers sometimes

anchor on their own egocentric perspectives or blatant stereotypes when inferring the thoughts of another person (Epley et al., 2004; Skorinko & Sinclair, 2013). Furthermore, the amount of group-based guilt perceivers feel influences the extent to which perspective takers wish to take collective action (Mallett, Huntsinger, Sinclair, & Swim, 2008), which could be important in courtroom settings. Simultaneously considering research on race in the courtroom, and research on race and perspective taking, it seems clear that more work needs to be done in bringing these research traditions together, because it is unclear whether being instructed to take the perspective of an outgroup defendant would work to increase or decrease favorability toward the defendant.

Another limitation of the current research involves generalizability to the legal world, because we tested our model in a way that differs from how decisions in real courtrooms are made. For example, the current studies rely on vignettes rather than videotaped or mock trials, and also rely on individual jurors' decisions rather than group decisions made after jury deliberations. Moreover, the participant sample draws mainly from a university population. However, our interests were primarily in understanding the psychological processes underlying perspective taking in the courtroom, and we therefore relied on procedures used by others to explore psychological processes in this domain (Nuñez, Dahl, Tang, & Jensen, 2007). In addition, to link our work more closely to other research on perspective taking, we chose to focus on individual decision-making. Last, while our participants were undergraduates, we took care to recruit students, when possible, from each class (e.g., first years through seniors), and all participants were U.S. citizens who were over 18 and were therefore potentially jury eligible citizens. While we believe that our studies provide a solid foundation and contribute to our understanding of how perspective taking can operate to influence real-world outcomes, we also acknowledge that future research can extend this work by addressing some of these real-world issues. For instance, studies could investigate how the effects of perspective taking work during juror deliberations (e.g., Bornstein, 1999; Nuñez, McCreary, & Culhane, 2011), perhaps using videotaped trial proceedings (Archer et al., 1979), and recruiting from a more diverse pool of jurors. In addition, future research should examine what happens when jurors are asked to perspective take with both the defendant and the victim—a possibility that might actually occur in the dynamic nature of the courtroom.

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In conclusion, the current research demonstrates that perspective taking may play an important role in the courtroom, and extends past research in a number of ways. First, it examines the effects of perspective taking not only on interpersonal perception but on decision-making in a legal domain. Second, the research demonstrates—using an induction consisting of a lawyer's statements to a jury during closing arguments—that perspective taking can be manipulated more subtly and naturalistically than has often been the case in previous research (e.g., Batson et al., 1989; Galinsky & Moskowitz, 2000; Vescio et al., 2003). Third, it confirms that the effects of perspective taking are not limited to the target, but can extend beyond the target to others (e.g., Laurent & Myers, 2011). Fourth, it shows a new mechanism—leniency—by which empathy can affect outcomes, at least in criminal proceedings. Finally, it provides an important contribution to the literature by clearly and consistently demonstrating a role for empathy in mediating the effects of perspective taking on perceptions of defendant culpability, working in part through a greater desire for leniency to finally affect participants' belief in a defendant's guilt and likelihood of recidivism.

Thus, this research provides empirical evidence that partially supports the advice given by trial consultants to defense attorneys. Minick (2006) wrote:

... [perspective taking] puts the focus on the plaintiff as actor in the case scenario. This forces the jurors to deal with the behavior of the plaintiff objectively, rather than focusing just on the harm suffered and takes some of the emotion out of the case. This also puts the role of the defendant in perspective (p. 4).

Consistent with this, the current research demonstrates that when jurors take the perspective of a defendant, they are more favorable toward them. However, our research shows that emotion is not necessarily removed; rather, empathy is redirected because perspective taking with the defendant increased empathy toward the defendant. Our results also demonstrate the precarious nature of perspective taking in the courtroom because the target matters, as shown by the findings that perspective taking with the victim increases empathy toward the victim and results in less favorable perceptions of the defendant. Thus, perspective taking can be a double-edged sword. Depending on the desired outcome, it is important to, like a weapon, point it toward the target where it will do the most good.



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## Appendix A: defense's closing arguments in Experiment 1

While there are some vague similarities between the story that the prosecution would have you believe and the facts that we've heard so far in this case, there is certainly not enough solid evidence to convict Mr. Johnson of vehicular manslaughter. Their case rests on the shaky testimony on an 11-year-old girl who suffered intense emotional trauma after watching her brother get run over and die right in front of her. It is unlikely that she could correctly remember the license plate of the car. There are 40 cars in the defendant's neighborhood that match the description the little girl gave that could have been driving back from the community celebration and hit the boy, and five of them have license plates that have two of the three letters that the girl thought she remembered seeing. Just to further prove this point Dr. SO AND SO, an expert in the field of child psychology with a PhD degree from the acclaimed University of Virginia testified, "I have researched and published extensively on childhood trauma and the response of the child to it. It is my professional opinion that the little girl could not have possibly remembered the license plate of the driver of the vehicle. She felt helpless in this situation, so when the police said it would be a big help in catching the person who ran over her brother if she could remember the license plate, she wanted to remember it so much she made up a license plate that she saw." This case is built solely on coincidences and not concrete proof that the defendant committed the crime. Yes, he may have attended a party in the neighborhood. Yes, he may have had a few drinks at the party—who wouldn't. However, there is no clear evidence to link my client, Mr. Johnson with the crime. Moreover, the prosecution would like you to believe the Mr. Johnson was inebriated on that night, yet, no breathalyzer was administered by police and Ms. Smith, the defendant's girlfriend, trusted Mr. Johnson to not only drive her home, but to leave and drive himself home.

### *Perspective Taking Condition Only:*

Ladies and Gentlemen of the jury, I want you to imagine how you would feel if you were in my client's shoes? You are all upstanding citizens, like my client, so how would you feel if you were wrongly accused of a crime that you did not commit? How would you feel if you were put in jail because a family needed to blame someone for the death of their loved one? How would you feel if the evidence provided against you was all circumstantial and nothing concrete?

For the state to prove that the defendant committed this crime, they have to prove beyond a shadow of a doubt that the defendant was driving the same car that caused the death of Randall Williams, which they did not. Their main evidence rests on the word of an 11-year-old girl, which has been proved unreliable by the expert witness. The defendant should be set free with no punishment.

## Appendix B: example of the trial summary used in Experiments 2, 3, and 4

### Prosecution's closing statement

Ladies and Gentlemen of the jury, based on the evidence provided by the police and various witnesses of the hit-and-run, it has been made clear to us today that Ms. Megan Johnson committed a hit-and-run—a felony in the state of Virginia because the incident caused major injuries to the victim, Ms. Jessica Williams. And, Ms. Johnson, should be punished for the crime she committed, and the undue suffering that the victim must now endure.

Ladies and Gentlemen of the jury, Ms. Johnson claims that she "did not even drive on that street" on the night of the hit-and-run; yet, why should we believe her? Could it be mere coincidence that the Ms. Johnson owns and operates the same

car that witnesses reported was at the scene of the crime? Could it be mere coincidence that the Ms. Johnson's license plate matches the same characteristics as those reported by witnesses and that her vehicle has damage to the same side of the car that would have hit the victim? Could it also be mere coincidence that Ms. Johnson, who clearly admits to normally driving down Main Street on her way home, suddenly, on the night of the crime, decided to take an alternate route home like she claims? Is it also mere coincidence that she also happened to have dropped off a friend, who lives near the scene of the accident, around the same time the accident occurred?

There are simply too many "coincidences"; rather, the evidence clearly indicates that Ms. Johnson did **not** take an alternate route home; rather, she dropped her friend off at their apartment (slightly before 10:00 p.m. as the friend testified in court), and she then took her normal route home. Given her inebriated state, Ms. Johnson drove irresponsibly home (something she's done before given her past DUI record), in the middle of the road, and she suddenly noticed an on-coming vehicle. To avoid the on-coming vehicle, she swerved too quickly and violently, and lost control of her car—and subsequently hit Ms. Williams as she was walking home on the sidewalk.

The evidence presented today clearly demonstrates Ms. Johnson owns and operates a vehicle that matches the make and model of the vehicle involved in the hit-and-run. In addition, Ms. Johnson's vehicle has damage to the same side of the car that would have hit the victim, Jessica Williams. And, it has become clear in this case based on the testimony of those at the community celebration that Ms. Johnson had been drinking that night and we all know that alcohol impairs judgment, driving skills, and memory—not to mention she has been caught driving under the influence of alcohol in the past.

\*\*Perspective Taking Prompt Entered Here for Experiment 3\*\*\*

In conclusion, Ladies and Gentlemen of the jury, this is not mere coincidence; rather there is clear evidence that Ms. Johnson was in fact the driver of the vehicle that hit Ms. Jessica Williams on that July 4th evening. We seek maximum punishment for this felony.

### ***Defense's closing statements***

Ladies and Gentlemen of the jury, while there are some vague similarities between the story that the prosecution would have you believe and the facts that we've heard so far in this case, there is certainly not enough evidence to convict my client, Ms. Megan Johnson of hit-and-run. Their case rests on the shaky testimony of witnesses who, when pressed, are suddenly unsure about what they saw. I ask you this, "Where is the evidence?"

The prosecution will have you believe that the witnesses remembered the characters of the license plate and that they

clearly match those characteristics of my client, Ms. Johnson's license plate. Yet, police records indicate that there are 8 other vehicles in this county that have those same characters in their license plates. Moreover, there are 2 other vehicles in the county that also match the make and model of the vehicle suspected to have hit Jessica Williams. How is it that my client is the one being accused of the crime?

The prosecution would also like you to believe that the memories of the witnesses were infallible that evening; however, we brought in experts in the areas of witnesses and memory and they all came to the same conclusion: the scene was too chaotic for the witnesses to process the types of details (like the characters on the license plate) that the witnesses reported; the scene was too dark for the witnesses to have seen everything they claim they saw; and the experts provided statistical evidence to demonstrate that witness's memories are often not always very accurate.

Moreover, the accident occurred around 10:00 p.m. in the evening. The scene of the crime was dimly lit and many of the witnesses had also been at community celebrations where they too were most likely drinking the same type of alcoholic beverages that my client had. Through the testimony of my client and those at the same celebration, it is clear that Ms. Johnson drank responsibly. She had a few drinks early on in the evening, and then stopped because she knew she was driving home. In fact, her friend relied on her and believed she was "completely sober and completely able to drive", and subsequently got a ride home from Ms. Johnson. The prosecution would like you to believe that based on one past DUI that occurred over a year ago, that my client regularly drives home intoxicated. That simply isn't the case. There was one night, over a year ago, that my client made a mistake and drove home too soon after finishing her last drink, and she got caught. But, she learned from that mistake—as she testified in the courtroom.

This case is built solely on coincidences and not concrete proof that my client committed the crime. Yes, she may have attended a party in the neighborhood and yes, she may have had a few drinks at the party, but there is no clear evidence to link my client, Ms. Johnson with the crime. In fact, my client testified, under oath, that she took another route home that evening, and she provided evidence that the damage to her car had occurred on an evening after the accident and she has the claim to her insurance as evidence.

\*\*Perspective Taking Prompt Entered Here for Experiments 2 and 4; Leniency Prompt Entered here for Experiment 4\*\*.

I think we all can agree that what happened to Jessica Williams is indeed horrible and unfortunate. But, the problem is that the state needs to prove that my client, the defendant, committed this crime. However, they have not done so without a shadow of doubt. Their main evidence rests on the fallible memories of witnesses who claimed to have seen things that they most likely didn't see. My client should be found not guilty.