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Jurors' Perceptions of Juvenile Defendants: The Influence of Intellectual Disability, Abuse History, and Confession Evidence[†]

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Understanding jurors' perceptions of juvenile defendants has become increasingly important as more and more juvenile cases are being tried in adult criminal court rather than family or juvenile court. Intellectual disability and child maltreatment are overrepresented among juvenile delinquents, and juveniles (particularly disabled juveniles) are at heightened risk for falsely confessing to crimes. In two mock trial experiments, we examined the effects of disability, abuse history, and confession evidence on jurors' perceptions of a juvenile defendant across several different crime scenarios. Abused juveniles were treated more leniently than nonabused juveniles only when the juvenile's crime was motivated by self-defense against the abuser. Jurors used disability as a mitigating factor, making more lenient judgments for a disabled than a nondisabled juvenile. Jurors also completely discounted a coerced confession for a disabled juvenile, but not for a nondisabled juvenile. In fact, compared with when it was portrayed as voluntary, jurors generally discounted a juvenile's coerced confession. Implications for public policy and directions for future research are discussed.

Understanding jurors' perceptions of juvenile defendants has become increasingly important because of the growing trend of trying juveniles in adult criminal court rather than family or juvenile court. In 2002, for example, over 2 million juveniles were arrested in the United States. Of those cases eligible for processing in the

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juvenile justice system, 7% were referred directly to criminal court (Snyder, 2004), where juveniles often face a jury. Further, as noted by Slobogin (in press), although juries are not mandated in juvenile court (*McKeiver v. Pennsylvania*, 1971), in some states juveniles are entitled to a jury trial in juvenile as well as adult court (e.g. Kansas; *In re L. M.*, 2008).

Although evidence is generally the strongest predictor of juror judgments in cases involving adult defendants, research suggests that a host of extralegal factors can also influence juror verdicts in important ways (for a review, see Devine, Clayton, Dunford, Seying, & Pryce, 2001). The few existing studies of jurors' perceptions of juveniles reveal that this is true in juvenile cases as well. For example, jurors' perceptions and case judgments are affected by trial factors such as attorneys' attempts to induce jurors' empathy for and stereotypes about juvenile defendants (Haegerich & Bottoms, 2000) and by juvenile individual difference factors such as race (Stevenson & Bottoms, in press). Juveniles in the legal system are especially likely to be intellectually disabled (Kazdin, 2000) or have a history of child maltreatment (Widom, 1989), and they are at heightened risk for falsely confessing to crimes they did not commit (Drizin & Leo, 2004). Thus, it is important to understand the influence of these variables on jurors' perceptions of juvenile defendants. In two studies, we used a mock trial paradigm to examine jurors' perceptions and judgments in criminal cases involving a juvenile defendant. In Study 1, we examined the influence of a juvenile's history of childhood abuse and intellectual disability; in Study 2, we continued our examination of intellectual disability, but also studied the influence of a juvenile's confession on jurors' perceptions and judgments.

STUDY 1

Intellectual Disability

Kazdin's (2000) review of studies estimating intellectual disability among delinquent youth suggests that 7–15% are disabled (i.e. have IQs below 70; American Psychiatric Association (*DSM-IV-TR*), 2000). In fact, because the average IQ for juvenile offenders is consistently at least one standard deviation below the population average (Burnett, Noblin, & Prosser, 2004; Goldstein, Condie, Kalbeitzer, Osman, & Geier, 2003; Viljoen, Klaver, & Roesch, 2005), even more are probably in the borderline range of intellectual disability (i.e. IQs ranging from 71 to 84; *DSM-IV-TR*, 2000). Yet we do not know whether or how intellectual disability influences jurors' perceptions and judgments. The only research we know of examining perceptions of intellectually disabled juveniles in a courtroom context is a study of a trial involving a 15-year-old *victim* of child sexual abuse. Jurors rendered more pro-prosecution judgments when the victim was described as "mildly mentally retarded" compared with "of average intelligence" (Bottoms, Nysse-Carris, Harris, & Tyda, 2003). Results supported the researchers' theory that jurors consider an intellectually disabled victim (like a young child) as more honest and less cognitively able to fabricate false accusations than a victim of average intelligence.

Knowledge about jurors' perceptions of intellectually disabled juvenile defendants may be garnered from studies examining perceptions of disabled *adult*

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defendants (e.g. Garvey, 1998; Gibbons, Gibbons, & Kassin, 1981). For example, Garvey (1998) surveyed jurors from actual capital murder cases to learn how they reacted to various case factors, or how they thought they would have reacted had the factor been present in the case. Most jurors (71%) reported that they were or would have been less likely to vote for the death penalty if the defendant was mentally retarded. Gibbons and colleagues (1981) surveyed undergraduates and found that most supported special treatment (e.g. special courts and facilities) for disabled adult defendants in the court system. In another study by Gibbons et al. (1981), mock jurors read a narrative describing either an intellectually disabled or nondisabled adult accused of committing either vandalism or burglary and assault. Jurors believed that, compared with a nondisabled defendant, a disabled defendant was more likely to have committed vandalism, but less likely to have committed burglary and assault. Perhaps, given the findings by Bottoms and colleagues (2003), a disabled adult is perceived as less cognitively and criminally sophisticated than a nondisabled adult, and therefore less capable of planning and completing complex crimes such as burglary and assault but competent to commit a less complex crime like vandalism. Gibbons and colleagues also found that mock jurors were more likely to make internal rather than external attributions about the cause of the crime for the nondisabled defendant, but they were more likely to make external rather than internal attributions for the disabled defendant. For example, mock jurors believed that a disabled defendant was more likely to have been coerced into committing a crime by another person than to have been motivated by financial need or an inherent criminal character. Gibbons et al. attributed this to the *patronization effect* (Gibbons, Sawin, & Gibbons, 1979), a tendency for people to attribute disabled adults' behavior to external rather than internal factors and attribute less responsibility to disabled compared with nondisabled individuals, presumably driven by beliefs that disabled individuals are incompetent and have little control over their own lives. This is consistent with Kelley's (1973) discounting principle, whereby people discount possible internal causes for behavior when a more plausible external cause exists; in this case, intellectual disability may signal jurors to search for alternative external explanations.

To examine whether such effects would extend to cases involving juvenile defendants, we conducted a mock trial study in which we varied crime type and whether a juvenile defendant was intellectually disabled. We predicted that our mock jurors would render more pro-defendant judgments for a disabled juvenile compared with a nondisabled juvenile, especially when the juvenile was accused of a relatively severe crime. Consistent with research and theory described previously, we expected that disability status would affect case judgments because the jurors would believe disabled juveniles to be less cognitively competent than nondisabled juveniles, and therefore less capable of planning and comprehending the criminal implications of crimes, and, because of the patronization effect and discounting principle, less responsible for crimes committed.

History of Childhood Abuse

Intellectually disabled children are at higher risk for maltreatment than other children (for a review, see Westcott & Jones, 1999), and maltreated children are at

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higher risk for delinquency than nonmaltreated children (Maxfield & Widom, 1996; Widom, 1989; for a review, see Widom & Wilson, in press). Thus, many juvenile defendants, especially disabled defendants, are victims of childhood abuse. In fact, Mason, Zimmerman, and Evans (1998) found that 51% of adjudicated adolescents had experienced physical abuse and 19% had experienced sexual abuse. Insight into jurors' perceptions of abused juveniles is critical for understanding jurors' decision making in cases involving juveniles.

Research examining perceptions of adult defendants who were abused as children has generally demonstrated that a history of child abuse has a mitigating effect on jurors' judgments (e.g., Garvey, 1998; Heath, Stone, Darley, & Grannemann, 2003; Lynch & Haney, 2000). For example, Garvey (1998) found that, although only 37% of jurors reported being less likely to vote for the death penalty if the adult defendant had been seriously abused as a child, child abuse was more mitigating than other factors including poverty, substance abuse, and having no previous criminal record. In a simulated capital sentencing trial (Lynch & Haney, 2000), 62% of mock jurors reported using an adult defendant's history of child physical abuse as a mitigating factor. Heath and colleagues (2003) found that mock jurors rated a defendant's history of childhood physical abuse as one of the most persuasive of 15 different possible defenses proffered to excuse an adult defendant of assault and battery. Further, as participants' ratings of the persuasiveness of the defenses increased, they perceived the defendant to be less responsible and to have had less control over the crime, and, in turn, they rendered shorter sentences.

Three studies that we know of have focused on the influence of a history of child abuse on perceptions of juvenile defendants. In the first (Stalans & Henry, 1994), mock jurors read a vignette describing a 16-year-old boy accused of killing either his father or a neighbor after a heated argument. The boy was either described as having been previously beaten and abused by his father or not. Participants were generally less likely to favor transferring the abused juvenile than the nonabused juvenile from juvenile court to adult court. Participants were least likely to transfer a juvenile to adult court if he killed his abusive father than in any other condition. Nunez and colleagues (Nunez, Dahl, & Hess, 2005; Nunez, Dahl, Tang, & Jensen, 2007) reported similar results, although the mitigating effect of abuse history was weaker for a girl than a boy defendant. Thus, abuse history influences jurors' judgments in a mitigating way in some conditions, but why? In the study by Nunez and colleagues (2005), 10% ($N = 35$) of mock jurors in the abused condition but only one juror in the nonabused condition chose a self-defense verdict, leading the authors to conclude that jurors used the father's past abuse to justify the juvenile's crime. Indeed, the effects of abuse history were typically strongest in the Nunez et al. (2007) and Stalans and Henry (1994) studies when the juvenile was accused of murdering the perpetrator of the abuse (the father) as opposed to the nonabusive neighbor. Thus, jurors might have interpreted the crime as a self-defense reaction, and the abuse history effect could be driven by jurors' feelings that the murder of an abuser is justified.

Yet in the research by Nunez and colleagues (2007) and Stalans and Henry (1994), even when the juvenile's murder victim was a nonabusive neighbor, participants were less likely to recommend adult court for an abused juvenile compared with a nonabused juvenile. Thus, people might generally feel more positive toward abused juveniles, perhaps sympathetic toward them. In fact, Stalans

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and Henry found that sympathy for the abused juvenile affected jurisdictional preferences on a univariate level, but sympathy no longer affected preferences once jurors' specific inferences about the juvenile's intent and recidivism risk were taken into consideration.

We investigated whether the mitigating effect of abuse history manifests when juveniles are portrayed as intellectually disabled and whether the effect generalizes across four different crimes of increasing severity: shoplifting, a drug offense, self-defense murder, and aggravated murder. Given the theoretical considerations discussed previously, we predicted that mock jurors would have a more positive reaction to abused than nonabused juveniles generally, and thus render more favorable judgments across all crime types, not only the crime in which a murder was committed in self-defense. We also predicted main effects of crime type such that jurors' judgments would be less lenient and perceptions less favorable to the defendant as the crime increased in severity.

Method

Study 1 conformed to a 2 (abuse history: abused or nonabused) $\times$ 2 (disability status: intellectually disabled or nondisabled) $\times$ 4 (crime type: shoplifting, drug offense, self-defense murder, or aggravated murder) experimental design, with crime type varied within subjects and other variables varied between subjects.

Participants

Participants were 203 jury-eligible undergraduate psychology students (44% men) at the University of Illinois at Chicago (UIC), who participated in exchange for course credit. The sample was all United States citizens, young ($M = 19$ years old, $SD = 2$, ranging from 18 to 30), and ethnically diverse (32% Asian, 30% Caucasian, 20% Hispanic, 10% African American, and 7% of other backgrounds). We dropped an additional 14 participants: five who missed the abuse manipulation check, seven who missed the intellectual disability manipulation check, and two who missed both. There were 22–30 participants in each of the experimental cells.

Materials

Description of juvenile. A written paragraph delivered basic information about the juvenile and the experimental manipulations. In all conditions, the paragraph stated that (a) the juvenile was a 16-year-old Caucasian girl from a lower- to middle-class socio-economic background; (b) that a psychologist testified that she had "no major psychological problems"; and (c) that she was accused of committing the crime in question three months earlier. We studied a girl defendant because, although boys are more likely to offend than girls, the number of girl offenders is rising even faster than that of boys and they deserve empirical attention (Garbarino, 2006). To manipulate abuse status, the juvenile was said to have either "a history of neglect by her parents and maltreatment, including physical and sexual abuse at the hands of her father" or "no known abuse or neglect experiences." To manipulate disability

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status, the psychologist testified that the girl was either ''mildly mentally retarded'' or ''of average intelligence.'' We used the description ''mildly mentally retarded,'' as did Bottoms and colleagues (2003), because Henry, Keys, Jopp, and Balcazar (1996) found that similar participants were unfamiliar with the term ''developmentally disabled.''

Case vignettes. Four separate vignettes, each approximately a half-page in length, described the juvenile defendant as unambiguously guilty of each of four crimes because we were focused on understanding the influence of our independent variables on participants' attributions for the causes of these crimes. In the least severe case, the juvenile was charged with shoplifting items totaling over $500. She was seen by a security guard and arrested. In the drug offense case, participants were told that the juvenile attempted to sell crack-cocaine to an undercover police officer near an elementary school. She was arrested and found with 30 grams of crack-cocaine. In the self-defense murder vignette, the juvenile shot her father and said it was in self-defense after a verbal and physical fight with the drunken man. Information was also presented that she was a difficult child and that the juvenile had asked a friend earlier that day if she could come live with her if something happened to her father. In the most severe vignette, the aggravated murder case, the juvenile stabbed and killed a classmate at school because the juvenile was jealous that the classmate had been flirting with a boy on whom the juvenile had a crush. The two girls had fought at school before and the juvenile was found with the bloody knife after the murder.

Case judgments. Each vignette was followed by four case judgments. To examine mock jurors' attributions for the cause of the crime, we asked them to rate from 1 (not at all) to 6 (completely) how ''bad of a person'' they perceived the juvenile to be (i.e. internal attribution), the extent to which the juvenile was ''responsible for the crime'' (i.e. internal attribution), and the extent to which her ''background was a factor that led her to commit this crime'' (i.e. external attribution). Jurors also rated the extent to which she could ''be rehabilitated so that she becomes a productive member of society who does not commit any more crimes'' (i.e. sentencing goal).

Demographic and manipulation-check questionnaire. A brief questionnaire assessed juror gender, age, citizenship status, and ethnicity. Manipulation check items asked participants to indicate (*yes* or *no*) whether the juvenile had been portrayed as abused and whether she was mentally retarded.

Procedure

Participants completed the study alone or in mixed-gender groups of 2–10. They were told to play the role of a juror and to take this role very seriously because the results of the study could be used to inform the court system. They were told they would make judgments about the cases, such as verdict judgments, and that they might be involved in group deliberations with other participants. After giving informed consent, participants were told that they would first read a paragraph describing a girl juvenile defendant, then read four separate vignettes describing her

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crimes. Participants were asked to make judgments about each case independently before moving to the next case. That is, they were told to think of the girl described in the paragraph as they considered each case, but that they should consider each case individually and separately from all others (i.e. that the juvenile was not accused of committing all four crimes). Before each vignette they were told to disregard the prior case and re-read the girl's description before reading the next case. Each vignette and its associated case judgments were distributed to participants in different orders as determined by a Latin square. After the final vignette and judgments, participants completed the demographic questionnaire, were thanked, and debriefed, in keeping with an approved Institutional Review Board (IRB) protocol. The entire procedure lasted approximately 30–45 minutes.

Results

Latin square analyses of variance (ANOVAs) revealed statistically significant order effects for all dependent variables, $F(3, 603) \geq 4.51$, $p \leq .01$, which we extracted from the data using the steps recommended by Keppel and Wickens (2004). Specifically, we organized the data by order and calculated the effect, subtracted the effect from each of the original scores, and then reorganized the adjusted data by our within-subject factor (crime type).

We were not interested in participant gender effects in this study, but because Stalans and Henry (1994; but not Ghetti & Redlich, 2001) found that women were more lenient than men, we conducted four separate preliminary 2 (abuse history: abused or nonabused) $\times$ 2 (disability status: intellectually disabled or non-disabled) $\times$ 4 (crime type: shoplifting, drug offense, self-defense murder, or aggravated murder) $\times$ 2 (juror gender) mixed ANOVAs on all dependent measures. Only one significant gender effect emerged: a three-way interaction of gender, disability status, and crime on perceived amenability to rehabilitation, $F(3, 579) = 3.93$, $p < .01$. A 2 (abuse history) $\times$ 2 (disability status) $\times$ 4 (crime type) analysis of covariance (ANCOVA) on this dependent variable, with gender as the covariate, did not change the results presented next.

We tested our hypotheses with four separate 2 (abuse history) $\times$ 2 (disability status) $\times$ 4 (crime type) mixed ANOVAs on our dependent measures. Significant main effects of crime type were further tested with planned comparisons. We found significant main effects of crime type across all variables: perceptions of deviance, $F(3, 591) = 147.28$, $p < .001$; effect of background, $F(3, 582) = 29.11$, $p < .001$; responsibility, $F(3, 591) = 65.31$, $p < .001$; and amenability to rehabilitation, $F(3, 591) = 72.70$, $p < .001$. (See Table 1 for all means and standard deviations.) Planned comparisons revealed significant differences between each of the four crimes such that as the seriousness of the crime increased the juvenile was perceived as significantly more deviant and significantly less amenable to rehabilitation, all $F \geq 5.63$, $p < .05$. Supporting the findings by Nunez and colleagues (2005, 2007) and Stalans and Henry (1994) that jurors' attributions are sensitive to self-defense motives, the juvenile was perceived to be significantly more influenced by her background and less responsible when the crime was murder in self-defense as compared with each of the other three crimes, all $F \geq 33.03$, $p \leq .001$. Mock jurors also considered the girl to be significantly less influenced by her background and

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Table 1. Study 1: Mean ratings as a function of crime type and abuse history

Dependent measure	Crime type				
	Shoplifting	Drug offense	Self-defense murder	Aggravated murder	*Marginal*
Deviance					
Abused	3.09 (1.02)	3.90 (1.08)	3.75 (1.14)	4.81 (.87)	*3.88 (.71)*
Nonabused	3.07 (1.15)	3.86 (1.14)	4.47 (1.12)	4.81 (1.04)	*4.05 (.87)*
Marginal	*3.08_a (1.09)*	*3.87_b (1.11)*	*4.10_c (1.18)*	*4.80_d (.95)*	
Potential for rehabilitation					
Abused	5.21 (.98)	4.83 (1.01)	4.35 (1.08)	3.91 (1.22)	*4.57 (.79)*
Nonabused	5.14 (1.05)	4.79 (1.04)	4.09 (1.26)	4.21 (1.21)	*4.56 (.87)*
Marginal	*5.16_a (1.01)*	*4.81_b (1.02)*	*4.22_c (1.18)*	*4.07_d (1.21)*	
Effect of background					
Abused	3.69 (1.48)	3.87 (1.46)	5.34 (1.05)	3.97 (1.66)	*4.21 (1.06)*
Nonabused	2.98 (1.41)	3.09 (1.61)	2.94 (1.67)	2.32 (1.49)	*2.84 (1.15)*
Marginal	*3.35_{ab} (1.49)*	*3.47_a (1.59)*	*4.15_c (1.84)*	*3.13_b (1.77)*	
Responsibility					
Abused	5.32 (.92)	5.18 (.94)	4.28 (1.17)	5.44 (.85)	*5.05 (.77)*
Nonabused	5.46 (.80)	5.37 (.78)	4.92 (1.02)	5.53 (.70)	*5.32 (.57)*
Marginal	*5.38_{ab} (.87)*	*5.27_a (.87)*	*4.60_c (1.14)*	*5.48_b (.78)*	

All judgments were made on scales ranging from 1 (not at all) to 6 (completely). Values in parentheses are standard deviations. Means with different subscripts differed significantly as revealed by planned comparisons.

more responsible in committing aggravated murder compared with selling drugs, all $F \geq 8.23$, $p < .01$. Judgments about her background and responsibility for shoplifting did not differ significantly from the drug offense or aggravated murder, all $F \leq 3.46$, ns.

There were no significant main effects of abuse history on participants' perceptions of the juvenile's deviance or potential for rehabilitation, $F(1, 197) \leq 2.30$, ns. (See Table 1 for all means and standard deviations.) Abuse status did, however, significantly influence other attributions about the cause of the crime. An abused juvenile was perceived as significantly more influenced by her background, $F(1, 194) = 78.20$, $p < .001$, and significantly less responsible, $F(1, 197) = 8.17$, $p < .01$, than a nonabused juvenile. These main effects were, however, qualified by significant abuse history × crime type interactions for all four dependent measures: perceptions of deviance, $F(3, 591) = 9.78$, $p < .001$; responsibility, $F(3, 591) = 6.43$, $p < .001$; amenability to rehabilitation, $F(3, 591) = 3.64$, $p < .01$; and effect of background, $F(3, 582) = 23.84$, $p < .001$. Simple effects analyses revealed that an abused juvenile was perceived as significantly less deviant and less responsible than a nonabused juvenile only when she perpetrated murder in self-defense, $F(1, 591) \geq 37.45$, $p < .001$, and not for the other crimes, all other simple effects $F(1, 591) \leq 3.68$, ns. Compared with the nonabused juvenile, the abused juvenile was also perceived as significantly more amenable to rehabilitation when accused of self-defense murder, $F(1, 591) = 4.80$, $p < .05$, but less amenable to rehabilitation when accused of aggravated murder, $F(1, 591) = 6.49$, $p \leq .01$. There was no significant difference for the other crimes, all $F \leq .28$, ns. Finally, the abused juvenile was perceived as being more influenced by her background than the nonabused juvenile in each type of case, all $F(1, 582) \geq 19.10$, $p \leq .001$, but the effect was significantly larger for the self-defense murder case (Cohen's $d = 1.72$,

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95% confidence interval (CI) = 1.47–2.12) than any other (Cohen's d for shoplifting = .49, CI = .21–.77; drug offense = .51, CI = .23–.79; and aggravated murder = 1.05, CI = .75–1.34).

Intellectual disability had no significant main effect on perceptions of the juvenile's potential for rehabilitation, $F(1, 197) = .86$, ns, but compared with a nondisabled juvenile, jurors perceived an intellectually disabled juvenile as significantly less deviant ($M = 3.81$, SD = .86 versus $M = 4.11$, SD = .71), $F(1, 197) = 7.77$, $p < .01$, significantly less responsible for the crimes ($M = 5.03$, SD = .70 versus $M = 5.33$, SD = .65), $F(1, 197) = 11.00$, $p \leq .001$, and marginally more influenced by her background ($M = 3.65$, SD = 2.91 versus $M = 3.41$, SD = 1.34), $F(1, 194) = 2.91$, $p = .09$, respectively. The latter effect was qualified by a significant disability status × crime type interaction, $F(3, 582) = 3.28$, $p < .05$, which failed to reach significance for the other three measures, all $F(3, 591) \geq 2.09$, ns. The juvenile's background was perceived to be a significantly stronger factor when the juvenile was disabled rather than nondisabled only in the aggravated murder condition ($M = 3.46$, SD = 1.72 versus $M = 2.86$, SD = 1.79), $F(1, 582) = 13.67$, $p < .001$, not the other crime conditions, all other $F \leq .59$, ns.

Study 1 Summary and Discussion

Prior research has found a general bias for mock jurors to treat abused juveniles more leniently than nonabused juveniles, a bias that is strongest when the juvenile is accused of murdering the perpetrator of the abuse (Nunez et al., 2007; Stalans & Henry, 1994). Our results underscore the specificity of these effects to crimes that could be motivated by self-defense against the perpetrator of abuse. Specifically, our participants were less likely to make internal attributions about the cause of the abused juvenile's crime and rated the abused juvenile as less responsible than the nonabused juvenile only when she perpetrated murder in self-defense, not for other crimes. In that case, the abused juvenile was also rated as more amenable to rehabilitation. This is especially interesting considering that mock jurors said they took the juvenile's background (i.e. abuse history) into account for all four crimes, but they rated the abused juvenile differently only when the crime was murder in self-defense against an abusive father. Thus, our results indicate that abuse history does not always cause strong generalized external attributions for an abused juvenile's criminal behavior, but instead that jurors are mainly receptive to the self-preservation defense when an abused person acts against her abuser. This contradicts prior work finding leniency effects for abused juveniles accused of murdering a nonabusive neighbor (Nunez et al., 2007; Stalans & Henry, 1994). It is possible that these conflicting findings are a result of different gendered juveniles across studies, especially given that Nunez and colleagues (2005, 2007) found a weaker effect of abuse history for girl than boy defendants. Also, prior research examined perceptions of physically abused juveniles, whereas our study examined perceptions of a physically *and* sexually abused juvenile. Future research might examine whether jurors' perceptions and judgments are influenced by the type of abuse experienced by juvenile defendants.

Our finding that the abused juvenile was perceived as less amenable to rehabilitation than the nonabused juvenile in the aggravated murder case is striking.

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It suggests that jurors sometimes use abuse history as an aggravating rather than mitigating factor. In fact, Grisso (2002) recently expressed concern that expert witnesses testifying in court might incorrectly use the mounting evidence linking child abuse and juvenile delinquency as a basis for arguing that abused juveniles will re-offend and should therefore be treated more punitively than their nonabused counterparts. Our finding suggests that jurors might be open to such an argument and willing to consider a person with a history of child abuse as ''damaged goods,'' who has less potential for rehabilitation and more potential for reoffending. In fact, preliminary evidence from other work in our laboratory supports this possibility (Stevenson et al., 2008; for more discussion of this point, see Stevenson, in press).

Study 1 also revealed that adults considered the diminished capacities of intellectually disabled juveniles in a mitigating way. Consistent with the patronization effect (Gibbons et al., 1981), discounting principle (Kelley, 1973), and our hypotheses, even when it was clear that a disabled juvenile committed a crime, participants felt that she was less bad/deviant and less responsible for her actions (but not more amenable to rehabilitation) than a nondisabled juvenile who committed the same crimes. These effects held true across four distinct crime situations and were not qualified by whether the juvenile had experienced childhood abuse in her past. Further, as expected and consistent with Gibbons and colleagues' findings for adult offenders, participants were more likely to attribute the cause of the disabled juvenile's crime to an external factor (i.e. the juvenile's background) only for the most serious crime, aggravated murder. According to theory, jurors may search for external explanations when they perceive that disabled defendants are too incompetent to execute complex crimes.

STUDY 2

We continued our investigation of jurors' perceptions of intellectually disabled juveniles in Study 2, extending our work in several important ways. First, we used methods that more closely approximated the task that actual jurors face in a courtroom. Second, we extended our research in a manner that is interesting for both applied and theoretical reasons by examining the influence of intellectual disability on jurors' perceptions in the context of a new variable—whether the juvenile had confessed (under coercion or voluntarily) to a crime. As described next, both youth and intellectual disability are risk factors for falsely confessing to a crime (Drizin & Leo, 2004). (Given the lack of significant interactions between abuse history and disability in Study 1, we did not pursue our investigation of abuse history further.)

Confession Evidence

The importance of studying the influence of confession evidence on jurors' decisions is underscored by actual cases, which contain stunning examples of juveniles' false confessions to terrible crimes. For example, in the infamous Central Park jogger case, five juveniles ranging in age from 14 to 16 all separately falsely confessed and were convicted of brutally beating and raping a woman they had not touched (Drizin & Leo, 2004). They were of average intelligence, but there are also many examples of

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false confessions from juveniles with lower than average IQ. For example, 17-year-old Jessie Misskelley, one of the West Memphis Three, confessed to the murder of three 8-year-old boys (Leo & Ofshe, 1998). Misskelley is borderline intellectually disabled with an IQ of 71, and although Misskelley has not been proven innocent the details of his confession were so inaccurate that Leo and Ofshe (1998) described Misskelley's statement as a "highly probable false confession."

Goldstein and colleagues (2003) found that 67% of a general sample of boy offenders stated that they would give a false confession in hypothetical police interrogation scenarios. Further, the younger the juvenile, the more likely they are to self-report confessing: In response to a vignette describing a police interrogation, community and detained juveniles were more likely to confess than to deny an offense or remain silent as age decreased, regardless of IQ (Grisso et al., 2003; see also Woolard, Harvell, & Graham, 2008). Drizin and Leo (2004) reported that 33% of their sample of proven false confessors in actual cases were juveniles. Of these, 83% were 14 years of age or older, and therefore often eligible to be waived to adult criminal court where jurors might hear their cases. Why do juveniles falsely confess? Research has demonstrated that juveniles are suggestible and susceptible to coercion (Gudjonsson, 1992) and that suggestibility predicts false confessions in juveniles ranging from 12 to 16 years old (Redlich & Goodman, 2003; but see Candel, Merckelbach, Loyen, & Reyskens, 2005, who did not find a significant relation between suggestibility and false confessions in 7- to 9-year-olds). Stress—the hallmark of coercive police interrogations—heightens suggestibility (Gudjonsson, 1988).

Approximately one-fourth of proven false confessors are intellectually disabled adults or juveniles (Drizin & Leo, 2004; Leo & Ofshe, 1998). Intellectually disabled juveniles may not be competent to make decisions about confessing (i.e. to truthfully confess or not confess to a crime committed, or to falsely confess or not confess to a crime not committed) because of comprehension and reasoning impairments (see, e.g., Goldstein, Kalbeitzer, Zelle, & Romaine, 2006) and heightened suggestibility—they are more vulnerable than nondisabled juveniles to even subtle psychological influence, persuasion, deception, and coercion (Clare & Gudjonsson, 1993; Gudjonsson & Henry, 2003; Henry & Gudjonsson, 1999; Milne, Clare, & Bull, 2002; Young, Powell, & Dudgeon, 2003; but see Henry & Gudjonsson, 2003). In light of evidence that police often use the same coercive interrogation strategies with children and youth as they do with adults (Meyer & Reppucci, 2007), there is substantial cause for concern that innocent disabled juveniles are at risk for falsely confessing to crimes they did not commit.

Jurors are strongly biased to perceive adults' confessions as true (Kassin, 2005; Kassin & Gudjonsson, 2004), and they convict adults who confess under coercive circumstances just as often as adults who confess voluntarily (see, e.g., Kassin & McNall, 1991; Kassin & Sukel, 1997). Redlich and colleagues (Redlich, Ghetti, & Quas, 2008a; Redlich, Quas, & Ghetti, 2008b) have provided preliminary evidence that jurors are also biased to believe confessions from juvenile defendants, although they might be sensitive to the possibility that juveniles' confessions could be coerced. Specifically, Redlich et al. (2008a) examined mock jurors' reactions to scenarios describing the interrogation of a 7-, 11-, or 14-year-old boy suspect who allegedly brought a gun to school. Participants were twice as likely to determine that the boy suspect was involved in the crime when he confessed and recanted compared with

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when he never admitted involvement, regardless of his age. In a separate study by Redlich et al. (2008b), mock jurors read a transcript of an actual police interrogation of an 11- or 14-year-old juvenile suspect accused of murdering a toddler. The juvenile suspect denied allegations over 40 times before eventually admitting guilt. The police were described as using several coercive tactics, including implying that they knew the suspect was present at the time of the toddler's death and stating that they knew the suspect was guilty. Verdicts were not influenced by the juvenile's age or jurors' perceptions of the voluntariness of the confession, consistent with Kassin's research on perceptions of adults' confessions. Jurors were, however, less likely to render a guilty verdict the more credible they perceived the juvenile to be, the less they thought the juvenile understood what was happening in the interview, and the more they perceived the police to have been unfair. These findings comport with the body of work finding that prospective jurors understand that child witnesses are more suggestible than adults in the context of forensic interviews (e.g. McAuliff & Kovera, 2007; Quas, Thompson, & Clarke-Stewart, 2005).

In Study 2, we extended prior research by varying whether a juvenile offered no confession, confessed voluntarily, or confessed under coercion from a police interrogator, and by varying the seriousness of the crime the juvenile was accused of committing (a drug offense, an assault, a murder not committed in self-defense). Given the research reviewed previously, we predicted that mock jurors would be sensitive to the circumstances of a confession, recognizing juveniles' vulnerability to coercion and discounting a juvenile's coerced confession—but not completely, given the strength of jurors' biases to believe confessions (even coerced then recanted confessions) from adults (Kassin & Sukel, 1997) and juveniles (Redlich et al., 2008a, 2008b). We expected this to manifest as lowered ratings of the juvenile's guilt, more favorable perceptions of the juvenile (i.e. in terms of responsibility, credibility, and truthfulness of confession), higher ratings of the juvenile's susceptibility to coercion, lower ratings of the juvenile's understanding of what was happening during the interrogation, and less favorable perceptions of the police and interrogation (i.e. coerciveness, fairness) in the coerced-confession condition compared with the voluntary-confession condition, with ratings in the no-confession condition more favorable than in the other two conditions. Because perceptions of deviance and rehabilitation potential are related to the cause of the crime but not the cause of the confession, we did not expect our confession manipulation to influence jurors' perceptions of these characteristics.

We also experimentally varied whether the juvenile was portrayed as intellectually disabled, to study, for the first time, the effects of disability on perceptions of juveniles' confession evidence. Given the theory outlined earlier and our Study 1 findings, we expected jurors in the intellectually disabled versus nondisabled condition to make more lenient and sympathetic ratings (i.e. fewer guilty verdicts, lowered ratings of deviance, weaker attributions of responsibility, greater perceived credibility, but perhaps not higher ratings of rehabilitation potential). But would jurors take intellectual disability into account when determining how much to rely on a juvenile's confession evidence? Nathanson and Platt (2005) found that adults perceive intellectually disabled child witnesses who are 9 years old or younger as more suggestible and sensitive to coercion than nondisabled children, but Bottoms and colleagues (2003) found that mock jurors' ratings of suggestibility were similar for a disabled and nondisabled 15-year-old child witness (even though other

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judgments were affected by disability). In the situation of confessions specifically, there is only one relevant study to draw from. (Although the juvenile suspect in Redlich et al. (2008b) had an IQ of 77, they did not vary the juvenile's IQ.) In the study by Gibbons and colleagues (1981), mock jurors rendered more lenient judgments when an adult offender who confessed was intellectually disabled compared with nondisabled. Consistent with the patronization effect and discounting theories mentioned earlier, jurors were more likely to believe that the confession was the product of coercion (i.e. an external cause) when the adult was intellectually disabled compared with when he was not. We expected that the patronization effect and discounting theories would also govern jurors' perceptions of juveniles with intellectual disability, so we predicted that jurors' judgments would be more pro-defense (i.e. more pro-juvenile-defendant ratings on all dependent measures, including understanding of what was happening during the interrogation and vulnerability to coercion, greater ratings of police coercion) for a disabled than a nondisabled juvenile who confessed. We predicted that this would be especially true when the confession was portrayed as coerced, because we reasoned that coercion would make the suggestibility of disabled juveniles a particularly salient alternative explanation for the confession, encouraging external rather than internal attributions for the confession.

Finally, we predicted that the effects above would generalize across the three types of crime, but that there would be main effects of crime type such that jurors' judgments would be less lenient and perceptions less favorable to the defendant as the crime increased in severity.

Method

Study 2 conformed to a 2 (disability status: intellectually disabled or non-disabled) $\times$ 3 (confession: none, voluntary, or coerced) $\times$ 3 (crime type: drug offense, assault, or murder) between-subjects design. We avoided order effects by varying crime type between subjects.

Participants

Participants were 512 UIC undergraduates (48% men) who participated in exchange for course credit. All were jury-eligible United States citizens ($M =$ 19 years old, SD $= 2$, ranging from 18 to 49). The sample was ethnically diverse: 31% Asian, 35% Caucasian, 20% Hispanic, 7% African American, and 7% other. We dropped 46 additional participants who missed the intellectual disability manipulation check. The 18 experimental cells each contained 27–31 participants.

Materials

Description of juvenile. The description of the juvenile and the manipulation of her intellectual disability status was the same as that used in the nonabused condition of Study 1.

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Case summaries. Three separate case summaries, each approximately a half-page in length, described the juvenile defendant as accused of each of three crimes: a drug offense, assault of a classmate, or murder of her father (but not in self-defense), all of which could result in transfer to adult criminal court in Illinois. The cases were similar to those used in Study 1, with these exceptions. First, they were lengthier and more elaborately detailed, thus more ecologically valid. Second, case details were altered to make the juvenile's guilt ambiguous. In the drug offense case, mock jurors were told that the juvenile attempted to buy crack-cocaine from an undercover police officer near an elementary school. The juvenile claimed that she gave the officer money because she thought he was a homeless person and did not understand that the officer was offering drugs. In the murder case, we omitted the suggestion that there was a physical altercation between the juvenile and her father to remove all possibility that participants would infer a self-defense motive on the juvenile's behalf. Instead, the juvenile testified that her father came home drunk but she remembered nothing else and argued that he had shot himself because he had been depressed. A medical examiner confirmed that the father had antidepressants in his bloodstream but other forensic evidence (i.e. nature of injury, gunshot residue) was inconclusive. Finally, we changed the aggravated murder case to a case of assault. As in Study 1, jurors read that the two girls had fought at school before, but now jurors also read that the victim fought with lots of other students, the defendant had never been in trouble before, and the defendant was not found with the murder weapon. Pilot testing confirmed that the juvenile's guilt was ambiguous in each case; the final conviction rate across all conditions was 52%.

At the end of each summary, jurors were told that the juvenile had either maintained her innocence during police questioning (no confession), immediately confessed to the crime but later retracted her confession (voluntary confession), or confessed due to police coercion but later retracted her confession (coerced confession). As can be seen in the appendix, coercion was introduced by describing that the interrogator presented false evidence and used minimization tactics (Kassin & Gudjonsson, 2004) by diminishing the seriousness of the crime and expressing sympathy throughout the juvenile's lengthy interrogation. Our manipulation was modeled on prior research by Kassin and colleagues (Kassin & McNall, 1991; Kassin & Sukel, 1997; Kassin & Wrightsman, 1980, 1981) and is ecologically valid because the techniques mirror those used in actual cases and recommended by police interrogation training manuals (i.e. Inbau, Reid, Buckley, & Jayne, 2001; see Meyer & Reppucci, 2007, and Redlich & Kassin, in press, for reviews).

Case judgments. Each vignette was followed by case judgments, in the order described here. Dichotomous guilt was measured with the question ''Do you think Tracie is guilty or not guilty?'' Confidence in that guilt judgment was measured with the question ''How confident are you in your judgment?'', which was answered on a scale ranging from 1 (not at all confident) to 10 (completely confident). These were combined to create a more sensitive 20-point degree-of-guilt scale ranging from 1 (not guilty, completely confident) to 20 (guilty, completely confident) (Kassin & Wrightsman, 1980, 1981). Next, 6-point scales ranging from 1 (not at all) to 6 (completely) were used to measure jurors' perceptions of the juvenile's credibility (''How truthful is Tracie?''), deviance (''How bad of a person is Tracie?''), and responsibility (''To what extent was Tracie responsible for the crime?''). Similar to

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Redlich et al. (2008a, 2008b), we used the same 6-point scale to assess jurors' perceptions of two domains of the juvenile's suggestibility: understanding of the interrogation (''How much did Tracie understand what was happening during the interrogation?'') and vulnerability to coercion (''How vulnerable or susceptible was Tracie to being coerced or forced by the police to say something that wasn't true?''); and perceptions of police fairness (''How fair were the police during the interrogation?'') and coerciveness (''To what degree did the police coerce or force Tracie to say something that wasn't true?''). The item assessing police fairness was reverse-coded and averaged with the item assessing police coerciveness to create a reliable measure of police coercion ($\alpha = .72$), with higher scores indicating greater coercion. Derived in part from the study by Kassin and Sukel (1997), jurors in the voluntary-confession and coerced-confession conditions were asked to (a) estimate the probability that the juvenile's confession was truthful on a 10-point scale ranging from 0 to 100%, (b) make a dichotomous judgment of the voluntariness of the juvenile's confession (''Did Tracie confess voluntarily and without coercion?''; yes or no), (c) rate their confidence in that judgment (''How confident are you in your judgment?'', answered on a 10-point scale ranging from 1 [not at all confident] to 10 [completely confident]), and (d) rate how much their verdict was influenced by the juvenile's confession (''To what extent did the fact that Tracie confessed to a police officer lead you to view Tracie as guilty or not guilty?'') on the 6-point scale described previously. The voluntariness judgments were combined to create a confession voluntariness scale ranging from 1 (not voluntary, completely confident) to 20 (voluntary, completely confident). Finally, across all three confession conditions, mock jurors who voted guilty rated the juvenile's potential for rehabilitation (''To what extent can Tracie be rehabilitated so that she becomes a productive member of society who does not commit any more crimes?'') using the 6-point scale.

Demographic and manipulation-check questionnaire. This questionnaire was the same as that used in Study 1, except that it did not include a manipulation check about abuse history.

Procedure

Mock jurors participated alone or in mixed-gender groups of 2–10. The instructions they received were nearly identical to those given to participants in Study 1. After reading the description of the juvenile and the case summary, mock jurors completed case judgments, filled out the demographic and manipulation check questionnaire, and were thanked and debriefed, in keeping with an approved IRB protocol. The entire procedure lasted approximately 30–45 minutes.

Results

A series of 2 (disability status: intellectually disabled or not disabled) $\times$ 3 (confession: none, voluntary, or coerced) $\times$ 3 (crime type: drug offense, assault, or murder) between-subjects ANOVAs were conducted to test our predictions for all dependent variables except dichotomous guilt judgments, for which we performed

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log-linear modeling and chi-square analyses. Significant main effects of crime type and confession condition were further tested with planned comparisons. We present the main effects of each independent variable in turn and then present two-way interaction effects. (There were no significant three-way interactions). Note that main effects discussed initially are sometimes qualified by interactions. In separate sections, we review the effects of each independent variable on (a) guilt and responsibility judgments; (b) perceptions of the juvenile as deviant, likely to rehabilitate, credible, and suggestible; (c) perceptions of police coercion; and (d) confession-related judgments.

Preliminary Analyses

As in Study 1, we conducted separate preliminary 2 (disability status) × 3 (confession) × 3 (crime type) × 2 (juror gender) between-subjects ANOVAs on all dependent measures. These revealed a significant main effect of juror gender on perceptions that the juvenile's confession was true, $F(1, 319) = 8.96$, $p < .01$. There were also significant confession × juror gender interactions on degree-of-guilt ratings, $F(2, 476) = 9.19$, $p < .001$, and on perceptions of the juvenile's responsibility for the crime, $F(2, 476) = 7.26$, $p \leq .001$. There was also a significant disability status × confession × juror gender interaction on perceptions of the juvenile's deviance, $F(2, 474) = 3.43$, $p < .05$. Separate 2 (disability status) × 3 (confession) × 3 (crime type) ANCOVAs on these dependent measures, with gender as the covariate, did not change the results presented next.

Crime Type Main Effects

The defendant was convicted by 266 of our mock jurors and acquitted by 246. (See Table 2 for conviction rates and degree-of-guilt ratings as a function of disability status, confession condition, and crime type.) We performed a four-way frequency analysis to develop a hierarchical log-linear model of effects of our independent variables on jurors' dichotomous guilt judgments. All contingency tables provided expected frequencies of five or greater. After the model was selected, none of the 36 cells was an outlier. Stepwise selection by simple deletion of effects produced a best-fitting model that included no main effects but all possible two-way effects (discussed later). The model had a likelihood ratio (LR) $\chi^2(8, N = 512) = 4.68$, ns, indicating a good fit between observed frequencies and expected frequencies generated by the model. There were no main effects of crime type for verdicts (as revealed by the frequency analysis) nor degree-of-guilt ratings (as revealed by ANOVA), $F(2, 494) = .92$, ns.

ANOVAs revealed significant main effects of crime type on jurors' perceptions of the juvenile's responsibility for the crime, $F(2, 494) = 4.16$, $p < .05$, deviance, $F(2, 492) = 25.29$, $p < .001$, rehabilitation potential, $F(2, 246) = 4.32$, $p \leq .01$, and credibility, $F(2, 494) = 16.55$, $p < .001$, but not on suggestibility perceptions, all $F(2, 494) \leq .31$, ns. (See Table 3 for all means and standard deviations.) Planned comparisons revealed that the juvenile was perceived as more deviant as the severity of the crime increased from drug offense to assault to murder, all $F(1, 492) \geq 11.42$, $p < .001$. She was perceived as more responsible for the drug offense than for either

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Table 2. Study 2: Verdict (%) and mean degree-of-guilt ratings as a function of disability status, confession condition, and crime type

Crime type × confession condition	Guilty verdicts (%)			Degree-of-guilt ratings		
	Disability status		*Marginal*	Disability status		*Marginal*
	Nondisabled	Disabled		Nondisabled	Disabled	
Drug offense						
No confession	54	38	*46*	11.14 (6.88)	9.97 (5.80)	*10.54 (6.32)*
Voluntary confession	79	40	*59*	14.39 (5.81)	9.37 (6.51)	*11.79 (6.63)*
Coerced confession	69	43	*56*	13.07 (6.39)	9.63 (6.50)	*11.32 (6.55)*
Marginal	*67*	*40*	*53*	*11.56 (6.40)*	*9.65 (6.22)*	*11.22 (6.49)*
Assault						
No confession	26	37	*32*	7.33 (5.82)	9.00 (5.63)	*8.17 (5.73)*
Voluntary confession	83	68	*75*	14.76 (4.79)	12.71 (5.87)	*13.75 (5.40)*
Coerced confession	37	41	*39*	9.19 (6.10)	9.52 (6.90)	*9.35 (6.45)*
Marginal	*49*	*49*	*49*	*10.53 (6.37)*	*10.44 (6.30)*	*10.40 (6.32)*
Murder						
No confession	24	55	*40*	7.45 (5.40)	11.41 (6.04)	*9.43 (6.02)*
Voluntary confession	83	71	*77*	14.86 (4.85)	13.00 (6.07)	*13.90 (5.55)*
Coerced confession	54	30	*42*	11.46 (6.39)	8.22 (5.70)	*9.87 (6.22)*
Marginal	*54*	*53*	*53*	*11.26 (6.30)*	*10.99 (6.20)*	*11.12 (6.23)*
Marginal						
No confession	35	44	*39*	8.64 (6.25)	10.15 (5.85)	*9.40 (6.08)*
Voluntary confession	81	60	*70*	14.67 (5.10)	11.69 (6.32)	*13.15 (5.93)*
Coerced confession	54	38	*46*	11.29 (6.37)	9.14 (6.34)	*10.21 (6.43)*
Marginal	*57*	*47*	*52*	*11.56 (6.40)*	*10.35 (6.24)*	*10.95 (6.34)*

The degree-of-guilt scale ranged from 1 (not guilty, completely confident) to 20 (guilty, completely confident). Values in parentheses are standard deviations.

assault or murder, all $F(1, 494) \geq 3.90$, $p \leq .05$, which did not significantly differ from each other, $F(1, 494) = .38$, ns, but even so she was perceived as more amenable to rehabilitation when accused of the drug offense as compared with murder, $F(1, 246) = 9.21$, $p < .05$. Perceptions of rehabilitation potential in the assault case did not significantly differ from either other case, all $F(1, 246) \leq 2.12$, ns. The girl was perceived as significantly less credible if she was accused of assault than if she was accused of a drug offense or murder, all $F \geq 23.21$, $p < .001$, and the latter two conditions did not differ significantly, $F = .03$, ns. Jurors were also significantly less likely to think that the juvenile's confession influenced their verdicts, $F(2, 330) = 6.90$, $p \leq .001$, when she was accused of a drug offense than when she was accused of assault or murder, all $F > 9.37$, $p < .01$, which did not differ from each other, $F = .19$, ns. There were no other significant crime type effects, all $F(2, 331–494) \leq .77$, ns.

Intellectual Disability Main Effects

Intellectual disability significantly influenced degree-of-guilt ratings, $F(1, 494) = 5.16$, $p < .05$, but not dichotomous verdicts. As predicted, jurors assigned a lower degree of guilt to the disabled than the nondisabled juvenile. Similarly, the disabled juvenile ($M = 3.57$, SD = 1.38) was considered marginally less responsible for the crime than a nondisabled juvenile ($M = 3.79$, SD = 1.43), $F(1, 494) = 3.57$, $p = .06$.

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Table 3. Study 2: Mean ratings for judgments about the juvenile, interrogation, and confession as a function of disability status, confession, and crime type

Dependent measure × crime type	Confession condition									*Grand marginal*
	None			Voluntary			Coerced			
	Nondisabled	Disabled	*Marginal*	Nondisabled	Disabled	*Marginal*	Nondisabled	Disabled	*Marginal*	
Responsibility	3.21 (1.63)	3.54 (1.39)	*3.38 (1.38)*	4.38 (1.21)	3.85 (1.30)	*4.11 (1.28)*	3.75 (1.46)	3.29 (1.42)	*3.52 (1.46)*	*3.68 (1.41)*
Drug offense	4.11 (1.20)	3.66 (1.23)	*3.88 (1.23)*	4.25 (1.38)	3.60 (1.30)	*3.91 (1.37)*	4.24 (1.33)	3.53 (1.46)	*3.88 (1.43)*	*3.89 (1.34)*
Assault	2.78 (1.28)	3.11 (1.45)	*2.94 (1.37)*	4.62 (1.02)	4.21 (1.07)	*4.42 (1.05)*	3.19 (1.57)	3.11 (1.60)	*3.15 (1.57)*	*3.52 (1.49)*
Murder	2.76 (1.19)	3.83 (1.42)	*3.29 (1.40)*	4.28 (1.22)	3.77 (1.45)	*4.02 (1.36)*	3.79 (1.34)	3.19 (1.18)	*3.49 (1.29)*	*3.61 (1.38)*
Deviance	2.79 (.98)	2.87 (.99)	*2.83 (.98)*	3.10 (1.01)	2.96 (1.01)	*3.03 (1.01)*	2.94 (1.14)	2.80 (1.23)	*2.87 (1.19)*	*2.91 (1.06)*
Drug offense	2.86 (1.11)	2.32 (.72)	*2.59 (.97)*	2.79 (.96)	2.37 (.89)	*2.57 (.94)*	2.52 (.95)	2.27 (1.05)	*2.39 (1.00)*	*2.51 (.97)*
Assault	2.67 (.83)	2.88 (.86)	*2.77 (.85)*	3.03 (.87)	3.00 (.86)	*3.02 (.86)*	2.89 (1.12)	3.04 (1.26)	*3.02 (.86)*	*2.92 (.97)*
Murder	2.83 (1.00)	3.38 (1.05)	*3.10 (1.05)*	3.48 (1.09)	3.15 (1.23)	*3.48 (1.02)*	3.43 (1.20)	3.15 (1.23)	*3.29 (1.21)*	*3.29 (1.10)*
Potential for rehabilitation	4.64 (.87)	4.44 (1.05)	*4.53 (.98)*	4.93 (.95)	4.51 (1.22)	*4.75 (1.09)*	4.78 (1.09)	4.50 (1.11)	*4.66 (1.10)*	*4.67 (1.07)*
Drug offense	4.93 (.70)	5.09 (.94)	*5.00 (.80)*	5.00 (.98)	5.08 (.79)	*5.03 (.90)*	4.90 (1.21)	4.38 (1.19)	*4.70 (1.21)*	*4.90 (1.00)*
Assault	4.14 (1.22)	4.40 (.97)	*4.29 (1.05)*	5.04 (1.00)	4.42 (1.26)	*4.77 (1.15)*	4.80 (.92)	4.73 (1.19)	*4.76 (1.04)*	*4.67 (1.11)*
Murder	4.50 (.55)	4.00 (1.00)	*4.14 (.98)*	4.75 (.90)	4.27 (1.32)	*4.52 (1.13)*	4.60 (1.06)	4.38 (.92)	*4.52 (.99)*	*4.43 (1.05)*
Credibility	3.68 (1.22)	3.52 (1.18)	*3.60 (1.20)*	3.07 (1.12)	3.30 (1.10)	*3.19 (1.11)*	3.30 (1.00)	3.46 (1.00)	*3.38 (1.00)*	*3.39 (1.12)*
Drug offense	3.18 (1.34)	3.38 (1.32)	*3.28 (1.32)*	3.00 (1.12)	3.23 (1.10)	*3.12 (1.11)*	3.07 (1.00)	3.37 (1.13)	*3.22 (1.07)*	*3.21 (1.16)*
Assault	4.11 (1.16)	3. 96 (.90)	*4.04 (1.03)*	3.59 (1.12)	3.68 (1.06)	*3.63 (1.08)*	3.70 (.99)	3.67 (.96)	*3.69 (.97)*	*3.78 (1.04)*
Murder	3.76 (1.02)	3.37 (.88)	*3.50 (1.13)*	2.62 (.90)	3.03 (1.08)	*2.83 (1.01)*	3.14 (.93)	3.37 (.88)	*3.25 (.91)*	*3.19 (1.05)*
Understanding of interrogation	4.32 (1.21)	3.88 (1.25)	*4.10 (1.25)*	3.67 (1.32)	3.43 (1.21)	*3.55 (1.27)*	3.11 (1.30)	3.17 (1.28)	3.14 (1.29)	*3.60 (1.32)*
Drug offense	4.11 (1.26)	3.76 (1.22)	*3.93 (1.24)*	3.54 (1.35)	3.43 (1.25)	*3.48 (1.29)*	3.34 (1.32)	3.23 (1.43)	3.29 (1.37)	*3.56 (1.32)*
Assault	4.41 (1.34)	3.18 (1.12)	*4.14 (1.30)*	3.79 (1.18)	3.18 (1.12)	*3.49 (1.18)*	3.11 (1.19)	2.96 (1.16)	3.04 (1.17)	*3.56 (1.29)*
Murder	4.45 (1.06)	4.00 (1.34)	*4.22 (1.22)*	3.69 (1.47)	3.65 (1.23)	*3.67 (1.34)*	2.86 (1.38)	3.30 (1.24)	3.07 (1.32)	*3.66 (1.37)*
Vulnerability to coercion	3.40 (1.46)	3.51 (1.24)	*3.46 (1.35)*	3.16 (1.21)	3.70 (1.21)	*3.43 (1.23)*	4.30 (1.22)	4.56 (1.17)	4.43 (1.20)	*3.77 (1.34)*
Drug offense	3.82 (1.22)	3.66 (1.17)	*3.74 (1.19)*	3.29 (1.15)	3.67 (1.24)	*3.48 (1.20)*	4.03 (1.09)	4.53 (1.28)	4.29 (1.20)	*3.84 (1.24)*
Assault	3.37 (1.67)	3.37 (1.45)	*3.37 (1.55)*	2.90 (1.18)	3.61 (1.03)	*3.25 (1.15)*	4.52 (1.09)	4.70 (.99)	4.61 (1.04)	*3.73 (1.40)*
Murder	3.03 (1.40)	3.48 (1.12)	*3.26 (1.28)*	3.31 (1.29)	3.81 (1.35)	*3.57 (1.33)*	4.36 (1.45)	4.44 (1.22)	4.40 (1.33)	*3.73 (1.40)*
Police coercion	2.50 (.96)	2.58 (.87)	*2.54 (.91)*	2.25 (.92)	2.65 (1.09)	*2.45 (1.03)*	3.87 (1.06)	4.08 (1.12)	3.98 (1.10)	*2.98 (1.23)*
Drug offense	2.55 (.93)	2.66 (.82)	*2.61 (.87)*	2.45 (.94)	2.82 (1.13)	*2.64 (1.05)*	3.71 (1.02)	3.90 (1.18)	3.81 (1.10)	*3.02 (1.15)*
Assault	2.74 (1.10)	2.43 (.90)	*2.58 (1.01)*	2.16 (.88)	2.50 (.73)	*2.32 (.82)*	4.07 (1.01)	4.37 (1.04)	4.22 (1.03)	*3.03 (1.27)*
Murder	2.22 (.80)	2.64 (.90)	*2.43 (.87)*	2.16 (.95)	2.65 (1.09)	*2.40 (1.16)*	3.84 (1.16)	4.00 (1.12)	3.92 (1.13)	*2.89 (1.27)*

(*Continues*)

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Table 3. (Continued)

Dependent measure × crime type	Confession condition									*Grand marginal*
	None			Voluntary			Coerced			
	Nondisabled	Disabled	*Marginal*	Nondisabled	Disabled	*Marginal*	Nondisabled	Disabled	*Marginal*	
Confession voluntariness	—	—	—	15.22 (5.07)	13.28 (6.30)	*14.23 (5.80)*	8.65 (6.67)	7.07 (5.85)	*7.87 (6.31)*	*11.11 (6.83)*
Drug offense	—	—	—	14.54 (5.34)	12.50 (6.71)	*13.48 (6.12)*	9.10 (6.72)	7.24 (6.03)	*8.17 (6.39)*	*10.83 (6.78)*
Assault	—	—	—	15.04 (5.11)	14.64 (5.28)	*14.84 (5.15)*	7.78 (6.32)	7.41 (6.34)	*7.59 (6.27)*	*11.28 (6.76)*
Murder	—	—	—	16.07 (4.82)	12.81 (6.73)	*14.38 (6.06)*	9.04 (7.10)	6.56 (5.30)	*7.82 (6.35)*	*11.24 (7.00)*
Truthfulness of confession	—	—	—	6.58 (2.28)	5.97 (2.30)	*6.27 (2.31)*	4.93 (2.55)	5.13 (2.50)	*5.03 (2.52)*	*5.66 (2.49)*
Drug offense	—	—	—	6.25 (2.49)	5.53 (2.33)	*5.97 (2.54)*	4.62 (2.97)	5.53 (2.33)	*5.08 (2.68)*	*5.52 (2.64)*
Assault	—	—	—	7.21 (1.90)	4.56 (2.86)	*6.70 (1.87)*	4.41 (2.28)	4.56 (2.86)	*4.48 (2.56)*	*5.62 (2.49)*
Murder	—	—	—	6.28 (2.37)	5.26 (2.28)	*6.15 (2.41)*	5.75 (2.21)	5.26 (2.28)	*5.51 (2.24)*	*5.84 (2.34)*
Confession influenced verdict	—	—	—	4.26 (1.31)	4.00 (1.41)	*4.13 (1.36)*	4.00 (1.37)	3.36 (1.23)	*3.68 (1.34)*	*3.91 (1.37)*
Drug offense	—	—	—	3.96 (1.35)	3.53 (1.36)	*3.74 (1.36)*	3.72 (1.44)	2.93 (1.31)	*3.32 (1.42)*	*3.53 (1.40)*
Assault	—	—	—	4.31 (1.56)	4.18 (1.44)	*4.25 (1.49)*	4.26 (1.16)	3.48 (1.31)	*3.87 (1.29)*	*4.06 (1.40)*
Murder	—	—	—	4.48 (.95)	4.29 (1.35)	*4.38 (1.17)*	4.04 (1.48)	3.70 (.91)	*3.87 (1.23)*	*4.14 (1.22)*

Values in parentheses are standard deviations. Confession voluntariness ratings ranged from 1 (not voluntary, completely confident) to 20 (voluntary, completely confident). All other judgments ranged from 1 (not at all) to 6 (completely).

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The disabled juvenile was also perceived differently from the nondisabled juvenile in terms of issues relevant to interrogation and confession. Jurors perceived that the police exerted significantly more police coercion when the juvenile was disabled ($M = 3.09$, SD = 1.24) than nondisabled ($M = 2.87$, SD = 1.21), $F(1, 494) = 6.47$, $p \leq .01$. Further, compared with the nondisabled girl, jurors rated the disabled girl as marginally less understanding of the interrogation ($M = 3.49$, SD = 1.27, versus $M = 3.70$, SD = 1.37), $F(1, 494) = 3.54$, $p = .06$, and significantly more vulnerable to coercion ($M = 3.91$, SD = 1.29, versus $M = 3.62$, SD = 1.38), $F(1, 494) = 7.00$, $p < .01$, and her confession ($M = 10.25$, SD = 6.82) as significantly less voluntary ($M = 11.99$, SD = 6.76), $F(1, 331) = 7.38$, $p < .01$.[1] Even so—and interestingly—disability status did not influence jurors' ratings of the truthfulness of the juvenile's confession, $F(1, 331) = .65$, ns. Finally, jurors thought that their verdicts were less influenced by the confession when the girl was portrayed as disabled ($M = 3.69$, SD = 1.36) compared with nondisabled ($M = 4.13$, SD = 1.34), $F(1, 330) = 9.64$, $p < .01$. There were no other significant disability status effects, all $F(1, 246–494) \leq 2.29$, ns.

Confession Main Effects

Confession condition significantly influenced degree-of-guilt ratings and perceptions of responsibility, all $F(2, 494) \geq 15.74$, $p < .001$, but not dichotomous verdicts. Jurors were significantly more likely to consider the juvenile guilty and responsible if she confessed voluntarily compared with when she confessed due to coercion, all $F \geq 17.40$, $p < .001$, or never confessed, all $F \geq 26.65$, $p < .001$. Ratings did not differ between the latter two conditions, all $F \leq 1.54$, ns, indicating that jurors fully discounted the coerced confession when making guilt judgments and attributions of responsibility for the crime.

Confession condition also significantly affected perceptions of the juvenile's credibility, $F(2, 494) = 6.35$, $p < .01$. Compared with when she never confessed, she was perceived as less credible if she confessed voluntarily or under coercion, all $F \geq 3.43$, $p \leq .06$. Perceptions of credibility did not differ across the latter two conditions, $F = 2.77$, ns, suggesting that any confession weakens a defendant's credibility. As expected, the confession manipulation significantly affected jurors' perceptions of the girl's suggestiveness (understanding of interrogation, $F(2, 494) = 24.71$, $p < .001$, and vulnerability to coercion, $F(2, 494) = 35.17$, $p < .001$) and of police coercion $F(2, 494) = 123.26$, $p < .001$). Specifically, the juvenile was perceived as less understanding and more vulnerable if her confession was coerced rather than voluntary, all $F \geq 8.84$, $p < .01$, and as more vulnerable when coerced compared with when she did not confess, $F = 49.53$, $p < .001$. There was no significant difference between the voluntary and no confession conditions, $F(1, 494) = .06$, ns. The police were perceived as significantly more coercive when

[1] We performed another four-way frequency analysis to develop a hierarchical log-linear model of the effects of our independent variables on jurors' dichotomous judgments about the voluntariness of the juvenile's confession. Because most jurors accurately judged the confession to be either voluntary or not based on the condition in which they were, even in the best model identified through stepwise deletion, two contingency tables provided expected frequencies lower than 5, and 10 of the 24 cells were outliers. Garson (2008) recommends seeking a different model if more than one per 20 cells is an outlier. Thus, we focused instead on the more sensitive confession voluntariness measure that was calculated from the dichotomous judgment and jurors' confidence in that judgment.

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there was a coerced confession than no confession or when she confessed voluntarily, all $F \geq 170.42$, $p < .001$, and the latter two conditions did not differ, $F = .67$, ns. Jurors also accurately rated a juvenile's voluntary confession as significantly more voluntary, $F(2, 331) = 97.96$, $p < .001$, and more truthful, $F(2, 331) = 23.34$, $p < .001$, than a juvenile's coerced confession. Finally, jurors reported being significantly less influenced by the juvenile's confession when she was portrayed as having confessed under coercion compared with voluntarily, $F(2, 330) = 9.38$, $p < .01$. There were no other significant confession condition effects, all $F(2, 246–492) \leq 1.83$, ns.

Disability Status × Confession Interactions

There were significant disability status × confession interactions on verdicts, partial LR $\chi^2 = 10.56$, $p < .01$, degree-of-guilt ratings, $F(2, 494) = 6.66$, $p \leq .001$, and perceptions of responsibility, $F(2, 494) = 5.28$, $p < .01$. Simple effects comparisons revealed significant effects of confession on verdicts,[2] degree-of-guilt ratings, and perceived responsibility for both a disabled and a nondisabled juvenile, all $\chi^2(2, N = 254–258) \geq 8.70$, $p \leq .01$, all $F(1, 494) \geq 4.05$, $p < .05$. Coerced confessions were completely discounted only when the girl was portrayed as intellectually disabled. That is, there were no significant differences in mock jurors' verdicts or perceptions of guilt or responsibility for the disabled juvenile as a function of whether she never confessed or confessed under coercion, $\chi^2(1, N = 169) = .52$, ns, all $F \leq 1.54$, ns. In contrast, jurors perceived a nondisabled juvenile as significantly more guilty and more responsible if she confessed under coercion compared with if she never confessed, $\chi^2(1, N = 168) = 6.18$, $p \leq .01$, all $F \geq 6.95$, $p < .01$. Still, they perceived both the nondisabled and disabled juvenile to be more guilty and more responsible if the confession was voluntary compared with coerced, all $\chi^2(1, N = 170–173) \geq 7.96$, $p < .01$, all $F \geq 7.84$, $p < .01$, indicating some sensitivity to the potential for coercion to prompt false confessions. Moreover, jurors perceived both the nondisabled and disabled juvenile to be more guilty if she confessed voluntarily compared with never confessing, all $\chi^2(1, N = 170–174) \geq 4.47$, $p < .05$, all $F = 2.88$, $p \leq .09$. Jurors also perceived the nondisabled juvenile to be more responsible if she confessed voluntarily compared with never confessing, $F = 33.39$, $p < .001$, but this difference was not significant for the disabled juvenile, $F = 2.40$, ns. Thus, jurors discounted the voluntary confession when making attributions about the disabled juvenile's responsibility for the crime, but not when making guilt judgments. There were no other significant disability status × confession interaction effects, all $F(2, 246–494) \leq 2.36$, ns.

Disability Status × Crime Type Interactions

The disability status × crime type interaction was significant for verdicts, partial LR $\chi^2 = 7.28$, $p < .05$, degree-of-guilt ratings, $F(2, 494) = 3.67$, $p < .05$, perceived deviance, $F(2, 492) = 3.53$, $p < .05$, and approached significance for responsibility,

[2] Because there are no omnibus tests for effects with more than two levels in log-linear modeling and because parameter estimates are not useful for evaluating the direction of effects (Tabachnick & Fidell, 2001), we used chi-square analyses to interpret the simple effects of interactions on verdict.

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$F(2, 494) = 2.70$, $p = .07$. Jurors considered a disabled juvenile significantly less guilty (verdict and degree of guilt), less deviant, and less responsible than a nondisabled juvenile when the crime was a drug offense, $\chi^2(1, N = 174) = 12.37$, $p < .001$, all $F(1, 492–494) \geq 6.84$, $p < .01$, but not when the crime was assault or murder, all $\chi^2(1, N = 165–173) = .01$, ns, all $F(1, 494) \leq .17$, ns. There were no other significant disability status × crime type interaction effects, all $F(2, 246–494) \leq 1.18$, ns.

Confession × Crime Type Interactions

The confession × crime type interaction approached significance for verdicts, partial LR $\chi^2 = 9.19$, $p = .06$, and reached significance for degree-of-guilt ratings, $F(4, 494) = 2.57$, $p < .05$, and perceived responsibility, $F(4, 494) = 4.90$, $p \leq .001$. When accused of assault or murder, all $\chi^2(2, N = 165–173) \geq 20.41$, $p < .001$, all $F(2, 494) \geq 4.85$, $p < .01$, but not a drug offense, $\chi^2(2, N = 174) = 2.18$, ns, all $F(2, 494) \leq .71$, ns, a juvenile was perceived as significantly more guilty (verdict and degree of guilt) and responsible when she confessed voluntarily than if she confessed under coercion or never admitted involvement in the crime, all $\chi^2(1, N = 111–118) \geq 14.52$, $p < .001$, all $F \geq 4.61$, $p < .05$, and the latter two conditions did not differ, all $\chi^2(1, N = 108–113) \leq .65$, ns, all $F \leq 1.05$, ns. These results suggest that coerced confessions are discounted for more serious crimes, but not less serious crimes. Another significant confession × crime type interaction, $F(4, 331) = 3.44$, $p < .05$, indicated that jurors thought that a juvenile's confession was more truthful when it was voluntary as compared with coerced when she was accused of committing a drug offense or assault, all $F(2, 331) \geq 4.09$, $p \leq .05$, but not when she was accused of murder, $F(2, 331) = 2.10$, ns. Thus, differential perceptions of the truthfulness of the confession cannot explain why jurors discounted the coerced confession when rendering guilt and responsibility judgments. There were no other significant confession × crime type interaction effects, all $F(4, 246–494) \leq 1.95$, ns.

Study 2 Summary and Discussion

Study 2 revealed a significant main effect of intellectual disability on degree-of-guilt ratings and a marginal effect on attributions of responsibility. These findings support the conclusion from Study 1 that jurors use disability in a mitigating way, and generally parallel the finding by Bottoms and colleagues (2003) that jurors favored an intellectually disabled teenager as a victim/witness over a nondisabled teenager. Although a disabled juvenile was perceived as less deviant and less responsible than a nondisabled juvenile across all crime types in Study 1, Study 2 revealed that the mitigating effects of intellectual disability on degree of guilt, responsibility, and perceived deviance were found only in the drug offense case, not in the more serious cases. Jurors might find it more believable that a disabled rather than nondisabled juvenile committed a less serious offense than a more serious offense (see, e.g., Gibbons et al., 1981), and, as in Study 1, jurors might in turn be more likely to search for external explanations for the behavior of a juvenile accused of a serious crime involving vicious intent (i.e. assault, murder). When an external explanation is

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not evident, however, perhaps jurors find it implausible that the juvenile is truly disabled. To the extent that this is true, jurors might not only fail to consider a juvenile defendant's disability when determining his or her culpability for the alleged crime, but they might even ignore it.

It is also possible, however, that a juvenile's intellectual disability influences jurors' judgments in more subtle ways than assessed here. For example, jurors might not be any less likely to believe a disabled rather than nondisabled juvenile is guilty. But they might find it more inappropriate for a disabled juvenile to be tried and sentenced as an adult (i.e. in adult court) compared with a nondisabled juvenile. Thus, they might be more likely to nullify the law by acquitting a juvenile even though they think she is guilty when she is disabled compared with nondisabled. Future research might consider using a more nuanced assessment of jurors' perceptions of guilt than verdict to determine whether a juvenile's disability has a less obvious influence on case outcomes.

In contrast to studies documenting jurors' over-reliance on adults' coerced confessions (e.g. Kassin & McNall, 1991), Study 2 revealed that jurors are sometimes sensitive to the social psychological circumstances of a juvenile's confession. Specifically, jurors perceived the girl as more guilty and responsible when her confession was voluntary rather than coerced, and judgments were the same when the confession was coerced as when there was no confession at all. Thus, jurors fully discounted the coerced confession, an effect never seen in the research on jurors' perceptions of adult defendants. This was true in the more serious cases but not the drug case. Perhaps jurors found it unlikely that police would exert enough pressure to elicit a false confession from a juvenile suspected of a less serious crime. Consistent with the research by Redlich et al. (2008b), it seems that mock jurors realize that juveniles are suggestible, as supported by our finding that jurors rated the girl as more vulnerable to coercion and less understanding of the interrogation in the coerced confession condition as compared with the no confession condition. Also consistent with the findings by Redlich et al. (2008b), jurors recognized the potential for police interrogation tactics to influence the voluntariness and truthfulness of a confession: when there was a coerced rather than voluntary confession, the police were perceived as less fair and more coercive, the confession was perceived as less voluntary and less truthful, and jurors reported being less influenced by the confession.

Even so, significant interactions revealed that, despite these main effects, coerced confessions were only completely discounted (in terms of guilt and responsibility judgments) when the juvenile was portrayed as intellectually disadvantaged. Of interest, jurors also discounted a disabled juvenile's voluntary confession in terms of responsibility, although they were still more likely to convict a disabled juvenile when she confessed voluntarily rather than not at all. These results are especially interesting in light of our finding that neither jurors' perceptions of the juvenile's credibility nor their perceptions of the truthfulness of the confession varied as a function of disability status. Kelley's (1973) discounting principle provides a useful framework for understanding these findings. First, the juvenile's disability may have highlighted the effect of the coercive context (i.e. an external cause) on the juvenile's decision to confess. In support, the police were perceived as less fair and more coercive when the juvenile defendant was described as disabled compared with nondisabled. In addition, compared with a nondisabled juvenile, jurors considered

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the disabled juvenile to be more suggestible (i.e. more vulnerable to coercion and somewhat less understanding of the interrogation), her confession to be less voluntary, and their own verdicts to have been less influenced by a confession (these effects remained significant across case type). In any case, although we are pleased to see that jurors are sensitive to the increased vulnerability of intellectually disabled juveniles to the dangers of false confession, it is less heartening to understand that in cases involving juveniles of average intelligence jurors might not discount coerced confessions, over-relying on confession evidence just as they do in adult cases.

More research is necessary to understand the conditions under which intellectually disabled juveniles' vulnerabilities are salient to jurors, the conditions under which they are disregarded, and—now that we have established that there are effects of this variable—the psychological mechanisms that explain why jurors sometimes consider, and sometimes fail to consider, intellectual disability as a mitigating factor.

CAVEATS AND IMPLICATIONS

The mock trial paradigm is commonly used in psychology and law research and has led to many important discoveries in the field. Our particular studies were ecologically valid in many respects. For example, participants were over the age of 18 years, United States citizens, and ethnically diverse, as actual jurors would be. We impressed upon participants the seriousness of the research, confirming by observation that they were engaged in the tasks. Our case details were drawn from real cases and included appropriate charges, legally admissible evidence, and ecologically valid variables. In the second study, we asked jurors for the same determination of guilt as real jurors would make.

Even so, caution is warranted in generalizing from our results to actual cases because even the best simulations fail to replicate some aspects of real trials (Diamond, 1997; Weiten & Diamond, 1979). For example, our mock jurors were not exposed to a lengthy trial, and were students rather than older, more representative community members. Although Bornstein's (1999) meta-analysis of mock trial studies revealed few differences in case judgments of student and community jurors (see also Cutler, Penrod, & Dexter, 1990), one might argue that sample could make a difference in cases involving defendants so near in age to the mock jurors. Even so, undergraduates and community members had similar perceptions of juvenile offenders in a study by Haegerich and Bottoms (2004). Also, our mock jurors did not deliberate as a group, which might attenuate (Shaw & Skolnick, 1995) or amplify (Moscovici & Zavalloni, 1969) individual jurors' biases. Yet several studies (including one using a case involving a juvenile defendant, Haegerich & Bottoms, 2004) have found that deliberation has few effects on post-deliberation verdicts as compared with the average of pre-deliberation verdict preferences (Kalven & Zeisel, 1966; MacCoun & Kerr, 1988; Sandys & Dillehay, 1995).

We believe our research is a reasonable first step in the investigation of the effects of abuse history, intellectual disability, and confession evidence on jurors' perceptions and judgments. The very fact that we found strong, consistent effects associated with variables such as intellectual disability, even though we manipulated

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intellectual disability with the minimal and arguably subtle technique of a written label, suggests that jurors do have biases that have great potential to enter into legal decision making.

If effects are this robust when potential jurors are given only the label ''mentally retarded,'' what happens when jurors come face-to-face with an intellectually disabled juvenile? The mitigating effect of disability may be exacerbated in such circumstances, but it is also possible that jurors may render less favorable judgments for disabled juveniles who appear unremorseful or uninterested simply because they do not comprehend what is happening. In contrast, the tendency for jurors to doubt that a juvenile accused of serious crimes is disabled may be exacerbated if the juvenile does not exhibit stereotypical behaviors thought to be associated with intellectual disability (Keyes, Edwards, & Derning, 1998). This may be particularly problematic for juveniles who are only mildly disabled.

One practical implication of our studies is that procedural safeguards may be indicated to ensure that abused and disabled juveniles receive fair trials in adult criminal court in all cases. For example, judicial instructions to jurors and/or expert testimony designed to educate jurors about the link between abuse and delinquency may help jurors think of abuse as a mitigating factor when judging juvenile defendants' culpability. Yet in Study 1, an abused juvenile accused of aggravated murder was perceived as have less potential for rehabilitation than a nonabused juvenile. Thus, such expert testimony may backfire—be used by jurors in an aggravating manner as evidence of future dangerousness (Grisso, 2002). The United States Supreme Court recognized this danger in *Atkins v. Virginia* (2002), warning that testimony about mental retardation might be misused by jurors as evidence of future dangerousness (see Perlin, 2003, for a review). Our results did not support this concern, however: intellectual disability was not associated with more punitive judgments in either Study 1 or Study 2.

As another example, expert testimony could address the link between intellectual disability and increased suggestiveness and vulnerability to coercion, highlighting the need for jurors to consider confessions from defendants with intellectual disability very carefully. Although our results suggest that jurors are already sensitive to these concerns with juvenile defendants accused of serious crimes, perhaps such testimony is warranted when the crimes are less serious (e.g. drug offenses). In addition, expert testimony about juveniles' susceptibility to interrogative pressure might diminish the contaminating effect of coerced confessions on jurors' judgments.

All of these issues present opportunities for future research to understand more about perceptions of juveniles. In addition, because our research suggests that there are conditions under which jurors do not consider the limitations of disabled or abused juvenile defendants or juveniles who have confessed, future research should examine the extent to which such biases are associated with individual differences among jurors, such as attitudes, attribution style, and political orientation. The ability to predict which jurors are sensitive to the variables we studied might have relevance for jury selection in juvenile cases. Finally, because many juvenile cases are handled outside of adult criminal court, research should also seek to understand how family and juvenile court judges react to juveniles. Moreover, although some research has examined other legal players' (e.g. correctional or probation officers) perceptions of abused juveniles (e.g. Vidal & Skeem, 2007), their perceptions of

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disabled juveniles and juveniles who have confessed should also be studied to gain an understanding of how such juveniles are perceived after adjudication or conviction.

CONCLUSION

In conclusion, we have applied social psychological theories and methods to investigate legally relevant questions about jurors' reactions to cases involving youthful defendants. Our work shows that intellectual disability, a history of child maltreatment, and circumstances surrounding confession all influence jurors' judgments. Future research should build on our initial findings, by testing similar variables under more ecologically valid conditions and by expanding our work to other variables present in the unique situation of criminal trials involving juvenile defendants. Such research is important for research psychologists interested in testing theories related to legal decision making, but it is also important for applied, practical reasons. Professionals within the legal system need to understand how jurors react to juveniles accused of crimes and how they reach their verdicts in cases involving juveniles. Such increased understanding has the potential to lead to change, change that can help ensure fairness for some of the most vulnerable defendants in our legal system.

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APPENDIX: STUDY 2 CONFESSION MANIPULATION

In Study 2, after reading one of the three case summaries, participants read one of the three confession manipulations (no confession, voluntary confession, coerced confession). Differences based on the crime type manipulation are in parentheses and italicized: (*drug offense/assault/murder*).

1. *No confession*. The police took Tracie to the police station within an hour of the offense, which was at 4:00 pm in the afternoon. When she was interrogated, Tracie told the detective the story above. Tracie maintained her innocence throughout the interrogation.
2. *Voluntary confession*. The police took Tracie to the police station within an hour of the offense, which was at 4:00 pm in the afternoon. Immediately when they started to question her, she confessed to (*the drug offense/stabbing Marcy/shooting her father*). Later, Tracie admitted that she confessed while she was being questioned, but she explained that she was really upset and was in a state of shock. When asked about the interrogation and confession, the detective conceded that Tracie was under stress while in custody. But he rejected the suggestion that Tracie was under so much stress that she would confess to a crime she did not commit. The detective said, ''No, I wouldn't say the stress had anything to do with it. I mean she just blurted it out. Nobody twisted her arm. No one was abusing her or threatening her or anything. She wasn't even handcuffed.''
3. *Coerced confession*. The police took Tracie to the police station within an hour of the offense, which was at 4:00pm in the afternoon. They held her for questioning until 11:00 pm that evening, at which point Tracie confessed to (*the drug offense/stabbing Marcy/shooting her father*). During the interview, the detective expressed sympathy and concern, and told Tracie things like (''*I know sometimes I need to unwind. I mean, sometimes you just have to relax. I don't blame you. Is that why you needed the crack?*''/''*It sounds to me that Marcy was asking for trouble and deserved what she got. I mean, she tried to take your boyfriend from you. That would make me crazy. Man, I don't blame you for defending what's yours*''/''*It sounds to me that your Dad had it coming and deserved what he got. I mean, he should have been taking care of you instead of drinking all the time. That would make me crazy. Man, I don't blame you*

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for shooting him''). The detective then suggested to Tracie that she would be better off confessing because they had (*a security video/a security video/video from the neighbor's security camera directly across the street from Mr. English's bedroom*) that would prove exactly what happened. Later, Tracie admitted that she confessed while she was being questioned, but explained that she was really upset and was in a state of shock. Tracie said that although she didn't do it, she didn't think that anyone would believe her because (*she was on a videotape talking with the undercover agent/everyone would think they had seen her on a videotape/everyone would think they had seen her on a videotape*). Tracie said she was very tired and that she was handcuffed so tightly that her arms hurt and she thought that if she confessed, she would get to go home.

When asked about the interrogation and confession, the detective conceded that Tracie was under stress while in custody. He admitted that he lied to Tracie about having a security video (there wasn't one), which is a common interrogation tactic. But he rejected the suggestion that Tracie was under so much stress that she would confess to a crime she did not commit. The detective said, ''No, I wouldn't say the stress had anything to do with it. I mean she just blurted it out. It was a standard interrogation. She was handcuffed, but that's pretty typical.''

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