



MONTCLAIR STATE
UNIVERSITY

Montclair State University
**Montclair State University Digital
Commons**

Department of Psychology Faculty Scholarship
and Creative Works

Department of Psychology

4-1-2019

Guilty Pleas of Youths and Adults: Differences in Legal Knowledge and Decision Making

Tina Zottoli

Montclair State University, zottolit@montclair.edu

Tarika Daftary Kapur

Montclair State University, daftarykaput@mail.montclair.edu

Follow this and additional works at: <https://digitalcommons.montclair.edu/psychology-facpubs>



Part of the [Psychology Commons](#)

MSU Digital Commons Citation

Zottoli, Tina and Daftary Kapur, Tarika, "Guilty Pleas of Youths and Adults: Differences in Legal Knowledge and Decision Making" (2019). *Department of Psychology Faculty Scholarship and Creative Works*. 247. <https://digitalcommons.montclair.edu/psychology-facpubs/247>

This Article is brought to you for free and open access by the Department of Psychology at Montclair State University Digital Commons. It has been accepted for inclusion in Department of Psychology Faculty Scholarship and Creative Works by an authorized administrator of Montclair State University Digital Commons. For more information, please contact digitalcommons@montclair.edu.

Guilty Pleas of Youths and Adults: Differences in Legal Knowledge and Decision Making

Tina M. Zottoli and Tarika Daftary-Kapur
Montclair State University

Few studies have examined differences in the guilty plea decisions of youth and adults. In interviews with 64 youth ($X = 15.9$, $SD = 1.2$) and 56 adults ($X = 38.5$, $SD = 11.5$) who pleaded guilty to felonies in New York City, we found important differences between the youths and adults in their understanding of the plea process, the factors they considered when making decisions, and their rationales for their decisions. Youth were less likely to recognize that a guilty plea resulted in a criminal record and to understand the trial process, and they reported having considered fewer potential outcomes in their decision making than adults. Like adults, youth overwhelmingly reported pleading guilty for reduced charges or penalties, but were substantially less likely than adults to understand the nature of the rights they were waiving. Our findings raise the question of whether the assumption of competence for youth is reasonable, and whether steps to assess youth understanding and decisional competence should be taken before youth are allowed to enter into plea agreements.

Public Significance Statement

Youth convicted by guilty plea in criminal court had poorer knowledge of trial rights and considered fewer consequences when making plea decisions than adults. These findings cast doubt on the presumption of competence for youth in the plea negotiation process.

Keywords: guilty pleas, adolescents, decision making, legal understanding

Supplemental materials: <http://dx.doi.org/10.1037/lhb0000314.supp>

Plea bargaining is an indispensable part of the United States' criminal justice system (Brown & Bunnell, 2006). More than 90% of all criminal cases in the United States are resolved by some form of plea deal (Devers, 2011), and despite the range of criticisms that have been levied against the practice (Dervan, 2012; Lynch, 1994; Wright, 2005), the plea bargain is likely to remain the primary way that justice is dispensed in the United States for the foreseeable future (Brown & Bunnell, 2006). Recognizing this reality, there has been a recent renewal of interest among psychology and law scholars in understanding the psychology of plea deal

decision making and in identifying factors that may undermine the legitimacy of the process for some defendants (Redlich, Bibas, Edkins, & Madon, 2017). This research has begun to reveal several person-centric (e.g., group outcome disparities; Daftary-Kapur & Zottoli, 2014; Edkins, 2011; Kutateladze, Andiloro, Johnson, & Spohn, 2014) and system-centric variables (e.g., plea discounts; Bushway, Redlich, & Norris, 2014; Edkins & Dervan, 2018; Zottoli, Daftary-Kapur, Winters, & Hogan, 2016) that may contribute to problematic outcomes for at least some defendants. In this article we focus specifically on disparities in the understanding and decision making of adults and youth who plead guilty in criminal court.

Adolescent Legal Capacities

A significant body of research makes clear that adolescents, as a group, are at increased risk for rights violations during the adjudicative process (Redlich, Silverman, & Steiner, 2003; Scott & Grisso, 2004; Viljoen & Wingrove, 2007). Adolescents often lack a complete understanding of legal concepts (Redlich et al., 2003), may be psychosocially immature (Cauffman & Steinberg, 2000), and may be more likely to rely on short-term, positive, and social consequences when making decisions (Albert, Chein, & Steinberg, 2013). Research on the legal capacities of adolescents has found that youth are more likely than adults to show deficits in the capacities necessary to participate competently at trial (Grisso et

This article was published Online First December 20, 2018.

Tina M. Zottoli, Department of Psychology, Montclair State University; Tarika Daftary-Kapur, Department of Justice Studies, Montclair State University.

This study was funded in part by an Early Career Grant from the American Psychology and Law Society (APA division 41) and by a Grant-in-Aid from the Society for the Psychological Study of Social Issues (APA division 9). The authors would like to acknowledge Conor Hogan and Georgia Winters who aided in data collection, Elizabeth Tahan, who performed data entry and assisted with coding, and Jordan Gault who helped trouble-shoot R code for a portion of the analyses.

Correspondence concerning this article should be addressed to Tina M. Zottoli, Department of Psychology, Montclair State University, 1 Normal Avenue, Montclair, NJ 07043. E-mail: zottolit@montclair.edu

al., 2003; Redlich et al., 2003; Viljoen, Odgers, Grisso, & Tillbrook, 2007), they often struggle to understand and appreciate the significance of their Miranda rights and are more likely than adults to waive their rights during police questioning (Abramovitch, Peterson-Badali, & Rohan, 1995; Grisso, 1981; Viljoen & Roesch, 2005) and give false confessions (Drizin & Leo, 2004).

While fewer studies have examined youth decision making specifically in the context of plea offers (for review see Redlich, Zottoli, & Daftary-Kapur, *in press*), this growing body of research has already investigated several important questions, including how youth make decisions about pleas, the extent to which youth understand the plea process and appreciate the outcomes that follow their decisions (Daftary-Kapur & Zottoli, 2014; Redlich & Shteynberg, 2016; Viljoen, Klaver, & Roesch, 2005), and how youth and adults differ in terms of their experiences of the process (Zottoli et al., 2016). In research using hypothetical scenarios, both justice-involved and nonjustice-involved youth have been shown to be more likely to accept plea offers, both in general (Grisso et al., 2003) and when innocent (Helm, Reyna, Franz, & Novick, 2018; Redlich & Shteynberg, 2016), to score significantly lower than adults on measures of legal knowledge, both general and plea specific (Redlich & Shteynberg, 2016), and to be less likely to recognize the long-term consequences of their decisions (Grisso et al., 2003). In a recent field study of youth convicted by guilty plea in criminal court, we found youth to possess relatively limited understanding of plea deals in general and a limited appreciation for the consequences that attached to their own guilty pleas (Daftary-Kapur & Zottoli, 2014). Also, the youth in our sample appeared to be overly influenced by the short-term, positive consequences of plea offers, such as going home right away (Daftary-Kapur & Zottoli, 2014). Finally, two recent studies on youth in New York City (Zottoli et al., 2016) and California (Malloy, Shulman, & Cauffman, 2014) found rates of self-reported false guilty pleas to be 27% and 17%, respectively.

Taken together, the research on adolescent legal capacities, including the research on guilty pleas, suggests that adolescents who are offered plea deals in criminal court may be at increased risk for rights violations relative to adults and may be at increased risk to plead guilty when innocent. However, the body of knowledge in this area is deficient in at least two ways that limit the extent to which we can rely on it for policy recommendations. First, few studies have compared adolescent and adult decision making directly, and of those that have, only two have done so with justice-involved samples (Grisso et al., 2003; Zottoli et al., 2016). The first of these studies is limited by its use of hypothetical vignettes and the extent to which data on delinquent youth can be extrapolated to the population of youth charged in criminal court (Grisso et al., 2003) and the other did not address decision making *per se*, but rather the context of decisions, such as attorney contact and decision-time frames (Zottoli et al., 2016). Second, there have been no qualitative explorations of how adults and youth approach plea decisions. While quantitative data are essential to inferring population differences, qualitative methods help focus attention on the meanings and perceptions of participants and enable us to consider the social context of their experiences—information that is often lost when quantitative data are aggregated and reduced to summary statistics (e.g., Griffin, 2004). Here we address these gaps with a mixed—method study of youth and adults who were

offered plea deals in the Supreme Court (i.e., criminal court) of New York.

Study Aims

Through this investigation, we sought to learn how youth and adults differ in terms of their understanding of the plea process (both in general and with respect to their own cases), the number and kinds of factors they consider when making their decisions, their rationales for their plea decisions and their self-reported innocence or guilt. Specifically, we intended to provide estimates for population differences on several legal understanding and decision-making variables and to thematically organize and describe participants' responses to questions about their own decision making and their beliefs about the process. We anticipated that from within our broad areas of inquiry, there might emerge differences between youth and adults that have implications for the presumption of competency of youth who plead guilty and/or of the knowingness and willingness of their decisions.

Method

Participants

We interviewed 69 adolescents and 60 adults who had been mandated to community-based, alternative-to-incarceration (ATI) programs in New York City (NYC). The majority (98%) of juveniles accused of crimes in NYC (whether the case originates in family or criminal court) pass through ATI programs at some point, either while their cases are pending or after sentencing (Gewirtz, 2014). While the percentage of adults that pass through ATIs is unknown, like youth, adults may be mandated to ATIs during the pendencies of their cases or as a condition of probation or parole. The study was open to all English speaking individuals under the supervision of the facilities from which we recruited, provided that they were charged with felonies in criminal court.

One youth and four adults were excluded because their cases involved misdemeanor charges and an additional four youth were excluded because their cases were adjudicated in family court. In New York State, whether a youth younger than 18 years of age—16 at the time these data were collected—will be adjudicated in family or criminal court is a statutory determination made on the basis of filed charges (N.Y. CPL NYS LAW § 1.20, *nd*). The final sample comprised 64 youth and 56 adults whose cases involved at least one felony charge in criminal court. All adults and the majority of youth had already accepted offers and were either awaiting sentencing or had been sentenced. Two youth had rejected offers and were awaiting trial; one youth was planning to plead guilty at his next court date. Fifty-seven percent of the adults and all but one youth were interviewed within 2 years of their plea decisions. Seven adults pleaded five or more years before interview; the remaining adults and one youth pleaded between 3 and 5 years prior. See Table 1 for other sample characteristics.

Measures

Demographic information. We gathered information on age, sex, race/ethnicity, education level, special education history, men-

Table 1
Sample Characteristics

Participant variable	Adults	Youth
Age at arrest ^a	33.4 (11.0)	15.0 (.84)
Age at interview	38.5 (11.5)	15.9 (1.2)
Race		
Black	75.0%	80.0%
White	8.9%	11.7%
Hispanic	17.9%	31.1%
Male	91.1%	76.2%
Hx mental disorder ^b	54%	21%
Hx special education	23.2%	12.5%
Prior arrests ^c	Mode = 0, 21% Range: 0 to 37	Mode = 0, 50% Range: 0 to 20
Penalty reduction ^d	.76 (.26)	.93 (.22)

^a Adults were between 18 and 62 years old at the time of arrest and between 19 and 63 at the time interview. The majority of youth were between 14 and 16 years of age at time of arrest (two were 13-years-old and two were 17) and between 14 and 19 at the time of interview (one was 13-years-old). ^b Mental disorder included any self-reported past or current diagnosis, including substance abuse. ^c Among youth with prior arrests, 60% reported one juvenile court finding (mode = 1, 46.7%) and 63.5% reported at least one criminal court conviction (mode = 1, 23%). All adults with prior arrests reported at least one criminal conviction, with modal prior convictions of 1 and 2 (35.7% of adults respectively). ^d Reflects custodial sentence reduction relative to maximum custodial sentence associated with original charges. Distributions for both groups are heavily skewed. The majority of youth (88%) received probation in lieu of a custodial sentence.

tal health history, and prior juvenile and criminal justice involvement for all participants. All data were self-reported.

Interview protocol. Our interview protocol (online supplemental material), which was an expanded and extended version of that used in a previous study (Daftary-Kapur & Zottoli, 2014), covered legal understanding (including assessment of general knowledge about guilty pleas as well as knowledge specific to participants' own cases) and decision making, and included a question about actual guilt/innocence. With slight variation by topic, the interview proceeded from general open-ended questions (e.g., what did you think about when you were deciding whether or not you would accept your plea offer?), through specific open-ended questions (e.g., Did you think about the good things that would happen if you accepted your plea offer? What were those things?), and finally to closed-ended (i.e., Yes/No) questions (e.g., Did you worry about having a criminal record?). Where appropriate, responses to open-ended questions were followed by some variation of the prompt "Was there anything else?" and when responses were vague or not understood, nonleading queries such as (but not limited to) "Can you tell me more about that?" or "Can you explain what you mean by (participant response)?" were made. The structure of some questions was adapted from the Judgment in Legal Contexts interview (JILC; Grisso et al., 2003). In developing criteria for correct or incorrect responses to legal understanding items, we relied on standard legal definitions (Lehman & Phelps, 2004) and law in the jurisdiction, as well as on guidelines provided in generally accepted Forensic Assessment Instrument manuals for the assessment of legal competency (e.g., The Fitness Interview Test, revised; Roesch, Zapf, & Eaves, 2006).

Legal understanding. Questions in this section assessed knowledge of the plea and trial process (general and case-specific), including the rights forfeited when one pleads guilty and the

general consequences of entering a guilty plea. Specifically, we asked questions about whether guilty pleas entail admissions of guilt, result in criminal records, and are final. We also asked participants whether one has a choice in pleading guilty, and, if so, what the alternative options are. Anticipating that the response "I had no choice" could as well reflect subjective interpretations of the situation as it could legal knowledge, we included follow-up questions to help us differentiate between participants who knew they had a legal choice (i.e., could have a trial) and those who did not (i.e., those who believed that the only legal option was accepting a plea offer). Similarly, based on our prior work (Daftary-Kapur & Zottoli, 2014) we anticipated that at least some participants who acknowledged trial rights would nonetheless have an inaccurate understanding of the function of a trial and/or of what a trial entails (e.g., in our previous study some participants thought their pretrial appearance was a trial). Therefore, we incorporated systematic follow-up questions (e.g., What happens at trial; What do you think would have happened if you went to trial) that helped us differentiate between those who accurately understood the function of a trial and the trial process from those who did not.

Decision-making. In the decision-making section of the interview, we first asked participants to freely recall the factors they considered in making their plea decisions, and then we asked specifically about the pros and cons they considered for each option (i.e., accepting and rejecting the offer). After these open-ended items, we asked participants whether they considered each of a set of specific factors/consequences, in the form of yes/no items. Participants were also asked about their primary reason(s) for their plea decisions. Finally, presuming that plea decisions depend to some degree on beliefs about trial outcomes, participants who acknowledged trial as an option (regardless of accuracy), were asked a series of questions about their expectations for the outcomes of their trials as well as the certainty of and the reasons for those beliefs.

False-guilty pleas. Lastly, we provided participants with three generic scenarios of defendants facing plea decisions and asked them to choose the scenario that most closely described their cases. In the first scenario the defendant was guilty as charged; in the second, he was charged with something more serious than what he did and pleaded to something closer to the actual offense, and in the last one, the defendant was innocent.

Procedure

All procedures were approved by the Institutional Review Boards of Montclair State University and Fairleigh Dickinson University and met the American Psychological Association's guidelines for ethical research (American Psychological Association, 2002). Permission was granted by the participating ATIs to recruit and collect data at their sites. We recruited participants during mandatory group sessions at the ATI facilities. To ensure that we reached a representative cross-section of the population, we recruited on all week-days and during both morning and afternoon sessions. Typically, 30–40% of group attendees volunteered, though the rate varied between zero and 100%. Volunteers signed up and were then contacted privately to schedule an interview. Adult participants signed consent forms at the time of their interviews. Youth provided contact information for their parents or guardians (cross-checked with ATI staff) and the co-authors ob-

tained verbal consent from parents or guardians before scheduling interviews. Youth gave verbal assent at the time of interview and were provided with an informational sheet on the study. Interviews lasted between 30 minutes and 1 hour and were conducted by the co-authors or trained research assistants in private rooms at the ATI facilities. For compensation, adults received \$40 in cash and youth received a \$40 gift card.

Analytic Strategy

Qualitative analyses. We transcribed interviews and, apart from objectively scored content (i.e., yes/no questions; counts), subjected the text to content analysis. We used NVivo (Castleberry, 2014) to facilitate content coding. Coding varied according to domain of inquiry. For most of the legal understanding portion of the interview, codes were relatively simple and established, a priori, based upon legal definitions and existing guidelines for assessing legal knowledge in competency exams. We used both deductive and inductive methods to develop coding categories for the decision making portion of the interview. We established deductive codes a priori, based on prior research on adolescent decision making (e.g., coding responses for short- vs. long-term orientation). In keeping with definitions used in our prior study (Daftary-Kapur & Zottoli, 2014), we incorporated two central ideas into our definitions for future orientation: the time-frame in which a consequence would be initially experienced, as well as the extent to which the consequence would have lasting impact. Thus, we defined long-term consequences as those that would not be realized before a year's time *or* that would have lasting negative or positive impact. For example, "having a criminal record" would be coded long-term, because even though one might receive that record soon, its impact is lasting. For this study, we subdivided short-term consequences into immediate and short-term to account for the increased salience of consequences that are realized with very little delay. We defined as immediate those consequences that would be realized within hours and up to a day (e.g., "I can go home today"), and as short-term those that would be felt after one day but before a year (e.g., "I keep having to go to court dates"). Of course, these cut-offs are somewhat subjective; our data will be made available to investigators who wish to utilize different schemes.

For codes developed inductively, we developed initial lists of categories and a general coding framework based on emergent themes, following the steps outlined by Haney, Russell, Gulek, and Fierros (1998). We reviewed initial categories and established final coding categories using the constant-comparative method which entails the systematic comparison of each new text to be assigned to a category with each of those texts that has already been assigned to the category (Glaser, 1965). Four student research assistants (who were not involved in data collection) coded response data in close consultation with the coauthors. Kappas, based on codes for 15 randomly selected interviews, ranged from .67 to .79 (substantial agreement; Viera & Garrett, 2005) and disagreements were resolved by consensus. Inferential analyses were conducted on data for which meaningful population inferences could be made (e.g., proportion of correct responses).

Quantitative analyses. In an effort to estimate population parameters that are generally understood and practically meaningful, all items that yielded quantitative data were either scored as correct/incorrect responses (e.g., Does pleading guilty require an admission of wrong-doing?) or were formatted in such a way as to yield counts

(e.g., number of participants who considered a particular consequence). In keeping with the growing trend to move away from null hypothesis significance testing (NHST; Cumming, 2013; Gigerenzer, 2004; Kruschke, 2010), we used Bayesian estimation for all quantitative analyses. Bayesian methods are independent of the intentions of the investigator (i.e., they do not depend on sample size or stopping rules) and they allow for probabilistic estimations of the population parameters of interest; that is, unlike frequentist confidence intervals that either do or do not include the population parameter, Bayesian posterior distributions are probability density functions of the parameter itself (Kruschke & Liddell, 2018; Wagenmakers, 2007). For readers who may prefer frequentist analyses, Table 2 provides a NHST for each Bayesian parameter estimate reported.

As this is the first study, to our knowledge, that directly compared adults and youth from these populations, we utilized low-information (i.e., vague) priors that assumed equivalence between groups. Following Kruschke (2015), for analyses of proportion differences, we modeled our prior estimates with beta distributions and utilized Bernoulli or binomial distributions to model our data likelihood functions, and for count data we modeled our prior estimates with normal distributions and utilized exponential Poisson distributions to model the likelihood functions. For continuous data, we modeled priors with normal distributions and used t-distributions for the likelihood functions. We report 95% Highest Density Intervals (HDIs) for all estimates. The 95% HDI is the portion of the posterior distribution for the population parameter that includes the 95% most probable values for the parameter; because the posterior distribution is a density function, we can also provide probabilities for various ranges of possible values, conditional on the data observed. For proportions, we report the probability that differences between groups exceed .1 (or 10%); for count data (e.g., outcomes endorsed) we report probability that differences exceed one.

We ran all analyses in R (R Core Team, 2013) using packages *coda* (Plummer, Best, Cowles, & Vines, 2006) and *rjags* (Plummer, 2016), and utilized scripts provided by Kruschke (2015), which were modified for the specifications of our study. All posterior distributions were generated using Markov Chain Monte Carlo sampling, run in JAGS (Plummer, 2017), and, consistent with recommended practices (Gelman & Rubin, 1992), we utilized three chains per analysis to establish representativeness and stability of the posterior distribution. Again, following Kruschke (2015), we initialized chains at random points near the maximum likelihood estimate (MLE) from the likelihood function of the data derived by resampling. We verified stability and representativeness of chains by inspection of various convergence criteria in common usage (Cowles & Carlin, 1996), including autocorrelation (near zero), shrinkage (Gelman-Rubin factor <1.1), and parameter density plots that are closely superimposed. We ran all NHSTs in SPSS (IBM Corp, 2015).

Results

Participant Variables

Table 1 provides sample characteristics. Youth and adults differed on self-reported histories of psychological disorder (PD) and special education (SE), and in time-since-plea. Controlling for age, none of these variables were associated with knowledge or decision-making outcomes, and when controlling for PD, SE and

Table 2

Results of Null-Hypothesis Significant Tests for Each Bayesian Parameter Estimation Reported in Text

Response variable	Adults	Youth	Test result ^a	<i>p</i> -value	Effect size	95% CI
Legal understanding						
Admit guilt (general)	97%	84%	$\chi^2(115, 2) = .19$	.67	$\phi = .04$	[−.14, .22]
Admit guilt (self)	98%	84%	$\chi^2(111, 2) = 8.8$	.003	$\phi = .28$	[.04, .01]
Record (general)	94%	71%	$\chi^2(104, 2) = 12.6$	.002	$\phi = .34$	[.16, .50]
Record (self)	82%	48%	$\chi^2(107, 2) = 16.3$	<.001	$\phi = .39$	[.23, .54]
Change mind (general) ^b	46%	13%	$\chi^2(111, 2) = 16.6$	<.001	$\phi = .39$	[.22, .54]
Choice (general)	100%	94%	$\chi^2(119, 2) = 1.4$	.23	$\phi = .11$	[−.07, .28]
Acknowledged trial right (general)	89%	78%	$\chi^2(120, 1) = 2.6$	.10	$\phi = .15$	[−.03, .32]
Choice (self)	66%	87%	$\chi^2(112, 1) = 5.2$	.002	$\phi = .22$	[.04, .40]
Acknowledged trial right (self)	94%	85%	$\chi^2(114, 1) = 2.5$	.12	$\phi = .15$	[−.03, .34]
Accurate trial knowledge	94%	67%	$\chi^2(117, 1) = 14.9$	<.001	$\phi = .36$	[.19, .51]
Decision making						
Factors considered (open) ^c	$\bar{X} = 1.7$	$\bar{X} = 1.3$	Wald $\chi^2(114, 2) = 3.3$	.07	Exp(B) = 1.3	[.98, 1.8]
Factors considered (cued) ^c	$\bar{X} = 4.3$	$\bar{X} = 2.7$	Wald $\chi^2(107, 2) = 168$	<.001	Exp(B) = 1.6	[1.3, 1.9]
Long-term consequences	65%	57%	$t(90) = 1.2$	.23	$d = .27$	[−.17, .67]
False guilty pleas^d						
Innocent	19.6%	34.6%	$\chi^2(115, 1) = 7.0$	.007	$\phi = .24$	[.06, .40]
Partially innocent	46.4%	22%	$\chi^2(115, 1) = 4.6$	.032	$\phi = .20$	[.02, .37]
Guilty	34%	42%	$\chi^2(115, 1) = .6$	.44	$\phi = .07$	[−.11, .25]

Note. CI = confidence interval.

^a Sample sizes vary result-to-result because of missing or refused responses. ^b Question about own-case not asked. ^c Poisson regression models. ^d Omnibus $\chi^2(115, 2) = 8.2, p = .017$.

time-since-plea, the existing relationships between age and outcome variables remained robust.

Legal Understanding

All estimates are based upon valid percentages (i.e., excluding missing data). When missing or refused responses make valid percentages difficult to interpret in context, we provide the size of valid respondent sample in text.

Admission of guilt. Eighty-four percent of youth and 97% of adults recognized that guilty pleas entail admissions of guilt, 95% HDI: 4–24%; $p(\theta > 10\%|y) = .75^1$; likewise, 84% of youth and 98% of adults acknowledged that they admitted wrong-doing, themselves, when they pleaded guilty, 95% HDI: 4–24%, $p(\theta > 10\%|y) = .76$.

Criminal record. Only 71% of youth compared with 94% of adults recognized that a guilty plea results in a criminal record, 95% HDI: 9–36%, $p(\theta > 10\%|y) = .97$, and even fewer youth (48%) compared with adults (82%) said that their *own* guilty pleas resulted in criminal records, 95% HDI: 17–48%, $p(\theta > 10\%|y) \sim 1$.

Finality of guilty plea. Youth (13%) were less likely than adults (46%) to say that defendants can change their minds after telling the judge that they accepted a plea offer, 95% HDI: 17–48%, $p(\theta > 10\%|y) \sim 1$.

Choice and trial knowledge. Apart from four youth, all participants recognized that a person offered a plea deal has a choice, 95% HDI: −2 to 13%, $p(\theta > 10\%|y) = .12$. However, fewer participants (78% of youth and 89% of adults) indicated that a defendant could choose to go to trial if he or she rejected a plea offer, even after being directly probed with the question “If a defendant refuses a plea offer, can he have a trial?” 95% HDI: −2 to 23%, $p(\theta > 10\%|y) = .52$.

When asked whether they, themselves, had a choice in accepting their own plea offers, youth (90%; $n = 54, 60$ responded) were

more likely than adults (73%; $n = 38, 52$ responded) to answer yes; 95% HDI: 6–36%, $p(\theta > 10\%|y) = .92$. However, as anticipated, 85% of the youth (61 responded) and 94% of the adults (53 responded) acknowledged on subsequent questioning that they knew they could have a trial if they wanted one, 95% HDI: −3 to 20%, $p(\theta > 10\%|y) = .38$; suggesting that the question about having a choice, at least for the adults, tapped perception of realistic options, not knowledge of legal options. Finally, youth (67%; 64 responded) were less likely than adults (94%; 53 responded) to have at least a rudimentary understanding of what a trial actually is (i.e., that the prosecutor must prove his case and the defendant has the right to present and challenge evidence, etc.), 95% HDI: 12–38%, $p(\theta > 10\%|y) = .99$. To illustrate, the following responses to the question “What happens at trial?” come from youth who stated that they knew they had a choice and that they could go to trial:

14 y/o, female: “I’m a little fuzzy on that one.”

14 y/o, male: “[You get] a sentence. [You] go to the judge and the judge decides what he wants to do.”

Plea Decision Making

Factors considered. On average, youth and adults gave a similar number of total responses when asked the general and open ended question “What were you thinking about when you were deciding whether or not to accept your plea offer?” $\bar{X}_{youth} = 1.3$, $Md_{youth} = 1$; $\bar{X}_{adult} = 1.7$, $Md_{adults} = 1$; 95% HDI: −.7 to −.1,

¹ This notation can be interpreted as follows: The 95% HDI for the difference in proportion (we report it as a percentage) of youth and adults who know that pleading guilty entails an admission of guilt is 4 to 24%. Conditional on the data observed, the probability is .75 that the difference is greater than 10%. HDI stands for Highest Density Interval.

$p(\theta > 1|y) \sim 0$. More pronounced differences between groups appeared when participants were cued (i.e., “Did you think about the good/bad things that would happen if you accepted/rejected the plea offer? What were those things?”). Adults gave approximately twice as many responses as youth, $\bar{X}_{adult} = 4$, $Md_{adults} = 4$; $\bar{X}_{youth} = 2.7$, $Md_{youth} = 2$, 95% HDI: .8 to 1.9, $p(\theta > 1|y) = .87$, reflecting a 67% increase in responses among adults and only a 19% increase for youth.

Our data provided no evidence for differences between youth and adults in terms of percentage of responses that reflected negative or positive outcomes (mode for both groups was 50%) or that were associated with accepting or rejecting the plea offer, with both groups providing more responses associated with accepting plea offers (~60% for both groups). In terms of future orientation, 57% of the factors considered by youth and 65% of those considered by adults reflected long-term consequences, $\bar{X}_{youth} = 57\%$, $\bar{X}_{adult} = 65\%$, 95% HDI: 20 to -4%, $p(\theta > 10\%|y) = .37$. Modes for the immediate and short-term categories for both groups were zero; statistical models were unstable, so we report only descriptive results here. On average, 26% of the responses of youth reflected immediate consequences and 18% reflected short-term consequences; for adults, these percentages were 14 and 22%, respectively.

Nature of the factors considered. To provide richer contextual detail about what the participants said they were thinking about when making their decisions, we categorized responses to the open-ended questions according to emerging themes. Thematic coding resulted in 14 categories that captured the majority of the responses (each category comprised at least 15 responses) and two smaller categories that captured five responses each. If a participant responded to multiple questions with the same response, the response was coded only once. There were 18 responses that did not fall into any of these descriptive categories and did not cluster together in any meaningful ways, reflecting the great diversity among participants in terms of what they were thinking about at the times of their decisions. Table 3 provides example responses reflecting the categories and percentage of participants whose responses fell in the category.

As expected, the majority of participants (>75%) mentioned thinking about the penalties (plea or trial) that they faced. Roughly equivalent numbers of youth and adults mentioned thinking about what option would result in the fastest resolution of their cases and about “freedom” or being or getting free. Youth were more likely than adults to say they thought about getting a second chance and whether or not they would succeed on probation. Adults were somewhat more likely than youth to say that they considered the trial process (including likelihood for acquittal), having a criminal record and how much time they had spent or would spend in pretrial detention; adults were considerably more likely than youth to cite concerns about future employment, other social and financial impacts, family concerns, and fears or concerns about prison life.

Endorsement of specific consequences. We asked participants a series of yes/no questions about whether or not they considered several common consequences attached to their potential decisions. Table 4 provides percentages of positive endorsements by group, 95% HDI for group differences and the probability that group differences are greater than $\pm 10\%$. On average, youth and adults endorsed similar numbers of items (youth, 4.7/11,

adults, 5.3/11), 95% HDI: -.02 to .17, $p(\theta > 1|y) = .28$. Differences did appear, however, at the item level. The clearest differences in endorsements between youth and adults show up for concerns about having a criminal record, access to future government entitlements (e.g., housing), and being on probation. Adults endorsed all of these items more commonly than youth. Youth were somewhat more likely than adults to endorse concerns about succeeding on probation. Finally, the items that were most often endorsed by both groups were ending the legal process and impact on job opportunities.

Trial outcome expectations. The majority of participants (67% of youth and 72.5% of adults) believed they would lose if they went to trial. Fourteen percent of youth and 8.5% of adults said that they did not know what would happen. Youth and adults were about equally likely to say they were certain of their expectations for the outcomes of their cases (53% of youth and 55% of the adults). In contrast to these similarities, clear differences emerged between the 48 youth (76%) and 36 adults (64%) who provided reasons to support their expectations. Coding resulted in five high-level categories for belief rationales: strength of evidence in the case; general pessimism about the system or system unfairness; reliance on actual guilt or innocence; influence of prior record; and attorney-related issues. Seven responses were distinct from each other and distinct from all other categories and were, therefore, coded as miscellaneous. In Table 5 we provide example responses and percentage of participants who gave responses that fell in the category. Youth were more likely than adults to rely on actual guilt or innocence to support their beliefs about trial outcome and were more likely to reference the evidence in their cases. On the other hand, adults were more likely than youth to cite prior record (or lack thereof) to support their expectations, to refer to general system unfairness or pessimism about the system and to reference attorney-related reasons.

Primary reason(s) for plea decision. All participants were asked an open-ended question designed to elicit the primary rationale for their plea decision. Our coding resulted in nine high-level categories for rationales. Five statements made by participants were distinct from each other and distinct from all other categories and were, therefore, coded as miscellaneous. Three participants gave no response or responded “I don’t know.” Table 6 provides example responses reflecting the categories and the percentage of participants whose responses fell in the category. By far, the most common rationale for pleading guilty was to obtain reduced charges or sentence, with 40% percent of the youth and 52% of the adults giving this reason. This rationale was followed by ending or avoiding pretrial detention and believing that trial was too risky. Ending the legal process was a fairly common reason given by youth but not by adults. The remaining categories had many fewer responses overall, though group trends are apparent for some of them (e.g., advised to do so).

Given the data we obtained on differences in youth and adult understanding of their options (specifically, with respect to understanding what trial entails), we conducted a post hoc, holistic review of the interviews of participants who said they pleaded guilty to obtain reduced charges or sentence. Three separate themes emerged: (a) realistic assessment of evidence or trial odds, (b) expectations of system or trial unfairness, and (c) poor understanding of process (e.g., misunderstanding of what could happen

Table 3

Factors Considered During Decision Making: Categories, Percentage of Participants With Responses in Each Category, and Example Responses

Category	% Adults	% Youth	Examples
Penalty	75%	76%	<p>"I looked at [the] outcomes. [. . .] Looked at sentencing guidelines and see what you <i>can</i> get. Brings things into focus." (A)</p> <p>"The consequences were less than if I went to trial." (A)</p> <p>"How much lighter the sentence would be; 90 days instead of a year." (A)</p> <p>"I thought I was going to be sentenced for a mad long time." (Y)</p> <p>"I would go to Riker's for 1 year." (Y)</p> <p>"Just [thinking about] the 15 years- I couldn't even do a month." (Y)</p>
Trial success	36%	22%	<p>"A 20% chance I could beat it." (A)</p> <p>"Blowing trial and being convicted." (A)</p> <p>"My lawyer struck fear in me. He said the DA has a strong case. I listened to him because he's an expert." (A)</p> <p>"If I pleaded not guilty I definitely would've lost the case." (Y)</p> <p>"It'd be good to be found not guilty but that wasn't gonna happen." (Y)</p>
Pretrial detention	27%	17%	<p>"I was stuck in jail." (A)</p> <p>"I had already been at Riker's island for 27 months." (A)</p> <p>"I had already spent 1 year in jail." (A)</p> <p>"Whether I would be remanded with or without the plea." (Y)</p> <p>"Didn't want to stay in jail no more." (Y)</p>
Prison life	32%	13%	<p>"Prison is violent, and I wanted to avoid misunderstandings. Your life is seriously in danger there, and there are some people that never come home. Guys get jealous of people who take pleas so you gotta keep to yourself." (A)</p> <p>"Being affiliated with different types of gangs, I am not the type to fight. I could have been a little bitch, not built for jail life." (A)</p> <p>"You gotta wait until they tell you can eat, piss, and [expletive]." (A)</p> <p>"Not being able to eat real food." (Y)</p> <p>"In jail you got to rumble and fight every day and night." (Y)</p>
Freedom	40%	40%	<p>"My freedom." (A)</p> <p>"Anything to get back into the community." (A)</p> <p>"Getting back to society." (A)</p> <p>"Umm I would've missed my summer." (Y)</p> <p>"Yea I actually thought about being free." (Y)</p>
Family concerns	59%	20%	<p>"My mom was dying and my father wasn't well too." (A)</p> <p>"I was thinking of me not seeing my son who was a toddler at the time." (A)</p> <p>"I don't want to come home when my daughters are 21." (A)</p> <p>"Kids and my family. My wife does good by herself and knows how to support them." (A)</p> <p>"The position I put my parents in." (Y)</p> <p>"Not being able to see my family." (Y)</p>
Employment	23%	8%	<p>"Having a robbery charge on job applications, and just overcoming the job situation." (A)</p> <p>"[Getting] the job that I wish." (A)</p> <p>"If I have to get another job, they'd do a background check." (A)</p> <p>"Possibility of getting a job because I have no record." (Y)</p>
Other financial or social impacts	25%	<i>n</i> = 1	<p>"I was thinking about my lost apartment, losing my luxuries; my motorcycle/car. I lost a lot of respect from certain people too." (A)</p> <p>"Thought about my wife having financial struggles, and with the kids . . . I don't want my children on the street." (A)</p> <p>"Being accused of being a rat. Individuals looked at me funny. Had to watch my back a lot." (Y)</p>
Fastest resolution	25%	22%	<p>"Whether or not I wanted to pay money." (Y)</p> <p>"Hurry up and get out of judge's face." (A)</p> <p>"I just wanted to get it out of the way." (A)</p> <p>"That it would be over. I knew that I was gonna have to do something for the crime, so I just wanted to get it over with." (A)</p> <p>"I wanted to get the case closed ASAP." (Y)</p>
Probation	14%	30%	<p>"Just wanted to get out of the process [and] the system. It was faster." (Y)</p> <p>"I was thinking if I could make it on probation." (A)</p> <p>"Me not making it through [probation]. Not making it. Some people don't make it." (A)</p> <p>"Thinking about the probation officer looking over me, so I counted the years; 16 to 22, that's a long time." (Y)</p> <p>"Thinking about am I gonna mess up or am I going to follow through with this program." (Y)</p> <p>"I [didn't] know what to do. I'm only 15 I [didn't] want to be on probation till I'm 20. Would rather do the jail time. But, then my lawyer said I would get probation after jail [anyway] so I don't understand it." (Y)</p>
Record	34%	20%	<p>"I asked myself 'Do I want this on my criminal record or do I want to fight this?'" (A)</p> <p>"My record would not be as bad." (A)</p> <p>"[That] this could be knocked down to misdemeanor." (A)</p>

Table 3 (continued)

Category	% Adults	% Youth	Examples
Second chance	20%	29%	“That my record won’t be clean.” (Y) “I don’t know if my charge would get worse.” (Y) “I won’t have a record after programming.” (Y) “Jail could save my life. I could better myself in jail with vocational training and schooling.” (A) “I thought about that I’d get my mind together and make some changes.” (A) “Learn some responsibility. By staying on probation I will have to do good. Stay out of trouble, stop smoking and stuff.” (Y)
Honesty	<i>n</i> = 2	<i>n</i> = 3	“Take the plea to have second change to make things right.” (Y) “It was the right thing to do, I was guilty either way.” (A) “Admitting to something that didn’t happen the way I saw it happen. And not being able to tell my story.” (A) “Being honest. Looking honest in court.” (Y)
Collateral legal consequences	<i>n</i> = 4	<i>n</i> = 0	“They could dismiss the federal case and I could lose federal protection, and I’d be open to max sentences in Kings and Richmond county.” (A) “Would not have to go to [mandated treatment program] or have the order of protection.” (A)

Note. (A) Indicates that response came from interview of an adult, (Y) indicates youth.

if a plea is rejected). The following are example statements from protocols categorized as reflecting these themes:

Evidence/odds, youth. “[I would have] got beat.” “There’s evidence, you know, it’s waiting already there.”

Evidence/odds, adult. “I was scared because I wanted to get out, and I didn’t want to go to trial. I was guilty and she had evidence, her face was messed up and there were witnesses.”

System unfair, youth. “A person has a choice but I think it’s rough if you don’t take it. They are choosing between their freedom and being treated like a slave. Honestly, I wish I had better knowledge of laws and the criminal justice system. Legal aids tell you whatever they want. I would have made a better decision. I just wish I knew more. It’s all so unfair.”

System unfair, adult. “[I] had to take it because the judge indirectly told me I would get the maximum time [if I didn’t]. The lawyer made me uncomfortable and told me I should take it.” “I felt the court system would not be fair to my case.” “I felt I was getting railroaded.”

Poor understanding, youth. “[You are choosing between] a plea deal or not, I guess choosing between going to jail.” “[If you don’t accept the deal] I guess the judge would do what he gotta go, he decides what happens to you.” “I had to take it. Judge said come to CCA or jail.”

Poor understanding, adult. “[You] take it or come back to the next court date and then get jail time.”

In our adult sample, the majority of participants who said they pleaded guilty for reduced time or charges appear to have done so because they believed that there was strong evidence against them (67%). Twenty-five percent believed that the system was unfair and they would fare worse if they proceeded otherwise, and the remaining 8% seem not to have understood the trial process well enough to recognize that they could, potentially, be acquitted. In our youth sample, we saw a different pattern. Forty-seven percent of the youth who gave the rationale of lesser time or charges actually failed to understand the legal process, including misunderstanding their rights and the aims of trial. Thirty-two percent of interviews reflected a rational assessment of the evidence in the case and 21% reflected a belief that the system was unfair.

False Guilty Pleas

Finally, when presented with the plea offer scenarios, 42% of the youth and 34% percent of the adults stated that their cases most closely resembled the guilty as charged scenario; 22% of youth and 46.4% of adults selected the scenario wherein the defendant was guilty of what he pleaded to, but not to what was originally charged; and 34.6% of youth and 19.6% of adults chose the innocence scenario. Estimates of interaction-term deflection parameters provide evidence that these variables are not independent, $\beta_{\text{guilty} \times \text{innocent}} = -.31$, 95% HDI: -1.22 to $.54$; $\beta_{\text{guilty} \times \text{partial_guilt}} = .86$, 95% HDI: $-.04$ to 1.7 ; $\beta_{\text{innocent} \times \text{partial_guilt}} = 1.14$, 95% HDI: $.08$ – 2.1 . Youth and adults were similarly likely to report being guilty as charged, $\beta_{\text{guilty}} = -.31$, 95% HDI: $-.68$ – $-.29$, whereas adults were more likely than youth to report being guilty of that to which they pleaded guilty but not to that with which they were charged, $\beta_{\text{partial_guilt}} = .71$, 95% HDI: $.09$ – 1.2 and youth were more likely to report being innocent of all charges, $\beta_{\text{innocent}} = -.4$, 95%

Table 4
Parameter Estimates for Differences in Endorsement of Specific Consequences

Consequence	Adults	Youth	95% HDI for θ^a	$p(\theta > 10\% | y)$
Ending legal process	86.3%	89.2%	-14.6 to 9%	2%
Losing at trial	69.5%	52%	-1.5 to 34%	74.5%
Being on probation ^b	57%	78%	-36 to -4%	89.9%
Succeeding on probation	49%	63%	-31 to 3%	65.8%
Criminal record ^b	71%	53%	2 to 33%	80%
Job opportunities	76%	68%	-7 to 24%	40.2%
School aid	22%	31%	-24 to 7%	1.4%
Government programs ^b	45%	16%	14 to 45%	99%
Voting ^b	29%	16%	-1.7 to 28%	65.7%
Reputation	41%	25%	-1 to 32%	73%

^a θ represents the parameter estimate (i.e., mean difference in percentage of youth and adults endorsing item). ^b Indicates the group difference was significant ($p < .05$) under an NHST χ^2 test for independence.

This document is copyrighted by the American Psychological Association or one of its allied publishers. This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

Table 5

Reasons for Trial Outcome Expectations: Categories, Percentage of Participants With Responses in Each Category, and Example Responses

Category	% Adults	% Youth ^b	Examples
Strength of evidence in case	39%	48%	“They had a lot of evidence against me. The victim was going to be a witness.” (Y) “Because there’s video against me.” (Y) “There was no doubt that I was there at the time of the incident, and the victim was able to describe me down to what I was wearing that day.” (A) “The evidence was sketchy. Might not hold.” (A)
General pessimism about system	19%	12.5%	“[Being] Black in court, usually don’t look too good.” (Y) “‘Cause that’s the way it works. It’s the system, ya know.” (Y) “Look at me, I am a black, troubled kid.” (A) “It’s a money game. They make more money with me living in jail.” (A)
Actual guilt or innocence	8%	27%	“If I go to trial I will be found guilty cause I am.” (Y) “I was guilty. I am on another case for robbery; that one I will win because I am innocent.” (A) “Umm. Because I didn’t do it.” (Y)
Influence of prior record	17%	$n = 1$	“[When] people at Riker’s saw my file, [they could tell] I was innocent.” (A) “They would weigh my background and history too.” (Y) “With my rap sheet, they’d give me the max on everything.” (A) “It was my first felony so I would have gotten an appeal.” (A)
Lawyer-related factors ^a	14%	8%	“Because of my record. I had attempted murder, back in ‘89.” (A) “My lawyer told me [what would happen] and he knows more than me so I like to listen to him.” (Y) “My lawyer’s an [expletive].” (Y) “Because my lawyer wasn’t working well with me [. . .] wasn’t really helping me.” (A) “I’m pretty sure if I had the right person representing me, it wouldn’t have been [certain that I would lose].” (A)

Note. (A) Indicates that response came from interview of an adult, (Y) indicates youth.

^a Response reflected belief that lawyer will be ineffective *or* that belief about case outcome was strongly influenced by lawyer’s opinion. ^b Neither youth who said they rejected their offers responded to this question.

HDI: -1.0 to $.06$. Although the 95% HDI includes zero as a nonnegligible probability, readers should note that 95% HDIs are nonsymmetrical; the probability that β_{innocent} is less than zero exceeds 96%. Of the two youth who rejected their offers, one claimed innocence and the other did not respond.

Discussion

Using a mixed-method approach, we explored three policy-relevant domains: understanding of the plea process (both general and case specific), factors that influenced plea decision making, and self-reported factual innocence. We had two aims: quantify any differences in understanding and decision making between youth and adults who were convicted by guilty plea and provide contextual information about these differences that might ultimately help practitioners (attorneys or clinicians) who work with system-involved youth. Our results are generally in line with existing research on adolescent legal capacities, which has consistently shown youth to perform more poorly than adults on measures of legal understanding and decisional competency (e.g., Cooper, 1997; Grisso, 1981; Viljoen & Roesch, 2005). We also identified some similarities between the youth and adults, not only in terms of adequate performance but also in deficiencies, suggesting, as others have argued, that comprehension for at least some aspects of the plea process may be low among defendants, in general (e.g., Redlich & Summers, 2012). In the following sections we highlight some of our more compelling results and discuss the implications that follow from them.

Legal Understanding

While the majority of participants understood the basic elements of a guilty plea, our data revealed two areas of particular concern. First, fewer youth than adults recognized that a guilty plea results in a criminal record. This is an important finding, particularly in New York City (where these interviews were conducted), highlighting the importance of jurisdiction specific research. In New York, more than two thirds of youth charged as adults receive youthful offender (YO) status in exchange for their guilty pleas (Gewirtz, 2014). Specifically, an eligible youth will plead guilty to the charged (or reduced) felony offense in exchange for a conditionally sealed record and five years of probation, in lieu of incarceration. Technically, the YO record is not a criminal conviction and the youth need not report it, for example, on a job application. As such, these offers may confer substantial benefit to a young person. However, the record is not expunged, and if the youth violates probation or is arrested again, the YO conviction will affect the subsequent disposition. The system-level consequences of probation violation or rearrest for youth with YO status are actually not different from individuals with any prior felony conviction in NY, including being subject to pretrial detention on subsequent charges, an issue that the recent Khaleif Browder case has brought into stark relief (e.g., Gonnerman, 2014).

Almost all the youth in our study who accepted YO deals told us that they would *not* have a record after completing probation. We did not ask systematic follow-up questions to ascertain the extent to which these youths fully understood the ramifications of their

Table 6
Decision Rationales: Categories, Percentage of Participants With Responses in Each Category, and Example Responses

Category ^a	% Adults	% Youth ^b	Examples ^c
Reduction in charges or sentence	52%	40%	"I wanted to take the least severe penalty for the actual thing I was arrested on." (A) "It was a lighter sentence and the consequences are basically the same. It is less time to get back on the road." (A) "I didn't want to go upstate and do the 2 to 6." (A) "I wanted my freedom and not to get locked up." (Y) "Because I didn't want to be in prison." (Y) "It's a simple choice of math." (Y)
Trial too risky	21%	16%	"I felt the court system would not be fair to my case, the lawyer was not going to represent me [well at trial]." (A) "I felt I couldn't win if I took it to trial because of the nature of my criminal history and the individual I was accused of being linked with." (A) "It wasn't worth the risk." (Y) "Because I uh knew I was never gonna beat the case, they had me on camera; they had evidence." (Y) "I was under extreme stress, incarcerated almost 2 years for this case. Scared, all kind of things, fighting in jail, not feeding you proper." (A) "I was scared. I wanted to get out. Tired of going back to Riker's. [They] treat you like animals there." (A) "I wanted to go home." (Y) "'Cause I did not want to get remanded." (Y)
End or avoid pretrial detention	32%	14%	"I was tired of going to court. You will go a million times a year if you let them." (A) "It would be better for me, I don't have to worry about going back to court." (Y) "To get it over and done with" (Y) "'Cause I was tired of going to court and missing school" (Y)
End legal process	5%	16%	"Because I was desperate. I wanted out. The DA gave me the offer and I took it. I didn't have many options." (A) "Because of the fact of me going through this stress." (A) "Financial insecurities and knowing collateral damage, psychologically, financially and socially could [get] worse." (A) "'Cause I was hungry and I did not want to go back to jail. They made me throw away a huge donut I had at the court." (Y)
Emotional or psychological stress	13%	<i>n</i> = 1	"Because I was desperate. I wanted out. The DA gave me the offer and I took it. I didn't have many options." (A) "Because of the fact of me going through this stress." (A) "Financial insecurities and knowing collateral damage, psychologically, financially and socially could [get] worse." (A) "'Cause I was hungry and I did not want to go back to jail. They made me throw away a huge donut I had at the court." (Y)
Family concerns	11%	3%	"I wanted to get back home to my kids. [. . .] If I didn't have kids I might have risked trial. Long time [waiting] in jail if you don't take it" (A) "I wanted to see my son and stepchildren. I lived in foster care. My son is [in foster care now] now, but kinship maternal aunt. My concern was my kid going through foster care." (A) "At the time, my daughter was sick, so I needed to get home as soon as possible." (A) "'Cause of my sister. I talked to her when I was in jail and I got upset. I didn't want her to see me going away." (Y)
Advised to do so	<i>n</i> = 1	8%	"I was instructed by my lawyer." (A) "'Cause when I was talking to the lawyer I admitted it so she said we could go to trial but you admitted it so you should just plead. 'Cause she said then I could be home, better than being locked up." (Y) "Because my lawyer said it was a good idea." (Y) "My mom made the decision [for me]. I wasn't part of the process at all." (Y)
Actual guilt	<i>n</i> = 2	6%	"I knew that I was guilty and the plea gave me the opportunity to come home as early as possible." (A) "Because I did the crime. I would take whatever they give me." (Y) "Because I thought I was guilty (Q: why did you think you were guilty?) Because of the stuff that I did." (Y)
Get a second chance	<i>n</i> = 1	<i>n</i> = 2	"I had the option to do schooling." (A) "To get another chance; to show that I can [. . .] stay out of trouble." (Y)

Note. (A) Indicates that response came from interview of an adult, (Y) indicates youth.

^a Some participants gave more than one response. Multiple responses reflecting the same rationale (e.g., to get less time; didn't want to be in prison that long) were combined and coded once in a single category; multiple statements reflecting more than one rationale (e.g., to get a lower charge and get the process over with) were coded separately. ^b Of the two youth who did not accept offers, only one provided a response (worried about failing probation; coded as *Miscellaneous*). ^c Example responses are not necessarily exclusive to the category. For example, the response "I was under extreme stress, incarcerated almost 2 years for this case. Scared, all kind of things, fighting in jail, not feeding you proper," was coded under both *Emotional or Psychological Stress* and *End or Avoid Pre-Trial Detention*.

YO pleas; however, our impression was that most did not. Future investigations should explore this question explicitly, especially given that the most recent statistics available show that 75% of youth prosecuted as adults in NYC are rearrested post-disposition (Gewirtz, 2016).

The second area of concern is the rather large discrepancy between the percentage of youth who said they could go to trial if

they rejected their pleas, and the percentage of youth who did not grasp what a trial entailed. Specifically, of the 52 youth who acknowledged having a right to trial, only 14 (27%) fully understood the meaning of that right. In comparison, nearly all of the adults who acknowledged they could go to trial understood what that meant. This is a profound difference between youth and adults and might be an important factor, among others, in explaining the

higher base rate of self-reported false guilty pleas among youth. At the very least, this finding implies that the guilty pleas of many youths may be constitutionally questionable. Attorneys (and judges at the time of plea colloquy) who rely on superficial questions such as “Do you understand that you are waiving your right to a trial?” might be missing important data that will help establish whether or not a youth is making a knowing and voluntary decision. A recent study reporting interviews with juvenile-defense attorneys revealed that attorneys largely believe that their clients understand the right to trial, but the evidence that attorneys provide for this belief is that they (the attorneys) have explained it to the client (Fountain & Woolard, 2018); very few of the attorneys relied on client-specific indicators of competence. Our data suggest that juvenile clients should be asked to explain what trial is, what happens at trial, what their roles are in trial and what the potential outcomes are, before they are assumed to possess this basic understanding.

Along these lines, it is not unreasonable to assume that some deficits in youth understanding may be attributable to limited attorney contact. Youth in this population report meeting infrequently with attorneys and often in conjunction with their scheduled court appearances (Daftary-Kapur & Zottoli, 2014; Zottoli et al., 2016). In these less-than-ideal circumstances it may be difficult for attorneys to communicate complex legal information to their juvenile clients in effective ways, and attorneys may come away with a misperception that information has been assimilated and appreciated by their clients (Fountain & Woolard, 2018). Future research should focus on how attorneys relay information and assess understanding, with a goal of developing best practices that take into consideration the constraints attorneys face.

Decision Making

Several reasonable conclusions about age-group differences in guilty-plea decision making can be drawn from our data. Congruent with existing research on adolescent decision making (Grisso et al., 2003; Mann, Harmoni, & Power, 1989), the youth, relative to the adults, considered fewer potential outcomes in their decision making, were less likely to contemplate negative consequences for aspects of their lives that they have yet had to experience (e.g., family and financial concerns; employment) and more likely to mention certain immediate benefits of pleading guilty, such as ending the legal process. Adults provided about twice as many responses as youth, on average, when asked “Did you think about the good/bad things that would happen if you accepted/rejected your plea offer? What were those things?”. Grisso et al. (2003) reported similar results across hypothetical scenarios involving guilty pleas, police interrogation, and consultation with attorneys. Some youth may be less capable than adults of generating the full range of potential outcomes that might attach to decision options, suggesting that it may be necessary for attorneys or judges to help youth conceive of and evaluate the possible consequences attached to the options they face.

Beyond the numbers of factors considered, qualitative analyses of the responses also reveal differences with respect to *what* our participants considered and their ultimate rationales for their decisions. Of course, these differences may not be solely attributable to development, but may also reflect system and case-specific differences. For example, youth were more likely to endorse

concerns about being on probation and less likely to be concerned about having a record and living in prison; adults were more concerned about family and financial obligations and future employment. On the other hand, that youth were more likely than adults to say their ultimate reason for pleading guilty was to end the legal process probably reflects adolescent tendencies to attend more to the short-term, positive benefits of a decision (Miller & Byrnes, 2001) and is consistent with prior work (Daftary-Kapur & Zottoli, 2014; Grisso et al., 2003).

While youth and adults may have emphasized *different* short or long-term and positive or negative consequences, overall differences in the proportions of responses between adults and youth with respect to the future-orientation or positive or negative valence of the consequences they considered were underwhelming. This was somewhat surprising given well-established developmental differences in future-time orientation and reward seeking (e.g., Crone & van der Molen, 2004; Steinberg & Cauffman, 1996; Steinberg et al., 2009), as well as evidence for adolescent “short-sightedness” in legal decision making (e.g., Daftary-Kapur & Zottoli, 2014; Grisso et al., 2003; Redlich & Shteynberg, 2016). In our first study (that did not have an adult sample and did not cue participants to talk about pros or cons), the majority of the general consequences of a guilty plea identified by youth were long-term and negative, but when asked about their own offers, youth tended to focus on positive, short-term benefits (Daftary-Kapur & Zottoli, 2014). Here, perhaps as a result of better and more detailed questioning, both groups reported thinking about a mix of short or long-term and positive or negative outcomes, with adults reporting only slightly more long-term consequences than the youth. However, using questions very similar to ours, Grisso et al. (2003) found adults attended more to long-term consequences than did youth. Importantly, operational definitions differed between the studies (a goal of future research might be developing and validating consistent definitions for these terms) and Grisso et al. (2003) also aggregated responses across three scenarios, likely resulting in more reliable estimates. These differences, as well as those between hypothetical and actual decisions, may explain discrepancies. That said, while the difference between groups with respect to long-term outcomes was not especially large, a greater percentage of youth responses, relative to adults, reflected immediate outcomes as opposed to short-term.

Consistent with other studies (e.g., Malloy et al., 2014; Redlich & Shteynberg, 2016) the most common rationale for pleading guilty, given by both youth and adults, was to get reduced time or charges. This response is usually thought to reflect a rational calculus of competing options; however, we found great diversity among participants who provided this rationale. Of most relevance here is that youth were over-represented among those participants who said they pleaded guilty for reduced charges or penalty, and who also appeared to have insufficient knowledge about the trial process and their rights. This finding implies, again, that a more careful assessment might be required for youth, even when they provide answers that, on the surface, appear indicative of mature adult reasoning; similar stated reasons for decisions might not be based upon the same fund of knowledge.

Finally, while youth and adults were similarly confident in their expectations of trial outcome, differences emerged with respect to proffered explanations for these beliefs. Of particular interest to us is that more than a quarter of the youth (compared with less than

10% of adults) answered in such a way as to suggest that they thought their actual guilt or innocence would be self-evident at a trial. Future research should contemplate the influence of this illusion of transparency (Gilovich, Savitsky, & Medvec, 1998) on guilty plea decisions and whether youth and adults differ in their susceptibility to these effects. The reasons youth gave to support their beliefs about trial outcome should be considered in light of the fact that many of these youth were unable to accurately describe what happens in a trial.

False Guilty Pleas

The majority of participants (56% of youth and 66% of adults) said that their cases were most similar to the one in our “partial innocence” scenario (i.e., guilty of plea charges but not guilty of original charges). Assuming participants were being truthful, there are a few potential explanations for these data. Among them, are differences in perception between police or prosecutors who examine available evidence and defendants who have first-hand knowledge of the offense committed, or differences in what defendants *believe* they should be charged with and that which the law prescribes. On the other hand, these data may reflect a tendency on the part of prosecutors to overcharge or stack charges to facilitate the plea process (e.g., Wright, 2005). More research is needed to arrive at any definitive conclusions.

Of more relevance to the aims of this study, the rate of self-reported *innocence* was higher among the youth than the adults. Empirical data that youth are at increased risk for pleading guilty when innocent are mounting, with two recent laboratory studies also reporting higher rates of false guilty pleas among their adolescent participants (e.g., Helm et al., 2018; Redlich & Shteynberg, 2016). Reasons for this phenomenon may be found in the lack of understanding some youth have for the alternatives to pleading guilty (as we report here) or in developmental differences in the cognitive processing styles of youth and adults (e.g., Helm & Reyna, 2017); for example, Helm et al. (2018) suggest that youth may rely more on surface level information (e.g., sentencing differences) rather than on meaning of the information (e.g., implications of felony conviction) or their personal values (e.g., I would not plead guilty if I were innocent). Additionally, innocent youth may be more likely than innocent adults to heed the advice of an attorney who sees a guilty plea as the best option. We found youth in New York City to have more favorable views of their attorneys than adults (Zottoli et al., 2016) and Grisso et al. (2003) found youth to be more compliant with authority across their hypothetical scenarios.

Jurisdictional differences may also play a role. It is not difficult to imagine that an offer of immediate freedom and a sealed record (i.e., the YO deal) would make a guilty plea, even when innocent, more appealing than a trial that might result in prison and a record (or that just might take too much time—consider the subsample, albeit small, of our participants who claimed innocence and believed they could win at trial, but still pleaded guilty). At least two experimental studies have shown that the likelihood of pleading guilty (both true and false pleas) increases when the plea sentence involves probation instead of incarceration (Edkins & Dervan, 2018; Redlich & Shteynberg, 2016). Experimental work comparing the effects of YO-like deals and more traditional deals may

help clarify whether these specific conditions increase the likelihood of false-guilty pleas.

Limitations

While the data we present here have important implications for policy and practice, interpretation of these data are constrained by several limitations. First, and foremost, our sample size of 120 is relatively small and participants were self-selected volunteers from the individuals who passed through these ATIs. We also relied on self-report, and any attempt to retrospectively access decision-making processes is besotted by numerous obstacles, not least of which are failures of memory and the potential that outcomes realized since the time of our participants’ decisions may color recollections of the processes they went through. The latter issue will likely be exacerbated as time-since-plea increases and, on the whole, the youth in our study were seen closer in time to their actual pleas than were many adults. While there was no apparent impact on response variables, it is still the case that unlike most of the youth, many of the adults had time to contextualize their plea decisions and to experience some of the associated collateral consequences that attached to them. Adults were also more likely to endorse psychiatric and special education histories, such that some differences between groups may have been underestimated. Finally, it goes without saying that our results, although generally consistent with other field and lab studies, generalize only to the populations from which our participants were drawn. Moreover, states, and counties or cities within states, can differ dramatically in terms of policy and practice, obligating us to refrain from generalizing our results too broadly and highlighting the importance of studies like this across diverse jurisdictions.

Conclusion

It seems clear at this point that youth are at increased risk to enter into plea deals with insufficient legal understanding or compromised decision making, and that many youths who factually understand the legal process may not fully appreciate the implications of outcomes for their own lives (Daftary-Kapur & Zottoli, 2014; Redlich & Shteynberg, 2016; Redlich et al., 2003). The body of research is robust enough to suggest that potential safeguards for the procedural and constitutional rights of youth in the plea context (e.g., assumption of incompetence for youth) should be seriously considered.

Nevertheless, what we know about youth in the plea context is limited relative to what we know about youth (and adults) in other legal contexts. It is fairly certain that the guilty plea will remain the primary mode of conviction in the United States for the foreseeable future. Guilty plea decisions are complex and almost always pit certain short-term advantages against uncertain long-term outcomes; how defendants approach these decisions depends on a number of factors including individual and group-level differences across a range of traits (e.g., risk tolerance), which, in turn, are moderated by context (e.g., pretrial detention). Research that can identify aspects of the process that exacerbate the effects of developmental immaturity may lead to policy recommendations aimed at protecting the rights of youth who must make plea decisions.

References

- Abramovitch, R., Peterson-Badali, M., & Rohan, M. (1995). Young people's understanding and assertion of their rights to silence and legal counsel. *Canadian Journal of Criminology*, *37*, 1–18.
- Albert, D., Chein, J., & Steinberg, L. (2013). The teenage brain: Peer influences on adolescent decision making. *Current Directions in Psychological Science*, *22*, 114–120. <http://dx.doi.org/10.1177/0963721412471347>
- American Psychological Association. (2002). Ethical principles of psychologists and code of conduct. *American Psychologist*, *57*, 1060–1073. <http://dx.doi.org/10.1037/0003-066X.57.12.1060>
- Brown, M., & Bunnell, S. (2006). Negotiating justice: Prosecutorial perspectives on federal plea bargaining in the District of Columbia. *Administrative Law Review*, *4*, 1063–1093.
- Bushway, S. D., Redlich, A. D., & Norris, R. J. (2014). An explicit test of plea bargaining in the “shadow of trial.” *Criminology*, *52*, 723–754. <http://dx.doi.org/10.1111/1745-9125.12054>
- Castleberry, A. (2014). NVivo 10 [software program]. Version 10. QSR International; 2012. *American Journal of Pharmaceutical Education*, *78*, 25. <http://dx.doi.org/10.5688/ajpe78125>
- Cauffman, E., Shulman, E. P., Steinberg, L., Claus, E., Banich, M. T., Graham, S., & Woolard, J. (2010). Age differences in affective decision making as indexed by performance on the Iowa Gambling Task. *Developmental Psychology*, *46*, 193–207. <http://dx.doi.org/10.1037/a0016128>
- Cauffman, E., & Steinberg, L. (2000). (Im)maturity of judgment in adolescence: Why adolescents may be less culpable than adults. *Behavioral Sciences & the Law*, *18*, 741–760. <http://dx.doi.org/10.1002/bsl.416>
- Cohen, J. (1994). The earth is round ($p < .05$). *American Psychologist*, *49*, 997–1003. <http://dx.doi.org/10.1037/0003-066X.49.12.997>
- Cooper, D. K. (1997). Juveniles' understanding of trial-related information: Are they competent defendants? *Behavioral Sciences & the Law*, *15*, 167–180. [http://dx.doi.org/10.1002/\(SICI\)1099-0798\(199721\)15:2<167::AID-BSL266>3.0.CO;2-E](http://dx.doi.org/10.1002/(SICI)1099-0798(199721)15:2<167::AID-BSL266>3.0.CO;2-E)
- Cooper, D. K., & Grisso, T. (1997). Five year research update (1991–1995): Evaluations for competence to stand trial. *Behavioral Sciences & the Law*, *15*, 347–364. [http://dx.doi.org/10.1002/\(SICI\)1099-0798\(199722/06\)15:3<347::AID-BSL270>3.0.CO;2-K](http://dx.doi.org/10.1002/(SICI)1099-0798(199722/06)15:3<347::AID-BSL270>3.0.CO;2-K)
- Corp, I. B. M. (2015). *IBM SPSS statistics for Windows, Version 23.0*. Armonk, NY: IBM Corp.
- Cowles, M. K., & Carlin, B. P. (1996). Markov chain Monte Carlo convergence diagnostics: A comparative review. *Journal of the American Statistical Association*, *91*, 883–904. <http://dx.doi.org/10.1080/01621459.1996.10476956>
- Crone, E. A., & van der Molen, M. W. (2004). Developmental changes in real life decision making: Performance on a gambling task previously shown to depend on the ventromedial prefrontal cortex. *Developmental Neuropsychology*, *25*, 251–279. http://dx.doi.org/10.1207/s15326942dn2503_2
- Cumming, G. (2013). *Understanding the new statistics: Effect sizes, confidence intervals, and meta-analysis*. New York, NY: Routledge. <http://dx.doi.org/10.4324/9780203807002>
- Daftary-Kapur, T., & Zottoli, T. M. (2014). A first look at the plea deal experiences of juveniles tried in adult court. *The International Journal of Forensic Mental Health*, *13*, 323–336. <http://dx.doi.org/10.1080/14999013.2014.960983>
- Dervan, L. E. (2012). Bargained justice: Plea-bargaining's innocence problem and the Brady safety-valve. *Utah Law Review*, *51*, 51–97.
- Devers, L. (2011). *Plea and charge bargaining*. Bureau of Justice Assistance. Retrieved from <https://www.bja.gov/Publications/PleaBargainingResearchSummary.pdf>
- Drizin, S., & Leo, R. A. (2004). The problem of false confessions in the post-DNA world. *North Carolina Law Review*, *82*, 891–1007.
- Edkins, V. A. (2011). Defense attorney plea recommendations and client race: Does zealous representation apply equally to all? *Law and Human Behavior*, *35*, 413–425. <http://dx.doi.org/10.1007/s10979-010-9254-0>
- Edkins, V. A., & Dervan, L. E. (2012). Pleading innocents: Laboratory evidence of plea bargaining's innocence problem. *Current Research in Social Psychology*, *21*, 14–21.
- Edkins, V. A., & Dervan, L. E. (2018). Freedom now or a future later: Pitting the lasting implications of collateral consequences against pre-trial detention in decisions to plead guilty. *Psychology, Public Policy, and Law*, *24*, 204–215. <http://dx.doi.org/10.1037/law0000159>
- Fountain, E. N., & Woolard, J. L. (2018). How defense attorneys consult with juvenile clients about plea bargains. *Psychology, Public Policy, and Law*, *24*, 192–203. <http://dx.doi.org/10.1037/law0000158>
- Gelman, A., & Rubin, D. B. (1992). Inference from iterative simulation using multiple sequences. *Statistical Science*, *7*, 457–472. <http://dx.doi.org/10.1214/ss/1177011136>
- Gewirtz, M. (2014). *Annual report on the adult court case processing of juvenile offenders in New York City, January through December 2012*. Retrieved from <http://www.cjareports.org/reports/jo2012color.pdf>
- Gewirtz, M. (2016). *Post-disposition rearrests of juvenile offenders*. New York, NY: New York City Criminal Justice Agency, Inc.
- Gigerenzer, G. (2004). Mindless statistics. *Journal of Socio-Economics*, *33*, 587–606. <http://dx.doi.org/10.1016/j.socec.2004.09.033>
- Gilovich, T., Savitsky, K., & Medvec, V. H. (1998). The illusion of transparency: Biased assessments of others' ability to read one's emotional states. *Journal of Personality and Social Psychology*, *75*, 332–346. <http://dx.doi.org/10.1037/0022-3514.75.2.332>
- Glaser, B. G. (1965). The constant comparative method of qualitative analysis. *Social Problems*, *12*, 436–445. <http://dx.doi.org/10.2307/798843>
- Gonnerman, J. (2014, October 6). Before the law. *New Yorker Magazine*. Retrieved from <http://www.newyorker.com/magazine/2014/10/06/before-the-law>
- Griffin, C. (2004). The advantages and limitations of qualitative research in psychology and education. *Scientific Annals of the Psychological Society of Northern Greece*, *2*, 3–15.
- Grisso, T. (1981). Introduction. *Juveniles' waiver of rights. Perspectives in law & psychology* (pp. 1–10). Boston, MA: Springer. http://dx.doi.org/10.1007/978-1-4684-3815-4_1
- Grisso, T., Steinberg, L., Woolard, J., Cauffman, E., Scott, E., Graham, S., . . . Schwartz, R. (2003). Juveniles' competence to stand trial: A comparison of adolescents' and adults' capacities as trial defendants. *Law and Human Behavior*, *27*, 333–363. <http://dx.doi.org/10.1023/A:1024065015717>
- Haney, W., Russell, M., Gulek, C., & Fierros, E. (1998). Drawing on education: Using student drawings to promote middle school improvement. *Schools in the Middle*, *7*, 38–43.
- Helm, R. K., & Reyna, V. F. (2017). Logical but incompetent plea decisions: A new approach to plea bargaining grounded in cognitive theory. *Psychology, Public Policy, and Law*, *23*, 367–380. <http://dx.doi.org/10.1037/law0000125>
- Helm, R. K., Reyna, V. F., Franz, A. A., & Novick, R. Z. (2018). Too young to plead? Risk, rationality, and plea bargaining's innocence problem in adolescents. *Psychology, Public Policy, and Law*, *24*, 180–191. <http://dx.doi.org/10.1037/law0000156>
- Kruschke, J. K. (2010). What to believe: Bayesian methods for data analysis. *Trends in Cognitive Sciences*, *14*, 293–300. <http://dx.doi.org/10.1016/j.tics.2010.05.001>
- Kruschke, J. K. (2015). *Doing Bayesian data analysis: A tutorial with R, JAGS, and Stan*. Cambridge, MA: Academic Press.
- Kruschke, J. K., & Liddell, T. M. (2018). The Bayesian new statistics: Hypothesis testing, estimation, meta-analysis, and power analysis from a Bayesian perspective. *Psychonomic Bulletin & Review*, *25*, 178–206. <http://dx.doi.org/10.3758/s13423-016-1221-4>

- Kutateladze, B. L., Andiloro, N. R., Johnson, B. D., & Spohn, C. C. (2014). Cumulative disadvantage: Examining racial and ethnic disparity in prosecution and sentencing. *Criminology*, *52*, 514–551. <http://dx.doi.org/10.1111/1745-9125.12047>
- Lehman, J., & Phelps, S. (2004). *West's encyclopedia of American law* (2nd ed.). Detroit, MI: Thomson/Gale.
- Lynch, D. (1994). The impropriety of plea agreements: A tale of two counties. *Law & Social Inquiry*, *19*, 115–134. <http://dx.doi.org/10.1111/j.1747-4469.1994.tb00392.x>
- Malloy, L. C., Shulman, E. P., & Cauffman, E. (2014). Interrogations, confessions, and guilty pleas among serious adolescent offenders. *Law and Human Behavior*, *38*, 181–193. <http://dx.doi.org/10.1037/lhb0000065>
- Mann, L., Harmoni, R., & Power, C. (1989). Adolescent decision-making: The development of competence. *Journal of Adolescence*, *12*, 265–278. [http://dx.doi.org/10.1016/0140-1971\(89\)90077-8](http://dx.doi.org/10.1016/0140-1971(89)90077-8)
- Miller, D. C., & Byrnes, J. P. (2001). Adolescents' decision making in social situations: A self-regulation perspective. *Journal of Applied Developmental Psychology*, *22*, 237–256. [http://dx.doi.org/10.1016/S0193-3973\(01\)00082-X](http://dx.doi.org/10.1016/S0193-3973(01)00082-X)
- N. Y. CPL NYS LAW § 1.20 (nd).
- Plummer, M. (2016). *rjags: Bayesian Graphical Models using MCMC. R package version 4–6*. Retrieved from <https://CRAN.R-project.org/package=rjags>
- Plummer, M. (2017). *JAGS Version 4. 3.0 user manual*. Retrieved from http://people.stat.sc.edu/hansont/stat740/jags_user_manual.pdf
- Plummer, M., Best, N., Cowles, K., & Vines, K. (2006). CODA: Convergence diagnosis and output analysis for MCMC. *R News*, *6*, 7–11.
- R Core Team. (2013). *R: A language and environment for statistical computing*. Vienna, Austria: R Foundation for Statistical Computing. Retrieved from <http://www.R-project.org/>
- Redlich, A. D., Bibas, S., Edkins, V. A., & Madon, S. (2017). The psychology of defendant plea decision making. *American Psychologist*, *72*, 339–352. <http://dx.doi.org/10.1037/a0040436>
- Redlich, A. D., & Shteynberg, R. V. (2016). To plead or not to plead: A comparison of juvenile and adult true and false plea decisions. *Law and Human Behavior*, *40*, 611–625. <http://dx.doi.org/10.1037/lhb0000205>
- Redlich, A. D., Silverman, M., & Steiner, H. (2003). Pre-adjudicative and adjudicative competence in juveniles and young adults. *Behavioral Sciences & the Law*, *21*, 393–410. <http://dx.doi.org/10.1002/bsl.543>
- Redlich, A. D., & Summers, A. (2012). Voluntary, knowing, and intelligent pleas: Understanding the plea inquiry. *Psychology, Public Policy, and Law*, *18*, 626–643. <http://dx.doi.org/10.1037/a0026066>
- Redlich, A. D., Zottoli, T., & Daftary-Kapur, T. (in press). Juvenile justice and plea bargaining. In V. A. Edkins & A. D. Redlich (Eds.), *A system of pleas: Social science's contributions to the real legal system*. New York, NY: Oxford University Press.
- Roesch, R., Zapf, P. A., & Eaves, D. (2006). *FIT-R: Fitness Interview Test-Revised. A structured interview for assessing competency to stand trial*. Sarasota, FL: Professional Resource Press/Professional Resource Exchange.
- Scott, E. S., & Grisso, T. (2004). Developmental incompetence, due process, and juvenile justice policy. *National Carolina Law Review*, *83*, 793.
- Steinberg, L. (2009). Adolescent development and juvenile justice. *Annual Review of Clinical Psychology*, *5*, 459–485. <http://dx.doi.org/10.1146/annurev.clinpsy.032408.153603>
- Steinberg, L., & Cauffman, E. (1996). Maturity of judgment in adolescence: Psychosocial factors in adolescent decision making. *Law and Human Behavior*, *20*, 249–272. <http://dx.doi.org/10.1007/BF01499023>
- Steinberg, L., Graham, S., O'Brien, L., Woolard, J., Cauffman, E., & Banich, M. (2009). Age differences in future orientation and delay discounting. *Child Development*, *80*, 28–44. <http://dx.doi.org/10.1111/j.1467-8624.2008.01244.x>
- Viera, A. J., & Garrett, J. M. (2005). Understanding interobserver agreement: The kappa statistic. *Family Medicine*, *37*, 360–363.
- Viljoen, J. L., Klaver, J., & Roesch, R. (2005). Legal decisions of preadolescent and adolescent defendants: Predictors of confessions, pleas, communication with attorneys, and appeals. *Law and Human Behavior*, *29*, 253–277. <http://dx.doi.org/10.1007/s10979-005-3613-2>
- Viljoen, J. L., Odgers, C., Grisso, T., & Tillbrook, C. (2007). Teaching adolescents and adults about adjudicative proceedings: A comparison of pre- and post-teaching scores on the MacCAT-CA. *Law and Human Behavior*, *31*, 419–432. <http://dx.doi.org/10.1007/s10979-006-9069-1>
- Viljoen, J. L., & Roesch, R. (2005). Competence to waive interrogation rights and adjudicative competence in adolescent defendants: Cognitive development, attorney contact, and psychological symptoms. *Law and Human Behavior*, *29*, 723–742. <http://dx.doi.org/10.1007/s10979-005-7978-y>
- Viljoen, J. L., & Wingrove, T. (2007). Adjudicative competence in adolescent defendants: Judges' and defense attorneys' views of legal standards for adolescents in juvenile and criminal court. *Psychology, Public Policy, and Law*, *13*, 204–229. <http://dx.doi.org/10.1037/1076-8971.13.3.204>
- Wagenmakers, E. J. (2007). A practical solution to the pervasive problems of p values. *Psychonomic Bulletin & Review*, *14*, 779–804. <http://dx.doi.org/10.3758/BF03194105>
- Wright, R. F. (2005). Trial distortion and the end of innocence in federal criminal justice. *University of Pennsylvania Law Review*, *154*, 79–156. <http://dx.doi.org/10.2307/25047583>
- Zottoli, T. M., Daftary-Kapur, T., Edkins, V. A., Redlich, A. R., King, C. M., Dervan, L. E., & Tahan, E. (2018, March). *State of the states: Advancing guilty plea research through a survey of laws in the United States*. Paper presented at the annual conference of the American Psychology and Law Society. Memphis, TN
- Zottoli, T. M., Daftary-Kapur, T., Winters, G. M., & Hogan, C. (2016). Plea discounts, time pressures, and false-guilty pleas in youth and adults who pleaded guilty to felonies in New York City. *Psychology, Public Policy, and Law*, *22*, 250–259. <http://dx.doi.org/10.1037/law0000095>

Received May 3, 2018

Revision received October 26, 2018

Accepted October 31, 2018 ■