



## Perceptions of waived juvenile defendants across mental health diagnoses and demographic characteristics



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### ARTICLE INFO

#### Keywords:

Juvenile offenders  
Mental health  
Juror decision-making  
Race  
Gender

### ABSTRACT

Justice involved youth who present with diagnosable mental health issues are commonly prosecuted in criminal courts. Limited research has examined how jurors perceive and respond to transferred juveniles with mental health issues. For the current study, 252 mock jurors were randomly assigned to read one of six profiles (i.e., White male, White female, Black male, Black female, Latino, and Latina) and report culpability, deserved punishment, behavior regulation, and dangerousness for juveniles diagnosed with conduct disorder, major depressive disorder, attention deficit hyperactivity disorder, schizophrenia, and described with antisocial traits/behaviors. A schizophrenia diagnosis was associated with less blame, punishment, and capacity for behavior regulation. A description of antisocial traits/behaviors was associated with more blame, punishment, capacity for behavior regulation, and dangerousness. White juveniles described with antisocial traits were considered more blameworthy and deserving of punishment than Latinos. Considering the temporary nature of adolescent antisocial personality characteristics, jurors should have greater awareness of the maturation process.

### 1. Introduction

In 2014 there were an estimated 140,000 juveniles prosecuted in criminal courts in the United States (Sickmund & Puzzanchera, 2014). While case processing statistics of juveniles transferred to criminal courts are limited, one recent study in Florida found that 2% of transferred juveniles were convicted by a jury each year (Lehmann, Chiricos, & Bales, 2017), suggesting that jurors could decide on thousands of cases where juveniles are tried in criminal courts. Even though judges are afforded limited discretion in criminal courts, case processing disparities for youth based on demographic factors exist (Males & Macallair, 2000).

Prior research suggests there are racial, ethnic, and gender-based sentencing disparities in the criminal justice system (Lehmann et al., 2017; MacDonald & Chesney-Lind, 2001). For example, mock jurors typically recommend greater punishment for non-White delinquents and have varied responses to male and female delinquents (Nuñez, Dahl, Tang, & Jensen, 2007; Stevenson & Bottoms, 2009). These disparities in case processing of juveniles could also be compounded by mental health disorders present in the juvenile. Several cases involving juvenile offenders with mental illnesses have been decided through jury

trials in recent years (e.g., Green, 2018). For example, a girl who committed attempted murder at age 12 was found by a jury to not be responsible for her actions after being diagnosed with schizotypal disorder (Neuman, 2017). Considering the high prevalence of mental illness among transferred juveniles (Washburn et al., 2008), it is critical that researchers also consider the impact of jurors' perceptions of juveniles with psychiatric conditions.

The current study examined relationships between jurors' perceptions of blameworthiness, dangerousness, behavior regulation, and deserved punishment and a waived juvenile defendant's mental health status (i.e., conduct disorder (CD), attention deficit hyperactivity disorder (ADHD), major depressive disorder (MDD), schizophrenia, and antisocial traits/behaviors), race-ethnicity, and gender. This research advances knowledge about legal decision-making pertaining to transferred juvenile defendants who have psychiatric conditions and elucidates the extent to which juvenile defendants' race-ethnicity and/or gender might play a role in shaping jurors' perceptions. Results of this study have implications for how mental health related information communicated in a legal context could shape perceptions of culpability, degree of deserved punishment, and future criminal risk.

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### 1.1. Juvenile offenders and mental health

Examinations of psychiatric conditions among justice involved youth indicate widely varying prevalence rates, with anywhere from 40% to 90% of justice involved youth reportedly possessing a psychiatric condition<sup>1</sup> (e.g., Fazel, Doll, & Långström, 2008; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). Between 15% and 25% of juveniles in the general public experience a psychiatric condition, but that number doubles or triples for youth involved in the juvenile justice system (Grisso, 2004).

Overall, CD is the most prevalent psychiatric condition among justice involved youth (Fazel et al., 2008; Teplin et al., 2002). Only diagnosed in children, CD is considered to be a precursor to later adult antisocial personality disorder (ASPD)<sup>2</sup> (American Psychiatric Association, 2013). In one sample of justice involved youth, approximately four in ten detained juveniles displayed traits of CD (Teplin et al., 2002).

In adult populations, ASPD is characterized by a failure to conform to social norms, deceitfulness, impulsivity, and aggressiveness (American Psychiatric Association, 2013). According to the DSM-5, juveniles cannot be diagnosed with ASPD. Other antisocial labels are sometimes given to individuals, however, who come before the court. For example, the term “psychopath” has historically not been considered a diagnosable mental disorder (Crego & Widiger, 2015), despite sharing some features with ASPD (Anton, Baskin-Sommers, Vitale, Curtin, & Newman, 2012) including each being interconnected with criminal behavior.

Psychopathy has contemporarily been assessed using the Psychopathy Checklist – Revised (PCL-R) (Hare, 1991) as opposed to an individual being diagnosed as “psychotic” utilizing the DSM. The PCL-R, however, has had multiple critiques (e.g., Nicholls, Ogloff, Brink, & Spidel, 2005; Poythress et al., 2010; Skeem & Cooke, 2010). Despite some concerns with measurement of psychopathy through the PCL-R, it remains a forensically relevant condition for youth as it may be influential in legal decision-making, not only to argue for future violence risk, recidivism, and harsher punishment for some youth, but also for members of the courtroom workgroup to point to as a defense for more rehabilitation (Viljoen, MacDougall, Gagnon, & Douglas, 2010).

Although the externalizing behavioral health issues discussed above are common among justice-involved juveniles, mood disorders (e.g., major depression) are also found in this population (American Psychiatric Association, 2013). Approximately one in ten male justice involved youth, and nearly three in ten female justice involved youth have a diagnosable depressive disorder (Fazel et al., 2008). Additionally, females are more likely to have affective disorders and anxiety disorders than males (Fazel et al., 2008; Teplin et al., 2002).

Psychotic disorders are far less prevalent among justice-involved juveniles in comparison to other psychiatric conditions, as the prevalence rate is roughly 3% (Fazel et al., 2008). Estimates for how many juveniles have schizophrenic traits in juvenile detention are difficult to ascertain, but one study conducted in Mississippi juvenile facilities found that approximately 30% of youth in these institutions reported moderate to severe symptoms of schizophrenia (Robertson, Dill, Husain, & Undesser, 2004).

In sum, cited research has shown a high prevalence of psychiatric conditions among system involved youth. Although juveniles cannot be diagnosed with certain disorders (e.g., ASPD), they are sometimes still described with these labels (Murrie, Cornell, & McCoy, 2005). As

<sup>1</sup> The widely varying prevalence rates in many empirical analyses described were a result of the ways mental health conditions were measured in different empirical studies, or in variations in samples on which the studies were completed.

<sup>2</sup> Although CD is a precursor for later ASPD, it is important to note that not all youth who have CD in their adolescence later develop ASPD as adults.

thousands of juveniles are prosecuted in criminal courts each year, the majority who present with mental health issues (Washburn et al., 2008), it is critical that researchers examine how jurors perceive this unique population of justice involved youth.

### 1.2. Jurors' perceptions of transferred juveniles

Researchers have begun to consider how various factors shape jurors' responses to juveniles in courts. This research has primarily focused upon extra-legal case characteristics (e.g., age) and how these factors shape perceptions of dangerousness and culpability, as well as sentence recommendations (Tang & Nuñez, 2003; Walker & Woody, 2011). Other extra-legal factors, however, have been shown to affect jurors' decisions, including the defendants' race, gender, and mental health status (Boccaccini, Murrie, Clark, & Cornell, 2008; Nuñez et al., 2007; Stevenson & Bottoms, 2009).

Most notably, race appears to affect jurors' responses to transferred juveniles. For example, Black juvenile defendants are more likely than White juvenile defendants to be found guilty by male jurors (Stevenson & Bottoms, 2009) and are more likely to be given a sentence of life in prison without the possibility of parole (Mireles, 2012). Other research has found Black juvenile defendants are less likely to be found guilty than Whites, which could be the result of social desirability that occurs when respondents make efforts to appear unbiased (Pica, Pettalia, & Pozzulo, 2017).

Similarly, the impact of gender on jury decision-making is unclear, as adolescent females have been found to receive equal treatment to adolescent males in some research (Blais & Forth, 2014), while other research suggests that mock jurors consider different factors in transfer decisions for males and females (Nuñez et al., 2007). It is possible that gender differences vary depending on several factors (e.g., history of abuse, age of defendant, relationship to victim). Additionally, Nuñez and colleagues note people are much more likely to be exposed to images of males engaged in violent acts, while media attention focused on violent males often includes background information in an attempt to explain the behavior. Hence, people might have more complex cognitive schemas related to male defendants. The combination of increased exposure to violent behavior and potentially more complex cognitive schemas for males might explain gender differences in male and female legal outcomes and perceptions.

As high rates of transferred juveniles have diagnosable mental disorders (Washburn et al., 2008), it is critical that researchers move beyond commonly considered extra-legal factors (e.g., race, gender) and examine how psychological factors could also shape jurors' perceptions of juveniles in criminal court. Much of the current research in this area focuses upon punitive sentencing of juveniles labeled as psychopaths. For example, describing a juvenile defendant in expert testimony with a history of antisocial behavior and psychopathic personality traits has a stronger effect on perceptions of future dangerousness and punishment than a psychopathy diagnosis (Boccaccini et al., 2008). Mock jurors appeared to be more supportive of punishment, as juvenile defendants described as psychopaths or diagnosed with ASPD/CD received higher ratings of risk for future violence than defendants without a diagnosis (Blais & Forth, 2014). In a different study, mock jurors presented with a juvenile delinquent who had been diagnosed as psychopathic were more likely to support treatment as opposed to juvenile detention (Zacny, 2015). Zacny speculated that the atypical support of treatment for those diagnosed with psychopathy was likely driven by a biased sample of college students in social science fields and suggested that better representative community samples be used for future research.

In conclusion, several extra-legal factors have been examined in various legal outcomes for juveniles transferred to criminal court (Tang & Nuñez, 2003; Walker & Woody, 2011). Considering the high prevalence of diagnosable mental illness among the waived juvenile population (Washburn et al., 2008), it is important to also consider mental health status when examining perceptions of juveniles waived to adult

criminal court, especially in conjunction with other variables, including race-ethnicity and gender. The current study aims to fill this gap.

### 1.3. Overview of study and hypotheses

The current study explored how psychiatric conditions (CD, ADHD, MDD, schizophrenia, antisocial traits/behaviors) among waived juveniles with varying demographic factors (i.e., race-ethnicity, gender) shape jurors' perceptions of blame, punishment, dangerousness, and ability to regulate behavior. Blame, punishment, and perceived dangerousness are oft-considered outcomes in jury decision making research (Devine, 2012) and behavior regulation reflects perceived controllability associated with culpability (Weiner, 2006).

Four hypotheses were formulated. First, we hypothesized that a description of antisocial traits/behaviors would be associated with greater blame, punishment, dangerousness, and behavior regulation in comparison to other mental health conditions. Second, we hypothesized that mock jurors would perceive White juveniles as less blameworthy, dangerous, deserving of punishment, and able to regulate behavior. Third we hypothesized mock jurors would perceive females as less blameworthy, dangerous, deserving of punishment, and capable of regulating behavior. Finally, we hypothesized that there would be a three-way interaction between defendant race-ethnicity, gender, and mental health status such that non-White males described with antisocial traits and behaviors would be rated most blameworthy, dangerous, and capable of behavior regulation. White females described with other mental health traits would be perceived as lowest in these outcomes, while other groups would fall in between.

## 2. Method

### 2.1. Participants

Participants 18 years of age or older residing in the U.S. were recruited from Amazon's MTurk website and compensated \$3. Fifty-two percent of the 252 participants were male,  $M_{\text{age}} = 37.5$ . Seventy-five percent of participants were White/European American; 7% were Black/African American; and 7% were Asian/Asian American. One-third of participants reported having college experience and one-third reported having a four-year degree.

### 2.2. Design and procedure

The current study employed a  $3 \times 2 \times 5$  between- and within-subjects (mixed) experimental design. Between subject factors included juvenile defendant race-ethnicity (Latino, White, Black) and juvenile defendant gender (Male, Female), yielding six experimental conditions. The within-subjects factor included psychiatric condition (CD, ADHD, MDD, schizophrenia, antisocial traits/behaviors).

Participants were informed that they would read a hypothetical scenario about one juvenile offender who was transferred from the juvenile into the adult system. Participants were then randomly assigned to read about one juvenile defendant—a Black male, Black female, White male, White female, Latino, or Latina. All juvenile defendants were given gender and racially stereotypical names (e.g., DeShawn, Maria) to indicate race/ethnicity and gender and paired with six standardized photos (i.e., one photo per experimental condition) (Ma, Correll, & Wittenbrink, 2015). Participants read that the juvenile was transferred to criminal court and found guilty by a jury. No other information about the juvenile was provided (e.g., age or offense). Participants then rated the extent to which the defendant was blameworthy, dangerous, deserving of punishment, and able to regulate behavior given that the defendant was diagnosed with CD, ADHD, MDD, schizophrenia, or described with antisocial traits and behaviors. The presentation order of all mental health conditions was counter-balanced across conditions.

### 2.3. Variables

#### 2.3.1. Independent variables

Independent variables included the waived juvenile defendant's mental health condition, race-ethnicity, and gender. Mental health conditions included CD, ADHD, MDD, schizophrenia and antisocial traits/behaviors. CD was defined for participants as "a persistent and repetitive pattern of behavior in which the basic rights of others or major societal norms or rules are violated" (American Psychiatric Association, 2013). ADHD was defined as "a neurodevelopmental disorder characterized by persistent inattention, hyperactivity, and impulsivity" (Martinez-Badía & Martínez-Raga, 2015). MDD was defined as "a change in mood in which a person experiences a depressed or irritable mood most of the day that might also be accompanied by reduced self-esteem and confidence; ideas of guilt and unworthiness; decreased focus or concentration; disturbed sleep; and possibly, ideas about self-harm" (Gautam, Jain, Gautam, Vahia, & Grover, 2017). Schizophrenia was defined as "a neurological disorder characterized by delusions, hallucinations, mood swings, and disorganized speech and behavior" (Arciniegas, 2015). Research indicates that most youth are not explicitly labeled as "psychopaths" when psychopathy features are considered present in legal proceedings (Viljoen et al., 2010). In order to avoid psychopathy labeling, participants read about a defendant juvenile who had "been described by an expert as having a history of displaying superficial charm; a grandiose notion of self-worth; a need for stimulation and impulsiveness; pathological lying; the ability to manipulate others; and a lack of remorse and empathy."

#### 2.3.2. Dependent variables

Participants rated the extent to which a juvenile defendant was blameworthy, deserving of punishment, able to regulate behavior, and likely to commit crime in the future if he or she possessed the aforementioned mental health conditions. First, participants were asked if the defendant was *more or less* blameworthy with the diagnosis than without (1 = *much less blameworthy*, 6 = *much more blameworthy*). Next, participants were asked if the defendant deserved *more or less* punishment (1 = *much less punishment*, 6 = *much more punishment*). Then, participants were asked how likely it was that the juvenile defendant would commit another crime in the future (1 = *much less likely*, 6 = *much more likely*) (i.e., dangerousness). Finally, participants were asked if the defendant was more or less able to regulate behavior (1 = *much less likely*, 6 = *much more likely*).

## 3. Results

To understand the effects of defendant race-ethnicity, defendant gender, and psychiatric conditions on perceptions of blame, punishment, dangerousness, and ability to regulate behavior, four mixed ANOVAs were conducted.<sup>3</sup> Power analysis using G\*Power (Faul, Erdfelder, Lang, & Buchner, 2007) indicated that our sample size was sufficient to detect a (1) small effect ( $f = 0.10$ ) 80% of the time if one exists in the population for a repeated measures analyses involving within-between interactions, (2) medium effect ( $f = 0.25$ ) 80% of the time for repeated measures, between factors; and (3) small effect 95% of the time for repeated measures, within factors analyses ( $\alpha = 05$ ). Defendant race-ethnicity and defendant gender were entered as between-subjects factors. Ratings for blameworthiness, punishment, dangerousness, and behavior regulation associated with CD, MDD, ADHD, schizophrenia, and antisocial traits/behaviors were entered as within-subject factors. Sample means and standard deviations for perceptions of blameworthiness, punishment, dangerousness, and behavior

<sup>3</sup> Mauchly's test of Sphericity indicated that the assumption of sphericity had been violated for all four ANOVAs. Hence, all results are reported with the Greenhouse-Geisser correction.

**Table 1**  
Blameworthiness, punishment, dangerousness, and behavior regulation means and standard deviation by psychiatric condition, defendant race-ethnicity, and gender.

	Defendant race-ethnicity and gender																				
	Black Male			Black female			White male			White female			Latino male			Latina female			Total		
	M	SD	n	M	SD	n	M	SD	n	M	SD	n	M	SD	n	M	SD	n	M	SD	n
<b>Blameworthiness</b>																					
CD	3.44	1.14	39	3.17	0.82	42	3.30	1.22	40	3.40	0.98	43	3.47	1.08	43	3.29	0.99	42	3.35	1.03	249
MDD	3.10	0.97	39	3.48	0.92	42	3.15	1.27	40	3.19	0.93	43	3.30	0.94	43	3.19	0.94	42	3.25	0.99	249
ADHD	3.21	1.08	39	3.55	0.94	42	3.50	1.04	40	3.33	0.99	43	3.40	1.12	43	3.50	0.92	42	3.42	1.00	249
Schizophrenia	2.21	1.08	39	2.12	1.02	42	2.15	1.05	40	2.02	0.83	43	2.40	1.05	43	2.12	0.99	42	2.17	1.00	249
Antisocial	4.31	1.52	39	4.76	1.10	42	4.95	1.06	40	4.77	1.17	43	4.33	1.13	43	4.36	1.19	42	4.59	1.20	249
<b>Punishment</b>																					
CD	3.55	1.30	39	3.29	0.92	41	3.37	1.41	41	3.30	0.89	42	3.37	0.73	42	3.30	0.99	43	3.34	1.04	248
MDD	3.13	0.99	39	3.50	0.92	41	3.24	1.20	41	2.98	0.99	42	3.12	0.79	42	3.12	1.00	43	3.15	0.96	248
ADHD	3.20	1.07	39	3.64	0.82	41	3.46	0.95	41	3.26	0.88	42	3.30	1.01	42	3.40	0.95	43	3.34	0.91	248
Schizophrenia	2.60	1.19	39	2.43	1.17	41	2.22	1.08	41	2.28	0.88	42	2.54	1.10	42	2.40	0.98	43	2.36	1.00	248
Antisocial	4.25	1.55	39	4.55	1.11	41	4.76	1.09	41	4.51	1.14	42	4.14	1.19	42	4.21	1.23	43	4.39	1.23	248
<b>Dangerousness</b>																					
CD	5.03	1.00	40	4.98	0.84	42	5.23	1.05	40	5.14	0.83	43	4.91	1.19	42	5.21	0.84	42	5.08	0.96	249
MDD	3.70	1.04	40	3.83	1.25	42	4.13	1.16	40	3.88	1.14	43	3.90	1.10	42	4.03	1.14	42	3.91	1.14	249
ADHD	3.95	0.93	40	4.07	0.95	42	4.13	1.29	40	3.98	0.96	43	3.81	0.99	42	4.12	1.06	42	4.01	1.03	249
Schizophrenia	4.08	1.51	40	4.93	0.89	42	4.70	1.22	40	4.65	1.00	43	4.38	1.15	42	4.67	1.12	42	4.57	1.18	249
Antisocial	5.33	1.25	40	5.38	0.73	42	5.48	0.88	40	5.44	0.88	43	5.31	1.00	42	5.36	0.88	42	5.38	0.94	249
<b>Beh. Regulation</b>																					
CD	2.80	1.43	40	2.59	1.11	42	2.88	1.32	40	2.71	1.11	42	2.93	1.18	43	2.49	1.08	41	2.73	1.21	248
MDD	3.10	0.93	40	2.95	1.03	42	3.08	1.07	40	3.17	1.01	42	3.05	1.00	43	3.05	1.28	41	3.07	1.05	248
ADHD	2.95	1.11	40	3.03	0.98	42	3.13	1.11	40	3.10	1.10	42	3.05	1.23	43	2.98	1.15	41	3.04	1.11	248
Schizophrenia	1.73	0.88	40	1.69	0.95	42	1.83	0.93	40	1.71	0.77	42	2.12	1.00	43	1.54	0.74	41	1.77	0.90	248
Antisocial	3.63	1.63	40	3.64	1.53	42	3.43	1.63	40	4.12	1.55	42	3.60	1.45	43	3.59	1.38	41	3.67	1.53	248

regulation by disorder type, defendant race-ethnicity, and defendant gender can be found in Table 1.

### 3.1. Main effect of mental health condition

#### 3.1.1. Blameworthiness

There was a main effect of psychiatric condition on ratings of blame,  $F(3.386, 819.377) = 260.737, p < .001, \eta_p^2 = 0.519$ . Generally, a juvenile defendant was considered the least blameworthy when diagnosed with schizophrenia and the most blameworthy when described with antisocial traits/behaviors,  $ps < 0.001$ . CD blameworthiness did not significantly differ from ADHD or MDD but was higher for CD than for schizophrenia,  $< 0.001$  and lower for CD than for antisocial traits and behaviors,  $p < .001$ . Additionally, blameworthiness was lower for MDD than ADHD,  $p = .006$ ; higher for MDD than for schizophrenia,  $p < .001$ ; and lower for MDD than for antisocial traits and behaviors,  $p < .001$ .

#### 3.1.2. Punishment

There was also a main effect of psychiatric condition on ratings of punishment,  $F(3.168, 766.596) = 202.301, p < .001, \eta_p^2 = 0.455$ . Generally, a schizophrenia diagnosis was associated with the least amount of recommended punishment and a description of antisocial traits/behaviors was associated with the most recommended punishment,  $p < .001$ . Punishment associated with CD did not significantly differ from punishment associated with ADHD. However, mean recommended punishment was higher for CD than MDD,  $p = .003$ ; higher for CD than for schizophrenia,  $p < .001$ ; and lower for CD than for antisocial traits and behaviors,  $p < .001$ . Mean punishment was lower for MDD than ADHD,  $p = .001$ ; higher for MDD than for schizophrenia,  $p < .001$ ; and lower for MDD than for antisocial traits and behaviors. Finally, punishment was higher for ADHD than schizophrenia,  $p < .001$ , and lower for ADHD than for antisocial traits and behaviors,  $p < .001$ .

#### 3.1.3. Dangerousness

There was a main effect of psychiatric condition on ratings of dangerousness,  $F(3.76, 913.90) = 138.44, p < .001, \eta_p^2 = 0.363$ .

Generally, a juvenile defendant was considered the least dangerous when diagnosed with MDD or ADHD and the most dangerous when described with antisocial traits/behaviors (see Table 1). Mean dangerousness was lower when defendants were diagnosed with schizophrenia than when they were described with antisocial traits and behaviors,  $p < .001$ . Mean dangerousness was higher for CD than MDD,  $p < .001$ ; higher for CD than for ADHD,  $p < .001$ ; higher for CD than for schizophrenia,  $p < .001$ ; and lower for CD than for antisocial traits and behaviors,  $p < .001$ . Dangerousness associated with MDD did not significantly differ from dangerousness associated with ADHD. Mean dangerousness was lower for MDD and ADHD than for schizophrenia,  $ps < 0.001$  and lower for MDD and ADHD than for antisocial traits and behaviors,  $ps < 0.001$ .

#### 3.1.4. Behavior regulation

There was also a main effect of psychiatric condition on ratings of behavior regulation,  $F(3.04, 734.39) = 132.53, p < .001, \eta_p^2 = 0.354$ . Overall, a schizophrenia diagnosis was associated with the least capacity for behavior regulation. Mean behavior regulation was lower for schizophrenia than a description of antisocial traits and behaviors,  $p < .001$ . Mean behavior regulation was lower for CD than MDD,  $p < .001$  antisocial traits/behaviors,  $p < .001$ , and ADHD,  $p < .001$  and higher for CD than for schizophrenia,  $p < .001$ . The ability to regulate behavior for MDD did not significantly differ from the ability to regulate behavior for ADHD. Additionally, mean behavior regulation was higher for MDD and ADHD than for schizophrenia,  $ps < 0.001$  and lower for MDD than for antisocial traits and behaviors,  $ps < 0.001$ . We also hypothesized that females would be considered less blameworthy, less dangerous, deserving of less punishment, and more likely to regulate behavior than males. There was no main effect of defendant gender on mean blameworthiness,  $p = .982$ ; punishment,  $p = .976$ ; dangerousness,  $p = .232$ ; or ability to regulate behavior,  $p = .555$ .<sup>4</sup>

<sup>4</sup>We found a statistically significant interaction between defendant gender and psychiatric disorder for behavior regulation such that the ability to regulate behavior was higher for male defendants diagnosed with schizophrenia than for female defendants diagnosed with schizophrenia but the very small effect size associated with this finding ( $\eta_p^2 = 0.012$ ) prompted us to exclude it from the

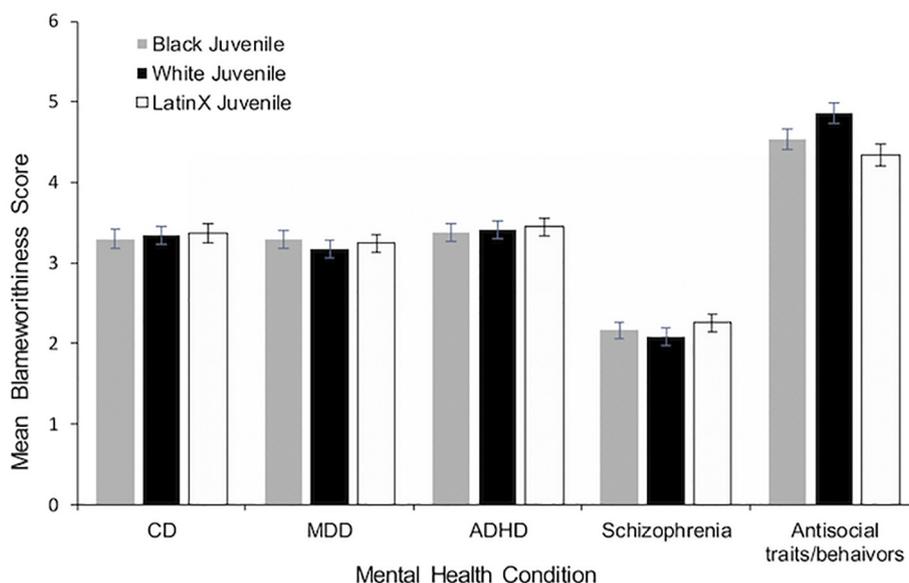


Fig. 1. Blameworthiness ratings by juvenile defendant race-ethnicity and mental health condition.

### 3.2. Defendant race-ethnicity and gender

Additionally, we also hypothesized that participants would perceive White juveniles as less blameworthy, less dangerous, deserving of less punishment, and better able to regulate behavior than non-White juveniles. There was no main effect of defendant race-ethnicity on blameworthiness,  $p = .718$ ; punishment,  $p = .686$ ; dangerousness,  $p = .394$ ; or ability to regulate behavior,  $p = .706$ . There was a statistically significant two-way interaction between defendant race-ethnicity and psychiatric condition on blameworthiness,  $F(6.75, 820.09) = 2.36, p = .023, \eta_p^2 = 0.019$ , such that White juveniles described with antisocial traits ( $M = 4.86; SE = 0.132$ ) were considered more blameworthy than Latino juveniles ( $M = 4.34; SE = 0.130, p = .006$ ) and Black juveniles ( $M = 4.54; SE = 0.134, p = .047$ ). There was also a statistically significant two-way interaction between race-ethnicity and mental health status on punishment,  $F(6.34, 766.60) = 2.42, p = .023, \eta_p^2 = 0.020$ . White juveniles described with antisocial traits ( $M = 4.65; SE = 0.134$ ) were rated as deserving of more punishment than Latino defendants described with antisocial traits ( $M = 4.15; SE = 0.132, p = .008$ ). See Figs. 1 and 2 for blameworthiness and punishment mean scores by juvenile defendant race-ethnicity across all mental health conditions.

Finally, we hypothesized that there would be a three-way interaction between a defendant's race-ethnicity, gender, and mental health status such that non-White males described with antisocial traits and behaviors would be considered most blameworthy, dangerous, deserving of more punishment, and better able to regulate behavior compared to all other groups/combinations of independent variables. This interaction was not statistically significant.

## 4. Discussion

The purpose of the current study was to examine how extra-legal defendant characteristics (i.e., race, ethnicity, and gender) affect participants' perceptions of juveniles with varying mental health conditions who are transferred to criminal courts. First, we had hypothesized, given the most common findings in previous studies (Blais & Forth, 2014; Boccaccini et al., 2008), that juveniles described with antisocial traits/behaviors would be rated as deserving of more punishment, more

blameworthy, more dangerous, and less able to regulate behavior in comparison to other mental health conditions. This hypothesis was supported. Juvenile defendants in the current study who were described with antisocial traits were considered to be the most blameworthy, deserving of punishment, dangerous, and able to regulate behavior.

Such findings suggest that tools that point to significant antisocial conditions such as psychopathy should be judiciously considered for juveniles. Despite the cautious value of measurement for these types of traits among adult populations, mental health professionals have been cautious in labeling juvenile justice involved youth as antisocial in this way (Boccaccini et al., 2008). This caution is due in part to the temporariness of many adolescent behaviors that are indicative of antisocial behavior, that in many cases, diminish as adolescents mature. However, as previously noted, the construct of psychopathy has been used in the courts in consideration of transfer and sentencing for juveniles (e.g., Viljoen et al., 2010). Considering some argue for the potentially fleeting nature of antisocial personality characteristics of adolescents, the findings from the current study are potentially concerning when considering treatment for these youth. To explain, transferred juveniles are removed from the juvenile justice system where the predominant orientation is rehabilitation (Feld, 1999). Upon placement in the criminal justice system, adolescents are subject to harsher treatment, limited rehabilitation, and criminal labels that have long-term impacts on their life prospects (Schubert et al., 2010).

In contrast to defendants described with antisocial traits, those diagnosed with schizophrenia were seen as less deserving of punishment. It may be that participants see youth with schizophrenia as less culpable based on their perceived significant mental health needs, and are more likely to pathologize the youths' law breaking as opposed to criminalizing antisocial behaviors. This finding is especially interesting given that the label of certain specific mental illnesses (e.g., schizophrenia) might actually be seen as a beneficial characteristic of the defendant in some instances, ultimately garnering more sympathy. One could speculate that participants potentially see defendants with some psychiatric conditions as "ill" and therefore less culpable for their behaviors than a defendant without these illnesses.

Participants' perceptions of blame and punishment were moderately affected by a CD diagnosis even though a juvenile defendant with CD was considered dangerous. This suggests that participants recognize the crossover between CD and antisocial traits/behavior but do not attribute the same blame to a juvenile diagnosed with CD as one who is

(footnote continued)  
primary findings of interest.

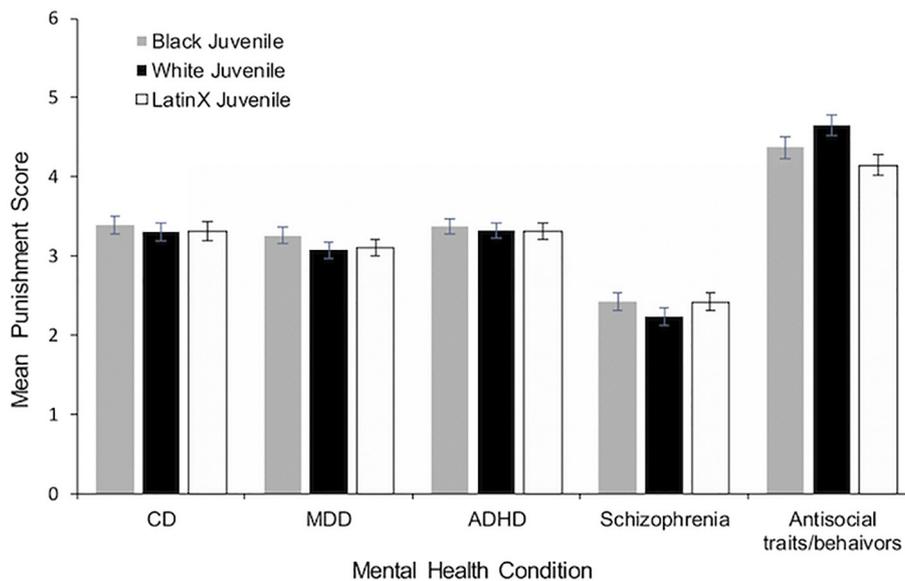


Fig. 2. Punishment ratings by juvenile defendant race-ethnicity and mental health condition.

described with antisocial traits/behaviors. This might be due to the difference in perceived behavior regulation such that participants generally appeared to believe that a juvenile was better able to regulate behavior when described with antisocial traits and behaviors than when diagnosed with CD. Perhaps because juveniles with CD were reported as being “diagnosed,” in contrast to juveniles with antisocial traits/behaviors whose characteristics were “described,” participants perceived that those with formal diagnoses were less able to regulate behavior. Such findings suggest that experts should take care when describing juveniles to avoid biasing jurors.

Considering our findings regarding CD and schizophrenia, it would appear that a mental health diagnosis might prompt leniency such that people might attribute delinquent or criminal behaviors to external factors (e.g., the mental health condition) rather than to internal factors as might be the case for a juvenile described with antisocial traits/behaviors. It might also be that mental health diagnoses signal reduced controllability of their behavior or situation (Weiner, 2006). In the current study, juveniles with mental health diagnoses were perceived as less capable of regulating behavior than juveniles described with antisocial traits/behaviors. This suggests that experts might want to address the juvenile's ability to regulate behavior to help jurors understand the true nature of mental disorders, which could prevent disparities in verdicts.

In contrast to our hypotheses, White defendants were considered more blameworthy and deserving of punishment than Latino and Black defendants when described with antisocial traits and behaviors, and White defendants were considered more deserving of punishment when described with antisocial traits and behaviors than Latino defendants. These findings are consistent with Pica et al. (2017) jury decision-making study of transferred juveniles, which found that Black juveniles were less likely than White juveniles to be found guilty at trial. They speculated that this was the result of mock jurors overcompensating to appear unbiased. While limited research has examined how jurors in criminal courts perceive non-white juveniles, racial and ethnic disparities in processing have been observed at several stages of the juvenile justice system. For example, in comparison to White youths, Latino youths are processed more punitively in detention decisions (Rodriguez, 2010). In the current study participants extended lenient treatment to Latino and Black youths described with antisocial traits. It could be that overcompensation also occurs here but for Latino and Black youth. Any finding of unequal treatment of defendants is cause for concern. Many courts take precautions against implicit bias in

judicial decision-making (e.g., Perez, Miller, Summers, & Marsh, 2017). Others take steps to limit jurors' bias. For instance, some courts provide instructions or videos instructing jurors to ignore the defendant's race (for review, see Alvarez, Miller, & Bornstein, 2016).

Our third hypothesis that females would be considered less blameworthy, deserving of punishment, dangerous, and likely to regulate their behavior was not supported. While most research on gender disparities indicates that girls generally receive more lenient juvenile justice treatment due to chivalrous actions by court actors (Bishop & Frazier, 1991), those disparities were not present in the current study. However, some studies suggest that the judicial response to girls are shaped by the stage of processing. For example, girls are typically treated more punitively in the earlier stages of processing (e.g., arresting status offenders), as it is perceived that formal contact with the system will protect girls (Spivak, Wagner, Whitmer, & Charish, 2014). Then, in the later stages of processing (e.g., adjudication), girls are treated similarly to boys (Dannefer & Schutt, 1982; Spivak et al., 2014), suggesting that court actors are reviewing relevant case factors and are less likely to use their discretion to divert girls out of the system. Some prior research also indicates that girls and boys will be treated similarly by mock jurors (Blais & Forth, 2014). It is possible that once juveniles have been moved into the adult system, jurors are less willing to consider extra-legal factors, like gender, as mitigating factors and focus more so on the seriousness of offense when making decisions.

Similarly, our final hypothesis that race-ethnicity, gender, and mental health status would interact to shape responses to juveniles was not supported. In contrast to prior research findings (e.g., Rodriguez, 2010), results from the current study suggest that participants are not overly influenced by race-ethnicity and gender when making decisions of juveniles with mental health issues. In a few cases, Whites and those described with antisocial characteristics were treated more punitively, but overall, unique responses based upon demographic factors were not present. These findings are encouraging, as they indicate that jurors are setting aside demographic factors in favor of considering cases of justice involved youth based primarily upon legal case characteristics.

#### 4.1. Limitations of study and future research

The current study was an important step in examining how jurors might perceive juveniles with mental health issues, but several limitations are worth noting. We relied upon brief descriptions of a juvenile defendant providing only a fraction of information that jurors would be

exposed to. It is possible that a trial with detailed descriptions of the history of the juvenile and motivations for offending would shape jurors' responses. Future research should consider using mock trial simulations to assess jurors' responses. It is also important to note that the current study did not involve participation in a trial. As such, this study lacked verisimilitude (Bornstein, 1999) and consequentiality (Bornstein and McCabe, 2004).

Relatedly, we used a convenience sample that was neither selected randomly nor generalizable to the public. However, prior studies have highlighted the representativeness (Shapiro, Chandler, & Mueller, 2013) and validity (Hauser & Schwarz, 2016) of these types of participants. Furthermore, MTurk samples are more representative of typical juries than commonly used student samples, as MTurk workers tend to be older than student samples, have more education, and are more likely to be employed (Behrend, Sharek, Meade, & Wiebe, 2011).

Finally, as the public is increasingly exposed to psychopathy via the media, forensic psychologists are advised against labeling adolescents as psychopaths, but it is possible that they and others in the justice system use language indicative of psychopathic tendencies (Boccaccini et al., 2008). This possibility has resulted in research like the current study examining how this language can shape perceptions of adolescents in the criminal justice system. Despite this research, it remains unclear exactly how, why, and when psychopathic identifiers are used for adolescent offenders. Future research should examine the extent, content, and wording used to describe juveniles as psychopaths and who typically uses such language.

#### 4.2. Conclusions

Overall, it appears that participants differentiated between psychiatric conditions as they relate to culpability, dangerousness, behavior regulation, and punishment. We found robust effects of mental health conditions across perceptions of blame, punishment, dangerousness, and behavior regulation. Our findings also suggest that juveniles with mental health diagnoses are perceived as less capable of regulating behaviors than juveniles described with antisocial traits/behaviors. Future research could explicate this relationship further by more directly testing an attributional model of controllability, moral emotions, and responsibility (Weiner, 2006).

Our findings emphasize the care that legal and health practitioners must take in the ways in which they talk or write about a juvenile defendant's mental health status especially in regards to juveniles waived to criminal court. The results of our study also have implications for policy regarding the transfer of juveniles to criminal court. Jurors in cases involving juveniles waived to criminal courts are confronted with the responsibility of making long-term decisions about young persons. Although Murrie, Boccaccini, McCoy, and Cornell (2007) found that diagnostic labels rarely influence judges, our study suggests that jurors might consider a waived juvenile's mental health status in legal decision-making. As such, jurors in cases where the defendant is a juvenile should be made aware of the maturation process of justice involved youth. Policymakers should take these results into consideration as the juvenile justice system might be better designed to deal with juvenile offenders who face mental health problems than those dealing mostly with adult offenders.

#### Acknowledgements

This project was funded by the College of Liberal Arts Scholarly and Creative Activities and the New Scholarly Endeavor Grant Awards (University of Nevada, Reno).

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