Check for updates

THE PREVALENCE OF TRAUMA AMONG PARTICIPANTS IN A JUVENILE MENTAL HEALTH COURT

HALEY R. ZETTLER
JESSICA M. CRAIG
University of North Texas

There is evidence that youth in the justice system are more likely to experience trauma and mental health problems than the general population. Trauma histories may exacerbate mental health problems, and mental health problems may increase the likelihood of continued offending. While prior research has examined the effects of adverse childhood experiences (ACEs) on recidivism, it has yet to consider the prevalence of trauma among youth in a juvenile mental health court. Data from an urban juvenile mental health court (N = 203) was used to assess the prevalence of ACEs. The average ACE score of participants was 3.6% and 46% had a high ACE score. Furthermore, those who did not complete the program and/or were rearrested following participation had significantly higher ACE scores. Controlling for other factors, ACEs were not significantly associated with program noncompletion or rearrest. Policy implications surrounding trauma-informed practices are provided.

Keywords: adverse childhood experiences; mental health; trauma; juvenile justice

INTRODUCTION

Youth in the juvenile justice system often report extensive trauma histories (Abram et al., 2004; Baglivio & Epps, 2016; Dierkhising et al., 2013; Kerig et al., 2009). Prior research has found that trauma is correlated with various mental health problems, including symptoms related to anxiety, depression, self-harm, somatic complaints, attention-deficit hyperactivity disorder (ADHD), post-traumatic stress disorder, and antisocial personality disorder (Anda et al., 2007; DeVenter et al., 2013; Douglas et al., 2011; Kerig et al., 2009; Merrick et al., 2017; Mersky et al., 2013; Schilling et al., 2007; Vaughn et al., 2017). Research on childhood trauma and offending in adolescence indicates that trauma histories are associated with an increased likelihood of offending during both adolescence and adulthood (Baglivio et al., 2014, 2015; Barrett et al., 2013; Craig et al., 2017; Wolff et al., 2017; Yohros, 2023).

AUTHORS' NOTE: *The authors thank Chief Rosie Medina and the El Paso Juvenile Probation Department for their assistance on this project. Correspondence concerning this article should be addressed to Haley R. Zettler, Associate Professor, Department of Criminal Justice, University of North Texas, 1155 Union Circle #305130, Denton, TX 76203; email: Haley.Zettler@unt.edu.*

CRIMINAL JUSTICE AND BEHAVIOR, 201X, Vol. XX, No. X, Month 2024, 1–19.
DOI: 10.1177/00938548231222619
Article reuse guidelines: sagepub.com/journals-permissions
© 2024 International Association for Correctional and Forensic Psychology

In addition, system-impacted youth are disproportionately likely to suffer from mental health problems, with an estimated 50% and 75% meeting the criteria for a mental health disorder (Grande et al., 2011; Teplin et al., 2002; Vincent et al., 2008). While the prevalence varies based on which stage of the system youth are assessed, mental health diagnoses are more frequent the further the youth is processed (Wasserman et al., 2010). Contact with the juvenile justice system may exacerbate mental health problems and if left untreated may lead to continued offending behavior. As youth in the juvenile justice system are more likely to report both mental health problems and trauma exposure, which in turn may increase the likelihood of future delinquency, it is important to further consider this relationship.

The current study seeks to examine the prevalence of childhood trauma among youth participating in a juvenile mental health court. While there is evidence that youth with mental health problems report disproportionately higher rates of trauma, research is yet to examine this relationship in a sample of youth participating in a specialized mental health court program. Furthermore, the current study assesses the relationship between trauma and court outcomes for these youth, as youth who have both trauma histories and mental health problems may require additional treatment resources. Prior to presenting the methodological approach and results of the study, a brief overview of juvenile mental health courts and their effectiveness is provided. We also include a discussion on the relationship between trauma and mental health problems among system-impacted youth.

OVERVIEW OF JUVENILE MENTAL HEALTH COURTS

As youth with mental health problems pose unique challenges and require individualized assessment and treatment, one program developed to better serve this population is the use of juvenile mental health courts (JMHCs). Mental health courts are a type of specialty court that evolved out of the drug court model in the late 1990s in response to the ineffectiveness of traditional criminal justice processing of defendants with mental illnesses (Goldkamp & Irons-Guynn, 2000; Petrila et al., 2000; Redlich et al., 2005). The first JMHC was established in 2001 in Santa Clara County, California, and aimed to unite mental health and juvenile justice stakeholders through a multidisciplinary treatment response (Arredondo et al., 2001). As of 2022, 56 JMHCs were operating in the United States (Substance Abuse and Mental Health Services Administration [SAMHSA], 2022). While JMHCs vary by jurisdiction, several guiding principles distinguish these courts from other juvenile justice programming.

One of the key components of JMHCs is their focus on treatment, rather than punishment alone, through intensive and multidisciplinary case management (Gardner, 2011). In a national survey of 41 JMHCs, 51% reported that youth with any mental health diagnosis were eligible to participate and 70% included felony offenses (Callahan et al., 2012). The National Center of Mental Health and Juvenile Justice lists the following as shared principles of JMHCs: (a) youth should not be in contact with the juvenile justice system solely because of mental health problems or the need to access treatment; (b) youth with mental health problems should be diverted from the traditional justice system into evidence-based community programming when possible; (c) youth should be placed in the least restrictive setting; (d) information garnered from mental health screening or assessment should not jeopardize a youth's legal interests; (e) treatment should be culturally appropriate; (f) treatment should consider the developmental differences of youth that may affect behavior, (g)

JMHCs should engage youth's family and community support systems; and (h) JMHCs should be multidisciplinary and collaborative in nature (Skowyra & Cocozza, 2006). As JMHCs have increased in popularity in the past two decades, it is important to examine the effectiveness of these programs in providing mental health treatment to youth and reducing recidivism.

RESEARCH ON JMHCS

A recent meta-analysis of mental health courts on recidivism found that participation led to a 74% reduction in recidivism for both adult and juvenile court programs (Fox et al., 2021). While there is less research on JMHCs than other specialty courts (i.e., drug courts), several evaluations have assessed outcomes for program participants. An evaluation of the first JMHC in Santa Clara County reported that participants committed significantly fewer violent, aggressive, and property crimes in the 23 months following program admission compared with the 18 months prior (Behnken et al., 2009). Heretick and Russell (2013) examined outcomes for 81 youth who entered a JMHC between 2005 and 2011, concluding that youth who participated in the JMHC were significantly less likely to recidivate during and after their probation supervision, and less likely to commit violent/aggressive and property offenses than youth adjudicated and assigned to other probation and diversion programs. Similarly, in a sample of predominately Black youth, JMHC participants were significantly less likely to be readjudicated and rearrested than youth on traditional probation supervision (Ramirez et al., 2015). Furthermore, the authors found that participation was associated with substantial reductions in a variety of mental health symptoms.

In a process evaluation of Toronto's first JMHC, Davis and colleagues (2015) identified predictors of successful completion of the program as well as how the program addressed mental health needs. The results indicated that most participants successfully completed the program, and those who completed the program had higher levels of initial treatment motivation. In addition, the authors found that mental health issues were indirectly related to offending, highlighting the need to consider other criminogenic needs during programming (Davis et al., 2015). Regarding differences in JMHC outcomes by race and gender, one study found that participation decreased the likelihood of recidivism for both boys and girls and that racial and ethnic minorities had significantly larger reductions than white participants (Behnken et al., 2017). While research on the effectiveness of JMHCs is largely positive across various demographic groups and geographical locations, research has yet to examine the prevalence and of trauma in this population.

TRAUMA AND MENTAL HEALTH PROBLEMS AMONG SYSTEM-IMPACTED YOUTH

There is an established link between childhood trauma and mental health problems in several juvenile justice settings. Much of this research conceptualizes childhood trauma using adverse childhood experiences (ACEs). In the original ACE study, Felitti and colleagues (1998) define ACEs as 10 potentially traumatic exposures during childhood: emotional abuse, physical abuse, sexual abuse, physical neglect, violence toward mother, household substance abuse, household mental illness, parental separation or divorce, and having a household member who has been incarcerated. Among 429 youth in the juvenile justice system, Clements-Nolle and Waddington (2019) found that youth with four to five ACEs reported higher levels of psychological distress. In a sample of youth on probation,

Logan-Greene and colleagues (2017) found that adverse childhood experiences (ACE) score was the strongest predictor of mental health problems. An examination of system-impacted youth in Germany revealed that ACEs were significantly associated with the occurrence of both internalizing and externalizing mental health problems, with those reporting high ACE scores being the most likely to report significant mental health problems (Turner et al., 2021). In a large sample of adjudicated Florida youth, Craig and colleagues (2019) found that current drug use, mental health problems, and their co-occurrence partially mediated the relationship between ACEs and recidivism among adjudicated youth. A review by Folk, Ramos, et al. (2021) examined the relationship between ACEs and outcomes among first-time system-impacted youth, concluding that exposure to more ACEs, particularly abuse, increased the likelihood of substance use and psychiatric symptoms.

In addition, there is evidence that childhood trauma increases the likelihood of psychotropic medication prescriptions both in adolescence and in adulthood (Anda et al., 2007; Wolff et al., 2022). For example, Anda and colleagues (2007) found that adult patients with a high ACE score ($\geq$5) were nearly three-times more likely to be prescribed a psychotropic medication. However, a study of residentially placed youth posits that the relationship between ACEs and psychotropic medications may be explained through the increased likelihood of depression/anxiety, thought disturbance, and prior mental health problems (Wolff et al., 2022).

While no research to date has directly assessed trauma in the context of a JMHC, prior research on trauma and mental health problems suggests that trauma histories are prevalent among mental health court participants. For example, an examination of trauma exposure and post-traumatic stress disorder (PTSD) in a sample of adult specialty courts indicated that childhood trauma was associated with higher levels of PTSD symptoms among court participants (Tossone & Baughman, 2020). In Davis and colleagues' (2015) evaluation of Toronto's JMHC, nearly half (48%) of participants reported an elevated score on the Massachusetts Youth Screening Instrument (MAYSI-2) trauma subscale. Collectively, these findings signify the need to investigate trauma exposure in JMHC participants.

Childhood trauma can interfere with an adolescent's ability to regulate affect, adapt healthy coping mechanisms, and exercise impulse control, all of which are associated with delinquent behaviors (van der Kolk, 2014; van der Kolk & Fisler, 1994). Research has demonstrated that youth who are exposed to a higher number of ACEs are more likely to have an early onset of offending (Baglivio et al., 2015), more incidents of institutional misconduct (Trulson et al., 2016), and further entrenchment in the juvenile justice and adult legal system (Craig et al., 2017; Fox et al., 2015; Perez et al., 2018). A recent study of detained youth by Weber and Lynch (2021) found that cumulative adversity significantly predicted reoffending among girls and boys. In Yohros' (2023) systematic review and meta-analysis of the relationship between ACEs and youth recidivism, the author reviewed 16 studies concluding that ACEs increase the risk of youth recidivism, with varying effects sizes across gender, racial, and ethnic differences. However, it is important to note that most of the research on the ACEs-reoffending relationship comes from the same geographical region, with most studies being conducted in Florida (n = 14). Furthermore, studies' definitions of recidivism vary from rearrest to re-adjudication (Narvey et al., 2021), follow-up period (Kowalski, 2019; Muir & Viljoen, 2022), and official versus self-report measures (Craig et al., 2017).

One way to combat the effects of trauma on future offending is by providing trauma-informed programming throughout the juvenile justice system. Trauma-informed programming focuses on mitigating the negative symptoms associated with trauma including PTSD and other mental health problems such as depression and anxiety (Black et al., 2012; Silverman et al., 2008). These programs, although not standardized across the juvenile justice system, may include cognitive–behavioral therapies such as trauma-focused cognitive behavioral therapy (TF-CBT); skills-based programs for youth and staff such as Trauma Affect Regulation: A Guide for Education and Therapy (TARGET); and system-wide programming such as the Sanctuary model (Zettler, 2021). Research on the effectiveness of trauma-informed programming is overwhelmingly positive, concluding that they can reduce negative mental health symptoms, and indirectly reduce violence and future offending (Zettler, 2021). As JMHCs are designed to divert youth from traditional justice system processing, they serve as an important place to identify and treat trauma to prevent further offending and entrenchment in the legal system.

CURRENT STUDY

Using a sample of youth participating in a juvenile mental health court, the current study aims to examine the prevalence of trauma on juvenile court outcomes. As noted earlier, prior research has highlighted the co-occurrence of mental health problems and trauma in the juvenile justice system, yet no study to date has examined this relationship in the context of a juvenile mental health court. It is important to consider the role of trauma in juvenile mental health courts, as youth with trauma histories may have additional treatment needs during participation in these programs. Specifically, the current study seeks to answer the following research questions:

Research Question 1 (RQ1): What is the prevalence of adverse childhood experiences among youth participating in a juvenile mental health court?

Research Question 2 (RQ2): Are adverse childhood experiences associated with court outcomes including program completion and rearrest?

METHOD

SAMPLE

The current study relies on secondary data from a large juvenile probation department in an urban, southwestern county. The sample includes participants in the juvenile mental health court program from January 1, 2013, through December 31, 2019 ($N = 203$). In the JMHC, participants are required to have a *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-V;* American Psychiatric Association, 2013) Axis diagnosis indicating a mental health disorder as identified by a mental health professional. Furthermore, participants must be assessed at a low to moderate risk to reoffend based on their PACT assessment. Exclusion criteria for the court include intellectual developmental disorder and/or autism/spectrum disorders and youth with a substance abuse diagnosis of moderate or severe. The juvenile probation department operating the JMHC in this jurisdiction provided the researchers all relevant information regarding demographic characteristics, Positive Achievement Change Tool (PACT) assessments, and court outcomes, including recidivism

measured as being rearrested within 1 year of program completion/removal. When a youth is unsuccessfully discharged from a program it is because of their lack of participation/engagement in services, they have absconded, or lack of progress on outlined goals. An unsuccessful discharge will trigger a violation which allows the court to then place a child in a program and/or supervision type that will best meet their risks and needs. Youth are unsuccessfully discharged from the program if they abscond or are detained for more than 45 days. All others are discharged from the program only after all efforts have been exhausted to engage the youth/family in services and multiple attempts to aid the youth/family in making progress on treatment goals or when the clinician and team determine that the child's needs far exceed the capacity of the community-based program and necessitate a higher level of care.

The JMHC program in the current study is a post-adjudication court program that provides targeted home-based clinical therapeutic services, case management, psychiatric services, intensive supervision, and frequent judicial monitoring to address individualized dynamic risk factors. The stated objective of the JMHC is to provide effective, research-supported mental health and supervision services to youth with mental health needs to prevent removal from home, reduce juvenile justice involvement, and link youth to community-based mental health supports. The goal of the JMHC is to reduce delinquency, increase accountability, and rehabilitate youth through a comprehensive, coordinated community-based probation system.

The JMHC consists of a multi-disciplinary team, including a core team that is made up of a licensed counselor, case manager, and juvenile probation officer (JPO). Services of at least one core team member and access to a crisis hotline are available to participants 24/7. Furthermore, the JPO and/or therapist/case manager must staff cases weekly to review each participant's progress. The average monthly caseload of the program is 12 to 15 youths. Individualized treatment plans are developed for each participant by the core team with a consultation with the participant and their parent(s). The core team staffs each case with the judge, defense attorney, and district attorney on a bi-weekly or weekly basis. Court review hearings are scheduled with the judge on a bi-weekly basis and participating youth and their parent(s) are required to attend these hearings. The program operates in a three-phased treatment program with an aftercare component.

MEASURES

Positive Achievement Change Tool (PACT)

All measures were derived from the full Positive Achievement Change Tool (PACT) assessment, a validated instrument for predicting recidivism among system-impacted youth (Baglivio & Jackowski, 2013). Validation studies have found AUC effect sizes between .58 and .647 for the overall risk of reoffending (Baglivio, 2009; Mueller et al., 2022; Winokur-Early et al., 2012). In their validation study, Winokur-Early et al. (2012) found strong internal consistency for the criminal history score ($\alpha = .71$) and strong inter-rater reliability agreement ($>90\%$) on factors related to social history (e.g., history of abuse, neglect, and mental health problems). The PACT instrument measures both static and dynamic risk in addition to protective factors that include the following domains: criminal history, education/vocation, free time, employment, relationships with peers, family, substance use, mental health, attitudes, aggression, and social skills. The youth in the current study were

assessed through a semi-structured interview protocol by probation staff every 90 days. Probation staff who administer the PACT are trained when they are hired. They are provided a 16-hr course on the utilization of the assessment and case planning tool. In addition, all staff must participate in the department's interrater reliability session twice per year where they monitor for assessment fidelity. Ongoing PACT booster trainings are offered based on the outcomes of the interrater reliability assessment. The current study utilizes data derived from the youth's first PACT assessment and the most recent assessment prior to program completion or removal. Measures in the current study follow prior research using the PACT assessment to calculate a youth's history of child maltreatment (Baglivio et al., 2014; Craig et al., 2019; Zettler et al., 2018) and other psychosocial characteristics related to offending in adolescence (Baglivio et al., 2020; Craig, 2019; Meldrum et al., 2020; Narvey et al., 2021).

ACE Scores

The current study replicated the traditional ACE score measures used by prior studies that have also relied upon PACT data (e.g., Baglivio et al., 2014). The measures for each of the 10 ACEs were derived from questions from several domains (Domain 7: Family History/Current Living Arrangements, Domain 9: Mental Health history) measuring family background characteristics using the youth's first PACT assessment: physical abuse, emotional abuse, physical neglect, emotional neglect, sexual abuse, family history of mental illness, family history of substance abuse, parental separation/divorce, family history of incarceration, and exposure to family violence. Each individual ACE was counted once so the overall ACE score could range from 0, to indicate the youth had experienced zero ACEs, to 10, a score indicating the youth had experienced all 10 ACEs at least once.

Demographic Factors

Several demographic characteristics were included in the analyses, including the youth's sex assigned at birth, race/ethnicity, age, and family poverty status. County-level census data revealed that 82% of the population is Latino and 20% lived below the poverty line (U.S. Census Bureau, 2021a, 2021b). Youth who were assigned male at birth were coded as "1." For racial/ethnic status, a youth's ethnic status superseded their racial category. The youth's age when they began the program was also included. The PACT also included data regarding whether the family was below, at, or above the level of poverty. Those who were at or above the poverty level were coded as "0" while those who were below the poverty level were coded as "1." All of these measures were derived from the youth's first PACT assessment.

Justice-Related Factors

The current study also included several justice-related factors. First, the length of time the youth was in the program, measured in days, was considered. The youth's prior number of misdemeanors and the prior number of felonies were also included. For the prior number of misdemeanors, those who had zero to one misdemeanor were coded as "0," those with two were coded as "1," and those with three or more were coded as "2." A similar coding scheme was used for the prior number of felonies; those with no prior felonies were coded

as “0,” those with one were coded as “1,” those with two prior felonies were coded as “2,” and those with 3 or more were coded as “3.”

Youth Background Factors

Several other background factors were included that have been found to be predictive of various justice-related outcomes. The PACT assessment closest to the youth’s completion or noncompletion of JMHC was utilized to capture the youth’s characteristics closest to the outcomes of interest (noncompletion and rearrest). The Full PACT assessment includes several items related to the youth’s substance use history (PACT Domain 8: Drugs/Alcohol History). Based on these indicators, we created an overall measure of substance use history to indicate whether the youth had engaged in any substance use in the past. Those who indicated they had engaged in at least some substance use in the past were coded as “1” while those who did not were coded as “0.”

Several indicators of the youth’s personality or other personal traits were included (PACT Domain 10: Attitudes/Behaviors). First, the extent to which the youth felt empathy toward his or her victim was included. Youth who reported having no empathy for their victims were coded as “0,” those with some empathy were coded as “1,” and those who had empathy for their victims were coded as “2.” Next, an indicator of the youth’s impulsivity was included. Youth who use self-control were coded as “0,” those who use some self-control were coded as “1,” while those who were found to be either impulsive or highly impulsive and tend to act before thinking were coded as “2.” The extent to which the youth was optimistic was also considered. Youth with high aspirations and a strong sense of purpose were coded as “0,” those with normal aspirations were coded as “1,” and those with little to no aspirations were coded as “2.” Finally, the extent to which the youth believed physical aggression was appropriate was included. Those who believed physical aggression is never or rarely appropriate were coded as “0,” those who believed physical aggression is sometimes appropriate were coded as “1,” and those who believed it was often appropriate were coded as “2.”

Dependent Variables

The two outcome measures of interest included if the youth did not complete the JMHC program (*program noncompletion*) and if the youth was rearrested during the 1-year follow-up period after completion or removal from the program (*rearrest*). When a youth is unsuccessfully discharged from a program it is because of their inability to participate/engage in services, they have absconded, or lack of progress on outlined goals. An unsuccessful discharge will trigger a violation which allows the court to then place a child in a program and/or supervision type that will best meet their risks and needs. Youth are unsuccessfully discharged from the program if they abscond or are detained for more than 45 days. All others are discharged from the program only after all efforts have been exhausted to engage the youth/family in services and multiple attempts to aid the youth/family in making progress on treatment goals or when the clinician and team determine that the child’s needs far exceed the capacity of the community-based program and necessitate a higher level of care. Youth who were rearrested within 1-year of completion or removal from the program were coded as “1” while those who were not rearrested were coded as “0.” Youth who did not

complete the program were coded as "1" while those who completed the program were coded as "0."

ANALYTICAL PLAN

After first assessing the descriptive statistics of the current sample, we sought to understand the potential differences between youth who did not complete the JMHC and those who successfully completed the program. First, we checked bivariate correlations between all variables included in the analyses, and no potential issues of multicollinearity were detected. We then conducted several two-tailed *t*-tests and chi-square tests to assess potential group differences based on our variables of interest utilizing Stata 15.1 (StataCorp, 2017). These tests were replicated among those who were rearrested compared with those who were not. Specifically, *t* tests were used to assess potential group differences in our outcomes of interest among our continuous measures (i.e., ACE score, age at program, program length), while chi-square tests were used for our dichotomous or categorical measures. Second, as the outcomes of interest were both dichotomously measured, three logistic regression models were estimated. These models predicted the separate likelihoods of program non-completion and rearrest using the covariates that were found to be significant in distinguishing between the groups in the bivariate analyses.

RESULTS

DESCRIPTIVE STATISTICS

As can be seen in Table 1, 19% of the sample did not complete JMHC while 30% of the youth were rearrested. In the full sample, the mean ACE score was 3.60 ($SD = 1.81$) and ranged from 0 to 8. Of note, a little under half of the sample (46%, $n = 94$) had at least 4 or more ACEs. The modal ACE score was 2 (23%) although 22% of the sample had 3 ACEs and 16% of the sample had 4 ACEs. The most common ACEs included parental separation/divorce (89%), household member with a history of incarceration (63%), and emotional abuse (48%). A little over half (55%) of the sample were assigned male at birth. A little over three-quarters of the sample indicated they were Latino/Latina (78%), while 9% were Black and 13% were White. The mean age of the sample was 14.6 ($SD = 1.38$) and ranged from 10 to 17 years of age. In addition, 62% of youth were considered to come from impoverished conditions. The mean number of days the youth were in JMHC was 176.8 days ($SD = 53.41$) and ranged from 22 to 329 days. The sample consisted of youth with little-to-no prior juvenile justice exposure as the modal number of prior misdemeanors in the current sample was 0 to 1 ($M = .18$; $SD = .59$) and the modal number of prior felonies was 0 ($M = .32$; $SD = .50$).

Also of note are the youths' background factors. In the current study, 70% of the youth had a history of substance use. The mean empathy score was 1.35 ($SD = .75$), indicating the youth had on average some empathy for their victims. The mean impulsivity score was 1.42 ($SD = .67$), demonstrating most youths exhibited some self-control. On average, the youth were found to score 1.05 ($SD = .52$) on this optimism scale, indicating they had normal aspirations. Finally, the mean physical aggression score was .43 ($SD = .56$), indicating most youths believed physical aggression was rarely to sometimes appropriate.

TABLE 1: Descriptive Statistics by Program Completion Status

Variable	Full sample ($N = 203$)			Program noncompleters ($n = 39$)			Program completers ($n = 164$)			t-test/χ^2 results	Effect size (d/V)
	M/%	*SD*	Range	*M*/%	*SD*	Range	*M*/%	*SD*	Range		
Program noncompletion	19%	—	0–1	—	—	—	—	—	—	—	—
Rearrested	30%	—	0–1	49%	—	0–1	26%	—	0–1	−2.78**	−.49
ACE Score	3.60	1.81	0–8	4.03	1.78	0–8	3.49	1.81	0–8	−1.65	−.29
Male[a]	55%	—	0–1	38%	—	0–1	59%	—	0–1	5.45*	.25
Black	9%	—	0–1	3%	—	0–1	10%	—	0–1	2.37	−.11
Latino/Latina	78%	—	0–1	82%	—	0–1	77%	—	0–1	.39	.04
White	13%	—	0–1	15%	—	0–1	12%	—	0–1	.29	.04
Age at program	14.6	1.38	10–17	14.59	1.53	11–17	14.67	1.34	10–17	.33	.06
Program length	176.80	53.41	22–329	142.08	70.83	22–294	185.05	44.82	60–329	4.75***	.85
Prior misdemeanors	.18	.59	0–3	.38	.85	0–3	.13	.51	0–3	5.79	.17
Prior felonies	.32	.50	0–3	.31	.47	0–1	.32	.51	0–3	.24	.04
Poverty	62%	—	0–1	79%	—	0–1	57%	—	0–1	6.54*	.18
Substance use history	70%	—	0–1	85%	—	0–1	66%	—	0–1	4.94*	.16
Empathy	1.35	.75	0–2	1.28	.69	0–2	1.37	.77	0–2	5.16	.16
Impulsivity	1.42	.67	0–2	1.56	.64	0–2	1.39	.67	0–2	2.74	.12
Optimism	1.05	.52	0–2	1.13	.61	0–2	1.03	.50	0–2	3.50	.13
Physical aggression	.43	.56	0–2	.59	.55	0–2	.40	.56	0–2	6.31*	.18

Note. SD = standard deviation; ACE = adverse childhood experiences.
[a]Females.
*$p < .05$. **$p < .01$. ***$p < .001$.

ASSESSING GROUP DIFFERENCES

The final column of Table 1 presents the results of the *t*-tests and chi-square tests that assessed for group differences among the variables of interest. While not all differences were significant, a comparison of the subgroup means/prevalence rates for each variable indicates that, in general, noncompleters were more "at-risk" than those who completed the program. For instance, noncompleters tended to have more ACEs ($M = 4.03$) than those who completed the program ($M = 3.49$) although this difference was at ($t = -1.65$, $p = .09$). In addition, assigned females at birth were more likely to not complete than assigned males at birth ($\chi^2 = 5.45$, $p = .02$). Those who did not complete the program were more likely to be in the JMHC for a shorter amount of time ($M = 142.08$ days) than those who completed it (185.05 days; $t = 4.75$, $p < .001$). Noncompleters were also more likely to come from an impoverished family ($\chi^2 = 6.54$, $p = .01$) and have a history of substance use ($\chi^2 = 4.94$, $p = .03$) relative to those who completed the program. In addition, noncompleters tended to be more accepting of physical aggression than those who completed the program ($\chi^2 = 6.31$, $p = .04$).

Table 2 presents the results of the *t* tests and chi-square tests for the outcome of rearrest. Similar to the results comparing the variables for program noncompletion, those who were re-arrested tended to be more at risk than those who were not rearrested within the follow-up period. Those who did not complete the program were more likely to be rearrested than those who completed the program ($\chi^2 = 6.49$, $p = .01$). Those who were rearrested had on average 3.92 ACEs while those who were not rearrested had on average 3.45 ACEs, a significant difference ($t = -1.69$, $p = .04$). Unlike in the prior comparison, assigned males at birth were more likely to be rearrested than assigned females at birth ($\chi^2 = 7.26$, $p = .01$). Youth who were rearrested tended to be younger (mean age = 13.66) relative to those who were not rearrested (mean age = 15.09; $t = 7.74$, $p < .001$). Youth who were rearrested were also more likely to come from impoverished families ($\chi^2 = 6.01$, $p = .01$). In addition, youth who were rearrested were more likely to exhibit less empathy for their victims ($\chi^2 = 10.24$, $p = .01$), be more impulsive ($\chi^2 = 10.76$, $p = .01$), be less optimistic for their future ($\chi^2 = 14.36$, $p = .001$), and be more accepting of physical aggression ($\chi^2 = 6.23$, $p = .04$).

PREDICTORS OF PROGRAM NONCOMPLETION

Table 3 presents two logistic regression models predicting the likelihood of program noncompletion and rearrest. Although our earlier analyses relied upon a larger set of factors, only a subset of these—those that were statistically significantly different from our prior two sets of comparisons—were retained in these models. Supplemental models were estimated that retained all the original variables and those additional variables did not appear to be salient predictors of either outcome; these results are available upon request.

The first set of models in Table 3 presents the estimates of the logistic regression model predicting program non-completion likelihood. Though a youth's ACE score was not significantly related to program completion, having one additional ACE increased the likelihood of not completing the program by 17% ($p = .20$). Other noteworthy findings included those who were in the program for a shorter amount of time were more likely to not complete the program (odds ratio [OR] = .98, $p < .001$) and those who came from impoverished families were more likely to not complete the program (OR= 3.14, $p = .02$). In addition, those with a substance use history had a 286% higher odds of program noncompletion relative to those without a history of substance use ($p = .02$).

TABLE 2: Descriptive Statistics by Rearrest Status

Variable	Rearrested (n = 62)			Not rearrested (n = 141)			t-test/χ^2 results	Effect size (d/V)
	M/%	*SD*	Range	*M*/%	*SD*	Range		
Program noncompletion	31%	—	0–1	14%	—	0–1	6.49*	.19
ACE Score	3.92	1.93	0–8	3.45	1.75	0–8	−1.69*	−.26
Male[a]	69%	—	0–1	49%	—	0–1	7.26*	.19
Black	6%	—	0–1	10%	—	0–1	.64	−.06
Latino/Latina	81%	—	0–1	77%	—	0–1	.28	.04
White	13%	—	0–1	13%	—	0–1	.00	.00
Age at program	13.66	1.28	10–16	15.09	1.18	12–17	7.74***	1.18
Program length	180.66	61.71	30–300	175.09	49.47	22–329	−.68	−.10
Prior misdemeanors	.31	.76	0–3	.12	.50	0–3	4.02	.13
Prior felonies	.37	.49	0–1	.30	.50	0–3	1.76	.09
Poverty	74%	—	0–1	56%	—	0–1	6.01*	.17
Substance use history	64%	—	0–1	72%	—	0–1	1.25	−.08
Empathy	1.14	.74	0–2	1.45	.74	0–2	10.24**	.22
Impulsivity	1.64	.57	0–2	1.33	.68	0–2	10.76**	.23
Optimism	1.24	.56	0–2	.96	.48	0–2	14.36**	.27
Physical aggression	.58	.61	0–2	.37	.53	0–2	6.23*	.18

Note. *SD* = standard deviation; ACE = adverse childhood experiences.
[a]Females.
*$p < .05$. **$p < .01$. ***$p < .001$.

PREDICTORS OF REARREST

The second set of models in Table 3 shows the logistic regression estimates predicting the likelihood of rearrest. Similar to the prior model, each additional ACE exposure increases the likelihood of being rearrested by 17%; however, this effect was not statistically significant ($p = .15$). Younger youth were more likely to be rearrested (OR = .36, $p < .001$). Youth who exhibited less optimism for their future were also more likely to be rearrested (OR = 2.41, $p = .04$). An additional model was included to control for program completion. The results of the model reveal that program noncompletion significantly increased the odds of rearrest (OR = 3.31, $p = .02$) and when controlling for program completion, assigned males at birth were significantly more likely to be rearrested than assigned females at birth (OR = 2.59, $p = .03$).

DISCUSSION AND CONCLUSION

The current study provides an initial investigation into the prevalence of prior trauma among youth participating in a JMHC. Similar to prior research by Davis et al. (2015), the current study found extensive trauma histories among JMHC participants, with an average ACE score of 3.6 and nearly half the sample reporting high ACE scores (≥4). The results show that this sample of youth in JMHC appear to have higher ACE scores than reported in prior studies of system-impacted youth, with ranges of 1.99 to 3.23 (Baglivio et al., 2016; Craig et al., 2020) for incarcerated youth and 2.62 to 3.35 for youth in other community-based programming (Craig, 2019; Narvey et al., 2021). In addition, the bivariate results indicate that on average, those who did not complete the court program had significantly higher ACE scores than those who were successful (4.03 vs. 3.49). Similarly,

TABLE 3: Logistic Regression Models Predicting Program Noncompletion and Rearrests ($N = 203$)

	Program noncompletion			Rearrests			Rearrests (full model)		
Variable	OR	B (*SE*)	95% CI	OR	B (*SE*)	95% CI	OR	B (*SE*)	95% CI
ACE Score	1.17	.16 (.12)	[.92, 1.50]	1.17	.16 (.10)	[.95, 1.45]	1.17	.15 (.11)	[.94, 1.45]
Male[a]	0.48	−.73 (.48)	[.19, 1.23]	2.14	.76 (.42)	[.94, 4.86]	2.59*	.95 (.44)	[1.09, 6.12]
Program noncompletion	—	—	—	—	—	—	3.31*	1.19 (.03)	[1.16, 9.44]
Age at program	0.75	−.79 (.18)	[.53, 1.06]	.36***	−1.02 (.20)	[.24, .53]	.36***	−1.03 (.21)	[.24, .53]
Program length	.98***	−.02 (.00)	[.97, .99]	0.99	.00 (.01)	[.99, 1.00]	.99	−.00 (.00)	[.99, 1.01]
Poverty	3.14*	1.14 (.51)	[1.16, 8.50]	1.72	.54 (.41)	[.77, 3.85]	1.43	.36 (.43)	[.62, 3.31]
Substance use history	3.86*	1.35 (.58)	[1.25, 11.92]	2.08	.73 (.46)	[.84, 5.17]	1.88	.63 (.48)	[.73, 4.86]
Empathy	0.97	−.03 (.32)	[.51, 1.82]	1.04	.04 (.28)	[.60, 1.80]	1.05	.05 (.28)	[.60, 1.83]
Impulsivity	1.55	.44 (.40)	[.70, 3.39]	1.19	.18 (.35)	[.60, 2.36]	1.09	.09 (.36)	[.54, 2.21]
Optimism	1.1	.09 (.46)	[.44, 2.72]	2.41*	.88 (.43)	[1.03, 5.66]	2.39*	.88 (.43)	[1.03, 5.61]
Physical aggression	1.4	.33 (.41)	[.62, 3.13]	1.08	.08 (.36)	[.53, 2.18]	1.06	.06 (.37)	[.51, 2.18]

Note. OR = odds ratio; CI = confidence interval; ACE = adverse childhood experiences.
[a]Female as a reference group.
*$p < .05$. **$p < .01$. ***$p < .001$.

participants who recidivated had significantly higher ACE scores (3.92) than those who did not (3.45) during the 1-year follow-up period. Based on these findings, it appears that JMHC participants often deal with the co-occurring effects of mental health problems and childhood trauma.

Furthermore, the current study considered the potential relationship between ACEs and outcomes for JMHC participants including program noncompletion and recidivism. A large body of research demonstrates that ACEs are associated with an increased likelihood of recidivism in adolescence (for a review see Yohros, 2023), but this study is among the first to examine this relationship in a JMHC. Previous research has largely been limited to general populations of youth sent to community-based programming or residential placement but has not examined youth participating in a specific program, such as a specialty court. Future research should consider this relationship in other program-specific contexts.

Prior research has overwhelmingly focused on samples in Florida (Baglivio et al., 2016; Craig, 2019; Craig et al., 2017, 2019; Narvey et al., 2021; Wolff & Baglivio, 2017; Wolff et al., 2017), with a growing number of studies being conducted in other states and countries (Craig et al., 2020; Craig & Zettler, 2021; Kowalski, 2019; Muir & Viljoen, 2022; Vitopoulos et al., 2019). The current study draws from a sample from a single, urban county that is predominately Latino, a population that has received relatively little empirical attention. Like the prior literature in this area (e.g., Baglivio et al., 2016; Craig, 2019; Craig et al., 2017, 2019; Narvey et al., 2021; Wolff & Baglivio, 2017; Wolff et al., 2017), the current study utilized a 12-month follow-up period to measure recidivism. Moreover, the study also examined the potential association between ACEs and program completion. While ACEs failed to significantly predict program completion and recidivism, it is important to note that each additional ACE exposure increased the odds of both program noncompletion and recidivism by 17%. However, there were several other factors that were significantly associated with participant outcomes. Poverty and substance use history increased the odds of program noncompletion, while longer program participation decreased the odds of noncompletion. Regarding recidivism, those who did not complete the program were significantly more likely to be rearrested than those who successfully completed. Regarding personal characteristics, those with less optimism about their future (i.e., little to no aspirations) were significantly more likely to be rearrested while older participants were significantly less likely to be rearrested. Our findings regarding the protective effect of optimism on future reoffending are in agreement with a growing body of literature focused on future orientation (Brezina et al., 2009; Craig, 2019; Piquero, 2016; Testa et al., 2022). In general, this literature suggests those with more positive expectations for their future are less likely to engage in offending behavior. In addition, as Craig (2019) reported, those with more ACEs tended to have reduced future orientations. Furthermore, among system-impacted youth, Logan-Greene and colleagues (2017) also found evidence that youth aspirations (a broader measure that included the youth's belief in their future success, optimism, and goal setting) moderated the relationship between family dysfunction and mental health. Taken together, these results suggest that trauma has important implications on how a youth perceives him or herself, which, in turn, affects not only their mental health but also future offending.

Collectively, the results of the current study show that while prior trauma is prevalent among JMHC participants and should be considered during treatment, other factors may be more salient in predicting court outcomes. One plausible explanation as to why the results failed to find ACEs as a significant predictor is that the relationship between ACEs and

noncompletion /recidivism may be mediated by mental health and/or substance use problems. For example, research by Craig and colleagues (2019) found that the ACEs-recidivism relationship was partially mediated by mental health problems, substance use, and their co-occurrence among adjudicated youth. In addition, it is possible that ACEs exacerbate existing mental health problems, although the time order is difficult to establish. More research is necessary to disentangle the complex relationship between ACEs and mental health.

It is important to note that there are several limitations of the current study. These data consist of participants from one JMHC during a 6-year window; thus, the results may not be generalizable to other populations. The overall sample size was relatively small, but this is consistent with the average size of JMHCs which are designed to serve a small caseload to provide intensive and coordinated treatment services (Callahan et al., 2012). While every participant had at least one *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM-IV*; American Psychiatric Association, 1994) diagnosis to be eligible to participate, we did not have data regarding the type of diagnoses nor the number of diagnoses for each participant. Prior research has found that childhood trauma is correlated with specific mental health problems, such as PTSD (Kerig et al., 2009; Tossone & Baughman, 2020). Future research should consider if ACEs are associated with specific diagnoses for this population. Finally, we did not have data regarding treatment services received by each youth. Trauma-informed treatment is especially important for system-impacted youth, as it focuses on reducing trauma-related symptoms, including mental health problems, which can reduce the risk of reoffending (Zettler, 2021). While it is common practice in this court to refer youth to trauma-informed treatment based on their treatment needs (e.g., Trauma-Informed Cognitive Behavioral Therapy, Eye Movement Desensitization and Reprocessing Therapy, Mindfulness Interventions, Neurofeedback Therapy, Strengthening Families Program), data about the type of treatment received and length of treatment participation was unavailable to the researchers.

The results provide relevant policy implications for the juvenile justice system. One framework to consider the need for mental health interventions across the juvenile justice system is the Sequential Intercept Model (SIM; Munetz & Griffin, 2006) that identifies time points in which individuals with mental illness could be identified and diverted to treatment while being held responsible for their criminal behavior. The original five intercepts include: (a) law enforcement, emergency services; (b) initial detention, initial court hearings; (c) jails, collaborative/specialty courts, forensic evaluation/hospitalization; (d) re-entry, and (e) community corrections and supports (Munetz & Griffin, 2006). As noted by Heilbrun and colleagues (2017) the application of the SIM model to the juvenile justice system is especially relevant at Intercepts 1, 3, and 5. A recent systematic review of the research on ACEs and offending in adolescence by Folk, Kemp, and colleagues (2021) argues for the need to assess trauma across the various intercepts in the SIM. As specialty court programs provide a time to provide both mental health and trauma treatment (Intercept 3), these programs should routinely assess for and provide both evidence-based mental health and trauma-informed services. While juvenile justice agencies routinely screen for trauma, including ACEs, there is less agreement about which practices and policies should be implemented for youth reporting trauma exposure (Branson et al., 2017).

There is some preliminary evidence that providing trauma-focused treatment in specialty courts improves the outcomes for participants. For example, in an evaluation of an "Integrated Trauma Treatment Program" for adult drug court participants with a trauma history, those who participated in Eye Movement Desensitization and Reprocessing (EMDR)

Therapy were significantly more likely to graduate from the program and less likely to recidivate than participants who declined participation (Brown et al., 2015). In Powell and colleagues (2012), review of the Pima County family drug court which includes trauma-specific treatment provided concurrently with substance use treatment, both substance use and mental health problems decreased after 6 months following participation. While there has yet to be an evaluation of trauma-informed treatment provided in a JMHC, these results suggest that implementing such programming could improve participant outcomes.

Overall, the current study highlights the high co-occurrence of childhood trauma and mental health problems among youth impacted by the juvenile justice system. Although we failed to find a significant relationship between ACEs and program outcomes, there is evidence that the complex nature of trauma and mental health problems may account for the null findings. Thus, it is important that across all points of contact that youth have with the justice system, including specialty court programs, that trauma is assessed, and trauma-informed treatment is provided.

ORCID iDs

Haley R. Zettler https://orcid.org/0000-0003-4319-7301
Jessica M. Craig https://orcid.org/0000-0001-5418-0834

REFERENCES

Abram, K. M., Teplin, L. A., Charles, D. R., Longworth, S. L., McClelland, G. M., & Dulcan, M. K. (2004). Posttraumatic stress disorder and trauma in youth in juvenile detention. *Archives of General Psychiatry*, *61*, 403–410. https://doi.org/10.1001/archpsyc.61.4.403

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.).

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.

Anda, R. F., Brown, D. W., Felitti, V. J., Bremner, J. D., Dube, S. R., & Giles, W. H. (2007). Adverse childhood experiences and prescribed psychotropic medications in adults. *American Journal of Preventive Medicine*, *32*, 389–394. https://doi.org/10.1016/j.amepre.2007.01.005

Arredondo, D. E., Kumli, K., Soto, L., Colin, E., Ornellas, J., Davilla, Jr, J. R. J., Edwards, J. L. P., & Hyman, J. E. M. (2001). Juvenile mental health court: Rationale and protocols. *Juvenile and Family Court Journal*, *52*(4), 1–19. https://doi.org/10.1111/j.1755-6988.2001.tb00047.x

Baglivio, M. T. (2009). The assessment of risk to recidivate among a juvenile offending population. *Journal of Criminal Justice*, *37*(6), 596–607. https://doi.org/10.1016/j.jcrimjus.2009.09.008

Baglivio, M. T., & Epps, N. (2016). The interrelatedness of adverse childhood experiences among high-risk juvenile offenders. *Youth Violence and Juvenile Justice*, *14*, 179–198. https://doi.org/10.1177/1541204014566286

Baglivio, M. T., Epps, N., Swartz, K., Huq, M. S., Sheer, A., & Hardt, N. S. (2014). The prevalence of adverse childhood experiences (ACE) in the lives of juvenile offenders. *Journal of Juvenile Justice*, *3*, 12–34.

Baglivio, M. T., & Jackowski, K. (2013). Examining the validity of a juvenile offending risk assessment instrument across gender and race/ethnicity. *Youth Violence and Juvenile Justice*, *11*(1), 26–43. https://doi.org/10.1177/1541204012440107

Baglivio, M. T., Wolff, K. T., DeLisi, M., & Jackowski, K. (2020). The role of adverse childhood experiences (ACEs) and psychopathic features on juvenile offending criminal careers to age 18. *Youth Violence and Juvenile Justice*, *18*(4), 337–364. https://doi.org/10.1177/1541204020927075

Baglivio, M. T., Wolff, K. T., Piquero, A. R., Bilchik, S., Jackowski, K., Greenwald, M. A., & Epps, N. (2016). Maltreatment, child welfare, and recidivism in a sample of deep-end crossover youth. *Journal of Youth and Adolescence*, *45*(4), 625–654. https://doi.org/10.1007/s10964-015-0407-9

Baglivio, M. T., Wolff, K. T., Piquero, A. R., & Epps, N. (2015). The relationship between adverse childhood experiences (ACE) and juvenile offending trajectories in a juvenile offender sample. *Journal of Criminal Justice*, *43*, 229–241. https://doi.org/10.1016/j.jcrimjus.2015.04.012

Barrett, D. E., Katsiyannis, A., Zhang, D., & Zhang, D. (2013). Delinquency and recidivism: A multicohort, matched-control study of the role of early adverse experiences, mental health problems, and disabilities. *Journal of Emotional and Behavioral Disorders*, *22*(1), 3–15. https://doi.org/10.1177/1063426612470514

Behnken, M. P., Arredondo, D. E., & Packman, W. L. (2009). Reduction in recidivism in a juvenile mental health court: A pre-and post-treatment outcome study. *Juvenile and Family Court Journal*, *60*(3), 23–44. https://doi.org/10.1111/j.1755-6988.2009.01030.x

Behnken, M. P., Bort, A., & Borbon, M. (2017). Race and gender recidivism differences among juvenile mental health court graduates. *Juvenile and Family Court Journal*, *68*(2), 19–31. https://doi.org/10.1111/jfcj.12092

Black, P. J., Woodworth, M., Tremblay, M., & Carpenter, T. (2012). A review of trauma-informed treatment for adolescents. *Canadian Psychology/Psychologie Canadienne*, *53*(3), 192–203. https://doi.org/10.1037/a0028441

Branson, C. E., Baetz, C. L., Horwitz, S. M., & Hoagwood, K. E. (2017). Trauma-informed juvenile justice systems: A systematic review of definitions and core components. *Psychological Trauma*, *9*, 635–646. https://doi.org/10.1037/tra0000255

Brezina, T., Tekin, E., & Topalli, V. (2009). "Might not be a tomorrow": A multimethods approach to anticipated early death and youth crime. *Criminology*, *47*(4), 1091–1129. https://doi.org/10.1111/j.1745-9125.2009.00170.x

Brown, S. H., Gilman, S. G., Goodman, E. G., Adler-Tapia, R., & Freng, S. (2015). Integrated trauma treatment in drug court: Combining EMDR therapy and seeking safety. *Journal of EMDR Practice and Research*, *9*(3), 123–136. https://doi.org/10.1891/1933-3196.9.3.123

Callahan, L., Cocozza, J., Steadman, H. J., & Tillman, S. (2012). A national survey of U.S. juvenile mental health courts. *Psychiatric Services*, *63*(2), 130–134. https://doi.org/10.1176/appi.ps.201100113

Clements-Nolle, K., & Waddington, R. (2019). Adverse childhood experiences and psychological distress in juvenile offenders: The protective influence of resilience and youth assets. *Journal of Adolescent Health*, *64*, 49–55. https://doi.org/10.1016/j.jadohealth.2018.09.025

Craig, J. M. (2019). The potential mediating impact of future orientation on the ACE-crime relationship. *Youth Violence and Juvenile Justice*, *17*(2), 111–128. https://doi.org/10.1177/1541204018756470

Craig, J. M., Piquero, A. R., Farrington, D. P., & Ttofi, M. M. (2017). A little early risk goes a long bad way: Adverse childhood experiences and life-course offending in the Cambridge study. *Journal of Criminal Justice*, *53*, 34–45. https://doi.org/10.1016/j.jcrimjus.2017.09.005

Craig, J. M., Trulson, C. R., DeLisi, M., & Caudill, J. W. (2020). Toward an understanding of the impact of adverse childhood experiences on the recidivism of serious juvenile offenders. *American Journal of Criminal Justice*, *45*(6), 1024–1039. https://doi.org/10.1007/s12103-020-09524-6

Craig, J. M., & Zettler, H. R. (2021). Are the effects of adverse childhood experiences on violent recidivism offense-specific? *Youth Violence and Juvenile Justice*, *19*(1), 27–44. https://doi.org/10.1177/1541204020939638

Craig, J. M., Zettler, H. R., Wolff, K. T., & Baglivio, M. T. (2019). Considering the mediating effects of drug and alcohol use, mental health, and their co-occurrence on the adverse childhood experiences-recidivism relationship. *Youth Violence and Juvenile Justice*, *17*(3), 219–240. https://doi.org/10.1177/1541204018796910

Davis, K. M., Peterson-Badali, M., Weagant, B., & Skilling, T. A. (2015). A process evaluation of Toronto's first youth mental health court. *Canadian Journal of Criminology and Criminal Justice*, *57*(2), 159–188. https://doi.org/10.3138/CJCCJ.2014.E10

DeVenter, M., Demyttenaere, K., & Bruffaerts, R. (2013). The relationship between adverse childhood experiences and mental health in adulthood. A systematic literature review. *Tijdschrift Voor Psychiatrie*, *55*, 259–268.

Dierkhising, C. B., Ko, S. J., Woods-Jaeger, B., Briggs, E. C., Lee, R., & Pynoos, R. S. (2013). Trauma histories among justice-involved youth: Findings from the National Child Traumatic Stress Network. *European Journal of Psychotraumatology*, *4*, 1–13. https://doi.org/10.3402/ejpt.v4i0.20274

Douglas, K. R., Chan, G., Gelernter, J., Arias, A. J., Anton, R. F., Poling, J. F., Farrer, L., & Kranzler, H. R. (2011). T-HTTLPR as a potential moderator of the effects of adverse childhood experiences on risk of antisocial personality disorder. *Psychiatric Genetics*, *21*, 240–248. https://doi.org/10.1097/YPG.0b013e3283457c15

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*, *14*, 245–258. https://doi.org/10.1016/S0749-3797(98)00017-8

Folk, J. B., Kemp, K., Yurasek, A., Barr-Walker, J., & Tolou-Shams, M. (2021). Adverse childhood experiences among justice-involved youth: Data-driven recommendations for action using the sequential intercept model. *The American Psychologist*, *76*(2), 268–283. https://doi.org/10.1037/amp0000769

Folk, J. B., Ramos, L., Bath, E. P., Rosen, B., Marshall, B. D., Kemp, K., Brown, L., Conrad, S., & Tolou-Shams, M. (2021). The prospective impact of adverse childhood experiences on justice-involved youth's psychiatric symptoms and substance use. *Journal of Consulting and Clinical Psychology*, *89*(6), 483–498. https://doi.org/10.1037/ccp0000655

Fox, B., Miley, L. N., Kortright, K. E., & Wetsman, R. J. (2021). Assessing the effect of mental health courts on adult and juvenile recidivism: A meta-analysis. *American Journal of Criminal Justice*, *46*, 644–664. https://doi.org/10.1007/s12103-021-09629-6

Fox, B. H., Perez, N., Cass, E., Baglivio, M. T., & Epps, N. (2015). Trauma changes everything: Examining the relationship between adverse childhood experiences and serious, violent and chronic juvenile offenders. *Child Abuse & Neglect*, *46*, 163–173. https://doi.org/10.1016/j.chiabu.2015.01.011

Gardner, P. (2011). An overview of juvenile mental health courts. *ABA Child Law Practice*, *30*(7), 101–105.

Goldkamp, J., & Irons-Guynn, C. (2000). *Emerging judicial strategies for the mentally ill in the criminal caseload: Mental health courts in Fort Lauderdale, Seattle, San Bernadino, and Anchorage* (NCJ: 182504). Bureau of Justice Assistance.

Grande, T., Hallman, J., Caldwell, K., & Underwood, L. (2011). Using the BASC-2 to assess mental health needs of incarcerated juveniles: Implications for treatment and release. *Corrections Today*, *73*(5), 100–102.

Heilbrun, K., Goldstein, N. E. S., DeMatteo, D., Newsham, R., Gale-Bentz, E., Cole, L., & Arnold, S. (2017). The sequential intercept model and juvenile justice: Review and prospectus. *Behavioral Sciences & the Law*, *35*, 319–336. https://doi.org/10.1002/bsl.2291

Heretick, D. M., & Russell, J. A. (2013). The impact of juvenile mental health court on recidivism among youth. *Journal of Juvenile Justice*, *3*(1), 1–14.

Kerig, P. K., Ward, R. M., Vanderzee, K. L., & Moeddel, M. A. (2009). Posttraumatic stress as a mediator of the relationship between trauma and mental health problems among juvenile delinquents. *Journal of Youth and Adolescence*, *38*(9), 1214–1225. https://doi.org/10.1007/s10964-008-9332-5

Kowalski, M. A. (2019). Adverse childhood experiences and justice-involved youth: The effect of trauma and programming on different recidivistic outcomes. *Youth Violence and Juvenile Justice*, *17*(4), 354–384. https://doi.org/10.1177/1541204018809836

Logan-Greene, P., Tennyson, R. L., Nurius, P. S., & Borja, S. (2017). Adverse childhood experiences, coping resources, and mental health problems among court-involved youth. *Child Youth Care Forum*, *46*, 923–946. https://doi.org/10.1007/s10566-017-9413-2

Meldrum, R. C., Campion Young, B., Soor, S., Hay, C., Copp, J. E., Trace, M., Smith-Darden, J. P., & Kernsmith, P. D. (2020). Are adverse childhood experiences associated with deficits in self-control? *Criminal Justice and Behavior*, *47*(2), 166–186. https://doi.org/10.1177/0093854819879741

Merrick, M. T., Ports, K. A., Ford, D. C., Afifi, T. O., Gershoff, E. T., & Grogan-Kaylor, A. (2017). Unpacking the impact of adverse childhood experiences on adult mental health. *Child Abuse & Neglect*, *69*, 10–19. https://doi.org/10.1016/j.chiabu.2017.03.016

Mersky, J. P., Topitzes, J., & Reynolds, A. J. (2013). Impacts of adverse childhood experiences on health, mental health, and substance use in early adulthood: A cohort study of an urban, minority sample in the U.S. *Child Abuse and Neglect*, *37*, 917–925. https://doi.org/10.1016/j.chiabu.2013.07.011

Mueller, K. C., Carey, M. T., & Noh, K. (2022). Revalidating the Positive Achievement Change Tool (PACT) in a major city: A survival analysis. *Crime & Delinquency*, *69*(13–14), 2678–2698. https://doi.org/00111287221087949

Muir, N. M., & Viljoen, J. L. (2022). Adverse childhood experiences and recidivism in Indigenous and White female and male adolescents on probation. *Child Abuse & Neglect*, *126*, 105512. https://doi.org/10.1016/j.chiabu.2022.105512

Munetz, M. R., & Griffin, P. A. (2006). Using the sequential intercept model as an approach to decriminalization of people with serious mental illness. *Psychiatric Services*, *57*, 544–549.

Narvey, C., Yang, J., Wolff, K. T., Baglivio, M., & Piquero, A. R. (2021). The interrelationship between empathy and adverse childhood experiences and their impact on juvenile recidivism. *Youth Violence and Juvenile Justice*, *19*(1), 45–67. https://doi.org/10.1177/1541204020939647

Perez, N. M., Jennings, W. G., & Baglivio, M. T. (2018). A path to serious, violent, chronic delinquency: The harmful aftermath of adverse childhood experiences. *Crime & Delinquency*, *64*(1), 3–25. https://doi.org/10.1177/0011128716684806

Petrila, J., Poythress, N. G., McGaha, A., & Boothroyd, R. A. (2000). Preliminary observations from an evaluation of the Broward County Florida mental health court. *Court Review (Fall)*, *37*(4), 20–28. https://digitalcommons.usf.edu/mhlp_facpub/4

Piquero, A. R. (2016). "Take my license n'all that Jive, I can't see...35": Little hope for the future encourages offending over time. *Justice Quarterly*, *33*(1), 73–99. https://doi.org/10.1080/07418825.2014.896396

Powell, C., Stevens, S., Lo Dolce, B., Sinclair, K. O., & Swenson-Smith, C. (2012). Outcomes of a trauma-informed Arizona family drug court. *Journal of Social Work Practice in the Addictions*, *12*(3), 219–241. https://doi.org/10.1080/1533256X.2012.702624

Ramirez, A. M., Andretta, J. R., Barnes, M. E., & Woodland, M. H. (2015). Recidivism and psychiatric symptom outcomes in a juvenile mental health court. *Juvenile and Family Court Journal*, *66*(1), 31–46. https://doi.org/10.1111/jfcj.12025

Redlich, A. D., Steadman, H. J., Monahan, J., Petrila, J., & Griffin, P. A. (2005). The second generation of mental health courts. *Psychology, Public Policy and the Law*, *11*(4), 527–538.

Schilling, E. A., Aseltine, R. H. Jr., & Gore, S. (2007). Adverse childhood experiences and mental health in young adults: A longitudinal survey. *BMC Public Health*, *7*, 30–39. https://doi.org/10.1186/1471-2458-7-30

Silverman, W. K., Ortiz, C. D., Viswesvaran, C., Burns, B. J., Kolko, D. J., Putnam, F. W., & Amaya-Jacksom, L. (2008). Evidence-based psychosocial treatments for children and adolescents exposed to traumatic events. *Journal of Clinical Child & Adolescent Psychology*, *37*(1), 156–183. https://doi.org/10.1080/15374410701818293

Skowyra, K., & Cocozza, J. J. (2006). *A blueprint for change: Improving the system response to youth with mental health needs involved with the juvenile justice system*. National Center for Mental Health and Juvenile Justice.

StataCorp. (2017). *Stata Statistical Software: Release 15*.

Substance Abuse and Mental Health Services Administration. (2022). https://www.samhsa.gov/gains-center/mental-health-treatment-court-locator/juveniles

Teplin, L. A., Abram, K. M., McClelland, G. M., Dulcan, M. K., & Mericle, A. A. (2002). Psychiatric disorders in youth in juvenile detention. *Archives of General Psychiatry*, *59*(12), 1133–1143. https://doi.org/10.1001/archpsyc.59.12.1133

Testa, A., Turney, K., Jackson, D. B., & Jaynes, C. M. (2022). Police contact and future orientation from adolescence to young adulthood: Findings from the pathways to desistance study. *Criminology*, *60*(2), 263–290. https://doi.org/10.1111/1745-9125.12297

Tossone, K., & Baughman, M. (2020). Trauma exposure and post-traumatic stress symptoms among men and women in a substance use and mental health treatment court sample. *Journal of Offender Rehabilitation*, *59*(3), 117–137. https://doi.org/10.1080/10509674.2019.1706687

Trulson, C. R., Haerle, D. R., Caudill, J. W., & DeLisi, M. (2016). *Lost causes: Blended sentencing, second chances, and the Texas youth commission*. University of Texas Press.

Turner, D., Wolf, A. J., Barra, S., Müller, M., Gregório Hertz, P., Huss, M., Tüscher, O., & Retz, W. (2021). The association between adverse childhood experiences and mental health problems in young offenders. *European Child & Adolescent Psychiatry*, *30*(8), 1195–1207. https://doi.org/10.1007/s00787-020-01608-2

U.S. Census Bureau. (2021a). *ACS demographic and housing estimates*. https://data.census.gov/table?q=el+paso+tx+&tid=ACSDP1Y2021.DP05

U.S. Census Bureau. (2021b). *ACS poverty status in the past 12 months*. https://data.census.gov/table?q=el+paso+tx+poverty&tid=ACSST1Y2021.S1701

van der Kolk, B. A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Viking.

van der Kolk, B. A., & Fisler, R. E. (1994). Childhood abuse and neglect and loss of self-regulation. *Bulletin of the Menninger Clinic*, *58*, 145–168.

Vaughn, M. G., Salas-Wright, C. P., Huang, J., Qian, Z., Terzis, L. D., & Helton, J. J. (2017). Adverse childhood experiences among immigrants to the United States. *Journal of Interpersonal Violence*, *32*, 1543–1564. https://doi.org/10.1177/0886260515589568

Vincent, G. M., Grisso, T., Terry, A., & Banks, S. M. (2008). Sex and race differences in mental health symptoms in juvenile justice: The MAYSI-2 national meta-analysis. *Journal of the American Academy of Child and Adolescent Psychiatry*, *47*(3), 282–290. https://doi.org/10.1097/CHI.0b013e318160d516

Vitopoulos, N. A., Peterson-Badali, M., Brown, S., & Skilling, T. A. (2019). The relationship between trauma, recidivism risk, and reoffending in male and female juvenile offenders. *Journal of Child & Adolescent Trauma*, *12*, 351–364. https://doi.org/10.1007/s40653-018-0238-4

Wasserman, G. A., McReynolds, L. S., Schwalbe, C. S., Keating, J. M., & Jones, S. A. (2010). Psychiatric disorder, comorbidity, and suicidal behavior in juvenile justice youth. *Criminal Justice and Behavior*, *37*(12), 1361–1376. https://doi.org/10.1177/0093854810382751

Weber, S., & Lynch, S. (2021). Understanding the relations among adverse childhood experiences (ACE), substance use, and reoffending among detained youth. *Child Abuse & Neglect*, *120*, 105211. https://doi.org/10.1016/j.chiabu.2021.105211

Winokur-Early, K., Hand, G. A., & Blankenship, J. (2012). *Validity and reliability of the Florida Positive Achievement Change Tool (PACT) risk and needs assessment instrument: A three-phase evaluation (validation study, factor analysis, inter-rater reliability)*. Justice Research Center.

Wolff, K. T., & Baglivio, M. T. (2017). Adverse childhood experiences, negative emotionality, and pathways to juvenile recidivism. *Crime & Delinquency*, *63*(12), 1495–1521. https://doi.org/10.1177/0011128715627469

Wolff, K. T., Baglivio, M. T., & Intravia, J. (2022). Adverse childhood experience (ACEs), psychotropic medication prescription, and continued offending among youth with serious offending histories in juvenile justice residential placement. *Journal of Criminal Justice*, *83*, 101922. https://doi.org/10.1016/j.jcrimjus.2022.101922

Wolff, K. T., Baglivio, M. T., & Piquero, A. R. (2017). The relationship between adverse childhood experiences and recidivism in a sample of juvenile offenders in community-based treatment. *International Journal of Offender Therapy and Comparative Criminology*, *61*(11), 1210–1242. https://doi.org/10.1177/0306624X15613992

Yohros, A. (2023). Examining the relationship between adverse childhood experiences and juvenile recidivism: A systematic review and meta-analysis. *Trauma, Violence, & Abuse*, *24*(3), 1640–1655. https://doi.org/10.1177/15248380211073846

Zettler, H. R. (2021). Much to do about trauma: A systematic review of existing trauma-informed treatments on youth violence and recidivism. *Youth Violence and Juvenile Justice*, *19*(1), 113–134. https://doi.org/10.1177/1541204020939645

Zettler, H. R., Wolff, K., Baglivio, M., Craig, J. M., & Epps, N. (2018). The racial and gender differences in the impact of adverse childhood experiences on juvenile residential placement. *Youth Violence and Juvenile Justice*, *16*(3), 319–337. https://doi.org/10.1177/1541204017698213

Haley R. Zettler is an associate professor at the University of North Texas. Her primary research interests focus on corrections, substance abuse, mental health, and recidivism. She is a former Adult Probation Officer. Recent publications can be found in *Criminal Justice and Behavior, Youth Violence & Juvenile Justice, American Journal of Criminal Justice, Criminal Justice Review, and Criminal Justice Policy Review.*

Jessica M. Craig is an associate professor in the Department of Criminal Justice at the University of North Texas. Her research interests include juvenile justice and life course criminology, with a focus on the consequences of child maltreatment. Some of her recent work has been published in *Journal of Criminal Justice, Youth Violence and Juvenile Justice, Criminal Behavior and Mental Health, and Crime & Delinquency*.