An Evaluation of the Cuyahoga County Behavioral Health/Juvenile Justice (BHJJ) Initiative: 2006-2017

Fred Butcher, PhD | Jeff Kretschmar, PhD | Krystel Tossone, PhD

Begun Center for Violence Prevention Research and Education

JACK, JOSEPH AND MORTON MANDEL SCHOOL OF APPLIED SOCIAL SCIENCES

CASE WESTERN RESERVE UNIVERSITY

August 2018

Table of Contents

Executive Summary: An Evaluation of the Cuyahoga County Behavioral Health/Juvenile Justice (BHJJ) Initiative: 2006 - 2017

Fred Butcher, Ph.D., Jeff M. Kretschmar, Ph.D. & Krystel Tossone, Ph.D.

Begun Center for Violence Prevention Research and Education
Jack, Joseph, and Morton Mandel School of Applied Social Sciences
Case Western Reserve University

Juvenile justice-involved youth with serious behavioral health issues often have inadequate and limited access to care to address their complex and multiple needs. Ohio's Behavioral Health/Juvenile Justice (BHJJ) initiative was designed to provide these youth evidence and community-based behavioral health treatment in lieu of detention. Twelve counties participated in BHJJ during the most recent biennium: Ashtabula, Cuyahoga, Franklin, Hamilton, Holmes, Lorain, Lucas, Mahoning, Montgomery, Summit, Trumbull, and Wayne. BHJJ was funded through a partnership between the Ohio Departments of Youth Services (ODYS) and Mental Health and Addiction Services (OhioMHAS). The Begun Center for Violence Prevention Research and Education at Case Western Reserve University provided evaluation services for the program.

Demographics and Youth Characteristics

- 453 youth have been enrolled in BHJJ (55% males, 64% non-white). The average age of youth entering the program was 16.1 years old.
- The most common DSM diagnosis for males and females was Cannabis-related Disorders.
- Caregivers reported that 37% of the females had a history of sexual abuse, 62% talked about suicide, and 32% had attempted suicide. 61% of males and 76% of females had family members who were diagnosed with or showed signs of depression.
- 69% of BHJJ females and 66% of BHJJ males had biological family members with drinking or drug problems.
- According to the OYAS, 77% of the BHJJ youth were moderate or high risk to reoffend.
- 34% of youth had at least one felony charge in the 12 months prior to BHJJ enrollment.

Educational Information

- About 72% of the youth were suspended or expelled from school in the year prior to their BHJJ enrollment. During treatment, 33% were suspended or expelled.
- At termination, 37% of unsuccessful completers and 63% of successful completers were receiving mostly A's, B's, and C's. At termination, 81% of youth were attending school.
- At termination, workers reported that 90% of youth were attending school more or about the same amount as they were before starting treatment.

Mental/Behavioral Health Outcomes

- BHJJ youth reported decreases in trauma symptoms related to anger, anxiety, depression, dissociation, posttraumatic stress, and sexual concerns from intake to termination.

- Results from the Ohio Scales indicated the caregiver, worker, and youth reported increased youth functioning and decreased problem severity while in BHJJ treatment.

- Males and females reported a decrease in alcohol, cigarette, and marijuana use at termination from BHJJ.

- Upon entering the program, 64% of the youth were at risk for out of home placement. At termination, 26% of youth were at risk for out of home placement.

Termination and Recidivism Information

- 68% of the youth terminated from the BHJJ program completed treatment successfully. The average length of stay in the program was 329 days.

- Workers reported that police contacts have been reduced for 64% of the youth.

- One year after termination, 24% of BHJJ youth had a new felony charge.

- Twenty-one of the 435 youth (4.8%) enrolled in BHJJ for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment in BHJJ.

An Evaluation of the Cuyahoga County Behavioral Health/Juvenile Justice (BHJJ) Initiative: 2006-2017

Juvenile Justice and Mental Health

Youth involved in the juvenile justice system report significant behavioral health impairment. While estimates vary, most studies report that between 65-75% of juvenile justice-involved (JJI) youth have at least one mental health or substance abuse disorder and 20% to 30% report suffering from a serious mental disorder (Cocozza & Skowyra, 2000; Shufelt & Cocozza, 2006; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002; Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002). Rates of similar mental health/substance use disorders among the general adolescent population are far lower (Cuellar, McReynolds, & Wasserman, 2006; Friedman, Katz-Levy, Manderscheid, & Sondheimer, 1996; Merikangas, et al., 2010; Otto, Greenstein, Johnson, & Friedman, 1992; U.S. Department of Health and Human Services, 1999).

Studies have found that JJI females are often more likely to suffer from mental health disorders than JJI males (Teplin et al., 2002; Nordess et al., 2002; Shufelt & Cocozza, 2006; Wasserman, McReynolds, Ko, Katz, & Carpenter, 2005). Driving this difference is the fact that Anxiety and Mood Disorders are far more common in JJI girls than JJI boys (Shufelt & Cocozza, 2006; Teplin et al., 2002; Wasserman et al., 2005). Not only are JJI girls more likely to report mental health disorders, they are also more likely to report co-occurring mental health and substance use disorders than JJI males (Abram, Teplin, McClelland, & Dulcan, 2003; Wasserman et al., 2005; Wasserman, McReynolds, Schwalbe, Keating, & Jones, 2010).

While it is clear that a significant percentage of JJI youth have mental health problems, many have not received help or treatment for these issues prior to entering the system. One study found that only 34% of juvenile detainees with Anxiety, Mood, or Disruptive Behavior Disorders had ever received prior mental health treatment (Novins, Duclos, Martin, Jewett, & Manson, 1999). In another study, only 17% of juvenile detainees reported previous mental health treatment by a psychiatrist or therapist (Feinstein et al., 1998). A SAMHSA-funded study reported that while 94% of juvenile justice facilities had some type of mental health services available to youth, the quality and comprehensiveness of these services varied greatly based on the facility (Goldstrom, Jaiquan, Henderson, Male, & Manderscheid, 1998). Goldstrom et al. (1998) reported that 71% of juvenile detention centers offer mental health screening while only 56% conduct full evaluations. In facilities where full evaluations are offered, screenings and assessments are often not standardized (Hoge, 2002; Soler, 2002).

Juvenile Justice/Mental Health Diversion Programs

The prevalence of juvenile justice youth with mental health issues is cause for alarm. While the juvenile justice system is often the first time a youth is screened for mental health problems, the system is often ill-prepared to properly treat these youth (Cocozza & Skowyra, 2000; Skowyra & Powell, 2006; Teplin et al., 2002; U.S. Department of Justice, 2005). In response to the growing number of youth entering the juvenile justice system with mental health issues and the lack of proper care in these facilities, many communities have developed diversion programs or mental health courts as an alternative to detention or incarceration. These programs allow for more in-depth assessment and evaluation and more

comprehensive and evidence-based treatment and supervision services than are available in typical juvenile justice facilities.

Ohio's Behavioral Health/Juvenile Justice (BHJJ) Initiative

Nearly 20 years ago, Ohio's juvenile court judges met with representatives from the Ohio Department of Mental Health (ODMH) and the Ohio Department of Youth Services (ODYS) to address a growing and serious concern. Many of the youth who appeared in court demonstrated serious mental health and/or substance use problems. Not only did these judges lack the resources and expertise to identify, assess, and serve these youth, but there were few alternative programs into which these youths could be placed in lieu of a detention facility.

The state recommended funding local pilot projects in an attempt to divert youth who demonstrated a need for behavioral health service from incarceration and into community-based treatment settings. The pilot program operated in three counties in Ohio. While small in scope, the pilot project was successful in reducing the number of youth with behavioral health issues committed to the ODYS.

In 2005, the state allocated new resources to the Behavioral Health/Juvenile Justice (BHJJ) project and funded several counties throughout Ohio to expand upon the work accomplished in the pilot phase. The intent of the BHJJ project was to transform the local systems' ability to identify, assess, evaluate, and treat multi-need, multi-system youth and their families and to identify effective programs, practices, and policies. As in the pilot, the initiative was designed to divert JJI youth with mental health or substance use issues from detention and into community and evidence-based treatment. The state identified criteria to be used by participating counties to determine if a youth was appropriate for inclusion in the BHJJ project, including: a DSM diagnosis, aged 10 to 18, substantial mental status impairment, co-occurring substance abuse, a pattern of criminal behavior, charged and/or adjudicated delinquent, a threat to public safety, exposed to trauma or domestic violence, and a history of multi-system involvement. Each county was able to determine which and how many criteria the youth had to meet to be eligible for participation.

Since 2006, 18 counties have been selected to participate in the BHJJ program. Urban, suburban, and rural counties have been included in the project. These counties were required to use evidence-based or evidence-informed treatment models; however, the state allowed each county to select the model that best fit the needs of their youth and families. Examples of the types of treatment models provided through BHJJ include Multi-systemic Therapy (MST), Functional Family Therapy (FFT), Integrated Co-Occurring Treatment (ICT), Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), and Multidimensional Family Therapy (MDFT).

While each county employs slightly different protocols and procedures in the implementation of BHJJ, the juvenile court is the typical entry point into the program. Youth who have been charged with a crime are given a psychological assessment to determine if they meet criteria for inclusion in BHJJ. If the youth meets criteria and the youth and family agree to participate, the youth is recommended for BHJJ participation. If the judge or magistrate accepts the recommendation, the youth is enrolled in the BHJJ program and referred or linked to the treatment agency responsible for providing the treatment services. In most cases the youth remains on probation supervision during their time in the BHJJ program. While residential placement is an option in some of the participating counties, a mission of

BHJJ is to provide treatment in the least restrictive setting possible and therefore the majority of the treatment is provided in-home or in outpatient settings.

A key component to the BHJJ program is the ongoing outcome evaluation provided by the Begun Center for Violence Prevention Research and Education at the Mandel School for Applied Social Sciences at Case Western Reserve University (Kretschmar, Butcher, Flannery & Singer, 2016; Kretschmar, Butcher, Kanary, & Devens, 2015). For information or copies of previous evaluation reports, please contact Dr. Jeff Kretschmar at jeff.kretschmar@case.edu or visit http://begun.case.edu/research/juvenile-justice/bhjj/.

Measures and Instrumentation

All of the instruments collected as part of the BHJJ evaluation were in TeleForm© format. TeleForm© is a software program that allows for data transmission via fax machine, scanner, or .pdf file. Instruments are created using this software and once completed, can be faxed or scanned directly into a database.

Ohio Youth Problems, Functioning, and Satisfaction Scales (Ohio Scales)

The Ohio Scales (Ogles, Melendez, Davis, & Lunnen, 2001) were designed to assess clinical outcomes for children with severe emotional and behavioral disorders, and were developed primarily to track service effectiveness. The measure assesses four primary domains of outcomes with four subscales: Problem Severity, Functioning, Hopefulness, and Satisfaction with services. In the Ohio Scales–Caregiver version, the caregiver rates his/her child's problem severity and functioning, and the caregiver's satisfaction with services and hopefulness about caring for his or her child. In the Ohio Scales–Youth version, the youth rates his/her own problem severity and functioning, and his/her satisfaction with services and hopefulness about life or overall well-being. The Worker version does not include the Satisfaction or Hopefulness scales. A score is generated for each of the four subscales, with a total score for the scale generated by summing the items.

Trauma Symptom Checklist for Children (TSCC)

The Trauma Symptom Checklist for Children (TSCC) is a 54-item Likert-type questionnaire containing six subscales designed to measure anxiety, anger, depression, posttraumatic stress, dissociation, and sexual concerns (Briere, 1996). Youth respond to a series of questions regarding the frequency of certain thoughts, events, or behaviors. Responses are made on a 4-point, 0-3 scale with "0" indicating "never" and "3" indicating "almost all the time".

Substance Use Survey – Revised

This measure, adapted from the SAMHSA-funded Tapestry Project (a demonstration and research project that identifies, serves and follows youth and families from Cuyahoga County, Ohio, with significant behavioral and mental health needs), collects information reported by the youth about the frequency of his or her substance use, including tobacco, alcohol, marijuana, cocaine, painkillers, and several additional substances.

Enrollment and Demographics Form (Enrollment Form)

This form permits program staff to record several important pieces of information including date of enrollment, reasons for BHJJ services, DSM diagnoses, Global Assessment of Functioning (GAF) scores, and agencies with which the youth is involved. In addition, out-of-home placement status, risk for placement, and educational and vocational data are collected.

Child Information Update Form (Termination Form)

This form is completed by the treatment staff at termination from the BHJJ program, and is used to record DSM diagnoses, GAF score, date and reasons for termination from the program, and out-of-home placement risk. Educational and vocational data, as well as information related to contacts with the police are also captured.

Victimization and Delinquency Questionnaire (VDQ)

The Victimization and Delinquency Questionnaire (VDQ) is a 33-item survey designed to gather information on childhood victimization as a witness or victim, delinquency, and negative peer interactions. This self-report instrument is measured on a 0 (Never) to 4 (Almost every day) scale. The items were adapted from a variety of sources, including the Juvenile Victimization Questionnaire (Finkelhor, Hamby, Ormrod, & Turner, 2005). This survey replaced the Recent Exposure to Violence Scale (REVS) used in previous BHJJ evaluations.

Caregiver Information Questionnaire (Intake and Termination)

The Caregiver Information Questionnaire, adapted from SAMHSA/Center for Mental Health Services (2005), permits staff to record information including demographics, risk factors, family composition, physical custody of the child, abuse history, family history of mental health issues, the child's mental and physical health service use history, caregiver employment status, and child's presenting problems.

Youth Services Survey for Families

The Youth Services Survey for Families (YSSF) (SAMHSA) was designed to assess caregiver satisfaction with services the youth received, and if, as a result of those services, the youth is showing improved functioning. This measure was optional.

Recidivism

Recidivism can be defined in many ways: a new offense, a violation of probation, new adjudication, or commitment to ODYS. Recidivism is a standard measure of program success, especially as an indicator of treatment outcomes over time. For this evaluation, recidivism was defined in three ways; a new misdemeanor or felony charge, a new adjudication, and a placement in an ODYS facility any time after enrollment in the BHJJ program. These data are provided to the evaluators by the juvenile court in each participating county. Recidivism data are presented for youth prior to and after enrollment and termination from BHJJ.

Ohio Youth Assessment System (OYAS)

The OYAS is a criminogenic risk assessment tool designed to assist juvenile court staff with placement and treatment decisions based on a youth's risk score. The OYAS contains five distinct versions of the tool administered at different points in the juvenile justice process: Diversion, Detention, Disposition, Residential, and Reentry. Youth receive a total score and fall into three risk levels; low, moderate, or high. Each county's juvenile court supplied OYAS data to the evaluators.

Data Collection Schedule

The evaluation contains both required and optional questionnaires (see Table 1 and Table 2).

Table 1. Required BHJJ Questionnaires

Measure	Who Completes	When Administered
Ohio Scales	Youth & Worker	Intake, every 3 months, Term
Trauma Symptom Checklist for Children (TSCC)	Youth	Intake, Term
Substance Use Survey – Revised (SUS)	Youth with Program Staff	Intake, every 6 months, Term
Enrollment and Demographics Information Form (EDIF)	Program Staff	Intake
Child Information Update Form (CIUF)	Program Staff	Term
Caregiver Information Questionnaire – Intake (CIQ-I)	Caregiver with Program Staff	Intake

Table 2. Optional BHJJ Questionnaires

Measure	Who Completes	When Administered
Ohio Scales	Caregiver	Intake, every 3 months, Term
Victimization and Delinquency Questionnaire	Youth	Intake, Term
Caregiver Information Questionnaire – Term (CIQ-F)	Caregiver with Program Staff	Term
Youth Service Survey for Families (YSSF)	Caregiver	Term

Date of BHJJ Participation

To date, 18 counties throughout Ohio have participated in the BHJJ program (see Table 3). The aggregate report includes data from all 18 counties. Currently, there are 12 BHJJ counties. In addition to the aggregate report, individual county reports are included for each of these current counties.

Table 3. Dates of BHJJ Participation

County	BHJJ Participation Dates
Ashtabula	2016 - present
Butler	2008 – 2009
Champaign	2006 - 2009
Cuyahoga	2006 – present
Fairfield	2006 - 2009
Franklin	2006 - present
Hamilton	2008 – present
Holmes	2013 - present
Logan	2006 - 2009
Lorain	2013 – present
Lucas	2009 – present
Mahoning	2013 – present
Montgomery	2006 - present
Summit	2009 - present
Trumbull	2013 – present
Union	2006 - 2009
Wayne	2013 - present
Wood	2013 - 2015

Project Description

Cuyahoga County's BHJJ model has evolved as a highly intensive, structured program delivering effective, evidenced based treatment and culturally-appropriate services for juvenile offenders. Data provided by Ohio Department of Youth Services (ODYS) reflect that among youth adjudicated in Cuyahoga County, 81% are African American and 85% are male. Many of the youth enrolled in the BHJJ program are residents of the City of Cleveland, English speaking, indigent, and multi-system involved.

Eligibility Criteria:

- Resident of Cuyahoga County
- Male or Female, ages 12-18
- Adjudicated for Misdemeanors or Felonies
- Diagnosed with Mental Health/Serious Emotional Disturbance, Substance Use, or Co-Occurring Disorder

Services and Treatment Models: The BHJJ program within Cuyahoga County entails specialized Juvenile Court services, Intensive Probation monitoring, Care Coordination, pharmacological and mental health screening and assessment, and intensive use of high fidelity wraparound services. Additionally, the BHJJ team has access to a dedicated crisis stabilization bed. Services include crisis intervention, stabilization, comprehensive diagnostic assessment, psychiatric consultations, evaluation, and medication management. The aforementioned allows a crisis to be managed by providing a short term solution and ultimately avoiding the need for an out of home residential placement. Overall, since 2011, the BHJJ Project has seen its residential placements reduced by 70%.

The primary evidenced based treatment models utilized are Integrated Co-Occurring Treatment and Multi-Systemic Therapy, however other evidenced based practices and treatment models may be accessed when deemed appropriate.

Integrated Co-Occurring Treatment (ICT): ICT is an integrated treatment approach embedded in an intensive home based method of service delivery, which provides a set of core services to youth with co-occurring disorders of substance use and Serious Emotional Disability.

Multi-Systemic Therapy (MST): MST focuses on understanding the "fit" of the child's/family's issues and how to best resolve them. In addition, MST focusses on assisting parents in building support systems and social networks within their community and empowers them to address their family's needs more effectively. Particular emphasis is placed on ensuring the family's ability to sustain positive changes and avoid recidivism once therapy has ended.

The BHJJ model shifted upon the 2018-2019 grant period to fully integrate the project within the Mental Health Court Specialized Docket (Phoenix Court). This has allowed for more fluid, cohesive and individualized planning, as measured through the court's three graduated phases and evidence based treatment planning. The timeframe to move through the phases is determined by the progress of the youth, and is usually twelve (12) months or less.

Key Stakeholders: In Cuyahoga County, the BHJJ program operates through the partnership between the Alcohol, Drug Addiction & Mental Health Services (ADAMHS) Board of Cuyahoga County, Cuyahoga

County Juvenile Court, Family and Children First Council of Cuyahoga County, and Bellefaire Jewish Children's Bureau. These partners meet quarterly in order to discuss progress of the project model.

Referral and Enrollment Process: BHJJ participants are identified through the court by Probation Officers, Jurists, Alternative Case Planning (ACP) Review process or the ODYS Review Committee who suspect a youth has mental health concerns and/or has an identified substance abuse problem. Referrals are sent to the BHJJ Probation Manager or BHJJ Clinical Coordinator, and include all relevant collateral documentation, such as recent diagnostic assessments and Ohio Youth Assessment System (OYAS). The BHJJ Clinical Coordinator ensures all collateral documents are submitted with the referral, and completes the Massachusetts Youth Screening Instrument-Version 2 (MAYSI-2) with the youth. The BHJJ Clinical Coordinator presents the referral information and screening results to the BHJJ Review Committee, comprised of BHJJ staff, ICT/MST Clinicians, Defense Counsel, Guardian Ad Litem, and the Phoenix Court Jurist. The Review Committee determines program eligibility and selects the appropriate EBP. Upon Phoenix Court Enrollment, the youth and family meet with their BHJJ Treatment Team, which include their BHJJ Care Coordinator, BHJJ Intervention Specialist, and EBP Clinician. Individualized Service Plans and Court Plans are developed, and services are implemented.

Successful Completion: At the clinical level, progress is determined through clinical outcomes from the EBP in which each youth is involved, and reflected by a youth's movement through the Phoenix Court's three graduated phases. The combination of graduated phases and treatment advances serve as a catalyst to transition toward community-based stabilization and successful completion.

The Cuyahoga County BHJJ project has been highly successful addition to the array of juvenile justice and behavioral health services available in Cuyahoga County. The county's commitments of youth to ODYS facilities has declined by 61% since 2005, and since 2011 its rate of out-of-home placements have significantly reduced due to an effective service model that is intensive and cohesive contributing to successful outcomes for project participants.

Data Analysis Plan

Description of the Analyses Used in the Report

Several types of inferential statistics are used throughout the report, including three types of bivariate analyses. The chi-square analysis refers to a bivariate technique where a relationship between two variables is tested to determine if there are any significant differences. For example, if we are interested in whether males and females differ on whether they have ever used alcohol, a chi-square test is used. If there is a statistically significant result, this indicates that the difference between females and males is unlikely to have occurred by chance. Thus, we would describe the difference for the gender groups as a *real difference* rather than one that could have occurred by chance.

In instances where the bivariate relationship of interest is a measure that is both a yes/no measure and one that is repeated, a McNemar's test is used. For example, if we are interested in whether there is a statistically significant decrease in the proportion of youth using alcohol in the past six months from intake to termination, we would use a McNemar's test. A statistically significant result would indicate

that the observed difference in six-month use from intake to termination is a real difference and one that likely did not occur by chance.

The third type of bivariate analysis used throughout the report is the t-test. T-tests are similar to chi-square tests in that they test two variables to determine whether there are significant differences. For example, if we are interested in whether females and males differ on their levels of posttraumatic stress symptoms, a t-test is used. Since the variable posttraumatic stress lies on a continuous scale, we examine whether the corresponding means for the two gender groups significantly differ. Independent samples t-tests are used when there are two distinct groups (e.g. female and male) while paired samples t-tests are used when we are interested in whether means for the same group from different time points differ significantly (e.g. pre/post differences).

While statistical significance is an indication of how likely differences between groups or time points could occur by chance, effect sizes measure the magnitude of these observed differences. In other words, while statistical significance tells us whether a difference exists, effect sizes tell us how much of a difference exists. Effect sizes as represented by Cohen's *d* are also presented using the recommended criteria for its interpretation in Cohen's (1988) seminal work. Interpretation of Cohen's *d* is based on the criteria where 0.2 indicates a small effect size, 0.5 indicates a medium effect, and 0.8 indicates a large effect[1].

One-way *ANOVAs* are used when we are interested in whether mean differences on a dependent variable are significant along a categorical independent variable. For instance, one-way *ANOVAs* are conducted when we are interested in whether caregivers, youth, and workers differ significantly on mean Ohio Scales Functioning scores. The question of interest here is whether there are *real differences* between mean scores for the three different reporters.

Logistic regression is a multivariate statistical technique where the question to be answered is whether or not a variable predicts group membership. The use of the term multivariate here indicates that there is more than one independent variable included in the analysis. Each of the variables in the model contributes to the prediction of group membership and therefore, the effects of each variable in the analysis are controlled. Consider the question of whether recidivism can be predicted by risk assessment scores, age, race, and gender. Group membership in this case refers to whether or not an individual recidivated (yes/no). Results of the logistic regression will indicate the probability of recidivism for a male youth compared to a female, while controlling for, or holding constant, risk assessment scores, age, and race.

[1] For a more thorough review see Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Results

Demographics

Cuyahoga County has enrolled 453 youth in the BHJJ program since 2006. Of the 453 youth enrolled, 45.5% (n = 206) were female and 54.5% (n = 247) were male. Since July 2015, 69.9% (n = 58) of new enrollees have been male (see Table 4).

The majority of the overall sample of youth were either Caucasian (36.0%, n = 160) or African American (53.3%, n = 237). Since July 2015, a much larger proportion of African Americans (71.1%, n = 57) than Caucasians (20.5%, n = 163) were enrolled. The average age of the youth at intake into BHJJ was 16 years old (SD = 1.17) with a range between 11 and 17 years.

Table 4. Demographic Information for BHJJ Youth

	All Youth Enrolled (2006 - 2017)	**Youth Enrolled between July 2015 – June 2017**
Gender	Female = 45.5% (n = 206)	Female = 30.1% (n = 25)
	Male = 54.5% (n = 247)	Male = 69.9% (n = 58)
Race	African American = 53.3% (n = 237)	African American = 71.1% (n = 59)
	Caucasian = 36.0% (n = 160)	Caucasian = 20.5% (n = 17)
	Other = 10.8% (n = 48)	Other = 8.4% (n = 7)
Age at Intake	16.06 years (SD = 1.17)	15.76 years (SD = 1.29)

Custody Arrangement and Household Information

At intake, the majority of youth lived with the biological mother (61.0%, n = 261) (see Table 5). At time of enrollment, 82.7% (n = 354) of the BHJJ youth lived with at least one biological parent.

Nearly 80% of the BHJJ caregivers (79.5%, n = 353) had at least a high school diploma or GED, and 11.1% (n =47) had a bachelor's degree or higher (see Table 6). More than one in five caregivers (20.5%, n = 86) reported that they did not graduate from high school.

Caregivers reported their annual household income. The median household income for BHJJ families was between $20,000 and $24,999 (see Table 7). A little over 73% (73.1%, n = 306) reported annual household incomes below $35,000 and 43.5% (n = 182) reported an annual household income below $20,000. More than 20% of BHJJ families (21.5%, n = 90) reported an annual household income below $10,000.

Table 5. Custody Arrangement for BHJJ Youth

Custody	BHJJ Youth
Two Biological Parents or One Biological and One Step or Adoptive Parent	17.3% (n=74)
Biological Mother Only	61.0% (n=261)
Biological Father Only	4.4% (n=19)
Adoptive Parent(s)	6.1% (n=26)
Sibling	0.2% (n=1)
Aunt/Uncle	2.1% (n=9)
Grandparents	6.8% (n=29)
Ward of the State	0.5% (n=2)
Other	1.6% (n=7)

Table 6. Educational Outcomes for Caregivers of BHJJ Youth

Number of School Years Completed	Number of Caregivers
Less than High School	20.5% (n=86)
High School Graduate or G.E.D.	31.4% (n=132)
Some College or Associate Degree	36.9% (n=174)
Bachelor's Degree	6.9% (n=29)
More than a Bachelor's Degree	4.2% (n=18)

Table 7. Annual Household Income for BHJJ Families

Annual Household Income	BHJJ Families
Less than $5,000	13.1% (n=55)
$5,000 - $9,999	8.4% (n=35)
$10,000 - $14,999	13.6% (n=57)
$15,000 - $19,999	8.4% (n=35)
$20,000 - $24,999	15.3% (n=64)
$25,000 - $34,999	14.3% (n=60)
$35,000 - $49,999	14.3% (n=60)
$50,000 - $74,999	7.6% (n=32)
$75,000 - $99,999	3.6% (n=15)
$100,000 and over	1.4% (n=6)

Youth and Family History

Caregivers were asked to respond to a series of questions designed to obtain data related to the youth's family history. Chi-square analysis was conducted on each item and significant differences are identified in Table 8. Overall, a significantly higher proportion of the caregivers of females reported a history of sexual abuse, running away, talking about suicide, attempting suicide, and a family history of depression.

Caregivers reported that 37.4% (n = 71) of females and 6.1% (n = 14) of males had a history of being sexually abused. Caregivers of 61.9% of females (n = 120) and 35.5% of males (n = 83) reported hearing the child talking about committing suicide and 31.9% of females (n = 61) and 13.9% (n = 32) of males had attempted suicide at least once. More than three quarters of females (75.9%, n = 142) and males (61.0%, n = 139) reported a family history of depression.

At intake, caregivers were asked if the youth had ever been pregnant (or if male, had ever impregnated a female) and if they were currently expecting a child. Caregivers reported that 17.2% (n = 27) of females had ever been pregnant and 38.5% (n = 10) were currently expecting a child. Caregivers reported that 11.1% (n = 24) of males had ever impregnated a female and 26.1% (n = 6) were currently expecting a child.

Table 8. Youth and Family History

Question	Females	Males
Has the child ever been physically abused?	21.6% (n=42)	16.4% (n=38)
Has the child ever been sexually abused?	37.4% (n=71)**	6.1% (n=14)
Has the child ever run away?	75.3% (n=146)**	61.1% (n=140)
Has the child ever had a problem with substance abuse, including alcohol and/or drugs?	82.9% (n=160)	84.9% (n=197)
Has the child ever talked about committing suicide?	61.9% (n=120)**	35.5% (n=83)
Has the child ever attempted suicide?	31.9% (n=61)**	13.9% (n=32)
Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?	45.9% (n=89)	37.6% (n=88)
Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?	75.9% (n=142)**	61.0% (n=139)
Has anyone in the child's biological family had a mental illness, other than depression?	56.5% (n=105)	50.0% (n=111)
Has the child ever lived in a household in which someone was convicted of a crime?	43.1% (n=81)	36.2% (n=83)
Has anyone in the child's biological family had a drinking or drug problem?	68.9% (n=131)	66.2% (n=151)
Is the child currently taking any medication related to his/her emotional or behavioral symptoms?	52.4% (n=100)	45.8% (n=104)

* < .05, ** < .01, *** < .001

Problems Leading to Service

The case worker or staff member assigned to the family typically completed a diagnostic assessment as part of the intake process. The workers were asked to identify the problems leading to the youth being referred for BHJJ services. For both females and males, the most common problem leading to BHJJ services was conduct/delinquency problems (89.0% and 91.4% respectively) (see Table 9). Chi-square analysis indicated females had significantly higher rates of problems related to suicide, depression, and school performance. Males had significantly higher rates of hyperactive and attention-related problems as well as problems related to specific developmental disabilities and learning disabilities.

Table 9. Problems Leading to Services

Problems Leading to Services	Females	Males
Adjustment-related problems	15.0% (n = 30)	19.3% (n = 45)
Anxiety-related problems	30.0% (n = 60)	33.5% (n = 78)
Conduct/delinquency-related problems	89.0% (n = 178)	91.4% (n = 213)
Depression-related problems	65.0% (n = 130)***	45.5% (n = 106)
Eating disorders	2.0% (n = 4)	2.1% (n = 5)
Hyperactive and attention-related problems	34.0% (n = 68)	53.2% (n = 124)***
Learning disabilities	8.0% (n = 16)	16.7% (n = 39)**
Pervasive development disabilities	0.5% (n = 1)	3.9% (n = 9)*
Psychotic behaviors	4.0% (n = 8)	3.4% (n = 8)
School performance problems not related to learning disabilities	74.0% (n = 148)*	63.5% (n = 148)
Specific developmental disabilities	0	3.4% (n = 8)**
Substance use, abuse, dependence-related problems	84.5% (n = 169)	88.4% (n = 206)
Suicide-related problems	25.5% (n = 51)**	14.2% (n = 33)

* < .05, ** < .01, *** < .001

Ohio Youth Assessment System

Ohio Youth Assessment System (OYAS) (criminogenic risk) data were collected at the time point closest to their respective enrollment dates for those enrolled since 2009. Table 10 shows the distribution of OYAS categories for BHJJ youth by gender and race. We conducted Chi-squared tests to see if differences based on gender and race were statistically significant. A similar proportion of males and females were represented in each of the OYAS risk levels. While OYAS risk levels were similar for gender, we found statistically significant differences based on race. Over 30% of Nonwhite youth were identified as high risk compared to 12.6% of White youth.

Table 10. OYAS Risk Categories by Gender and Race

	OYAS Low	OYAS Moderate	OYAS High
Female	25.0% (n = 32)	50.8% (n = 65)	24.2% (n = 31)
Male	22.5% (n = 53)	51.7% (n = 122)	25.8% (n = 61)
White	27.0% (n = 30)	60.4% (n = 67)	12.6% (n = 14)
Nonwhite*	21.8% (n = 55)	47.6% (n = 120)	30.6% (n = 77)

*p < .001

DSM Diagnoses

Workers were asked to report any DSM diagnoses at intake in the BHJJ program. These diagnoses were either identified through a psychological assessment given as part of the enrollment process or in some cases, from psychological assessments given in close proximity to a youth's enrollment in BHJJ. The most common diagnosis for both females and males was Cannabis-related disorders (see Table 11).

Chi-square analysis indicated females were significantly more likely to be diagnosed with Post-traumatic Stress Disorder (PTSD). Males were significantly more likely to be diagnosed with Cannabis-related Disorders and ADHD. Over eighty percent of males (81.5%, n = 190) and over seventy percent of females (70.6%, n = 137) were identified as having both a DSM mental health diagnosis and a substance use diagnosis.

Table 11. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
Adjustment Disorder	2.1% (n= 4)	3.0% (n = 7)
Alcohol-related Disorders	29.5% (n 57)	25.8% (n = 60)
Attention Deficit Hyperactivity Disorder	26.4% (n = 51)	39.5% (n = 92)**
Bipolar Disorder	6.2% (n = 12)	4.7% (n = 11)
Cannabis-related Disorders	72.2% (n = 140)	87.6% (n = 204)***
Conduct Disorder	11.9% (n = 23)	17.6% (n = 41)
Depressive Disorders	34.2% (n = 66)	27.0% (n = 63)
Disruptive Behavior Disorder	2.1% (n = 4)	3.9% (n = 9)
Mood Disorder	15.5% (n = 30)	12.0% (n = 28)
Oppositional Defiant Disorder	21.2% (n = 41)	27.5% (n = 64)
Post-traumatic Stress Disorder	14.5% (n = 28)*	8.2% (n = 19)

* < .05, ** < .01, *** < .001

Educational Information

Several items focused on educational information were included in the evaluation packet at both intake into and termination from the BHJJ program. The items were completed by the worker with help from the youth and caregiver. Over seventy percent (71.8%, n = 252) were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in treatment with BHJJ, 32.6% (n = 108) of the youth were expelled or suspended from school.

Educational data were analyzed for youth who were eligible for inclusion (youth on summer break or who had graduated at the time of the survey were not included in the analyses). At intake, 76.1% (n = 223) of youth were currently attending school while at termination, 80.8% (n = 249) of BHJJ youth were attending school.

If the youth was attending school, the worker was asked to identify the types of grades the youth typically received. Table 12 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 13 displays this information based on completion status. At intake, 14.4% of youth were earning mostly A's and B's and 29.8% were earning mostly D's and F's. At termination from BHJJ, 16.7% of youth were earning mostly A's and B's and 14.3% were earning mostly D's and F's. Academic improvement was largely dependent upon BHJJ completion status. While academic performance varied little at intake for youth regardless of future BHJJ completion status, youth who completed successfully reported significant academic performance improvement at termination. For example, at intake, 40.8% of unsuccessful completers and 36.1% of successful completers received mostly A's, B's, or C's. At termination, 36.9% of unsuccessful completers and 62.5% of successful completers received mostly A's, B's, or C's.

At termination, workers reported that 64.2% (n = 213) of youth were attending school more than before starting treatment and 26.2% (n = 87) of youth were attending school 'about the same' amount compared to before starting treatment. Workers reported that 4.8% (n = 16) were attending school less often than before treatment in BHJJ. At termination, 54.7% (n = 127) of the youth attending school had Individualized Education Plans (IEPs).

Table 12. Academic Performance

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A's and B's	14.4% (n = 31)	16.7% (n = 50)
Mostly B's and C's	27.9% (n = 60)	38.3% (n = 115)
Mostly C's and D's	27.9% (n = 60)	30.7% (n = 92)
Mostly D's and F's	29.8% (n = 64)	14.3% (n = 43)

Table 13. Academic Performance for Youth by Completion Status

	Unsuccessful Completers		Successful Completers	
Typical Grades	Frequency at Intake	Frequency at Termination	Frequency at Intake	Frequency at Termination
Mostly A's and B's	13.2% (n = 10)	13.1% (n = 11)	13.0% (n = 27)	18.0% (n = 38)
Mostly B's and C's	27.6% (n = 21)	23.8% (n =20)	23.1% (n = 48)	44.5% (n = 94)
Mostly C's and D's	30.3% (n = 23)	36.9% (n = 31)	28.4% (n = 59)	28.0% (n = 59)
Mostly D's and F's	28.9% (n = 22)	26.2% (n = 22)	35.6% (n = 74)	9.5% (n = 20)

Ohio Scales

One of the main measures in the data collection packet was the Ohio Scales. The Ohio Scales were completed by the youth, caregiver, and worker at intake and then every three months following intake until termination from services. Because termination can occur at any point in time along the continuum of service, separate charts are included that display the means from intake to termination. Decreases in Problem Severity and increases in Functioning correspond to positive change.

All Problem Severity and Functioning analyses were conducted on assessment periods with enough valid cases to produce meaningful results. Paired samples t-tests were used to compare Problem Severity scores at intake to Problem Severity scores at the other assessment periods. A paired samples t-test compares the means of two variables by computing the difference between the two variables for each case and testing to see if the average difference is significantly different from zero. In order for a case to be included in the analyses, the rater must have scores for both assessment periods. For example, a caregiver must supply scores for both the intake and 3-month assessment period to be included in the paired samples t-test for that time point. If the caregiver only has an intake score, his or her data is not included in the analysis.

Problem Severity

Overall means for the Problem Severity scale by rater and assessment period for Cuyahoga County youth are represented graphically in Figure 1. Means from intake to termination are presented in Figure 2.

Figure 1

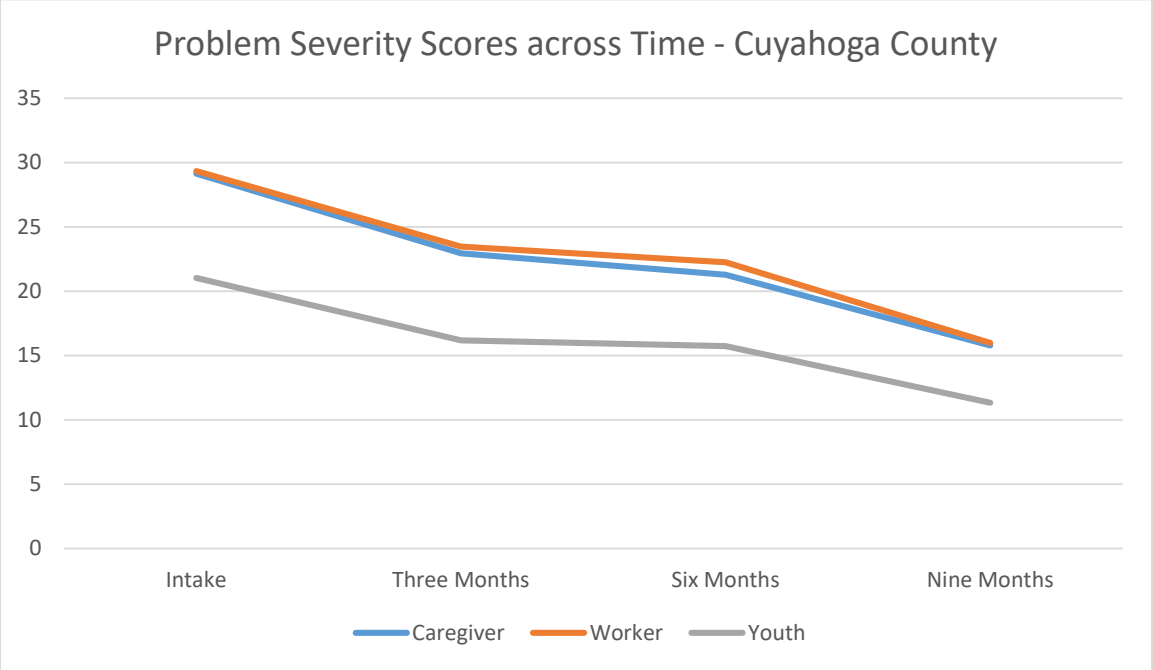
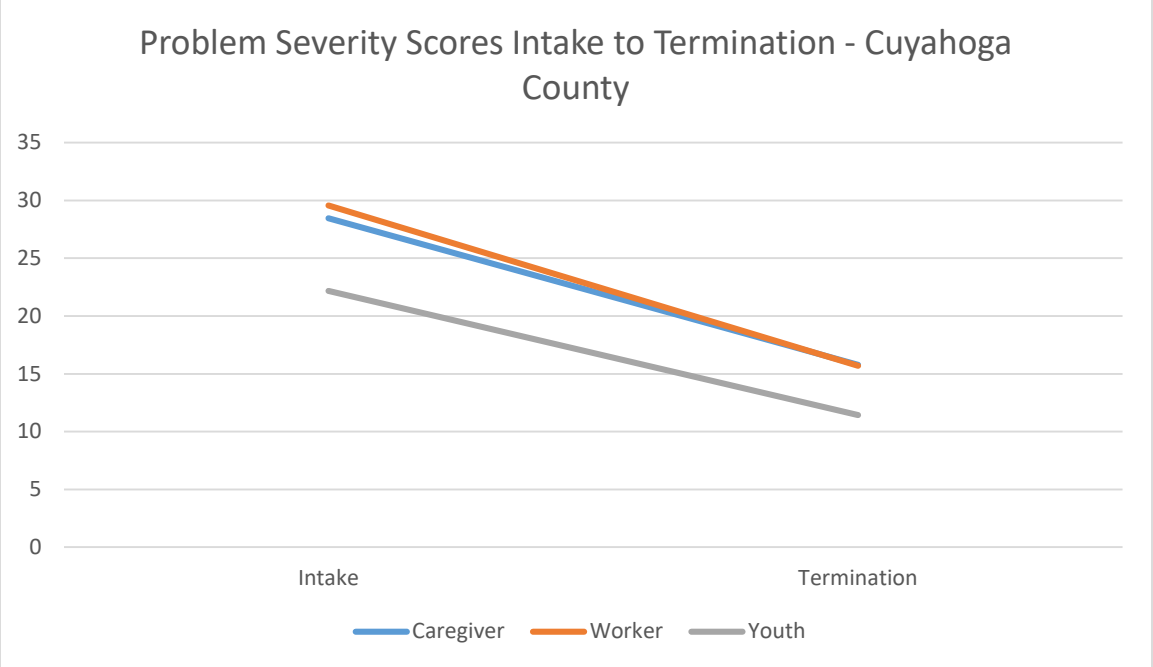


Figure 2



Caregiver Rating

Paired samples t-tests revealed significant improvements in Problem Severity at each measurement interval compared to intake (see Table 14). Significant improvements were noted at three months: $t(340) = 6.11$, $p < .001$; six months: $t(269) = 6.68$, $p < .001$; nine months: $t(180) = 6.98$, $p < .001$; and at termination $t(276) = 10.48$, $p < .001$. Small effects were noted for the period between intake to three months and the period between intake to six months. Medium effect sizes were noted for the time periods between intake to nine months and intake to termination.

Table 14. Paired Samples T-Tests for Problem Severity - Caregiver

	Mean Time 1	Mean Time 2	*t*	d
Intake to Three Months	29.14 (SD=18.09; n=341)	23.09 (SD=15.47; n=341)	6.11***	.33
Intake to Six Months	29.38 (SD=18.86; n=270)	21.26 (SD=15.61; n=270)	6.68***	.41
Intake to Nine Months	29.69 (SD=19.17; n=181)	18.85 (SD=14.70; n=181)	6.98***	.52
Intake to Termination	28.45 (SD=17.83; n=277)	15.78 (SD=14.88; n=277)	10.48***	.63

* < .05, ** < .01, *** < .001

Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Problem Severity from intake to each successive data collection point (see Table 15). Improvements were noted at three months: $t(350) = 7.05$, $p < .001$; six months: $t(282) = 8.13$, $p < .001$; nine months: $t(180) = 6.58$, $p < .001$; and at termination $t(314) = 14.79$, $p < .001$. We found a large effect size for the period between intake and termination while small effect sizes were found for all other time periods.

Table 15. Paired Samples T-Tests for Problem Severity – Worker

	Mean Time 1	Mean Time 2	*t*	d
Intake to Three Months	29.44 (SD=13.29; n=351)	23.46 (SD=12.87; n=351)	7.05***	.37
Intake to Six Months	30.05 (SD=13.68; n=283)	22.04 (SD=11.68; n=283)	8.13***	.48
Intake to Nine Months	29.53 (SD=12.97; n=181)	20.91 (SD=12.19; n=181)	6.58***	.49
Intake to Termination	29.55 (SD=13.16; n=315)	15.69 (SD=10.58; n=315)	14.79***	.83

* < .05, ** < .01, *** < .001

Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement at each data collection point (see Table 16). Improvements were noted at three months: $t(335) = 6.22$, $p < .001$; six months: $t(271) = 6.04$, $p < .001$; nine months: $t(176) = 7.30$, $p < .001$; and at termination $t(284) = 10.20$, $p < .001$. Moderate effect sizes were observed for the time periods between intake to nine months and intake to termination. A small effect size was noted for the time periods between intake to three months and intake to six months.

Table 16. Paired Samples T-Tests for Problem Severity – Youth

	Mean Time 1	Mean Time 2	*t*	d
Intake to Three Months	21.37 (SD=15.82; n=336)	16.23 (SD=12.89; n=336)	6.22***	.34
Intake to Six Months	22.21 (SD=16.15; n=272)	15.82 (SD=14.08; n=272)	6.04***	.37
Intake to Nine Months	21.95 (SD=15.04; n=177)	13.51 (SD=11.52; n=177)	7.30***	.55
Intake to Termination	22.18 (SD=16.77; n=285)	11.43 (SD=11.68; n=285)	10.20***	.60

* < .05, ** < .01, *** < .001

Functioning Scores

Means for the Functioning scale by rater and assessment period can be found in Figure 3 and Figure 4.

Figure 3

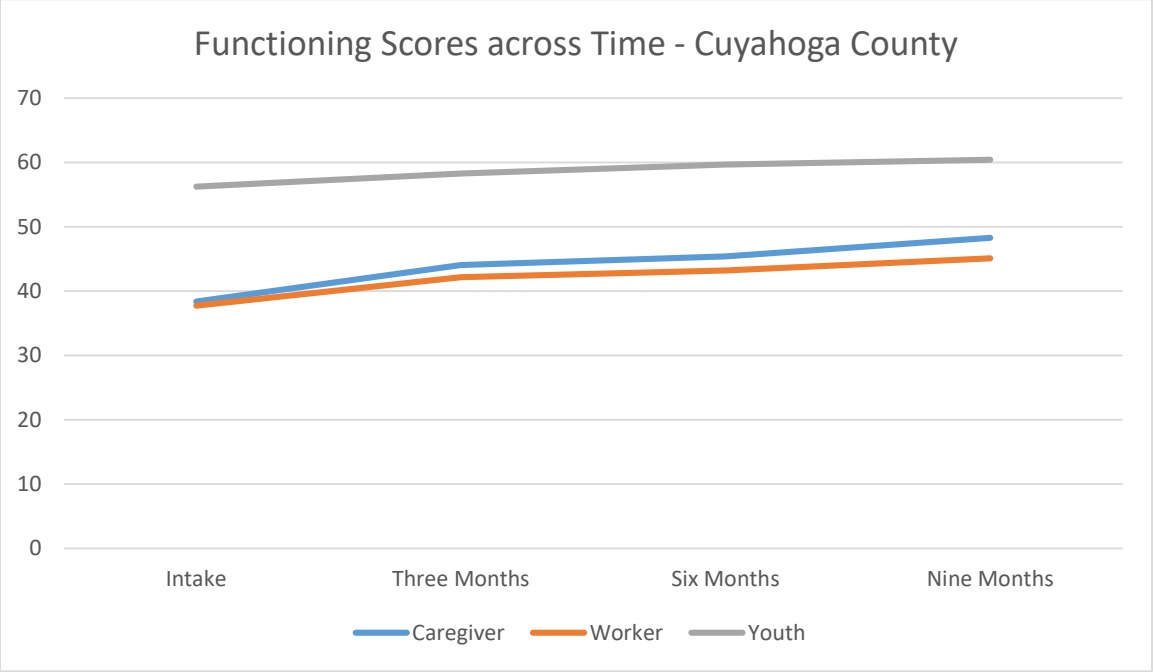
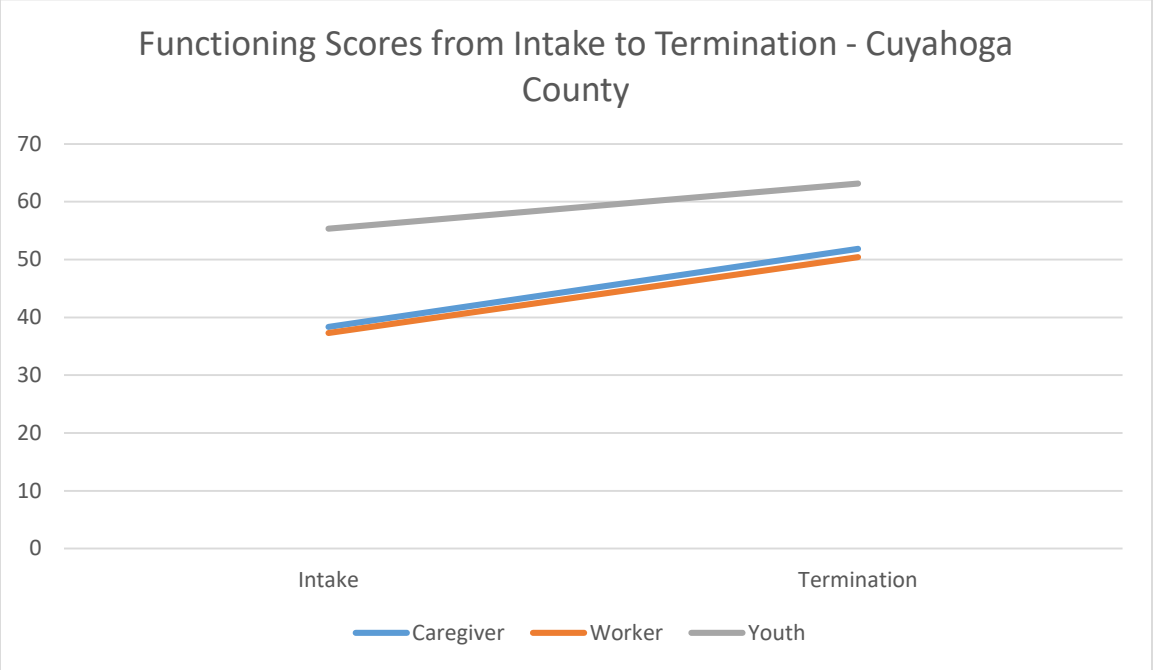


Figure 4



Caregiver Ratings

Paired samples t-tests revealed significant improvements in Functioning at each measurement interval compared to intake (see Table 17). Significant improvements were noted at three months: $t(341) = -6.26$, $p < .001$; six months: $t(270) = -6.45$, $p < .001$; nine months: $t(179) = -6.87$, $p < .001$; and at termination $t(277) = -11.86$, $p < .001$. Moderate effect sizes were noted for the periods between intake and three months and between intake and six months. Large effect sizes were found for the periods between intake and nine months and intake and termination.

Table 17. Paired Samples T-Tests for Functioning Scores – Caregiver

	Mean Time 1	Mean Time 2	*t*	d
Intake to Three Months	38.09 (SD=16.32; n=342)	43.91 (SD=16.80; n=342)	-6.26***	.34
Intake to Six Months	38.11 (SD=16.25; n=271)	45.33 (SD=15.79; n=271)	-6.45***	.39
Intake to Nine Months	38.15 (SD=16.86; n=180)	48.16 (SD=15.36; n=180)	-6.87***	.54
Intake to Termination	38.35 (SD=16.30; n=278)	51.86 (SD=17.77; n=278)	-11.86***	.71

* < .05, ** < .01, *** < .001

Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Functioning from intake to each successive data collection point (see

Table 18) Improvements were noted at three months: $t(346) = -5.86$, $p < .001$; six months: $t(283) = -6.45$, $p < .001$; nine months: $t(178) = -5.52$, $p < .001$; and at termination $t(310) = -14.38$, $p < .001$. A large effect was noted for the period between intake and termination while moderate effects were noted for all other time periods.

Table 18. Paired Samples T-Tests for Functioning Scores – Worker

	Mean Time 1	Mean Time 2	*t*	d
Intake to Three Months	37.84 (SD=9.86; n=347)	42.25 (SD=12.30; n=347)	-5.86***	.31
Intake to Six Months	37.47 (SD=10.25; n=284)	43.27 (SD=12.34; n=284)	-6.45***	.38
Intake to Nine Months	37.60 (SD=10.48; n=179)	44.81 (SD=12.48; n=179)	-5.52***	.41
Intake to Termination	37.32 (SD=10.06; n=311)	50.43 (SD=13.13; n=311)	-14.38***	.82

* < .05, ** < .01, *** < .001

Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement at each data collection point (see Table 19). Improvements were noted at three months: $t(335) = -2.26$, $p < .05$; six months: $t(268) = -4.56$, $p < .001$; nine months: $t(175) = -4.36$, $p < .001$; and at termination $t(279) = -7.98$, $p < .001$. Moderate effect sizes were noted for the period between intake and nine months and the period between intake and termination. Small effect sizes were noted for all other time periods.

Table 19. Paired Samples T-Tests for Functioning Scores – Youth

	Mean Time 1	Mean Time 2	*t*	d
Intake to Three Months	56.39 (SD=12.57; n=336)	58.23 (SD=13.25; n=336)	-2.26*	.12
Intake to Six Months	55.27 (SD=12.63; n=269)	59.67 (SD=13.60; n=269)	-4.56***	.28
Intake to Nine Months	54.99 (SD=12.33; n=176)	60.23 (SD=13.84; n=176)	-4.36***	.33
Intake to Termination	55.34 (SD=12.53; n=280)	63.14 (SD=13.60; n=280)	-7.98***	.48

* < .05, ** < .01, *** < .001

Violence and Delinquency Questionnaire

The Violence and Delinquency Questionnaire (VDQ) is a self-report, 33-item Likert-style survey composed of three general domains: exposure to violence, violence perpetration, and peer delinquency. The VDQ is offered at intake and termination into the BHJJ program. At intake, each item prompts the youth to answer within the context of the past year. At termination, youth are directed to answer "since the last time you answered these questions".

Because this is a new survey to the BHJJ protocol, we conducted reliability analyses on each domain. This allowed us to understand whether each of the three domains demonstrated good internal consistency, that is, how closely related a set of items are as a group. The measure of the internal consistency is referred to as Cronbach's alpha, and anything over 0.70 is generally considered to be acceptable in most social science research. Each domain, the violence exposure (0.78), the violence perpetration (0.75), and the peer delinquency (0.85) demonstrated acceptable internal consistency.

This section of the report is divided into the three domains. First we present the violence exposure rates for the BHJJ sample, and provide comparison data from a large, national, random sample of youth. The random sample were not drawn from a juvenile justice population, so direct comparisons should be made cautiously. Rather, these data are presented to highlight the increased violence exposure reported by juvenile justice-involved youth in the BHJJ and similar samples (Ford, Hartman, Hawke, &

Chapman, 2008). The next section displays the delinquency perpetration results, and the final section shows the peer delinquency data. These data are presented as pre/posttest comparisons.

Victimization as a Witness or Victim

Overall, a higher percentage of the BHJJ sample reported exposure to violence compared to the national sample on every item. For example, 5.4% of the national sample and 42.7% of the BHJJ sample knew someone who was murdered in the past year (see Table 20).

Table 20. Prevalence of Self-Reported Violent Victimization

	% Yes BHJJ Sample (n = 76)	% Yes National Sample
In the last year, did someone threaten to hurt you when you thought they might really do it?	35.5%	14.4%[a]
In the last year, have you been hit or attacked because of your skin color, religion, or where your family comes from? Because of a physical problem you have? Or because someone said you were gay?	2.6%	1.9%[b]
In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?	21.1%	2.8%[b]
In the last year, did anyone steal anything from you and never give it back? Things like a backpack, money, watch, clothing, bike, stereo, or anything else?	51.3%	16.6%[a]
Sometimes people are attacked WITH sticks, rocks, knives, or other things that would hurt. In the last year, did anyone hit or attack you on purpose with an object or weapon? Somewhere like at home, at school, at a store, in a car, on the street, or anywhere else?	13.2%	5.7%[a]
In the last year, did anyone hit or attack you WITHOUT using an object or weapon?	46.1%	17.7%[a]
In the last year, did you get scared or feel really bad because kids were calling you names, saying mean things to you, or saying they didn't want you around?	14.5%	21.8%[a]
In the last year, did a grown-up touch your private parts when they shouldn't have or make you touch their private parts? Or did a grown-up force you to have sex?	5.3%	0.3%[b]
Now think about other kids, like from school, a boyfriend or girlfriend, or even a brother or sister. In the last year, did another child or teen make you do sexual things?	2.6%	1.2%[b]
In the last year, did you SEE a parent get pushed, slapped, hit, punched, or beat up by another parent, or their boyfriend or girlfriend?	11.8%	3.3%[b]
In the last year, in real life, did you SEE anyone get attacked on purpose WITH a stick, rock, gun, knife, or other thing that would hurt? Somewhere like: at home, at school, at a store, in a car, on the street, or anywhere else?	36.8%	12.8%[a]
In the last year, in real life, did you SEE anyone get attacked or hit on purpose WITHOUT using a stick, rock, gun, knife, or something that would hurt them?	57.9%	29.0%[a]

In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?	42.7%	5.4% [a]
In the last year, did you get scared or feel really bad because grown-ups in your life called you names, said mean things to you, or said they didn't want you?	25.0%	9.7% [a]
Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?	19.7%	5.6% [a]
When someone is neglected, it means that the grown-ups in their life didn't take care of them the way they should. They might not get them enough food, take them to the doctor when they are sick, or make sure they have a safe place to stay. In the last year, were you neglected?	5.3%	1.4% [b]

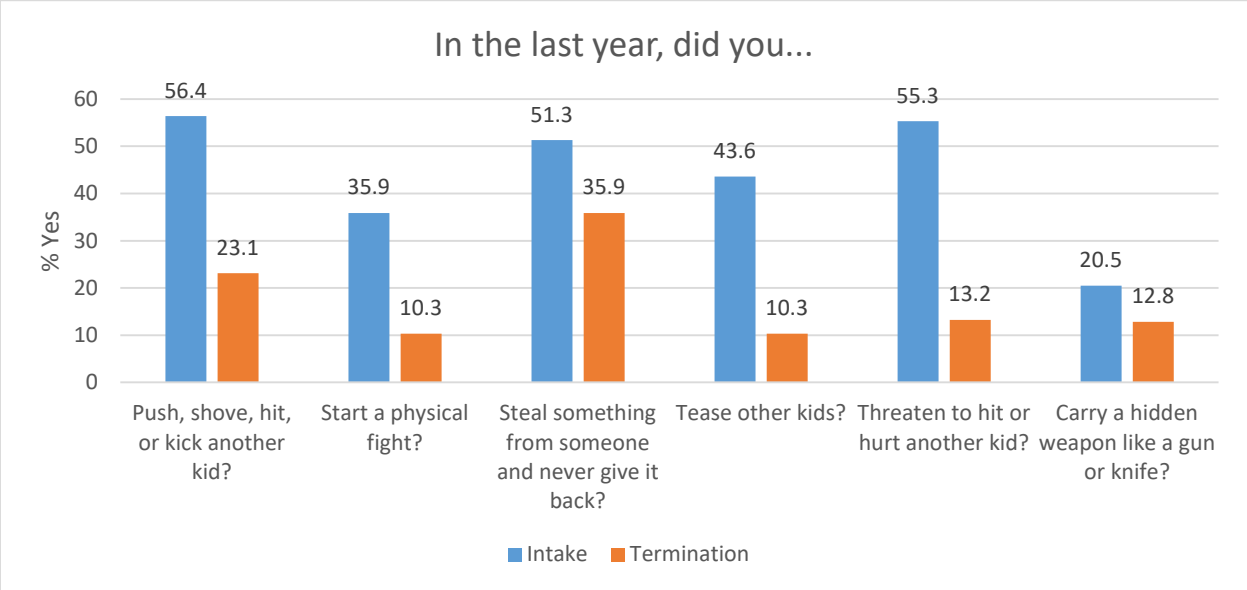
[a] Calculated from the raw National Survey of Children Exposed to Violence (NATSCEV) data. [b] Obtained from Finkelhor, D., Hamby, S.L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. *Child Abuse and Neglect, 29*, 383-412.

In the next section, we present the outcomes for self-reported delinquency as well as peer delinquency. In order to examine the impact of BHJJ services on self-reported and peer delinquency, we present data for those youth who completed both an intake and termination VDQ. At intake, the youth answered with respect to the last year, while at termination, the youth answered "since the last time you answered these questions".

Self-reported delinquency

Youth reported significantly less delinquency at termination than intake (see Figure 5). For example, at intake, 35.9% of youth reported starting a physical fight in the past year. At termination, 10.3% of youth had started a fight since intake into BHJJ. McNemar's tests revealed statistically significant improvements from intake to termination for four items: push, shove, hit, or kick another kid, start a physical fight, tease other kids, and threaten to hurt another kid.

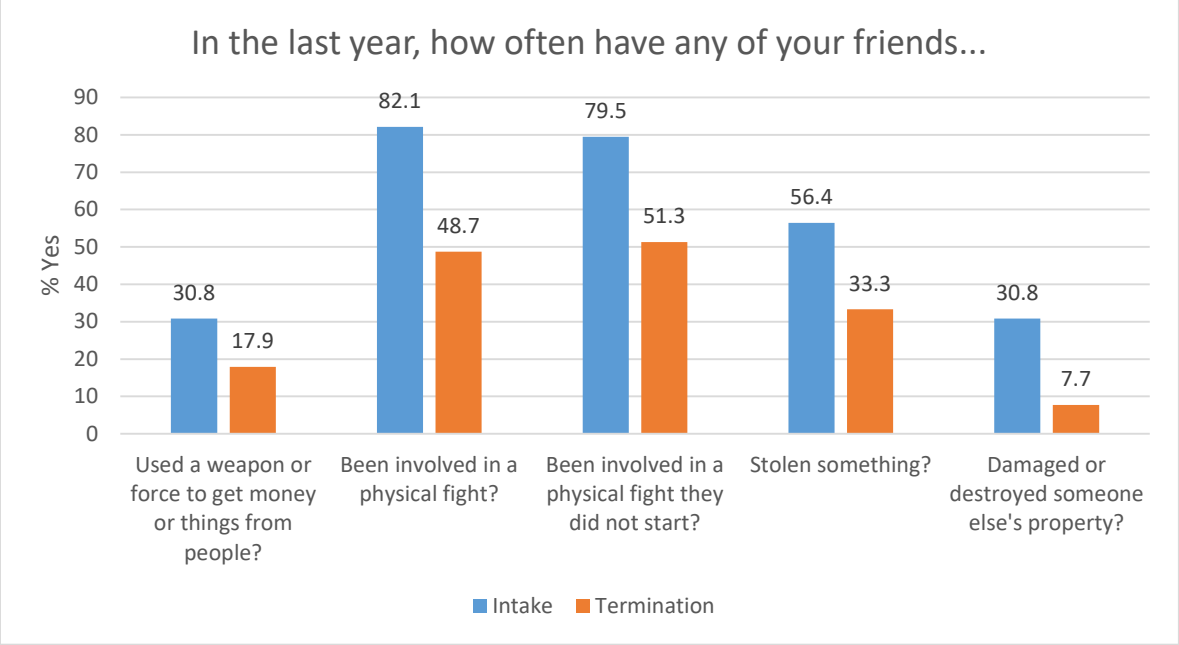
Figure 5



Peer delinquency

Youth also reported significantly less peer delinquency at termination than intake (see Figure 6). For example, at intake, 82.1% of youth reported that at least one of their friends had been involved in a physical fight. At termination from BHJJ, 48.7% of youth reported that at least one of their friends had been involved in a physical fight. McNemar's tests revealed statistically significant improvements from intake to termination for three items: been involved in a physical fight, been involved in a physical fight they did not start, and stolen something.

Figure 6



Trauma Symptom Checklist for Children

The Trauma Symptom Checklist for Children (TSCC) is a 54-item Likert-type survey composed of six subscales: anger, anxiety, depression, dissociation, post-traumatic stress disorder, and sexual concerns. The TSCC was administered at intake and termination from BHJJ. The TSCC contains an Underresponse and Hyperresponse scale. The Underresponse scale "reflects a tendency toward denial, a general under-endorsement response set, or a need to appear unusually symptom-free" (Briere, 1996). According to the professional manual, any child who has a t-score above 70 on the Underresponse scale should be eliminated from further data analysis. The Hyperresponse scale "indicates a general overresponse to TSCC items, a specific need to appear especially symptomatic, or a state of being overwhelmed by traumatic stress" (Briere, 1996). The TSCC professional manual recommends eliminating any child with a Hyperresponse t-score above 90 from further data analysis. Higher scores indicate greater symptomatology.

An examination of the Underresponse and Hyperresponse scales revealed that 33.3% (n = 151) of youth were identified as either an underresponder or hyperresponder, and these youths were eliminated from all further data analyses conducted on the TSCC. Paired-samples t-tests were conducted to show

whether means at intake and termination on each TSCC subscale differed significantly. Data were analyzed for youth who had completed the TSCC at both intake and termination and who were not identified as either underreporters or hyperresponders. Data are then presented separately for males and females.

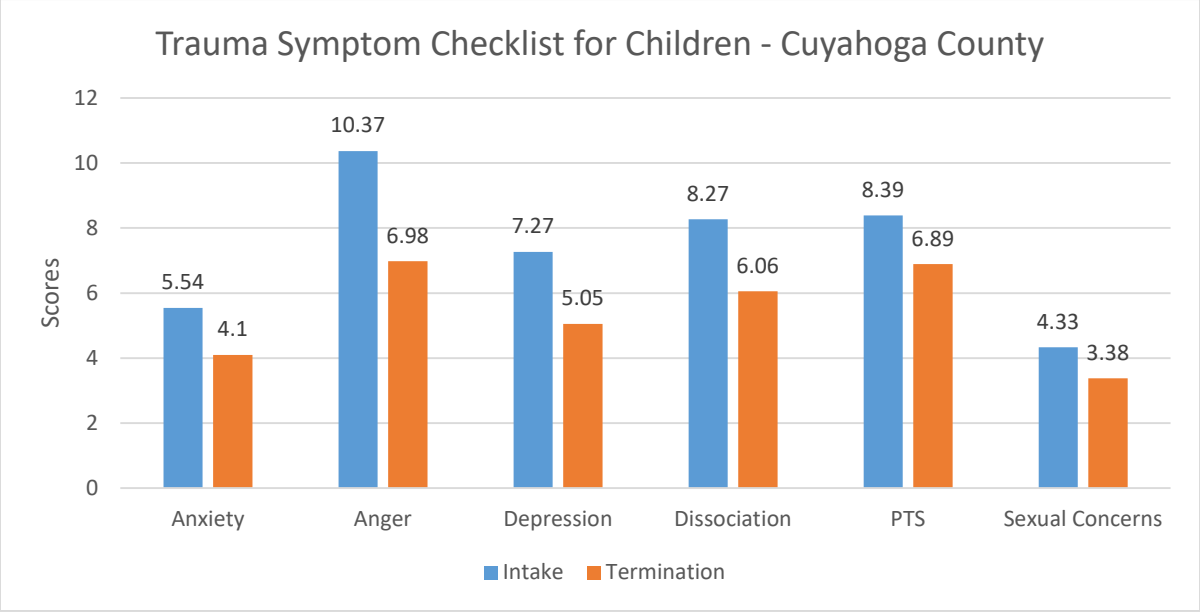
Overall, results from paired samples t-tests indicated that there were significant symptom reductions on all subscales from intake to termination (see Table 21 and Figure 7). Considering Cohen's (1988) established cutoffs, small effects were found for all subscales except Anger (moderate). The removal of such a large number of youth who were identified as "Underresponders" had a significant impact on the paired samples t-test results and the effect sizes.

Table 21. TSCC Subscales from Intake to Termination

	Intake	Termination	t	d
Anxiety	5.54 (SD=4.27; n=118)	4.10 (SD=3.49; n=118)	4.25***	.40
Depression	7.27 (SD=5.49; n=118)	5.05 (SD=3.90; n=118)	4.95***	.47
Anger	10.37 (SD=6.07; n=118)	6.98 (SD=4.76; n=118)	6.32***	.59
Posttraumatic Stress	8.39 (SD=5.85; n=118)	6.89 (SD=5.01; n=118)	2.84***	.26
Dissociation	8.27 (SD=5.20; n=116)	6.06 (SD=5.03; n=116)	4.63***	.43
Sexual Concerns	4.33 (SD=3.86; n=118)	3.38 (SD=3.78; n=118)	3.24***	.30

* < .05, ** < .01, *** < .001

Figure 7



TSCC and Gender

Research has found that females consistently report more trauma symptoms than males (Singer et al., 1995). We examined trauma symptoms for females and males in the BHJJ sample. Consistent with previous research, BHJJ females reported significantly more trauma symptoms for each subscale. For example, at intake, the average score on the Depression domain was 10.1 for females and 4.9 for males (see Figure 8 and Figure 9). For females, paired samples t-tests revealed significant improvements in trauma symptoms for each subscale at termination. For males, paired samples t-tests indicated significant improvements in trauma symptoms for every subscale except Posttraumatic Stress.

Figure 8

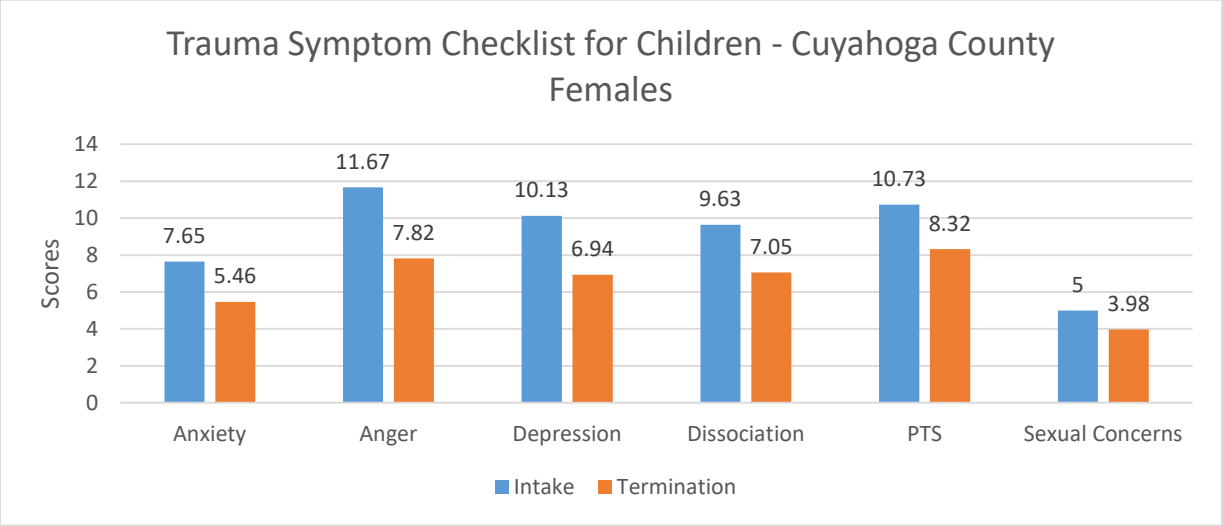
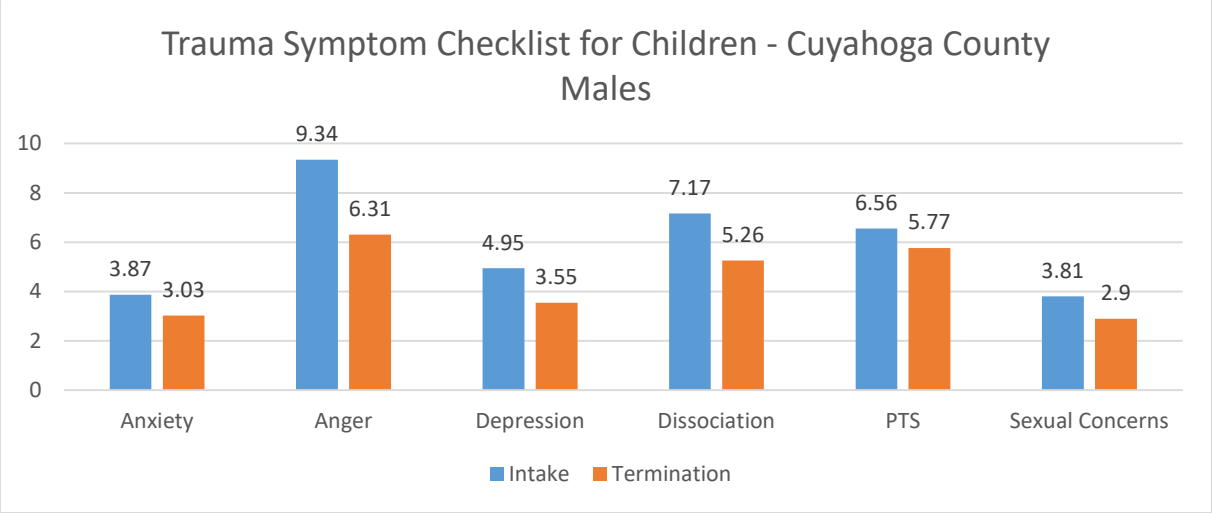


Figure 9



Substance use

Every six months the youth completed a self-report measure of substance use. The survey was designed to measure any lifetime use of each drug as well as patterns of current use. Table 22 presents the percentages of BHJJ youth who reported ever using alcohol or drugs and the average age of first use by gender. For both females and males, alcohol, cigarettes, and marijuana were the three most commonly used substances. Significantly more males than females reported chewing tobacco use, and significantly more females than males reported alcohol, cocaine, inhalant, heroin, Ritalin, barbiturates, PCP, and ecstasy use than males. Almost 1% of males (0.9%, n =2) and 7.9% of females (n = 15) ever used heroin at intake.

Table 22. Self-Reported Substance Use at Intake

	Males		**Females**	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
Alcohol	77.2% (n = 179)	13.24 (SD = 2.06)	86.7% (n = 163)*	13.30 (SD = 2.20)
Cigarettes	73.3% (n = 170)	12.79 (SD = 2.08)	76.8% (n = 149)	12.93 (SD = 2.23)
Chewing Tobacco	12.2% (n = 28)**	14.18 (SD = 2.02)*	4.2% (n = 8)	12.14 (SD = 3.13)
Marijuana	93.1% (n = 216)	12.82 (SD = 1.97)	90.0% (n = 171)	13.20 (SD = 1.89)
Cocaine	7.0% (n = 16)	14.75 (SD = 1.17)	15.6% (n = 30)**	15.44 (SD = 3.08)
Pain Killers (use inconsistent with prescription)	24.1% (n = 55)	14.44 (SD = 1.58)	26.9% (n = 52)	14.69 (SD = 1.12)
GHB	0	N/A	1.6% (n = 3)	14.00[a]
Inhalants	3.5% (n = 8)	14.14 (SD = 1.46)	8.4% (n = 16)*	13.31 (SD = 1.99)
Heroin	0.9% (n = 2)	15.50 (SD = 0.71)	7.9% (n = 15)***	14.80 (SD = 1.47)
Amphetamines	5.2% (n = 12)	14.30 (SD = 1.64)	8.1% (n = 15)	13.71 (SD = 2.70)
Ritalin (use inconsistent with prescription)	7.9% (n = 18)	14.50 (SD = 1.51)	16.6% (n = 32)**	14.43 (SD = 1.46)
Barbiturates	0.9% (n = 2)	15.00 (SD = 1.41)	5.2% (n = 10)*	14.63 (SD = 1.30)
Non-prescription Drugs	10.6% (n = 24)	14.45 (SD = 1.77)	12.5% (n = 23)	14.09 (SD = 1.19)
Hallucinogens	10.9% (n = 25)	14.96 (SD = 1.04)	12.6% (n = 24)	14.42 (SD = 1.50)
PCP	1.3% (n = 3)	15.33 (SD = 1.53)	4.7% (n = 9)*	14.44 (SD = 1.42)
Ketamine	3.0% (n = 7)	15.00 (SD = 1.10)	5.2% (n = 10)	14.33 (SD = 1.32)
Ecstasy	10.0% (n = 23)	14.81 (SD = 1.90)	22.2% (n = 42)**	14.35 (SD = 1.51)
Tranquilizers	11.3% (n = 26)	14.50 (SD = 1.42)	14.1% (n = 27)	14.52 (SD = 1.16)

*$p < .05$, ** $p < .01$, ***$p < .001$, [a]Standard deviations are not available for averages with one only case

Six-Month Substance Use

Youth were also asked whether they had used each substance in the past six months. Figure 10 and Figure 11 present past six-month use for the most commonly reported substances for males and females respectively among those who reported lifetime use of each specific substance. Both males and females reported a decrease in six-month use with respect to the most commonly used substances. McNemar's tests showed a significant decrease from intake to termination in six-month alcohol, cigarette, and marijuana use for males and females.

The percentage of males using alcohol in the past six months dropped from 59.9% (n = 103) to 40.2% (n = 47) from intake to termination. For females, 75.3% (n = 116) reported past six-month use at intake while 30.0% (n = 30) reported past six-month alcohol use at termination. Over 80% of males (87.0%, n = 140) and females (85.4%, n = 123) reported past six-month cigarette use at intake. At termination, 72.5% of males (n = 79) and 76.1% (n = 67) of females reported past six-month cigarette use.

Past six-month marijuana use declined from 88.4% (n = 183) at intake to 55.6% (n = 79) at termination for males and 85.9% (n = 140) at intake and 42.2% (n = 43) at termination for females.

Figure 10

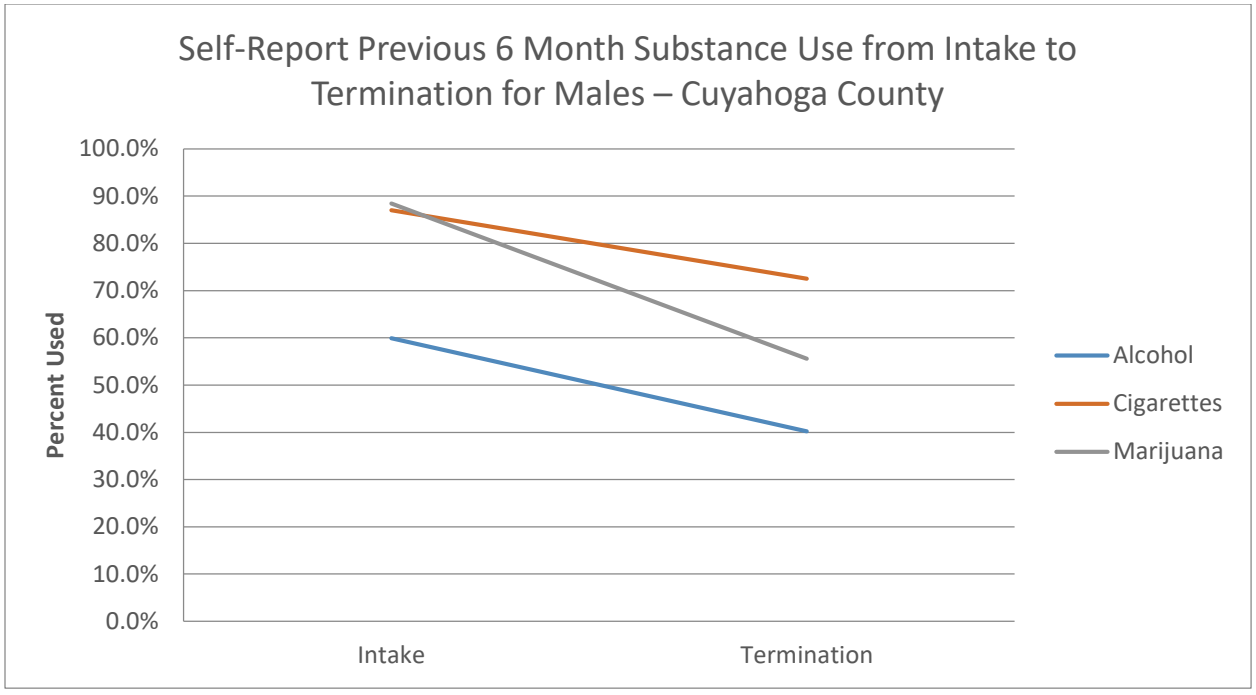
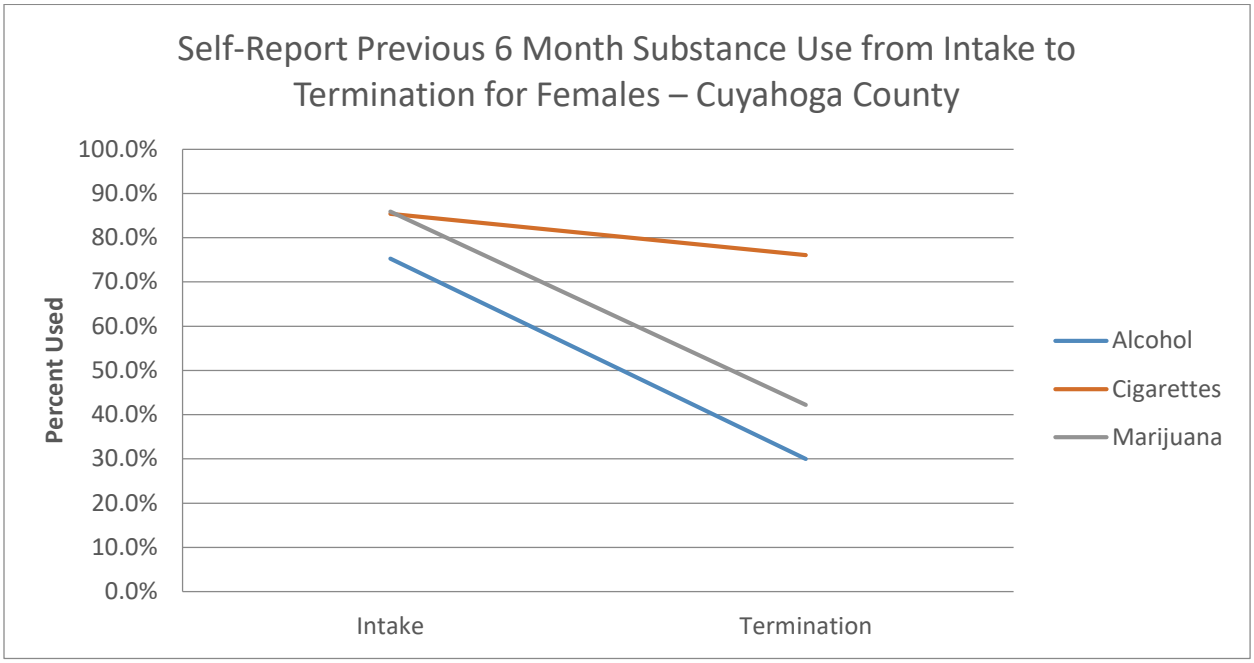


Figure 11



Thirty-Day Substance Use

If youth reported any lifetime use and if they had reported use in the past six months, youth were asked whether they had used each substance in the past 30 days. Figure 12 and Figure 13 present the average number of days youth reported using the three most commonly reported substances by gender (alcohol, cigarettes, and marijuana) in the past 30 days. We restricted our analyses to alcohol, cigarettes, and marijuana due to a small sample size of youth who had reported using other substances in the past 30 days. Prior to running these analyses, we restricted the sample to those who had reported lifetime use and six-month use at intake. For both gender groups, the average number of days declined from intake to termination for alcohol and marijuana. Alcohol use among males decreased from 2.30 days (SD = 4.63; n = 71) at intake to 0.95 days (SD = 1.89; n = 39) at termination. Among females, alcohol use decreased from 2.27 days at intake (SD = 5.04; n = 95) to 0.84 days (SD = 1.97; n = 37) at termination. For marijuana, males reported using for an average of 8.43 days (SD = 11.76; n = 132) out of the past 30 days at intake and 7.44 days (SD = 13.87; n = 80) at termination while females reported using for an average of 6.42 days (SD = 10.50; n = 113) at intake and 4.02 days (SD = 7.36; n = 53) at termination.

Figure 12

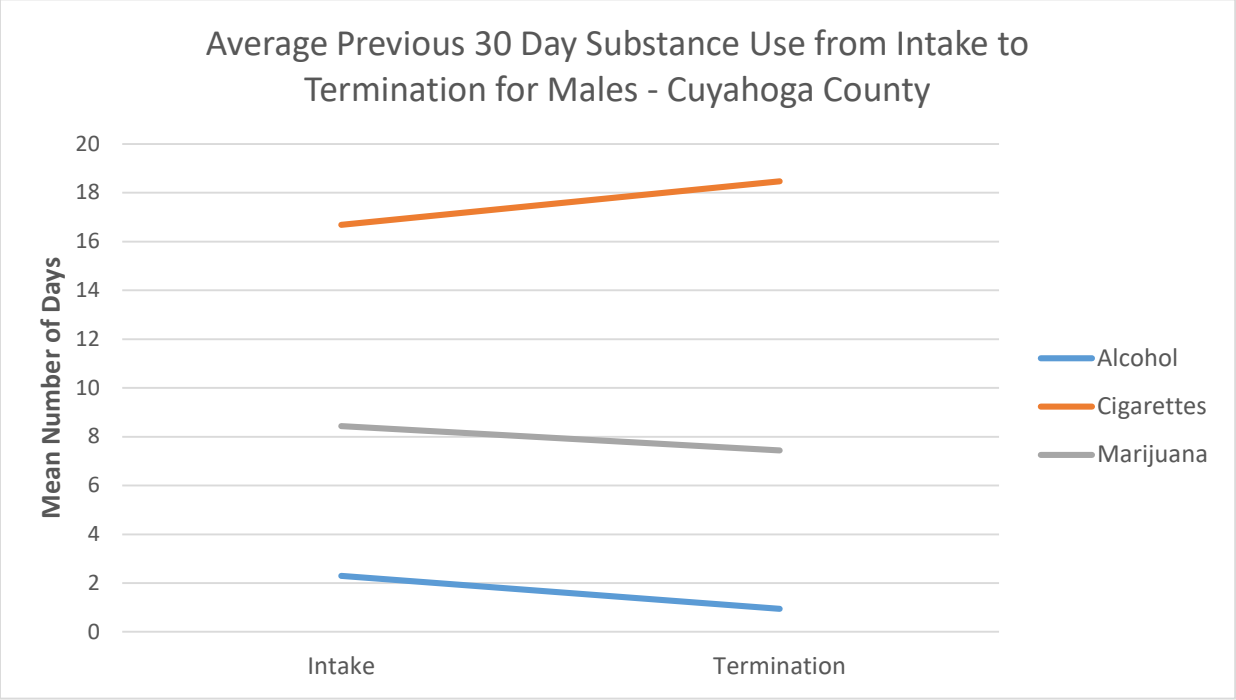
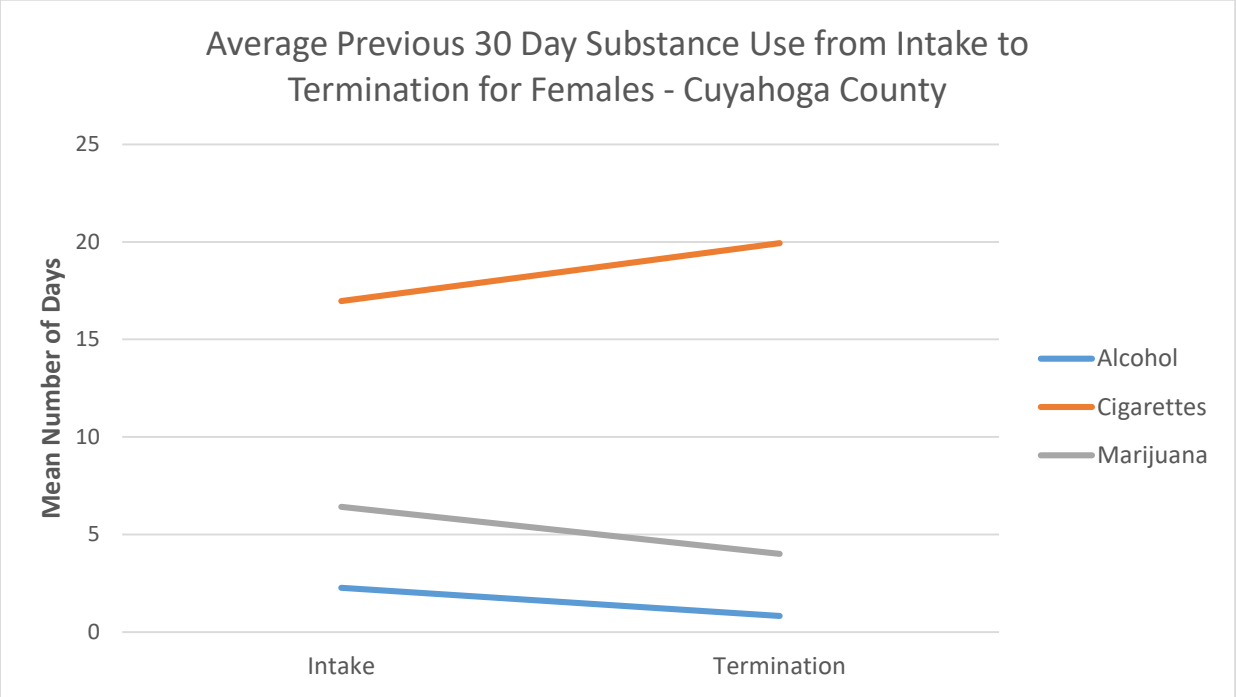


Figure 13



Reasons for Termination

Upon termination of treatment from BHJJ, the case worker is asked to identify the reason for the youth's termination from the program. This information is typically focused on treatment outcomes and driven by local definitions of success, not necessarily whether the youth received new court charges or adjudications (recidivism), although youth may be terminated from the BHJJ program due to new involvement with the court. Typically, successful treatment completion is tied to attendance at meetings, progress in therapy, compliance with terms of the treatment plan, etc. County-specific definitions of successful termination are described in detail in the Project Descriptions section.

To date, there have been 397 youth terminated from the BHJJ program in Cuyahoga County. Nearly 68% (67.5%, n = 268) of the youth terminated from the BHJJ program were identified as successful treatment completers. An additional 1.5% of youth (n = 6) were terminated from the program when the youth or family moved out of the county. Therefore, 69% (n = 276) of youth enrolled in BHJJ were terminated successfully or because the youth or family moved out of the county and were no longer able to receive BHJJ services. In Cuyahoga County 1.0% (n = 4) were withdrawn from the program and 11.6% (n = 46) were terminated from the program due to an out of home placement. Table 23 presents all of the reasons for termination from BHJJ.

In the latest evaluation period that began July 2015 and ended in June 2017, 68.1% (n = 32) of youth terminated successfully from the BHJJ program in Cuyahoga County.

Table 23. Reasons for Termination from BHJJ

Termination Reason	All Youth	Youth Enrolled from July 2015 to June 2017
Successfully Completed Services	67.5% (n = 268)	68.1% (n = 32)
Client Did Not Return/Rejected Services	4.0% (n = 16)	2.1% (n = 1)
Out of Home Placement	11.6% (n = 46)	10.6% (n = 5)
Client/Family Moved	1.5% (n = 6)	0.0% (n = 0)
Client Withdrawn	1.0% (n = 4)	0.0% (n = 0)
Client AWOL	5.0% (n = 20)	0.0% (n = 0)
Client Incarcerated	4.5% (n = 18)	8.5% (n = 4)
Other	4.8% (n = 19)	10.6% (n = 5)

Average Length of Stay

The average length of stay for youth in the Cuyahoga County BHJJ program was 329 days. For youth identified as completing treatment successfully, the average length of stay was 334 days and for youth identified as unsuccessful treatment completers, the average length of stay was 316 days. For youth enrolled since July 1, 2015, the average length of stay in BHJJ was 281 days.

Risk for Out of Home Placement

At intake into and termination from the BHJJ program, workers were asked whether the youth was at risk for out of home placement. Upon entering the program, 64.4% of the youth (n = 201) in Cuyahoga County were at risk for out of home placement. At termination, 26.1% (n = 100) of youth were at risk for out of home placement. Of those youth who successfully completed BHJJ treatment, 8.4% (n = 22) were at risk for out of home placement at termination while 65.3% (n = 77) of youth who terminated unsuccessfully from the program were at risk for out of home placement.

Police Contacts

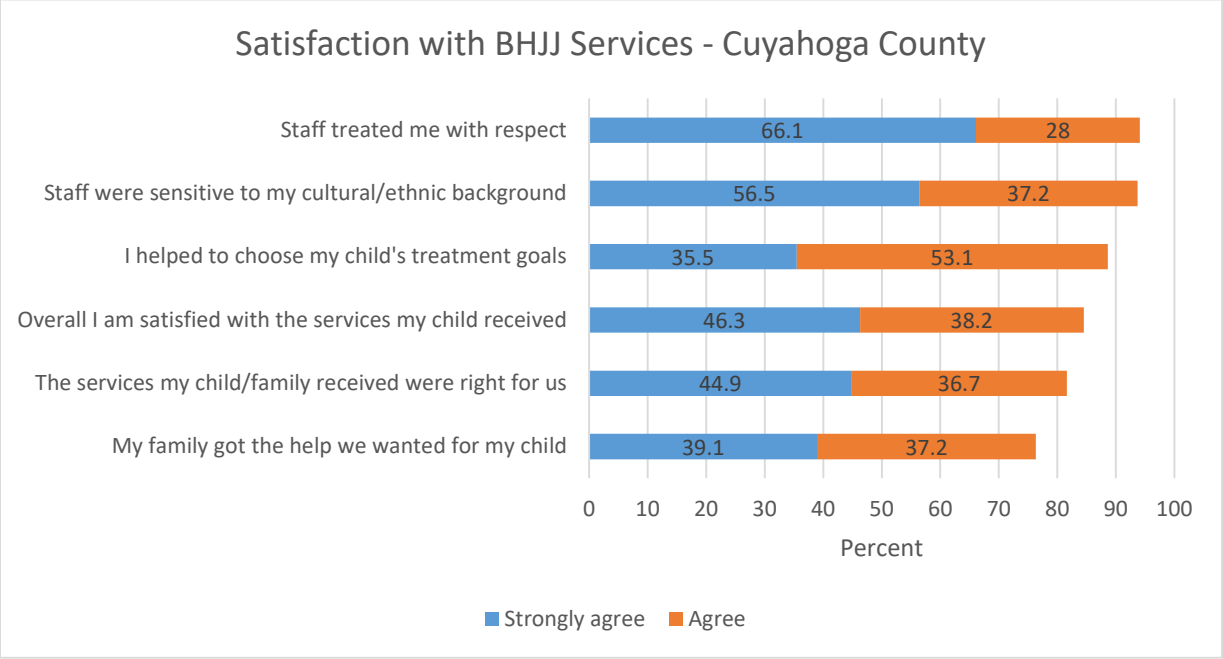
With help from the caregiver and youth, the worker was asked to estimate the frequency of police contacts since the youth has been receiving mental health services through BHJJ. Workers reported that police contacts have been reduced for 75.6% (n = 251) of the youth and had stayed the same for 15.1% (n = 50) of the youth. Police contacts increased for 3.3% (n = 11) of the youth and worker was unable to estimate for 6.0% (n = 20).

Youth Services Survey for Families

Upon completion of the BHJJ program, the caregiver was asked about their overall satisfaction with the services they received through the BHJJ program. The Youth Services Survey for Families (YSSF) was introduced as part of the data collection efforts in the 2009-2011 evaluation period. For the current evaluation, the YSSF was retained as an optional form in the termination data packet.

At termination from the BHJJ program, 84.5% (n = 219) of caregivers either strongly agreed or agreed that they were satisfied with the services their child received and 81.6% (n = 209) either strongly agreed or agreed that the services their child and/or family receive were right for them (see Figure 14). A strong majority (94.1%, n = 242) of caregivers either strongly agreed or agreed that staff treated them with respect and 93.7% (n = 237) indicated that they strongly agreed or agreed with the statement that they were satisfied with the cultural and ethnic sensitivity of BHJJ staff.

Figure 14



Recidivism

Methodology

Court data were provided by the Cuyahoga County Juvenile Court, and consisted of charges, adjudications, and commitments to ODYS (at any time after their BHJJ enrollment, including after termination from BHJJ). Data were divided into charges prior to enrollment, charges after enrollment, and charges after termination from BHJJ. We also present the data by treatment completion status (successful vs. unsuccessful). Technical or probation violations were not considered to be new charges and thus were not included in the analyses. Data specific to charges for misdemeanor and felony charges are presented in the following sections. Juvenile court history and recidivism information are presented at 3, 6, 12, and 18 month intervals.

Several criteria for inclusion in the analysis were considered based on the time period of interest. While all youth 18 years of age and under are included in the analyses prior to enrollment, not all youth are included in each assessment period after enrollment and after termination. Any charges for youth over 18 years of age would likely be filed in adult court, and therefore would not appear in juvenile court records. A youth over 18 at the time of termination may show no future juvenile court involvement; however, the individual may have charges in the adult system. Because we did not have access to adult records, youth 18 years of age or older at termination were eliminated from all analyses that examined charges after termination. Also, youth who turned 18 years old during the measurement interval in question (3, 6, 12, 18 months after enrollment or termination) were eliminated from the analysis because we lacked a complete picture of their possible court involvement.

Enrollment and termination dates were also used to identify youth for the analyses. For example, when examining recidivism data three months after termination from BHJJ we chose to include only those youths who had been terminated from BHJJ for at least three months prior to the end of the data collection period, June 30, 2017. If the youth was terminated one month prior to the end of the data collection, that youth only had one month to recidivate. Therefore, the full extent of their recidivism is not known. For example, in order to be included in the three month after termination analyses, a youth had to have been 17.75 years old or younger at the time of termination and must have been terminated at least three months prior to the end of the data collection period. To be included in the six-month analysis, youth had to have been 17.50 years old or younger at termination and have been terminated 6 months prior to June 30, 2017. The same criteria were applied to the intervals following enrollment in BHJJ. When examining new charges occurring within three months after intake, youth must be 17.75 years old or younger at the time of enrollment and the enrollment date must be at least three months prior to the end of the data collection period for inclusion in the analysis.

Results

Juvenile Court Involvement Prior to Intake

In the 12 months prior to their BHJJ enrollment, 74.0% (n = 322) of the BHJJ youth had misdemeanor charges, 33.8% (n = 147) had at least one felony charge, and 80.7% (n = 351) were adjudicated delinquent (see Table 24).

Previous juvenile court information is presented for youth based on BHJJ treatment completion status (successful vs. unsuccessful) (see Table 24). In the 12 months prior to enrollment, 75.0% (n = 201) of successful completers and 69.3% (n = 88) of unsuccessful completers were adjudicated delinquent in the 12 months prior to their enrollment in BHJJ. A lower percentage of successful completers had a felony charge in the 12 months prior to intake (30.2%, n = 81) than unsuccessful completers (37.0%, n = 47).

Table 24. Charges Prior to BHJJ Enrollment

	Overall			**Successful**			**Unsuccessful**		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
3 months	26.9% (n = 117)	8.7% (n = 38)	27.8% (n = 121)	26.1% (n = 70)	7.5% (n = 20)	28.4% (n = 76)	26.0% (n = 33)	9.4% (n = 12)	26.0% (n = 33)
6 months	52.0% (n = 226)	17.7% (n = 77)	55.9% (n = 243)	53.0% (n = 142)	14.2% (n = 38)	57.1% (n = 153)	47.2% (n = 60)	23.3% (n = 30)	52.8% (n = 67)
12 months	74.0% (n = 322)	33.8% (n = 147)	80.7% (n = 351)	75.0% (n = 201)	30.2% (n = 81)	81.0% (n = 217)	69.3% (n = 88)	37.0% (n = 47)	78.7% (n = 100)
18 months	82.5% (n = 359)	37.2% (n = 162)	88.7% (n = 386)	85.1% (n = 228)	34.0% (n = 91)	89.9% (n = 241)	76.4% (n = 97)	38.6% (n = 49)	85.8% (n = 109)

Recidivism after Enrollment

We defined recidivism after enrollment as receiving a new charge or adjudication at 3, 6, 12, and 18 months after a youth's BHJJ enrollment date. Once again even if a charge was eventually dismissed, it was included in the 'Total Misdemeanors' and 'Total Felonies' columns of the associated tables but would not be included in the calculations of delinquent adjudications.

In the 12 months after enrollment in BHJJ, 44.7% (n = 159) of youth were charged with at least one new misdemeanor and 29.5% (n = 105) were charged with at least one new felony. Fifty-five percent (55.3%, n = 197) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 25).

In the 12 months after enrollment in BHJJ 49.8% (n = 109) of successful completers were charged with at least one new misdemeanor, 21.5% (n = 47) were charged with at least one new felony, and 50.2% (n = 110) were adjudicated delinquent. Of the youth who completed unsuccessfully, 61.7% (n = 66) were charged with at least one new misdemeanor, 38.3% (n = 41) were charged with at least one new felony, and 64.5% (n = 69) were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 25).

Table 25. Charges After BHJJ Enrollment

	Overall			**Successful**			**Unsuccessful**		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
3 months	23.6% (n = 96)	13.5% (n = 55)	26.4% (n = 107)	20.9% (n = 53)	11.1% (n = 28)	24.1% (n = 61)	26.3% (n = 31)	16.1% (n = 19)	28.8% (n = 34)
6 months	35.5% (n = 138)	19.5% (n = 76)	37.0% (n = 144)	31.0% (n = 75)	14.9% (n = 36)	32.2% (n = 78)	40.9% (n = 47)	25.2% (n = 29)	43.5% (n = 50)
12 months	44.7% (n = 159)	29.5% (n = 105)	55.3% (n = 197)	49.8% (n = 109)	21.5% (n = 47)	50.2% (n = 110)	61.7% (n = 66)	38.3% (n = 41)	64.5% (n = 69)
18 months	65.8% (n = 212)	37.9% (n = 122)	65.8% (n = 212)	63.5% (n = 120)	30.7% (n = 58)	64.0% (n = 121)	67.3% (n = 70)	44.2% (n = 46)	70.2% (n = 73)

Recidivism after Termination

We defined recidivism after termination as receiving a new charge or adjudication any time after a youth's BHJJ termination date. If a charge was eventually dismissed, it was still included in the 'Total Misdemeanors' and 'Total Felonies' column of the associated tables but would not be included in the calculations of delinquent adjudications.

In the 12 months after termination from BHJJ, 43.2% (n = 80) of youth were charged with at least one new misdemeanor, 24.3% (n = 45) were charged with at least one new felony, and 40.0% (n = 74) were adjudicated delinquent (see Table 26).

In the 12 months following their termination from BHJJ, 46.5% (n = 53) of successful completers were charged with at least one new misdemeanor, 22.8% (n = 26) were charged with at least one new felony, and 43.0% (n = 49) were adjudicated delinquent. Of the youth who completed unsuccessfully, 37.7% (n = 26) were charged with at least one new misdemeanor, 26.1% (n = 18) were charged with at least one new felony, and 34.8% (n = 24) were adjudicated delinquent in the 12 months after their termination from BHJJ (see Table 26).

Table 26. Charges After Termination from BHJJ

	Overall			**Successful**			**Unsuccessful**		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
3 months	16.0% (n = 42)	8.0% (n = 21)	15.6% (n = 41)	16.9% (n = 28)	7.8% (n = 13)	15.7% (n = 26)	13.8% (n = 13)	7.4% (n = 7)	14.9% (n = 14)
6 months	25.3% (n = 56)	13.6% (n = 30)	24.4% (n = 54)	29.2% (n = 40)	13.9% (n = 19)	27.7% (n = 38)	18.3% (n = 15)	12.2% (n = 10)	18.3% (n = 15)
12 months	43.2% (n = 80)	24.3% (n = 45)	40.0% (n = 74)	46.5% (n = 53)	22.8% (n = 26)	43.0% (n = 49)	37.7% (n = 26)	26.1% (n = 18)	34.8% (n = 24)
18 months	55.9% (n = 90)	32.9% (n = 53)	52.2% (n = 84)	60.8% (n = 59)	29.9% (n = 29)	55.7% (n = 54)	48.4% (n = 30)	37.1% (n = 23)	46.8% (n = 29)

Felony Offenders and ODYS Commitments

We examined data for those youth who committed felony offenses in the 12 months prior to their BHJJ enrollment to determine if they had new felony charges after their BHJJ termination. A total of 55 felony offenders remained in the analysis after the data were restricted to youth 17 years old or younger, who had one full year to recidivate and for whom we had both recidivism and termination data. Of the youth, 32.7% (n = 18) were charged with a new felony in the 12 months after their termination from BHJJ.

Twenty-one of the 435 BHJJ youth (4.8%) from Cuyahoga County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.

Success Stories

While the collection of empirical data is crucial to demonstrate program effectiveness and help secure additional funding, qualitative data can be an additional source of valuable information that may at times be obscured by means, tables, and figures. Counties were asked to provide information on memorable youth and families who participated in the BHJJ program in the form of success stories.

Cuyahoga County's BHJJ model has evolved as a highly intensive, structured program delivering effective, evidenced based treatment and culturally-appropriate services for juvenile offenders. Data provided by Ohio Department of Youth Services (ODYS) reflect that among youth adjudicated in Cuyahoga County, 81% are African American and 85% are male. Many of the youth enrolled in the BHJJ program are residents of the City of Cleveland, English speaking, indigent, and multi-system involved.

Eligibility Criteria:

- Resident of Cuyahoga County
- Male or Female, ages 12-18
- Adjudicated for Misdemeanors or Felonies
- Diagnosed with Mental Health/Serious Emotional Disturbance, Substance Use, or Co-Occurring Disorder

Services and Treatment Models: The BHJJ program within Cuyahoga County entails specialized Juvenile Court services, Intensive Probation monitoring, Care Coordination, pharmacological and mental health screening and assessment, and intensive use of high fidelity wraparound services. Additionally, the BHJJ team has access to a dedicated crisis stabilization bed. Services include crisis intervention, stabilization, comprehensive diagnostic assessment, psychiatric consultations, evaluation, and medication management. The aforementioned allows a crisis to be managed by providing a short term solution and ultimately avoiding the need for an out of home residential placement. Overall, since 2011, the BHJJ Project has seen its residential placements reduced by 70%.

The primary evidenced based treatment models utilized are Integrated Co-Occurring Treatment and Multi-Systemic Therapy, however other evidenced based practices and treatment models may be accessed when deemed appropriate.

Integrated Co-Occurring Treatment (ICT): ICT is an integrated treatment approach embedded in an intensive home based method of service delivery, which provides a set of core services to youth with co-occurring disorders of substance use and Serious Emotional Disability.

Multi-Systemic Therapy (MST): MST focuses on understanding the "fit" of the child's/family's issues and how to best resolve them. In addition, MST focusses on assisting parents in building support systems and social networks within their community and empowers them to address their family's needs more effectively. Particular emphasis is placed on ensuring the family's ability to sustain positive changes and avoid recidivism once therapy has ended.

The BHJJ model shifted upon the 2018-2019 grant period to fully integrate the project within the Mental Health Court Specialized Docket (Phoenix Court). This has allowed for more fluid, cohesive and individualized planning, as measured through the court's three graduated phases and evidence based treatment planning. The timeframe to move through the phases is determined by the progress of the youth, and is usually twelve (12) months or less.

Key Stakeholders: In Cuyahoga County, the BHJJ program operates through the partnership between the Alcohol, Drug Addiction & Mental Health Services (ADAMHS) Board of Cuyahoga County, Cuyahoga County Juvenile Court, Family and Children First Council of Cuyahoga County, and Bellefaire Jewish Children's Bureau. These partners meet quarterly in order to discuss progress of the project model.

Referral and Enrollment Process: BHJJ participants are identified through the court by Probation Officers, Jurists, Alternative Case Planning (ACP) Review process or the ODYS Review Committee who suspect a youth has mental health concerns and/or has an identified substance abuse problem. Referrals are sent to the BHJJ Probation Manager or BHJJ Clinical Coordinator, and include all relevant collateral documentation, such as recent diagnostic assessments and Ohio Youth Assessment System (OYAS). The BHJJ Clinical Coordinator ensures all collateral documents are submitted with the referral, and completes the Massachusetts Youth Screening Instrument-Version 2 (MAYSI-2) with the youth. The BHJJ Clinical Coordinator presents the referral information and screening results to the BHJJ Review Committee, comprised of BHJJ staff, ICT/MST Clinicians, Defense Counsel, Guardian Ad Litem, and the Phoenix Court Jurist. The Review Committee determines program eligibility and selects the appropriate EBP. Upon Phoenix Court Enrollment, the youth and family meet with their BHJJ Treatment Team, which include their BHJJ Care Coordinator, BHJJ Intervention Specialist, and EBP Clinician. Individualized Service Plans and Court Plans are developed, and services are implemented.

Successful Completion: At the clinical level, progress is determined through clinical outcomes from the EBP in which each youth is involved, and reflected by a youth's movement through the Phoenix Court's three graduated phases. The combination of graduated phases and treatment advances serve as a catalyst to transition toward community-based stabilization and successful completion.

The Cuyahoga County BHJJ project has been highly successful addition to the array of juvenile justice and behavioral health services available in Cuyahoga County. The county's commitments of youth to ODYS facilities has declined by 61% since 2005, and since 2011 its rate of out-of-home placements have

significantly reduced due to an effective service model that is intensive and cohesive contributing to successful outcomes for project participants.

References

Abram, K. M., Teplin, L. A., McClelland, G. M., & Dulcan, M. K. (2003). Comorbid psychiatric disorders in youth in juvenile detention. *Archives of General Psychiatry, 60*(11), 1097-1108.

Briere, J. (1996). *Trauma Symptom Checklist for Children (TSCC) Professional Manual*. Odessa, FL: Psychological Assessment Resources.

Cocozza, J. & Skowyra, K. (2000). Youth with mental health disorders: Issues and emerging responses. *Office of Juvenile Justice and Delinquency Prevention Journal, 7*(1), 3-13.

Cuellar, A.E., McReynolds, L., & Wasserman, G. (2006). A cure for crime: Can mental health treatment diversion reduce crime among youth? *Journal of Policy Analysis and Management, 25*(1), 197-214.

Feinstein, R. A., Lampkin, A., Lorish, C. D., Klerman, L. V., Maisiak, R., & Oh, M. K. (1998). Medical status of adolescents at time of admission to a juvenile detention center. *Journal of Adolescent Health, 22*(3), 190-196.

Finkelhor, D., Hamby, S.L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. *Child Abuse and Neglect*, *29*, 383-412.

Friedman, R., Katz-Levy, J., Manderscheid, R., & Sondheimer, D. (1996). Prevalence of serious emotional disturbance in children and adolescents. In R. Manderscheid & M. A. Sonnenschein (Eds.), *Mental health in the United States* (pp. 71-89). Rockville, MD: U.S. Department of Health and Human Services.

Goldstrom, I., Jaiquan, F., Henderson, M., Male, A., & Manderscheid, R.W. (2000). The availability of mental health services to young people in juvenile justice facilities: A national survey. In R.W. Manderscheid and M.J. Henderson (Eds.) *Mental Health, United States, 2000* (DHHS Publication No. SMA-01-3537, pp.248-268). Washington, DC: U.S. Government Printing Office.

Hoge, R. D. (2002). Standardized instruments for assessing risk and need in youthful offenders. *Criminal Justice and Behavior, 29*, 380-396.

Kretschmar, J.M., Butcher, F., Flannery, D.J., & Singer, M.I. (2016). Diverting juvenile justice-involved youth with behavioral health issues from detention: Preliminary findings from Ohio's Behavioral Health Juvenile Justice (BHJJ) Initiative. *Criminal Justice Policy Review, 27,* 302-325.

Kretschmar, J.M., Butcher, F., Kanary, P.K., & Devens, R. (2015). Responding to the mental health and substance abuse needs of youth in the juvenile justice system: Ohio's Behavioral Health/Juvenile Justice Initiative. *American Journal of Orthopsychiatry, 85,* 515-521.

Merikangas, K. R., He, J. P., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., Benjet, C., Georgiades, K., & Swendsen, J. (2010). Lifetime prevalence of mental disorders in US adolescents: Results from the National Comorbidity Study-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry, 49*(10), 980-989.

Nordess, P., Grummert, M., Banks, D., Schindler, M., Moss, M., Gallagher, K., & Epstein, M. (2002). Screening the mental health needs of youths in juvenile detention. *Juvenile & Family Court Journal, 53*(2), 43-50.

Novins, D. K., Duclos, C. W., Martin, C., Jewett, C. S., & Manson, S. M. (1999). Utilization of alcohol, drug, and mental health treatment services among American Indian adolescent detainees. *Journal of the American Academy of Child & Adolescent Psychiatry, 38*, 1102-1108.

Ogles, B. M., Melendez, G., Davis, D. C., & Lunnen, K. M. (2001). The Ohio Scales: Practical outcome assessment. *Journal of Child and Family Studies, 10*(2), 199-212.

Otto, R.K., Greenstein, J.J., Johnson, M.K., & Friedman, R.M. (1992). Prevalence of mental disorders among youth in the juvenile justice system. In J.J. Cocozza (Ed.), Responding to the mental health needs of youth in the juvenile justice system. Seattle, WA: The National Coalition for the Mentally Ill in the Criminal Justice System.

Schwalbe, C. S., Gearing, R. E., McKenzie, M. J., Brewer, K. B., Ibrahim, R. (2012). A meta-analysis of experimental studies of diversion programs for juvenile offenders. *Clinical Psychology Review, 32*, 26-33.

Shufelt, J. L. & Cocozza, J. J. (2006). Youth with mental health disorders in the juvenile justice system: Results from a multi-state prevalence study. Delmar, NY: National Center for Mental Health and Juvenile Justice.

Singer, M. I., Anglin, T. M., Song, L. y. & Lunghofer, L. (1995). Adolescents' exposure to violence and associated symptoms of psychological trauma. *Journal of the American Medical Association,* 273(6), 477-482.

Skowrya, K. & Powell, S. (2006). Juvenile diversion: Programs for justice-involved youth with mental health disorders. Delmar, NY: National Center for Mental Health and Juvenile Justice.

Soler, M. (2002). Health issues for adolescents in the justice system. *Journal of Adolescent Health, 31,* 321-333.

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.

U.S. Department of Health and Human Services. (2005). National Evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program. Rockville, MD: Author.

U.S. Department of Justice. (2005). Department of Justice activities under Civil Rights of Institutionalized Persons Act: Fiscal year 2004. Washington, DC: Author.

Wasserman, G. A., McReynolds, L. S., Ko, S. J., Katz, L. M., & Carpenter, J. R. (2005). Gender differences in psychiatric disorders at juvenile probation intake. *American Journal of Public Health, 95*(1), 131-137.

Wasserman, G. A., McReynolds, L., Lucas, C., Fisher, P., & Santos, L. (2002). The Voice DISC-IV with incarcerated male youths: Prevalence of disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 41*(3), 314-321.

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.