

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

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August 2018

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

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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

- ❖ 4,338 youth have been enrolled in BHJJ (63% males, 53% non-white). In the past two years, more non-whites (58%) than whites (42%) and males (68%) than females (32%) have been enrolled.
- ❖ Youth averaged 2.2 diagnoses. Females were significantly more likely to be diagnosed with Depressive Disorders, Alcohol-related Disorders, Bipolar Disorder, and Post-traumatic Stress Disorder (PTSD), and Mood Disorder. Males were significantly more likely to be diagnosed with Attention Deficit Hyperactivity Disorder (ADHD), Cannabis-Related Disorders, and Conduct Disorder.
- ❖ 44% of males and 35% of females were diagnosed with both a mental health and substance use diagnosis.
- ❖ Caregivers reported that 26% of the females had a history of sexual abuse, nearly 50% talked about suicide, and over 23% had attempted suicide. Over 60% of males and 68% of females had family members who were diagnosed with or showed signs of depression.
- ❖ According to the OYAS, 67% of the BHJJ youth were moderate or high risk to reoffend.
- ❖ In the current BHJJ counties, 35% of youth had felony charges in the 12 months prior to enrollment, ranging from 11% in Trumbull County to 98% in Summit County.

## Educational Information

- ❖ About 66% of the youth were suspended or expelled from school in the year prior to their BHJJ enrollment. During treatment, 35% were suspended or expelled. At intake, 41% of youth

earned mostly A's, B's, or C's while at termination, almost 50% of youth earned mostly A's, B's, or C's. At termination, 85% 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 a significant decrease in trauma symptoms from intake to termination.
- ❖ Results from the Ohio Scales indicated the caregiver, worker, and youth all reported increased youth functioning and decreased problem severity while in BHJJ treatment.
- ❖ Both males and females reported decreased substance use with respect to most of the commonly used substances, including alcohol and marijuana.
- ❖ Upon entering the program, 56% of the youth were at risk for out of home placement. At termination, 25% of youth were at risk for out of home placement.

### **Termination and Recidivism Information**

- ❖ Nearly 66% of the youth terminated from the BHJJ program completed treatment successfully. The average length of stay in the program was 202 days (169 days for youth enrolled during previous biennium).
- ❖ One year after termination, 18% of successful treatment completers and 24% of unsuccessful treatment completers had a new felony charge.
- ❖ Of the youth entering BHJJ with a felony charge, 27% of successful treatment completers and 36% of unsuccessful treatment completers were charged with a new felony in the 12 months following BHJJ termination.
- ❖ One hundred forty-two of the 3,679 youth (3.9%) enrolled in BHJJ for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment in BHJJ.
- ❖ Using only the direct State contribution to BHJJ of \$22.3 million since 2006, the average cost per youth enrolled in BHJJ was \$5,140. The FY16 per diem to house a youth at an ODYS institution was \$509 and the average length of stay was 11.6 months. Based on these numbers, the estimated cost of housing the average youth at an ODYS facility in FY16 was approximately \$177,132.

# An Evaluation of the 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 & Skowrya, 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 & Skowrya, 2000; Skowrya & 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 JJ 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, Canary, & Devens, 2015). For information or copies of previous evaluation reports, please contact Dr. Jeff Kretschmar at [jeff.kretschmar@case.edu](mailto: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 Descriptions

### Ashtabula County

The BHJJ Program that serves Ashtabula County is part of a collaborative project that allows for the implementation of evidence-based programs across the 3 most northeastern counties in Ohio, Mahoning, Trumbull, and Ashtabula. Homes For Kids provides MST services for the project while community based mental health providers provide TIP informed High Fidelity Wraparound for the project. The program serves male and female youth ages 12 to 17. The defined target population is multi-system involved youth who are at risk for out of home placement, incarceration, or returning from an out of home placement. All youth entering the program are designated SED and many will have a co-occurring substance abuse diagnosis. The program implements two evidence based practices, Multisystemic Therapy (MST) and the Transition to Independent Process (TIP), as well as evidence informed High Fidelity Wraparound. The primary goals are to: reduce out of home placements, divert youth from juvenile court programs or ODYS institutions to evidence based, family-focused programming in the community, maintain or reduce commitments to ODYS, improve intersystem



communication and collaboration, and share outcomes (successes and failures) across three contiguous counties that have some distinct similarities and differences.

Due to the projects focus on Multi-System Involved Youth (Cross Over), youth can and do enter the program from various channels that include juvenile court, children services boards, or county family and children first councils. Prior to referral, the juvenile court administers the OYAS to determine the risk of recidivism. Homes For Kids provides MST services to each youth identified as appropriate for the program. Upon completion of the MST Program, youth and families who are inclined and willing are transferred to Wraparound within the counties System of Care framework. Wraparound Facilitators incorporate the TIP treatment model in engaging youth and empowering families to lead healthier lives.

Trauma Informed Care is heavily embedded in the MST Collaborative with trauma informed protocols. Cultural Competence is also embedded through the entire project, as it is a core component of MST, TIP, and High-Fidelity Wraparound models. Youth entering the program are screened and assessed (at intake and discharge) for trauma utilizing the Trauma Symptom Checklist for Children (TSCC) and for substance abuse utilizing the Substance Use Survey (SUS) at intake and discharge.

The MV BHJJ Collaborative project provides the region with 4 MST Therapists, capable of serving approximately 60 youth annually. MST is an effective evidence based tool that has been proven to work with the toughest offenders' ages 12-17 who have a long history of arrests. All four MST Therapists are employed by Homes For Kids of Ohio.

Youth referred to the program are assessed by an MST Therapist and if appropriate and a good fit for the program, the case is opened and an initial session is scheduled with the family within 48 hours. The therapist meets with the family in their home to conduct family therapy sessions utilizing the MST model of treatment. MST therapists meet with families at minimum three times a week in their home working on getting the parent back in the driver seat of their family. MST clinicians go to where the child is and are on call 24 hours a day, seven days a week. They work intensively with parents and caregivers to put them in control. The therapist works with the caregivers to keep the adolescent focused on school, creating positive peer relationships, and gaining job skills. The therapist and caregivers introduce the youth to sports and recreational activities as an alternative to hanging out. The therapist and caregiver work intensively to improve family functioning and cohesiveness.

As with all evidence based programs, model adherence is a central theme. All client families complete TAM's (Therapist Adherence Measure) two weeks into treatment and every 30 days after on their assigned therapist to ensure the therapist is adhering to the MST model. The MST supervisor onto the MST services secure website enters these TAM's. To date adherence to the model falls within the expected targets. The four therapists on the MST team and the MST supervisor attend weekly MST group supervision for two hours followed by one hour of case consultation with an MST consultant employed at the Center for Innovative Practices at Case Western Reserve University. In addition to weekly 3-hour supervision and consultation, MST therapists attend treatment staffings at juvenile court and children services as scheduled. The MST team also has quarterly Booster trainings with the MST consultant on topics picked by the MST team, supervisor and consultant aimed at increasing adherence to the model and increasing successful case outcomes.

As the MST treatment episode ends, the therapist, probation officer, and child welfare staff continue to collaborate and link the youth and family with community resources as needed, to help sustain the

changes made during treatment. The families are offered the option of a step down into High-Fidelity Wraparound services and this is coordinated with the family by the MST therapist for a smooth transition from MST to wraparound. The MST therapist schedules with the wraparound facilitator to accompany them to the family's home to meet them and step the family down into wraparound services. A client and family is deemed to be successfully terminated from MST if they have: completed the 3-5 months of the program, learned new skills for sustainability in regards to utilizing informal supports as respite, improved their cohesion level as a family, decreased all referral behaviors, the youth is living in the home or community at time of discharge, attending work or school and has no new charges since entering the program.

### Cuyahoga County

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.

### Franklin County

The Franklin County BHJJ Initiative was developed to identify youth offenders with significant behavioral health impairments, who can also be safely served and maintained in the community with the support of appropriate treatment interventions. The overarching goals are early identification of behavioral health needs; to reduce out of home placement; to increase access to community based treatment; to ensure that children and families receive treatment that facilitates recovery and resiliency; to increase

referrals to evidence-based care and to reduce commitments to the Ohio Department of Youth Services. This model has improved intersystem communication and shared outcomes among the behavioral health, juvenile justice, and child welfare systems.

This project is supported by the Cross System Initiative Committee (CSI), a local partnership that includes ADAMH, Franklin County Children Services (FCCS), Franklin County Common Pleas Court, Division of Domestic Relations and Juvenile Branch (Juvenile Court), and Franklin County Family and Children First Council. Franklin County's BHJJ program provides behavioral health diagnostic assessments and care coordination services to serious youth offenders with significant behavioral health impairments, who are referred to the Pre-Sentencing Investigation Unit (PSI). While these youths are prioritized, Franklin County also serves youth from all areas of court including: Bench orders, Intake, JDC, Probation and Preliminary hearings. The service delivery team includes the youth and family, probation officer (if applicable), care coordinator, school, family-defined support, treatment providers, and other system representatives as necessary.

Franklin's BHJJ model identifies eligible youth through the Massachusetts Youth Screening Instrument-Version 2 (MAYSI-2) screenings. Youth who are determined to need further evaluation are then referred for a diagnostic assessment with the BHJJ assessors. The assessors, who are independently-licensed behavioral health clinicians housed at the court, complete a comprehensive, evidence-based diagnostic assessment that covers all youth/family domains, is family-focused and strengths-based, includes criminogenic risk factors, and provides evidence-based recommendations. Youth are also administered the Ohio Youth Assessment System (OYAS). The OYAS results are shared with the behavioral health clinician and are considered in the development of treatment recommendations. The clinicians are co-located at Juvenile Court to expedite the assessment process and enhance the collaboration between the two systems. The assessors are also available to present the identified treatment recommendations to the judges/magistrates. Youth are then linked with a care coordinator who help link the youth and family with treatment services while engaging the youth and family and encouraging cooperation with the referred services.

Treatment recommendations are individualized, based on the youth and family's particular mental health and/or substance abuse needs, with consideration also being given to location/transportation, individual preferences, level of urgency, current custody arrangements (e.g., youth in shelter care, group homes, or other out of home placements) as well as the age of the youth. Treatment recommendations are for evidence-based and evidence-informed programs that have been successful in addressing the needs of this diverse population. The following table captures some of the more frequently utilized services available in Franklin County:

Table 4. Treatment Models and Funding in Franklin County

Treatment Model	Funding
<b>MST (Multisystemic Therapy)</b>	ADAMH Board of Franklin County, Franklin County Children Services & Franklin County Family and Children First Council
<b>FFT (Functional Family Therapy)</b>	ADAMH Board of Franklin County, Franklin County Children Services & Franklin County Juvenile Court
<b>ICT (Integrated Co-occurring Treatment)</b>	ADAMH Board of Franklin County
<b>ACRA-A</b>	ADAMH Board of Franklin County; Franklin County Juvenile Court

The BHJJ service team carefully selects youth who meet the criteria of the grant at the time of pre-sentencing. Eligibility criteria for this initiative are as follows, although every criterion may not apply to all youth:

- Male or female ages 12 to 17
- DSM diagnosis
- Substantial mental status impairment in behavioral, cognitive, or affective functioning
- Co-occurring substance abuse disorders
- Adjudicated delinquent
- Learning disabilities and developmental disabilities
- Violent or pattern of criminal behavior

Successful completion of the Franklin County BHJJ program is defined as successful completion of the individualized treatment plan created by the youth, family and ongoing treatment provider.

### Hamilton County

The BHJJ project in Hamilton County consists of a collaborative effort between Hamilton County Juvenile Court (HCJC), Hamilton County Mental Health and Recovery Services Board (HCMHRSB) and Lighthouse Youth Services (LYS). Together these entities provide services for the Juvenile Mental Health Court, enhancing the coordination of care for youth and families through the use of evidence based clinical practice.

BHJJ funding has provided the opportunity for the program to identify and implement a model of screening, assessment and evaluation protocols that provide for a comprehensive service delivery system to effectively address those youths overrepresented within the juvenile court system. Referrals are received by court personnel, primarily Probation, or within the community. Initial screening for the program can be completed by Mental Health Access Point (MHAP), the front door to community mental health services, regardless if the youth is in the community or in detention. The initial screening consists of a set of eligibility criteria including age, mental health diagnosis, caregiver availability, and degree of criminal charges. Youth are further reviewed at weekly staff meetings to determine appropriateness for the program and to identify the treatment modality. Most of the youth and their families participate in Functional Family Therapy (FFT), an evidenced based model that is family focused. If indicated, the youth may also receive case management services and individual and group substance abuse services using Seven Challenges- an evidenced based model for young people that is designed to motivate youth to evaluate their lives, consider changes they may wish to make and then succeed in implementing the desired changes. This program has a dedicated substance abuse counselor and interventions are

individualized and based on assessment and youth needs. Additionally, the program uses Structured Sensory Interventions for Traumatized Children, Adolescents, Parents (SITCAP), to provide trauma informed interventions for the youth and their families.

The eligibility criteria include:

- Hamilton County resident,
- Males and females,
- Age 12-17 years (with the ability to consult with the review team on eligibility for youth under age 12 years),
- Pre-adjudication for first time offenders and/or youth who have no more than 5 adjudications with juvenile court (Pretrial Diversion Docket -PDD only),
- Adjudication of delinquency (Individualized Disposition Docket-IDD only),
- As defined by DSM, serious emotional disorders/neurobiological disorders (including but not limited to the following): affective disorders (e.g. bi-polar and major depressive episode); anxiety disorders (e.g. phobias and post-traumatic stress disorder) ; psychotic disorders (e.g. schizophrenia and schizoaffective disorder); severe attention deficit hyperactivity disorder; with or without co-occurring serious emotional disorders and substance abuse disorders;
- As defined by DSM behavioral disorders normally diagnosed in childhood (e.g. oppositional-defiant, disruptive behavior, and conduct disorders) with co-occurring mental health or substance abuse disorders;
- Identified caregiver willing to engage in treatment with the youth; and
- Voluntary admission with the consent of the parent/custodian

Prior to admission all youth are assessed using the Ohio Youth Assessment System (OYAS), the HCMHRB Diagnostic Assessment Form (DAF) or the HCJC Multidimensional Assessment Form. These instruments provide an extensive overview of the family's functioning level in multiple domains as well as identify the youth's mental health diagnosis. Further assessment occurs after admission using several instruments from FFT Outcome Questionnaire (OQ) Measures and the Child and Adolescent Needs and Strengths scale (CANS).

Through BHJJ funding, the Hamilton County Juvenile Mental Health Court is able to deliver evidence based services in a cross-system model with MHAP, Juvenile court and LYS. All services provided to the youth/family are reported to the Magistrates on the Individualized Disposition Docket (IDD) and the Pretrial Diversion Docket (PDD) through the use of dedicated probation staff and the LYS Court Liaison. The Magistrates are then able to utilize this information in their decision making. This intensive, cross system model enhances the ability to provide appropriate individualized services for the local target population.

Within the last two years the program expanded to include an Educational Liaison to strengthen school performance as evidenced by academics, attendance, and improved relationships between youth/family, school and the community partners. The Educational Liaison completes an educational assessment on all youth when they enter the program to determine strengths and areas that need to be addressed and develops an educational plan in collaboration with all parties. The liaison provides structured follow-up services to each family to ensure the families and school are working together to maintain the Individualized Education Plan (IEP) and other established school based interventions. The involvement of the Educational Liaison is phased out as appropriate once the youth completes the Mental Health Docket but works to ensure strong partnerships and relationships are established

between the school and family for on-going success. Additionally, the program recently added an Intake Coordinator position to bridge communication and coordination with juvenile court staff, particularly probation officers. The Intake Coordinator attends the Disposition Hearings to allow them to quickly engage with the families, maintain communication with the probation officer and clarify or alleviate any questions or concerns the family may have regarding expectations of the Mental Health Docket.

Typical length of stay in the program is about 4-6 months to complete Functional Family Therapy and meet probation requirements. Although admission to the program is voluntary, discharge from the program is not voluntary and requires court approval. Youth who are successfully discharged from IDD have completed all phases of FFT. Youth and their families are connected to on-going traditional and non-traditional services and supports as needed.

Lighthouse Youth Services has implemented the following evidence based practices in several programs: Positive Behavioral Intervention Services (PBIS), Girls' Circle, Parents As Teachers, Work Appreciation for Youth (WAY), a proprietary evidence based practice replicated in consultation with Children's Village, New York, Multidimensional Treatment Foster Care, Trauma Focused Treatment (L.I.T.E. group-Learning to Integrate Trauma with Expression), Structured Sensory Interventions for Traumatized Children, Adolescents, and Parents (SITCAP), and Assertive Community Treatment (ACT). Each of these programs offers quality interventions for children and families in a least restrictive setting, and has contributed to a clear reduction in out-of-home placements. Youth and families participating in the LIDS program have access to all programs within Lighthouse. The primary and evidenced based interventions offered in the LIDS program are Functional Family Therapy (FFT) and Seven Challenges. Each youth is assessed and treatment services implemented are based on individual needs.

The LIDS program is a model of successful community intersystem collaboration. HCJC and HCMHR SB have worked through a period of extensive planning and careful implementation to develop these systems. Monthly Infrastructure meetings with LYS, HCJC, MHAP, and HCMHR SB, enable ongoing program review and development as well as ongoing process improvement. The LIDS Advisory Committee provides oversight and coordination of care between systems. The Committee meets quarterly, is chaired by the HCMHR SB and includes partners from LYS, HCJC, MHAP and NAMI. Youth and families that have graduated from the LIDS program are invited to share their story to the LIDS Advisory Committee, that aide in the identification of strengths and areas for improvement.

### Holmes County

The Wayne Holmes BHJJ Partnership serves to meet the treatment needs of youth and families where there is high risk for out of home placement, with the goal of strengthening families and keeping them intact. Therapists work in the home with the families to remove barriers, and promote family functioning. Funding is also used for drug test kits, window and door alarms, safes, cell phones for parents, and money for prosocial activities that will help build family relationships and prosocial activities. This grant cycle, the goal is to be more proactive, and to accept referrals from CSB for youth who are at risk of juvenile court involvement, and/or out of home placement earlier in the process.

Multisystemic therapy is the treatment modality used for this partnership. Trained therapists work under this model, with supervision and oversight to assure high fidelity wraparound is occurring. The grant contracts with Crisis Intervention and Recovery Center, CIRC, in Stark County, to provide the in-home services. Referrals come through juvenile court, and are for ages 10 to 17 ½. The OYAS is used for

assessing youth, and determining if appropriate for placement into the MST program. Youth must have displayed delinquent or other behaviors that have brought them to the attention of juvenile court, and also have a mental health condition, and are at risk for out of home placement. Families must also be willing to work with the program.

The key stakeholders are Wayne County juvenile court, Wayne Holmes Mental Health and Recovery Board, CIRC, Wayne County Family and Children First Council, Case Western Reserve University—The Center for Innovative Practices at the Begun Center, and Holmes County Children’s Services has been invited to be included in this grant cycle. Children Services may refer to Juvenile court for consultation on youth at risk of juvenile court involvement and/or out of home placement. Possible youth are screened by juvenile court, assessed with the OYAS, discussed with family before referring to CIRC. CIRC also does an evaluation and meets with the family to discuss the service and process.

Measures of success include reducing recidivism rates for juvenile court involvement in total number of charges and severity, stabilizing families to prevent of out of home placement, and maintaining low commitment rates to ODYS. Also measured are goals of MST, which include: improving caregiver discipline practices, enhancing family relations, decreasing a youth’s association with deviant peers, increasing youth’s association in prosocial activities and with pro-social peers, improving youth’s school or vocational performance, engaging youth in positive recreational outlets, and developing a natural support network of extended family, neighbors, and friends to help caregivers achieve and maintain changes.

### Lorain County

The Lorain County Behavioral Health/Juvenile Justice (BHJJ) program is a collaboration of Bellefaire JCB, Lorain County Juvenile Court, and the Lorain County Board of Mental Health. Sponsored by the Ohio Department of Youth Services (ODYS) and the Ohio Department of Mental Health and Addiction Services (OhioMHAS), the BHJJ program is a diversion program for justice involved youth who experience mental health and substance use disorders (co-occurring disorders). In lieu of detention, identified youth are diverted to the community, evidenced based or promising treatment practices.

In Lorain County, youth identified as appropriate by the Lorain County Juvenile Court are referred to Bellefaire JCB’s Integrated Co-Occurring Treatment (ICT) program. The ICT program provides a comprehensive mix of services to meet the mental health and substance use needs of the youth and their family. ICT utilizes an integrated treatment approach, embedded in an intensive home-based method of service delivery, to provide a set of core services to youth with co-occurring disorders of substance use and serious emotional disability. It addresses the reciprocal interaction of how each disorder affects the other, in context of the youth’s family, culture, peers, school and greater community. ICT therapists work to prioritize saliency and immediacy of need which may fluctuate from session to session. The Lorain County BHJJ program consists of 3 full time ICT therapists in addition to one full time ICT Supervisor. All ICT staff complete a 3-day, comprehensive, core training provided by the ICT Consultant from the Center of Innovative Practices at Case Western Reserve University. A key aspect of providing quality services involves the collaboration of treatment providers and court staff. In efforts to enhance collaboration, and build positive working relationships, the ICT staff meets with the Lorain County Juvenile Court staff to review cases including both treatment and court



recommendations. These collaborative meetings ensure that all providers are on the same page regarding the course of treatment.

The Lorain County Juvenile Court identifies appropriate candidates for ICT and notifies Bellefaire JCB's intake specialist and ICT Supervisor of these referrals. Once a youth has been referred to services, they are scheduled to complete an intake at the office to obtain necessary financial information. When the intake is completed, the youth is assigned to an ICT therapist to begin services in the home. The ICT therapist utilizes a variety of instruments to assess functioning and to assist with the integrated mental health/substance use assessment or a substance use assessment (a substance use assessment is implemented if a youth enters the program with a recently completed mental health evaluation). In addition to the comprehensive assessment, the following measures are employed with the youth/family: The Childhood Trust Events Survey, CRAFFT screener (a mnemonic acronym of first letters of key words in the six screening questions), SASSI assessment (Substance Abuse Subtle Screening Inventory), Burns Depression Inventory, Burns Anxiety Inventory, and the Suicide Risk Assessment. The results of these instruments are incorporated into the diagnostic assessment and utilized to support treatment recommendations. Youth are provided services at a minimum of 3-5 hours per week, which averages 2-4 contacts on a weekly basis. Services are provided for a minimum of 3 months and youth are able to receive services for up to 6 months.

Prior to implementing specific interventions, the ICT staff focuses on engagement with youth that are typically resistant to counseling services. Engagement often occurs through the employment of motivational interviewing strategies and responding with a non-confrontational approach. Once rapport has been established, and salient issues have been identified, the ICT therapist may assist the family with developing a behavioral contract and will work towards crisis stabilization. Every family/client will work with their therapist to develop a safety plan during their initial session to reduce the frequency of crises and to keep the youth safe when residing in the home environment. Additional interventions include: family therapy, crisis management, role play/rehearsal of skills, advocacy for youth across life domains, psycho-education about the impact of trauma, life skills building, connection to prosocial activities and skills, and collaboration with the court staff to reduce re-offending behaviors.

One month before expected ICT completion, planning is initiated with the youth, family and the treatment team to determine appropriate referral recommendations. At the end of treatment, the goal is to be able to transition the youth to a lower level of care. This means the high intensity of home based services would no longer be needed and the youth could successfully transition to weekly counseling services, if appropriate. A successful completion of services can be defined by the level of engagement that has occurred throughout the course of therapy. Several facets are evaluated to determine whether a youth has successfully completed treatment. These include: maintaining the majority of counseling appointments, a reduction in reoffending behaviors, a reduction in substance use, increased school attendance, increased involvement in prosocial activities, and remaining in the home at termination of services/avoiding out of home placement. The ICT therapist will assist the family with coordinating referral options and will help to connect the family to services prior to terminating services.

## Lucas County

The Lucas County Behavioral Health and Juvenile Justice Initiative (LCBHJJ) has transformed the child-serving systems' ability to screen, identify, assess, and treat multi-need, multi-system youth since 2009. Over the past two years significant changes have been made to the BHJJ leadership team. However, these changes have not affected how services are being rendered to youth and families in Lucas County. The Lucas County Juvenile Court is committed to the care, protection, treatment and guidance of the children and families in its care. Both BHJJ and the Court continues to provide opportunities to develop, sustain, and enhance evidence-based approaches designed to serve serious juvenile offenders who have behavioral health care needs. The initiative's goals remain consistent and geared towards treating youth within the community by using the least restrictive care that ensures safety for the youth and community, and divert them from commitment into the Ohio Department of Youth Services (ODYS).

Since FY 2015, the LCBHJJ Initiative has provided two methods in accomplishing its overall goal: 1) Multi-systemic Therapy (MST), an evidence-based approach which includes supportive services, such as mentoring, pro-social activities, and an individualized service plan; and 2) The Assessment Center, a non-secure alternative for low risk offenders to detention, whose efforts are to divert youth from further penetrating the juvenile justice system. During calendar year 2016, 948 referrals were processed by Assessment Center staff. MST has been funded by BHJJ since 2009.

Youth charged with offenses such as, status offenses (unruly), alcohol and other drug related misdemeanors, minor domestic violence/family conflict, simple assaults, property offenses, criminal trespass, and safe school ordinances (SSOs), are transported by officers to the Assessment Center for processing. The center's main goal is to ensure the right youth receive the right service at the right time and place. Youth entering the AC are screened by trained staff utilizing evidenced-based tools. The youth and family are linked to community-based services that meet their needs. One referral option is Multisystem Therapy (MST).

MST's long term outcome is to empower families to build a healthier environment through the mobilization of existing child, family, and community resources. MST addresses risk factors in an individualized, comprehensive, and integrated fashion, allowing families to enhance protective factors. Specific treatment techniques used to facilitate these gains are based on empirically supported therapies, including behavioral, cognitive behavioral, and pragmatic family therapies." The MST team works diligently to engage families, especially caregivers at the beginning of treatment, as the caregiver is the primary change agent in the home.

Consideration for MST services are generated by four points of entry within the Juvenile Court: The Assessment Center, Misdemeanor Services, Family Violence Intervention Services, and the Probation Department. Youth at high risk for ODYS commitment are identified by the Case Officer, Probation Officer, or through the Court's resource staffing process. The resource staffing process is made up of a team within the Probation Department that reviews cases being referred for out of home placement. MST has also welcomed refers through other community resources in an effort to sustain programming.

The typical duration of home-based MST services is approximately 4 months, with multiple therapist-family contacts occurring weekly. MST's definition of success is that the youth meets all three Ultimate Outcome goals: 1) Living in the home or with a relative 2) Attending school regularly or working 20+ hours per week 3) No rearrests during treatment. The overarching goal of treatment is to equip the

family with skills and supports that will require them to be able to handle behaviors in the home and out in the community on their own before involving formal services.

### Mahoning County

The BHJJ Program that serves Mahoning County is part of a collaborative project that allows for the implementation of evidence-based programs across the 3 most northeastern counties in Ohio, Mahoning, Trumbull, and Ashtabula. Homes For Kids provides services (MST and TIP Informed High Fidelity Wraparound) for the project and the program serves male and female youth ages 12 to 17. The defined target population is multi-system involved youth who are at risk for out of home placement, incarceration, or returning from an out of home placement. All youth entering the program are designated SED and many will have a co-occurring substance abuse diagnosis. The program implements two evidence based practices, Multisystemic Therapy (MST) and the Transition to Independence Process (TIP), as well as evidence informed High Fidelity Wraparound. The primary goals are to: reduce out of home placements, divert youth from juvenile court programs or ODYS institutions to evidence based, family-focused programming in the community, maintain or reduce commitments to ODYS, improve intersystem communication and collaboration, and share outcomes (successes and failures) across three contiguous counties that have some distinct similarities and differences.

Due to the projects focus on Multi-System Involved Youth (Cross Over), youth can and do enter the program from various channels that include juvenile court, children services boards, or county family and children first councils. Prior to referral, the juvenile court administers the OYAS to determine the risk of recidivism. Homes For Kids provides MST services to each youth identified as appropriate for the program. Upon completion of the MST Program, youth and families who are inclined and willing are transferred to Wraparound within the counties System of Care framework. Wraparound Facilitators incorporate the TIP treatment model in engaging youth and empowering families to lead healthier lives.

Trauma Informed Care is heavily embedded in the MST Collaborative with trauma informed protocols. Cultural Competence is also embedded through the entire project, as it is a core component of MST, TIP, and High-Fidelity Wraparound models. Youth entering the program are screened and assessed (at intake and discharge) for trauma utilizing the Trauma Symptom Checklist for Children (TSCC) and for substance abuse utilizing the Substance Use Survey (SUS) at intake and discharge.

The MV BHJJ Collaborative project provides the region with 4 MST Therapists, capable of serving approximately 60 youth annually. MST is an effective evidence based tool that has been proven to work with the toughest offenders' ages 12-17 who have a long history of arrests. All four MST Therapists are employed by Homes For Kids of Ohio.

Youth referred to the program are assessed by an MST Therapist and if appropriate and a good fit for the program, the case is opened and an initial session is scheduled with the family within 48 hours. The therapist meets with the family in their home to conduct family therapy sessions utilizing the MST model of treatment. MST therapists meet with families at minimum three times a week in their home working on getting the parent back in the driver seat of their family. MST clinicians go to where the child is and are on call 24 hours a day, seven days a week. They work intensively with parents and caregivers to put them in control. The therapist works with the caregivers to keep the adolescent focused on school, creating positive peer relationships, and gaining job skills. The therapist and

caregivers introduce the youth to sports and recreational activities as an alternative to hanging out. The therapist and caregiver work intensively to improve family functioning and cohesiveness.

As with all evidence based programs, model adherence is a central theme. All client families complete TAM's (Therapist Adherence Measure) two weeks into treatment and every 30 days after on their assigned therapist to ensure the therapist is adhering to the MST model. The MST supervisor onto the MST services secure website enters these TAM's. To date adherence to the model falls within the expected targets. The four therapists on the MST team and the MST supervisor attend weekly MST group supervision for two hours followed by one hour of case consultation with an MST consultant employed at the Center for Innovative Practices at Case Western Reserve University. In addition to weekly 3-hour supervision and consultation, MST therapists attend treatment staffings at juvenile court and children services as scheduled. The MST team also has quarterly Booster trainings with the MST consultant on topics picked by the MST team, supervisor and consultant aimed at increasing adherence to the model and increasing successful case outcomes.

As the MST treatment episode ends, the therapist, probation officer, and child welfare staff continue to collaborate and link the youth and family with community resources as needed, to help sustain the changes made during treatment. The families are offered the option of a step down into High-Fidelity Wraparound services and this is coordinated with the family by the MST therapist for a smooth transition from MST to wraparound. The MST therapist schedules with the wraparound facilitator to accompany them to the family's home to meet them and step the family down into wraparound services. A client and family is deemed to be successfully terminated from MST if they have: completed the 3-5 months of the program, learned new skills for sustainability in regards to utilizing informal supports as respite, improved their cohesion level as a family, decreased all referral behaviors, the youth is living in the home or community at time of discharge, attending work or school and has no new charges since entering the program.

### Montgomery County

In Montgomery County, the BHJJ program is referred to as the LIFE Program (Learning Independence and Family Empowerment), and is a county-wide collaborative that has been in existence since 2006. The LIFE Program is made possible through the ongoing collaboration with the following organizations: Montgomery County Juvenile Court; South Community, Inc.; Montgomery County Alcohol Drug Addiction & Mental Health Services (ADAMHS Board); Ohio Department of Mental Health and Addiction Services (OhioMHAS) and the Ohio Department of Youth Services – Dayton Regional Office. The program serves females and males between the ages of 10 and 18 who are involved with Montgomery County Juvenile Court; who have a DSM diagnosis and meet at least one of the following criteria:

- Substantial mental status impairment in behavioral, cognitive and/or affective domains
- Primary or Co-occurring Substance Abuse
- Violent and/or pattern of criminal behavior
- Threat to public safety, community, self, and/or others
- Substantial impairment in daily living skills and limited success in major life domains
- Exposed to and/or victim of trauma and/or domestic violence
- History of multi-system involvement

Youth and families involved in the LIFE Program are referred by Juvenile Court personnel. The youth is assessed by the Caring for Kids Program, which provides 24-hours screening and assessment

services for youth involved in the Montgomery County Juvenile Court (MCJC). A MCJC Judge, Magistrate, Probation Officer or Intervention Specialist could also identify an adolescent who meets program criteria and refer the youth directly to the LIFE Program. If there are barriers to the client and family completing a Diagnostic Assessment and a referral is made by the court, the LIFE program is able to go into the home and complete the assessment. Referrals can also be made to the LIFE Program in other instances including: a youth could be paroled from the Ohio Department of Youth Services (ODYS) or released from one of the local MCJC secure facilities and referred directly in to the LIFE Program as a plan for re-entry. When the referral is complete, the youth and family may be referred to three separate therapeutic interventions, Functional Family Therapy (FFT), Functional Family Therapy-Contingency Management (FFT-CM) and/or Seven Challenges.

Functional Family Therapy is an elite evidenced based practice model supported by Blueprints for Healthy Youth Development. FFT has over 40 years of research demonstrating its effectiveness with juvenile-justice involved youth and has shown to reduce recidivism. FFT-CM is an enhancement to the FFT intervention to include protocols for treatment of co-occurring mental health and substance abuse problems. When the youth and family are referred to FFT or FFT-CM, the case is assigned to a therapist who contacts the family within 48 hours. The therapist meets with the family for family therapy sessions. Number of sessions are determined based on client and family need, but on average, the FFT intervention ranges from 8 to 16 sessions. A youth and family successfully complete the intervention when they have completed all phases of the FFT Model; have decreased the referred behavior and have increased overall youth and family functioning. If the family experiences difficulty after completing treatment, the family is offered booster sessions if needed.

Montgomery County has continued to address adolescent substance abuse treatment service gaps in the community by enhancing LIFE Program services to include the Seven Challenges Model. The expansion has allowed the LIFE Program to service youth and families who did not engage in the FFT services; allowed youth to remain in treatment once FFT ended; or allowed youth who needed more intense intervention to receive group and individual at the same time FFT is provided. The Seven Challenges is designed specifically for adolescents with drug problems, to motivate a decision and commitment to change, and supports success in implementing the desired changes. The Seven Challenges has been used nationally and internationally, and is listed on SAMHSA's National Registry of Evidence-based Programs and Practices. The program is supported by many Juvenile Justice systems and by Reclaiming Futures. The Seven Challenges Program has shown substantial reduction in substance abuse and impressive mental health improvements with adolescents. Two Life Program Care Specialists operate the Seven Challenges Program, providing youth and families for an average of 8 to 20 group, individual and/or family sessions.

All primary LIFE Program therapeutic services are located in the home environment and in the community to alleviate transportation barriers for families. In addition to services from the FFT Therapist and Care Specialist, a LIFE Probation Officer or Intervention Specialist is assigned to the youth to provide intense intervention or probation services. The youth also has access to a South Community psychiatrist, as needed and a Natural Helper (a family mentor) through MCJC Reclaiming Futures Natural Helper Program. The family also meets in their home with the Outcomes Support Specialist at specified intervals during treatment to complete outcome measures, which are submitted to the BHJJ Project

Evaluator at Case Western Reserve University. The Therapists, Program Managers, Probation Officers, Intervention Specialists, Care Specialists, and Psychiatrist attend bi-weekly interdisciplinary team meetings. Other providers who are involved with LIFE clients are invited to attend as needed. Juvenile Court personnel then will report progress on treatment or make any recommendations regarding treatment to the court Judges/Magistrates. The FFT Therapists in the LIFE Program also meet for weekly group clinical consultation and individual supervision with the FFT Site Lead/LIFE Program Managers to ensure Fidelity to the therapeutic model. Global Therapist Ratings are completed by the FFT Site Lead/Program Manager, and families complete surveys periodically throughout the course of treatment to monitor fidelity of the FFT model. The Care Specialists meet bi-weekly with the Seven Challenges site lead. Fidelity reviews are completed quarterly on each staff. The LIFE Program also embraces suggestions and feedback from the Advisory Board. The LIFE Advisory Board oversees the overall functioning of the program. The Advisory Board includes: South Community, Montgomery County Alcohol Drug Addiction and Mental Health Services Board, Montgomery County Juvenile Court, Ohio Department of Youth Services, Reclaiming Futures Mentoring Program, and a parent. The Advisory Board meets quarterly. Reports are distributed, and successes and barriers are discussed.

As the therapeutic intervention ends, the therapists, care specialists and probation officer continue to collaborate and to link the youth and family with community resources as needed to help sustain the changes made during treatment. The youth could also be linked with other services provided within South Community's continuum of care. If the family experiences difficulty after treatment has ended, they are able to contact South Community directly and indicate their previous involvement with the LIFE Program. A determination is made as to whether the family could benefit from FFT "booster sessions" or whether another intervention is more appropriate.

### Summit County

The Summit County Juvenile Court (SCJC) collaborates with the County of Summit Alcohol, Drug Addiction and Mental Health Services Board, The Village Network, Child Guidance and Family Solutions (CGFS), The Center for Innovative Practices of Case Western Reserve University (CIP), Greenleaf Family Center and Akron Area YMCA to provide Integrated Co-occurring Treatment (ICT) through CGFS with CIP oversight and Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) through the Village Network. The program is further supported using Greenleaf Family Center Parent Advocates for caregivers and Akron Area YMCA mentoring for youth along with intensive court supervision and case management. Approximately 55 - 60 youth can be referred to the BHJJ program annually. Additional supports have been added since 2011 to further promote program engagement and success, including opportunities for youth to work directly with Sylvan Learning Center staff individually and in small group settings. Sylvan staff often work directly with the local public schools in IEP development for the program youth with whom they tutor. From 2009 through June, 2017, 314 youth have been referred to the SCJC BHJJ program, including 254 males (81%) and 60 females (19%). Nearly 63%, or 254, of the referrals were African-American, 56 (18%) were Bi-Racial, 60 (20%) were Caucasian, 2 were Hispanic, and one was Asian. Nearly all the youth were charged with one or more felonies and scored moderate to high-risk on the OYAS. The general age range was between 14 and 18 years old.

Generally, males and females from 12 to 18 years old who commit a felony offense and who are known to have serious substance abuse/mental health issues can be referred to the program. Typically, BHJJ services are targeted to youth between 14 to 18 years old, as these services, while flexible, tend to be designed to be effective with this age-range. All youth under consideration for referral to BHJJ services

must first be staffed, (a meeting held among various experienced court staff from probation, felony disposition, and partnering agency professionals) post-adjudication (after admitting to their offense in court) for appropriateness (mental health and/or substance abuse issues, serious offenders, etc.). Referred youth have been placed on probation or intensive probation, some of whom have received suspended ODYS commitments. Once the youth has been admitted into the program and assigned to a provider agency treatment program, the Probation Officer, Probation Supervisor, Felony Disposition Supervisor and the program Case Manager, along with any other contributing agency/organization member (i.e. mental health professional, chemical dependency counselor, school personnel, etc.) will meet to develop individual/family case plans and provide further disposition recommendations to the judiciary. All available assessments (SASSI, OYAS, Screen Pediatric Psychosocial Influences or SPPI, etc.) are reviewed and discussed to help inform these decisions. These assessments have been administered by court staff throughout the early stages of the youth's court involvement. In many cases, BHJJ program participants have been previously involved with the court. Often in those cases an assessment history has already been compiled. Still, new assessments are administered each time a youth becomes re-involved with the court.

When the youth and family are ordered to participate and cooperate with the behavioral health service provider, a referral will be made to the provider by the probation officer assigned to the case. Once the youth/family has engaged, monthly reviews will be scheduled to gauge progress, service gaps and any non-compliance issues. A Behavioral Health Court Docket (BHCD) was implemented during FY 2011 BHJJ programming to bolster judicial oversight and provide structure to the application of incentives and sanctions to both youth and their caregivers.

Once an initial recommendation has been made as to which of the two provider services is more appropriate and ordered by judicial process, the Village Network or Child Guidance and Family Solutions begins delivering services and applying further assessments as needed. One of the key components of the treatments offered by both organizations is the flexibility built into both models to ensure that services are delivered in a culturally competent manner, and that youth and families referred to them are not rejected or that when difficulties arise, they are not ejected from the program with the exception of incidents that may cause serious concerns over public safety issues.

Successful treatment completion is determined by the service provider based on number of sessions completed, compliance with court orders, probation, and the individual and family case plan as set forth by the program case manager. In order to successfully complete the Village Network's TF-CBT, therapists attempt to ensure that the overall level of functioning has improved and a decrease in risk factors, an increase in school engagement (more days present at school), no additional felony charges, no commitments to DYS, an increase in grade point average, 40 or more successful engagements with the counselor (face to face contacts), and consistent compliance with medication orders. At the end of the program they continue to maintain in the community, and avoid substitute care.

Child Guidance and Family Solutions deems someone as "successful" in the ICT program (as part of the BHJJ grant) on the basis of two overarching factors: 1) Whether the youth attended for the entirety of the program and 2) Whether they remained in the home and avoided placement in ODYS.

In addition to the two main criteria, successful ICT completion also includes:

- Improved stability at home.

- Stabilization of mental health symptoms that would warrant less intensive mental health treatment.
- Reduction in substance use that warrants less intensive alcohol/drug treatment.
- Improved functioning at school and in the community.
- Connected to other treatment provider(s) or supports at the end of treatment.

### Trumbull County

The BHJJ Program that serves Trumbull County is part of a collaborative project that allows for the implementation of evidence-based programs across the 3 most northeastern counties in Ohio, Mahoning, Trumbull, and Ashtabula. Homes For Kids provides services MST and the Transition to Independent Process (TIP) Informed High Fidelity Wraparound for the project and the program serves male and female youth ages 12 to 17. The defined target population is multi-system involved youth who are at risk for out of home placement, incarceration, or returning from an out of home placement. All youth entering the program are designated SED and many will have a co-occurring substance abuse diagnosis. The program implements two evidence based practices, MST and TIP, as well as evidence informed High Fidelity Wraparound. The primary goals are to: reduce out of home placements, divert youth from juvenile court programs or ODYS institutions to evidence based, family-focused programming in the community, maintain or reduce commitments to ODYS, improve intersystem communication and collaboration, and share outcomes (successes and failures) across three contiguous counties that have some distinct similarities and differences.

Due to the project's focus on Multi-System Involved Youth (Cross Over), youth can and do enter the program from various channels that include juvenile court, children services boards, or county family and children first councils. Prior to referral, the juvenile court administers the OYAS to determine the risk of recidivism. Homes For Kids provides MST services to each youth identified as appropriate for the program. Upon completion of the MST Program, youth and families who are inclined and willing are transferred to Wraparound within the counties' System of Care framework. Wraparound Facilitators incorporate the TIP treatment model in engaging youth and empowering families to lead healthier lives.

Trauma Informed Care is heavily embedded in the MST Collaborative with trauma informed protocols. Cultural Competence is also embedded through the entire project, as it is a core component of MST, TIP, and High-Fidelity Wraparound models. Youth entering the program are screened and assessed (at intake and discharge) for trauma utilizing the Trauma Symptom Checklist for Children (TSCC) and for substance abuse utilizing the Substance Use Survey (SUS) at intake and discharge.

The MV BHJJ Collaborative project provides the region with 4 MST Therapists, capable of serving approximately 60 youth annually. MST is an effective evidence based tool that has been proven to be effective with the toughest offenders ages 12-17 who have a long history of arrests. All four MST Therapists are employed by Homes For Kids of Ohio.

Youth referred to the program are assessed by an MST Therapist and if appropriate and a good fit for the program, the case is opened and an initial session is scheduled with the family within 48 hours. The therapist meets with the family in their home to conduct family therapy sessions utilizing the MST model of treatment. MST therapists meet with families at minimum three times a week in their home working on getting the parent back in the driver seat of their family. MST clinicians go to where the child is and are on call 24 hours a day, seven days a week. They work intensively with parents and



caregivers to put them in control. The therapist works with the caregivers to keep the adolescent focused on school, creating positive peer relationships, and gaining job skills. The therapist and caregivers introduce the youth to sports and recreational activities as an alternative to hanging out. The therapist and caregiver work intensively to improve family functioning and cohesiveness.

As with all evidence based programs, model adherence is a central theme. All client families complete TAMs (Therapist Adherence Measure) assessments on their assigned therapists two weeks into treatment and every 30 days after to ensure the therapist is adhering to the MST model. The MST supervisor enters these TAMs into the MST services secure website. To date, adherence to the model falls within the expected targets. The four therapists on the MST team and the MST supervisor attend weekly MST group supervision for two hours followed by one hour of case consultation with an MST consultant employed at the Center for Innovative Practices at Case Western Reserve University. In addition to weekly 3-hour supervision and consultation, MST therapists attend treatment staffings at juvenile court and children services as scheduled. The MST team also has quarterly Booster trainings with the MST consultant on topics picked by the MST team, supervisor, and consultant aimed at increasing adherence to the model and increasing successful case outcomes.

As the MST treatment episode ends, the therapist, probation officer, and child welfare staff continue to collaborate and link the youth and family with community resources as needed to help sustain the changes made during treatment. The families are offered the option of a step down into High-Fidelity Wraparound services and this is coordinated with the family by the MST therapist for a smooth transition from MST to wraparound. The MST therapist schedules with the wraparound facilitator to accompany them to the family's home to meet them and step the family down into wraparound services. A client and family is deemed to be successfully terminated from MST if they have: completed the 3-5 months of the program, learned new skills for sustainability in regards to utilizing informal supports as respite, improved their cohesion level as a family, decreased all referral behaviors, the youth is living in the home or community at time of discharge, attending work or school, and has no new charges since entering the program.

## Wayne County

The Wayne Holmes BHJJ Partnership serves to meet the treatment needs of youth and families where there is high risk for out of home placement, with the goal of strengthening families and keeping them intact. Therapists work in the home with the families to remove barriers and promote family functioning. Funding is also used for drug test kits, window and door alarms, safes, cell phones for parents, and money for prosocial activities that will help build family relationships and prosocial activities. This grant cycle, the Wayne County program's goal is to be more proactive, and to accept referrals from CSB for youth who are at risk of juvenile court involvement and/or out of home placement earlier in the process.

Multi-systemic therapy (MST) is the treatment modality used for this partnership. Trained therapists work under this model, with supervision and oversight to assure high fidelity to the model is occurring. The grant contracts with Crisis Intervention and Recovery Center (CIRC) in Stark County to provide the in-home services. Referrals come through juvenile court, and are for ages 10 to 17 ½. The OYAS is used for assessing youth and determining if appropriate for placement into the MST program. Eligibility criteria include youth who have displayed delinquent or other behaviors that have brought them to the

attention of Juvenile Court, having a mental health condition, and being at risk for out of home placement. Families must also be willing to work with the program.

The key stakeholders are Wayne County Juvenile Court, Wayne Holmes Mental Health and Recovery Board, CIRC, Wayne County Family and Children First Council, Case Western Reserve University—The Center for Innovative Practices at the Begun Center, and Wayne County Children’s Services as the newest addition. Possible youth are screened by juvenile court, assessed with the OYAS, discussed with family before referring to CIRC. CIRC also does an evaluation and meets with the family to discuss the service and process.

Measures of success include reduced recidivism rates for juvenile court involvement in total number of charges and severity, stabilizing families to prevent out of home placements, and maintain low commitment rates to ODYS. We will also measure the built in goals of MST which include: improving caregiver discipline practices, enhancing family relations, decreasing a youth’s association with deviant peers, increasing youth’s association in prosocial activities and with pro-social peers, improving youth’s school or vocational performance, engaging youth in positive recreational outlets, and developing a natural support network of extended family, neighbors, and friends to help caregivers achieve and maintain changes.

## Data Analysis Plan

The report is divided into two main sections. The first is an aggregate report using data from all the BHJJ counties. This includes data collected from the beginning of the BHJJ program in 2005 through June 30, 2017 and includes data from all counties who have participated, regardless of their current participation status. After the aggregate report are individual county reports highlighting data from each current BHJJ county since they have been participating in the BHJJ program.

### Description of the Analyses Used in the Report

Several types of inferential statistics are used throughout the report. Three types of bivariate analyses are discussed throughout both the overall report and the county specific reports. 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<sup>1</sup>.

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.

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

## Results

### Demographics

As of June 30, 2017, 4,338 youth have been enrolled in the BHJJ program (see Table 5). The average age at enrollment was 15.59 years (SD=1.59). More males (62.8%, n = 2,722) than females (37.2%, n = 1,609) have been enrolled. Caucasians (47.2%, n = 2,024) and African Americans (41.5%, n = 1,777) comprised the majority of the total sample.

Since the last reporting period which ended on June 30, 2015, there have been 669 youth enrolled in the program. In the last biennium, there have been more males (67.6%, n = 452) than females (32.4%, n = 217), and slightly more African Americans (46.0%, n = 308) than Caucasians (41.7%, n = 279) enrolled. From July 1, 2015 through June 30, 2017 more than two thirds (67.6%) of BHJJ enrollees have been male and more than half (58.3%) have been non-Caucasian.

Table 5. Enrollment by County

County	Total Number of Youth Enrolled
Ashtabula	25
Butler	28
Champaign	97
Cuyahoga	453
Fairfield	32
Franklin	546
Hamilton	321
Holmes	25
Logan	270
Lorain	101
Lucas	255
Mahoning	34
Montgomery	1,758
Summit	286
Trumbull	47
Union	31
Wayne	25
Wood	4
<b>Total</b>	<b>4,338</b>

### Custody Arrangement and Household Information

At intake, the majority of youth lived with the biological mother (58.1%, n = 2,321) (see Table 6). More than 83.8% of BHJJ youth lived with at least one parent at enrollment (n = 3,348).

Over 80% (80.3%; n = 3,122) of the BHJJ caregivers had at least a high school diploma or GED, and 9% (n = 353) had a bachelor's degree or higher. Slightly over one-fifth of caregivers (19.7%; n = 767) reported they did not graduate from high school (see Table 7).

Caregivers were asked to report their annual household income. The average household income was between \$15,000 and \$19,999. Three-quarters of caregivers (75.5%; n = 2,893) reported an annual household income below \$35,000 and 50.6% (n = 1,938) reported an annual household income less than \$20,000. More than one out of every four BHJJ families (26.3%; n = 1,009) reported an annual household income below \$10,000 (see Table 8).

Table 6. Custody Arrangement for BHJJ Youth

<b>Custody</b>	<b>BHJJ Youth</b>
<b>Two Biological Parents or One Biological and One Step or Adoptive Parent</b>	18.9% (n=755)
<b>Biological Mother Only</b>	58.1% (n=2,321)
<b>Biological Father Only</b>	6.8% (n=272)
<b>Adoptive Parent(s)</b>	3.9% (n=157)
<b>Sibling</b>	0.3% (n=12)
<b>Aunt/Uncle</b>	2.4% (n=95)
<b>Grandparents</b>	7.7% (n=307)
<b>Friend</b>	0.2% (n=6)
<b>Ward of the State</b>	0.5% (n=18)
<b>Other</b>	1.3% (n=50)

Table 7. Educational Outcomes for Caregivers of BHJJ Youth

<b>Number of School Years Completed</b>	<b>Number of Caregivers</b>
<b>Less than High School</b>	19.7% (n=767)
<b>High School Graduate or G.E.D.</b>	35.7% (n=1,394)
<b>Some College or Associate Degree</b>	35.2% (n=1,375)
<b>Bachelor's Degree</b>	4.8% (n=189)
<b>More than a Bachelor's Degree</b>	4.2% (n=164)

Table 8. Annual Household Incomes for BHJJ Families

<b>Annual Household Income</b>	<b>BHJJ Families</b>
<b>Less than \$5,000</b>	18.1% (n=694)
<b>\$5,000 - \$9,999</b>	8.2% (n=315)
<b>\$10,000 - \$14,999</b>	15.1% (n=577)
<b>\$15,000 - \$19,999</b>	9.2% (n=352)
<b>\$20,000 - \$24,999</b>	13.4% (n=514)
<b>\$25,000 - \$34,999</b>	11.5% (n=441)
<b>\$35,000 - \$49,999</b>	12.0% (n=458)
<b>\$50,000 - \$74,999</b>	7.8% (n=299)
<b>\$75,000 - \$99,999</b>	2.7% (n=102)
<b>\$100,000 and over</b>	2.1% (n=80)

## 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 (see Table 9). Chi-square analysis to test for gender differences was conducted on each item and significant differences are identified in Table 9. Overall, caregivers reported that BHJJ females had significantly higher levels of physical abuse, sexual abuse, running away, talking about suicide, attempting suicide, exposure to domestic violence, and family histories of substance use, depression, mental illness, and substance use than males. Caregivers reported BHJJ males had significantly higher levels of substance abuse than female participants.

At intake, caregivers were asked if the youth had ever been pregnant (or if male, had ever impregnated a female) or were currently expecting a child. Caregivers reported that 8.9% (n = 112) of females had been pregnant and of those youth, 34.9% (n = 37) were currently expecting a child. Caregivers reported that 5.5% (n = 110) of males had impregnated a female and of those youth, 28.6% (n = 28) were currently expecting a child at the time of enrollment in the program. Of those who had been pregnant or impregnated a female, over 27% of females (27.3%, n = 24) and 39.2% of males (n = 40) currently had children. Of those who had children, 84.2% (n = 16) of females and 8.3% males (n = 3) currently lived with the child.

Table 9. Youth and Family History

Question	Females	Males
Has the child ever been physically abused?	18.3% (n=268)**	13.6% (n=340)
Has the child ever been sexually abused?	26.3% (n=379)**	7.3% (n=179)
Has the child ever run away?	58.1% (n=848)**	45.0% (n=1,103)
Has the child ever had a problem with substance abuse, including alcohol and/or drugs?	46.5% (n=681)	55.3% (n=1,371)**
Has the child ever talked about committing suicide?	49.3% (n=723)**	30.9% (n=774)
Has the child ever attempted suicide?	23.4% (n=339)**	10.0% (n=248)
Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?	39.9% (n=589)	37.3% (n=934)
Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?	67.8% (n=971)**	60.8% (n=1,473)
Has anyone in the child's biological family had a mental illness, other than depression?	49.3% (n=705)**	41.7% (n=990)
Has the child ever lived in a household in which someone was convicted of a crime?	38.6% (n=549)	40.5% (n=984)
Has anyone in the child's biological family had a drinking or drug problem?	60.8% (n=877)*	56.2% (n=1,378)
Is the child currently taking any medication related to his/her emotional or behavioral symptoms?	33.1% (n=478)	33.3% (n=804)

\*p < .05, \*\*p < .01

## 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 (89.3% and 90.7% respectively) (see Table 10). Chi-square analysis indicated females had significantly higher rates of problems related to suicide, depression, anxiety, adjustment, and eating disorders than males. Males had significantly higher rates of hyperactive and attention-related problems as well as problems related to substance use, specific developmental disabilities, and learning disabilities.

Table 10. Problems Leading to Services

Problems Leading to Services	Females	Males
<b>Adjustment-related problems</b>	12.6% (n = 192)***	8.6% (n = 218)
<b>Anxiety-related problems</b>	22.5% (n = 344)***	16.3% (n = 414)
<b>Conduct/delinquency-related problems</b>	89.3% (n = 1364)	90.7% (n = 2305)
<b>Depression-related problems</b>	48.8% (n = 745)***	28.7% (n = 729)
<b>Eating disorders</b>	1.6% (n = 25)***	0.6% (n = 14)
<b>Hyperactive and attention-related problems</b>	24.5% (n = 374)	40.5% (n = 1029)***
<b>Learning disabilities</b>	4.4% (n = 67)	8.5% (n = 216)***
<b>Pervasive development disabilities</b>	0.7% (n = 11)	1.5% (n = 38)*
<b>Psychotic behaviors</b>	2.0% (n = 30)	2.2% (n = 55)
<b>School performance problems not related to learning disabilities</b>	33.9% (n = 518)	32.6% (n = 828)
<b>Specific developmental disabilities</b>	0.9% (n = 13)	1.7% (n = 43)*
<b>Substance use, abuse, dependence-related problems</b>	41.7% (n = 636)	49.8% (n = 1265)***
<b>Suicide-related problems</b>	12.6% (n = 192)***	5.9% (n = 151)

\* < .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 11 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 greater proportion of females were in the low risk category than males while a greater proportion of White youth were in the low risk category than Nonwhite youth. Further, 24.0% of Nonwhite youth were identified as high risk while 13.2% of White youth were identified as high risk.

Table 11. OYAS Risk Categories by Gender and Race

	OYAS Low	OYAS Moderate	OYAS High
<b>Female</b>	42.4% (n = 297)	40.9% (n = 286)	16.7% (n = 117)
<b>Male*</b>	28.4% (n = 462)	50.1% (n = 814)	21.4% (n = 348)
<b>White</b>	40.0% (n = 343)	46.9% (n = 402)	13.2% (n = 113)
<b>Nonwhite*</b>	28.1% (n = 409)	47.9% (n = 696)	24.0% (n = 349)

\*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 females was Oppositional Defiant Disorder (ODD) while the most common diagnosis for males was Attention Deficit Hyperactivity Disorder (ADHD) (see Table 12).

A total of 8,925 diagnoses were identified for 4,142 youth with diagnostic information (2.15 diagnoses per youth). Data related to diagnoses per youth vary greatly by county (see county reports for additional information). Females reported 3,301 diagnoses (2.31 diagnoses per female) and males reported 5,624 diagnoses (2.36 diagnoses per male). Chi-square analysis indicated females were significantly more likely to be diagnosed with Depressive Disorders, Alcohol-related Disorders, Bipolar Disorder, Post-traumatic Stress Disorder (PTSD), and other Mood Disorders. Males were significantly more likely to be diagnosed with Cannabis-related Disorders, ADHD, and Conduct Disorder. Nearly 44 percent of males (43.9%, n = 1059) and over one third of females (35.4%, n = 509) were identified as having both a DSM mental health diagnosis and a substance use diagnosis.

Table 12. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
<b>Adjustment Disorder</b>	6.7% (n = 96)	5.5% (n = 131)
<b>Alcohol-related Disorders</b>	13.6% (n = 195)***	9.0% (n = 214)
<b>Attention Deficit Hyperactivity Disorder</b>	27.3% (n = 389)	<b>45.9% (n = 1,095)***</b>
<b>Bipolar Disorder</b>	7.8% (n = 112)**	5.4% (n = 130)
<b>Cannabis-related Disorders</b>	31.7% (n = 452)	41.5% (n = 992)***
<b>Conduct Disorder</b>	11.4% (n = 163)	22.3% (n = 533)***
<b>Depressive Disorders</b>	30.9% (n = 441)***	17.0% (n = 406)
<b>Disruptive Behavior Disorder</b>	5.4% (n = 77)	6.6% (n = 158)
<b>Mood Disorder</b>	14.1% (n = 201)**	11.1% (n = 264)
<b>Oppositional Defiant Disorder</b>	<b>43.2% (n = 616)</b>	42.4% (n = 1,013)
<b>Post-traumatic Stress Disorder</b>	10.3% (n = 147)***	5.2% (n = 125)

\* < .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. Two-thirds of the youth (66.4%, n = 1,999) were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in treatment with BHJJ, 35.1% (n = 926) 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, 86.7% (n = 2,305) of youth were currently attending school while at termination, 84.9% (n = 2,034) 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 13 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 14 displays this information based on completion status. At intake, 16.9% of youth were earning mostly A's and B's, and C's and 31.2% were earning mostly D's and F's. At termination from BHJJ, 49.6% of youth were earning mostly A's, B's, or C's, and 20.2% were earning mostly D's and F's. Academic improvement was largely dependent upon BHJJ completion status (see Table 14). 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, 35.1% of unsuccessful completers and 41.1% of successful completers received mostly A's, B's, or C's. At termination, 30.0% of unsuccessful completers and 59.0% of successful completers received mostly A's, B's, or C's.

At termination, workers reported that 41.3% (n = 1,098) of youth were attending school more than before starting treatment and 48.2% (n = 1,281) of youth were attending school 'about the same' amount compared to before starting treatment. Workers reported that 5.6% (n = 150) were attending school less often than before treatment in BHJJ. At termination, 38.1% (n = 742) of the youth attending school had Individualized Education Plans (IEPs).

Table 13. Academic Performance

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A's and B's	16.9% (n = 372)	17.0% (n = 407)
Mostly B's and C's	24.1% (n = 528)	32.6% (n = 783)
Mostly C's and D's	27.8% (n = 610)	30.2% (n = 725)
Mostly D's and F's	31.2% (n = 685)	20.2% (n = 486)

Table 14. Academic Performance for Youth by Completion Status

Typical Grades	Unsuccessful Completers		Successful Completers	
	Frequency at Intake	Frequency at Termination	Frequency at Intake	Frequency at Termination
Mostly A's and B's	13.4% (n = 98)	8.5% (n = 64)	16.5% (n = 256)	21.0% (n = 339)
Mostly B's and C's	21.7% (n = 159)	21.5% (n = 163)	24.6% (n = 381)	38.0% (n = 612)
Mostly C's and D's	27.9% (n = 205)	35.7% (n = 270)	25.8% (n = 400)	27.5% (n = 443)
Mostly D's and F's	37.1% (n = 272)	34.3% (n = 260)	33.0% (n = 511)	13.5% (n = 218)

## Ohio Scales

One of the main measures in the data collection packet is 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 intake, three-month, six-month, nine-month, and termination data. While additional assessment periods did exist, the number of assessments in these groups was less than ideal for analysis and these assessment periods are not reported here. 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 three-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

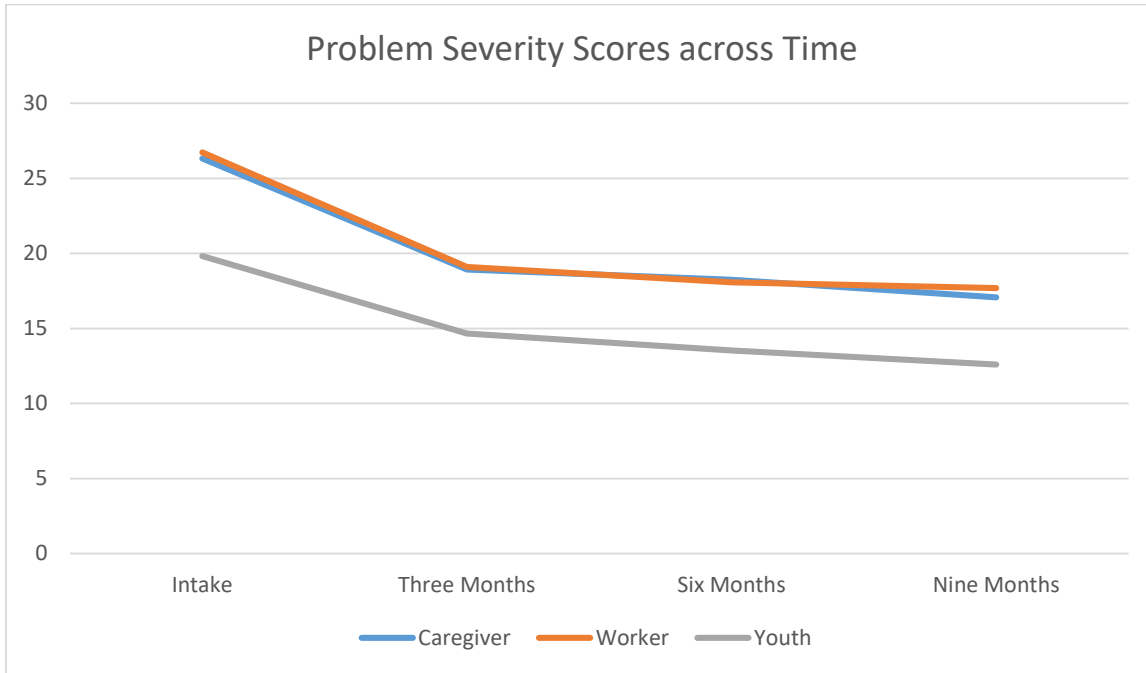
Means for the Problem Severity scale by rater and assessment period can be found in Table 15 and also in Figure 1 and Figure 2. Additional county-level information can be found in the individual county reports.

Table 15. Problem Severity over Time

	Caregiver	Worker	Youth
<b>Intake</b>	26.32 (SD=17.19; n=3,413)	26.74 (SD=13.51; n=3,987)	19.82 (SD=14.75; n=3,947)
<b>Three Months</b>	18.94 (SD=18.94; n=1,407)	19.10 (SD=12.00; n=1,839)	14.66 (SD=12.24; n=1,761)
<b>Six Months</b>	18.24 (SD=14.67; n=599)	18.08 (SD=11.75; n=777)	13.54 (SD=12.30; n=735)
<b>Nine Months</b>	17.07 (SD=13.71; n=324)	17.70 (SD=11.35; n=358)	12.60 (SD=11.13; n=351)
<b>Termination</b>	14.40 (SD=13.23; n=1,894)	16.27 (SD=12.56; n=2,937)	11.43 (SD=10.67; n=2,269)

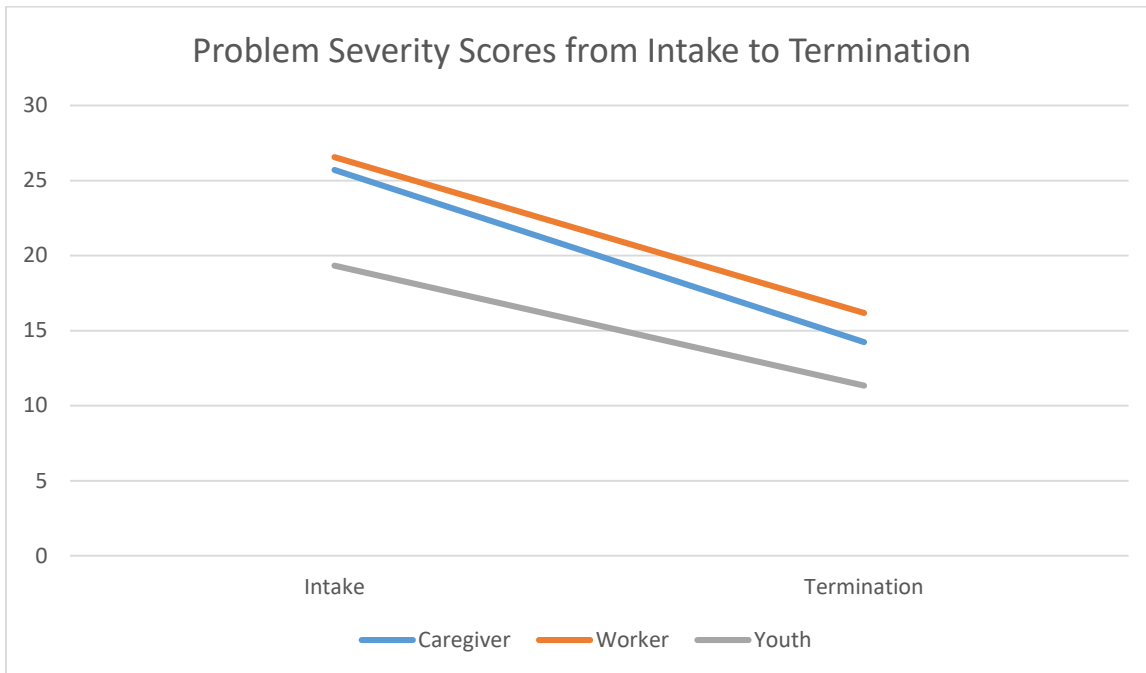
\* < .05, \*\* < .01, \*\*\* < .001

Figure 1



\*all comparisons from intake to each successive time point are significant at the  $p < .001$  level

Figure 2



\*all comparisons from intake to termination are significant at the  $p < .001$  level

### Caregiver Ratings

Paired samples t-tests revealed significant improvements in Problem Severity at each measurement interval (see Table 16) compared to intake. Significant improvements were noted at three months:  $t(1318) = 17.63, p < .001$ ; six months:  $t(574) = 11.12, p < .001$ ; nine months:  $t(311) = 9.97, p < .001$ ; and at termination  $t(1732) = 28.51, p < .001$ . 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 16. Paired Samples T-Tests for Problem Severity - Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	26.58 (SD=17.08; n=1,319)	18.93 (SD=14.13; n=1,319)	17.63***	.48
<b>Intake to Six Months</b>	26.62 (SD=18.01; n=575)	18.15 (SD=14.78; n=575)	11.12***	.46
<b>Intake to Nine Months</b>	27.61 (SD=18.44; n=312)	16.84 (SD=13.70; n=312)	9.97***	.56
<b>Intake to Termination</b>	25.71 (SD=17.10; n=1,733)	14.25 (SD=13.08; n=1,733)	28.51***	.68

\* < .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 17). Improvements were noted at three months:  $t(1763) = 22.47, p < .001$ ; six months:  $t(747) = 17.48, p < .001$ ; nine months:  $t(347) = 11.61, p < .001$ ; and at termination  $t(2741) = 35.40, p < .001$ . Medium effect sizes were found for all time periods we examined.

Table 17. Paired Samples T-Tests for Problem Severity - Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	26.40 (SD=13.00; n=1,764)	19.06 (SD=12.00; n=1,764)	22.47***	.53
<b>Intake to Six Months</b>	27.61 (SD=13.60; n=748)	17.96 (SD=11.69; n=748)	17.48***	.64
<b>Intake to Nine Months</b>	27.56 (SD=12.93; n=348)	17.80 (SD=11.42; n=348)	11.61***	.62
<b>Intake to Termination</b>	26.57 (SD=13.40; n=2,742)	16.18 (SD=12.49; n=2,742)	35.40***	.67

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

## Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement at each data collection point (see Table 18). Improvements were noted at three months:  $t(1687) = 15.30, p < .001$ ; six months:  $t(709) = 12.16, p < .001$ ; nine months:  $t(343) = 10.25, p < .001$ ; and at termination  $t(2120) = 27.19, p < .001$ . 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 18. Paired Samples T-Tests for Problem Severity - Youth

	Mean Time 1	Mean Time 2	t	D
<b>Intake to Three Months</b>	19.82 (SD=14.81; n=1,688)	14.68 (SD=12.36; n=1,688)	15.30***	.37
<b>Intake to Six Months</b>	20.36 (SD=15.42; n=710)	13.47 (SD=12.20; n=710)	12.16***	.45
<b>Intake to Nine Months</b>	20.62 (SD=14.55; n=344)	12.55 (SD=11.16; n=344)	10.25***	.55
<b>Intake to Termination</b>	19.34 (SD=14.40; n=2,121)	11.35 (SD=10.70; n=2,121)	27.19***	.59

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

## Functioning

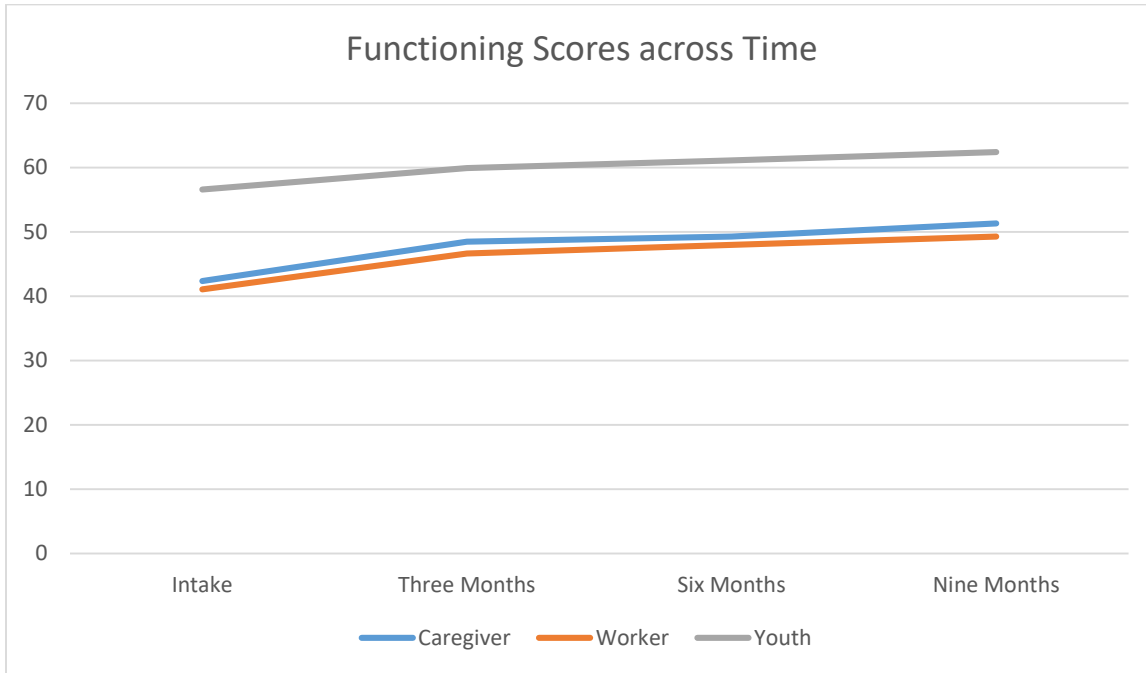
Means for the Functioning scale by rater and assessment period can be found in Table 19 and Figure 3 and Figure 4.

Table 19. Functioning Scores across Time

	Caregiver	Worker	Youth
<b>Intake</b>	42.40 (SD=16.67; n=3,413)	41.10 (SD=11.73; n=3,968)	56.63 (SD=13.13; n=3,933)
<b>Three Months</b>	48.48 (SD=16.62; n=1,405)	46.65 (SD=13.33; n=1,830)	59.92 (SD=13.31; n=1,767)
<b>Six Months</b>	49.29 (SD=16.38; n=602)	47.99 (SD=13.45; n=776)	61.12 (SD=13.14; n=734)
<b>Nine Months</b>	51.33 (SD=15.28; n=321)	49.31 (SD=13.32; n=360)	62.41 (SD=12.83; n=353)
<b>Termination</b>	53.63 (SD=1,905; n=1,905)	50.16 (SD=14.46; n=2,941)	62.31 (SD=13.33; n=2,277)

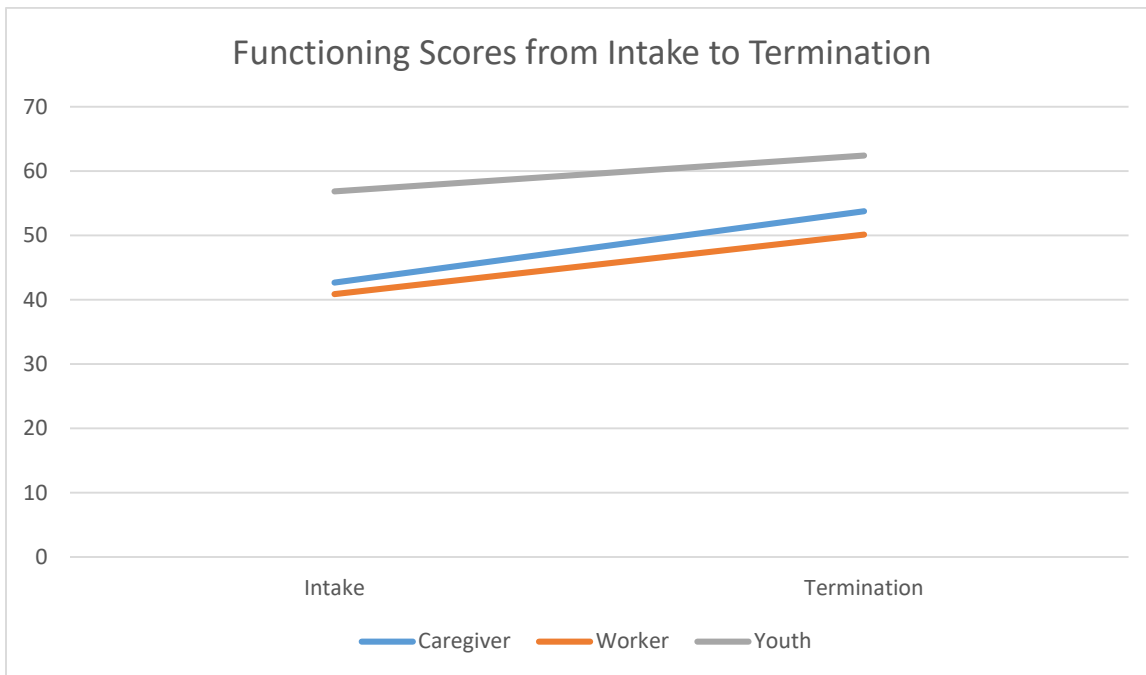
\* < .05, \*\* < .01, \*\*\* < .001

Figure 3



\*all comparisons from intake to each successive time point are significant at the  $p < .001$  level

Figure 4



\*all comparisons from intake to each successive time point are significant at the  $p < .001$  level

### Caregiver Ratings

Paired samples t-tests revealed significant improvements in Functioning at each measurement interval (see Table 20) compared to intake. Significant improvements were noted at three months:  $t(1320) = -15.06, p < .001$ ; six months:  $t(585) = -10.77, p < .001$ ; nine months:  $t(312) = -9.67, p < .001$ ; and at termination  $t(1737) = -27.50, p < .001$ . Small effect sizes were noted for the periods between intake and three months and intake and six months. Moderate effect sizes were noted for the periods between intake and nine months and between intake and termination.

Table 20. Paired Samples T-Tests for Functioning Scores - Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	41.98 (SD=16.55; n=1,321)	48.65 (SD=16.59; n=1,321)	-15.06***	.41
<b>Intake to Six Months</b>	41.33 (SD=16.98; n=585)	49.47 (SD=16.36; n=585)	-10.77***	.44
<b>Intake to Nine Months</b>	41.01 (SD=17.43; n=313)	51.16 (SD=15.37; n=313)	-9.67***	.54
<b>Intake to Termination</b>	42.66 (SD=16.79; n=1,738)	53.79 (SD=16.56; n=1,738)	-27.50***	.66

\* < .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 21). Improvements were noted at three months:  $t(1743) = -15.84, p < .001$ ; six months:  $t(742) = -13.09, p < .001$ ; nine months:  $t(346) = -9.01, p < .001$ ; and at termination  $t(2732) = -30.49, p < .001$ . A moderate effect size was noted for the period between intake and termination. All other time periods exhibited a small effect.

Table 21. Paired Samples T-Tests for Functioning Scores - Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	41.61 (SD=11.94; n=1,744)	46.73 (SD=13.37; n=1,744)	-15.84***	.38
<b>Intake to Six Months</b>	40.88 (SD=11.87; n=743)	48.04 (SD=13.52; n=743)	-13.09***	.48
<b>Intake to Nine Months</b>	41.37 (SD=12.01; n=347)	49.11 (SD=13.30; n=347)	-9.01***	.48
<b>Intake to Termination</b>	40.90 (SD=11.53; n=2,733)	50.15 (SD=14.47; n=2,733)	-30.49***	.58

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

### Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement at each data collection point (see Table 22). Improvements were noted at three months:  $t(1692) = -8.99, p < .001$ ; six months:  $t(708) = -8.74, p < .001$ ; nine months:  $t(342) = -8.47, p < .001$ ; and at termination  $t(2118) = -17.80, p < .001$ . A small effect was noted for each of the time periods we examined.

Table 22. Paired Samples T-Tests for Functioning Scores - Youth

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	57.07 (SD=12.79; n=1,693)	60.06 (SD=13.17; n=1,693)	-8.99***	.22
<b>Intake to Six Months</b>	56.30 (SD=13.24; n=709)	61.28 (SD=13.15; n=709)	-8.74***	.33
<b>Intake to Nine Months</b>	55.90 (SD=12.59; n=343)	62.45 (SD=12.80; n=343)	-8.47***	.46
<b>Intake to Termination</b>	56.87 (SD=12.94; n=2,119)	62.41 (SD=13.38; n=2,119)	-17.80***	.39

\* < .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 was 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 24.1% of the BHJJ sample knew someone who was murdered in the past year (see Table 23).

Table 23. Prevalence of Self-Reported Violent Victimization in the BHJJ Sample

	<b>% Yes BHJJ Sample (n = 695)</b>	<b>% Yes National Sample</b>
<b>In the last year, did someone threaten to hurt you when you thought they might really do it?</b>	37.3%	14.4% <sup>a</sup>
<b>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?</b>	8.6%	1.9% <sup>b</sup>
<b>In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?</b>	12.4%	2.8% <sup>b</sup>
<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?</b>	48.6%	16.6% <sup>a</sup>
<b>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?</b>	16.0%	5.7% <sup>a</sup>



<b>In the last year, did anyone hit or attack you WITHOUT using an object or weapon?</b>	38.4%	17.7% <sup>a</sup>
<b>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?</b>	26.4%	21.8% <sup>a</sup>
<b>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?</b>	4.0%	0.3% <sup>b</sup>
<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?</b>	4.0%	1.2% <sup>b</sup>
<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?</b>	13.8%	3.3% <sup>b</sup>
<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?</b>	28.7%	12.8% <sup>a</sup>
<b>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?</b>	44.1%	29.0% <sup>a</sup>
<b>In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?</b>	24.1%	5.4% <sup>a</sup>
<b>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?</b>	29.6%	9.7% <sup>a</sup>
<b>Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?</b>	22.8%	5.6% <sup>a</sup>
<b>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?</b>	9.2%	1.4% <sup>b</sup>

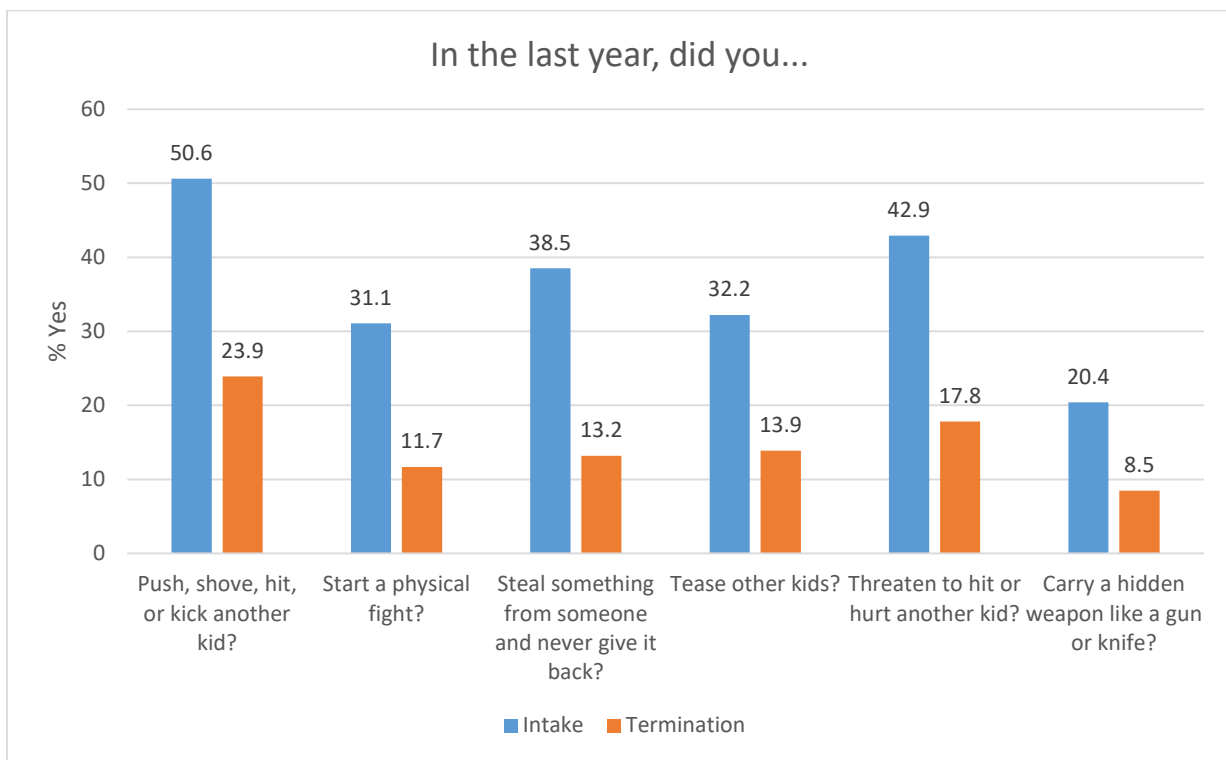
<sup>a</sup> Calculated from the raw National Survey of Children Exposed to Violence (NATSCEV) data. <sup>b</sup> Obtained from Finkelhor, D., Hamby, S.L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. *Child Abuse and Neglect*, 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 VDO. 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, 31.1% of youth reported starting a physical fight in the past year. At termination, 11.7% of youth had started a fight since intake into BHJJ. Chi-square testing revealed all pre/post comparisons were statistically significant.

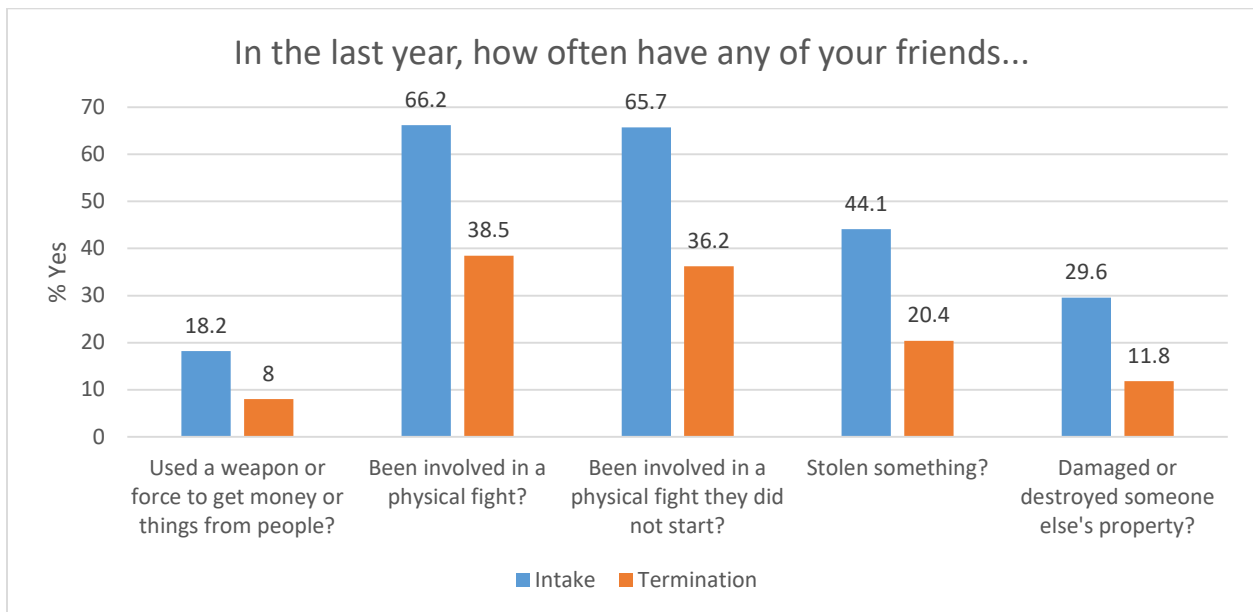
Figure 5



## Peer delinquency

Youth also reported significantly less peer delinquency at termination than intake (see Figure 6). For example, at intake, 66.2% of youth reported that at least one of their friends had been involved in a physical fight. At termination from BHJJ, 38.5% of youth reported that at least one of their friends had been involved in a physical fight. Chi-square testing revealed all pre/post comparisons were statistically significant.

Figure 6



## TSCC

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 scale indicated that of the 3,799 completed intake TSCC surveys, 20.5% (n = 780) contained t-scores at 70 or higher while of the 1,993 completed termination TSCC surveys, 36.3% (n = 724) contained t-scores at 70 or higher. A similar examination of the Hyperresponse scale revealed that 1.2% (n = 46) scored 90 or above on the intake TSCC while 0.6% (n = 12) scored 90 or above on the termination TSCC. 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.

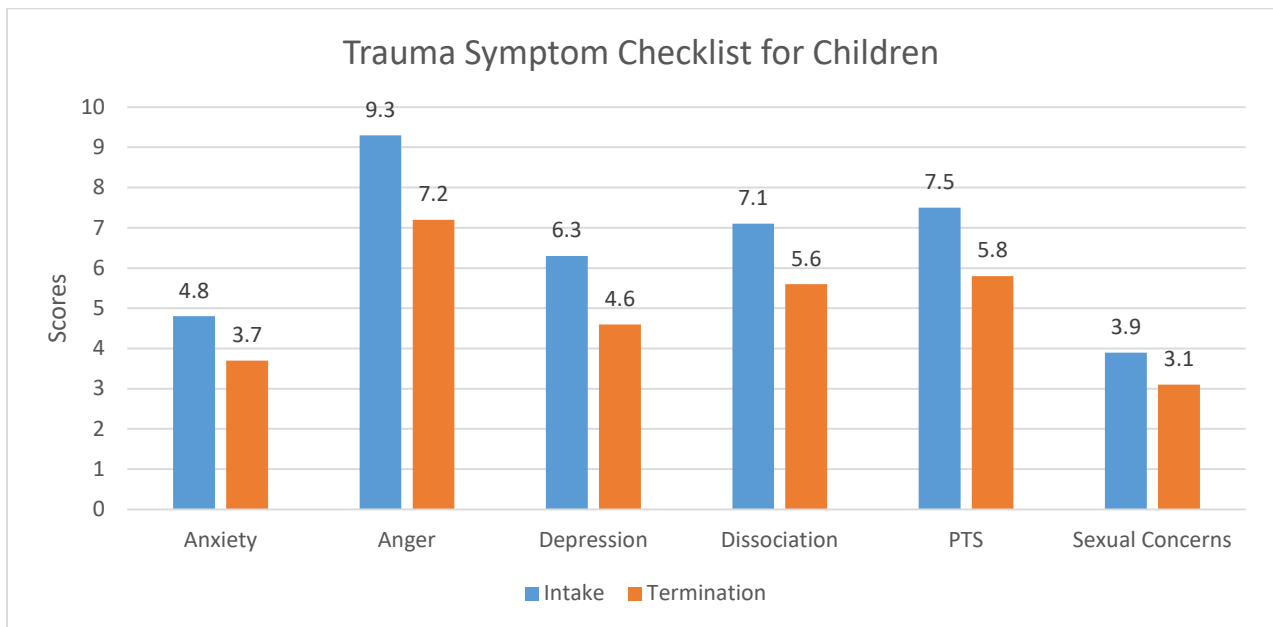
Overall, results from paired samples t-tests indicated that there were significant symptom reductions on all subscales from intake to termination (see Table 24). Statistically significant improvements were found on the Anxiety scale;  $t(1,014) = 10.28, p < .001$ , the Depression scale;  $t(1,014) = 13.14, p < .001$ , the Anger scale;  $t(1,014) = 12.71, p < .001$ , the Posttraumatic Stress scale;  $t(1,013) = 11.29, p < .001$ , the Dissociation scale;  $t(1,009) = 10.99, p < .001$ , and the Sexual Concerns scale;  $t(1,012) = 7.20, p < .001$ . Considering Cohen’s (1988) established cutoffs, small effects were found for all subscales. 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 24. TSCC Subscales from Intake to Termination

	Intake	Termination	t	d
<b>Anxiety</b>	4.84 (SD=3.95; n=1,015)	3.71 (SD=3.31; n=1,015)	10.28***	.33
<b>Depression</b>	6.32 (SD=4.84; n=1,015)	4.57 (SD=3.74; n=1,015)	13.13***	.42
<b>Anger</b>	9.26 (SD=5.51; n=1,015)	7.18 (SD=4.79; n=1,015)	12.71***	.40
<b>Posttraumatic Stress</b>	7.46 (SD=5.44; n=1,014)	5.79 (SD=4.70; n=1,014)	11.29***	.36
<b>Dissociation</b>	7.10 (SD=4.85; n=1,010)	5.60 (SD=4.30; n=1,010)	10.99***	.34
<b>Sexual Concerns</b>	3.85 (SD=3.59; n=1,013)	3.13 (SD=3.43; n=1,013)	7.20***	.23

\* < .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 8.8 for females and 4.9 for males. Paired samples t-tests revealed significant improvements in trauma symptoms for each subscale at termination for both females and males (See Table 25).

Table 25. TSCC Subscales from Intake to Termination among Females

Females	Intake	Termination	t	d
Anxiety	6.56 (SD=4.28; n=369)	4.95 (SD=3.77; n=369)	8.22***	.43
Depression	8.76 (SD=5.12; n=369)	6.25 (SD=3.92; n=369)	10.01***	.53
Anger	10.60 (SD=5.97; n=369)	8.01 (SD=5.09; n=369)	8.45***	.44
Posttraumatic Stress	9.48 (SD=5.67; n=369)	7.24 (SD=5.13; n=369)	8.48***	.44
Dissociation	8.51 (SD=5.14; n=367)	6.59 (SD=4.66; n=367)	7.80***	.41
Sexual Concerns	4.16 (SD=3.75; n=369)	3.21 (SD=3.76; n=369)	4.92***	.26

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

Figure 8

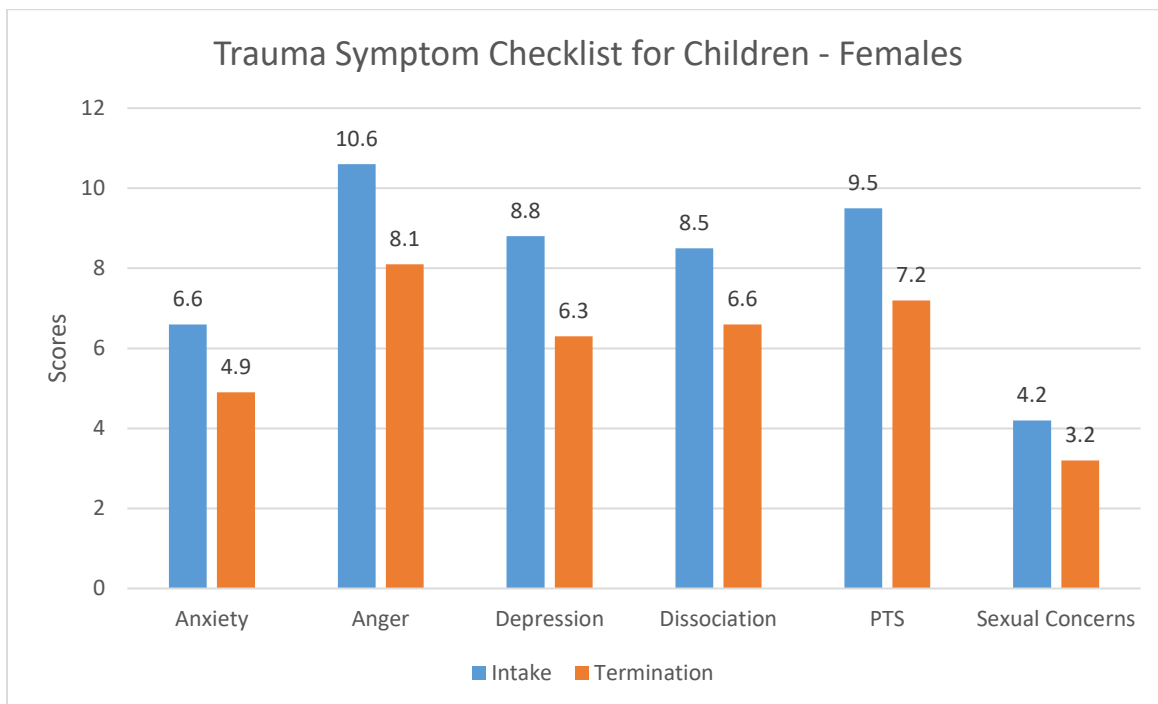
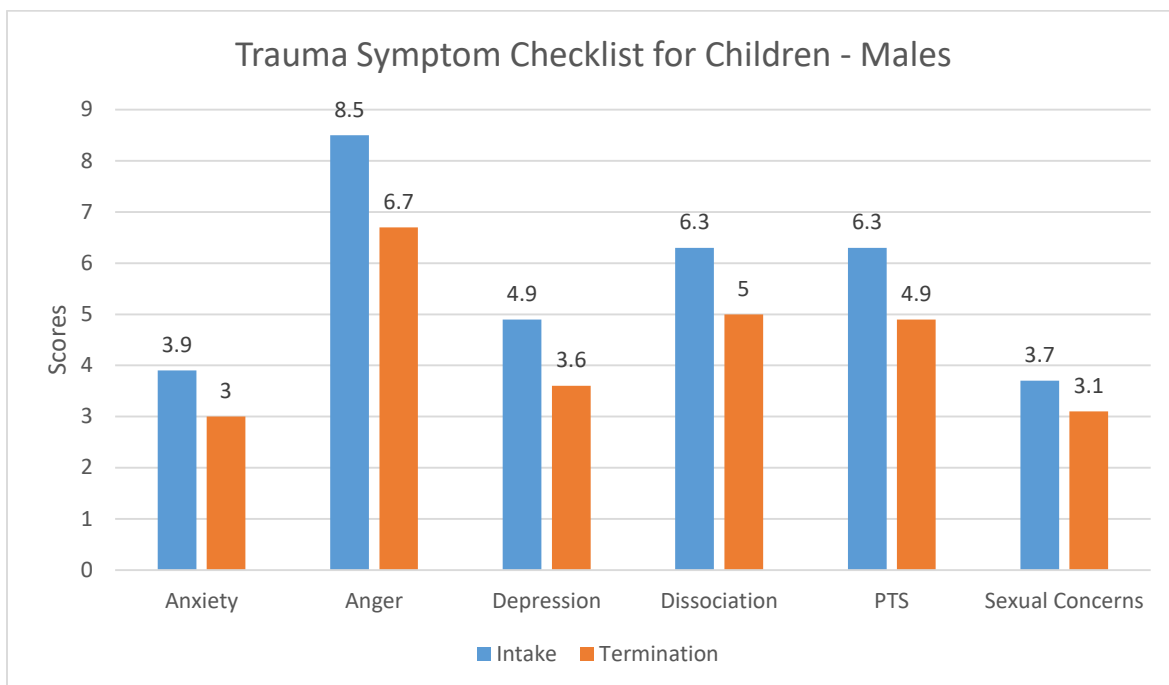


Table 26. TSCC Subscales from Intake to Termination for Males

Males	Intake	Termination	t	d
Anxiety	3.86 (SD=3.39; n=646)	2.99 (SD=2.78; n=646)	6.56***	.26
Depression	4.93 (SD=4.07; n=646)	3.60 (SD=3.26; n=646)	8.71***	.35
Anger	8.50 (SD=5.09; n=646)	6.65 (SD=4.52; n=646)	9.51***	.37
Posttraumatic Stress	6.31 (SD=4.96; n=645)	4.96 (SD=4.23; n=645)	7.66***	.30
Dissociation	6.28 (SD=4.48; n=643)	5.03 (SD=3.98; n=643)	7.79***	.31
Sexual Concerns	3.67 (SD=3.48; n=644)	3.08 (SD=3.22; n=644)	5.25***	.21

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

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 27 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. Chi-square tests revealed that significantly more females than males reported lifetime use of cocaine, pain killers, ecstasy, tranquilizers, and heroin. A significantly higher proportion of males reported lifetime use of chewing tobacco and marijuana. One percent of males (n = 24) and 2.8% of females (n = 40) reported lifetime use of heroin.

For the three most commonly reported substances, we examined whether youth who had reported no lifetime use at intake had reported any use at termination. Among youth reporting no lifetime use of alcohol at intake, 25.0% (n = 127) of males and 16.5% (n = 47) of females reported any use at termination. Of those who reported no cigarette use at intake, 18.7% (n = 108) of males and 12.7% (n = 41) of females reported any use at termination. Among those who reported no lifetime use of marijuana at intake, 17.7% (n = 62) of males and 14.7% (n = 39) of females reported marijuana use at termination.

Table 27. Self-Reported Substance Use at Intake for All BHJJ Youth

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
<b>Alcohol</b>	60.5% (n = 1487)	13.28 (SD = 2.16)	63.3% (n = 910)	13.38 (SD = 1.83)
<b>Cigarettes</b>	56.2% (n = 1377)	12.73 (SD = 3.24)	57.0% (n = 825)	12.71 (SD = 2.27)
<b>Chewing Tobacco</b>	14.8% (n = 359) <sup>***</sup>	13.58 (SD = 2.77)	5.0% (n = 72)	13.91 (SD = 2.03)
<b>Marijuana</b>	72.2% (n = 1775) <sup>***</sup>	13.08 (SD = 2.64)	64.4% (n = 929)	13.26 (SD = 1.77)
<b>Cocaine</b>	5.0% (n = 123)	14.65 (SD = 1.91)	9.5% (n = 136) <sup>***</sup>	14.62 (SD = 1.55)
<b>Pain Killers (use inconsistent with prescription)</b>	14.3% (n = 352)	14.13 (SD = 1.72)	17.2% (n = 248) <sup>*</sup>	14.14 (SD = 1.58)
<b>GHB</b>	0.2% (n = 5)	14.75 (SD = 0.96)	0.3% (n = 4)	14.25 (SD = 1.26)
<b>Inhalants</b>	3.2% (n = 78)	13.68 (SD = 2.08)	3.3% (n = 48)	13.45 (SD = 2.12)
<b>Heroin</b>	1.0% (n = 24)	14.92 (SD = 1.39)	2.8% (n = 40) <sup>***</sup>	14.60 (SD = 1.38)
<b>Amphetamines</b>	3.4% (n = 84)	14.97 (SD = 6.06)	3.6% (n = 51)	13.98 (SD = 1.91)
<b>Ritalin (use inconsistent with prescription)</b>	7.8% (n = 191)	13.15 (SD = 3.04)	8.8% (n = 127)	13.89 (SD = 1.72)
<b>Barbiturates</b>	1.5% (n = 38)	14.38 (SD = 1.23)	2.4% (n = 35) <sup>*</sup>	14.36 (SD = 1.22)
<b>Non-prescription Drugs</b>	7.3% (n = 179)	14.19 (SD = 2.05)	8.5% (n = 122)	13.98 (SD = 1.69)
<b>Hallucinogens</b>	6.8% (n = 166)	14.58 (SD = 1.53)	6.0% (n = 86)	14.65 (SD = 1.41)
<b>PCP</b>	1.3% (n = 31)	14.66 (SD = 1.52)	1.5% (n = 22)	14.52 (SD = 1.03)
<b>Ketamine</b>	0.7% (n = 18)	15.35 (SD = 1.12)	1.3% (n = 19)	14.50 (SD = 1.47)
<b>Ecstasy</b>	5.5% (n = 135)	14.68 (SD = 1.67)	7.1% (n = 102) <sup>*</sup>	14.47 (SD = 1.37)
<b>Tranquilizers</b>	9.6% (n = 236)	14.53 (SD = 1.53)	11.7% (n = 168) <sup>*</sup>	14.45 (SD = 1.45)

<sup>\*</sup>p < .05, <sup>\*\*\*</sup>p < .001

## 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, marijuana, cigarette, pain killer, and tranquilizer use among both genders. For females, tests showed a significant decrease from intake to termination in six-month cocaine use. For males, there was a significant decrease from intake to termination in six-month tobacco chew use.

The percentage of males using alcohol in the past six months dropped from 53.8% (n = 766) to 39.4% (n = 279) from intake to termination. For females, 60.2% (n = 512) reported past six-month use at intake while 32.3% (n = 132) reported past six-month alcohol use at termination. Over three-quarters of males (75.7%, n = 1015) and females (80.2%, n = 644) reported past six-month cigarette use at intake. At termination, 72.8% of males (n = 458) and 75.3% (n = 289) of females reported past six-month cigarette use.

Past six-month marijuana use declined from 73.1% (n = 1256) at intake to 51.8% (n = 449) at termination for males and 69.1% (n = 618) at intake and 40.8% (n = 175) at termination for females. Self-report pain killer use in the past six months declined from 47.1% (n = 155) to 22.4% (n = 30) in males and from 59.5% (n = 135) to 22.7% (n = 22) in females. Less than 50% of females (49.2%, n = 64) reported past six-month cocaine use at intake while 11.1% (n = 6) reported past six-month cocaine use at termination. At intake, 52.5% (n = 85) of females and 42.3% (n = 96) of males reported past six-month tranquilizer use while 17.1% (n = 12) of females and 24.7% (n = 24) of males had used tranquilizers at termination. Nearly 50% of males (49.1%, n = 171) of males reported past six-month use of chewing tobacco while 35.8% (n = 53) reported six-month use at termination.



Figure 10

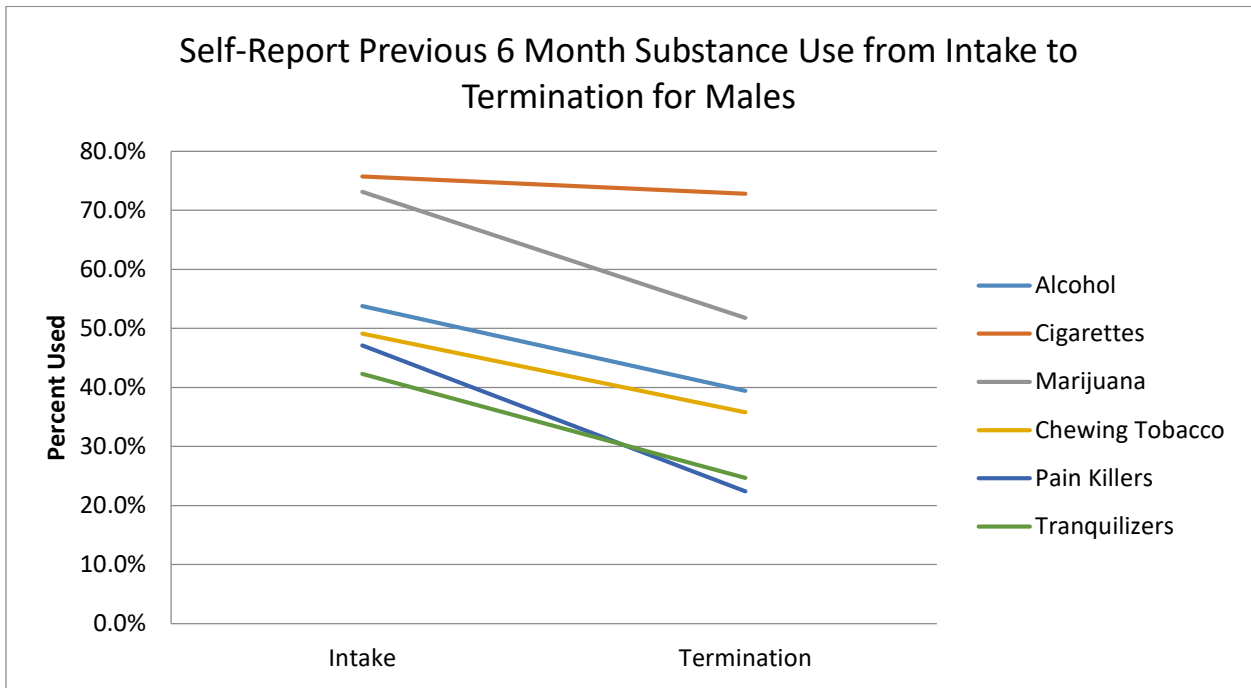
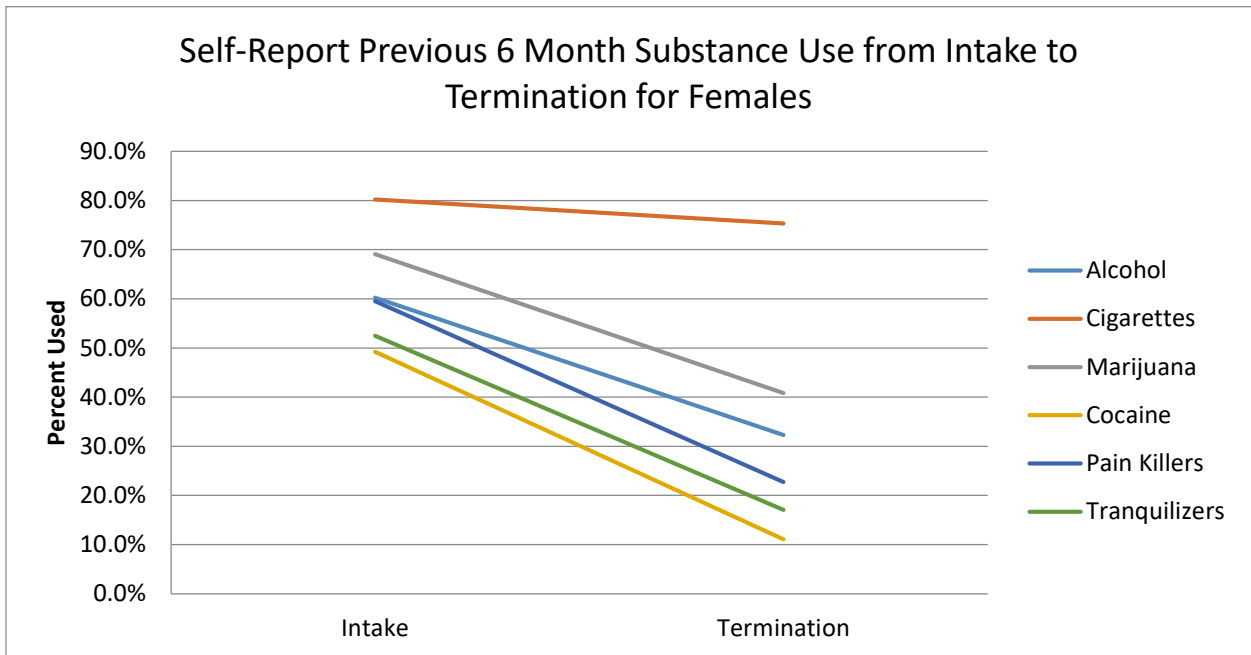


Figure 11



### 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 show the percentage of those youth who reported any 30 day use for the three most commonly reported substances by gender (alcohol, cigarettes, and marijuana). 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. The data show a reduction in past 30-day use of all of the most commonly reported substances from intake to termination. Past 30-day use of alcohol declined from 54.9% (n = 346) at intake to 37.5% (n = 75) at termination for males and from 54.7% (n = 235) at intake to 32.3% (n = 40) at termination for females. Past 30-day use of cigarettes declined from 89.0% (n = 796) at intake to 83.5% (n = 325) at termination for males and decreased from 89.2% (n = 510) at intake to 85.1% (n = 228) at termination for females. For males, past 30-day marijuana use declined from 65.5% (n = 694) at intake to 49.0% (n = 189) at termination and from 60.8% (n = 310) to 37.7% (n = 63) for females.

Figure 12

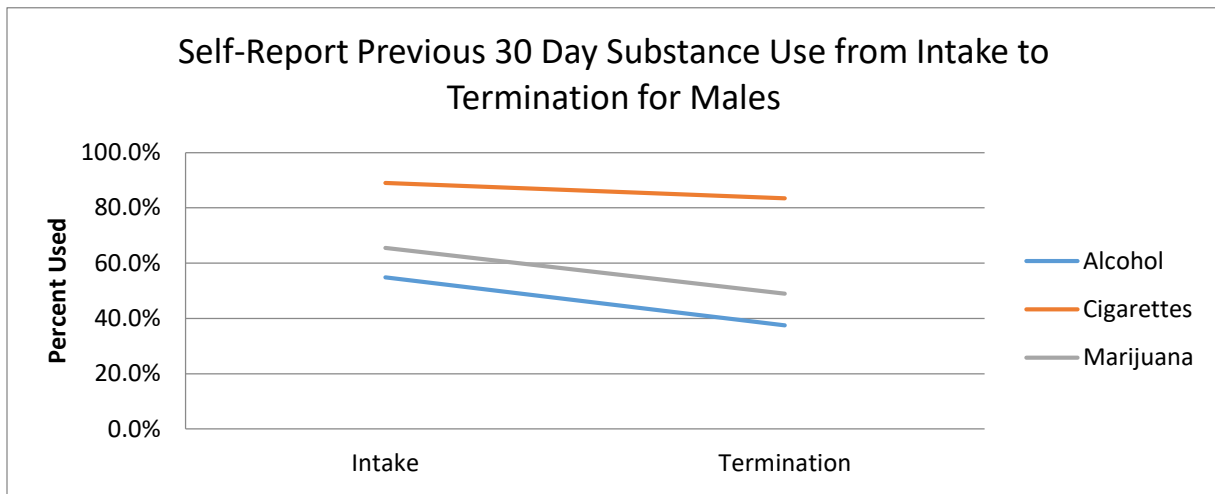
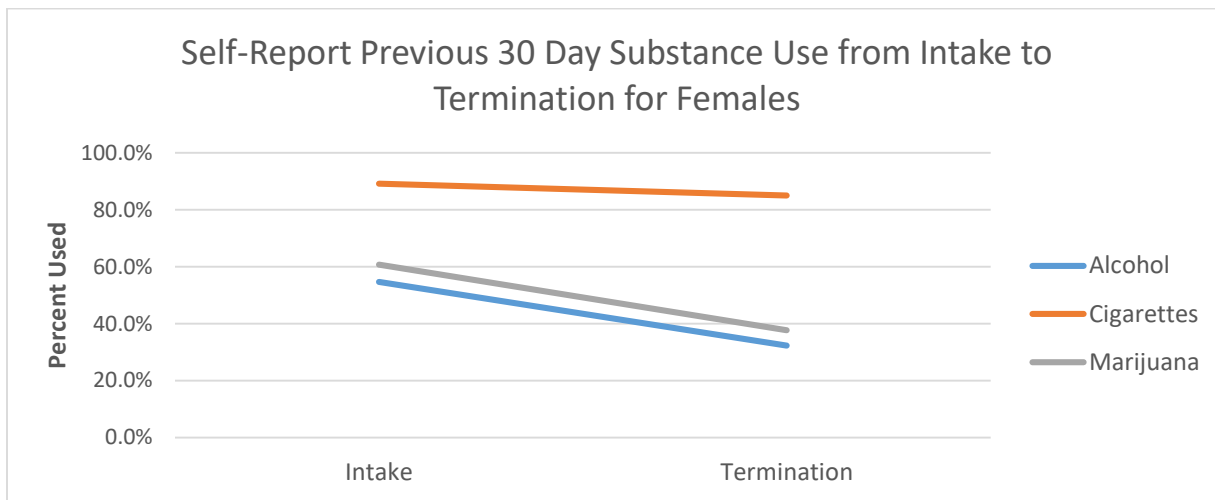


Figure 13



In addition to the percentage of youth reporting 30 day use, Figure 14 and Figure 15 present the average number of days youth reported using alcohol, cigarettes, and marijuana 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. In the past 30 days, males reported using alcohol for an average of 2.07 days (SD = 4.62; n = 630) at intake and 1.13 days at termination (SD = 2.59; n = 200). Females reported using alcohol for an average of 2.42 days (SD = 5.79; n = 430) at intake and 1.29 days (SD = 3.96; n = 124) at termination. For marijuana, males reported using for an average of 6.88 days (SD = 10.79; n = 1059) out of the past 30 days at intake and 5.37 days (SD = 10.10; n = 386) at termination while females reported using for an average of 5.84 days (SD = 9.56; n = 510) at intake and 3.51 days (SD = 7.06; n = 167) at termination. Paired samples t-tests revealed a statistically significant decrease in the average number of days from intake to termination for marijuana for both males and females.

Figure 14

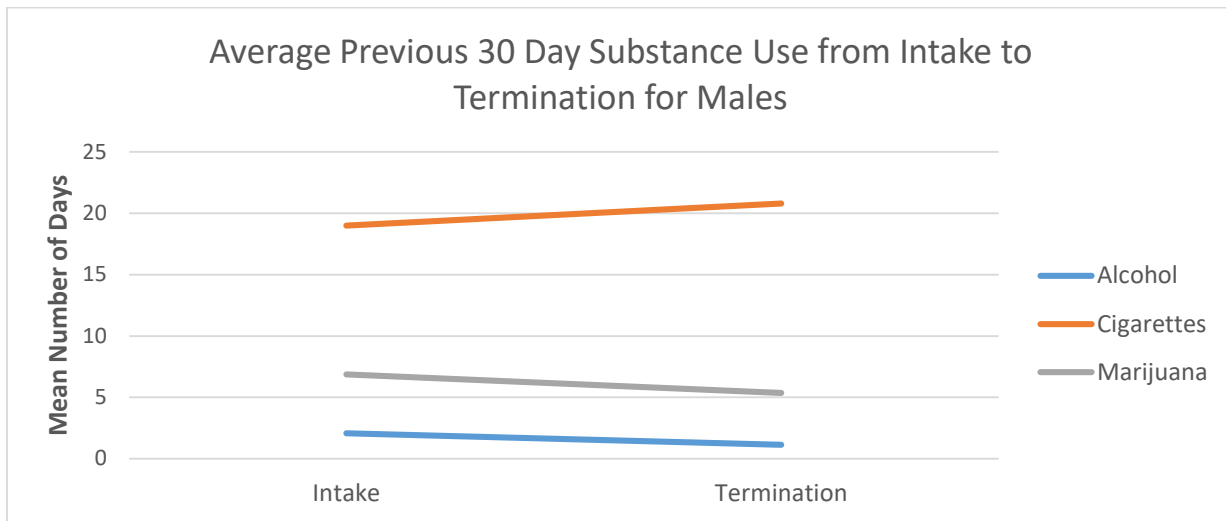
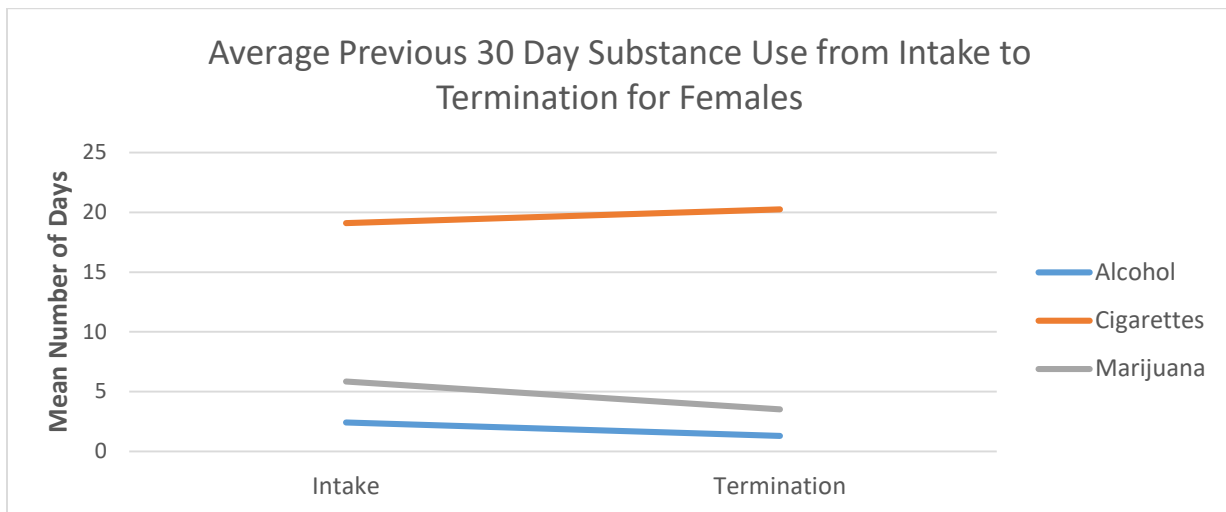


Figure 15



## 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 3,485 youth terminated from the BHJJ program. Nearly 66% (65.7%, n = 2,290) of the youth terminated from the BHJJ program were identified as successful treatment completers. Ninety-three youth (2.7%) were terminated from the program when the youth or family moved out the county. Therefore, over two thirds of the BHJJ sample either successfully completed programming or moved out of the county and were not able to receive services. About 3% (2.9%, n = 102) of youth were terminated due to some level of incarceration. The most frequently identified termination reason that fell into the 'other' category included aging out of the program and changes in the person with custody of the youth. In the latest evaluation period that began July 2015 and ended in June 2017, 63.7% (n = 270) of BHJJ youth terminated successfully. Table 28 presents all of the reasons for termination from BHJJ.

Table 28. Reasons for Termination from BHJJ

Termination Reason	All Youth	Youth Enrolled between July 2015 and June 2017
<b>Successfully Completed Services</b>	65.7% (n = 2,290)	63.7% (n = 270)
<b>Client Did Not Return/Rejected Services</b>	6.1% (n = 211)	4.3% (n = 18)
<b>Out of Home Placement</b>	8.1% (n = 281)	9.2% (n = 39)
<b>Client/Family Moved</b>	2.7% (n = 93)	2.4% (n = 10)
<b>Client Withdrawn</b>	6.4% (n = 223)	7.8% (n = 33)
<b>Client AWOL</b>	3.0% (n = 103)	2.6% (n = 11)
<b>Client Incarcerated</b>	2.9% (n = 102)	3.3% (n = 14)
<b>Other</b>	5.2% (n = 182)	6.8% (n = 29)

## Average Length of Stay

The average length of stay in the BHJJ program was 202 days. For youth identified as completing treatment successfully, the average length of stay was 201 days and for youth identified as unsuccessful treatment completers, the average length of stay was 171 days. For youth enrolled since July 1, 2015, the average length of stay in BHJJ was 169 days with successful treatment completers averaging 175 days and unsuccessful treatment completers averaging 144 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, 55.8% of the youth (n = 1,961) were at risk for out of home placement. At termination, 25.0% (n = 852) of youth were at risk for out of home placement. Of those youth who successfully completed BHJJ treatment, 8.2% (n = 184) were at risk for

out of home placement at termination while 58.0% (n = 659) of youth who completed unsuccessfully were at risk for out of home placement.

## Police Contacts

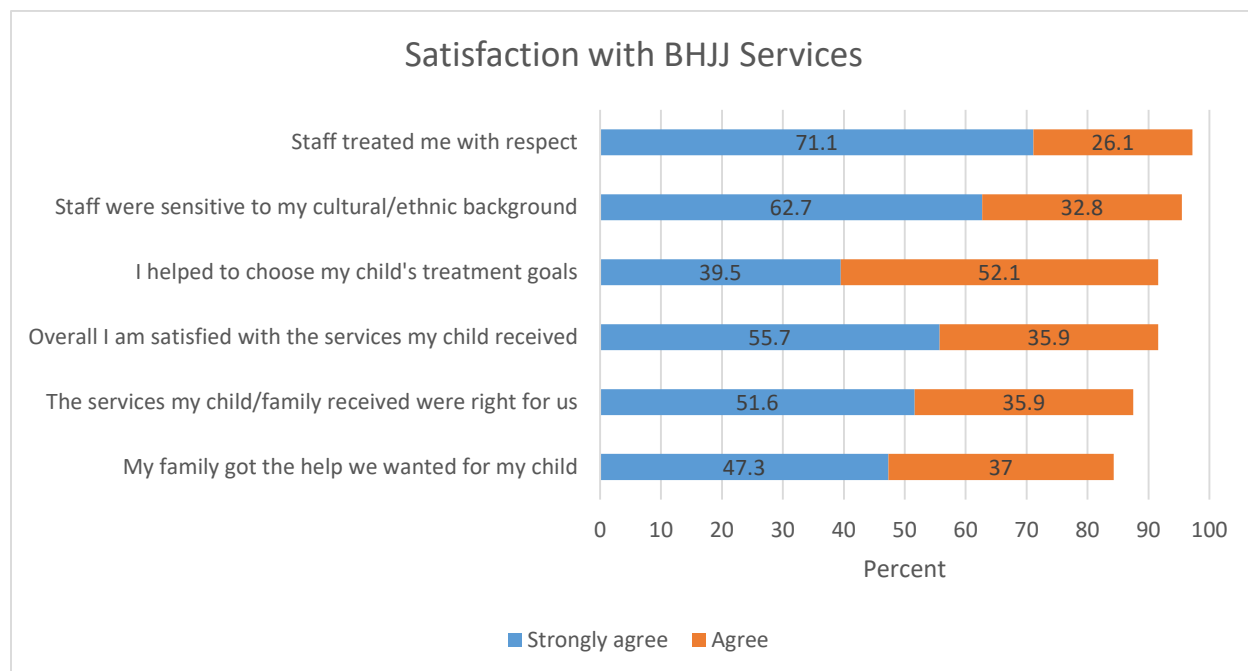
With help from the caregiver and youth, the worker was asked to estimate the frequency of police contacts since the youth has been receiving mental health services through BHJJ. Workers reported that police contacts had been reduced for 68.6% (n = 1,842) of the youth and had stayed the same for 22.9% (n= 616) of the youth. Police contacts increased for 6.1% (n = 163) of the youth and the worker was unable to estimate for 2.4% of youth (n = 65).

## YSSF

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, 91.6% (n = 1,274) of caregivers either strongly agreed or agreed that they were satisfied with the services their child received and 87.5% (n = 1,213) either strongly agreed or agreed that the services their child and/or family receive were right for them (see Figure 16). A strong majority (97.2%, n = 1,351) of caregivers either strongly agreed or agreed that staff treated them with respect and 95.5% (n = 1,314) indicated that they strongly agreed or agreed with the statement that they were satisfied with the cultural and ethnic sensitivity of BHJJ staff.

Figure 16



## Recidivism

### Methodology

Court data were provided by the local juvenile courts in each BHJJ county, 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, and 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.

The data presented here consists of juvenile court history and recidivism data for all of the counties that have participated in the BHJJ program since 2006. Some of the original counties are still participating in the program, while others are no longer involved. Up to date recidivism information was not gathered for those counties that are no longer participating. For those counties, the data collection date was adjusted to reflect the last date of their participation in the BHJJ program. Adjudication information was not provided for two former BHJJ counties and thus those counties are not included in the present adjudication analyses. Information on the dates of participation can be found in Table 3.

## Results

### Previous Juvenile Court Involvement

Overall, 68.9% (n = 2,828) of BHJJ youth had a misdemeanor charge, 34.2% (n = 1,405) had a felony charge, and 66.5% (n = 2,732) had been adjudicated delinquent in the 12 months prior to enrollment (see Table 29). Previous juvenile court information was similar for youth regardless of completion status (successful vs. unsuccessful; see Table 30 and Table 31). In the 12 months prior to enrollment, the same proportion of successful completers (66.9%, n = 1,500) and unsuccessful completers (66.9%, n = 773) were adjudicated delinquent in the 12 months prior to their enrollment in BHJJ. A slightly higher percentage of successful completers had a felony charge in the 12 months prior to intake (34.0%; n = 761) than unsuccessful completers (33.9%; n = 392). Chi-square analyses revealed that a significantly higher percentage of unsuccessful completers (71.2%; n = 822) than successful completers (67.9%; n = 1,522) were charged with a misdemeanor offense in the 12 months prior to intake. No statistically significant differences in prior felony charges and delinquent adjudications based on program completion status emerged.

Table 29. Charges Prior to Enrollment

	<b>% of Youth with Misdemeanors</b>	<b>% of Youth with Felonies</b>	<b>% of Youth Adjudicated Delinquent</b>
<b>3 months (N = 4,106)</b>	36.4% (n = 1,495)	14.2% (n = 581)	33.1% (n = 1,358)
<b>6 months (N = 4,106)</b>	55.5% (n = 2,280)	25.3% (n = 1,038)	53.1% (n = 2,179)
<b>12 months (N = 4,106)</b>	68.9% (n = 2,828)	34.2% (n = 1,405)	66.5% (n = 2,732)
<b>18 months (N = 4,106)</b>	73.5% (n = 3,017)	37.1% (n = 1,523)	70.4% (n = 2,890)

Table 30. Charges Prior to BHJJ Enrollment for Youth Who Completed Successfully

	<b>% of Youth with Misdemeanors</b>	<b>% of Youth with Felonies</b>	<b>% of Youth Adjudicated Delinquent</b>
<b>3 months (N = 2,241)</b>	35.7% (n = 801)	13.2% (n = 296)	32.0% (n = 717)
<b>6 months (N = 2,241)</b>	55.0% (n = 1,232)	24.5% (n = 550)	53.3% (n = 1,194)
<b>12 months (N = 2,241)</b>	67.9% (n = 1,522)	34.0% (n = 761)	66.9% (n = 1,500)
<b>18 months (N = 2,241)</b>	72.9% (n = 1,633)	36.9% (n = 827)	70.9% (n = 1,586)

Table 31. Charges Prior to BHJJ Enrollment for Youth Who Completed Unsuccessfully

	<b>% of Youth with Misdemeanors</b>	<b>% of Youth with Felonies</b>	<b>% of Youth Adjudicated Delinquent</b>
<b>3 months (N = 1,155)</b>	36.6% (n = 423)	14.0% (n = 162)	34.0% (n = 393)
<b>6 months (N = 1,155)</b>	56.6% (n = 654)	24.8% (n = 287)	52.9% (n = 611)
<b>12 months (N = 1,155)</b>	71.2% (n = 822)	33.9% (n = 392)	66.9% (n = 773)
<b>18 months (N = 1,155)</b>	75.7% (n = 874)	36.0% (n = 416)	70.9% (n = 819)

### Trends in Felony Charges

We examined trends in felony charges at the county level and found some differences in the proportion of felony level youth enrolled in BHJJ in the current evaluation period compared to the previous evaluation period. In the previous report, 38.2% of youth enrolled during 2013-2015 were charged with a felony in the 12 months prior to enrollment (these data vary by county, see Table 32). For the current reporting period, 35.3% of youth enrolled in the counties participating in BHJJ were charged with a felony in the 12 months prior to enrollment. This represents a 7.59% decrease in the percentage of youth coming into the program with at least one felony charge in the 12 months prior to enrollment. Cuyahoga (38.5% proportional increase), Hamilton (39.2% proportional increase), Lucas (4.54% proportional increase), and Summit (5.95% proportional increase) counties all saw noticeable increases in the proportion of felony level youth enrolled in the current reporting period.

Table 32. Number of Youth with Felony Charges in the 12 Months Prior to Enrollment among Current BHJJ Counties

<b>County</b>	<b>2013-2015</b>	<b>2015-2017</b>
<b>Ashtabula</b>	n/a	12.5% (n = 2)
<b>Cuyahoga</b>	39.7% (n = 31)	55.0% (n = 44)
<b>Franklin</b>	78.8% (n = 82)	73.5% (n = 36)
<b>Hamilton</b>	30.6% (n = 19)	42.6% (n = 20)
<b>Holmes</b>	9.1% (n = 1)	0.0% (n = 0)
<b>Lorain</b>	22.2% (n = 8)	22.2% (n = 12)
<b>Lucas</b>	70.5% (n = 43)	73.7% (n = 14)
<b>Mahoning</b>	22.7% (n = 5)	0.0% (n = 0)
<b>Montgomery</b>	20.1% (n = 90)	15.1% (n = 38)
<b>Summit</b>	92.4% (n = 73)	97.9% (n = 46)
<b>Trumbull</b>	15.8% (n = 3)	11.1% (n = 2)
<b>Wayne</b>	7.7% (n = 1)	22.2% (n = 2)
<b>Total</b>	38.2% (n = 356)	35.3% (n = 216)



### 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. In the 12 months after enrollment in BHJJ, 53.5% (n = 1,743) were charged with at least one new misdemeanor and 22.1% (n = 719) were charged with at least one new felony (see Table 33). Less than 47% (46.8%; n = 1,525) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ.

Table 33. Recidivism after BHJJ Enrollment

	<b>% of Youth with Misdemeanors</b>	<b>% of Youth with Felonies</b>	<b>% of Youth Adjudicated Delinquent</b>
<b>3 months (N = 3,752)</b>	21.6% (n = 812)	7.1% (n = 268)	20.5% (n = 770)
<b>6 months (N = 3,588)</b>	35.3% (n = 1,267)	13.2% (n = 475)	31.4% (n = 1,127)
<b>12 months (N = 3,257)</b>	53.5% (n = 1,743)	22.1% (n = 719)	46.8% (n = 1,525)
<b>18 months (N = 2,982)</b>	65.1% (n = 1,941)	29.0% (n = 866)	57.2% (n = 1,705)

In the 12 months after enrollment in BHJJ, 48.5% (n = 882) of successful completers were charged with at least one new misdemeanor, 16.3% (n = 297) were charged with at least one new felony, and 40.9% (n = 743) were adjudicated delinquent (see Table 34). Of the youth who completed unsuccessfully, 59.7% (n = 559) were charged with at least one new misdemeanor, 30.8% (n = 289) were charged with at least one new felony, and 55.7% (n = 522) were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 35). Chi-square analyses revealed that a significantly higher percentage of unsuccessful completers were charged with misdemeanors, felonies, and adjudicated delinquent than successful completers at each of the examined time points after enrollment.

Table 34. Recidivism after BHJJ Enrollment for Youth Who Completed Successfully

	<b>% of Youth with Misdemeanors</b>	<b>% of Youth with Felonies</b>	<b>% of Youth Adjudicated Delinquent</b>
<b>3 months (N = 2,092)</b>	17.4% (n = 364)	4.6% (n = 96)	16.9% (n = 353)
<b>6 months (N = 2,010)</b>	29.5% (n = 593)	8.6% (n = 172)	25.9% (n = 520)
<b>12 months (N = 1,817)</b>	48.5% (n = 882)	16.3% (n = 297)	40.9% (n = 743)
<b>18 months (N = 1,641)</b>	61.7% (n = 1,013)	22.5% (n = 370)	52.5% (n = 861)

Table 35. Recidivism after BHJJ Enrollment for Youth Who Completed Unsuccessfully

	<b>% of Youth with Misdemeanors</b>	<b>% of Youth with Felonies</b>	<b>% of Youth Adjudicated Delinquent</b>
<b>3 months (N = 1,057)</b>	27.9% (n = 295)	10.3% (n = 109)	25.8% (n = 273)
<b>6 months (N = 1,023)</b>	42.7% (n = 437)	20.4% (n = 209)	40.0% (n = 409)
<b>12 months (N = 937)</b>	59.7% (n = 559)	30.8% (n = 289)	55.7% (n = 522)
<b>18 months (N = 879)</b>	68.1% (n = 599)	38.3% (n = 337)	63.1% (n = 555)

### Recidivism after BHJJ Termination

We defined recidivism after termination as receiving a new charge or adjudication any time after a youth’s BHJJ termination date. In the 12 months after termination from BHJJ, 49.9% (n = 1,188) of youth were charged with at least one new misdemeanor and 21.3% (n = 507) were charged with at least one new felony (see Table 36). A little more than 43% (43.1%; n = 1,026) of youth were adjudicated delinquent in the 12 months following their termination from BHJJ.

Table 36. Recidivism after BHJJ Termination

	<b>% of Youth with Misdemeanors</b>	<b>% of Youth with Felonies</b>	<b>% of Youth Adjudicated Delinquent</b>
<b>3 months (N = 2,880)</b>	18.0% (n = 517)	6.5% (n = 186)	16.4% (n = 471)
<b>6 months (N = 2,666)</b>	30.2% (n = 804)	12.4% (n = 331)	26.7% (n = 712)
<b>12 months (N = 2,379)</b>	49.9% (n = 1,188)	21.3% (n = 507)	43.1% (n = 1,026)
<b>18 months (N = 2,119)</b>	63.2% (n = 1,340)	28.9% (n = 612)	54.1% (n = 1,147)

In the 12 months following their termination from BHJJ, 47.8% (n = 683) of successful completers were charged with at least one new misdemeanor, 17.8% (n = 254) were charged with at least one new felony, and 39.7% (n = 567) were adjudicated delinquent (see Table 37). Of the youth who completed unsuccessfully, 45.6% (n = 353) were charged with at least one new misdemeanor, 23.9% (n = 185) were charged with at least one new felony, and 41.9% (n = 324) were adjudicated delinquent in the 12 months after their termination from BHJJ (Table 38). Chi-square analyses showed that a significantly higher percentage of youth who terminated unsuccessfully were charged with felonies than youth who terminated successfully in each of the time periods examined following termination.

Table 37. Recidivism after BHJJ Termination for Youth Who Completed Successfully

	<b>% of Youth with Misdemeanors</b>	<b>% of Youth with Felonies</b>	<b>% of Youth Adjudicated Delinquent</b>
<b>3 months (N = 1,819)</b>	15.5% (n = 282)	5.3% (n = 96)	14.1% (n = 256)
<b>6 months (N = 1,643)</b>	27.9% (n = 459)	9.9% (n = 163)	23.7% (n = 390)
<b>12 months (N = 1,428)</b>	47.8% (n = 683)	17.8% (n = 254)	39.7% (n = 567)
<b>18 months (N = 1,247)</b>	60.9% (n = 759)	24.6% (n = 307)	50.3% (n = 627)

Table 38. Recidivism after BHJJ Termination for Youth Who Completed Unsuccessfully

	<b>% of Youth with Misdemeanors</b>	<b>% of Youth with Felonies</b>	<b>% of Youth Adjudicated Delinquent</b>
<b>3 months (N = 962)</b>	16.8% (n = 162)	7.2% (n = 69)	16.3% (n = 157)
<b>6 months (N = 885)</b>	27.2% (n = 241)	13.2% (n = 117)	25.6% (n = 227)
<b>12 months (N = 774)</b>	45.6% (n = 353)	23.9% (n = 185)	41.9% (n = 324)
<b>18 months (N = 685)</b>	60.3% (n = 413)	33.0% (n = 226)	54.3% (n = 372)

## Previous Felony

We analyzed the recidivism data further by examining youth who had been charged with a felony in the 12 months prior to intake. Of the 847 youth entering the program with at least one felony charge in the 12 months prior to intake and for whom data at 12 months after termination were available, 32.1% (n = 272) were charged with a new felony in the 12 months following termination. Nearly 68% of youth who were charged with a felony in the 12 months prior to their BHJJ enrollment were not charged with a new felony in the 12 months after their termination. We separated the data further based upon completion status. Twenty-seven percent (27.2%; n = 133) of youth with a felony charge in the 12 months prior to enrollment who successfully completed treatment were charged with a new felony 12 months following termination. Of those youth with a felony charge in the 12 months prior to enrollment who completed treatment unsuccessfully, 36.2% (n = 97) were charged with a new felony in the 12 months following termination.

## ODYS Commitments

Among the 3,679 BHJJ youth in the currently participating counties for whom we had recidivism data, 3.9% (n = 142) were sent to an ODYS facility at any time following their enrollment in BHJJ, including after a youth's termination from BHJJ (see Table 39). Conversely, 96.1% of youth participating in BHJJ were not admitted to an ODYS facility at any point after enrollment.

Table 39. ODYS Admissions for Youth Enrolled in BHJJ

BHJJ County	Number of Youth in Recidivism Analysis	Youth Committed to ODYS after BHJJ Enrollment
Ashtabula	19	0 (0.0%)
Cuyahoga	435	21 (4.8%)
Franklin	519	33 (6.4%)
Hamilton	298	18 (6.0%)
Holmes	24	0 (0.0%)
Lorain	100	3 (3.0%)
Lucas	220	17 (7.7%)
Mahoning	33	0 (0.0%)
Montgomery	1,700	21 (1.2%)
Summit	267	28 (10.5%)
Trumbull	40	1 (2.5%)
Wayne	24	0 (0.0%)
<b>Total</b>	<b>3,679</b>	<b>142 (3.9%)</b>

## Ohio Youth Assessment System

The Ohio Youth Assessment System (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. In this section we focus on the three risk levels; low, moderate, or high based on scores provided by each county's juvenile court. The OYAS scores provided by each of the juvenile courts were those closest to a youth's enrollment in BHJJ. While we used these data to predict future recidivism, we acknowledge that OYAS scores at termination would be more appropriate predictors of recidivism. Results should be interpreted with caution.

To test whether OYAS risk levels at intake predicted recidivism and successful completion of the BHJJ program, two separate analyses are presented. Chi-square analyses are presented to test the bivariate relationship between OYAS risk levels and recidivism as well as successful completion. Recidivism was defined as whether the individual had a new felony charge or a new delinquent adjudication within 12 months of termination. Table 40 shows the percentages of successful completion and recidivism by the OYAS risk categories. For example, of youth who scored high risk to reoffend on the OYAS at intake and who had available data at 12 months after termination, 37.7% were charged with a felony in the 12 months after termination. Chi-square analyses revealed significant group differences for the percentage of youth with a felony charge at 12 months after termination ( $\chi^2(2) = 40.60, p < .001$ ), the percentage of youth with delinquent adjudications ( $\chi^2(2) = 32.56, p < .001, n = 353$ ), and the percentage of those who successfully completed BHJJ treatment ( $\chi^2(2) = 45.83, p < .001$ ) by OYAS risk categories.

Table 40. Recidivism at 12 Months Following Termination and Percentage of Successful Completers by OYAS Risk Categories

	OYAS Low	OYAS Moderate	OYAS High
<b>Felony Charge at 12 months***</b>	17.1% (n = 74)	29.5% (n = 197)	37.7% (n = 116)
<b>Delinquent Adjudications at 12 months***</b>	41.4% (n = 179)	54.5% (n = 364)	61.7% (n = 190)
<b>Successful Completers***</b>	76.2% (n = 451)	66.9% (n = 601)	55.5% (n = 213)

Table 41 presents three separate models predicting recidivism at 12 months after termination and successful completion of BHJJ from gender, age, race, and OYAS risk categories. The model chi-square statistic indicated that the proposed model predicting delinquent adjudications at 12 months after termination represented the data well ( $\chi^2(5) = 84.10, p < .001, n = 1,330$ ). The odds of Males being adjudicated delinquent was 1.91 times higher than females, Nonwhite youth had 1.73 times greater odds, and each one-year increase in age was associated with 1.09 times greater odds of being adjudicated delinquent. In comparison to youth in the low risk category, the odds of being adjudicated delinquent for youth in the high risk category were 1.92 times higher.

The model predicting a felony charge within 12 months following termination represented the data well ( $\chi^2(5) = 150.08, p < .001, n = 1,330$ ). The odds of BHJJ males charged with a felony at 12 months after termination was 4.35 times greater than for BHJJ females and 2.21 times higher for Nonwhite youth. Compared to youth in the low risk category, the odds of a youth in the high risk category being charged with a felony within 12 months after termination was 2.17 times greater and 1.72 times greater for youth in the moderate risk category.

For the logistic regression model predicting successful completion from the BHJJ program, the proposed model represented the data well ( $\chi^2(5) = 45.25, p < .001, n = 1108$ ). The odds of successful completion for Nonwhite was 1.26 times less than for White youth. Compared to youth in the low risk category, the odds of successful BHJJ completion for youth in the high risk category was 2.38 times less and 1.54 times less for youth in the moderate risk category. These models suggest that the OYAS at intake predicts both recidivism and successful completion of BHJJ beyond what is explained by demographics.

Table 41. Logistic Regression Models Predicting Recidivism at 12 Months and Successful Completion

	Delinquent at 12 months			Felony at 12 Months			Successful Completion		
	B	SE B	e <sup>b</sup>	B	SE B	e <sup>b</sup>	B	SE B	e <sup>b</sup>
<b>Male (Female)</b>	.64***	.13	1.91	1.47***	.19	4.35	-.01	.00	0.99
<b>Age</b>	.08*	.04	1.09	.09	.05	1.09	-.03	.03	0.97
<b>Nonwhite (White)</b>	.55***	.12	1.73	.79***	.15	2.21	-.23*	.11	0.79
<b>OYAS Moderate (Low)</b>	.43**	.13	1.53	.54**	.17	1.72	-.43***	.12	0.65
<b>OYAS High (Low)</b>	.65***	.16	1.92	.78***	.19	2.17	-.86**	.15	0.42
<b>N</b>		1,330			1,330			1,770	
<b><math>\chi^2</math></b>		84.10***			150.08***			45.25***	
<b>Df</b>		5			5			5	

## Financial Implications

The FY16 per diem to house a youth at an Ohio Department of Youth Services institution was \$509 and the average length of stay was 11.6 months. Based on these numbers, the estimated cost of housing the average youth at an ODYS facility in FY16 was approximately \$177,132. Since 2006, 4,338 youth have been enrolled in BHJJ and the direct State contribution to the program has been approximately \$22.3 million. This does not include additional county resources, Medicaid dollars, or other sources of funding. Using these figures, the average cost per youth enrolled in BHJJ was \$5,140.

## 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

“J” was referred into ICT through the BHJJ program last year, and at the time, the client was on home detention. He was involved with BHJJ for many charges, including felonies. He was actively smoking THC, was constantly arguing with his mother – leaving the house without permission, being disrespectful, and yelling and swearing at her. He was struggling in school and was non-compliant with medication.

I spent a lot of time working with J on reducing his use of THC. I spent a lot of time talking with mom about different ways to communicate with him. Dad was able to come back from his home country in order to assist with parenting. He was considered the “disciplinarian” of the family, and J had difficulty seeing his mother as this when his father was deported. J was actually arrested during my time with him for a previous charge, and spent the holidays in the Detention Center.

We had several meetings at the school throughout his treatment in an effort to keep him on track to graduate. After much hard work and engagement with the family, J went to his prom, graduated from high school, was testing clean in his drug screens, and even got a job! It really took a lot of rapport building with mom because she was slow to trust me and struggled to make changes. After a lot of coaching, modeling, and challenging, mom was able to see the role she played in the behavior of her child and was able to make positive changes that improved her family’s functioning. He was closed successfully, and mom recently left me a message indicating that he continues to do well.

“D” was referred to ICT following two extended stays in the detention center due to felony aggravated robbery charges. D reports a history of marijuana and alcohol use but denies use since July 2016 due to being in the detention center. D was removed from his biological mother’s home around the age of 3 due to witnessing severe domestic violence, mother’s drug use, and physical abuse. He has a history of PTSD with dissociative features since the age of 5. He has lived with a relative since he was removed from his biological mother. He struggled in traditional school settings due to his negative behaviors and trauma symptoms.

D and his guardian engaged in individual and family therapy as well as case management services through Bellefaire. His guardian was somewhat resistant to the treatment process and it took multiple attempts to engage her in D's treatment, which we were able to do due to the flexibility with the ICT model to meet the clients and family where they are in the treatment process.

Once entering treatment, D tested negative for all tested substances the entire duration of treatment. D reports that he is not interested in smoking marijuana anymore. He was able to identify positive refusal skills, triggers, and coping skills. D has developed skills to maintain sobriety and avoid high risk situations. He did not receive new charges throughout treatment and followed all probation and household expectations. D was able to address his impulse control issues by weighing the pros/cons of his potential choice. D and his legal guardian reported that he was employed at a local restaurant. He was consistently putting in new job applications throughout treatment. Dave is motivated to receive his high school diploma or a GED. He was attending a charter school and had excellent attendance. He and his legal guardian reported no problematic behaviors within the home setting due to his level of compliance to the household expectations and appropriate communication skills.

### Franklin

The assigned officer received "E" almost a year ago. She was before the court on a M1 Attempted Assault charge. E was referred by the Magistrate for a BHJJ Assessment. The assessment was completed and family counseling was recommended. A referral was submitted to Family Functional Therapy – FFT through The Buckeye Ranch.

E is a very intelligent young lady and unfortunately has suffered numerous traumatic experiences. When E came to Care Coordination she was combative, verbally and physically aggressive, and could only yell and scream as a form of communication. There was also an almost non-existent relationship between E and her mother – they were disrespectful to each other and had very little knowledge on healthy communication skills.

E also had a difficult time at school with behavior and she had an active IEP for behavior. She had been removed from her original school and placed at another school because she became threatening with the Principal. Upon being transferred she was able to attend school half days due to her IEP. E tried to the best of her ability, and the assigned officer was quick to remind E "Progress not perfection!"

FFT entered the family's home in full force and was quickly able to get issues and problems prioritized. And along with learning about the family's different personalities, it was also helpful in teaching E and her mother to communicate. The next six months was full of ups and downs as well as strengths and weaknesses. But through it all E, her mother, the FFT Clinician, and the assigned officer maintained excellent contact and continued to build the "Team" relationship needed for all to be successful.

Today, E and her mother – with some minor issues – communicate on a new and much improved level. They both practice patience and love with each other. E continues to excel at what she does because she has learned age appropriate coping skills as well as effective communication skills.

### Montgomery

This youth experienced multiple traumas due to his mother's substance abuse issues that included methamphetamine use. He was placed with a relative for several years, but was reunited with his mother after she attained sobriety when he was 12 years old. He had several legal charges over the

next few years including: truancy, unruly, theft, and criminal damaging. He was placed on probation at age 14 and was unable to complete it successfully due to his heavy dependence on marijuana. He was placed in Drug Court when he was 16 and assigned to the LIFE Program for therapy. He had issues with depression, post-traumatic stress, and substance use.

He and his mother participated and were making progress when tragedy struck. A death in the family sent the client into a depressive spiral and he started using many different substances in dangerous combinations. His therapist recommended inpatient treatment and the court ordered it. When he completed inpatient treatment he returned home and to the LIFE Program. He was able to complete the program, extinguish criminal activity, and begin working. Two years later, he lives in his own apartment with his wife and child. He works two jobs, is clean and sober, and has been violation free. He stated: "I don't think I'd be alive without the help all of you gave me."

### Hamilton

"H" is a 16-year-old female who was referred for PDD in 2017 on a charge of Unauthorized Use of a Motor Vehicle. At the time, she was residing with her father on the west side of Cincinnati. H's mother then moved closer with H's 13-year-old brother, and H. has been spending time between both homes. Educationally, when H came to the program, she had turned a corner and was attending school regularly, on target to graduate early (despite having significant troubles in the years prior to coming to Lighthouse Youth Services). During treatment on PDD H received FFT, case management, and substance abuse treatment. She was also receiving individual therapy through another agency.

Shortly after acceptance into the program, H experienced a relapse and was charged with new delinquent charges including another Unauthorized Use of a Motor Vehicle. This led to H being removed from the PDD docket. She was placed into the Crisis Stabilization Unit (CSU) for two weeks and spent a brief time in detention. While at CSU, she began taking medication regularly, which helped her gain perspective on her behaviors and work toward repairing her relationship with her parents. Once she left the CSU, Lighthouse further assisted her with maintaining medication and through family therapy to repair her relationships. H was released from CSU, accepted into the IDD program, and placed on electronic monitoring for a month.

The family made progress in improving communication with each other and providing consistent accountability. In substance abuse treatment, H spent a lot of time working through her use triggers along with her low self-esteem and feelings of not fitting in with her peer group. H struggled with the concept of the addiction predisposition in her family. While she has not fully committed to abstinence, she has come a long way in recognizing the harmful consequences that she has experienced as a result of her behaviors and her substance use. She worked hard and identified issues regarding disappointing her family and using drugs as a way to forget, which turned into a cycle of disappointment and more using. H has learned mindfulness techniques for when she needs to "self-soothe." With the help of the case manager, H worked on boundary setting with anti-social peers as well as the concept of self-sabotage.

H worked over the summer, and employment assisted to raise her self-esteem. She also has repeat customers who come to see her and she has the opportunity use her fantastic people skills. Working allowed her to have some spending money but save enough to pay off her restitution to the court for her charges. She is looking for a new job opportunity and completed several job applications.



Although H experienced two relapses while in treatment, she was honest about both and worked through the issues with her therapist. H graduated high school in December 2017. H worked with her case manager on an application to a local college so that she can begin an Associate's program. She is interested in a degree in Social Work.

### Lucas

"J" was 13 years old at the time of his first domestic violence arrest. He had two additional arrests within five months of his first arrest. Although his first contact with the court was at the age of 13, his grandmother reported that his physical and verbal abuse towards her and his younger sister started around the age of 8. Grandmother reported that he would hit her, his mother, and sister when he would become upset. J experienced abuse and neglect when he resided with his biological parents. Due to his parents' inability to properly care for J and his sister, his grandmother obtained custody.

Immediately following his first arrest for domestic violence, the Family Violence Intervention (FVI) team met with J and his grandmother to create an individualized safety plan. Along with the safety plan, several assessments were administered to determine appropriate services for J and his family. The family was determined to be appropriate for the court's Step Up program. The FVI team completed six individual sessions with J and his grandmother to reinforce the safety plan, and to teach them healthy communication skills. Unfortunately, grandmother missed several sessions making it difficult to consistently improve the conflict in the home. She later missed three more sessions due to her own health issues.

Although the family experienced short periods of improvement, J obtained another domestic violence charge. According to his grandmother, his disruptive behavior was escalating at school including initiating fights with his peers. J had been suspended on multiple occasions because of his aggression. There was also conflict in the home between J and his younger sister. It was stated that grandmother struggled with taking J and his sister in public settings because of their conflict and disruptive behaviors. Because of these continued difficulties, as well as her inability to attend individual court sessions, grandmother asked for more help and support. She expressed concern that she was unable to control her grandson's behavior. Her request led the FVI team to refer her to the MST Program.

Multi-systemic Therapy (MST) for Juvenile Offenders addresses the multidimensional nature of behavior problems in troubled youth. Treatment focuses on those factors in each youth's social network that are contributing to his or her antisocial behavior. The primary goals of MST programs are to decrease rates of antisocial behavior and other clinical problems, improve functioning (e.g., family relations, school performance), and achieve these outcomes at a cost savings by reducing the use of out-of-home placements such as incarceration, residential treatment, and hospitalization. The ultimate goal of MST is to empower families to build a healthier environment through the mobilization of existing child, family, and community resources. MST is delivered in the natural environment (in the home, school, or community). The average length of time in programming is four months. Specific treatment techniques used to facilitate these gains are based on empirically supported therapies, including behavioral, cognitive behavioral, and pragmatic family therapies.

The MST therapist began working with J and his grandmother specifically around the issues of conflict in the home, family safety, and J's physically aggressive behaviors. During this period J disengaged with his ongoing therapist, but continued services with them for medication management only. A plan was

created to include specific goals for grandmother, J, and his younger sister. The MST therapist provided support to grandmother, and encouraged her to learn self-care techniques, taught skills to keep the home safe, and assisted grandmother with setting boundaries due to biological mother's continued negative involvement with the children. The MST therapist empowered grandmother to stand up to her daughter and prevent her from participating in healthy family activities; thus, greatly improving grandmother's ability to use proper interventions. On several occasions, grandmother utilized the 24 hour crises line for assistance and was not only able to deescalate J's aggression in the home, but was also able to avoid additional court contact. During the five-month period, short and long term goals were established regarding: family, education, mental and physical health, and self-care. A collaborative transition plan was created, and J was able to successfully complete the program.

It's been two months since J and his grandmother successfully completed the MST Program. Grandmother reports that her grandson's behavior has improved greatly, both at home and at school. She credits the MST Program for this positive change. She says that it was especially helpful that the MST Therapist came to their home. When asked what she learned from the program she reported, "I learned how to discipline J without using the belt. I learned how to separate from J when he escalates. I learned what to ignore and what to respond to. It taught me how to react when the kids aggravate me." Grandmother reports that J's behavior has improved greatly at school. He has received nine positive reports from school this year, so far!

## Summit

"S" is now a young adult, African American male who was 17 years old when he received a robbery charge. He has attention and depression issues. His family history includes significant mental health issues, including - his mother, who is not with the family. Dad has custody of S and his sisters. Dad has a job that takes him out of town, and spends weeks at a time away from home. This leaves S unsupervised and responsible for many of the household responsibilities. His assigned Village Network clinician also helps S deal with low self-esteem. Compounding his problems is that as a larger male with a muscular build he is recruited by the other boys in his neighborhood to be the intimidator of their group. S also has cognitive issues which enable him to be manipulated very easily. This is how he became involved with an armed robbery. He admits to some drug use, primarily to fit in with his friends. He also admitted that with Dad not being home for lengthy periods of time, he did not have money so the robbery was just a way to get some quickly.

Prior to the robbery charge and despite his mental health issues, S had been well-behaved with lots of positive guidance and support from his Dad and teachers. Extra-curricular activities such as basketball and working out also created an environment in which S could do very well and seemed happy, but living in a high crime area and not having supervision for long periods of time because of his Dad's job helped create risk factors that eventually led him to offend.

After being ordered into the BHJJ program and Village Network Trauma-focused Cognitive Behavioral Therapy, S was taught to develop coping skills to help control his negative impulses. S was able to include future goal setting in his treatment plan and strategies for dealing with the anxiety that can result from his new efforts at problem solving and perceived failures. These successes directly resulted from the work he put into BHJJ programming with Sylvan Learning Center staff, his Village Network

therapist and the Juvenile Court case manager. S would turn 18 while in BHJJ and requested help finding a job. In school, he struggled with math and English and worked with his school to establish an IEP. He attended Sylvan Learning Center under BHJJ programming for over 30 sessions with weekly communication between the high school he attended and Sylvan staff. S reported feeling more confident about turning in assignments.

S was released from probation with no problems and graduated from high school on time. His good attendance, behavior and grades allowed him to be placed in the Akron Public Schools College & Career service program. This enabled S to be placed in a maintenance staff trade program for the school system. He will receive benefits, retirement, and training for plumbing and electrical work.

### Wayne County

The youth was referred to MST due to truancy and behaviors that included physical aggression and property destruction. The caregivers expressed that the youth had struggled with attending school for a couple years due to bullying at previous school, but never to this extreme. The youth was placed on probation because of absences. The additional behaviors of physical aggression and property destruction were related to truancy; any time caregivers implemented any consequences for missing school, the youth became violent. The caregivers worked with the individual counselor to find anxiety medication that worked well for youth. The caregivers also implemented a behavior chart that also incorporated school attendance. MST worked with the caregivers on ways to hold the youth accountable for actions. The caregivers became consistent with rewards and consequences. Although the youth had one hiccup during the treatment process, an in school suspension for verbal outburst, the caregivers were able to implement consequence at home. The caregivers developed a good home-school link. Since MST services closed, the youth has not missed one day of school and has displayed no physical aggression or property destruction. The youth has become involved with pro-social activities and peers. Even after termination from the program, the caregivers are still utilizing the behavior chart.

### Holmes County

This young woman was a 16-yr. old Caucasian who lived with her parents. Her parents were raised Amish in another state and moved to Holmes County when their children were young. The client was in a drug treatment program and had been released when we started MST. Her parents were very frustrated and were ready to give up because the client would not stop her negative behaviors. She would leave without permission, did numerous drugs, and was verbally and physically aggressive. She was in treatment centers numerous times and was very disrespectful to her family. She left home one time and was gone for a long period, and her parents were worried that she may be dead. When she returned, her behavior was so aggressive that her family would be very cautious so she didn't explode on everyone. Her parents were struggling financially because the locked treatment was very expensive. The stress was wearing them down physically and emotionally. Her father was dealing with health problems and her mom was working a lot of hours, which put a strain on their marriage, as well.

We started MST and did fits of the referral behaviors to look at the drivers that caused these problems. We set up behavior plans with rules/rewards/consequences. The parents were struggling with their relationship due to the constant turmoil with the client and not working with each other to co-parent and support each other. We worked on the mom's trust issues. They started working together and supporting each other. They increased monitoring and supervision of the client and started holding her

responsible and accountable for her behaviors. They were very strict with where she went, who she was with, and what she was doing when she started earning a few privileges. They monitored her medications to make sure she was taking them and did random drug testing and random room searches. At one point, they found a piece of a joint in her room, they went to where she was working and questioned her. They took her phone, her wallet with her drivers' license and her keys, they drove her home and drug tested her. They talked to her boss and told her what was happening and took her home. She lost her driving privileges and had to start over with earning their trust. We finished the case with success and the parents and family are all working together.

After MST ended there was a situation where the client went to a house in town, used some illegal drugs, went for a walk, and entered another person's house. The homeowner called the police. When her Mom picked her up, she began to drive in the opposite direction from their home. The client asked where she was going and Mom said "you have been clean for a year and you are not putting our family through this again. You can go to jail because you are not welcome in our home if you are going to choose drugs over us". The client started crying and said she wanted another chance. They went home and ever since that incident, she has been doing great. She has not used and she will graduate a year early and wants to pursue a career in criminal justice.

### Mahoning

"L" is a 17-year female who now lives with a relative. At the time of referral from Mahoning County Juvenile Court, L's referral behavior consisted of assault, resisting arrest, physical and verbal aggression at school/ home/community, leaving without permission and negative peer interactions. At the start of MST treatment, L was suspended frequently from school for fighting, and her family encountered conflict in the neighborhood due to L fighting peers in the neighborhood and L was struggling to move phases in mental health court.

The family participated in the MST assessment to identify referral behaviors and needs. The family struggled to engage in frequent sessions. L's mother and father were dealing with their own legal issues as well as trying to focus on L's negative behaviors. Mental Health Court staff quickly aligned with the MST Therapist to help provide support to the family and to increase engagement in treatment.

L's mother slowly began to engage in treatment, increased the home-school link to identify L's needs and develop effective strategies to reduce negative behaviors and improve academic success. L's mother began to increase supervision and monitoring at home and in the community to reduce negative peer interactions. Unfortunately, as soon as the family started to make progress, L's mother was incarcerated.

The MST Therapist and Mental Health Court staff quickly collaborated to identify alternate caregivers to avoid placement. A relative agreed to step in as a caregiver and continue with MST treatment. The relative quickly engaged in treatment and began to implement sustainable interventions. Over several weeks, L's behaviors improved at school, home and in the community. L also began to progress in mental health court. L and her family successfully completed MST treatment with no new arrest, violations or charges.

## Trumbull

“A” is a 14-year-old male living with his biological father and stepmother in Trumbull County. Referral behaviors consisted of physical aggression, verbal aggression, leaving without permission and negative peer interactions. When MST opened the case, A had spent about 2 weeks in detention for a domestic violence charge against his stepmother. A’s father reported in the past several months that A’s behaviors were out of control. A would leave without permission and stay out with negative peers in the neighborhood for several days. A was disrespectful and defiant to the point that his stepmother refused to be at home alone with A.

The family engaged in the MST assessment to identify referral behaviors and needs. The family quickly engaged in frequent sessions and collaborated with the MST Therapist to develop effective strategies. The assigned probation officer aligned with the MST Therapist to help provide support to the family and the MST Therapist.

A and his family quickly engaged in treatment and started assessing strengths and needs of the family. The family utilized their identified strengths to make quick sustainable changes to the family structure and began implementing strategies to reduce negative peer interactions and develop clear rules and expectations in the home. The MST therapist worked with the family to develop strategies to hold A accountable with natural consequences to reduce leaving without permission and aggressive behavior in the home. The MST therapist worked with A to identify his interests in order to develop prosocial activities to increase positive peer interaction and as a tool to increase monitoring in the neighborhood.

Over the next several months A and the family worked hard to make the needed changes and follow recommendations from the MST Therapist and the probation officer. During treatment, A did not return to placement and his father and stepmother reported increased confidence in their skills to maintain positive changes. A and his family successfully completed MST treatment within 3 months.

## Ashtabula

Youth began MST treatment after multiple hospitalizations for suicidal ideations and self-harm. As a result, the youth had challenges attending school daily. The youth was at risk for failing the 10th grade when treatment began. MST began working with the caregiver to be able to improve the youth’s coping skills and began actively safety planning with the youth.

The caregiver began treatment feeling overwhelmed with the youth’s mental health needs and the family had challenges with housing and basic needs. The caregiver was still engaged in the treatment process and gained skills to be more assertive with the youth. The youth did graduate the 10th grade and the caregiver gained housing at the end of the summer.

While in treatment, the caregiver learned how to apply Cognitive Behavioral Therapy with the youth in order to do daily mood checks and safety planning without presenting the youth to the hospital. The youth started this school year and went from missing over 50 days of school the last school year to only missing 2 school days in the first 9 weeks. The caregiver put in place clear rules and expectations for the youth’s behavior. The youth also involved herself in several student organizations.

The family followed through with the treatment process and acknowledged and became more understanding of the symptoms the youth experienced. The caregiver grew more patient and trusted his parenting skills to appropriately safety plan with the youth.

### Lorain

“M”, a 16-year-old biracial male, began BHJJ services through the Integrated Co-Occurring Treatment (ICT) program after he was court-ordered through the Lorain County Juvenile Court. During the previous summer M was leaving home all the time, smoking marijuana on a daily basis, and began spending time with a group of negative peers. One summer evening, M was smoking marijuana with his friends when they suggested that he help them break into cars to steal money and other items of value. M went along with what his friends suggested, as he struggled with his self-esteem and typically followed what his friends asked him to do. As they were breaking into cars the police showed up and M decided to run, just as his friends told him to do. He ended up getting caught and arrested for obstructing official business, resisting arrest, and a curfew charge. After receiving these charges M was placed on probation, received routine drug tests, but continued to test positive for marijuana. In January of this year he was having a difficult time, feeling depressed, grieving the loss of a family member, and started to feel like he did not want to live anymore. His mom was attentive to this change in his mood and took him to the hospital to be assessed. The hospital admitted him for a few days due to his suicidal thoughts. At this time, he was placed on medication, and he began taking his medication consistently. Shortly after this hospitalization M was referred to services in the ICT program, to provide him with additional support through individual and family counseling.

During the course of treatment, M began to explore triggers for his low self-esteem and feelings of sadness. He began to develop insight into his relationship with his father, past abuse he endured, symptoms of depression and social anxiety, and ways he could improve his mood through more positive outlets and coping mechanisms. He started to build relationships with peers that were not using drugs or alcohol and his motivation improved at school. After beginning treatment through ICT, M tested negative on all urine drug screens, and continued to test negative throughout the course of treatment. M noticed his relationship with his mother improve, as she regained her trust in him and he was allowed more freedom to engage in prosocial activities. He began to develop goals for his future and has identified additional positive activities in which he could participate.

M’s mother expressed satisfaction with her improved relationship with her son and noticed that he manages his mental health and substance use issues more effectively. M successfully completed probation through the Lorain County Juvenile Court and has a new outlook on his life as a result of his involvement in the Integrated Co-Occurring Treatment program.

## County-Level Data

The focus of the evaluation now turns to the analysis of county-level data. The large sample size in the overall analyses allowed for multiple statistical comparisons across time. For counties that have small sample sizes, meaningful statistical comparisons across all time points and raters cannot be made. In addition, while Ohio Scales means are plotted across some time points, such as 9 and 12 months after intake, may have very small associated sample sizes. Interpretations of data based on very small sample sizes must be made cautiously, as the results may drastically change with the addition of just a few data points.

## Ashtabula County

### Demographics

Ashtabula County has enrolled 25 youth in the BHJJ program since 2015. Of the 25 youth enrolled, 28.0% (n = 7) were female and 72.0% (n = 18) were male (see Table 42). The majority of the overall sample of youth were Caucasian (79.2%, n = 19). The average age of the youth at intake into BHJJ was 15.12 years old (SD = 1.34) with a range between 12.9 and 17.2 years.

Table 42. Demographic Information for BHJJ Youth

	<b>Youth Enrolled between July 2015 – June 2017</b>
<b>Gender</b>	Female = 28.0% (n = 7)
	Male = 72.0% (n = 18)
<b>Race</b>	Caucasian = 79.2% (n = 19)
	Other = 20.8% (n = 5)
<b>Age at Intake</b>	15.12 years (SD = 1.34)

### Custody Arrangement and Household Information

At intake, the majority of youth lived with the biological mother (45.5%, n = 10) (see Table 43). At time of enrollment, 81.8% (n = 18) of the BHJJ youth lived with at least one biological parent.

Over 75% of the BHJJ caregivers (76.2%, n = 16) had at least a high school diploma or GED, and 9.6% (n = 2) had a bachelor's degree or higher (see Table 44). Five caregivers (23.8%) 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 - \$24,999 (see Table 45). Ninety percent of caregivers (n = 18) reported annual household incomes below \$35,000 and 40.0% (n = 8) reported an annual household income below \$20,000. Ten percent of BHJJ families (n = 2) reported an annual household income below \$5,000.

Table 43. Custody Arrangement for BHJJ Youth

<b>Custody</b>	<b>BHJJ Youth</b>
<b>Two Biological Parents or One Biological and One Step or Adoptive Parent</b>	13.6% (n=3)
<b>Biological Mother Only</b>	45.5% (n=10)
<b>Biological Father Only</b>	22.7% (n=5)
<b>Sibling(s)</b>	4.5% (n = 1)
<b>Grandparents</b>	13.6% (n=3)

Table 44. Educational Outcomes for Caregivers of BHJJ Youth

<b>Number of School Years Completed</b>	<b>Number of Caregivers</b>
<b>Less than High School</b>	23.8% (n=5)
<b>High School Graduate or G.E.D.</b>	38.1% (n=8)
<b>Some College or Associate Degree</b>	28.5% (n=6)
<b>Bachelor's Degree</b>	4.8% (n=1)
<b>More than a Bachelor's Degree</b>	4.8% (n=1)

Table 45. Annual Household Income for BHJJ Families

<b>Annual Household Income</b>	<b>BHJJ Families</b>
<b>Less than \$5,000</b>	10.0% (n=2)
<b>\$5,000 - \$9,999</b>	0.0% (n=0)
<b>\$10,000 - \$14,999</b>	15.0% (n=3)
<b>\$15,000 - \$19,999</b>	15.0% (n=3)
<b>\$20,000 - \$24,999</b>	35.0% (n=7)
<b>\$25,000 - \$34,999</b>	15.0% (n=3)
<b>\$35,000 - \$49,999</b>	5.0% (n=1)
<b>\$50,000 - \$74,999</b>	5.0% (n=1)
<b>\$75,000 - \$99,999</b>	0.0% (n=0)
<b>\$100,000 and over</b>	0.0% (n=0)



## 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 (see Table 46). Caregivers reported that 16.7% (n = 1) of females and 33.3% (n = 5) of males had a history of being physically abused while 50.0% (n = 3) of females had a history of being sexually abused. Caregivers of 33.3% (n = 2) of females and 57.1% (n = 8) of males reported hearing the child talking about committing suicide and 33.3% (n = 2) of females and 12.5% (n = 2) of males had attempted suicide at least once. More than 80% of the caregivers of females (83.3%, n = 5) and half of the caregivers of males (50.0%, n = 8) reported a family history of substance abuse.

Table 46. Youth and Family History

Question	Females	Males
Has the child ever been physically abused?	16.7% (n=1)	33.3% (n=5)
Has the child ever been sexually abused?	50.0% (n=3)	0.0% (n=0)
Has the child ever run away?	33.3% (n=2)	46.7% (n=7)
Has the child ever had a problem with substance abuse, including alcohol and/or drugs?	16.7% (n=1)	56.3% (n=9)
Has the child ever talked about committing suicide?	33.3% (n=2)	57.1% (n=8)
Has the child ever attempted suicide?	33.3% (n=2)	12.5% (n=2)
Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?	50.0% (n=3)	50.0% (n=8)
Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?	83.3% (n=5)	87.5% (n=14)
Has anyone in the child's biological family had a mental illness, other than depression?	66.7% (n=4)	71.4% (n=10)
Has the child ever lived in a household in which someone was convicted of a crime?	66.7% (n=4)	53.3% (n=8)
Has anyone in the child's biological family had a drinking or drug problem?	83.3% (n=5)	50.0% (n=8)
Is the child currently taking any medication related to his/her emotional or behavioral symptoms?	50.0% (n=3)	56.3% (n=9)

## 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 (80.0% and 86.7% respectively) (see Table 47).

Table 47. Problems Leading to Services

<b>Problems Leading to Services</b>	<b>Females</b>	<b>Males</b>
<b>Adjustment-related problems</b>	20.0% (n = 1)	6.7% (n = 1)
<b>Anxiety-related problems</b>	40.0% (n = 2)	33.3% (n = 5)
<b>Conduct/delinquency-related problems</b>	80.0% (n = 4)	86.7% (n = 13)
<b>Depression-related problems</b>	40.0% (n = 2)	40.0% (n = 6)
<b>Eating disorders</b>	0	0
<b>Hyperactive and attention-related problems</b>	20.0% (n = 1)	26.7% (n = 4)
<b>Learning disabilities</b>	0	6.7% (n = 1)
<b>Pervasive development disabilities</b>	0	6.7% (n = 1)
<b>Psychotic behaviors</b>	0	0
<b>School performance problems not related to learning disabilities</b>	60.0% (n = 3)	40.0% (n = 6)
<b>Specific developmental disabilities</b>	0	0
<b>Substance use, abuse, dependence-related problems</b>	20.0% (n = 1)	46.7% (n = 7)
<b>Suicide-related problems</b>	20.0% (n = 1)	20.0% (n = 3)

## 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 in BHJJ since 2009. Table 48 shows the distribution of OYAS categories for BHJJ youth by gender and race. Due to some small cell sizes, particularly among high risk youth we did not conduct a Chi-squared test to examine whether differences were statistically significant.

Table 48. OYAS Risk Categories by Gender and Race

	<b>OYAS Low</b>	<b>OYAS Moderate</b>	<b>OYAS High</b>
<b>Female</b>	71.4% (n = 5)	14.3% (n = 1)	14.3% (n = 1)
<b>Male</b>	33.3% (n = 4)	41.7% (n = 5)	25.0% (n = 3)
<b>White</b>	50.0% (n = 7)	28.6% (n = 4)	21.4% (n = 3)
<b>Nonwhite</b>	40.0% (n = 2)	40.0% (n = 2)	20.0% (n = 1)

## 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 females was Oppositional Defiant Disorder and for males, it was Mood Disorder (see Table 49). No males or females were identified as having both a DSM mental health diagnosis and a substance use diagnosis.

Table 49. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
<b>Adjustment Disorder</b>	20.0% (n = 1)	0
<b>Alcohol-related Disorders</b>	0	0
<b>Attention Deficit Hyperactivity Disorder (ADHD)</b>	20.0% (n = 1)	21.4% (n = 3)
<b>Bipolar Disorder</b>	0	7.1% (n = 1)
<b>Cannabis-related Disorders</b>	0	0
<b>Conduct Disorder</b>	0	0
<b>Depressive Disorders</b>	0	7.1% (n = 1)
<b>Disruptive Behavior Disorder</b>	0	0
<b>Mood Disorder</b>	20.0% (n = 1)	64.3% (n = 9)
<b>Oppositional Defiant Disorder</b>	80.0% (n = 4)	28.6% (n = 4)
<b>Post-traumatic Stress Disorder</b>	0	0

\* < .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 half of BHJJ youth (52.9%, n = 9) were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in treatment with BHJJ, no 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, 94.8% (n = 17) of youth were currently attending school while at termination, 80.0% (n = 4) 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 50 displays the grades typically received by the BHJJ youth at intake and termination from the program. At intake, 17.6% of youth were earning mostly A’s and B’s and 23.5% were earning mostly D’s and F’s. At termination from BHJJ, none of the youth were earning mostly A’s and B’s and 33.3% were earning mostly D’s and F’s.

At termination, workers reported that 75.0% (n = 3) of youth were attending school more than before starting treatment and 25.0% (n = 1) of youth were attending school ‘about the same’ amount

compared to before starting treatment. At termination, no BHJJ youth who was attending school had Individualized Education Plans (IEPs).

Table 50. Academic Performance

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A's and B's	17.6% (n = 3)	0
Mostly B's and C's	23.5% (n = 4)	33.3% (n = 1)
Mostly C's and D's	35.3% (n = 6)	33.3% (n = 1)
Mostly D's and F's	23.5% (n = 4)	33.3% (n = 1)

## 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. All Problem Severity and Functioning analyses were conducted on assessment periods with enough valid cases to produce meaningful results. Data at termination were available for 4 youth for the caregiver and youth reports, and 7 youth for the worker report. Therefore, we did not conduct any statistical analyses and instead present separate means at intake and termination in Table 51 and Table 52.

Table 51. Problem Severity Scores at Intake and Termination for Youth

	Problem Severity	
	Intake	Termination
Caregiver	32.51 (SD = 15.61; n = 19)	10.25 (SD = 5.31; n = 4)
Worker	31.00 (SD = 11.88; n = 19)	10.57 (SD = 4.93; n = 7)
Youth	28.95 (SD = 16.89; n = 19)	6.78 (SD = 6.87; n = 4)

Table 52. Functioning Scores at Intake and Termination for Youth

	Functioning	
	Intake	Termination
Caregiver	39.50 (SD = 12.28; n = 20)	57.25 (SD = 5.12; n = 4)
Worker	40.05 (SD = 8.00; n = 21)	51.86 (SD = 8.82; n = 7)
Youth	52.83 (SD = 14.82; n = 18)	66.5 (SD = 12.71; n = 4)

## 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.

Due to sample size limitations, we are only able to present the outcomes for the exposure to violence domain. In addition to the BHJJ data, we also 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).

### 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, 12.8% of the national sample and 26.3% of the BHJJ sample saw someone attacked with a weapon in the past year (see Table 53).

Table 53. Prevalence of Self-Reported Violence Exposure

	<b>% Yes BHJJ Sample (n = 20)</b>	<b>% Yes National Sample</b>
<b>In the last year, did someone threaten to hurt you when you thought they might really do it?</b>	15.0%	14.4% <sup>a</sup>
<b>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?</b>	0.0%	1.9% <sup>b</sup>
<b>In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?</b>	5.0%	2.8% <sup>b</sup>
<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?</b>	40.0%	16.6% <sup>a</sup>
<b>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</b>	5.0%	5.7% <sup>a</sup>

<b>with an object or weapon? Somewhere like at home, at school, at a store, in a car, on the street, or anywhere else?</b>		
<b>In the last year, did anyone hit or attack you WITHOUT using an object or weapon?</b>	20.0%	17.7% <sup>a</sup>
<b>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?</b>	30.0%	21.8% <sup>a</sup>
<b>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?</b>	5.0%	0.3% <sup>b</sup>
<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?</b>	5.0%	1.2% <sup>b</sup>
<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?</b>	15.0%	3.3% <sup>b</sup>
<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?</b>	26.3%	12.8% <sup>a</sup>
<b>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?</b>	47.6%	29.0% <sup>a</sup>
<b>In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?</b>	5.0%	5.4% <sup>a</sup>
<b>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?</b>	20.0%	9.7% <sup>a</sup>
<b>Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?</b>	25.0%	5.6% <sup>a</sup>
<b>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?</b>	10.0%	1.4% <sup>b</sup>

<sup>a</sup> Calculated from the raw National Survey of Children Exposed to Violence (NATSCEV) data. <sup>b</sup> 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.

### Self-reported and Peer Delinquency

Due to low sample sizes, we are unable to present the comparisons between intake and termination for both self-reported and peer delinquency.

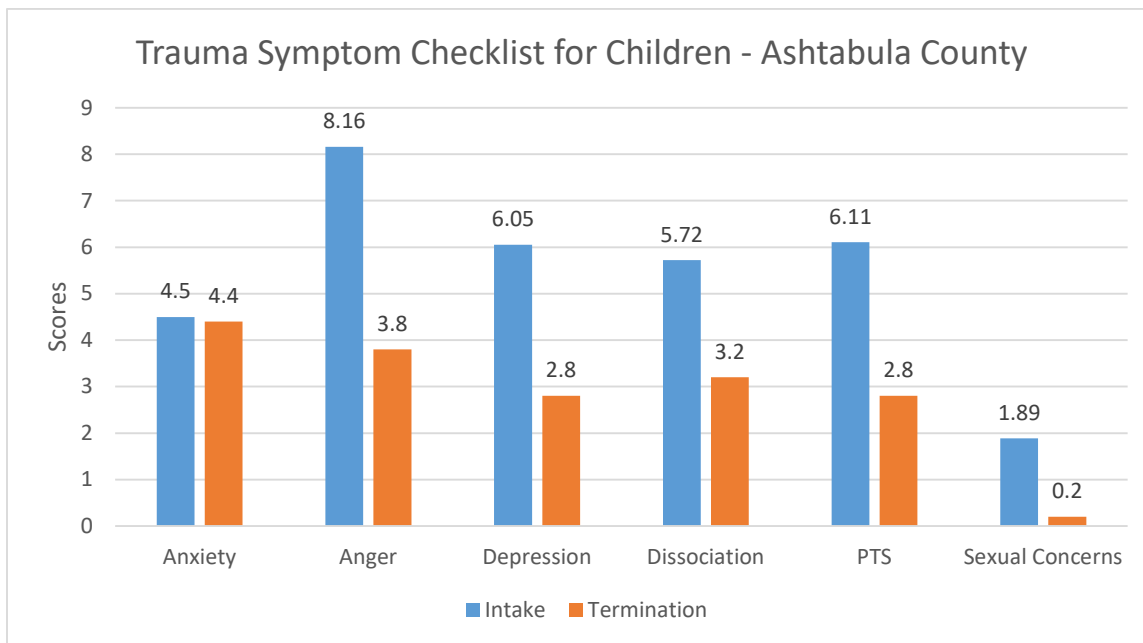
## Trauma Symptom Checklist for Children

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. Higher scores indicate greater symptomatology. Paired-samples t-tests were unable to be conducted due to low sample sizes. Therefore, we present the subscale means at intake and termination for all youth. Results indicated that there was a symptom reduction on all subscales except Anxiety (see Table 54 and Figure 17).

Table 54. TSCC Subscales from Intake to Termination

	Intake	Termination
<b>Anxiety</b>	4.50 (SD=4.71; n=18)	4.40 (SD=4.03; n=5)
<b>Depression</b>	6.05 (SD=5.51; n=18)	2.80 (SD=1.78; n=5)
<b>Anger</b>	8.17 (SD=5.22; n=18)	3.80 (SD=3.42; n=5)
<b>Posttraumatic Stress</b>	6.11 (SD=6.57; n=18)	2.80 (SD=3.27; n=5)
<b>Dissociation</b>	5.72 (SD=5.05; n=18)	3.20 (SD=3.11; n=5)
<b>Sexual Concerns</b>	1.89 (SD=1.93; n=18)	0.2 (SD=0.44; n=5)

Figure 17



## 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 55 presents the percentages of BHJJ youth who reported ever using alcohol or drugs and the average age of first use. Alcohol, cigarettes, and marijuana were the three most commonly used substances for both males and females.

Table 55. Self-Report Substance Use at Intake

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
<b>Alcohol</b>	60.0% (n = 9)	12.33 (SD = 1.53)	50.0% (n = 3)	12.75 (SD = 1.83)
<b>Cigarettes</b>	66.7% (n = 10)	12.20 (SD = 1.55)	50.0% (n = 3)	13.67 (SD = 3.06)
<b>Chewing Tobacco</b>	13.3% (n = 2)	13.00 (SD = 1.41)	0	N/A
<b>Marijuana</b>	73.3% (n = 11)	12.36 (SD = 1.63)	50.0% (n = 3)	12.00 (SD = 1.73)
<b>Cocaine</b>	6.7% (n = 1)	N/A	16.7% (n = 1)	15.00 <sup>a</sup>
<b>Pain Killers (use inconsistent with prescription)</b>	0	N/A	16.7% (n = 1)	13.00 <sup>a</sup>
<b>GHB</b>	0	N/A	0	N/A
<b>Inhalants</b>	6.7% (n = 1)	N/A	0	N/A
<b>Heroin</b>	0	N/A	0	N/A
<b>Amphetamines</b>	13.3% (n = 2)	12.50 (SD = 2.12)	0	N/A
<b>Ritalin (use inconsistent with prescription)</b>	0	N/A	16.7% (n = 1)	9.00 <sup>a</sup>
<b>Barbiturates</b>	0	N/A	0	N/A
<b>Non-prescription Drugs</b>	6.7% (n = 1)	15.00 <sup>a</sup>	0	N/A
<b>Hallucinogens</b>	0	N/A	16.7% (n = 1)	14.00 <sup>a</sup>
<b>PCP</b>	0	N/A	0	N/A
<b>Ketamine</b>	0	N/A	0	N/A
<b>Ecstasy</b>	0	N/A	0	N/A
<b>Tranquilizers</b>	0	N/A	33.3% (n = 2)	14.00 (SD = 1.41)

<sup>a</sup>Standard deviations are not available for averages with one only case

## Six-Month Substance Use

Youth were also asked to report whether they had used each substance in the past six months. Due to the low number of youth who terminated, data related to six-month substance use change could not be calculated.



## 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 5 youth terminated from the BHJJ program in Ashtabula County. Eighty percent (n = 4) of the youth terminated from the BHJJ program were identified as successful treatment completers with an average length of stay of 109 days. One youth was terminated due to medical health issues.

## 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, 47.1% of the youth (n = 8) in Ashtabula County were at risk for out of home placement. None of the five youth who were terminated were at risk for out of home placement.

## Police Contacts

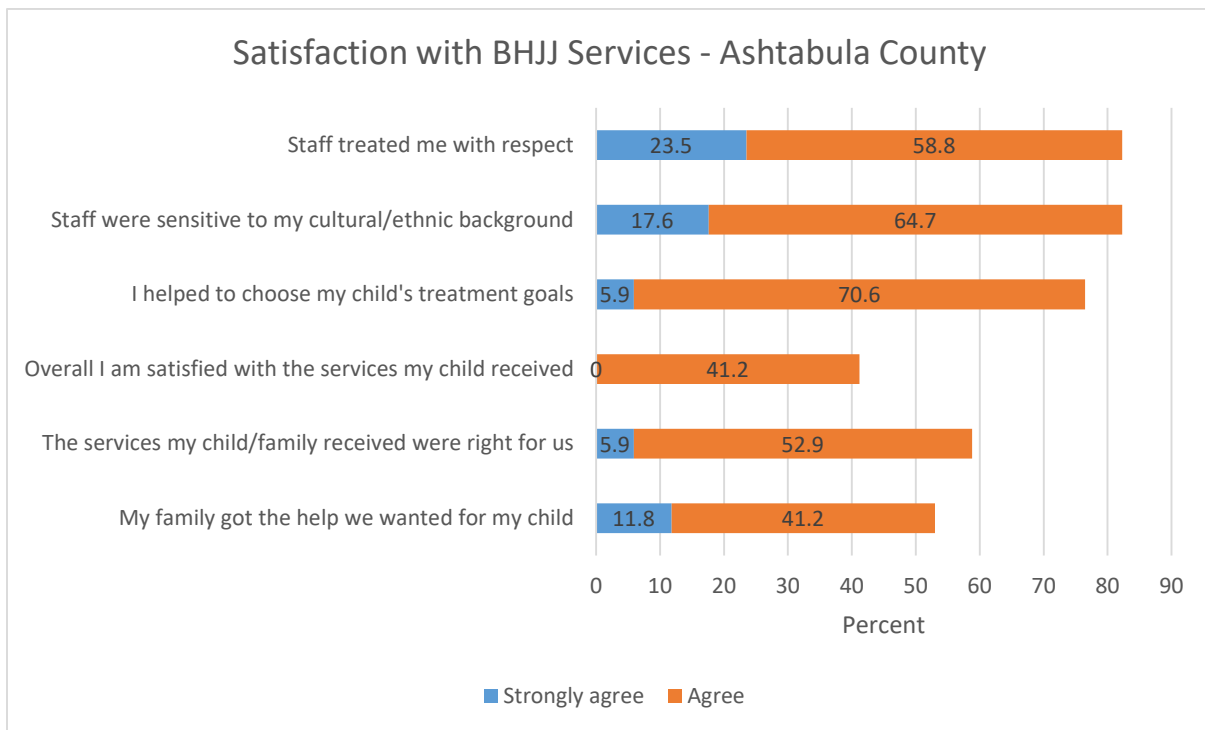
With help from the caregiver and youth, the worker was asked to estimate the frequency of police contacts since the youth has been receiving mental health services through BHJJ. Workers reported that police contacts have been reduced for 100% (n = 5) of the youth who terminated from the program.

## 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, 76.5% (n = 13) of caregivers either strongly agreed or agreed that they helped to choose their child's treatment goals and 58.8% (n = 10) either strongly agreed or agreed that the services their child and/or family receive were right for them (see Figure 18). A majority (82.3%, n = 14) of caregivers either strongly agreed or agreed that staff treated them with respect and 82.3% (n = 14) indicated that they strongly agreed or agreed with the statement that they were satisfied with the cultural and ethnic sensitivity of BHJJ staff.

Figure 18



## Recidivism

### Methodology

Court data were provided by the Ashtabula 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, 89.5% (n = 17) of the BHJJ youth had misdemeanor charges, 10.5% (n = 2) had at least one felony charge, and 89.5% (n = 17) were adjudicated delinquent (see Table 56).

Table 56. Charges Prior to BHJJ Enrollment

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	52.6% (n = 10)	5.3% (n = 1)	57.9% (n = 11)
<b>6 months</b>	68.4% (n = 13)	5.3% (n = 1)	68.4% (n = 13)
<b>12 months</b>	89.5% (n = 17)	10.5% (n = 2)	89.5% (n = 17)
<b>18 months</b>	94.7% (n = 18)	10.5% (n = 2)	94.7% (n = 18)

### 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, 72.7% (n = 8) of youth were charged with at least one new misdemeanor and 9.1% (n = 1) were charged with at least one new felony. Sixty-four percent (63.6%, n = 7) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 57).

Table 57. Charges After BHJJ Enrollment

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	6.3% (n = 1)	6.3% (n = 1)	12.5% (n = 2)
<b>6 months</b>	23.1% (n = 3)	7.7% (n = 1)	23.1% (n = 3)
<b>12 months</b>	72.7% (n = 8)	9.1% (n = 1)	63.6% (n = 7)
<b>18 months</b>	88.9% (n = 8)	11.1% (n = 1)	77.8% (n = 7)

## 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, 100.0% (n = 8) of youth were charged with at least one new misdemeanor, 0.0% (n = 0) were charged with at least one new felony, and 87.5% (n = 7) were adjudicated delinquent (see Table 58).

Table 58. Charges After Termination from BHJJ

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	60.0% (n = 3)	0.0% (n = 0)	60.0% (n = 3)
<b>6 months</b>	100.0% (n = 8)	0.0% (n = 0)	87.5% (n = 7)
<b>12 months</b>	100.0% (n = 8)	0.0% (n = 0)	87.5% (n = 7)
<b>18 months</b>	100.0% (n = 8)	0.0% (n = 0)	87.5% (n = 7)

## Felony Offenders and ODYS Commitments

None of the 19 BHJJ youth (0.0%) from Ashtabula County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.

## Cuyahoga County

### 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 59).

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 59. Demographic Information for BHJJ Youth

	All Youth Enrolled (2006 - 2017)	Youth Enrolled between July 2015 – June 2017
<b>Gender</b>	Female = 45.5% (n = 206) Male = 54.5% (n = 247)	Female = 30.1% (n = 25) Male = 69.9% (n = 58)
<b>Race</b>	African American = 53.3% (n = 237) Caucasian = 36.0% (n = 160) Other = 10.8% (n = 48)	African American = 71.1% (n = 59) Caucasian = 20.5% (n = 17) Other = 8.4% (n = 7)
<b>Age at Intake</b>	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 60). 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 61). 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 62). 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 60. Custody Arrangement for BHJJ Youth

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

Table 61. Educational Outcomes for Caregivers of BHJJ Youth

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

Table 62. Annual Household Income for BHJJ Families

<b>Annual Household Income</b>	<b>BHJJ Families</b>
<b>Less than \$5,000</b>	13.1% (n=55)
<b>\$5,000 - \$9,999</b>	8.4% (n=35)
<b>\$10,000 - \$14,999</b>	13.6% (n=57)
<b>\$15,000 - \$19,999</b>	8.4% (n=35)
<b>\$20,000 - \$24,999</b>	15.3% (n=64)
<b>\$25,000 - \$34,999</b>	14.3% (n=60)
<b>\$35,000 - \$49,999</b>	14.3% (n=60)
<b>\$50,000 - \$74,999</b>	7.6% (n=32)
<b>\$75,000 - \$99,999</b>	3.6% (n=15)
<b>\$100,000 and over</b>	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 63. 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 63. 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 64). 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 64. Problems Leading to Services

Problems Leading to Services	Females	Males
<b>Adjustment-related problems</b>	15.0% (n = 30)	19.3% (n = 45)
<b>Anxiety-related problems</b>	30.0% (n = 60)	33.5% (n = 78)
<b>Conduct/delinquency-related problems</b>	89.0% (n = 178)	91.4% (n = 213)
<b>Depression-related problems</b>	65.0% (n = 130)***	45.5% (n = 106)
<b>Eating disorders</b>	2.0% (n = 4)	2.1% (n = 5)
<b>Hyperactive and attention-related problems</b>	34.0% (n = 68)	53.2% (n = 124)***
<b>Learning disabilities</b>	8.0% (n = 16)	16.7% (n = 39)**
<b>Pervasive development disabilities</b>	0.5% (n = 1)	3.9% (n = 9)*
<b>Psychotic behaviors</b>	4.0% (n = 8)	3.4% (n = 8)
<b>School performance problems not related to learning disabilities</b>	74.0% (n = 148)*	63.5% (n = 148)
<b>Specific developmental disabilities</b>	0	3.4% (n = 8)**
<b>Substance use, abuse, dependence-related problems</b>	84.5% (n = 169)	88.4% (n = 206)
<b>Suicide-related problems</b>	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 65 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 65. OYAS Risk Categories by Gender and Race

	OYAS Low	OYAS Moderate	OYAS High
<b>Female</b>	25.0% (n = 32)	50.8% (n = 65)	24.2% (n = 31)
<b>Male</b>	22.5% (n = 53)	51.7% (n = 122)	25.8% (n = 61)
<b>White</b>	27.0% (n = 30)	60.4% (n = 67)	12.6% (n = 14)
<b>Nonwhite*</b>	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 66).

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 66. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
<b>Adjustment Disorder</b>	2.1% (n= 4)	3.0% (n = 7)
<b>Alcohol-related Disorders</b>	29.5% (n 57)	25.8% (n = 60)
<b>Attention Deficit Hyperactivity Disorder</b>	26.4% (n = 51)	39.5% (n = 92)**
<b>Bipolar Disorder</b>	6.2% (n = 12)	4.7% (n = 11)
<b>Cannabis-related Disorders</b>	72.2% (n = 140)	87.6% (n = 204)***
<b>Conduct Disorder</b>	11.9% (n = 23)	17.6% (n = 41)
<b>Depressive Disorders</b>	34.2% (n = 66)	27.0% (n = 63)
<b>Disruptive Behavior Disorder</b>	2.1% (n = 4)	3.9% (n = 9)
<b>Mood Disorder</b>	15.5% (n = 30)	12.0% (n = 28)
<b>Oppositional Defiant Disorder</b>	21.2% (n = 41)	27.5% (n = 64)
<b>Post-traumatic Stress Disorder</b>	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 67 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 68 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 67. 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 68. Academic Performance for Youth by Completion Status

Typical Grades	Unsuccessful Completers		Successful Completers	
	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 19. Means from intake to termination are presented in Figure 20.

Figure 19

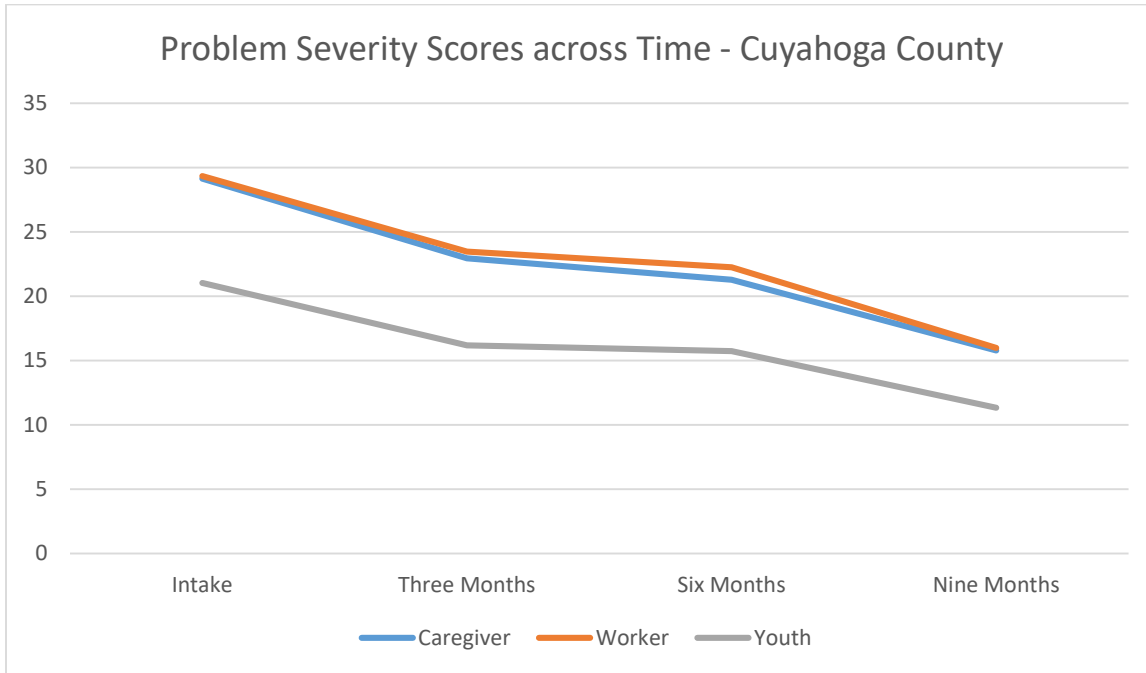
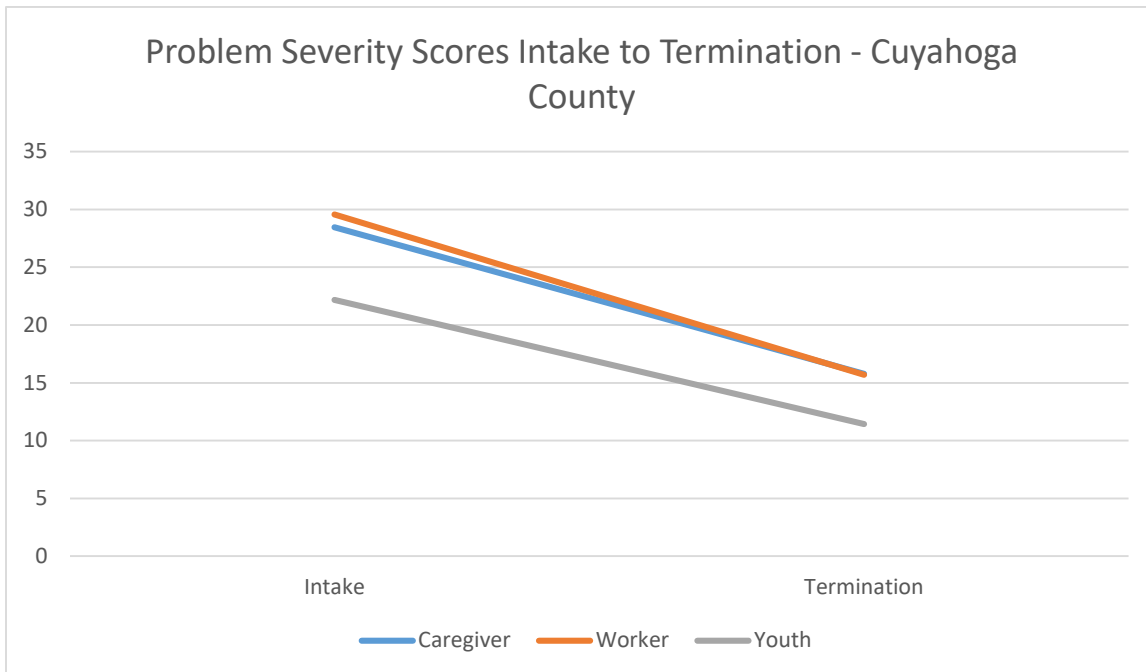


Figure 20



### Caregiver Rating

Paired samples t-tests revealed significant improvements in Problem Severity at each measurement interval compared to intake (see Table 69). 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 69. Paired Samples T-Tests for Problem Severity - Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	29.14 (SD=18.09; n=341)	23.09 (SD=15.47; n=341)	6.11***	.33
<b>Intake to Six Months</b>	29.38 (SD=18.86; n=270)	21.26 (SD=15.61; n=270)	6.68***	.41
<b>Intake to Nine Months</b>	29.69 (SD=19.17; n=181)	18.85 (SD=14.70; n=181)	6.98***	.52
<b>Intake to Termination</b>	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 70). 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 70. Paired Samples T-Tests for Problem Severity – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	29.44 (SD=13.29; n=351)	23.46 (SD=12.87; n=351)	7.05***	.37
<b>Intake to Six Months</b>	30.05 (SD=13.68; n=283)	22.04 (SD=11.68; n=283)	8.13***	.48
<b>Intake to Nine Months</b>	29.53 (SD=12.97; n=181)	20.91 (SD=12.19; n=181)	6.58***	.49
<b>Intake to Termination</b>	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 71). 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 71. Paired Samples T-Tests for Problem Severity – Youth

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	21.37 (SD=15.82; n=336)	16.23 (SD=12.89; n=336)	6.22***	.34
<b>Intake to Six Months</b>	22.21 (SD=16.15; n=272)	15.82 (SD=14.08; n=272)	6.04***	.37
<b>Intake to Nine Months</b>	21.95 (SD=15.04; n=177)	13.51 (SD=11.52; n=177)	7.30***	.55
<b>Intake to Termination</b>	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 21 and Figure 22.

Figure 21

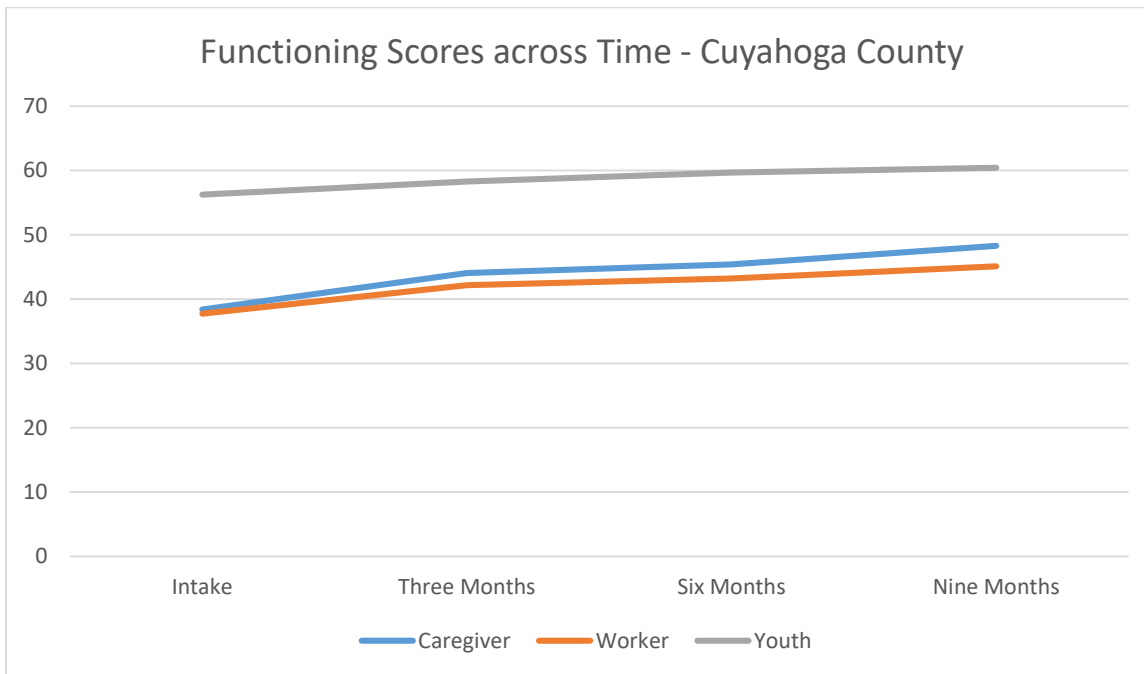
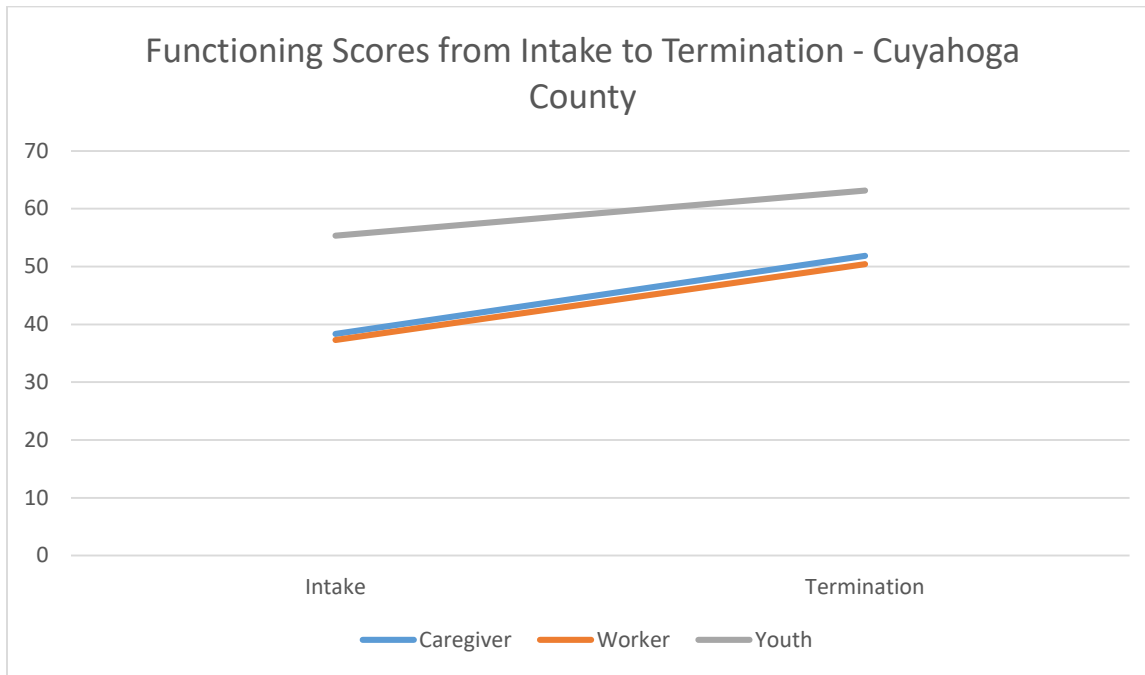


Figure 22



### Caregiver Ratings

Paired samples t-tests revealed significant improvements in Functioning at each measurement interval compared to intake (see Table 72). 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 72. Paired Samples T-Tests for Functioning Scores – Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	38.09 (SD=16.32; n=342)	43.91 (SD=16.80; n=342)	-6.26***	.34
<b>Intake to Six Months</b>	38.11 (SD=16.25; n=271)	45.33 (SD=15.79; n=271)	-6.45***	.39
<b>Intake to Nine Months</b>	38.15 (SD=16.86; n=180)	48.16 (SD=15.36; n=180)	-6.87***	.54
<b>Intake to Termination</b>	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 73). 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 73. Paired Samples T-Tests for Functioning Scores – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	37.84 (SD=9.86; n=347)	42.25 (SD=12.30; n=347)	-5.86***	.31
<b>Intake to Six Months</b>	37.47 (SD=10.25; n=284)	43.27 (SD=12.34; n=284)	-6.45***	.38
<b>Intake to Nine Months</b>	37.60 (SD=10.48; n=179)	44.81 (SD=12.48; n=179)	-5.52***	.41
<b>Intake to Termination</b>	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 74). 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 74. Paired Samples T-Tests for Functioning Scores – Youth

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	56.39 (SD=12.57; n=336)	58.23 (SD=13.25; n=336)	-2.26*	.12
<b>Intake to Six Months</b>	55.27 (SD=12.63; n=269)	59.67 (SD=13.60; n=269)	-4.56***	.28
<b>Intake to Nine Months</b>	54.99 (SD=12.33; n=176)	60.23 (SD=13.84; n=176)	-4.36***	.33
<b>Intake to Termination</b>	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 75).

Table 75. Prevalence of Self-Reported Violent Victimization

	<b>% Yes BHJJ Sample (n = 76)</b>	<b>% Yes National Sample</b>
<b>In the last year, did someone threaten to hurt you when you thought they might really do it?</b>	35.5%	14.4% <sup>a</sup>
<b>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?</b>	2.6%	1.9% <sup>b</sup>
<b>In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?</b>	21.1%	2.8% <sup>b</sup>
<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?</b>	51.3%	16.6% <sup>a</sup>
<b>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?</b>	13.2%	5.7% <sup>a</sup>
<b>In the last year, did anyone hit or attack you WITHOUT using an object or weapon?</b>	46.1%	17.7% <sup>a</sup>
<b>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?</b>	14.5%	21.8% <sup>a</sup>
<b>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?</b>	5.3%	0.3% <sup>b</sup>
<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?</b>	2.6%	1.2% <sup>b</sup>
<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?</b>	11.8%	3.3% <sup>b</sup>
<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?</b>	36.8%	12.8% <sup>a</sup>
<b>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?</b>	57.9%	29.0% <sup>a</sup>

<b>In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?</b>	42.7%	5.4% <sup>a</sup>
<b>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?</b>	25.0%	9.7% <sup>a</sup>
<b>Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?</b>	19.7%	5.6% <sup>a</sup>
<b>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?</b>	5.3%	1.4% <sup>b</sup>

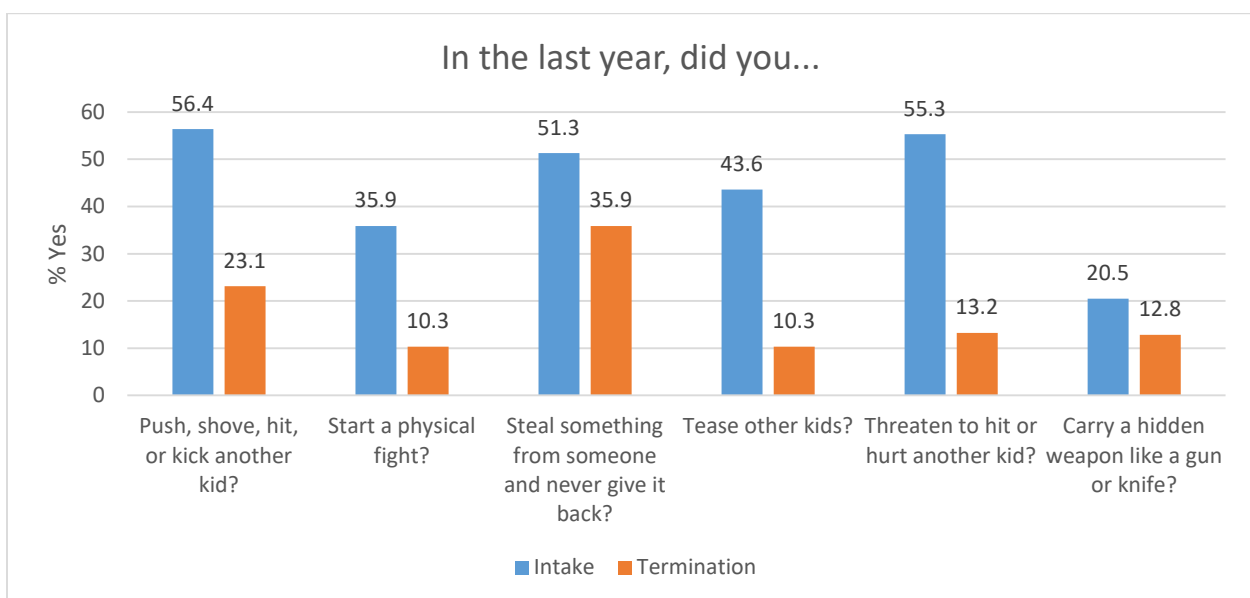
<sup>a</sup> Calculated from the raw National Survey of Children Exposed to Violence (NATSCEV) data. <sup>b</sup> Obtained from Finkelhor, D., Hamby, S.L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. *Child Abuse and Neglect*, 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 VDAQ. 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 23). 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.

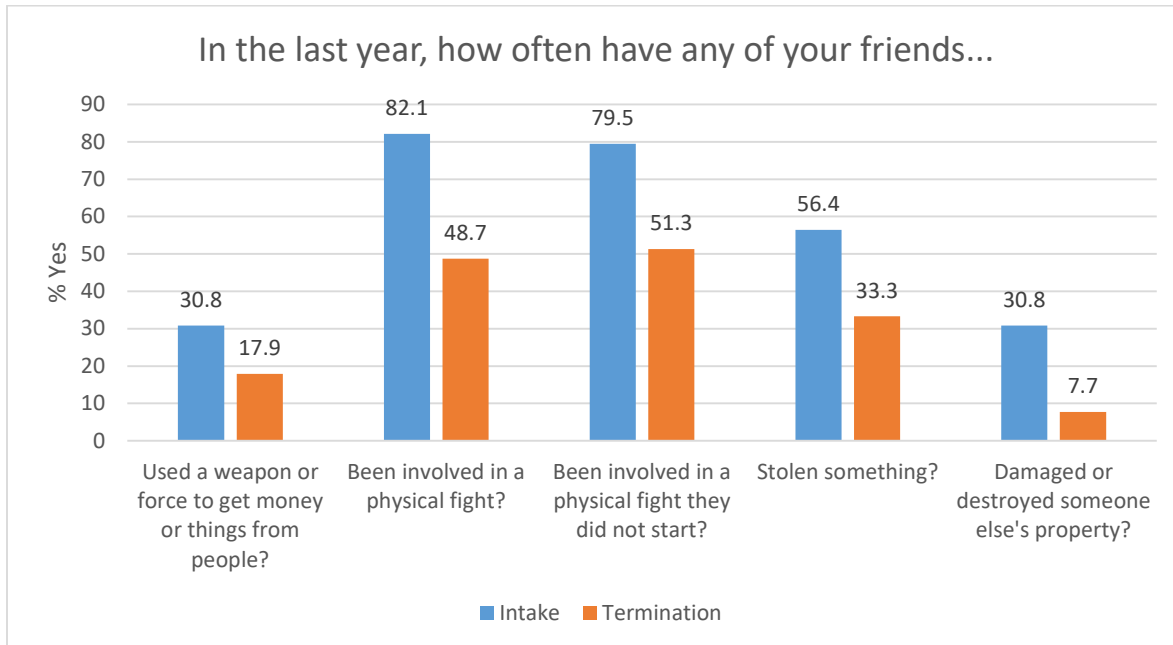
Figure 23



## Peer delinquency

Youth also reported significantly less peer delinquency at termination than intake (see Figure 24). 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 24



## 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.

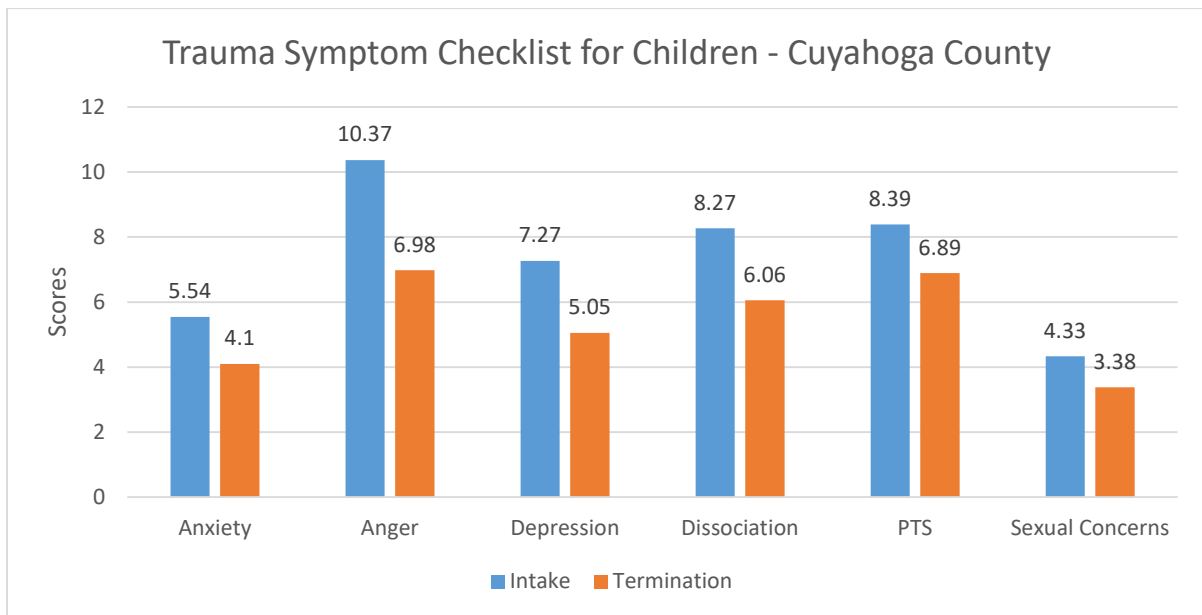
Overall, results from paired samples t-tests indicated that there were significant symptom reductions on all subscales from intake to termination (see Table 76 and Figure 25). Considering Cohen’s (1988) established cutoffs, small effects were found for all subscales except Anger (moderate). The removal 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 76. TSCC Subscales from Intake to Termination

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

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

Figure 25



## 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 26 and Figure 27). 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 26

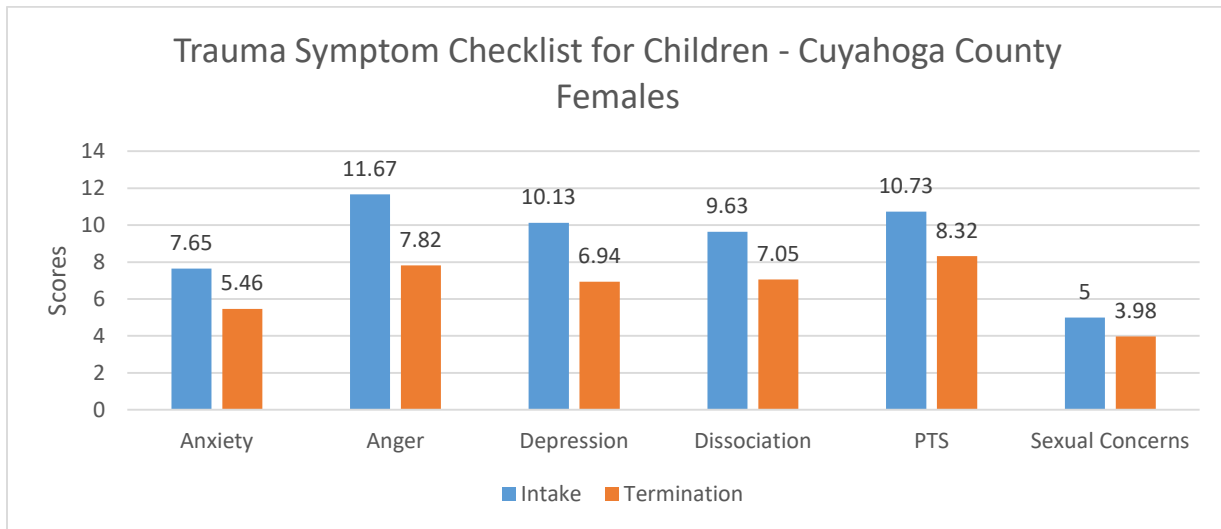
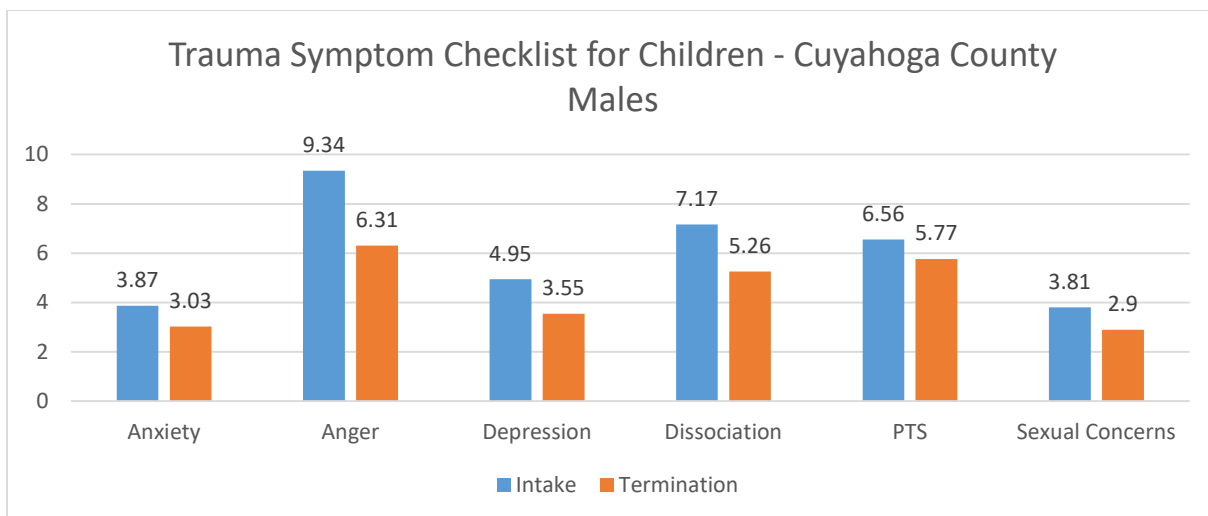


Figure 27



## 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 77 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 77. Self-Reported Substance Use at Intake

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

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ , <sup>a</sup>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 28 and Figure 29 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 28

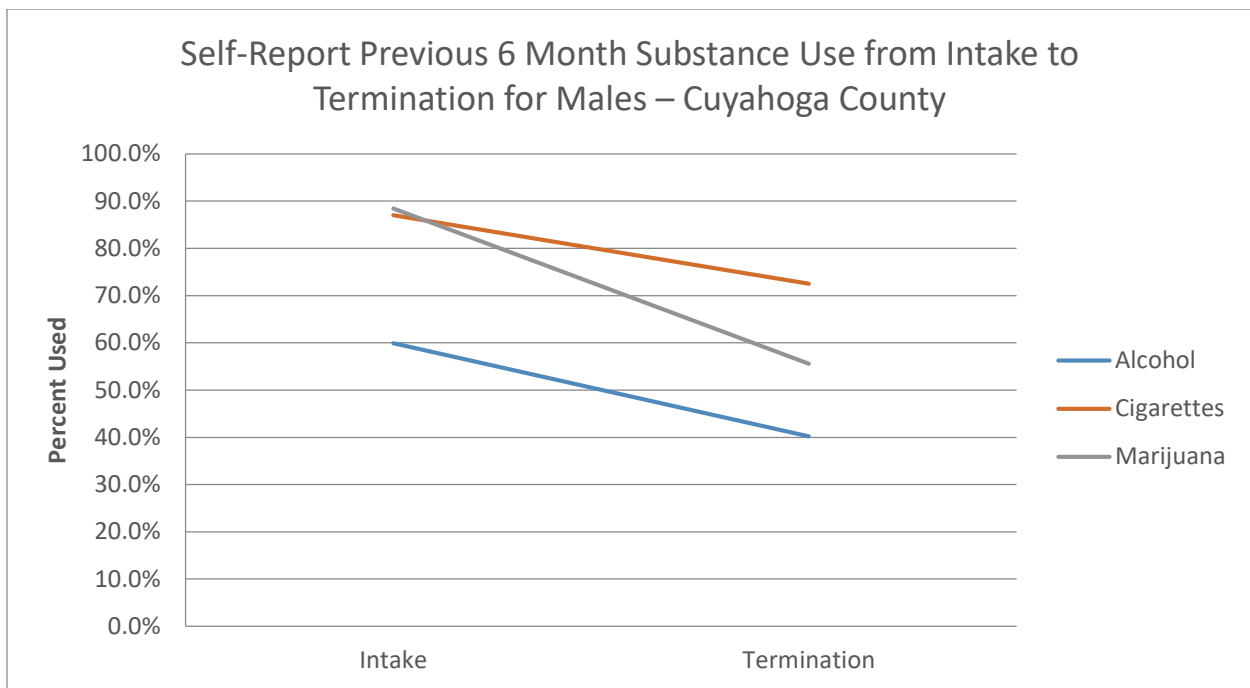
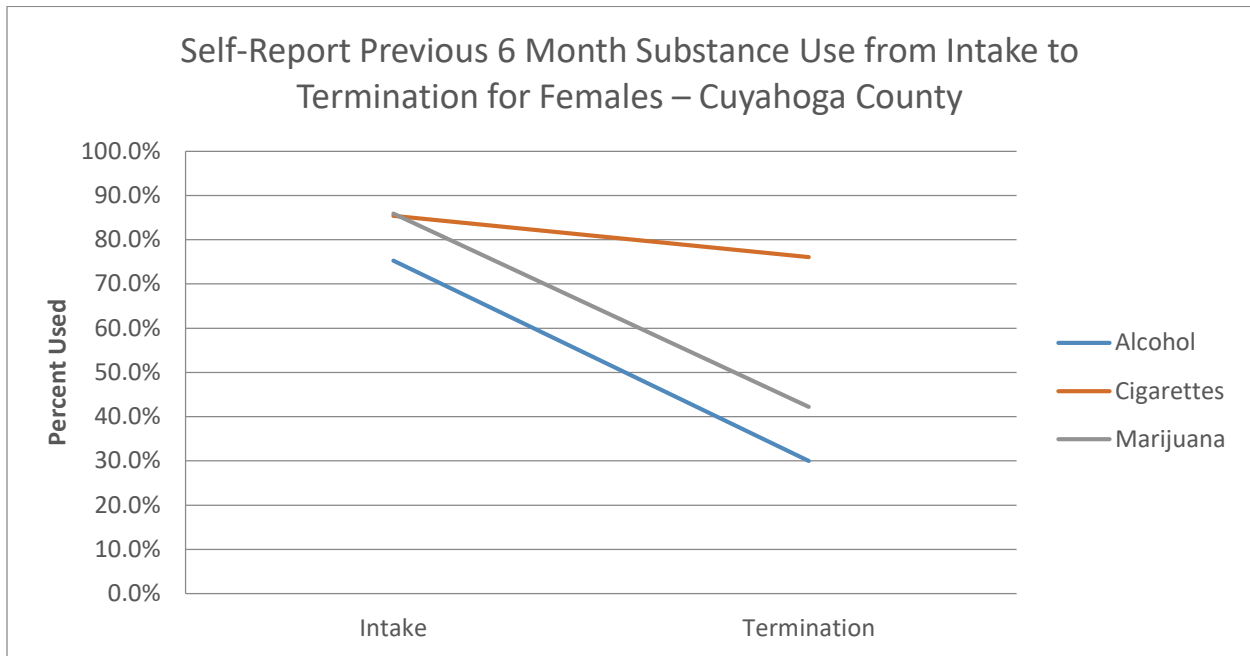




Figure 29



### 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 30 and Figure 31 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 30

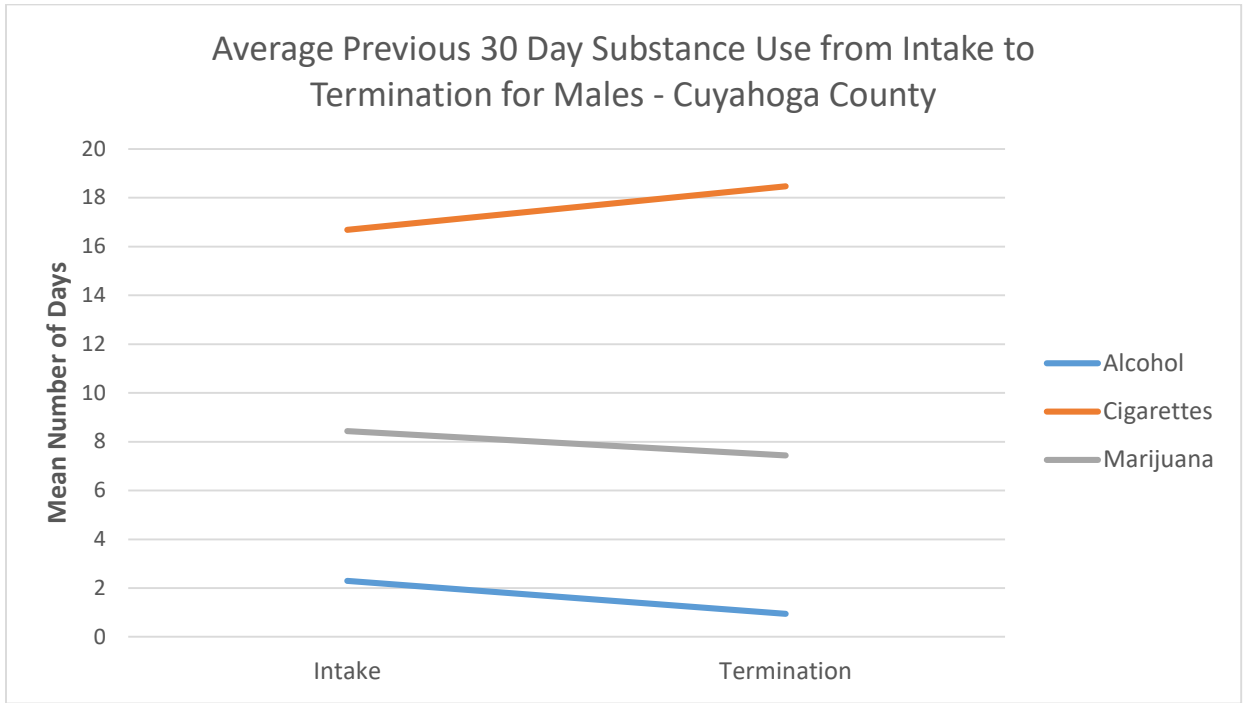
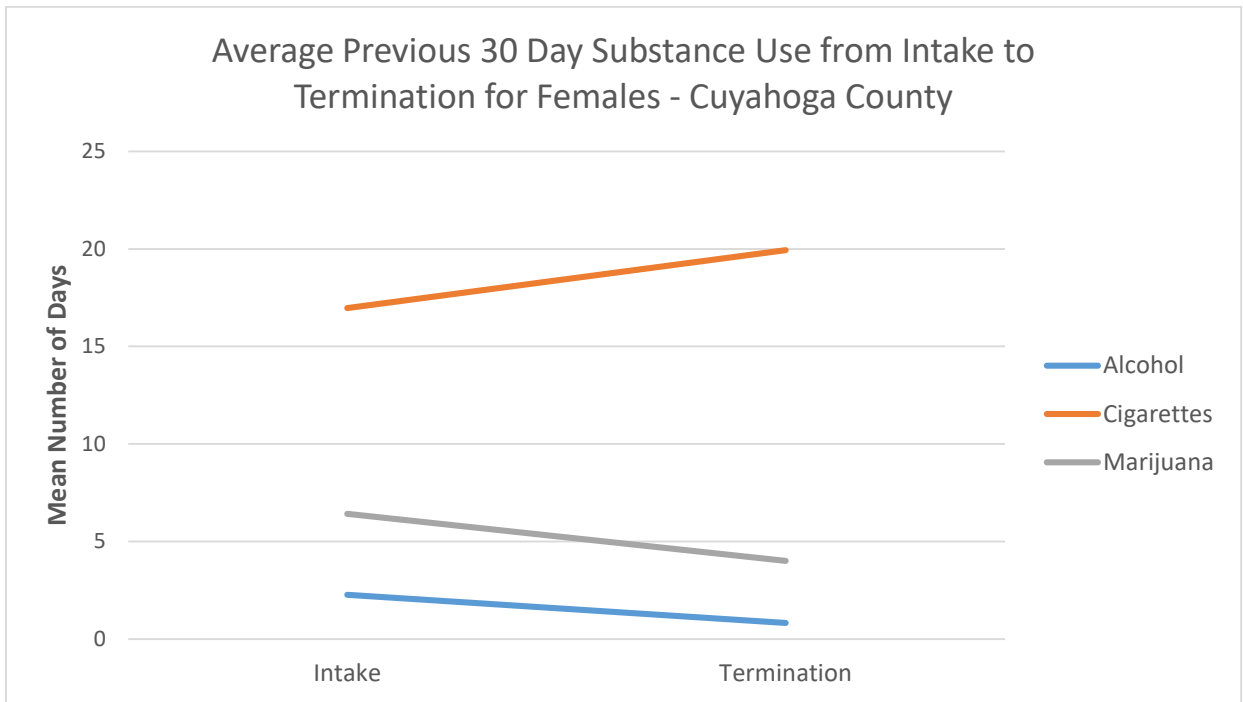


Figure 31



## 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 78 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 78. Reasons for Termination from BHJJ

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

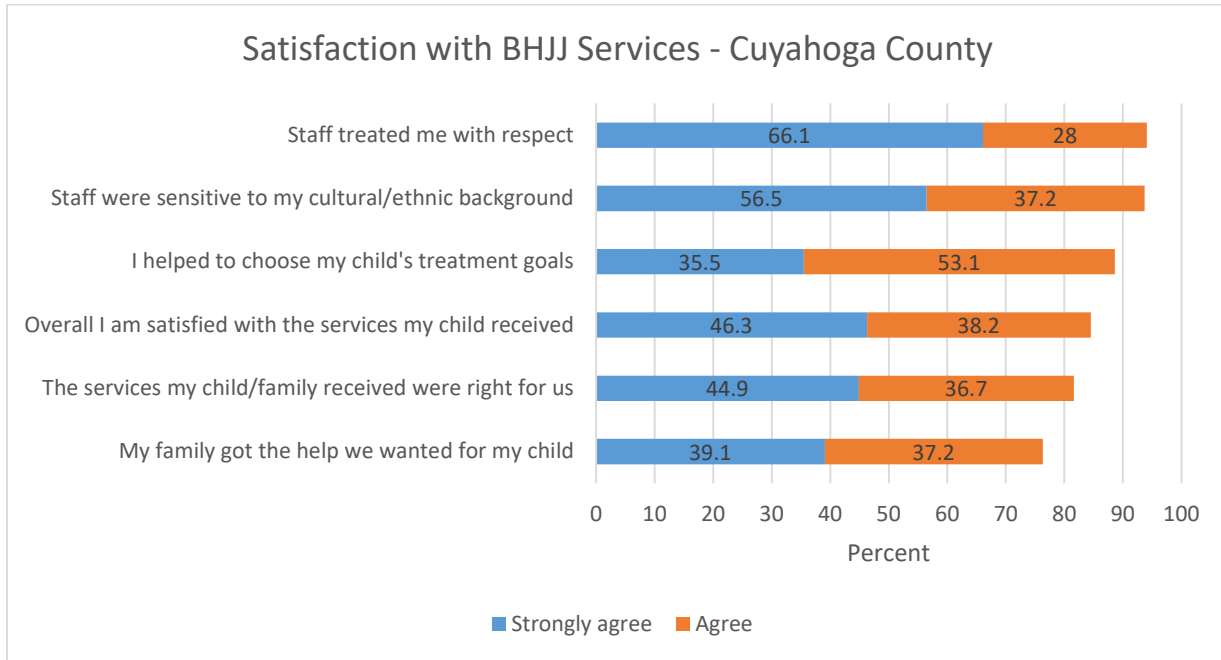
With help from the caregiver and youth, the worker was asked to estimate the frequency of police contacts since the youth has been receiving mental health services through BHJJ. Workers reported that police contacts have been reduced for 75.6% (n = 251) of the youth and had stayed the same for 15.1% (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 32). 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 32



## 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 79).

Previous juvenile court information is presented for youth based on BHJJ treatment completion status (successful vs. unsuccessful) (see Table 79). 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 79. Charges Prior to BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	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)
<b>6 months</b>	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)
<b>12 months</b>	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)
<b>18 months</b>	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 80).

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 80).

Table 80. Charges After BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	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)
<b>6 months</b>	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)
<b>12 months</b>	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)
<b>18 months</b>	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 81).

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 81).

Table 81. Charges After Termination from BHJJ

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	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)
<b>6 months</b>	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)
<b>12 months</b>	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)
<b>18 months</b>	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.

## Franklin County

### Demographics

Franklin County has enrolled 544 youth in the BHJJ program since 2006. Of the 544 youth enrolled, 20.6% (n = 112) were female and 79.4% (n = 432) were male. Since July 2015, 73.5% (n = 36) of new enrollees have been male (see Table 82).

The majority of the overall sample of youth were either Caucasian (30.4%, n = 163) or African American (53.4%, n = 287). A similar pattern was found for youth enrolled since July 2015 as the majority of youth enrolled were African American (53.1%, n = 26). The average age of the youth at intake into BHJJ was 16.04 years old (SD = 1.51) with a range between 13.47 and 18.05 years.

Table 82. Demographic Information for BHJJ Youth

	<b>All Youth Enrolled (2006 - 2017)</b>	<b>Youth Enrolled between July 2015 – June 2017</b>
<b>Gender</b>	Female = 20.6% (n = 112)	Female = 26.5% (n = 13)
	Male = 79.4% (n = 432)	Male = 73.5% (n = 36)
<b>Race</b>	African American = 53.4% (n = 287)	African American = 53.1% (n = 26)
	Caucasian = 30.4% (n = 163)	Caucasian = 20.4% (n = 10)
	Other = 16.2% (n = 87)	Other = 26.5% (n = 13)
<b>Age at Intake</b>	15.87 years (SD = 1.47)	16.04 years (SD = 4.6)

### Custody Arrangement and Household Information

At intake, the majority of youth lived with the biological mother (62.0%, n = 324) (see Table 83). At time of enrollment, 88.0% (n = 460) of the BHJJ youth lived with at least one biological parent.

Over 77% of the BHJJ caregivers (77.2%, n = 359) had at least a high school diploma or GED, and 7.0% (n = 35) had a bachelor's degree or higher (see Table 84). Over one in five caregivers (22.8%, n = 116) reported that they did not graduate from high school.

Caregivers reported their annual household income. The median household income for BHJJ families was between \$15,000 - \$19,999 (see Table 85). Nearly 80% (79.9%, n = 347) reported annual household incomes below \$35,000 and 56.7% (n = 287) reported an annual household income below \$20,000. One in three BHJJ families (34.4%, n = 174) reported an annual household income below \$10,000.

Table 83. Custody Arrangement for BHJJ Youth

<b>Custody</b>	<b>BHJJ Youth</b>
<b>Two Biological Parents or One Biological and One Step or Adoptive Parent</b>	17.6% (n = 92)
<b>Biological Mother Only</b>	62.0% (n = 324)
<b>Biological Father Only</b>	8.4% (n = 44)
<b>Adoptive Parent(s)</b>	2.3% (n=12)
<b>Sibling</b>	1.0% (n=5)
<b>Aunt/Uncle</b>	2.7% (n=14)
<b>Grandparents</b>	4.6% (n=24)
<b>Friend</b>	0.0% (n=0)
<b>Ward of the State</b>	0.8% (n=4)
<b>Other</b>	0.8% (n=4)

Table 84. Educational Outcomes for Caregivers of BHJJ Youth

<b>Number of School Years Completed</b>	<b>Number of Caregivers</b>
<b>Less than High School</b>	22.8% (n=116)
<b>High School Graduate or G.E.D.</b>	40.7% (n=207)
<b>Some College or Associate Degree</b>	29.5% (n=150)
<b>Bachelor's Degree</b>	3.0% (n=15)
<b>More than a Bachelor's Degree</b>	4.0% (n=20)

Table 85. Annual Household Income for BHJJ Families

<b>Annual Household Income</b>	<b>BHJJ Families</b>
<b>Less than \$5,000</b>	24.7% (n=125)
<b>\$5,000 - \$9,999</b>	9.7% (n=49)
<b>\$10,000 - \$14,999</b>	13.8% (n=70)
<b>\$15,000 - \$19,999</b>	8.5% (n=43)
<b>\$20,000 - \$24,999</b>	12.2% (n=62)
<b>\$25,000 - \$34,999</b>	10.8% (n=55)
<b>\$35,000 - \$49,999</b>	12.2% (n=62)
<b>\$50,000 - \$74,999</b>	5.1% (n=26)
<b>\$75,000 - \$99,999</b>	2.0% (n=10)
<b>\$100,000 and over</b>	1.0% (n=5)

## 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 86. 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 mental illness other than depression. A significantly higher proportion of the caregivers of males reported a history of substance abuse.

Caregivers reported that 20.0% of females and 3.7% of males had a history of being sexually abused. Over 42% of the caregivers of females (42.1%) and 28.3% of the caregivers of males reported that the child had ever run away. Caregivers of 35.5% of females and 19.5% of males reported hearing the child talking about committing suicide and 15.2% of females and 4.7% of males had attempted suicide at least once. Nearly half of the caregivers of males (48.8%) and 32.1% of the caregivers of females reported that the child had ever had a problem with substance abuse.

Table 86. Youth and Family History

Question	Females	Males
Has the child ever been physically abused?	14.3% (n=15)	10.0% (n=41)
Has the child ever been sexually abused?	20.0% (n=21)**	3.7% (n=15)
Has the child ever run away?	42.1% (n=38)**	28.3% (n=114)
Has the child ever had a problem with substance abuse, including alcohol and/or drugs?	32.1% (n=34)	48.8% (n=201)**
Has the child ever talked about committing suicide?	35.5% (n=38)**	19.5% (n=81)
Has the child ever attempted suicide?	15.2% (n=16)**	4.7% (n=19)
Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?	33.0% (n=35)	30.3% (n=127)
Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?	52.9% (n=55)	48.3% (n=197)
Has anyone in the child's biological family had a mental illness, other than depression?	41.0% (n=41)**	26.3% (n=105)
Has the child ever lived in a household in which someone was convicted of a crime?	45.5% (n=45)	41.0% (n=165)
Has anyone in the child's biological family had a drinking or drug problem?	59.4% (n=63)	53.4% (n=79)
Is the child currently taking any medication related to his/her emotional or behavioral symptoms	18.9% (n=20)	13.0% (n=53)

\* p < .05, \*\*p < .01

## 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 (87.7% and 94.5% respectively) (see Table 87). Chi-square analysis indicated females had significantly higher rates of problems related to suicide and depression. Males had significantly higher rates of hyperactive and attention-related problems, conduct/delinquency problems, learning disabilities, and substance use.

Table 87. Problems Leading to Services

<b>Problems Leading to Services</b>	<b>Females</b>	<b>Males</b>
<b>Adjustment-related problems</b>	3.8% (n = 4)	5.0% (n = 21)
<b>Anxiety-related problems</b>	17.0% (n = 18)	10.8% (n = 45)
<b>Conduct/delinquency-related problems</b>	87.7% (n = 93)	94.5% (n = 393)*
<b>Depression-related problems</b>	58.5% (n = 62)***	35.6% (n = 148)
<b>Eating disorders</b>	0.9% (n = 1)	0.2% (n = 1)
<b>Hyperactive and attention-related problems</b>	18.9% (n = 20)	32.5% (n = 135)**
<b>Learning disabilities</b>	2.8% (n = 3)	13.9% (n = 58)***
<b>Pervasive development disabilities</b>	0	0.2% (n = 1)
<b>Psychotic behaviors</b>	0.9% (n = 1)	2.6% (n = 11)
<b>School performance problems not related to learning disabilities</b>	49.1% (n = 52)	50.2% (n = 209)
<b>Specific developmental disabilities</b>	0	1.2% (n = 5)
<b>Substance use, abuse, dependence-related problems</b>	35.8% (n = 38)	60.6% (n = 252)***
<b>Suicide-related problems</b>	19.8% (n = 21)**	8.4% (n = 35)

\* < .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 88 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. Significant differences on OYAS levels were found for both gender and race. A larger proportion of males were identified as high risk on the OYAS (25.2%, n = 78) compared to females (14.9%, n = 11). The proportion of Nonwhite youth identified as high risk (27.1%, n = 73) was nearly double that of White youth (14.0%, n = 16).

Table 88. OYAS Risk Categories by Gender and Race

	OYAS Low	OYAS Moderate	OYAS High
<b>Female</b>	39.2% (n = 29)	45.9% (n = 34)	14.9% (n = 11)
<b>Male*</b>	24.5% (n = 76)	50.3% (n = 156)	25.2% (n = 78)
<b>White</b>	43.0% (n = 49)	43.0% (n = 49)	14.0% (n = 16)
<b>Nonwhite**</b>	20.8% (n = 56)	52.0% (n = 140)	27.1% (n = 73)

\*p < .05 \*\*p < .01

## 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 females was Oppositional Defiant Disorder and for males, was Cannabis-related disorders (see Table 89).

Chi-square analysis indicated females were significantly more likely to be diagnosed with Post-traumatic Stress Disorder (PTSD), Mood Disorders, and Depressive Disorders. Males were significantly more likely to be diagnosed with Cannabis-related Disorders, ADHD, and Conduct Disorder. Nearly half of males (49.6%, n = 206) and over twenty percent of females (20.4%, n = 21) were identified as having both a DSM mental health diagnosis and a substance use diagnosis.

Table 89. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
<b>Adjustment Disorder</b>	2.9% (n = 3)	5.3% (n = 22)
<b>Alcohol-related Disorders</b>	5.9% (n = 6)	6.3% (n = 26)
<b>Attention Deficit Hyperactivity Disorder</b>	15.7% (n = 16)	30.1% (n = 124)**
<b>Bipolar Disorder</b>	2.0% (n = 2)	1.7% (n = 7)
<b>Cannabis-related Disorders</b>	16.5% (n = 17)	49.8% (n = 206)***
<b>Conduct Disorder</b>	12.6% (n = 13)	30.1% (n = 125)***
<b>Depressive Disorders</b>	34.3% (n = 35)*	25.0% (n = 103)
<b>Disruptive Behavior Disorder</b>	19.8% (n = 20)	20.0% (n = 82)
<b>Mood Disorder</b>	19.0% (n = 19)*	9.8% (n = 40)
<b>Oppositional Defiant Disorder</b>	35.0% (n = 35)	26.3% (n = 108)
<b>Post-traumatic Stress Disorder</b>	7.0% (n = 7)**	0.7% (n = 3)

\* < .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 three-quarters of the youth (77.3%, n = 289) were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in treatment with BHJJ, 28.1% (n = 94) 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, 87.9% (n = 299) of youth were currently attending school while at termination, 83.4% (n = 252) 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 90 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 91 displays this information based on completion status. At intake, 8.2% of youth were earning mostly A's and B's and 41.1% were earning mostly D's and F's. At termination from BHJJ, 15.2% of youth were earning mostly A's and B's and 18.1% 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, 18.8% of unsuccessful completers and 28.3% of successful completers received mostly A's, B's, or C's. At termination, 28.1% of unsuccessful completers and 63.4% of successful completers received mostly A's, B's, or C's.

At termination, workers reported that 45.4% (n = 153) of youth were attending school more than before starting treatment and 40.7% (n = 137) of youth were attending school 'about the same' amount compared to before starting treatment. Workers reported that 10.1% (n = 34) were attending school less often than before treatment in BHJJ. At termination, 19.4% (n = 57) of the youth attending school had Individualized Education Plans (IEPs).

Table 90. Academic Performance

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A's and B's	8.2% (n = 23)	15.2% (n = 47)
Mostly B's and C's	16.4% (n = 46)	37.9% (n = 117)
Mostly C's and D's	34.3% (n = 96)	28.8% (n = 89)
Mostly D's and F's	41.1% (n = 115)	18.1% (n = 59)



Table 91. Academic Performance for Youth

Typical Grades	Unsuccessful Completers		Successful Completers	
	Frequency at Intake	Frequency at Termination	Frequency at Intake	Frequency at Termination
Mostly A's and B's	6.3% (n = 6)	4.5% (n = 4)	8.5% (n = 18)	19.4% (n = 42)
Mostly B's and C's	12.5% (n = 12)	23.6% (n = 21)	19.8% (n = 42)	44.0% (n = 95)
Mostly C's and D's	33.3% (n = 32)	33.7% (n = 30)	30.2% (n = 64)	26.9% (n = 58)
Mostly D's and F's	47.9% (n = 46)	38.2% (n = 34)	41.5% (n = 88)	9.7% (n = 21)

## 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 three-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 Franklin County youth are represented graphically in Figure 33 and means from intake to termination are presented in Figure 34.

Figure 33

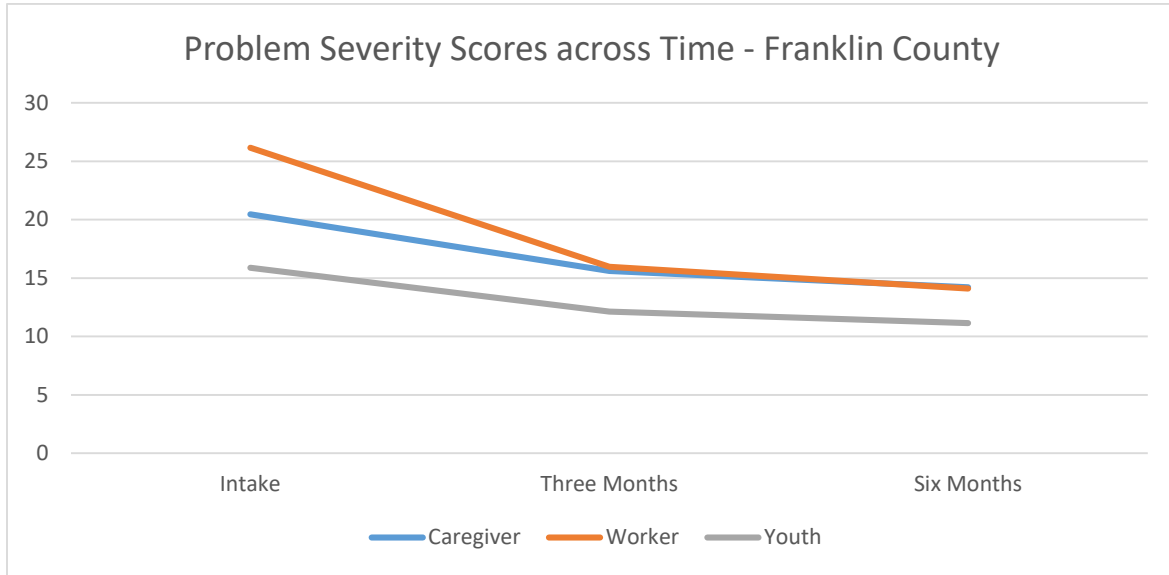
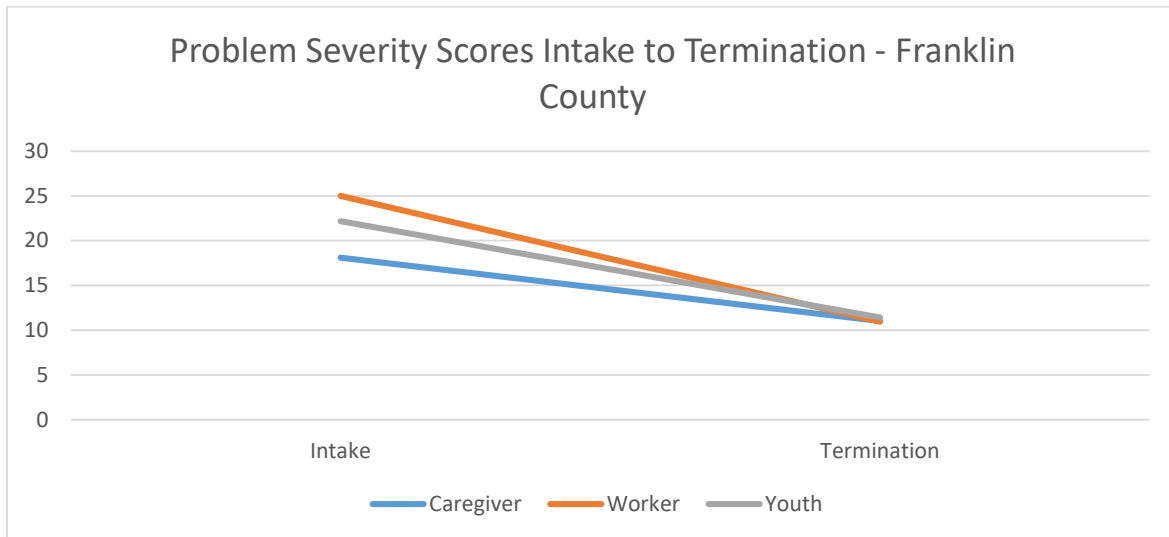


Figure 34



### Caregiver Rating

Paired samples t-tests revealed significant improvements in Problem Severity at each measurement interval compared to intake (see Table 92). Significant improvements were noted at three months:  $t(138) = 5.04, p < .001$ ; six months:  $t(72) = 2.76, p < .01$ ; and at termination  $t(120) = 5.69, p < .001$ . A large effect was found for the time period between intake and termination. Moderate effect sizes were found for all other time periods.

Table 92. Paired Samples T-Tests for Problem Severity - Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	21.76 (SD=15.86; n=139)	15.73 (SD=13.03; n=139)	5.04 <sup>***</sup>	.43
<b>Intake to Six Months</b>	19.47 (SD=13.81; n=73)	14.22 (SD=12.29; n=73)	2.76 <sup>**</sup>	.32
<b>Intake to Termination</b>	18.10 (SD=14.48; n=121)	11.02 (SD=12.18; n=121)	5.69 <sup>***</sup>	.51

\* < .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 93). Improvements were noted at three months:  $t(376) = 13.68, p < .001$ ; six months:  $t(197) = 11.93, p < .001$ ; nine months:  $t(44) = 4.72, p < .001$ ; and at termination  $t(320) = 19.60, p < .001$ . We found large effect sizes for all time periods.

Table 93. Paired Samples T-Tests for Problem Severity – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	25.53 (SD=12.38; n=377)	16.06 (SD=11.28; n=377)	13.68 <sup>***</sup>	.70
<b>Intake to Six Months</b>	26.45 (SD=13.13; n=198)	14.12 (SD=10.02; n=198)	11.93 <sup>***</sup>	.85
<b>Intake to Nine Months</b>	26.01 (SD=11.63; n=45)	14.87 (SD=10.15; n=45)	4.72 <sup>***</sup>	.70
<b>Intake to Termination</b>	25.00 (SD=11.81; n=321)	10.96 (SD=10.62; n=321)	19.60 <sup>***</sup>	1.09

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

### Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement at each data collection point (see Table 94). Improvements were noted at three months:  $t(361) = 5.33, p < .001$ ; six months:  $t(178) = 6.25, p < .001$ ; nine months:  $t(41) = 2.38, p < .05$ ; and at termination  $t(284) = 9.71, p < .001$ . Moderate effect sizes were observed for the time periods between intake to six months, intake to nine months, and intake to termination. A small effect size was found for the period between intake and three months.

Table 94. Paired Samples T-Tests for Problem Severity – Youth

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	15.49 (SD=12.36; n=362)	12.14 (SD=10.32; n=362)	5.33 <sup>***</sup>	.28
<b>Intake to Six Months</b>	16.53 (SD=12.56; n=179)	11.18 (SD=9.66; n=179)	6.25 <sup>***</sup>	.46
<b>Intake to Nine Months</b>	16.23 (SD=14.05; n=42)	10.79 (SD=10.86; n=42)	2.38 <sup>*</sup>	.38
<b>Intake to Termination</b>	22.18 (SD=16.77; n=285)	11.43 (SD=11.68; n=285)	9.71 <sup>***</sup>	.67

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

## Functioning

Overall means for the Problem Severity scale by rater and assessment period for Franklin County youth are represented graphically in Figure 35 and means from intake to termination are presented in Figure 36

Figure 35

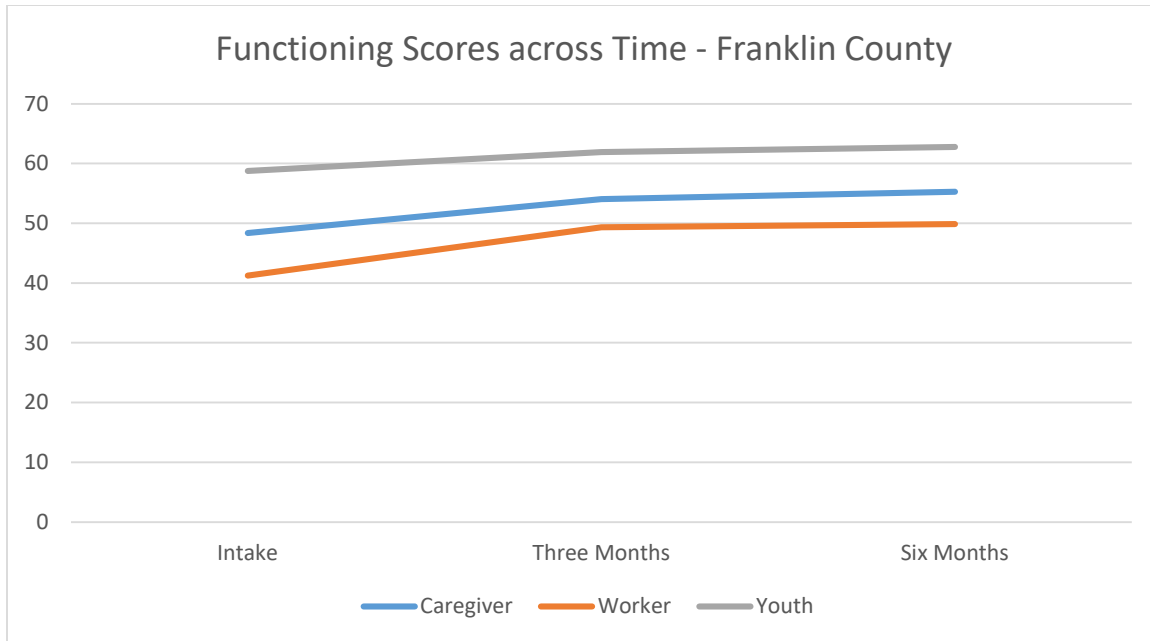
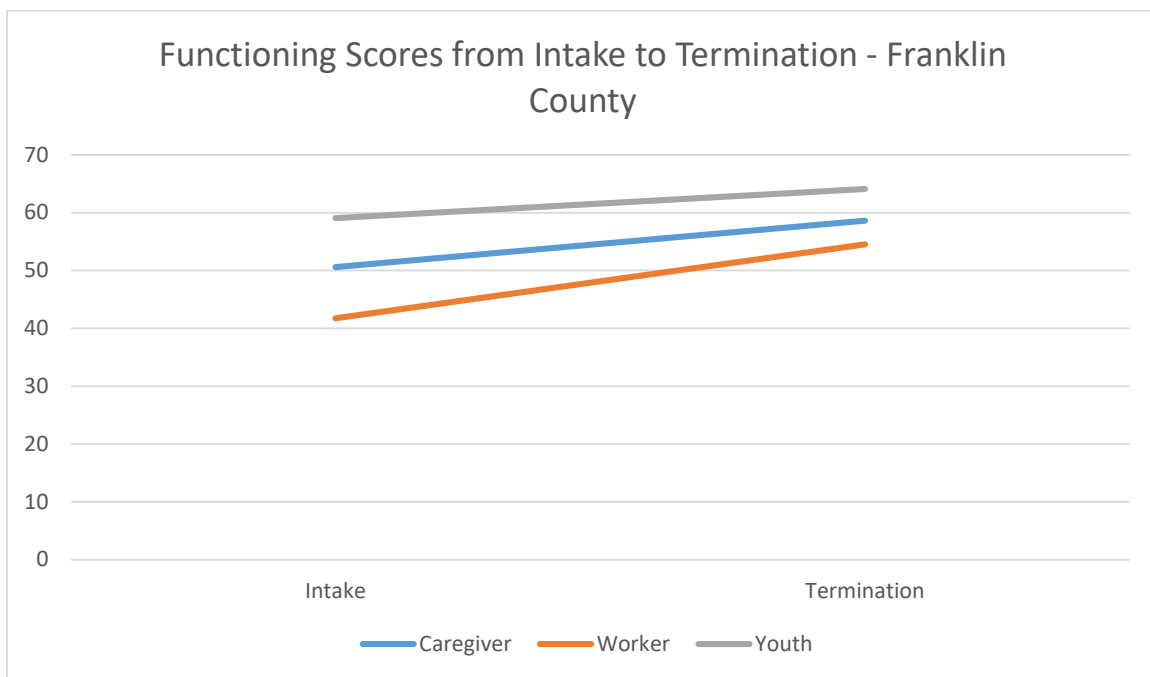


Figure 36



### Caregiver Ratings

Paired samples t-tests revealed significant improvements in Functioning at each measurement interval (see Table 95) compared to intake. Significant improvements were noted at three months:  $t(137) = -4.17, p < .001$ ; six months:  $t(71) = -3.81, p < .001$ ; and at termination  $t(117) = -5.53, p < .001$ . A large effect size was found in the time period between intake and termination. Moderate effect sizes were found for all other time periods.

Table 95. Paired Samples T-Tests for Functioning Scores – Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	48.04 (SD=16.57; n=138)	53.89 (SD=14.83; n=138)	-4.17***	.35
<b>Intake to Six Months</b>	48.03 (SD=15.59; n=72)	55.58 (SD=13.40; n=72)	-3.81***	.45
<b>Intake to Termination</b>	50.60 (SD=16.36; n=118)	58.65 (SD=13.93; n=118)	-5.53***	.51

\* < .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 96). Improvements were noted at three months:  $t(364) = -8.85, p < .001$ ; six months:  $t(193) = -7.28, p < .001$ ; nine months:  $t(43) = -2.08, p < .05$ ; and at termination  $t(318) = -14.05, p < .001$ . A large effect was noted for the periods between intake and termination and intake and six months while moderate effects were noted for all other time periods.

Table 96. Paired Samples T-Tests for Functioning Scores – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	41.88 (SD=11.89; n=365)	49.22 (SD=14.37; n=365)	-8.85***	.46
<b>Intake to Six Months</b>	40.94 (SD=11.21; n=194)	49.78 (SD=13.50; n=194)	-7.28***	.52
<b>Intake to Nine Months</b>	42.07 (SD=12.67; n=44)	47.52 (SD=14.27; n=44)	-2.08*	.31
<b>Intake to Termination</b>	41.77 (SD=11.60; n=319)	54.52 (SD=14.96; n=319)	-14.05***	.79

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

### Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement at each data collection point (see Table 97). Improvements were noted at three months:  $t(363) = -4.29, p < .001$ ; six months:  $t(181) = -3.90, p < .001$ ; nine months:  $t(39) = -3.64, p < .01$ ; and at termination  $t(313) = -6.45, p < .001$ . A large effect size was noted for the period between intake and nine months and a moderate effect size was found for the period between intake and termination. Small effect sizes were noted for all other time periods.

Table 97. Paired Samples T-Tests for Functioning Scores – Youth

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	58.85 (SD=13.07; n=364)	61.84 (SD=12.56; n=364)	-4.29***	.22
<b>Intake to Six Months</b>	57.92 (SD=14.73; n=182)	62.70 (SD=13.01; n=182)	-3.90***	.29
<b>Intake to Nine Months</b>	58.97 (SD=14.07; n=40)	66.42 (SD=10.01; n=40)	-3.64**	.57
<b>Intake to Termination</b>	59.07 (SD=12.66; n=314)	64.09 (SD=13.10; n=314)	-6.45***	.36

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

## 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 underendorsement 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 26.4% (n = 144) 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.

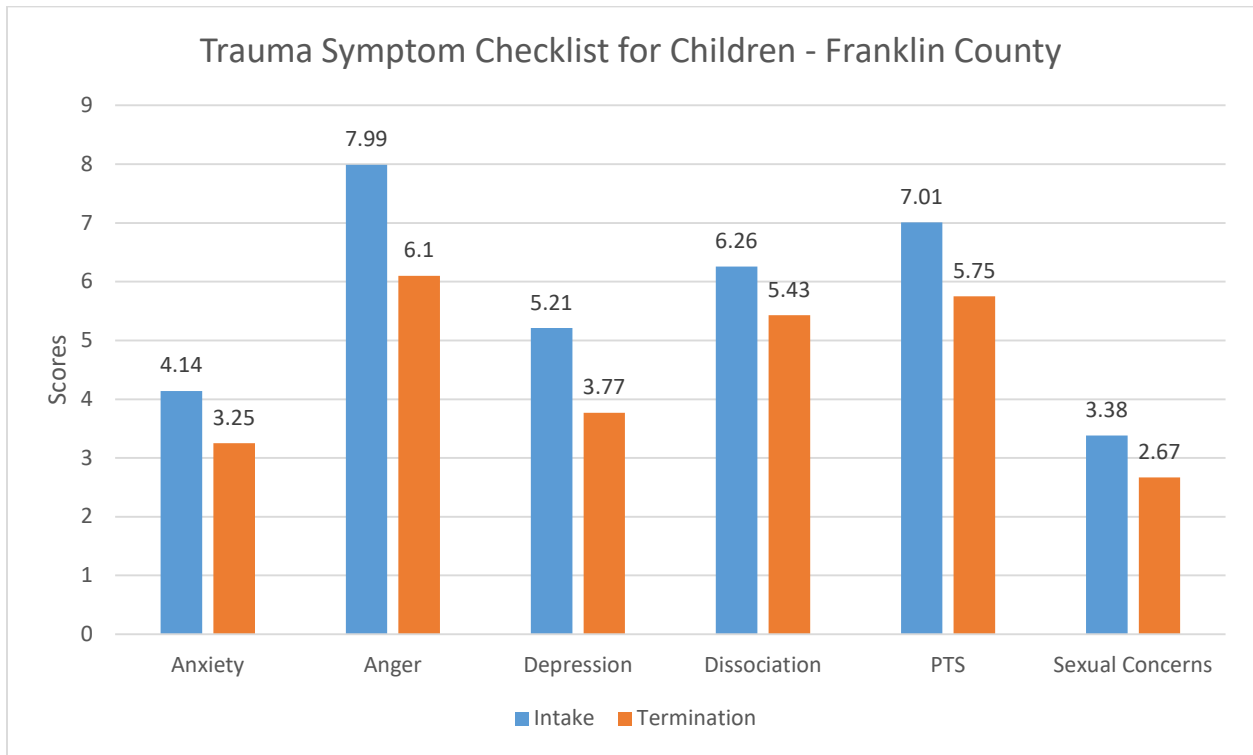
Overall, results from paired samples t-tests indicated that there were significant symptom reductions on all subscales from intake to termination (see Table 98 and Figure 37). Considering Cohen’s (1988) established cutoffs, small effects were found for all subscales. The removal of such a large number of youth who were identified as “Underresponders” had a significant impact on the paired samples t-test results and the effect sizes.

Table 98. TSCC Subscales from Intake to Termination

	<b>Intake</b>	<b>Termination</b>	<b>t</b>	<b>d</b>
<b>Anxiety</b>	4.14 (SD=3.53; n=166)	3.25 (SD=2.99; n=166)	3.26***	.26
<b>Depression</b>	5.21 (SD=3.89; n=166)	3.77 (SD=3.31; n=166)	4.57***	.36
<b>Anger</b>	7.99 (SD=4.79; n=166)	6.10 (SD=4.55; n=166)	4.81***	.37
<b>Posttraumatic Stress</b>	7.01 (SD=5.19; n=166)	5.75 (SD=4.40; n=166)	3.29***	.26
<b>Dissociation</b>	6.26 (SD=4.21; n=166)	5.43 (SD=4.17; n=166)	2.30*	.18
<b>Sexual Concerns</b>	3.38 (SD=2.73; n=166)	2.67 (SD=3.06; n=166)	3.10**	.24

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

Figure 37



### 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 7.8 for females and 4.6 for males (see Figure 38 and Figure 39). For females, paired samples t-tests revealed significant improvements in trauma symptoms for the Anxiety, Anger, Depression, and PTS subscale from intake to termination. For males, paired samples t-tests indicated significant improvements in trauma symptoms for all subscales except Dissociation.

Figure 38

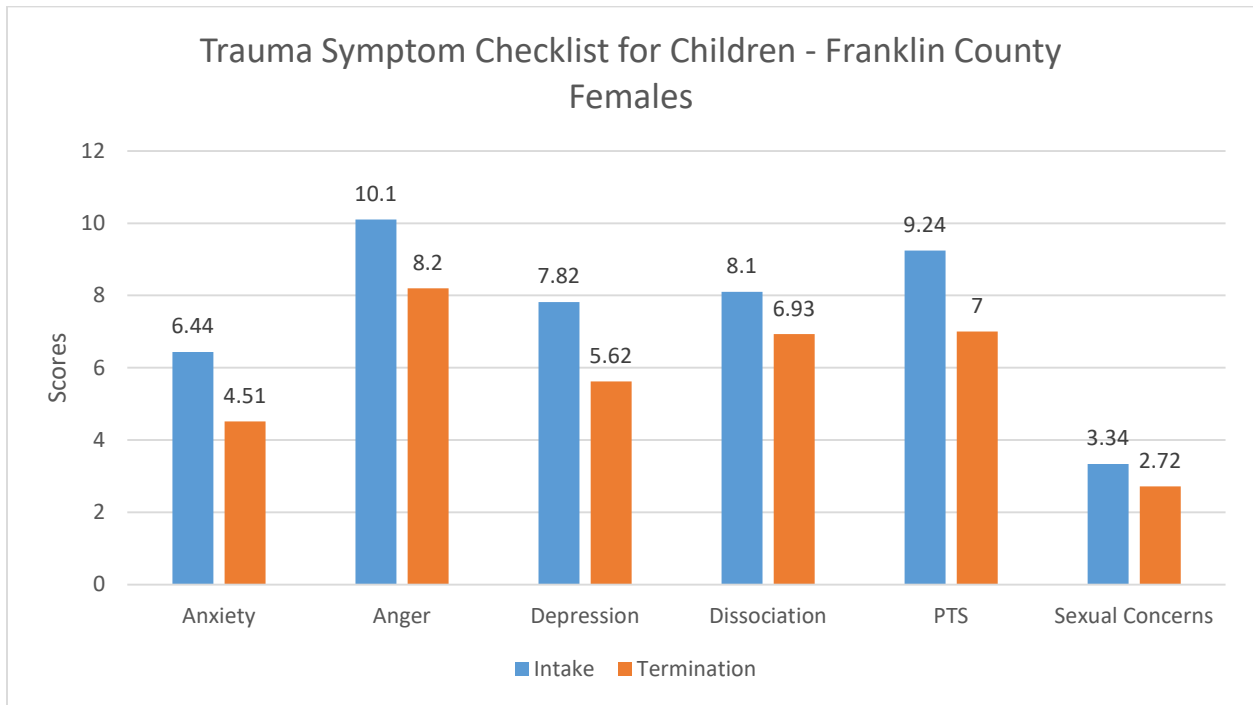
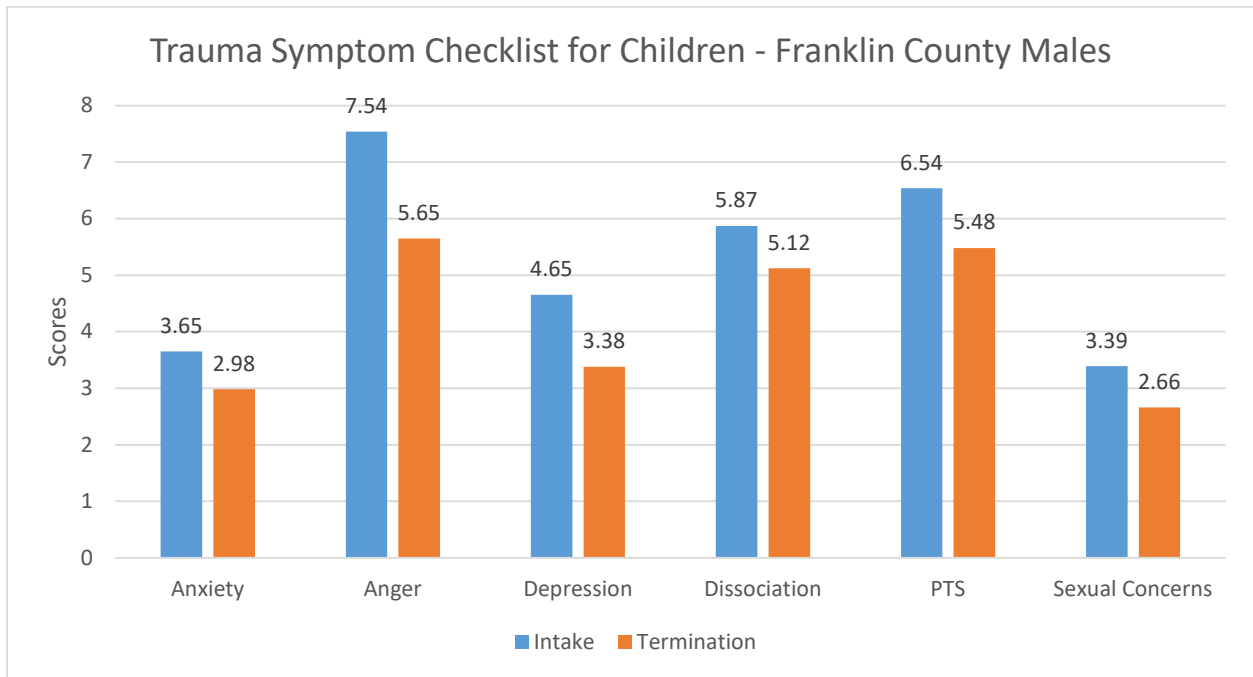


Figure 39





## 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 99 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. Chi-square tests revealed that significantly more females than males reported lifetime use of cocaine and pain killers. A significantly higher proportion of males reported lifetime use of chewing tobacco. Less than 1% of males (0.5%, n = 2) and 1.0% of females (n = 1) reported lifetime use of heroin.

Table 99. Self-Reported Substance Use at Intake

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
<b>Alcohol</b>	64.8% (n = 261)	13.74 (SD = 1.80)	57.7% (n = 60)	13.81 (SD = 1.96)
<b>Cigarettes</b>	53.8% (n = 218)	13.10 (SD = 2.68)	48.1% (n = 50)	13.18 (SD = 2.26)
<b>Chewing Tobacco</b>	7.3% (n = 29)	13.21 (SD = 2.81)	2.9% (n = 3)	12.67 (SD = 3.22)
<b>Marijuana</b>	81.5% (n = 330)*	13.56 (SD = 2.60)	71.2% (n = 74)	13.54 (SD = 1.71)
<b>Cocaine</b>	3.2% (n = 13)	14.69 (SD = 2.87)	8.8% (n = 9)*	14.75 (SD = 1.17)
<b>Pain Killers (use inconsistent with prescription)</b>	10.3% (n = 42)	13.65 (SD = 2.39)	19.2% (n = 20)*	14.53 (SD = 1.77)
<b>GHB</b>	0	N/A	0	N/A
<b>Inhalants</b>	2.5% (n = 10)	13.89 (SD = 1.54)	0	N/A
<b>Heroin</b>	0.5% (n = 2)	16.00 (SD = 0.00)	1.0% (n = 1)	13.00 <sup>a</sup>
<b>Amphetamines</b>	1.5% (n = 6)	14.50 (SD = 1.92)	0	N/A
<b>Ritalin (use inconsistent with prescription)</b>	7.2% (n = 29)	11.93 (SD = 3.89)	6.9% (n = 7)	13.29 (SD = 1.80)
<b>Barbiturates</b>	0.2% (n = 1)	15.00 <sup>a</sup>	1.0% (n = 1)	14.00 <sup>a</sup>
<b>Non-prescription Drugs</b>	3.2% (n = 13)	14.58 (SD = 1.56)	4.9% (n = 5)	14.25 (SD = 3.50)
<b>Hallucinogens</b>	3.9% (n = 16)	14.38 (SD = 2.42)	3.9% (n = 4)	15.67 (SD = 0.58)
<b>PCP</b>	0.2% (n = 1)	15.00	0	N/A
<b>Ketamine</b>	0	N/A	0	N/A
<b>Ecstasy</b>	3.0% (n = 12)	14.50 (SD = 1.23)	5.8% (n = 6)	13.92 (SD = 3.06)
<b>Tranquilizers</b>	3.4% (n = 14)	15.00 (SD = 1.24)	4.8% (n = 5)	14.40 (SD = 1.52)

\* $p < .05$ , <sup>a</sup>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 40 and Figure 41 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 alcohol and marijuana. McNemar’s tests showed a significant decrease from intake to termination in six-month alcohol and marijuana use for both males and females.

The percentage of males using alcohol in the past six months dropped from 59.8% (n = 146) to 36.0% (n = 45) from intake to termination. For females, 73.2% (n = 41) reported past six-month use at intake while 21.4% (n = 6) reported past six-month alcohol use at termination. Over three-quarters of males (78.5%, n = 168) reported past six-month cigarette use at intake and 74.3% (n = 81) reported past six-month use at termination.

Past six-month marijuana use declined from 79.6% (n = 258) at intake to 47.9% (n = 80) at termination for males and 77.5% (n = 55) at intake and 38.2% (n = 13) at termination for females.

Figure 40

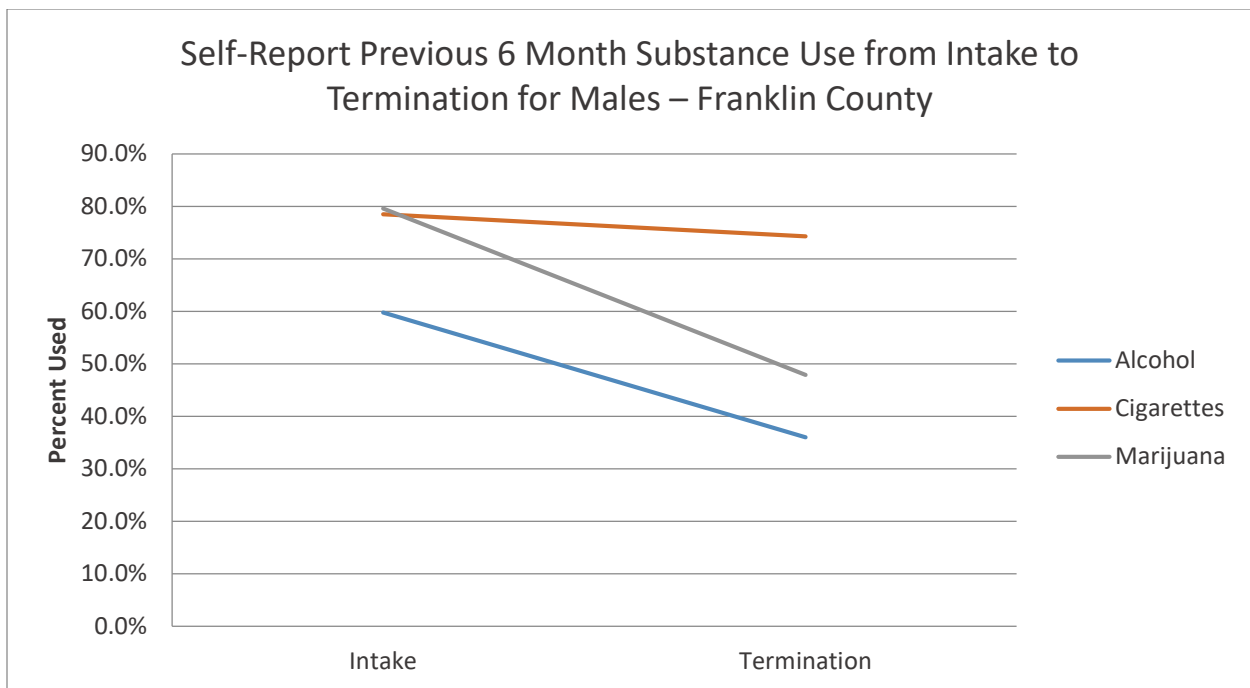
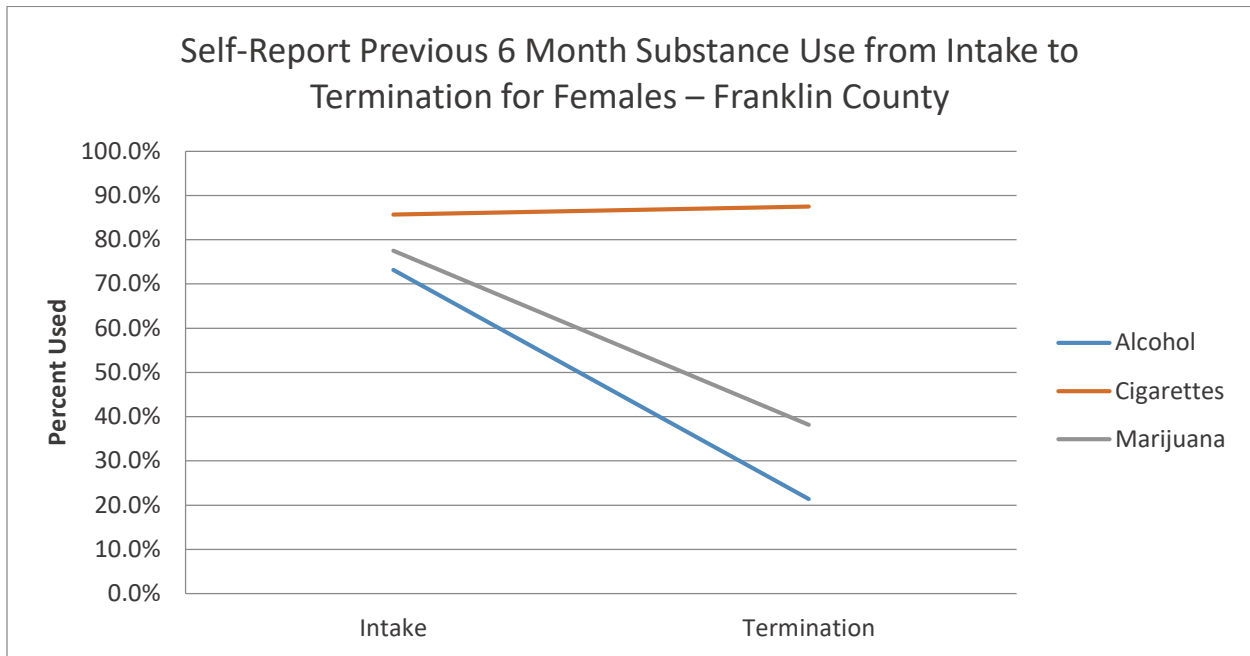


Figure 41



### 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 42 and Figure 43 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. For females, the average number of days declined from intake to termination for cigarettes. In the past 30 days, males reported using alcohol for an average of 1.54 days (SD = 3.39; n = 131) at intake and 0.73 days at termination (SD = 2.01; n = 40). Females reported using alcohol for an average of 2.26 days (SD = 4.10; n = 39) at intake and 0.50 days (SD = 1.41; n = 8) at termination. Females reported an average of 23.90 days (SD = 12.12, n = 39) of cigarette use at intake and 19.64 days (SD = 13.51, n = 22) at termination. For marijuana, males reported using for an average of 7.10 days (SD = 9.37; n = 226) out of the past 30 days at intake and 4.30 days (SD = 7.94; n = 81) at termination while females reported using for an average of 7.06 days (SD = 8.99; n = 51) at intake and 3.00 days (SD = 6.21; n = 11) at termination. Paired samples t-test revealed a statistically significant decrease from intake to termination for marijuana among males.

Figure 42

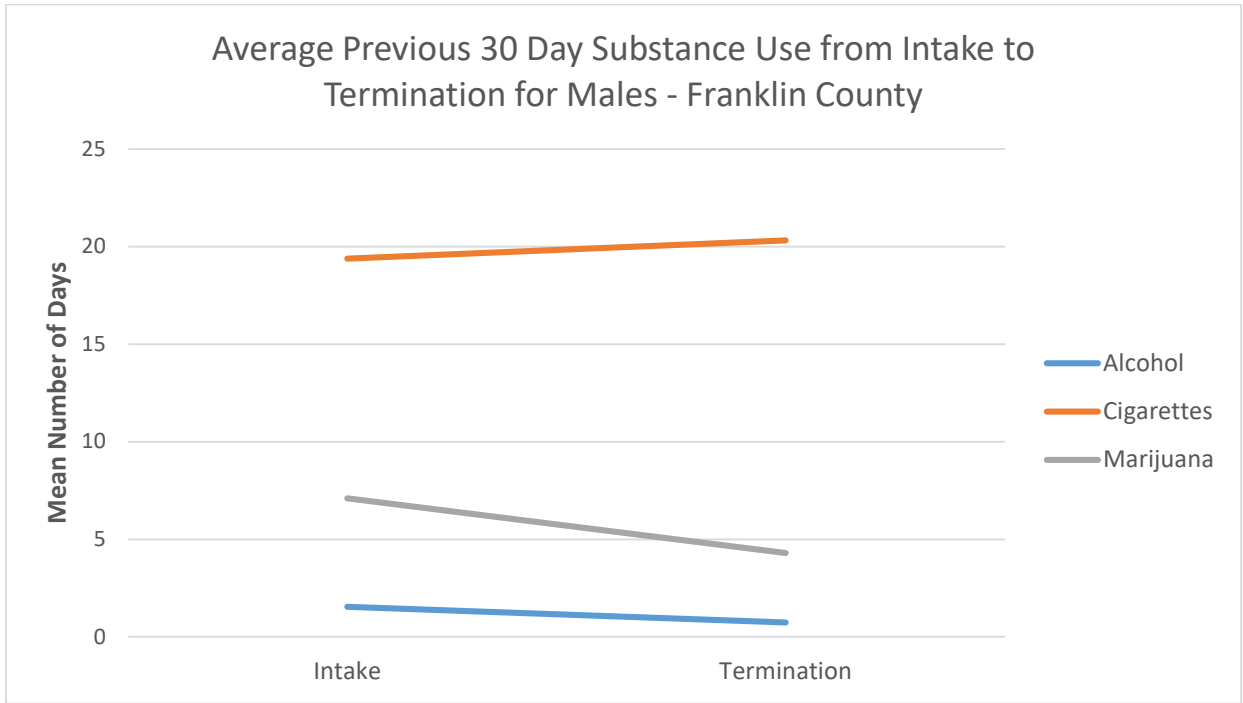
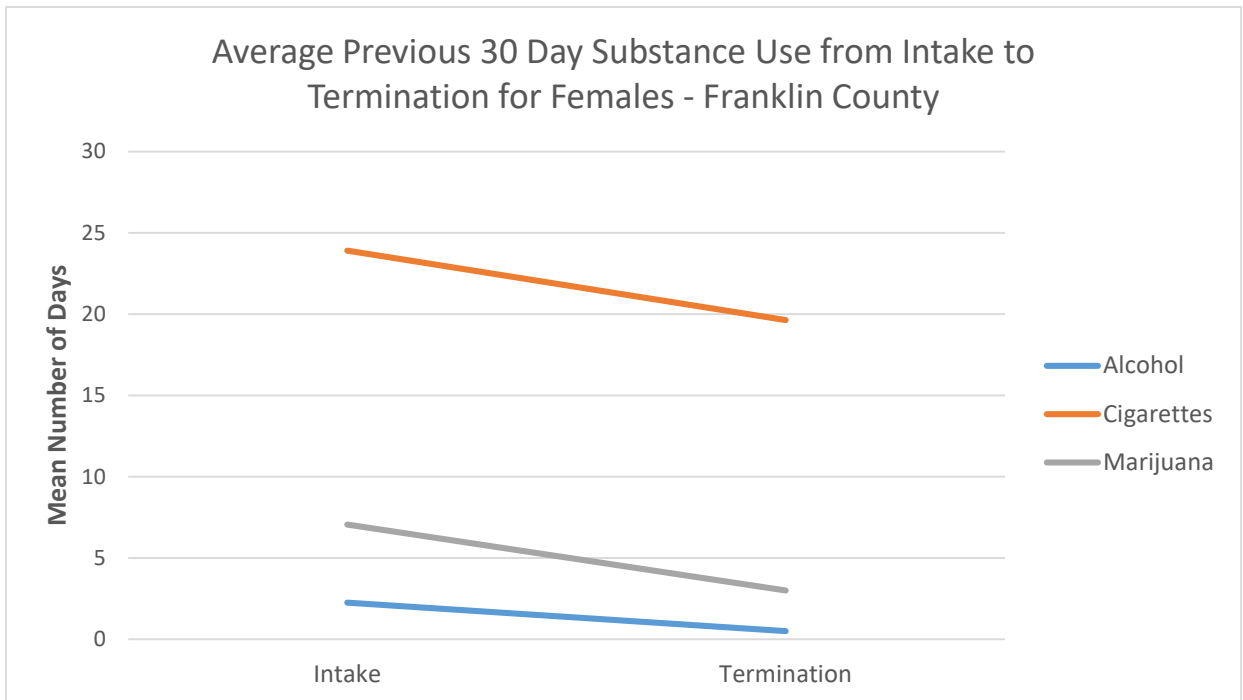


Figure 43



## 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 431 youth terminated from the BHJJ program in Franklin County. Nearly 70% (69.1%, n = 298) of the youth terminated from the BHJJ program were identified as successful treatment completers. In Franklin County, 2.3% (n = 10) were withdrawn from the program and 11.1% (n = 48) were terminated from the program due to an out of home placement. Table 100 presents all of the reasons for termination from BHJJ.

In the latest evaluation period that began July 2015 and ended in June 2017, 71.1% (n = 27) of youth terminated successfully from the BHJJ program in Franklin County.

Table 100. Reasons for Termination from BHJJ

Termination Reason	All Youth	Youth Enrolled from July 2015 to June 2017
<b>Successfully Completed Services</b>	69.1% (n = 298)	71.1% (n = 27)
<b>Client Did Not Return/Rejected Services</b>	7.0% (n = 29)	2.6% (n = 1)
<b>Out of Home Placement</b>	11.1% (n = 48)	10.5% (n = 4)
<b>Client/Family Moved</b>	0.9% (n = 4)	0.0% (n = 0)
<b>Client Withdrawn</b>	2.3% (n = 10)	0.0% (n = 0)
<b>Client AWOL</b>	3.2% (n = 14)	0.0% (n = 0)
<b>Client Incarcerated</b>	2.8% (n = 12)	2.6% (n = 1)
<b>Other</b>	3.7% (n = 16)	5.3% (n = 2)

## Average Length of Stay

The average length of stay for youth in the Franklin County BHJJ program was 240 days. For youth identified as completing treatment successfully, the average length of stay was 238 days and for youth identified as unsuccessful treatment completers, the average length of stay was 245 days. For youth enrolled since July 1, 2015, the average length of stay in BHJJ was 203 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, 74.5% of the youth (n = 354) in Franklin County were at risk for out of home placement. At termination, 23.0% (n = 92) of youth were at risk for out of home placement. Of those youth who successfully completed BHJJ treatment, 5.2% (n = 15) were at risk for out of home placement at termination while 69.7% (n = 76) 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 72.9% (n = 250) of the youth and had stayed the same for 15.2% (n = 52) of the youth. Police contacts increased for 9.6% (n = 33) of the youth and worker was unable to estimate for 2.3% (n = 8).

## 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. Franklin County does not complete the YSSF, and therefore no data are available to report.

## Recidivism

### Methodology

Court data were provided by the Franklin 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, 66.5% (n = 345) of the BHJJ youth had misdemeanor charges, 71.5% (n = 371) had at least one felony charge, and 92.7% (n = 481) were adjudicated delinquent.

Previous juvenile court information is presented for youth based on BHJJ treatment completion status (successful vs. unsuccessful) (see Table 101). In the 12 months prior to enrollment, 93.9% (n = 278) of successful completers and 95.4% (n = 124) of unsuccessful completers were adjudicated delinquent in the 12 months prior to their enrollment in BHJJ. A slightly lower percentage of successful completers had a felony charge in the 12 months prior to intake (73.6%, n = 218) than unsuccessful completers (74.6%, n = 97).

Table 101. Charges Prior to BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	25.0% (n = 130)	22.4% (n = 116)	34.7% (n = 180)	21.6% (n = 64)	20.9% (n = 62)	32.1% (n = 95)	28.5% (n = 37)	24.6% (n = 32)	42.3% (n = 55)
<b>6 months</b>	50.7% (n = 263)	54.3% (n = 282)	74.6% (n = 387)	48.0% (n = 142)	55.1% (n = 163)	75.0% (n = 222)	53.8% (n = 70)	56.9% (n = 74)	78.5% (n = 102)
<b>12 months</b>	66.5% (n = 345)	71.5% (n = 371)	92.7% (n = 481)	64.2% (n = 190)	73.6% (n = 218)	93.9% (n = 278)	70.8% (n = 92)	74.6% (n = 97)	95.4% (n = 124)
<b>18 months</b>	72.8% (n = 378)	74.2% (n = 385)	95.4% (n = 495)	70.9% (n = 210)	75.7% (n = 224)	95.3% (n = 282)	76.2% (n = 99)	77.7% (n = 101)	98.5% (n = 128)



## 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, 54.2% (n = 231) of youth were charged with at least one new misdemeanor and 22.3% (n = 95) were charged with at least one new felony. Forty-nine percent (49.1%, n = 209) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 102).

In the 12 months after enrollment in BHJJ 47.7% (n = 115) of successful completers were charged with at least one new misdemeanor, 17.8% (n = 43) were charged with at least one new felony, and 41.5% (n = 100) were adjudicated delinquent. Of the youth who completed unsuccessfully, 63.7% (n = 72) were charged with at least one new misdemeanor, 31.0% (n = 35) were charged with at least one new felony, and 61.9% (n = 70) were adjudicated delinquent in the 12 months after their enrollment in BHJJ.

Table 102. Charges After BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	18.3% (n = 88)	6.4% (n = 31)	17.0% (n = 82)	17.8% (n = 49)	5.1% (n = 14)	32.1% (n = 95)	18.5% (n = 23)	11.3% (n = 14)	42.3% (n = 55)
<b>6 months</b>	33.0% (n = 153)	14.7% (n = 68)	31.5% (n = 146)	29.5% (n = 78)	11.0% (n = 29)	27.3% (n = 72)	39.2% (n = 47)	25.0% (n = 30)	40.8% (n = 49)
<b>12 months</b>	54.2% (n = 231)	22.3% (n = 95)	49.1% (n = 209)	47.7% (n = 115)	17.8% (n = 43)	41.5% (n = 100)	63.7% (n = 72)	31.0% (n = 35)	61.9% (n = 70)
<b>18 months</b>	64.7% (n = 260)	29.9% (n = 120)	58.7% (n = 236)	58.7% (n = 131)	23.8% (n = 53)	51.1% (n = 114)	71.8% (n = 79)	42.7% (n = 47)	70.9% (n = 78)

## 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, 44.6% (n = 129) of youth were charged with at least one new misdemeanor, 19.7% (n = 57) were charged with at least one new felony, and 37.7% (n = 109) were adjudicated delinquent (see Table 103).

In the 12 months following their termination from BHJJ, 39.3% (n = 75) of successful completers were charged with at least one new misdemeanor, 15.2% (n = 29) were charged with at least one new felony, and 31.9% (n = 61) were adjudicated delinquent. Of the youth who completed unsuccessfully, 51.3% (n = 41) were charged with at least one new misdemeanor, 28.8% (n = 23) were charged with at least one new felony, and 45.0% (n = 36) were adjudicated delinquent in the 12 months after their termination from BHJJ.

Table 103. Charges After Termination from BHJJ

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	14.7% (n = 50)	5.0% (n = 17)	13.0% (n = 44)	12.9% (n = 30)	3.9% (n = 9)	12.0% (n = 28)	14.7% (n = 14)	5.3% (n = 5)	11.6% (n = 11)
<b>6 months</b>	25.6% (n = 81)	10.7% (n = 34)	22.4% (n = 71)	22.7% (n = 50)	8.6% (n = 19)	20.5% (n = 45)	29.4% (n = 25)	12.9% (n = 11)	23.5% (n = 20)
<b>12 months</b>	44.6% (n = 129)	19.7% (n = 57)	37.7% (n = 109)	39.3% (n = 75)	15.2% (n = 29)	31.9% (n = 61)	51.3% (n = 41)	28.8% (n = 23)	45.0% (n = 36)
<b>18 months</b>	57.2% (n = 147)	25.7% (n = 66)	47.5% (n = 122)	52.4% (n = 87)	20.5% (n = 34)	42.8% (n = 71)	62.5% (n = 45)	36.1% (n = 26)	52.8% (n = 38)

## 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 210 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, 20.0% (n = 42) were charged with a new felony in the 12 months after their termination from BHJJ.

Thirty-three of the 519 BHJJ youth (6.4%) from Franklin County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.

## Hamilton County

### Demographics

Hamilton County has enrolled 326 youth in the BHJJ program since 2008. Of the youth enrolled, 26.7% (n = 87) were female and 73.3% (n = 239) were male. Since July 2015, 79.2% (n = 42) of new enrollees have been male (see Table 104).

The majority of the overall sample of youth were either or Caucasian (38.8%, n = 124) or African American (54.4%, n = 174). A similar pattern was found for youth enrolled since July 2015, with over 62% (62.3%, n = 33) of those enrolled in the past biennium identifying as African American. The average age of the youth at intake into BHJJ was 15.12 years old (SD = 1.70) with a range between 12 and 17 years.

Table 104. Demographic Information for BHJJ Youth

	All Youth Enrolled (2008 - 2017)	Youth Enrolled between July 2015 – June 2017
<b>Gender</b>	Female = 26.7% (n = 87)	Female = 20.8% (n = 11)
	Male = 73.3% (n = 239)	Male = 79.2% (n = 42)
<b>Race</b>	African American = 54.4% (n = 174)	African American = 62.3% (n = 33)
	Caucasian = 38.8% (n = 124)	Caucasian = 34.0% (n = 18)
	Other = 6.9% (n = 22)	Other = 3.8% (n = 2)
<b>Age at Intake</b>	15.12 years (SD = 1.70)	15.40 years (SD = 1.46)

### Custody Arrangement and Household Information

At intake, almost two-thirds of youth lived with the biological mother (65.9%, n = 184) (see Table 105). At time of enrollment, 86.0% (n = 240) of the BHJJ youth lived with at least one biological parent.

Over 82% of the BHJJ caregivers (82.4%, n = 224) had at least a high school diploma or GED, and 14.3% (n = 39) had a bachelor's degree or higher (see Table 106). Nearly one in five caregivers (17.6%, n = 48) 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 - \$24,999 (see Table 107). Nearly 75.0% of caregivers (74.7%, n = 206) reported annual household incomes below \$35,000 and 46.4% (n = 128) reported an annual household income below \$20,000. Nearly 30% of BHJJ families (29.8%, n = 82) reported an annual household income below \$10,000.

Table 105. Custody Arrangement for BHJJ Youth

<b>Custody</b>	<b>BHJJ Youth</b>
<b>Two Biological Parents or One Biological and One Step or Adoptive Parent</b>	17.6% (n=49)
<b>Biological Mother Only</b>	65.9% (n=184)
<b>Biological Father Only</b>	2.5% (n=7)
<b>Adoptive Parent(s)</b>	4.3% (n=12)
<b>Sibling</b>	0.0% (n=0)
<b>Aunt/Uncle</b>	2.5% (n=5)
<b>Grandparents</b>	6.6% (n=13)
<b>Friend</b>	0.0% (n=0)
<b>Ward of the State</b>	0.0% (n=0)
<b>Other</b>	0.5% (n=1)

Table 106. Educational Outcomes for Caregivers of BHJJ Youth

<b>Number of School Years Completed</b>	<b>Number of Caregivers</b>
<b>Less than High School</b>	17.6% (n=48)
<b>High School Graduate or G.E.D.</b>	36.4% (n=99)
<b>Some College or Associate Degree</b>	31.6% (n=86)
<b>Bachelor's Degree</b>	7.0% (n=19)
<b>More than a Bachelor's Degree</b>	7.3% (n=20)

Table 107. Annual Household Income for BHJJ Families

<b>Annual Household Income</b>	<b>BHJJ Families</b>
<b>Less than \$5,000</b>	20.7% (n=57)
<b>\$5,000 - \$9,999</b>	9.1% (n=25)
<b>\$10,000 - \$14,999</b>	8.3% (n=23)
<b>\$15,000 - \$19,999</b>	8.3% (n=23)
<b>\$20,000 - \$24,999</b>	14.5% (n=40)
<b>\$25,000 - \$34,999</b>	13.8% (n=38)
<b>\$35,000 - \$49,999</b>	12.7% (n=35)
<b>\$50,000 - \$74,999</b>	7.6% (n=21)
<b>\$75,000 - \$99,999</b>	1.4% (n=4)
<b>\$100,000 and over</b>	3.6% (n=10)

## 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 108. Overall, a significantly higher proportion of the caregivers of females reported a history of sexual abuse, running away, talking about suicide, and attempting suicide. A significantly higher proportion of the caregivers of males reported a history of living in a household with someone convicted of a crime.

Caregivers reported that 11.3% of females and 7.5% of males had a history of being physically abused while 17.5% of females and 6.3% of males had a history of being sexually abused. Caregivers of 48.7% of females and 35.5% of males reported hearing the child talking about committing suicide and 27.3% of females and 11.7% of males had attempted suicide at least once. Over 65% of caregivers of females (68.8%) and males (65.3%) reported a family history of depression.

Table 108. Youth and Family History

Question	Females	Males
Has the child ever been physically abused?	11.3% (n=9)	7.5% (n=15)
Has the child ever been sexually abused?	17.5% (n=14)**	6.3% (n=12)
Has the child ever run away?	65.0% (n=52)*	48.2% (n=94)
Has the child ever had a problem with substance abuse, including alcohol and/or drugs?	43.6% (n=34)	55.3% (n=109)
Has the child ever talked about committing suicide?	48.7% (n=38)*	35.5% (n=70)
Has the child ever attempted suicide?	27.3% (n=21)**	11.7% (n=23)
Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?	25.9% (n=21)	31.0% (n=62)
Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?	68.8% (n=53)	65.3% (n=126)
Has anyone in the child's biological family had a mental illness, other than depression?	41.3% (n=31)	43.8% (n=81)
Has the child ever lived in a household in which someone was convicted of a crime?	13.3% (n=10)	40.9% (n=76)**
Has anyone in the child's biological family had a drinking or drug problem?	39.2% (n=31)	47.2% (n=93)
Is the child currently taking any medication related to his/her emotional or behavioral symptoms	52.5% (n=42)	46.6% (n=88)

\*p < .05, \*\* p < .01

## 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 (66.7% and 78.6% respectively) (see Table 109). Chi-square analysis indicated females had significantly higher rates of problems related to suicide, depression, anxiety, adjustment, and school performance. Males had significantly higher rates of conduct/delinquency problems and hyperactive and attention-related problems.

Table 109. Problems Leading to Services

<b>Problems Leading to Services</b>	<b>Females</b>	<b>Males</b>
<b>Adjustment-related problems</b>	18.7% (n = 14)*	9.4% (n = 18)
<b>Anxiety-related problems</b>	34.7% (n = 26)**	16.1% (n = 31)
<b>Conduct/delinquency-related problems</b>	66.7% (n = 50)	78.6% (n = 151)*
<b>Depression-related problems</b>	58.7% (n = 44)***	21.4% (n = 41)
<b>Eating disorders</b>		0.5% (n = 1)
<b>Hyperactive and attention-related problems</b>	26.7% (n = 20)	47.9% (n = 92)**
<b>Learning disabilities</b>	4.0% (n = 3)	7.3% (n = 14)
<b>Pervasive development disabilities</b>	1.3% (n = 1)	1.0% (n = 2)
<b>Psychotic behaviors</b>	4.0% (n = 3)	2.6% (n = 5)
<b>School performance problems not related to learning disabilities</b>	30.7% (n = 23)*	18.8% (n = 36)
<b>Specific developmental disabilities</b>	0	0
<b>Substance use, abuse, dependence-related problems</b>	30.7% (n = 23)	38.5% (n = 74)
<b>Suicide-related problems</b>	16.0% (n = 12)**	4.2% (n = 8)

\* < .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 110 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. Significant differences on OYAS levels were found for gender. A larger proportion of males were identified as moderate risk on the OYAS (48.2%, n = 92) compared to females (23.9%, n = 17). A similar proportion of White and Nonwhite youth were identified as low, moderate, and high risk.

Table 110. OYAS Risk Categories by Gender and Race

	OYAS Low	OYAS Moderate	OYAS High
<b>Female</b>	71.8% (n = 51)	23.9% (n = 17)	4.2% (n = 3)
<b>Male*</b>	47.1% (n = 90)	48.2% (n = 92)	4.7% (n = 9)
<b>White</b>	59.6% (n = 59)	36.4% (n = 36)	4.0% (n = 4)
<b>Nonwhite</b>	50.3% (n = 81)	44.7% (n = 72)	5.0% (n = 8)

\*p < .001

## DSM Diagnoses

Workers were asked to report any DSM I 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 females was Depressive Disorders and the most common diagnosis for males was Attention Deficit Hyperactivity Disorder (see Table 111).

Chi-square analysis indicated females were significantly more likely to be diagnosed with Post-traumatic Stress Disorder (PTSD) and Depressive Disorders. Males were significantly more likely to be diagnosed with Cannabis-related Disorders, ADHD, and Disruptive Behavior Disorder. Thirty-eight percent (38.2%, n = 66) of males and over one-quarter of females (26.2%, n = 17) were identified as having both a DSM mental health diagnosis and a substance use diagnosis.

Table 111. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
<b>Adjustment Disorder</b>	3.1% (n = 2)	6.4% (n = 11)
<b>Alcohol-related Disorders</b>	7.7% (n = 5)	4.6% (n = 8)
<b>Attention Deficit Hyperactivity Disorder (ADHD)</b>	26.2% (n = 17)	65.3% (n = 113)***
<b>Bipolar Disorder</b>	10.8% (n = 7)	11.0% (n = 19)
<b>Cannabis-related Disorders</b>	23.1% (n = 15)	37.6% (n = 65)*
<b>Conduct Disorder</b>	7.7% (n = 5)	16.2% (n = 28)
<b>Depressive Disorders</b>	40.6% (n = 26)**	19.8% (n = 34)
<b>Disruptive Behavior Disorder</b>	0	5.8% (n = 10)*
<b>Mood Disorder</b>	17.2% (n = 11)	12.9% (n = 22)
<b>Oppositional Defiant Disorder</b>	34.4% (n = 22)	37.4% (n = 64)
<b>Post-traumatic Stress Disorder</b>	17.2% (n = 11)**	5.3% (n = 9)

\* < .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 sixty percent of the youth (60.9%, n = 126) were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in treatment with BHJJ, 42.0% (n = 71) 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, 89.7% (n = 183) of youth were currently attending school while at termination, 91.1% (n = 154) 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 112 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 113 displays this information based on completion status. At intake, 17.8% of youth were earning mostly A's and B's and 22.4% were earning mostly D's and F's. At termination from BHJJ, 58.9% of youth were earning mostly A's, B's, or C's, and 13.9% were earning mostly D's and F's. Academic improvement was largely dependent upon BHJJ completion status. Successful completion had a clear impact on academic performance at termination from BHJJ. For example, at intake, 32.4% of unsuccessful completers and 48.8% of successful completers received mostly A's, B's, or C's. At termination, 31.6% of unsuccessful completers and 67.2% of successful completers received mostly A's, B's, or C's.

At termination, workers reported that 55.7% (n = 98) of youth were attending school more than before starting treatment and 36.4% (n = 64) of youth were attending school 'about the same' amount compared to before starting treatment. Workers reported that 5.1% (n = 9) were attending school less often than before treatment in BHJJ. At termination, 68.2% (n = 103) of the youth attending school had Individualized Education Plans (IEPs).

Table 112. Academic Performance

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A's and B's	17.8% (n = 31)	22.2% (n = 35)
Mostly B's and C's	21.8% (n = 38)	36.7% (n = 58)
Mostly C's and D's	37.9% (n = 66)	27.2% (n = 43)
Mostly D's and F's	22.4% (n = 39)	13.9% (n = 22)

Table 113. Academic Performance for Youth by Completion Status

Typical Grades	Unsuccessful Completers		Successful Completers	
	Frequency at Intake	Frequency at Termination	Frequency at Intake	Frequency at Termination
Mostly A's and B's	11.8% (n = 4)	7.9% (n = 3)	20.0% (n = 16)	26.7% (n = 31)
Mostly B's and C's	20.6% (n = 7)	23.7% (n = 9)	28.8% (n = 23)	40.5% (n = 47)
Mostly C's and D's	32.4% (n = 11)	39.5% (n = 15)	36.3% (n = 29)	23.3% (n = 27)
Mostly D's and F's	35.3% (n = 12)	28.9% (n = 11)	15.0% (n = 12)	9.5% (n = 11)

## 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.

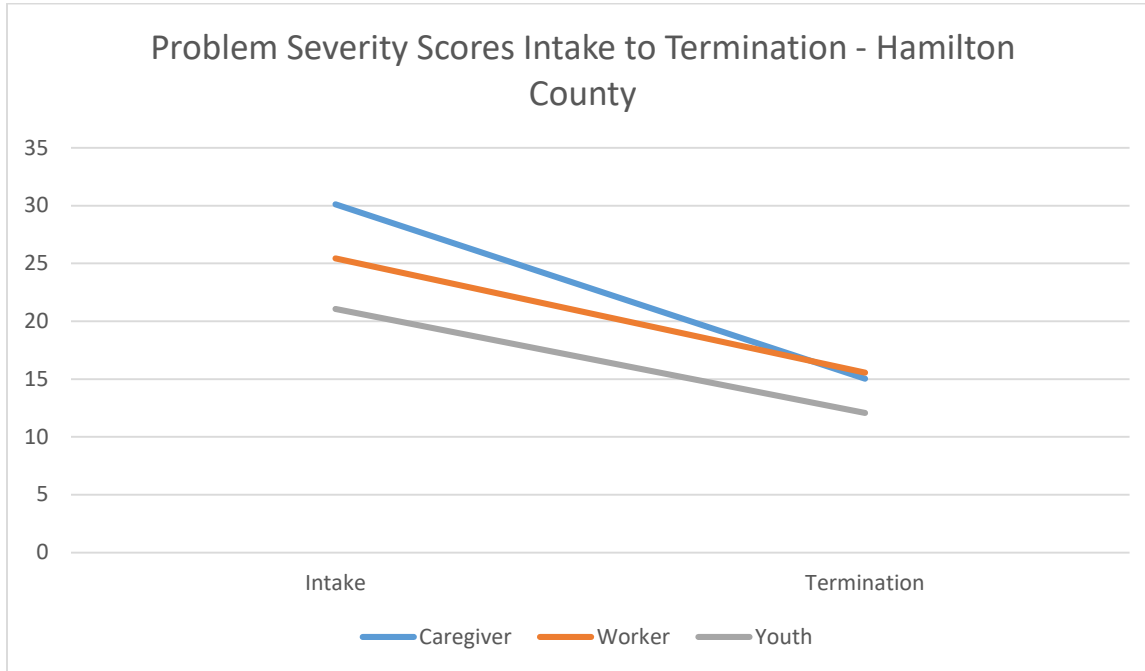
All Problem Severity and Functioning analyses were conducted on assessment periods with enough valid cases to produce meaningful results. While Hamilton County had a number of Ohio Scales completed at the three-month interval, there were not enough cases to report. Therefore, results for Hamilton County will be limited to intake and termination data.

Paired samples t-tests were used to compare Problem Severity scores at intake to Problem Severity scores at termination. 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 termination to be included in the analysis. If the caregiver only has an intake score, his or her data is not included.

## Problem Severity

Overall means for the Problem Severity scale by rater and assessment period for Hamilton County youth are represented graphically in Figure 44.

Figure 44



## Caregiver Rating

Means from intake to termination are presented in Table 114. Paired samples t-tests revealed significant improvements in Problem Severity at termination:  $t(67) = 7.67, p < .001$ . Data indicated a large effect for the time period between intake and termination.

Table 114. Paired Samples T-Tests for Problem Severity - Caregiver

	Mean Time 1	Mean Time 2	<i>t</i>	<i>d</i>
<b>Intake to Termination</b>	30.11 (SD=17.25; n=68)	15.04 (SD=11.55; n=68)	7.67***	.93

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

### Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Problem Severity from intake to termination (see Table 115). Improvements were noted at termination  $t(137) = 7.78, p < .001$  with a moderate effect size.

Table 115. Paired Samples T-Tests for Problem Severity – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	25.44 (SD=13.63; n=138)	15.55 (SD=10.73; n=138)	7.78***	.66

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

### Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement from intake to termination  $t(120) = 7.52, p < .001$  (see Table 116). Data indicated a moderate effect.

Table 116. Paired Samples T-Tests for Problem Severity – Youth

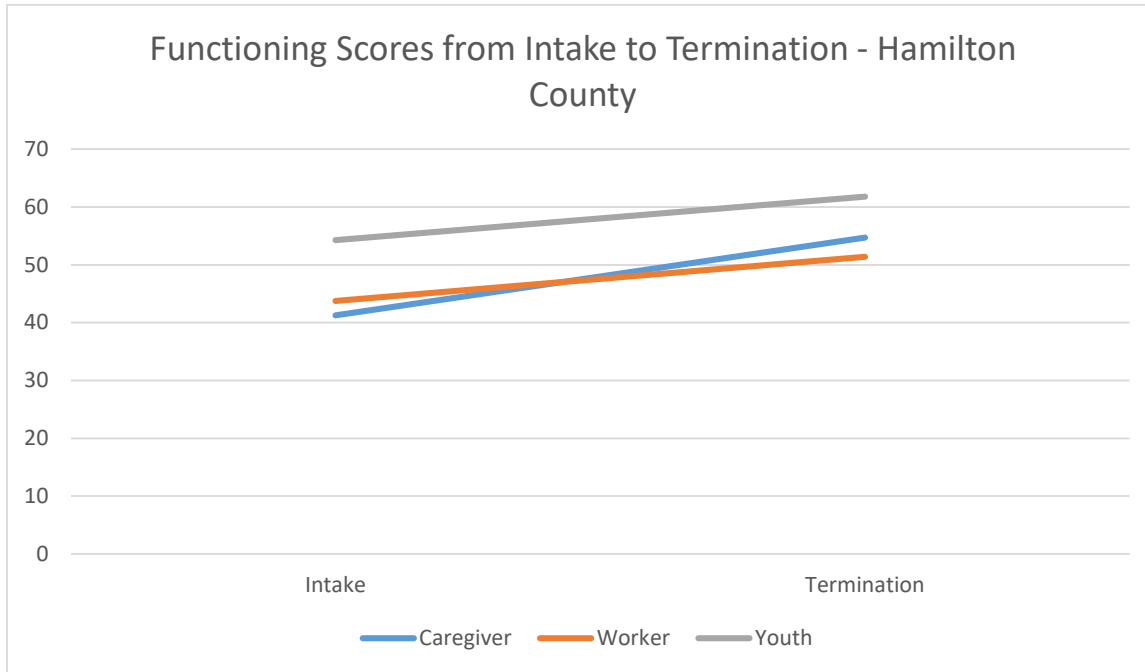
	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	21.16 (SD=14.42; n=121)	12.06 (SD=11.58; n=121)	7.52***	.68

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

## Functioning

Means for the Functioning scale by rater between intake and termination can be found in Figure 45.

Figure 45



### Caregiver Ratings

Paired samples t-tests revealed significant improvements in Functioning from intake to termination  $t(68) = -6.66, p < .001$  with a large effect (see Table 117).

Table 117. Paired Samples T-Tests for Functioning Scores – Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	41.26 (SD=17.11; n=69)	54.72 (SD=15.22; n=69)	-6.66***	.80

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

### Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Functioning from intake to termination  $t(133) = -4.92, p < .001$  with a small effect (see Table 118).

Table 118. Paired Samples T-Tests for Functioning Scores – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	43.75 (SD=12.87; n=134)	51.37 (SD=15.51; n=134)	-4.92***	.42

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

## Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement from intake to termination  $t(116) = -4.86, p < .001$  with a small effect size (see Table 119).

Table 119. Paired Samples T-Tests for Functioning Scores – Youth

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	54.29 (SD=13.89; n=117)	61.78 (SD=13.01; n=117)	-4.86***	.45

\* < .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 37.1% of the BHJJ sample knew someone who was murdered in the past year (see Table 120).

Table 120. Prevalence of Self-Reported Violent Victimization

	<b>% Yes BHJJ Sample (n = 72)</b>	<b>% Yes National Sample</b>
<b>In the last year, did someone threaten to hurt you when you thought they might really do it?</b>	41.7%	14.4% <sup>a</sup>
<b>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?</b>	8.3%	1.9% <sup>b</sup>
<b>In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?</b>	19.7%	2.8% <sup>b</sup>
<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?</b>	41.7%	16.6% <sup>a</sup>
<b>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?</b>	18.1%	5.7% <sup>a</sup>
<b>In the last year, did anyone hit or attack you WITHOUT using an object or weapon?</b>	43.1%	17.7% <sup>a</sup>
<b>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?</b>	19.4%	21.8% <sup>a</sup>
<b>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?</b>	4.2%	0.3% <sup>b</sup>
<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?</b>	4.2%	1.2% <sup>b</sup>
<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?</b>	15.3%	3.3% <sup>b</sup>
<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?</b>	35.1%	12.8% <sup>a</sup>
<b>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?</b>	53.5%	29.0% <sup>a</sup>
<b>In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?</b>	37.1%	5.4% <sup>a</sup>

<b>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?</b>	25.0%	9.7% <sup>a</sup>
<b>Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?</b>	23.9%	5.6% <sup>a</sup>
<b>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?</b>	8.5%	1.4% <sup>b</sup>

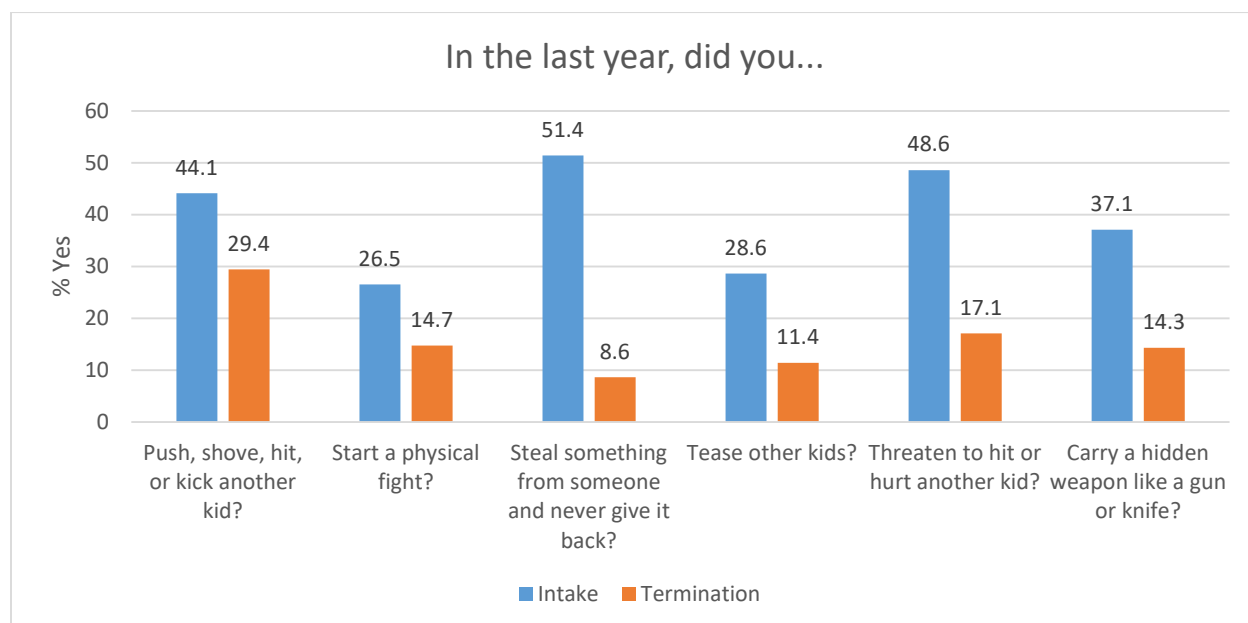
<sup>a</sup> Calculated from the raw National Survey of Children Exposed to Violence (NATSCEV) data. <sup>b</sup> Obtained from Finkelhor, D., Hamby, S.L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. *Child Abuse and Neglect*, 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 VDO. 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 46). For example, at intake, 26.5% of youth reported starting a physical fight in the past year. At termination, 14.7% of youth had started a fight since intake into BHJJ. McNemar’s tests revealed statistically significant improvements from intake to termination for four items: steal something, tease other kids, threaten to hurt another kid, and carry a hidden weapon.

Figure 46

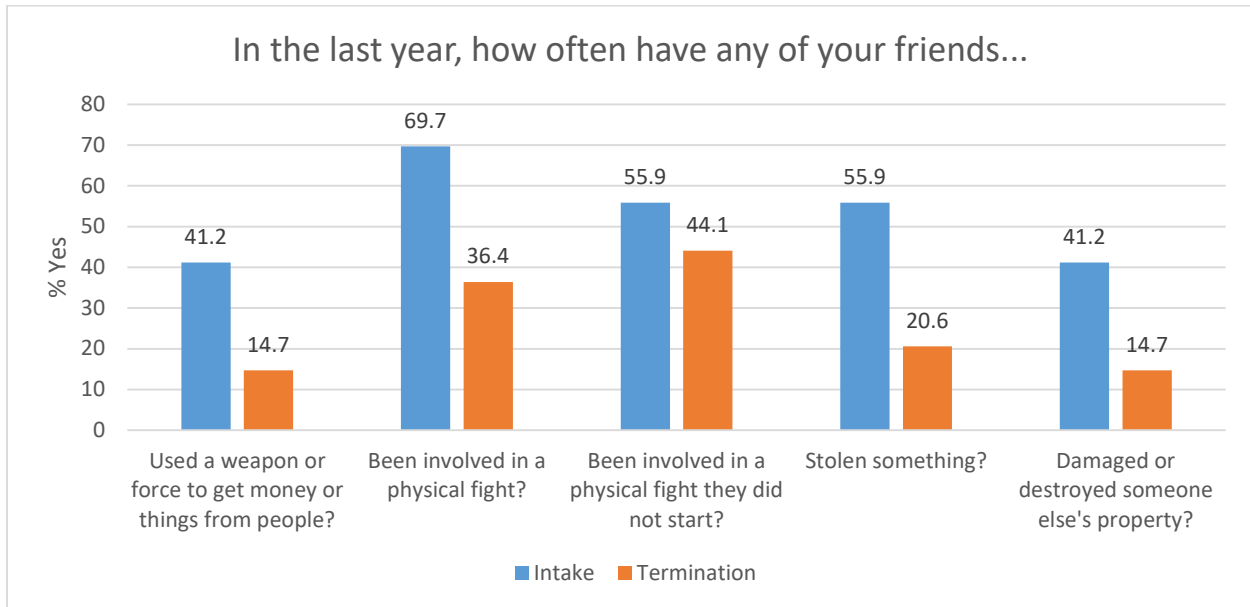




## Peer delinquency

Youth also reported significantly less peer delinquency at termination than intake (see Figure 47). For example, at intake, 69.7% of youth reported that at least one of their friends had been involved in a physical fight. At termination from BHJJ, 36.4% 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 four items: used a weapon to get money or things, been involved in a physical fight, stolen something, and damaged property.

Figure 47



## 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 underendorsement 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 27.3% (n = 89) of youth were identified as either an underresponder or hyperresponder, and these youths were eliminated from

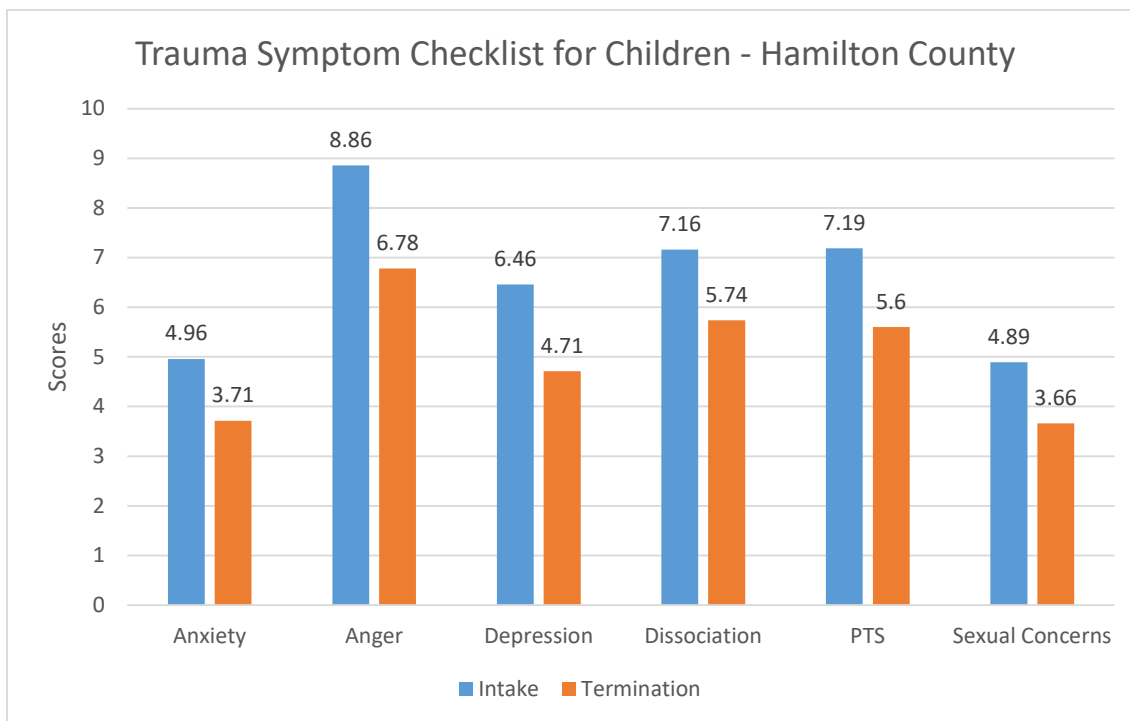
all further data analyses conducted on the TSCC. Paired-samples t-tests were conducted to show whether means at intake and termination on each TSCC subscale differed significantly. Data were analyzed for youth who had completed the TSCC at both intake and termination and who were not identified as either 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 121 and Figure 48). Considering Cohen’s (1988) established cutoffs, small effects were found for all subscales except Depression (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 121. TSCC Subscales from Intake to Termination

	Intake	Termination	t	d
<b>Anxiety</b>	4.97 (SD=3.70; n=66)	3.71 (SD=3.04; n=66)	3.73***	.47
<b>Depression</b>	6.45 (SD=4.23; n=66)	4.71 (SD=4.01; n=66)	3.54***	.54
<b>Anger</b>	8.86 (SD=4.62; n=66)	6.78 (SD=4.45; n=66)	4.40***	.43
<b>Posttraumatic Stress</b>	7.19 (SD=5.14; n=66)	5.60 (SD=4.40; n=66)	3.59***	.45
<b>Dissociation</b>	7.16 (SD=4.69; n=66)	5.75 (SD=3.75; n=66)	3.42***	.44
<b>Sexual Concerns</b>	4.89 (SD=4.51; n=66)	3.67 (SD=3.56; n=66)	2.90**	.37

Figure 48



## 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 9.7 for females and 5.1 for males (see Figure 49 and Figure 50). For females, paired samples t-tests indicated significant improvements in trauma symptoms for all subscales except Dissociation. For males, paired samples t-tests indicated significant improvements in trauma symptoms for all subscales except Sexual Concerns.

Figure 49

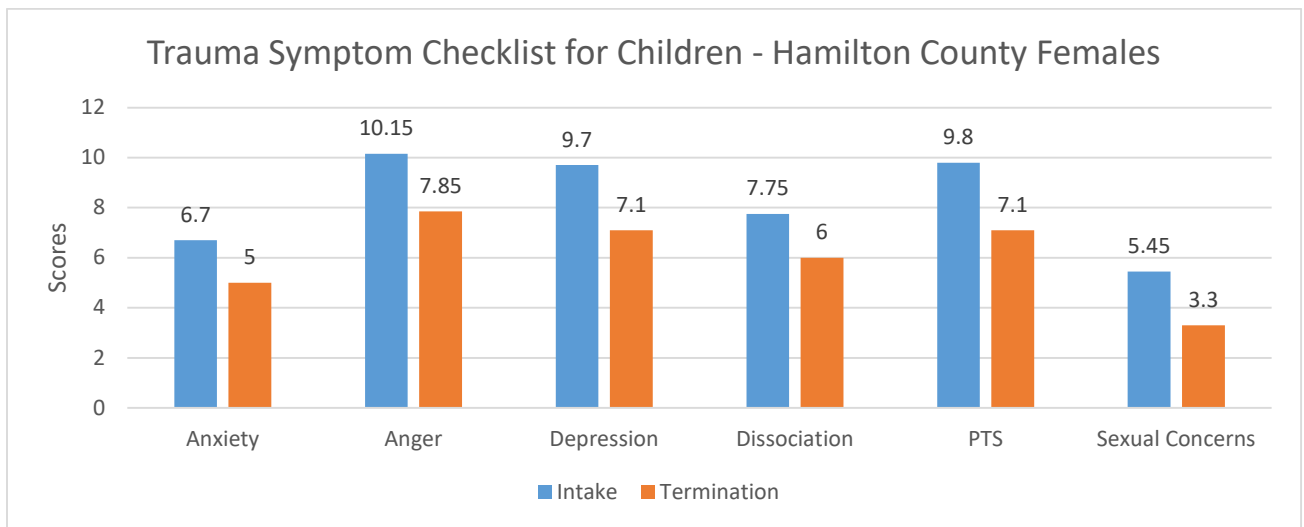
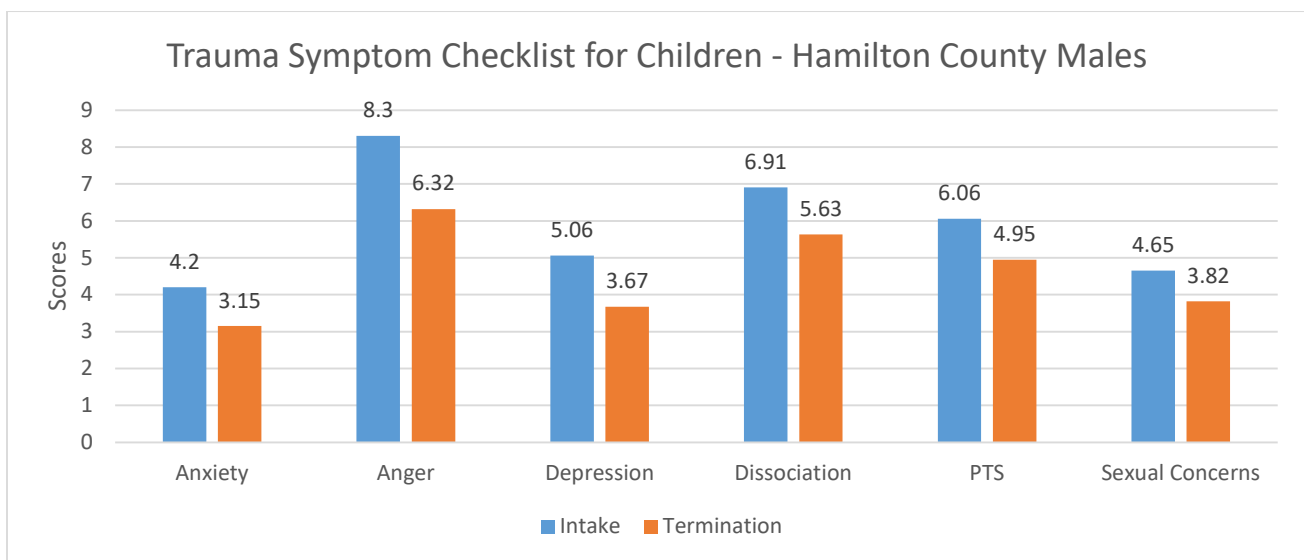


Figure 50



## 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 122 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. No youth in Hamilton County reported lifetime heroin use at intake.

Table 122. Self-Reported Substance Use at Intake

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
<b>Alcohol</b>	43.1% (n = 81)	13.31 (SD = 1.80)	46.1% (n = 35)	13.34 (SD = 1.52)
<b>Cigarettes</b>	47.6% (n = 89)	12.47 (SD = 2.89)	40.3% (n = 31)	13.08 (SD = 1.67)
<b>Chewing Tobacco</b>	11.6% (n = 22)	14.67 (SD = 1.16)	4.0% (n = 3)	13.72 (SD = 2.27)
<b>Marijuana</b>	65.5% (n = 127)	13.11 (SD = 2.46)	55.8% (n = 43)	12.77 (SD = 1.80)
<b>Cocaine</b>	2.6% (n = 5)	15.20 (SD = 1.48)	6.4% (n = 5)	15.00 (SD = 1.00)
<b>Pain Killers (use inconsistent with prescription)</b>	12.3% (n = 23)	14.20 (SD = 2.22)	8.1% (n = 6)	14.00 (SD = 1.55)
<b>GHB</b>	0.5% (n = 1)	N/A	0	N/A
<b>Inhalants</b>	0.5% (n = 1)	12.00	1.3% (n = 1)	13.00 <sup>a</sup>
<b>Heroin</b>	0	N/A	0	N/A
<b>Amphetamines</b>	1.6% (n = 3)	14.50 (SD = 0.71)	2.6% (n = 2)	14.50 (SD = 2.12)
<b>Ritalin (use inconsistent with prescription)</b>	6.3% (n = 12)	11.82 (SD = 3.76)	9.2% (n = 7)	14.50 (SD = 1.23)
<b>Barbiturates</b>	0.5% (n = 1)	15.00 <sup>a</sup>	1.3% (n = 1)	14.00 <sup>a</sup>
<b>Non-prescription Drugs</b>	11.2% (n = 21)	14.11 (SD = 1.88)	7.9% (n = 6)	14.00 (SD = 1.67)
<b>Hallucinogens</b>	4.7% (n = 9)	14.75 (SD = 2.49)	5.1% (n = 4)	15.00 (SD = 0.82)
<b>PCP</b>	0.5% (n = 1)	14.00 <sup>a</sup>	1.4% (n = 1)	16.00 <sup>a</sup>
<b>Ketamine</b>	0.5% (n = 1)	17.00 <sup>a</sup>	2.6% (n = 2)	15.00 (SD = 1.41)
<b>Ecstasy</b>	5.8% (n = 11)	14.73 (SD = 2.28)	3.9% (n = 3)	14.00 (SD = 1.73)
<b>Tranquilizers</b>	5.3% (n = 10)	14.70 (SD = 1.25)	6.7% (n = 5)	14.60 (SD = 0.89)

<sup>a</sup>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 51 and Figure 52 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 for females, and marijuana use in both males and females.

The percentage of males using alcohol in the past six months dropped from 49.4% (n = 39) to 36.7% (n = 11) from intake to termination. For females, 75.8% (n = 25) reported past six-month use at intake while

21.4% (n = 3) reported past six-month alcohol use at termination. Over 80% of males (85.1%, n = 74) and almost all females (96.7%, n = 29) reported past six-month cigarette use at intake. At termination, 65.6% of males (n = 21) and 80.0% (n = 8) of females reported past six-month cigarette use.

Past six-month marijuana use declined from 75.8% (n = 91) at intake to 46.9% (n = 23) at termination for males and 78.6% (n = 33) at intake and 29.4% (n = 5) at termination for females.

Figure 51

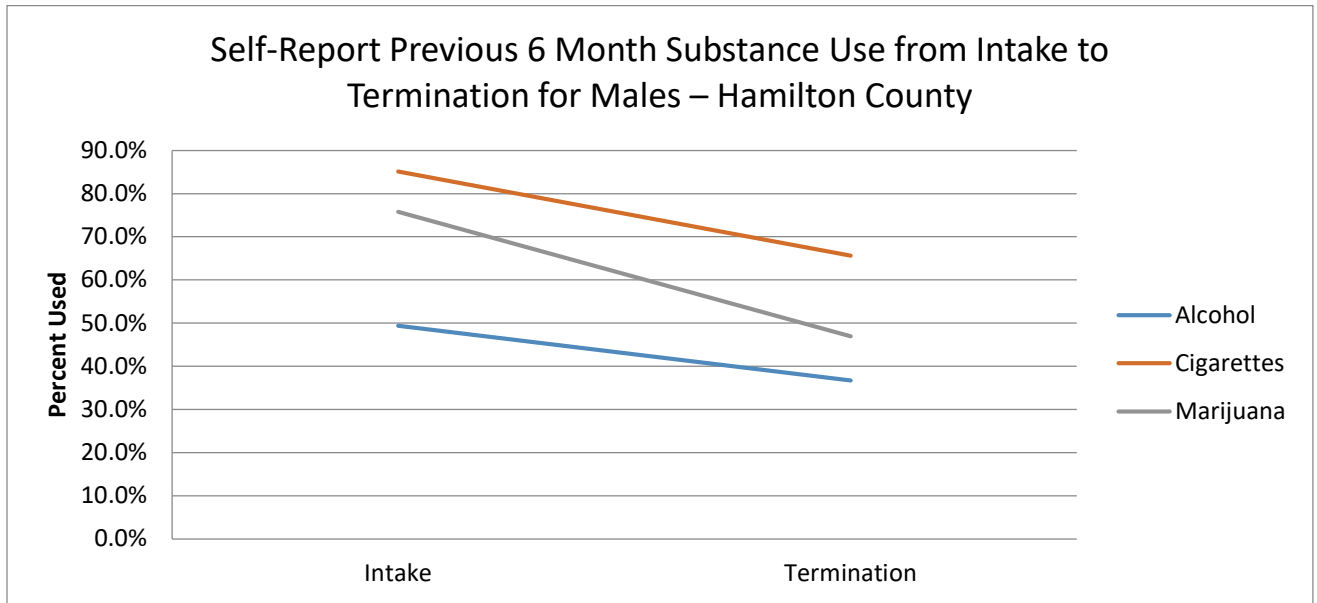
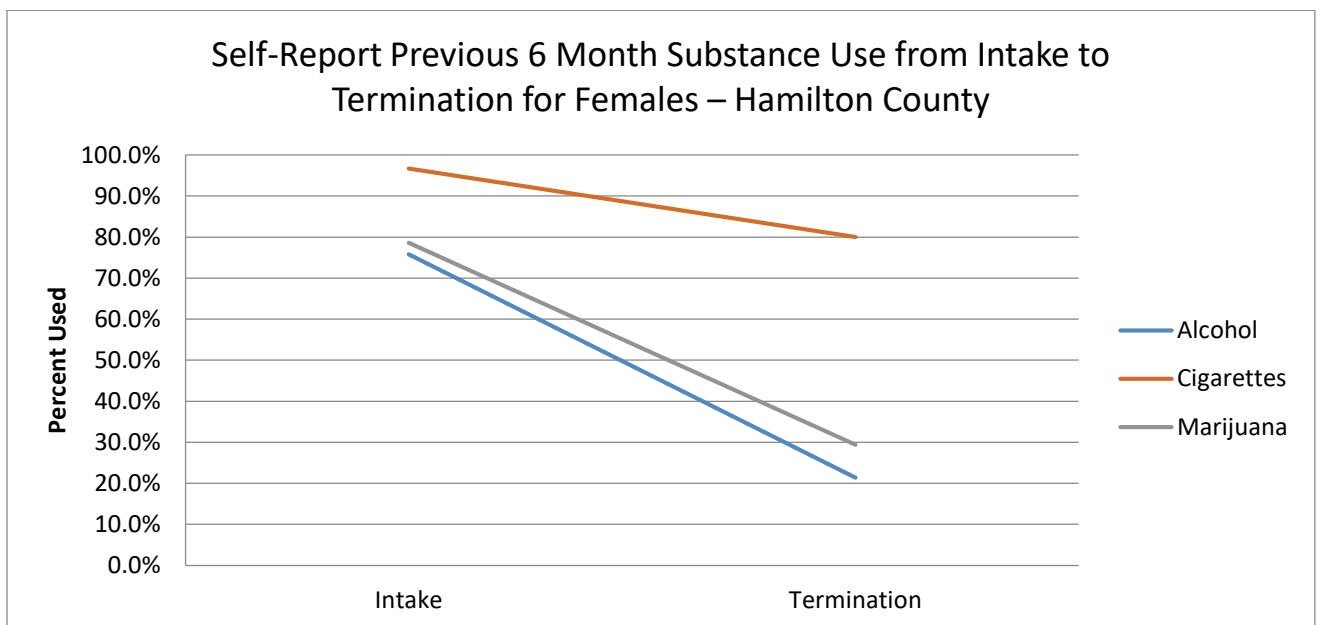


Figure 52



### 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 53 and Figure 54 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 marijuana, and decreased for cigarette use among females. Cigarette use among females decreased from 20.12 days (SD = 12.07; n = 25) at intake to 15.71 days (SD = 11.70; n = 7) at termination. For marijuana, males reported using for an average of 6.55 days (SD = 11.27; n = 76) out of the past 30 days at intake and 3.00 days (SD = 4.92; n = 19) at termination while females reported using for an average of 11.00 days (SD = 15.62; n = 23) at intake and 9.00 days (SD = 4.69; n = 4) at termination.

Figure 53

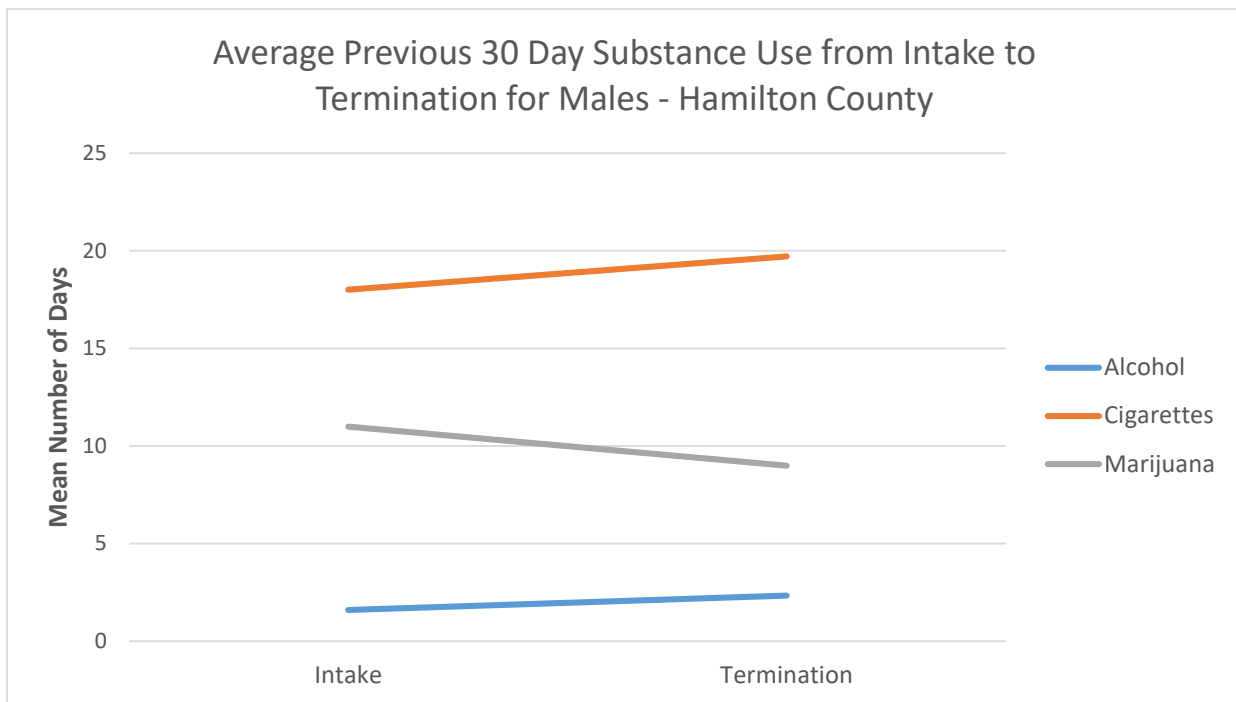
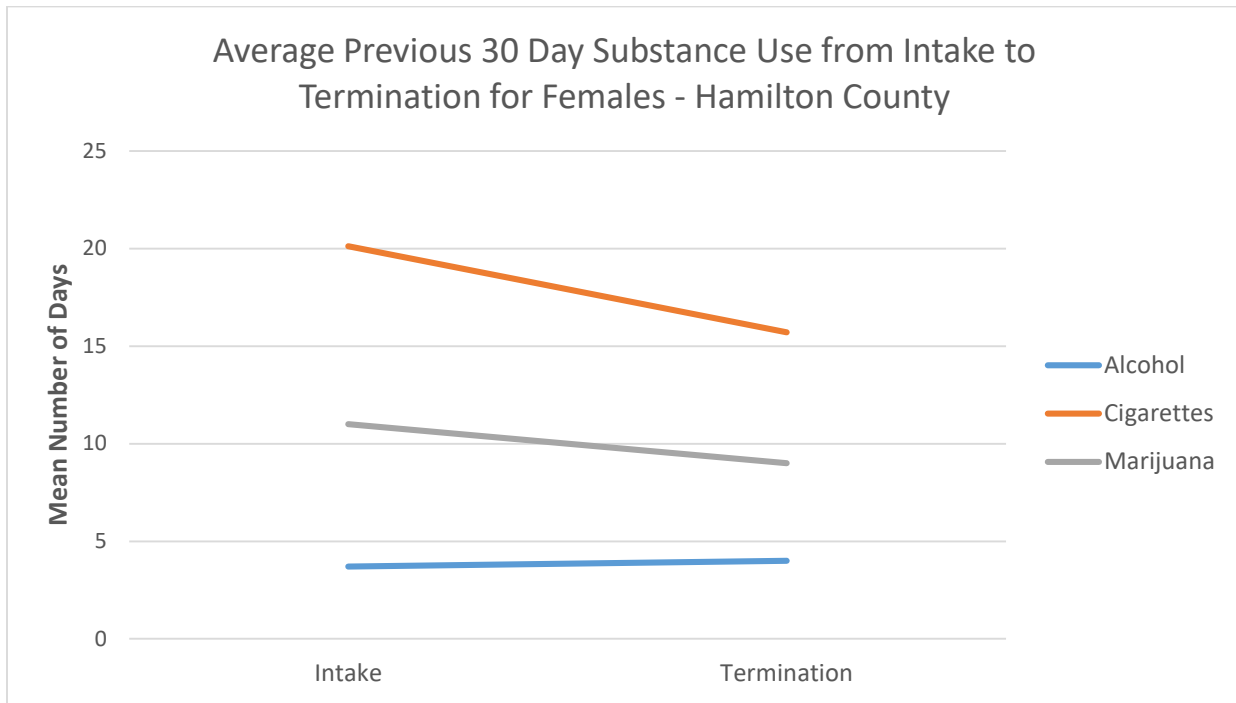


Figure 54



### 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 197 youth terminated from the BHJJ program in Hamilton County. Over 73% (73.6%, n = 154) of the youth terminated from the BHJJ program were identified as successful treatment completers. In Hamilton County, 7.1% (n = 14) were withdrawn from the program, 7.6% (n = 15) were terminated from the program due to an out of home placement, and 4.1% (n = 8) were incarcerated. Table 123 presents all of the reasons for termination from BHJJ.

In the latest evaluation period that began July 2015 and ended in June 2017, 43.5% (n = 10) of youth terminated successfully from the BHJJ program in Hamilton County. While this number represents a reduction in the proportion of youth completing the program successfully, it is important to note here that the number of youth who terminated from the program in this time span was relatively small.

Table 123. Reasons for Termination from BHJJ

Termination Reason	All Youth	Youth Enrolled from July 2015 to June 2017
<b>Successfully Completed Services</b>	73.6% (n = 145)	43.5% (n = 10)
<b>Client Did Not Return/Rejected Services</b>	1.0% (n = 2)	0.0% (n = 0)
<b>Out of Home Placement</b>	7.6% (n = 15)	13.0% (n = 3)
<b>Client/Family Moved</b>	1.0% (n = 2)	4.3% (n = 1)
<b>Client Withdrawn</b>	7.1% (n = 14)	17.4% (n = 4)
<b>Client AWOL</b>	2.5% (n = 5)	4.3% (n = 1)
<b>Client Incarcerated</b>	4.1% (n = 8)	13.0% (n = 3)
<b>Other</b>	3.0% (n = 6)	4.3% (n = 1)

### Average Length of Stay

The average length of stay for youth in the Hamilton County BHJJ program was 209 days. For youth identified as completing treatment successfully, the average length of stay was 214 days and for youth identified as unsuccessful treatment completers, the average length of stay was 193 days. For youth enrolled since July 1, 2015, the average length of stay in BHJJ was 175 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, 27.4% of the youth (n = 57) in Hamilton County were at risk for out of home placement. At termination, 20.7% (n = 39) of youth were at risk for out of home placement. Of those youth who successfully completed BHJJ treatment, 5.0% (n = 7) were at risk for out of home placement at termination while 65.3% (n = 32) 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 73.1% (n = 128) of the youth and had stayed the same for 23.4% (n = 41) of the youth. Police contacts increased for 3.4% (n = 6) of the youth.

### 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. Hamilton County no longer completes the YSSF, and therefore no new data are available to report.



## Recidivism

### Methodology

Court data were provided by the Hamilton 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, 67.1% (n = 200) of the BHJJ youth had misdemeanor charges, 32.6% (n = 97) had at least one felony charge, and 63.4% (n = 189) were adjudicated delinquent (see Table 124).

Previous juvenile court information is presented for youth based on BHJJ treatment completion status (successful vs. unsuccessful). In the 12 months prior to enrollment, 57.6% (n = 80) of successful completers and 80.0% (n = 40) 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 = 42) than unsuccessful completers (42.0%, n = 21).

Table 124. Charges Prior to BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	37.2% (n = 111)	14.4% (n = 43)	35.6% (n = 106)	36.0% (n = 50)	11.5% (n = 16)	29.5% (n = 41)	48.0% (n = 24)	26.0% (n = 13)	54.0% (n = 27)
<b>6 months</b>	59.1% (n = 176)	25.8% (n = 77)	55.0% (n = 164)	58.3% (n = 81)	24.5% (n = 34)	51.8% (n = 72)	70.0% (n = 35)	34.0% (n = 17)	68.0% (n = 34)
<b>12 months</b>	67.1% (n = 200)	32.6% (n = 97)	63.4% (n = 189)	65.5% (n = 91)	30.2% (n = 42)	57.6% (n = 80)	82.0% (n = 41)	42.0% (n = 21)	80.0% (n = 40)
<b>18 months</b>	70.1% (n = 209)	35.2% (n = 105)	67.1% (n = 200)	68.3% (n = 95)	31.7% (n = 44)	60.4% (n = 84)	82.0% (n = 41)	42.0% (n = 21)	80.0% (n = 40)

## 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, 59.0% (n = 148) of youth were charged with at least one new misdemeanor and 22.7% (n = 57) were charged with at least one new felony. Fifty-two percent (51.8%, n = 130) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 125).

In the 12 months after enrollment in BHJJ 56.1% (n = 64) of successful completers were charged with at least one new misdemeanor, 15.8% (n = 18) were charged with at least one new felony, and 47.4% (n = 54) were adjudicated delinquent. Of the youth who completed unsuccessfully, 69.6% (n = 32) were charged with at least one new misdemeanor, 43.5% (n = 20) were charged with at least one new felony, and 69.6% (n = 32) were adjudicated delinquent in the 12 months after their enrollment in BHJJ.

Table 125. Charges After BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	30.1% (n = 77)	9.4% (n = 24)	24.2% (n = 62)	20.5% (n = 24)	2.6% (n = 3)	12.8% (n = 15)	51.1% (n = 23)	24.4% (n = 11)	46.7% (n = 21)
<b>6 months</b>	44.4% (n = 112)	15.5% (n = 39)	37.7% (n = 95)	36.5% (n = 42)	8.7% (n = 10)	27.0% (n = 31)	60.0% (n = 27)	35.6% (n = 16)	60.0% (n = 27)
<b>12 months</b>	59.0% (n = 148)	22.7% (n = 57)	51.8% (n = 130)	56.1% (n = 64)	15.8% (n = 18)	47.4% (n = 54)	69.6% (n = 32)	43.5% (n = 20)	69.6% (n = 32)
<b>18 months</b>	72.0% (n = 172)	30.5% (n = 73)	62.3% (n = 149)	67.9% (n = 74)	20.2% (n = 22)	54.1% (n = 59)	75.6% (n = 34)	53.3% (n = 24)	73.3% (n = 33)

## 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, 61.0% (n = 114) of youth were charged with at least one new misdemeanor, 22.5% (n = 42) were charged with at least one new felony, and 50.8% (n = 95) were adjudicated delinquent (see Table 126).

In the 12 months following their termination from BHJJ, 54.2% (n = 58) of successful completers were charged with at least one new misdemeanor, 17.8% (n = 19) were charged with at least one new felony, and 40.2% (n = 43) were adjudicated delinquent. Of the youth who completed unsuccessfully, 43.6% (n = 17) were charged with at least one new misdemeanor, 23.1% (n = 9) were charged with at least one new felony, and 41.0% (n = 16) were adjudicated delinquent in the 12 months after their termination from BHJJ.

Table 126. Charges After Termination from BHJJ

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	25.8% (n = 49)	8.4% (n = 16)	22.6% (n = 43)	16.9% (n = 21)	7.3% (n = 9)	16.1% (n = 20)	20.0% (n = 9)	6.7% (n = 3)	20.0% (n = 9)
<b>6 months</b>	43.2% (n = 80)	15.7% (n = 29)	37.3% (n = 69)	36.2% (n = 42)	12.1% (n = 14)	29.3% (n = 34)	29.3% (n = 12)	14.6% (n = 6)	29.3% (n = 12)
<b>12 months</b>	61.0% (n = 114)	22.5% (n = 42)	50.8% (n = 95)	54.2% (n = 58)	17.8% (n = 19)	40.2% (n = 43)	43.6% (n = 17)	23.1% (n = 9)	41.0% (n = 16)
<b>18 months</b>	76.4% (n = 133)	31.0% (n = 54)	63.8% (n = 111)	72.3% (n = 68)	26.6% (n = 25)	54.3% (n = 51)	61.8% (n = 21)	32.4% (n = 11)	58.8% (n = 20)

## 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 64 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, 32.8% (n = 21) were charged with a new felony in the 12 months after their termination from BHJJ.

Eighteen of the 298 BHJJ youth (6.0%) from Hamilton County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.

## Holmes County

### Demographics

Holmes County has enrolled 25 youth in the BHJJ program since 2013. Of the 25 youth enrolled, 36.0% (n = 9) were female and 64.0% (n = 16) were male (see Table 127).

The majority of the overall sample of youth were Caucasian (87.5%, n = 21). The remainder were categorized as “Other” (12.5%, n = 3). The average age of the youth at intake into BHJJ was 14.7 years old (SD = 1.88).

Table 127. Demographic Information for BHJJ Youth

	<b>All Youth Enrolled (2013 - 2017)</b>
<b>Gender</b>	Female = 36.0% (n = 9) Male = 64.0% (n = 16)
<b>Race</b>	African American = 0.0% (n = 0) Caucasian = 87.5% (n = 21) Other = 12.5% (n = 3)
<b>Age at Intake</b>	14.7 years (SD = 1.88)

### Custody Arrangement and Household Information

At intake, the majority of youth lived with the biological mother (60.9%, n = 14) (see Table 128). At time of enrollment, 86.9% (n = 20) of the BHJJ youth lived with at least one biological parent.

A majority of BHJJ caregivers (86.4%, n = 19) had at least a high school diploma or GED, and 18.1% (n = 4) had some college or a bachelor’s degree (see Table 129).

Caregivers reported their annual household income. The median household income for BHJJ families was between \$15,000 - \$19,999 (see Table 130). Over 75% (77.4%, n = 17) reported annual household incomes below \$35,000 and 50.0% (n = 11) reported an annual household income below \$20,000. More than one in four BHJJ families (27.3%, n = 6) reported an annual household income below \$10,000.

Table 128. Custody Arrangement for BHJJ Youth

<b>Custody</b>	<b>BHJJ Youth</b>
<b>Two Biological Parents or One Biological and One Step or Adoptive Parent</b>	21.7% (n=5)
<b>Biological Mother Only</b>	60.9% (n=14)
<b>Biological Father Only</b>	4.3% (n=1)
<b>Adoptive Parent(s)</b>	8.7% (n=2)
<b>Sibling</b>	0.0% (n=0)
<b>Aunt/Uncle</b>	0.0% (n=0)
<b>Grandparents</b>	4.3% (n=1)
<b>Friend</b>	0.0% (n=0)
<b>Ward of the State</b>	0.0% (n=0)
<b>Other</b>	0.0% (n=0)

Table 129. Educational Outcomes for Caregivers of BHJJ Youth

<b>Number of School Years Completed</b>	<b>Number of Caregivers</b>
<b>Less than High School</b>	13.6% (n=3)
<b>High School Graduate or G.E.D.</b>	68.2% (n=15)
<b>Some College or Associate Degree</b>	13.6% (n=3)
<b>Bachelor's Degree</b>	4.5% (n=1)
<b>More than a Bachelor's Degree</b>	0.0% (n=0)

Table 130. Annual Household Income for BHJJ Families

<b>Annual Household Income</b>	<b>BHJJ Families</b>
<b>Less than \$5,000</b>	18.2% (n=4)
<b>\$5,000 - \$9,999</b>	9.1% (n=2)
<b>\$10,000 - \$14,999</b>	13.6% (n=3)
<b>\$15,000 - \$19,999</b>	9.1% (n=2)
<b>\$20,000 - \$24,999</b>	22.7% (n=5)
<b>\$25,000 - \$34,999</b>	4.5% (n=1)
<b>\$35,000 - \$49,999</b>	13.6% (n=3)
<b>\$50,000 - \$74,999</b>	4.5% (n=1)
<b>\$75,000 - \$99,999</b>	4.5% (n=1)
<b>\$100,000 and over</b>	0.0% (n=0)

## 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 (see Table 131). Statistical testing for gender differences could not be conducted due to small sample sizes.

Caregivers reported that 88.9% (n = 8) of females and 71.4% (n = 10) of males had a family history of depression. A majority of the caregivers of females (55.6%, n = 5) and 71.4% of males (n = 10) reported a family history of problems with substance use.

Table 131. Youth and Family History

Question	Females	Males
Has the child ever been physically abused?	22.2% (n=2)	7.1% (n=1)
Has the child ever been sexually abused?	62.5% (n=5)	21.4% (n=3)
Has the child ever run away?	44.4% (n=4)	55.6% (n=5)
Has the child ever had a problem with substance abuse, including alcohol and/or drugs?	25.0% (n=2)	21.4% (n=3)
Has the child ever talked about committing suicide?	55.6% (n=5)	42.9% (n=6)
Has the child ever attempted suicide?	11.1% (n=1)	7.1%(n=1)
Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?	22.2% (n=2)	42.9% (n=6)
Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?	88.9% (n=8)	71.4% (n=10)
Has anyone in the child's biological family had a mental illness, other than depression?	44.4% (n=4)	61.5% (n=8)
Has the child ever lived in a household in which someone was convicted of a crime?	25.0% (n=2)	35.7% (n=5)
Has anyone in the child's biological family had a drinking or drug problem?	55.6% (n=5)	71.4% (n=10)
Is the child currently taking any medication related to his/her emotional or behavioral symptoms	44.4% (n=4)	28.6% (n=4)



## 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 (55.6% and 60.0% respectively) (see Table 132).

Table 132. Problems Leading to Services

Problems Leading to Services	Females	Males
<b>Adjustment-related problems</b>	11.1% (n = 1)	6.7% (n = 1)
<b>Anxiety-related problems</b>	33.3% (n = 3)	20.0% (n = 3)
<b>Conduct/delinquency-related problems</b>	55.6% (n = 5)	60.0% (n = 9)
<b>Depression-related problems</b>	33.3% (n = 3)	20.0% (n = 3)
<b>Eating disorders</b>	11.1% (n = 1)	0
<b>Hyperactive and attention-related problems</b>	22.2% (n = 2)	6.7% (n = 1)
<b>Learning disabilities</b>	0	13.3% (n = 2)
<b>Pervasive development disabilities</b>	0	0
<b>Psychotic behaviors</b>	0	0
<b>School performance problems not related to learning disabilities</b>	44.4% (n = 4)	53.3% (n = 8)
<b>Specific developmental disabilities</b>	0	0
<b>Substance use, abuse, dependence-related problems</b>	33.3% (n = 3)	26.7% (n = 4)
<b>Suicide-related problems</b>	11.1% (n = 1)	6.7% (n = 1)

\* < .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 133 shows the distribution of OYAS categories for BHJJ youth by gender and race. Due to some small cell sizes, we did not conduct a Chi-squared test to examine whether differences were statistically significant.

Table 133. OYAS Risk Categories by Gender and Race

	OYAS Low	OYAS Moderate	OYAS High
<b>Female</b>	50.0% (n = 1)	50.0% (n = 1)	0.0% (n = 0)
<b>Male</b>	20.0% (n = 2)	70.0% (n = 7)	10.0% (n = 1)
<b>White</b>	27.3% (n = 3)	63.6% (n = 7)	9.1% (n = 1)
<b>Nonwhite</b>	0.0% (n = 0)	100.0% (n = 1)	0.0% (n = 0)

## 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 females and males was Oppositional Defiant Disorder (see Table 134). Six percent (6.7%, n = 1) of males and no females were identified as having both a DSM mental health diagnosis and a substance use diagnosis.

Table 134. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
<b>Adjustment Disorder</b>	0	0
<b>Alcohol-related Disorders</b>	0	0
<b>Attention Deficit Hyperactivity Disorder (ADHD)</b>	12.5% (n = 1)	20.0% (n = 3)
<b>Bipolar Disorder</b>	0	0
<b>Cannabis-related Disorders</b>	0	6.7% (n = 1)
<b>Conduct Disorder</b>	0	0
<b>Depressive Disorders</b>	12.5% (n = 1)	0
<b>Disruptive Behavior Disorder</b>	0	0
<b>Mood Disorder</b>	0	0
<b>Oppositional Defiant Disorder</b>	100% (n = 8)	100% (n = 15)
<b>Post-traumatic Stress Disorder</b>	0	6.7% (n = 1)

\* < .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. One-third of BHJJ youth (33.3%, n = 7) were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in treatment with BHJJ, 14.3% (n = 3) 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, 90% (n = 18) of youth were currently attending school while at termination, 89.5% (n = 17) 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 135 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 136 displays this information based on completion status. At intake, 18.8% of youth were earning mostly A's and B's and 31.3% were earning mostly D's and F's. At termination from BHJJ, 14.3% of youth were earning mostly A's and B's and 4.8% were earning mostly D's and F's.

At termination, workers reported that 47.6% (n = 10) of youth were attending school more than before starting treatment and 42.9% (n = 9) of youth were attending school ‘about the same’ amount compared to before starting treatment. Workers reported that 9.5% (n = 2) were attending school less often than before treatment in BHJJ. At termination, 42.9% (n = 9) of the youth attending school had Individualized Education Plans (IEPs).

Table 135. Academic Performance

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A’s and B’s	18.8% (n = 3)	14.3% (n = 3)
Mostly B’s and C’s	31.3% (n = 5)	47.6% (n = 10)
Mostly C’s and D’s	18.8% (n = 3)	33.3% (n = 7)
Mostly D’s and F’s	31.3% (n = 5)	4.8% (n = 1)

Table 136. Academic Performance for Youth by Completion Status

Typical Grades	Unsuccessful Completers		Successful Completers	
	Frequency at Intake	Frequency at Termination	Frequency at Intake	Frequency at Termination
Mostly A’s and B’s	0	0	25.0% (n = 4)	15.8% (n = 3)
Mostly B’s and C’s	0	0	31.3% (n = 5)	52.6% (n = 10)
Mostly C’s and D’s	0	100% (n = 1)	25.0% (n = 4)	26.3% (n = 5)
Mostly D’s and F’s	100% (n = 1)	0	18.8% (n = 3)	5.3% (n = 1)

## Ohio Scales

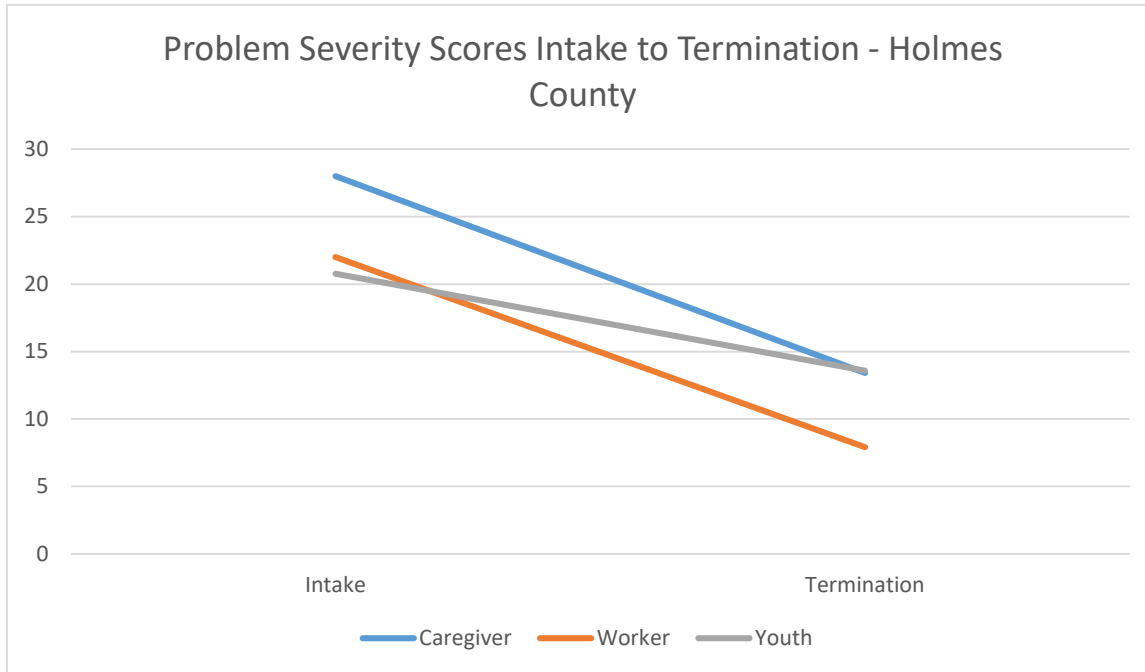
One of the main measures in the data collection packet was the Ohio Scales. The Ohio Scales were completed by the youth, caregiver, and worker at intake and then every three months following intake until termination from services. Because termination can occur at any point in time along the continuum 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 three-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

Means from intake to termination are presented in Figure 55.

Figure 55



## Caregiver Rating

Paired samples t-tests revealed significant improvements in Problem Severity at both measurement intervals compared to intake (see Table 137). Significant improvements were noted at three months:  $t(19) = 2.86$ ,  $p < .05$  and at termination  $t(19) = 5.81$ ,  $p < .001$ . A moderate effect size was noted from intake to three months and a large effect was noted for the period between intake and termination.

Table 137. Paired Samples T-Tests for Problem Severity - Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	25.91 (SD=16.05; n=20)	18.55 (SD=15.88; n=20)	2.86*	.64
<b>Intake to Termination</b>	28.00 (SD=16.00; n=20)	13.42 (SD=13.97; n=20)	5.81***	1.30

\*  $< .05$ , \*\*  $< .01$ , \*\*\*  $< .001$

### Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Problem Severity from intake to three months and to termination (see Table 138). Improvements were noted at three months:  $t(20) = 4.28$ ,  $p < .001$  and at termination  $t(20) = 7.18$ ,  $p < .001$  with large effect sizes.

Table 138. Paired Samples T-Tests for Problem Severity – Worker

	Mean Time 1	Mean Time 2	t	d
Intake to Three Months	20.33 (SD=7.60; n=21)	12.37 (SD=5.58; n=21)	4.28***	.93
Intake to Termination	22.00 (SD=7.50; n=21)	7.92 (SD=7.34; n=21)	7.18***	1.57

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

### Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement at termination (see Table 139). A significant improvement in Problem Severity scores was noted for the period between intake and termination  $t(20) = 2.92$ ,  $p < .01$  with a moderate effect size.

Table 139. Paired Samples T-Tests for Problem Severity – Youth

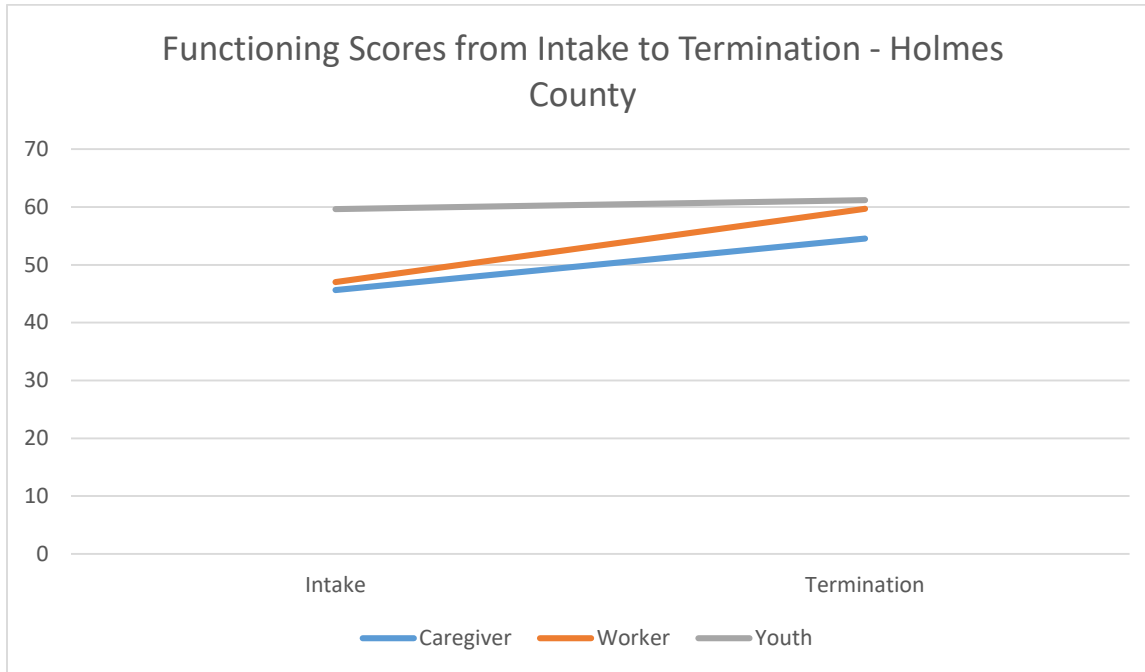
	Mean Time 1	Mean Time 2	t	d
Intake to Three Months	17.88 (SD=9.31; n=20)	13.85 (SD=8.20; n=20)	1.97	.44
Intake to Termination	20.77 (SD=10.82; n=21)	13.57 (SD=15.39; n=21)	2.92**	.64

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

## Functioning

Means for the Functioning scale by rater and assessment period can be found in Figure 56.

Figure 56



## Caregiver Ratings

Paired samples t-tests revealed significant improvements in Functioning at both measurement intervals compared to intake (see Table 140). Significant improvements were noted at three months:  $t(17) = -4.36$ ,  $p < .001$  with a large effect; and at termination  $t(18) = -2.40$ ,  $p < .05$  with a moderate effect size.

Table 140. Paired Samples T-Tests for Functioning Scores – Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	45.72 (SD=13.38; n=18)	53.61 (SD=16.11; n=18)	-4.36***	1.02
<b>Intake to Termination</b>	45.63 (SD=14.80; n=19)	54.53 (SD=13.28; n=19)	-2.40*	.55

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

### Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Functioning from intake to termination  $t(20) = -7.58, p < .001$  with a large effect size. (see Table 141).

Table 141. Paired Samples T-Tests for Functioning Scores – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	46.48 (SD=7.48; n=21)	48.71 (SD=8.84; n=21)	-1.82	.39
<b>Intake to Termination</b>	47.00 (SD=7.39; n=21)	59.71 (SD=9.19; n=21)	-7.58***	1.65

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

### Youth Ratings

Paired samples t-tests conducted on youth reported Functioning scores indicated no significant improvement at each data collection point between intake and three months and intake and termination (see Table 142).

Table 142. Paired Samples T-Tests for Functioning Scores – Youth

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	59.45 (SD=11.27; n=20)	59.70 (SD=13.55; n=20)	-0.09	.02
<b>Intake to Termination</b>	59.62 (SD=11.08; n=21)	61.19 (SD=10.70; n=21)	-0.59	.13

\* < .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.

Due to sample size limitations, we are only able to present the outcomes for the exposure to violence domain. In addition to the BHJJ data, we also 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).

### 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, 1.9% of the national sample and 33.3% of the BHJJ sample reported being attacked because of their skin color, religion, disability, or sexuality (see Table 143).

Table 143. Prevalence of Self-Reported Violent Victimization

	<b>% Yes BHJJ Sample (n = 12)</b>	<b>% Yes National Sample</b>
<b>In the last year, did someone threaten to hurt you when you thought they might really do it?</b>	17.6%	14.4% <sup>a</sup>
<b>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?</b>	33.3%	1.9% <sup>b</sup>
<b>In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?</b>	0.0%	2.8% <sup>b</sup>
<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?</b>	16.7%	16.6% <sup>a</sup>
<b>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?</b>	0.0%	5.7% <sup>a</sup>
<b>In the last year, did anyone hit or attack you WITHOUT using an object or weapon?</b>	16.7%	17.7% <sup>a</sup>
<b>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?</b>	41.6%	21.8% <sup>a</sup>
<b>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?</b>	8.3%	0.3% <sup>b</sup>
<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?</b>	0.0%	1.2% <sup>b</sup>
<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?</b>	0.0%	3.3% <sup>b</sup>
<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?</b>	16.7%	12.8% <sup>a</sup>



<b>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?</b>	25.0%	29.0% <sup>a</sup>
<b>In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?</b>	16.7%	5.4% <sup>a</sup>
<b>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?</b>	25.0%	9.7% <sup>a</sup>
<b>Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?</b>	16.6%	5.6% <sup>a</sup>
<b>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?</b>	0.0%	1.4% <sup>b</sup>

<sup>a</sup> Calculated from the raw National Survey of Children Exposed to Violence (NATSCEV) data. <sup>b</sup> 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.

### Self-reported and Peer Delinquency

Due to low sample sizes, we are unable to present the comparisons between intake and termination for both self-reported and peer delinquency.

### 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 underendorsement 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 32.0% (n = 8) 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.

Overall, results from paired samples t-tests indicated that there was a significant symptom reduction on the Anger subscale from intake to termination (see Table 144 and Figure 57). Considering Cohen’s (1988) established cutoffs, small effects were found for Anxiety, Posttraumatic stress, Dissociation, and

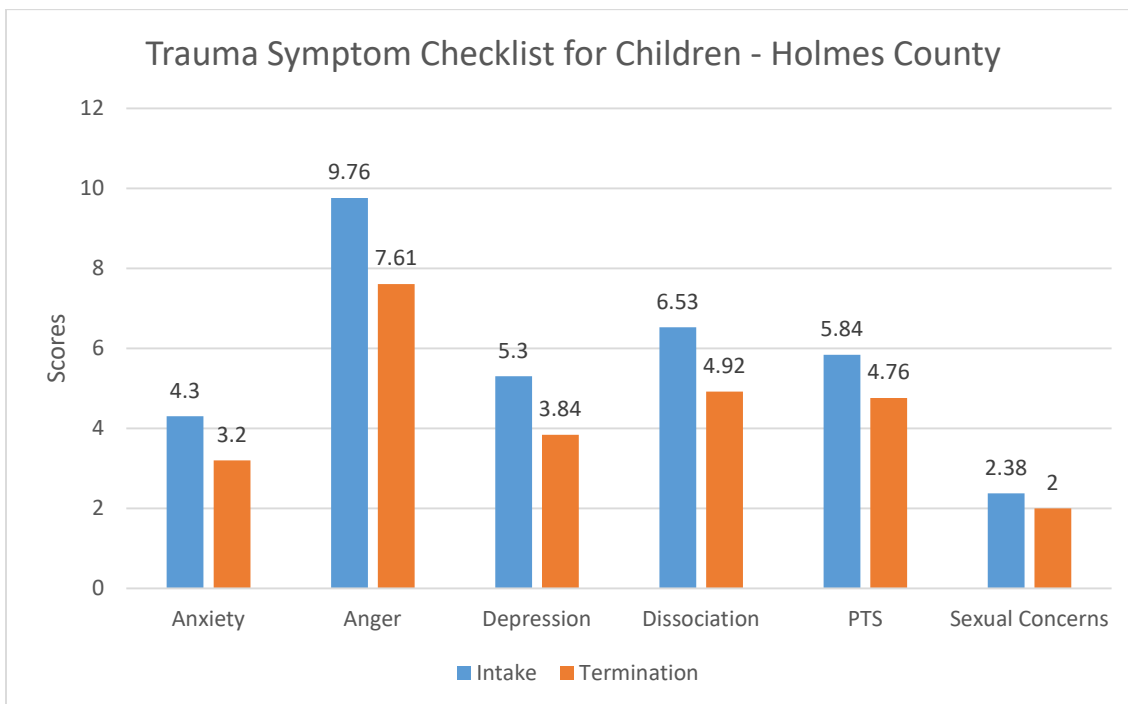
Sexual Concerns, while moderate effects were found for Depression and Anger. The removal of such a large number of youth who were identified as “Underresponders” had a significant impact on the paired samples t-test results and the effect sizes.

Table 144. TSCC Subscales from Intake to Termination

	<b>Intake</b>	<b>Termination</b>	<b>t</b>	<b>d</b>
<b>Anxiety</b>	4.30 (SD=2.65; n=13)	3.23 (SD=3.53; n=13)	1.10	.32
<b>Depression</b>	5.30 (SD=3.01; n=13)	3.84 (SD=3.07; n=13)	1.93	.55
<b>Anger</b>	9.76 (SD=4.53; n=13)	7.61 (SD=5.34; n=13)	2.32*	.64
<b>Posttraumatic Stress</b>	5.84 (SD=3.41; n=13)	4.76 (SD=3.94; n=13)	1.07	.30
<b>Dissociation</b>	6.53 (SD=3.92; n=13)	4.92 (SD=3.09; n=13)	1.44	.40
<b>Sexual Concerns</b>	2.38 (SD=1.55; n=13)	2.00 (SD=1.15; n=10)	1.05	.32

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

Figure 57



### TSCC and Gender

Due to low sample size, we were unable to examine trauma symptoms by gender.

## 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 145 presents the percentages of BHJJ youth who reported ever using alcohol or drugs and the average age of first use by gender. Alcohol, cigarettes, and marijuana were the three most commonly used substances.

Significantly more males than females reported chewing tobacco use. No youth in Holmes County reported ever using heroin at intake.

Table 145. Self-Reported Substance Use at Intake

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
<b>Alcohol</b>	53.3% (n = 8)	13.13 (SD = 3.80)	62.5% (n = 5)	13.20 (SD = 1.10)
<b>Cigarettes</b>	40.0% (n = 6)	10.80 (SD = 4.49)	62.5% (n = 5)	12.40 (SD = 0.89)
<b>Chewing Tobacco</b>	73.3% (n = 11)**	11.45 (SD = 3.73)	12.5% (n = 1)	13.00 <sup>a</sup>
<b>Marijuana</b>	40.0% (n = 6)	13.83 (SD = 1.72)	50.0% (n = 4)	12.50 (SD = 0.58)
<b>Cocaine</b>	6.7% (n = 1)	15.00 <sup>a</sup>	0	N/A
<b>Pain Killers (use inconsistent with prescription)</b>	0	N/A	0	N/A
<b>GHB</b>	0	N/A	0	N/A
<b>Inhalants</b>	0	N/A	12.5% (n = 1)	13.00 <sup>a</sup>
<b>Heroin</b>	0	N/A	0	N/A
<b>Amphetamines</b>	6.7% (n = 1)	16.00	0	N/A
<b>Ritalin (use inconsistent with prescription)</b>	6.7% (n = 1)	N/A	0	N/A
<b>Barbiturates</b>	0	N/A	0	N/A
<b>Non-prescription Drugs</b>	6.7% (n = 1)	15.00 <sup>a</sup>	25.0% (n = 2)	13.00 (SD = 0.00)
<b>Hallucinogens</b>	6.7% (n = 1)	13.00 <sup>a</sup>	0	N/A
<b>PCP</b>	0	N/A	0	N/A
<b>Ketamine</b>	0	N/A	0	N/A
<b>Ecstasy</b>	0	N/A	0	N/A
<b>Tranquilizers</b>	0	N/A	12.5% (n = 1)	13.00 <sup>a</sup>

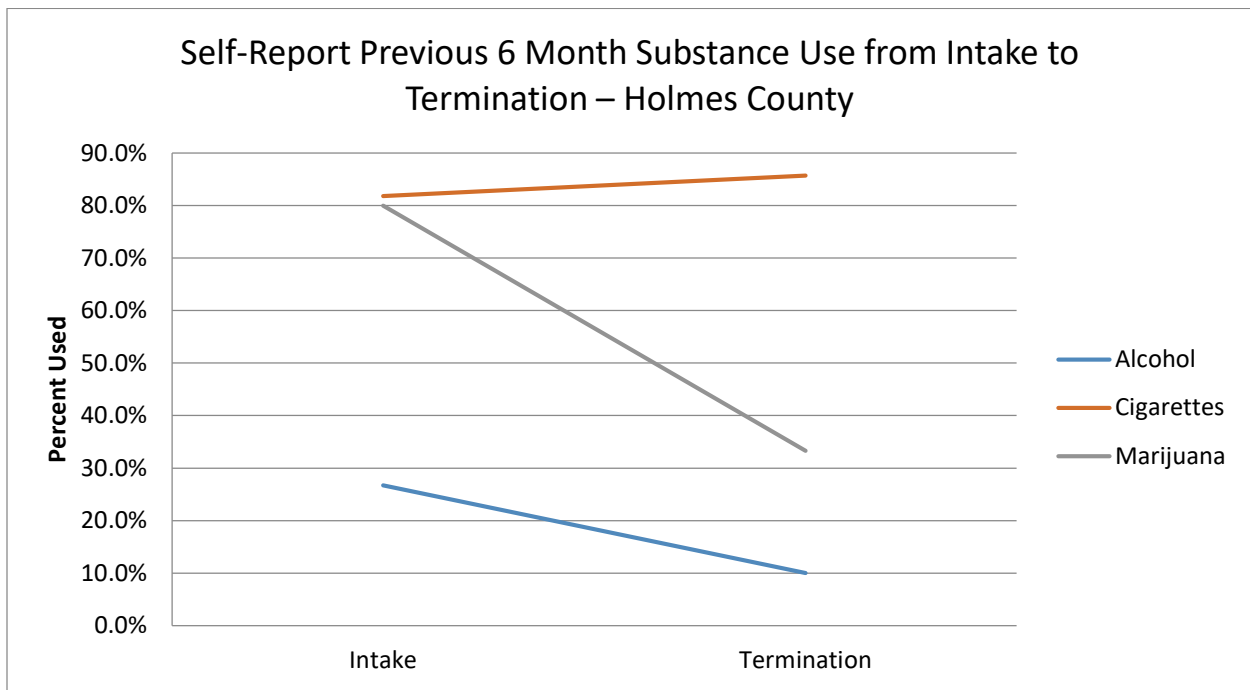
\*\*  $p < .01$ , <sup>a</sup>Standard deviations are not available for averages with one only case

### Six-Month Substance Use

Youth were also asked whether they had used each substance in the past six months. Figure 58 presents past six-month use for the most commonly reported substances among those who reported lifetime use of each specific substance. Youth reported a decrease in six-month use with respect to the alcohol and marijuana.

The percentage of youth using alcohol in the past six months dropped from 26.7% (n = 4) to 10.0% (n = 1) from intake to termination. Past six-month marijuana use declined from 80.0% (n = 8) at intake to 33.3% (n = 2) at termination.

Figure 58



### 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 20 youth terminated from the BHJJ program in Holmes County (see Table 146). All but one of the youth had completed services successfully (95%, n = 19). In the latest evaluation period that began July 2015 and ended in June 2017, 100.0% (n = 10) of youth terminated successfully from the BHJJ program in Holmes County.

Table 146. Reasons for Termination from BHJJ

Termination Reason	All Youth	Youth Enrolled from July 2015 to June 2017
Successfully Completed Services	95.0% (n = 19)	100.0% (n = 10)
Client Did Not Return/Rejected Services	0.0% (n = 0)	0.0% (n = 0)
Out of Home Placement	0.0% (n = 0)	0.0% (n = 0)
Client/Family Moved	0.0% (n = 0)	0.0% (n = 0)
Client Withdrawn	0.0% (n = 0)	0.0% (n = 0)
Client AWOL	0.0% (n = 0)	0.0% (n = 0)
Client Incarcerated	0.0% (n = 0)	0.0% (n = 0)
Other	5.0% (n = 1)	0.0% (n = 0)

### Average Length of Stay

The average length of stay for youth in the Holmes County BHJJ program was 152 days. For youth enrolled since July 1, 2015, the average length of stay in BHJJ was 143 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, 38.1% of the youth (n = 8) in Holmes County were at risk for out of home placement. At termination, 15.0% (n = 3) of youth were at risk for out of home placement.

### Police Contacts

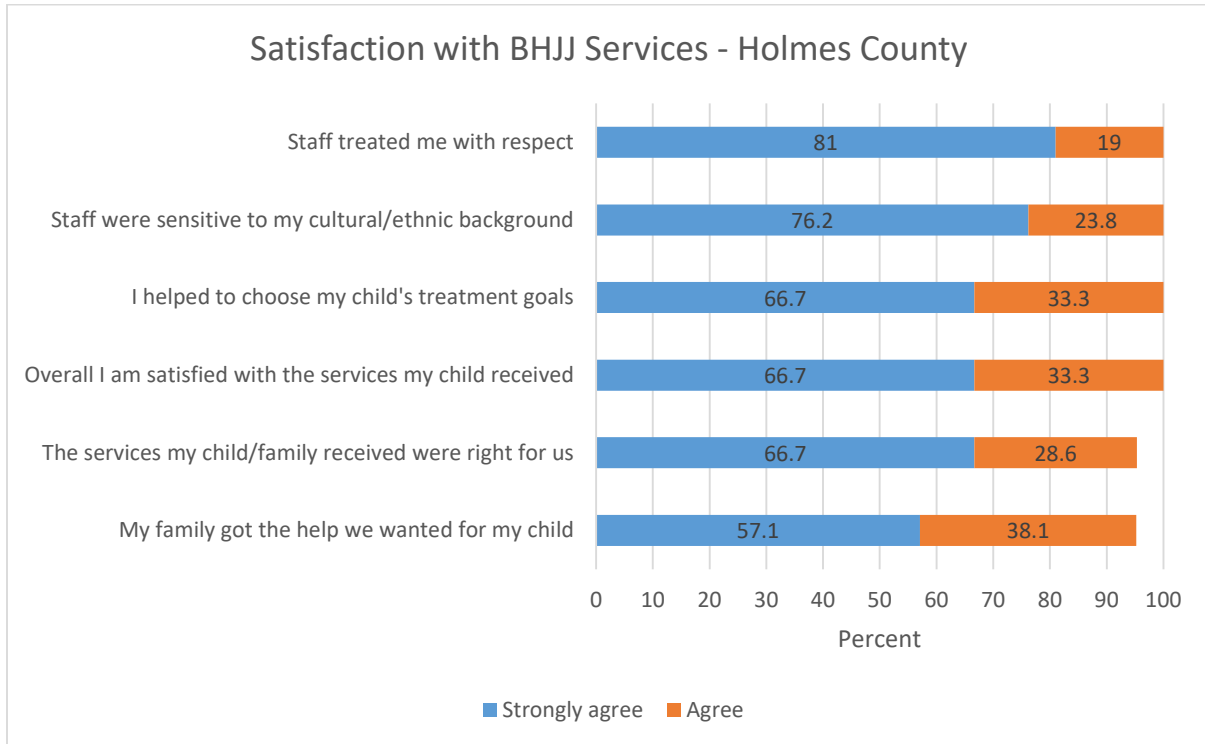
With help from the caregiver and youth, the worker was asked to estimate the frequency of police contacts since the youth has been receiving mental health services through BHJJ. Workers reported that police contacts have been reduced for all of the youth who received services.

## 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, 100% (n = 21) of caregivers either strongly agreed or agreed that they were satisfied with the services their child received and 95.2% (n = 20) either strongly agreed or agreed that the services their child and/or family receive were right for them (see Figure 59). Every caregiver (100%, n = 21) either strongly agreed or agreed that staff treated them with respect and 100% (n = 21) indicated that they strongly agreed or agreed with the statement that they were satisfied with the cultural and ethnic sensitivity of BHJJ staff.

Figure 59



## Recidivism

### Methodology

Court data were provided by the Holmes 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, 45.8% (n = 11) of the BHJJ youth had misdemeanor charges, 4.2% (n = 1) had at least one felony charge, and 50.0% (n = 12) were adjudicated delinquent (see Table 147).

Table 147. Charges Prior to BHJJ Enrollment

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	29.2% (n = 7)	4.2% (n = 1)	25.0% (n = 6)
<b>6 months</b>	41.7% (n = 10)	4.2% (n = 1)	41.7% (n = 10)
<b>12 months</b>	45.8% (n = 11)	4.2% (n = 1)	50.0% (n = 12)
<b>18 months</b>	62.5% (n = 15)	12.5% (n = 3)	62.5% (n = 15)

### 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, 40.0% (n = 8) of youth were charged with at least one new misdemeanor and 10.0% (n = 2) were charged with at least one new felony. Forty-five percent (45.0%, n = 9) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 148).

Table 148. Charges After BHJJ Enrollment

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	16.7% (n = 4)	4.2% (n = 1)	16.7% (n = 4)
<b>6 months</b>	28.6% (n = 6)	4.8% (n = 1)	33.3% (n = 7)
<b>12 months</b>	40.0% (n = 8)	10.0% (n = 2)	45.0% (n = 9)
<b>18 months</b>	52.9% (n = 9)	17.6% (n = 3)	58.8% (n = 10)



### 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, 41.2% (n = 7) of youth were charged with at least one new misdemeanor, 17.6% (n = 3) were charged with at least one new felony, and 35.3% (n = 6) were adjudicated delinquent (see Table 149).

Table 149. Charges After Termination from BHJJ

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	11.1% (n = 2)	0.0% (n = 0)	5.6% (n = 1)
<b>6 months</b>	21.1% (n = 4)	10.5% (n = 2)	15.8% (n = 3)
<b>12 months</b>	41.2% (n = 7)	17.6% (n = 3)	35.3% (n = 6)
<b>18 months</b>	71.4% (n = 10)	21.4% (n = 3)	50.0% (n = 7)

### Felony Offenders and ODYS Commitments

None of the 24 BHJJ youth (0.0%) from Holmes County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.

## Lorain County

### Demographics

Lorain County has enrolled 101 youth in the BHJJ program since 2013. Of the 101 youth enrolled, 37.6% (n = 38) were female and 62.4% (n = 63) were male (see Table 150). Since July 2015, 57.4% (n = 31) of newly enrolled youth have been male.

The majority of the overall sample of youth were either or Caucasian (49.0%, n = 49) or African American (19.0%, n = 19) with the remaining youth categorized as “Other” (32.0%, n = 32). The average age of the youth at intake into BHJJ was 16.36 years old (SD = 0.99) with a range between 14.1 and 17.95 years old.

Table 150. Demographic Information for BHJJ Youth

	All Youth Enrolled (2013 - 2017)	Youth Enrolled between July 2015 – June 2017
<b>Gender</b>	Female = 37.6% (n = 38)	Female = 42.6% (n = 23)
	Male = 62.4% (n = 63)	Male = 57.4% (n = 31)
<b>Race</b>	African American = 19.0% (n = 19)	African American = 22.2% (n = 12)
	Caucasian = 49.0% (n = 49)	Caucasian = 50.0% (n = 27)
	Other = 32.0% (n = 32)	Other = 27.8% (n = 15)
<b>Age at Intake</b>	16.36 years (SD = 0.99)	16.27 years (SD = 0.97)

### Custody Arrangement and Household Information

At intake, the majority of youth lived with their biological mother (52.8%, n = 47) and more than three in four youth lived with at least one biological parent (76.4%, n = 68) (see Table 151). An additional 13.5% (n = 12) lived with a grandparent.

More than 85% of the BHJJ caregivers (85.2%, n = 75) had at least a high school diploma or GED, and 3.4% (n = 3) had more than a bachelor’s degree (see Table 152). Nearly 15% (14.8%, n = 13) 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 - \$24,999 (see Table 153). Nearly 82% of caregivers (81.7%, n = 54) reported annual household incomes below \$35,000 and 54.5% (n = 48) reported an annual household income below \$20,000. Nearly one in four BHJJ families (23.9%, n = 21) reported an annual household income below \$10,000.

Table 151. Custody Arrangement for BHJJ Youth

<b>Custody</b>	<b>BHJJ Youth</b>
<b>Two Biological Parents or One Biological and One Step or Adoptive Parent</b>	20.2% (n=18)
<b>Biological Mother Only</b>	52.8% (n=47)
<b>Biological Father Only</b>	3.4% (n=3)
<b>Adoptive Parent(s)</b>	1.1% (n=1)
<b>Sibling</b>	1.1% (n=1)
<b>Aunt/Uncle</b>	4.5% (n=4)
<b>Grandparents</b>	13.5% (n=12)
<b>Friend</b>	1.1% (n=1)
<b>Ward of the State</b>	2.2% (n=2)
<b>Other</b>	0.0% (n=0)

Table 152. Educational Outcomes for Caregivers of BHJJ Youth

<b>Number of School Years Completed</b>	<b>Number of Caregivers</b>
<b>Less than High School</b>	14.8% (n=13)
<b>High School Graduate or G.E.D.</b>	40.9% (n=36)
<b>Some College or Associate Degree</b>	39.8% (n=35)
<b>Bachelor's Degree</b>	1.1% (n=1)
<b>More than a Bachelor's Degree</b>	3.4% (n=3)

Table 153. Annual Household Income for BHJJ Families

<b>Annual Household Income</b>	<b>BHJJ Families</b>
<b>Less than \$5,000</b>	20.5% (n=18)
<b>\$5,000 - \$9,999</b>	3.4% (n=3)
<b>\$10,000 - \$14,999</b>	13.6% (n=12)
<b>\$15,000 - \$19,999</b>	17.0% (n=15)
<b>\$20,000 - \$24,999</b>	22.7% (n=5)
<b>\$25,000 - \$34,999</b>	4.5% (n=1)
<b>\$35,000 - \$49,999</b>	13.6% (n=3)
<b>\$50,000 - \$74,999</b>	4.5% (n=1)
<b>\$75,000 - \$99,999</b>	4.5% (n=1)
<b>\$100,000 and over</b>	0.0% (n=0)

## 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 154. A significantly larger proportion of the caregivers of females reported lifetime histories of physical abuse, running away, talking about suicide, exposure to domestic violence, and a family history of mental illness other than depression.

Caregivers reported that 29.4% (n = 10) of females and 12.3% (n = 7) of males had a history of being physically abused while 31.3% (n = 10) of females and 14.3% (n = 8) of males had a history of being sexually abused. Caregivers of 70.6% (n = 24) of females and 43.9% (n = 25) of males reported hearing the child talking about committing suicide and 39.4% of females (n = 13) and 21.1% of males (n = 12) had attempted suicide at least once. A majority of the caregivers of females (67.6%, n = 23) and males (60.7%, n = 34) reported a family history of depression.

Table 154. Youth and Family History

Question	Females	Males
Has the child ever been physically abused?	29.4% (n=10)*	12.3% (n=7)
Has the child ever been sexually abused?	31.3% (n=10)	14.3% (n=8)
Has the child ever run away?	58.8% (n=20)*	36.8% (n=21)
Has the child ever had a problem with substance abuse, including alcohol and/or drugs?	90.9% (n=30)	94.6% (n=53)
Has the child ever talked about committing suicide?	70.6% (n=24)*	43.9% (n=25)
Has the child ever attempted suicide?	39.4% (n=13)	21.1%(n=12)
Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?	52.9% (n=18)*	31.6% (n=18)
Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?	67.6% (n=23)	60.7% (n=34)
Has anyone in the child's biological family had a mental illness, other than depression?	68.8% (n=22)*	41.5% (n=22)
Has the child ever lived in a household in which someone was convicted of a crime?	41.9% (n=13)	45.3% (n=24)
Has anyone in the child's biological family had a drinking or drug problem?	66.7% (n=22)	62.5% (n=35)
Is the child currently taking any medication related to his/her emotional or behavioral symptoms	29.4% (n=10)	40.4% (n=23)

## 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 substance use, abuse, and dependence-related problems (100%) (see Table 155). Chi-square analysis indicated females had significantly higher rates of problems related to suicide and depression-related problems. Males had significantly higher rates of hyperactive and attention-related problems.

Table 155. Problems Leading to Services

<b>Problems Leading to Services</b>	<b>Females</b>	<b>Males</b>
<b>Adjustment-related problems</b>	23.5% (n = 8)	14.3% (n = 8)
<b>Anxiety-related problems</b>	52.9% (n = 18)	53.6% (n = 30)
<b>Conduct/delinquency-related problems</b>	88.2% (n = 30)	83.9% (n = 47)
<b>Depression-related problems</b>	70.6% (n = 24)**	39.3% (n = 22)
<b>Eating disorders</b>	0	0
<b>Hyperactive and attention-related problems</b>	14.7% (n = 5)	39.3% (n = 22)*
<b>Learning disabilities</b>	2.9% (n = 1)	1.8% (n = 1)
<b>Pervasive development disabilities</b>	0	0
<b>Psychotic behaviors</b>	5.9% (n = 2)	3.6% (n = 2)
<b>School performance problems not related to learning disabilities</b>	50.0% (n = 17)	39.3% (n = 22)
<b>Specific developmental disabilities</b>	2.9% (n = 1)	0
<b>Substance use, abuse, dependence-related problems</b>	100% (n = 34)	100% (n = 56)
<b>Suicide-related problems</b>	41.2% (n = 14)**	10.7% (n = 6)

\* < .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 156 shows the distribution of OYAS categories for BHJJ youth by gender and race. Due to some small cell sizes, particularly among high risk youth we did not conduct a Chi-squared test to examine whether differences were statistically significant.

Table 156. OYAS Risk Categories by Gender and Race

	OYAS Low	OYAS Moderate	OYAS High
<b>Female</b>	42.1% (n = 16)	44.7% (n = 17)	13.2% (n = 5)
<b>Male</b>	24.6% (n = 15)	70.5% (n = 43)	4.9% (n = 3)
<b>White</b>	34.7% (n = 17)	55.1% (n = 27)	10.2% (n = 5)
<b>Nonwhite</b>	26.5% (n = 13)	67.3% (n = 33)	6.1% (n = 3)

## 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 females and males was Cannabis-related Disorder (see Table 157).

Chi-square analysis indicated females were significantly more likely to be diagnosed with Depressive Disorders and Post Traumatic Stress Disorder. Males were significantly more likely to be diagnosed with Attention Deficit Hyperactivity Disorder. One hundred percent of males (n = 56) and females (n = 34) were identified as having both a DSM mental health diagnosis and a substance use diagnosis.

Table 157. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
<b>Adjustment Disorder</b>	8.8% (n = 3)	10.7% (n = 6)
<b>Alcohol-related Disorders</b>	41.2% (n = 14)	23.2% (n = 13)
<b>Attention Deficit Hyperactivity Disorder (ADHD)</b>	11.8% (n = 4)	32.1% (n = 18)*
<b>Bipolar Disorder</b>	0	1.8% (n = 1)
<b>Cannabis-related Disorders</b>	97.1% (n = 33)	100% (n = 56)
<b>Conduct Disorder</b>	0	7.1% (n = 4)
<b>Depressive Disorders</b>	41.2% (n = 14)*	16.1% (n = 9)
<b>Disruptive Behavior Disorder</b>	0	3.6% (n = 2)
<b>Mood Disorder</b>	20.6% (n = 7)	23.2% (n = 13)
<b>Oppositional Defiant Disorder</b>	17.6% (n = 6)	10.7% (n = 6)
<b>Post-traumatic Stress Disorder</b>	23.5% (n = 8)*	7.1% (n = 4)

\* < .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. Forty-seven percent (47.1%, n = 40) of BHJJ youth were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in treatment with BHJJ, 27.9% (n = 19) 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, 86.6% (n = 71) of youth were currently attending school while at termination, 80.0% (n = 52) 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 158 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 159 displays this information based on completion status. At intake, 9.2% of youth were earning mostly A's and B's and 27.7% were earning mostly D's and F's. At termination, 18.2% of youth were earning mostly A's and B's and 30.3% were earning mostly D's and F's. Academic improvement varied by BHJJ completion status. For example, at intake, 49.6% of unsuccessful completers and 48.6% of successful completers received mostly A's, B's, or C's. At termination, 34.7% of unsuccessful completers and 55.8% of successful completers received mostly A's, B's, or C's.

At termination, workers reported that 35.6% (n = 26) of youth were attending school more than before starting treatment and 46.6% (n = 34) of youth were attending school 'about the same' amount compared to before starting treatment. Workers reported that 6.8% (n = 5) were attending school less often than before treatment in BHJJ. At termination, 34.4% (n = 21) of the youth attending school had Individualized Education Plans (IEPs).

Table 158. Academic Performance

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A's and B's	9.2% (n = 6)	18.2% (n = 12)
Mostly B's and C's	32.3% (n = 21)	30.3% (n = 20)
Mostly C's and D's	30.8% (n = 20)	21.2% (n = 14)
Mostly D's and F's	27.7% (n = 18)	30.3% (n = 20)

Table 159. Academic Performance for Youth by Completion Status

Typical Grades	Unsuccessful Completers		Successful Completers	
	Frequency at Intake	Frequency at Termination	Frequency at Intake	Frequency at Termination
Mostly A's and B's	8.3% (n = 2)	4.3% (n = 1)	8.6% (n = 3)	25.6% (n = 11)
Mostly B's and C's	41.7% (n = 10)	30.4% (n = 7)	40.0% (n = 14)	30.2% (n = 13)
Mostly C's and D's	37.5% (n = 9)	26.1% (n = 6)	17.1% (n = 6)	18.6% (n = 8)
Mostly D's and F's	12.5% (n = 3)	39.1% (n = 9)	34.3% (n = 12)	25.6% (n = 11)

## Ohio Scales

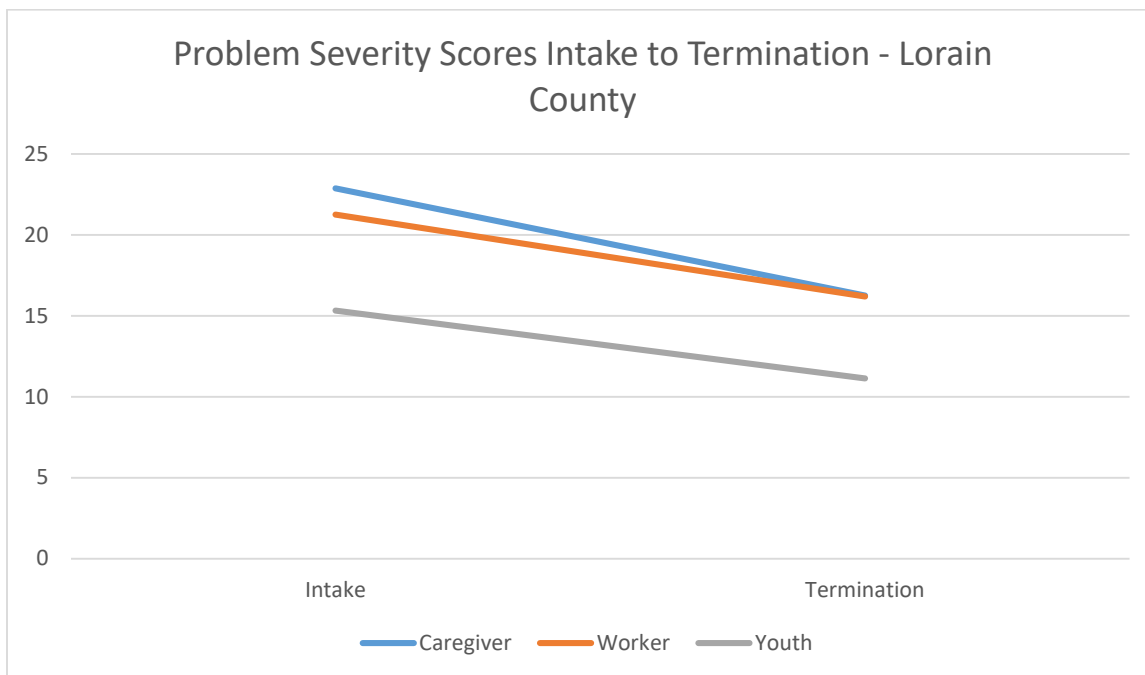
One of the main measures in the data collection packet was the Ohio Scales. The Ohio Scales were completed by the youth, caregiver, and worker at intake and then every three months following intake until termination from services. Because termination can occur at any point in time along the continuum 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 three-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

Means from intake to termination are presented in Figure 60.

Figure 60





### Caregiver Rating

Paired samples t-tests revealed significant improvements in Problem Severity at both measurement intervals compared to intake (see Table 160). Significant improvements were noted at three months:  $t(49) = 2.53, p < .05$  and at termination  $t(65) = 3.09, p < .01$  with small effect sizes.

Table 160. Paired Samples T-Tests for Problem Severity - Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	22.19 (SD=18.01; n=50)	16.78 (SD=11.97; n=50)	2.53*	.36
<b>Intake to Termination</b>	22.88 (SD=17.91; n=66)	16.26 (SD=13.20; n=66)	3.09**	.38

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

### Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Problem Severity from intake to three months and to termination (see Table 161). Improvements were noted at three months:  $t(51) = 3.38, p < .01$  and at termination  $t(65) = 3.84, p < .001$  with small effect sizes.

Table 161. Paired Samples T-Tests for Problem Severity – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	22.21 (SD=11.88; n=52)	17.39 (SD=10.36; n=52)	3.38**	.47
<b>Intake to Termination</b>	21.26 (SD=11.65; n=66)	16.20 (SD=10.25; n=66)	3.84***	.47

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

### Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement at termination (see Table 162). Significant improvements in Problem Severity scores were noted for the periods between intake and three months  $t(49) = 2.09, p < .05$  and intake and termination  $t(62) = 2.72, p < .05$  with small effect sizes.

Table 162. Paired Samples T-Tests for Problem Severity – Youth

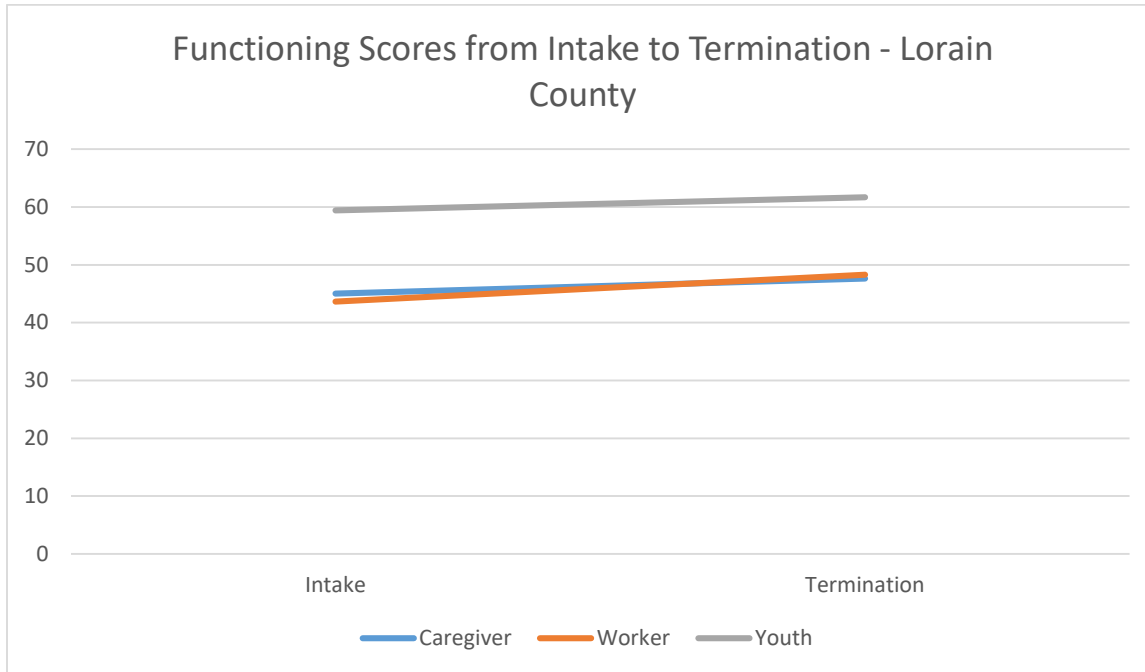
	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	16.70 (SD=12.11; n=50)	13.04 (SD=11.38; n=50)	2.09*	.30
<b>Intake to Termination</b>	15.32 (SD=11.77; n=63)	11.13 (SD=10.12; n=63)	2.72**	.34

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

## Functioning

Means for the Functioning scale by rater and assessment period can be found in Figure 61.

Figure 61



## Caregiver Ratings

Caregivers did not report statistically significant improvements in Functioning scores in the periods between intake and three months and intake and termination (see Table 163).

Table 163. Paired Samples T-Tests for Functioning Scores – Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	47.18 (SD=16.04; n=50)	49.82 (SD=16.53; n=50)	-1.18	.17
<b>Intake to Termination</b>	45.03 (SD=16.49; n=65)	47.63 (SD=15.88; n=65)	-1.41	.17

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

### Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Functioning from intake to three months  $t(51) = -2.06$ ,  $p < .05$  and intake and termination  $t(65) = -3.20$ ,  $p < .01$  with small effect sizes (see Table 164).

Table 164. Paired Samples T-Tests for Functioning Scores – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	42.92 (SD=12.11; n=52)	46.38 (SD=11.75; n=52)	-2.06*	.28
<b>Intake to Termination</b>	43.62 (SD=11.46; n=66)	48.27 (SD=12.45; n=66)	-3.20**	.39

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

### Youth Ratings

Paired samples t-tests conducted on youth reported Functioning scores indicated no significant improvement between intake and three months and between intake and termination (see Table 165).

Table 165. Paired Samples T-Tests for Functioning Scores – Youth

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	58.84 (SD=13.18; n=49)	61.37 (SD=11.09; n=49)	-1.56	.22
<b>Intake to Termination</b>	59.43 (SD=12.02; n=62)	61.71 (SD=11.98; n=62)	-1.54	.19

\* < .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.

Due to sample size limitations, we are only able to present the outcomes for the exposure to violence domain. In addition to the BHJJ data, we also 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).

### 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, 2.8% of the national sample and 15.7% of the BHJJ sample were hit or slapped by someone with whom they went on a date (see Table 166).

Table 166. Prevalence of Self-Reported Violent Victimization

	<b>% Yes BHJJ Sample (n = 51)</b>	<b>% Yes National Sample</b>
<b>In the last year, did someone threaten to hurt you when you thought they might really do it?</b>	17.7%	14.4% <sup>a</sup>
<b>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?</b>	7.8%	1.9% <sup>b</sup>
<b>In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?</b>	15.7%	2.8% <sup>b</sup>
<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?</b>	49.0%	16.6% <sup>a</sup>
<b>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?</b>	13.7%	5.7% <sup>a</sup>
<b>In the last year, did anyone hit or attack you WITHOUT using an object or weapon?</b>	35.3%	17.7% <sup>a</sup>
<b>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?</b>	19.6%	21.8% <sup>a</sup>
<b>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?</b>	3.9%	0.3% <sup>b</sup>
<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?</b>	0.0%	1.2% <sup>b</sup>
<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?</b>	13.8%	3.3% <sup>b</sup>
<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?</b>	19.6%	12.8% <sup>a</sup>
<b>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?</b>	37.3%	29.0% <sup>a</sup>

<b>In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?</b>	4.0%	5.4% <sup>a</sup>
<b>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?</b>	19.6%	9.7% <sup>a</sup>
<b>Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?</b>	11.8%	5.6% <sup>a</sup>
<b>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?</b>	9.8%	1.4% <sup>b</sup>

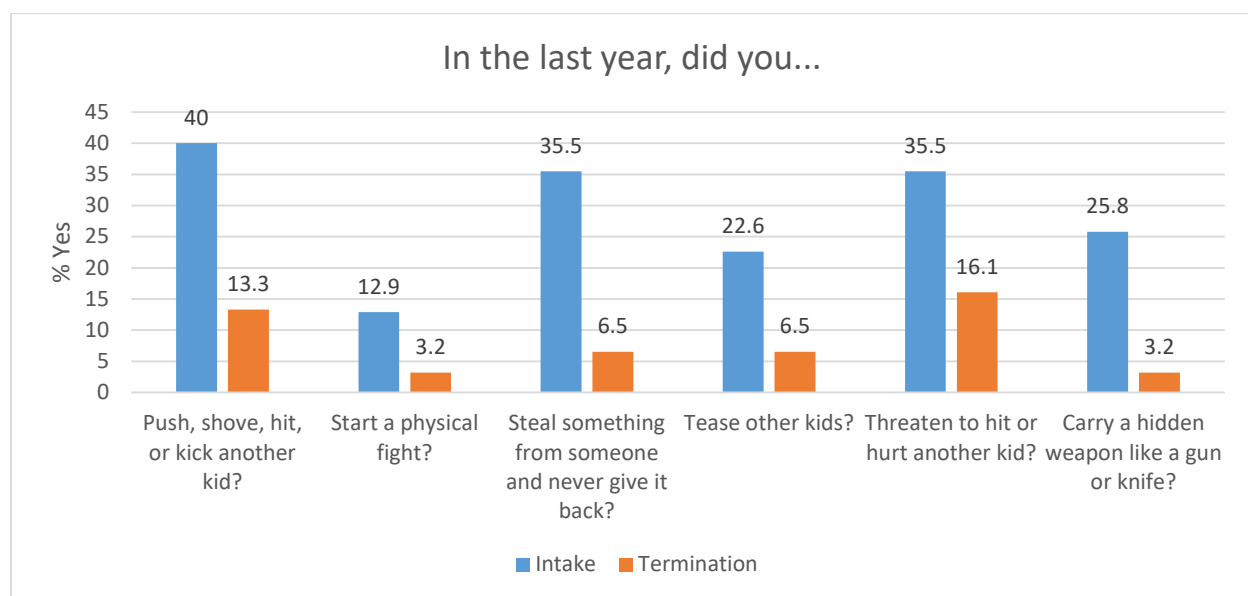
<sup>a</sup> Calculated from the raw National Survey of Children Exposed to Violence (NATSCEV) data. <sup>b</sup> Obtained from Finkelhor, D., Hamby, S.L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. *Child Abuse and Neglect*, 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 VDAQ. 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 62). For example, at intake, 25.8% of youth reported carrying a hidden weapon in the past year. At termination, 3.2% of youth reported carrying a hidden weapon 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, steal something, and carry a hidden weapon.

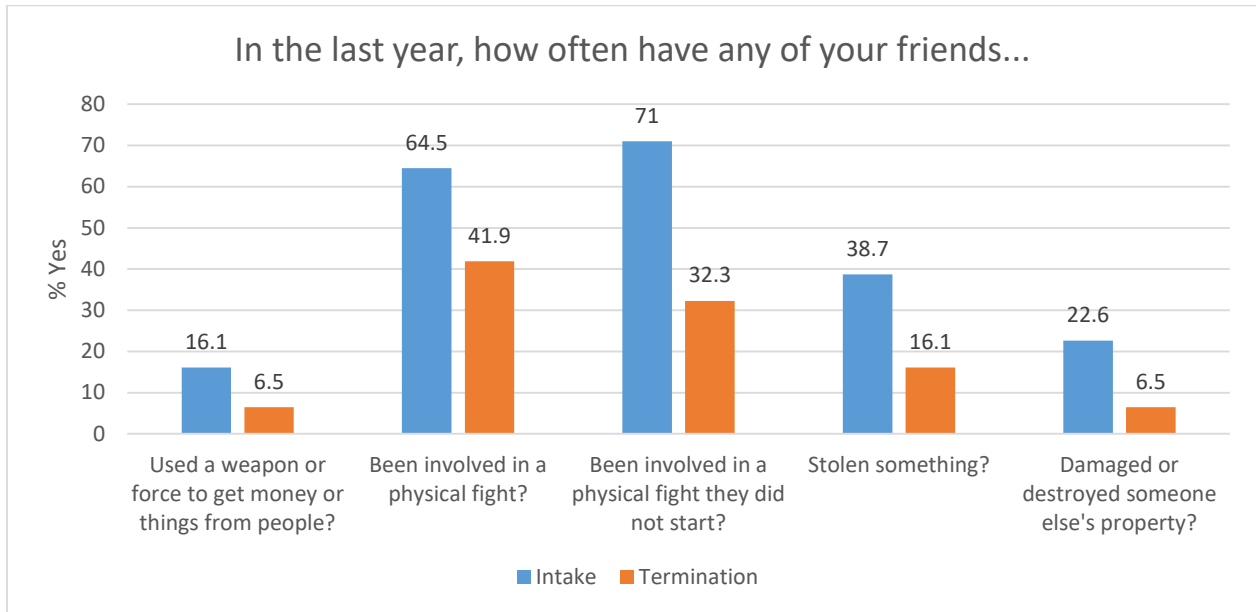
Figure 62



## Peer delinquency

Youth also reported less peer delinquency at termination than intake (see Figure 63). For example, at intake, 64.5% of youth reported that at least one of their friends had been involved in a physical fight. At termination from BHJJ, 41.9% of youth reported that at least one of their friends had been involved in a physical fight. McNemar's tests revealed statistically significant improvement from intake to termination for one item: been involved in a physical fight they did not start.

Figure 63



## 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 26.7% (n = 27) 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

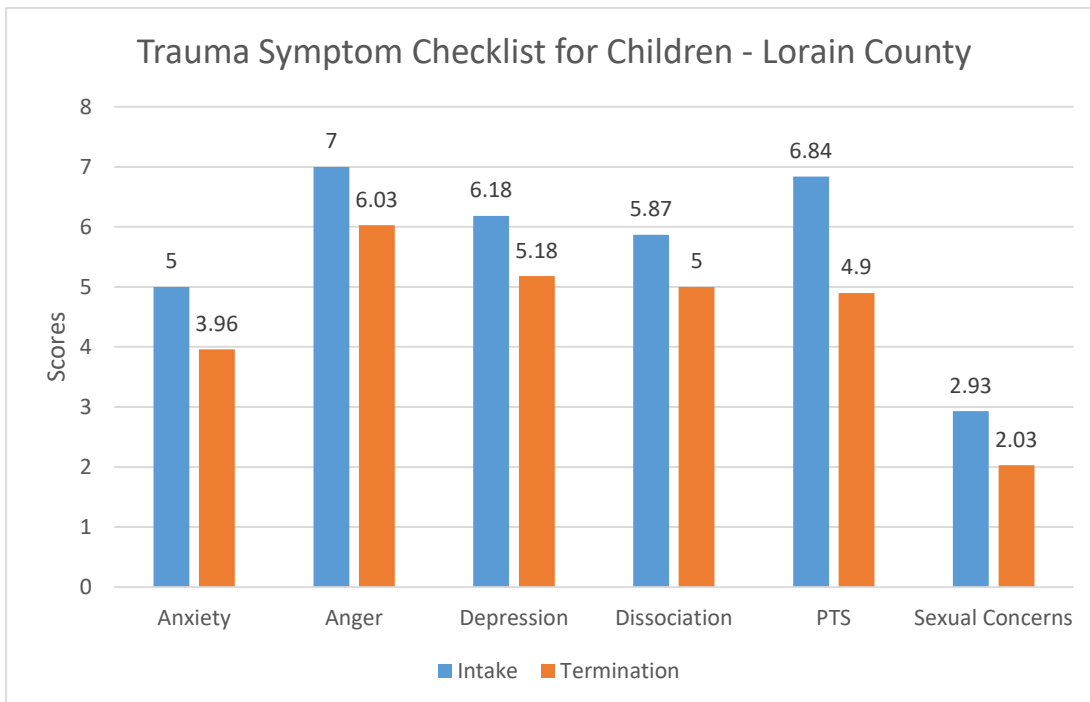
whether means at intake and termination on each TSCC subscale differed significantly. Data were analyzed for youth who had completed the TSCC at both intake and termination and who were not identified as either underreporters or hyperresponders. Data are then presented separately for males and females.

Overall, results from paired samples t-tests indicated that there were significant symptom reductions on the Posttraumatic stress subscale from intake to termination (see Table 167 and Figure 64). Considering Cohen’s (1988) established cutoffs, small effects were found for the Anxiety, Depression, Posttraumatic stress, and Sexual Concerns subscales. 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 167. TSCC Subscales from Intake to Termination

	Intake	Termination	t	d
<b>Anxiety</b>	5.00 (SD=4.08; n=32)	3.96 (SD=3.60; n=32)	1.48	.27
<b>Depression</b>	6.18 (SD=5.48; n=32)	5.18 (SD=4.65; n=32)	1.28	.23
<b>Anger</b>	7.00 (SD=4.59; n=32)	6.03 (SD=4.80; n=32)	0.98	.18
<b>Posttraumatic Stress</b>	6.84 (SD=5.65; n=32)	4.90 (SD=4.41; n=32)	2.41*	.43
<b>Dissociation</b>	5.87 (SD=4.43; n=32)	5.00 (SD=4.60; n=32)	0.92	.15
<b>Sexual Concerns</b>	2.93 (SD=3.01; n=32)	2.03 (SD=2.59; n=32)	1.32	.23

Figure 64



## 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 9.2 for females and 3.8 for males (see Figure 65 and Figure 66). For females, paired samples t-tests indicated significant improvements in trauma symptoms for the Posttraumatic stress subscale. For males, paired samples t-tests indicated no significant improvement in trauma symptoms for any subscale.

Figure 65

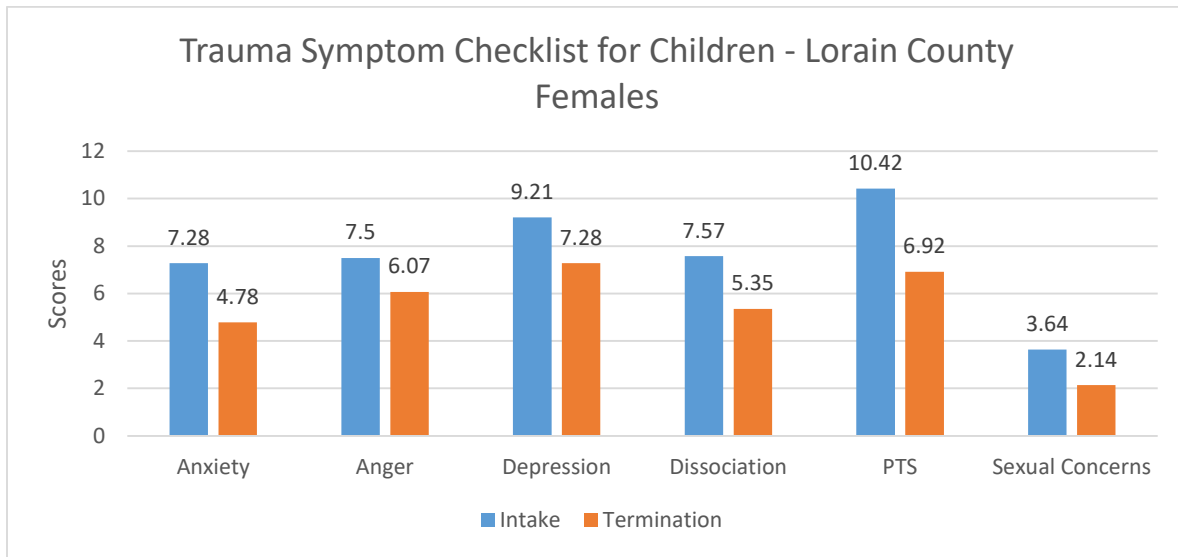
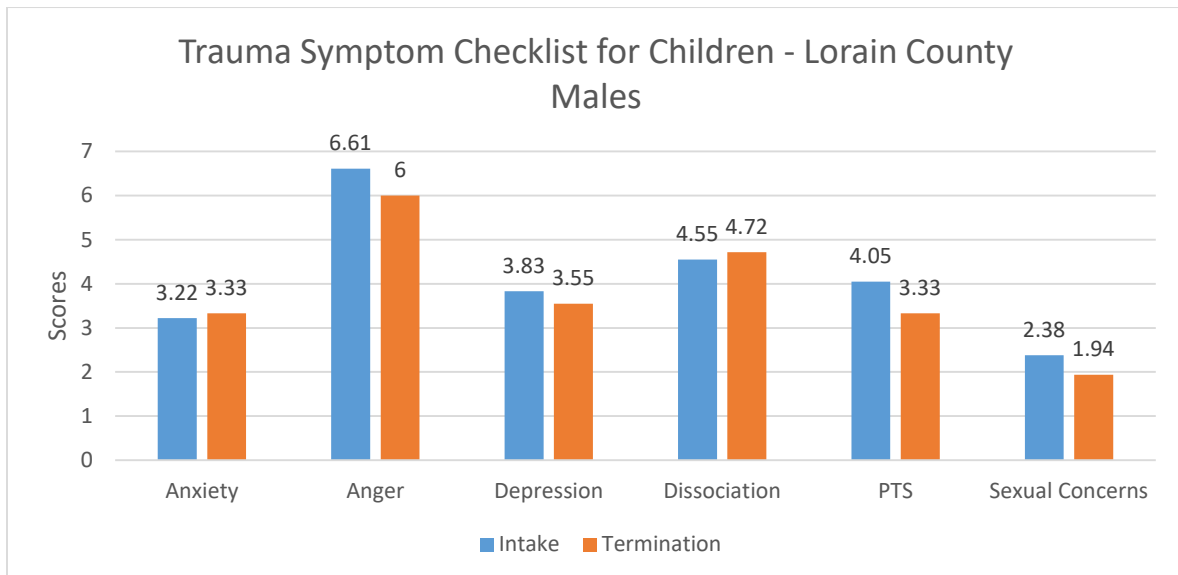


Figure 66





## 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 167 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. Almost 4.0% of males (3.6%, n = 2) and 12.1% of females (n = 4) ever used heroin at intake.

Table 168. Self-Reported Substance Use at Intake

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
<b>Alcohol</b>	83.6% (n = 46)	13.20 (SD = 1.79)	90.9% (n = 30)	13.65 (SD = 1.37)
<b>Cigarettes</b>	75.0% (n = 42)	12.96 (SD = 2.43)	84.8% (n = 28)	13.24 (SD = 1.73)
<b>Chewing Tobacco</b>	19.6% (n = 11)*	13.00 (SD = 1.90)	3.0% (n = 1)	16.00 <sup>a</sup>
<b>Marijuana</b>	100% (n = 55)	13.15 (SD = 1.78)	97.0% (n = 32)	12.94 (SD = 1.65)
<b>Cocaine</b>	9.1% (n = 5)	15.00 (SD = 0.71)	24.2% (n = 8)	14.38 (SD = 1.19)
<b>Pain Killers (use inconsistent with prescription)</b>	29.1% (n = 16)	13.67 (SD = 1.03)	21.2% (n = 7)	13.93 (SD = 1.28)
<b>GHB</b>	0	N/A	0	N/A
<b>Inhalants</b>	7.3% (n = 4)	14.00 (SD = 1.00)	6.1% (n = 2)	13.00 (SD = 0.00)
<b>Heroin</b>	3.6% (n = 2)	16.00 (SD = 0.00)	12.1% (n = 4)	14.25 (SD = 1.71)
<b>Amphetamines</b>	7.4% (n = 4)	13.67 (SD = 0.58)	12.1% (n = 4)	13.25 (SD = 0.96)
<b>Ritalin (use inconsistent with prescription)</b>	14.5% (n = 8)	13.67 (SD = 2.50)	24.2% (n = 8)	12.88 (SD = 1.55)
<b>Barbiturates</b>	1.9% (n = 1)	15.00 <sup>a</sup>	3.0% (n = 1)	12.00 <sup>a</sup>
<b>Non-prescription Drugs</b>	18.5% (n = 10)	13.80 (SD = 1.03)	21.2% (n = 7)	15.00 <sup>a</sup>
<b>Hallucinogens</b>	17.9% (n = 10)	14.67 (SD = 1.23)	9.1% (n = 3)	14.67 (SD = 0.58)
<b>PCP</b>	3.6% (n = 2)	14.00 (SD = 1.41)	0	N/A
<b>Ketamine</b>	1.8% (n = 1)	15.00 <sup>a</sup>	3.0% (n = 1)	14.00 <sup>a</sup>
<b>Ecstasy</b>	8.9% (n = 5)	14.50 (SD = 1.05)	18.2% (n = 6)	14.80 (SD = 0.45)
<b>Tranquilizers</b>	18.2% (n = 10)	14.40 (SD = 0.97)	24.2% (n = 8)	14.57 (SD = 0.79)

\* $p < .05$

### Six-Month Substance Use

Youth were also asked whether they had used each substance in the past six months. Figure 67 and Figure 68 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 alcohol and marijuana.

The percentage of males using alcohol in the past six months dropped from 47.8% (n = 22) to 39.3% (n = 11) from intake to termination. For females, 57.1% (n = 16) reported past six-month use at intake while 52.9% (n = 9) reported past six-month alcohol use at termination. Past six-month marijuana use declined from 84.9% (n = 45) at intake to 56.8% (n = 21) at termination for males and 90.0% (n = 27) at intake and 81.3% (n = 13) at termination for females.

Figure 67

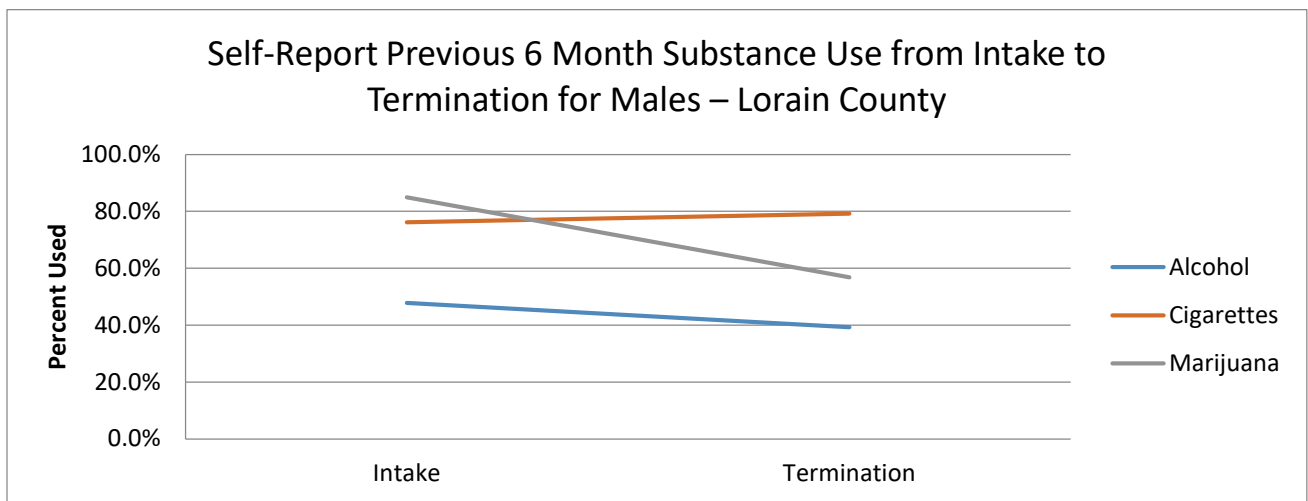
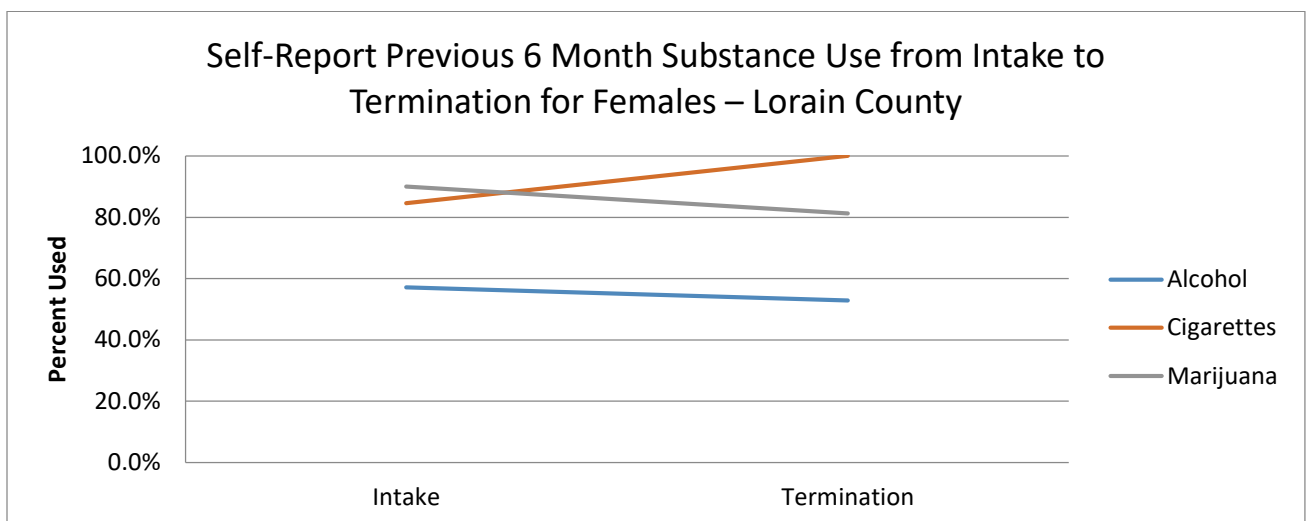


Figure 68



### 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 69 and Figure 70 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. Females reported an average of 16.67 days (SD = 13.31; n = 21) of cigarette use at intake, and at termination reported an average of 15.40 days (SD = 12.23; n = 10) at termination.

Figure 69

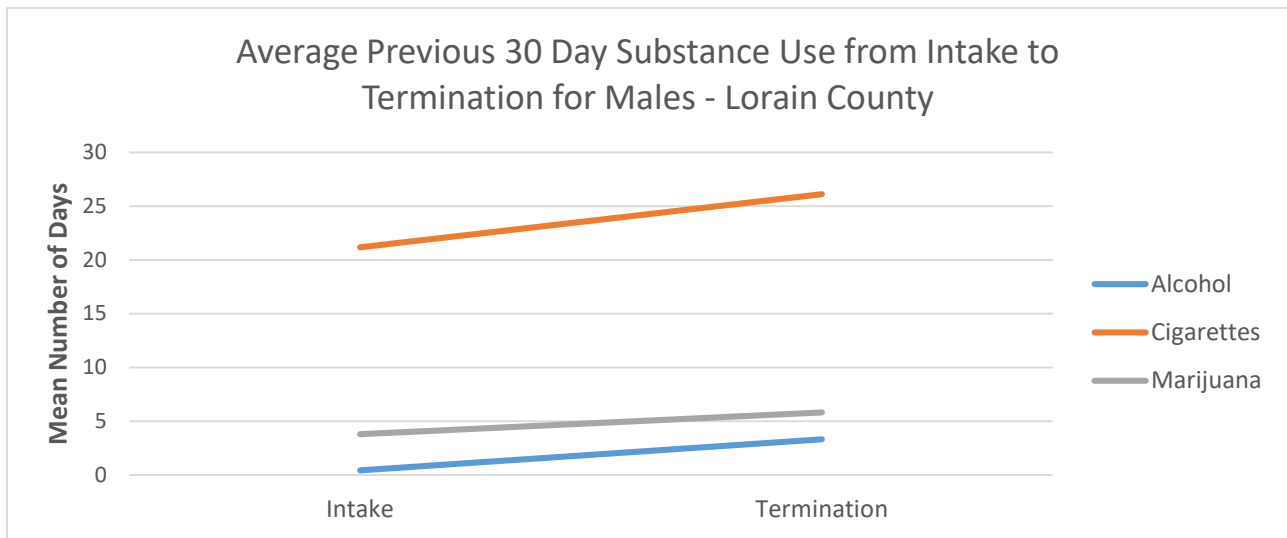
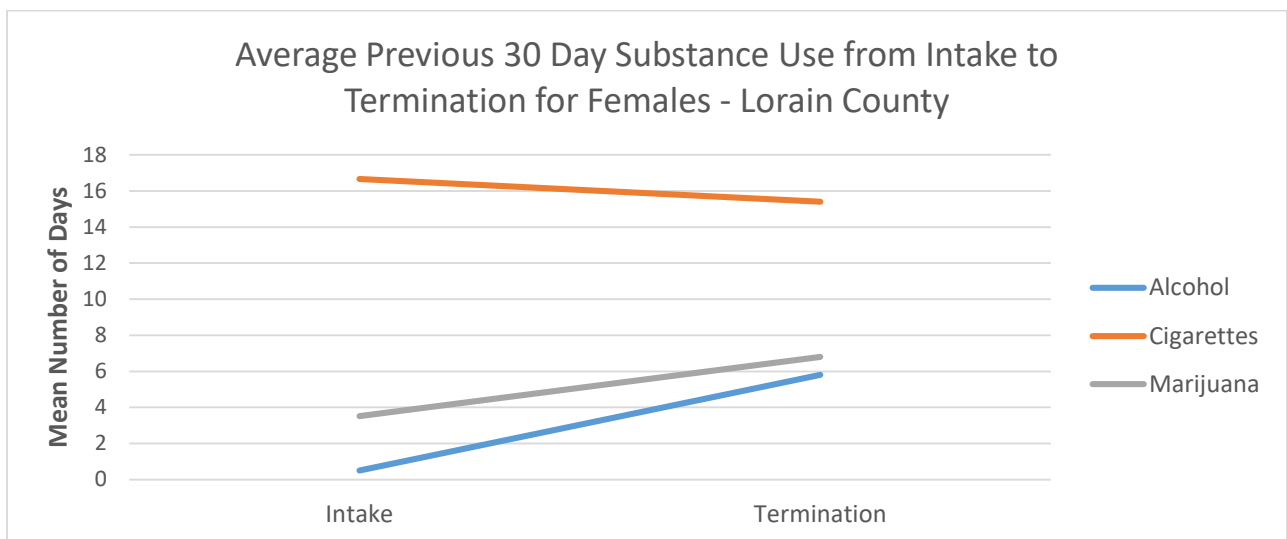


Figure 70



## 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 74 youth terminated from the BHJJ program in Lorain County. Nearly 60% (59.5%, n = 44) of the youth terminated from the BHJJ program were identified as successful treatment completers. In Lorain County 1.4% (n = 1) were withdrawn from the program, 14.9% (n = 11) were terminated from the program due to an out of home placement, and 6.8% (n = 5) were incarcerated. Table 169 presents all of the reasons for termination from BHJJ.

In the latest evaluation period that began July 2015 and ended in June 2017, 71.4% (n = 25) of youth terminated successfully from the BHJJ program in Lorain County.

Table 169. Reasons for Termination from BHJJ

Termination Reason	All Youth	Youth Enrolled from July 2015 to June 2017
<b>Successfully Completed Services</b>	59.5% (n = 44)	71.4% (n = 25)
<b>Client Did Not Return/Rejected Services</b>	8.2% (n = 6)	5.7% (n = 2)
<b>Out of Home Placement</b>	14.9% (n = 11)	11.4% (n = 4)
<b>Client/Family Moved</b>	1.4% (n = 1)	2.9% (n = 1)
<b>Client Withdrawn</b>	1.4% (n = 1)	0.0% (n = 0)
<b>Client AWOL</b>	4.1% (n = 3)	2.9% (n = 1)
<b>Client Incarcerated</b>	6.8% (n = 5)	2.9% (n = 1)
<b>Other</b>	4.1% (n = 3)	2.9% (n = 1)

## Average Length of Stay

The average length of stay for youth in the Lorain County BHJJ program was 138 days. For youth identified as completing treatment successfully, the average length of stay was 157 days and for youth identified as unsuccessful treatment completers, the average length of stay was 114 days. For youth enrolled since July 1, 2015, the average length of stay in BHJJ was 140 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, 53.0% of the youth (n = 44) in Lorain County were at risk for out of home placement. At termination, 43.1% (n = 31) of youth were at risk for out of home placement. Of those youth who successfully completed BHJJ treatment, 18.2% (n = 8) were

at risk for out of home placement at termination while 82.1% (n = 23) of youth who terminated unsuccessfully from the program were at risk for out of home placement.

## Police Contacts

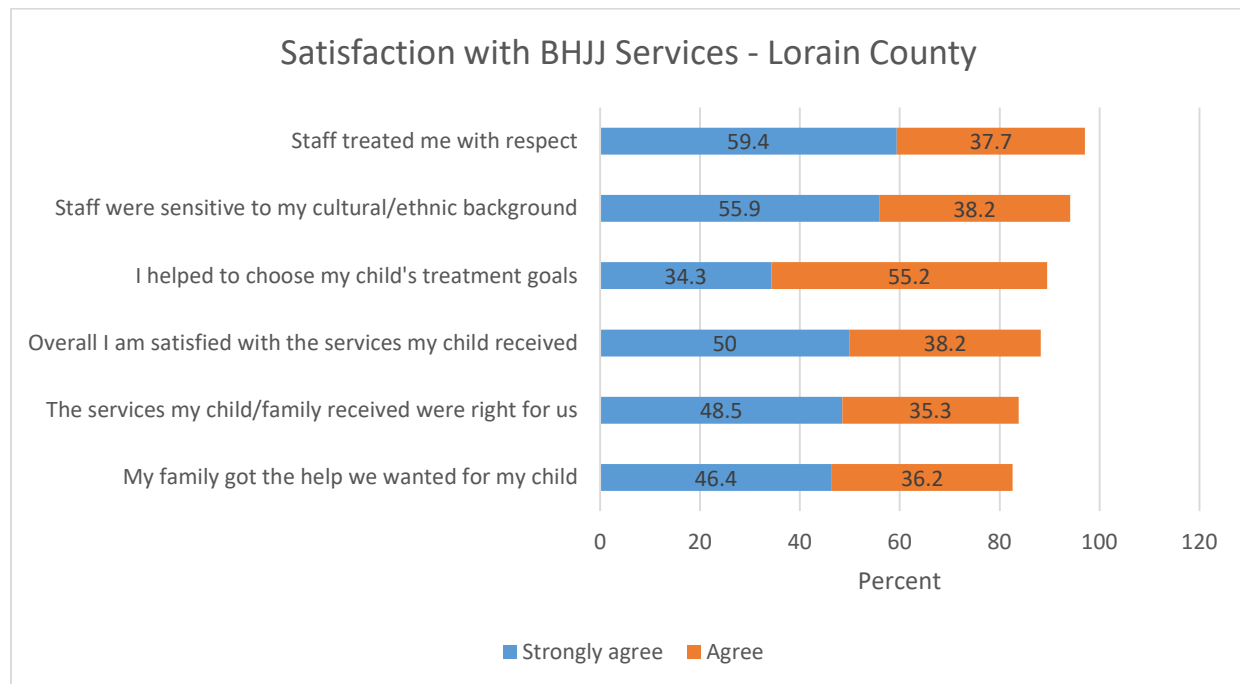
With help from the caregiver and youth, the worker was asked to estimate the frequency of police contacts since the youth has been receiving mental health services through BHJJ. Workers reported that police contacts have been reduced for 70.3% (n = 52) of the youth and had stayed the same for 25.7% (n = 19) of the youth. Police contacts increased for 4.1% (n = 3) of the youth.

## 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, 88.2% (n = 60) of caregivers either strongly agreed or agreed that they were satisfied with the services their child received and 83.8% (n = 57) either strongly agreed or agreed that the services their child and/or family receive were right for them (see Figure 71). A majority (97.1%, n = 67) of caregivers either strongly agreed or agreed that staff treated them with respect and 94.1% (n = 64) indicated that they strongly agreed or agreed with the statement that they were satisfied with the cultural and ethnic sensitivity of BHJJ staff.

Figure 71



## Recidivism

### Methodology

Court data were provided by the Lorain 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, 77.0% (n = 77) of the BHJJ youth had misdemeanor charges, 24.0% (n = 24) had at least one felony charge, and 79.0% (n = 79) were adjudicated delinquent (see Table 170).

Previous juvenile court information is presented for youth based on BHJJ treatment completion status (successful vs. unsuccessful). In the 12 months prior to enrollment, 79.5% (n = 35) of successful completers and 86.7% (n = 26) of unsuccessful completers were adjudicated delinquent in the 12 months prior to their enrollment in BHJJ. A similar percentage of successful completers had a felony charge in the 12 months prior to intake (29.5%, n = 13) as unsuccessful completers (30.0%, n = 9).

Table 170. Charges Prior to BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	26.0% (n = 26)	4.0% (n = 4)	24.0% (n = 24)	25.0% (n = 11)	2.3% (n = 1)	20.5% (n = 9)	36.7% (n = 11)	6.7% (n = 2)	36.7% (n = 11)
<b>6 months</b>	48.0% (n = 48)	13.0% (n = 13)	49.0% (n = 49)	47.7% (n = 21)	15.9% (n = 7)	50.0% (n = 22)	56.7% (n = 17)	16.7% (n = 5)	63.3% (n = 19)
<b>12 months</b>	77.0% (n = 77)	24.0% (n = 24)	79.0% (n = 79)	75.0% (n = 33)	29.5% (n = 13)	79.5% (n = 35)	83.3% (n = 25)	30.0% (n = 9)	86.7% (n = 26)
<b>18 months</b>	86.0% (n = 86)	28.0% (n = 28)	89.0% (n = 89)	79.5% (n = 35)	34.1% (n = 15)	86.4% (n = 38)	93.3% (n = 28)	30.0% (n = 9)	93.3% (n = 28)

## 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, 58.1% (n = 36) of youth were charged with at least one new misdemeanor and 14.5% (n = 9) were charged with at least one new felony. Fifty percent (50.0%, n = 31) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 171).

In the 12 months after enrollment in BHJJ 52.0% (n = 13) of successful completers were charged with at least one new misdemeanor, 8.0% (n = 2) were charged with at least one new felony, and 48.0% (n = 12) were adjudicated delinquent. Of the youth who completed unsuccessfully, 64.0% (n = 16) were charged with at least one new misdemeanor, 20.0% (n = 5) were charged with at least one new felony, and 64.0% (n = 16) were adjudicated delinquent in the 12 months after their enrollment in BHJJ.

Table 171. Charges After BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	21.3% (n = 19)	2.2% (n = 2)	19.1% (n = 17)	15.4% (n = 6)	0.0% (n = 0)	15.4% (n = 6)	35.7% (n = 10)	3.6% (n = 1)	35.7% (n = 10)
<b>6 months</b>	32.1% (n = 25)	6.4% (n = 5)	28.2% (n = 22)	18.2% (n = 6)	0.0% (n = 0)	18.2% (n = 6)	51.9% (n = 14)	14.8% (n = 4)	51.9% (n = 14)
<b>12 months</b>	58.1% (n = 36)	14.5% (n = 9)	50.0% (n = 31)	52.0% (n = 13)	8.0% (n = 2)	48.0% (n = 12)	64.0% (n = 16)	20.0% (n = 5)	64.0% (n = 16)
<b>18 months</b>	75.5% (n = 40)	22.6% (n = 12)	64.2% (n = 34)	72.7% (n = 16)	18.2% (n = 4)	68.2% (n = 15)	84.2% (n = 16)	26.3% (n = 5)	84.2% (n = 16)



## 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, 64.1% (n = 25) of youth were charged with at least one new misdemeanor, 25.6% (n = 10) were charged with at least one new felony, and 56.4% (n = 22) were adjudicated delinquent (see Table 172).

In the 12 months following their termination from BHJJ, 66.7% (n = 12) of successful completers were charged with at least one new misdemeanor, 16.7% (n = 3) were charged with at least one new felony, and 61.1% (n = 11) were adjudicated delinquent. Of the youth who completed unsuccessfully, 56.3% (n = 9) were charged with at least one new misdemeanor, 25.0% (n = 4) were charged with at least one new felony, and 62.5% (n = 10) were adjudicated delinquent in the 12 months after their termination from BHJJ.

Table 172. Charges After Termination from BHJJ

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	17.5% (n = 10)	5.3% (n = 3)	12.3% (n = 7)	13.8% (n = 4)	3.4% (n = 1)	10.3% (n = 3)	18.5% (n = 5)	7.4% (n = 2)	14.8% (n = 4)
<b>6 months</b>	32.7% (n = 17)	13.5% (n = 7)	30.8% (n = 16)	32.0% (n = 8)	8.0% (n = 2)	28.0% (n = 7)	29.2% (n = 7)	16.7% (n = 4)	33.3% (n = 8)
<b>12 months</b>	64.1% (n = 25)	25.6% (n = 10)	56.4% (n = 22)	66.7% (n = 12)	16.7% (n = 3)	61.1% (n = 11)	56.3% (n = 9)	25.0% (n = 4)	62.5% (n = 10)
<b>18 months</b>	76.5% (n = 26)	32.4% (n = 11)	64.7% (n = 22)	80.0% (n = 12)	26.7% (n = 4)	73.3% (n = 11)	71.4% (n = 10)	28.6% (n = 4)	71.4% (n = 10)

## 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 9 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, 44.4% (n = 4) were charged with a new felony in the 12 months after their termination from BHJJ.

Three of the 100 BHJJ youth (3.0%) from Lorain County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.

## Lucas County

### Demographics

Lucas County has enrolled 252 youth in the BHJJ program since 2009. Of the 252 youth enrolled, 22.6% (n = 57) were female and 77.4% (n = 195) were male. Since July 2015, 90.3% (n = 28) of new enrollees have been male (see Table 173).

The majority of the overall sample of youth were either African American (53.8%, n = 135) or Caucasian (28.3%, n = 71). The remainder of the population were classified in the “Other” racial category (17.9%, n = 45). A similar pattern was found for youth enrolled since July 2015, although a slightly higher proportion of African Americans (54.8%, n = 17) and slightly higher proportion of Caucasians (32.3%, n = 10) was observed. The average age of the youth at intake into BHJJ was 15.29 years old (SD = 1.36) with a range between 11.8 and 18.1 years.

Table 173. Demographic Information for BHJJ Youth

	All Youth Enrolled (2009 - 2017)	Youth Enrolled between July 2015 – June 2017
<b>Gender</b>	Female = 22.6% (n = 57)	Female = 9.7% (n = 3)
	Male = 77.4% (n = 195)	Male = 90.3% (n = 28)
<b>Race</b>	African American = 53.8% (n = 135)	African American = 54.8% (n = 17)
	Caucasian = 28.3% (n = 71)	Caucasian = 32.3% (n = 10)
	Other = 17.9% (n = 45)	Other = 12.9% (n = 4)
<b>Age at Intake</b>	15.29 years (SD = 1.36)	15.23 years (SD = 1.58)

### Custody Arrangement and Household Information

At intake, the majority of youth lived with the biological mother (61.5%, n = 144) (see Table 174). At time of enrollment, 82.0% (n = 192) of the BHJJ youth lived with at least one biological parent.

Over 77% of the BHJJ caregivers (77.6%, n = 160) had at least a high school diploma or GED, and 5.2% (n = 12) had a bachelor’s degree or higher (see Table 175). Over one in five caregivers (22.4%, n = 52) reported that they did not graduate from high school.

Caregivers reported their annual household income. The median household income for BHJJ families was between \$5,000 - \$9,999 (see Table 176). More than 40% of caregivers (40.4%, n = 92) reported an annual household income less than \$5,000. Over half of BHJJ families (50.5%, n = 115) reported an annual household income below \$10,000.

Table 174. Custody Arrangement for BHJJ Youth

<b>Custody</b>	<b>BHJJ Youth</b>
<b>Two Biological Parents or One Biological and One Step or Adoptive Parent</b>	15.4% (n=36)
<b>Biological Mother Only</b>	61.5% (n=144)
<b>Biological Father Only</b>	5.1% (n=12)
<b>Adoptive Parent(s)</b>	6.8% (n=16)
<b>Sibling</b>	0.0% (n=0)
<b>Aunt/Uncle</b>	1.3% (n=3)
<b>Grandparents</b>	8.5% (n=20)
<b>Friend</b>	0.0% (n=0)
<b>Ward of the State</b>	0.0% (n=0)
<b>Other</b>	1.3% (n=3)

Table 175. Educational Outcomes for Caregivers of BHJJ Youth

<b>Number of School Years Completed</b>	<b>Number of Caregivers</b>
<b>Less than High School</b>	22.4% (n=52)
<b>High School Graduate or G.E.D.</b>	42.7% (n=99)
<b>Some College or Associate Degree</b>	29.7% (n=49)
<b>Bachelor's Degree</b>	2.6% (n=6)
<b>More than a Bachelor's Degree</b>	2.6% (n=6)

Table 176. Annual Household Income for BHJJ Families

<b>Annual Household Income</b>	<b>BHJJ Families</b>
<b>Less than \$5,000</b>	40.4% (n=92)
<b>\$5,000 - \$9,999</b>	10.1% (n=23)
<b>\$10,000 - \$14,999</b>	11.4% (n=26)
<b>\$15,000 - \$19,999</b>	10.1% (n=23)
<b>\$20,000 - \$24,999</b>	10.5% (n=24)
<b>\$25,000 - \$34,999</b>	3.5% (n=8)
<b>\$35,000 - \$49,999</b>	5.7% (n=13)
<b>\$50,000 - \$74,999</b>	7.0% (n=16)
<b>\$75,000 - \$99,999</b>	1.3% (n=3)
<b>\$100,000 and over</b>	0.0% (n=0)

## 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 177. Caregivers reported that a significantly larger proportion of females than males had a history of sexual abuse, talking about suicide, and taking medication related to their emotional or behavioral symptoms. A significantly larger proportion of the caregivers of males reported a lifetime history of problems with substance abuse, and exposure to domestic violence.

Caregivers reported that 14.8% (n = 8) of females and 11.6% (n = 21) of males had a history of being physically abused while 29.6% (n = 16) of females and 7.9% (n = 14) of males had a history of being sexually abused. Caregivers of 51.9% (n = 27) of females and 35.8% (n = 64) of males reported hearing the child talking about committing suicide and 20.4% (n = 11) of females and 13.0% (n = 23) of males had attempted suicide at least once. The majority of the caregivers of females (62.3%, n = 33) and males (67.6%, n = 117) reported a family history of depression.

Table 177. Youth and Family History

Question	Females	Males
Has the child ever been physically abused?	14.8% (n=8)	11.6% (n=21)
Has the child ever been sexually abused?	29.6% (n=16)**	7.9% (n=14)
Has the child ever run away?	73.1% (n=38)	60.7% (n=105)
Has the child ever had a problem with substance abuse, including alcohol and/or drugs?	43.4% (n=23)	59.7% (n=105)*
Has the child ever talked about committing suicide?	51.9% (n=27)*	35.8% (n=64)
Has the child ever attempted suicide?	20.4% (n=11)	13.0% (n=23)
Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?	24.5% (n=13)	39.1% (n=70)*
Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?	62.3% (n=33)	67.6% (n=117)
Has anyone in the child's biological family had a mental illness, other than depression?	52.8% (n=28)	52.7% (n=89)
Has the child ever lived in a household in which someone was convicted of a crime?	28.0% (n=14)	42.3% (n=74)
Has anyone in the child's biological family had a drinking or drug problem?	44.2% (n=23)	58.8% (n=104)
Is the child currently taking any medication related to his/her emotional or behavioral symptoms?	53.8% (n=28)*	38.4% (n=66)

\*p < .05; \*\*p < .01

## 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 (90.9% and 95.7% respectively) (see Table 178). Chi-square analysis indicated females had significantly higher rates of problems related to depression while males had significantly higher rates of hyperactive and attention-related problems.

Table 178. Problems Leading to Services

Problems Leading to Services	Females	Males
<b>Adjustment-related problems</b>	5.5% (n = 3)	8.6% (n = 16)
<b>Anxiety-related problems</b>	16.4% (n = 9)	19.4% (n = 36)
<b>Conduct/delinquency-related problems</b>	90.9% (n = 50)	95.7% (n = 178)
<b>Depression-related problems</b>	30.9% (n = 17)*	15.6% (n = 29)
<b>Eating disorders</b>	0	1.1% (n = 2)
<b>Hyperactive and attention-related problems</b>	40.0% (n = 22)	53.8% (n = 100)*
<b>Learning disabilities</b>	7.3% (n = 4)	9.7% (n = 18)
<b>Pervasive development disabilities</b>	0	1.6% (n = 3)
<b>Psychotic behaviors</b>	3.6% (n = 2)	1.1% (n = 2)
<b>School performance problems not related to learning disabilities</b>	61.8% (n = 34)	61.3% (n = 114)
<b>Specific developmental disabilities</b>	0	1.6% (n = 3)
<b>Substance use, abuse, dependence-related problems</b>	34.5% (n = 19)	44.1% (n = 82)
<b>Suicide-related problems</b>	10.9% (n = 6)	7.0% (n = 13)

\* < .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 179 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. While a larger proportion of males than females were categorized as high risk, this difference was not statistically significant. A significantly larger proportion of Nonwhite youth were categorized as high risk than white youth.

Table 179. OYAS Risk Categories by Gender and Race

	OYAS Low	OYAS Moderate	OYAS High
<b>Female</b>	34.7% (n = 17)	46.9% (n = 23)	18.4% (n = 9)
<b>Male</b>	22.4% (n = 36)	53.4% (n = 86)	24.2% (n = 39)
<b>White</b>	41.8% (n = 23)	45.5% (n = 25)	12.7% (n = 7)
<b>Nonwhite*</b>	18.3% (n = 28)	54.9% (n = 84)	26.8% (n = 41)

\*p < .01

## 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 females and males was Oppositional Defiant Disorder (see Table 180).

Chi-square analysis indicated females were significantly more likely to be diagnosed with Depressive Disorders. Fourteen percent (n = 24) of males and 11.5% (n = 6) of females were identified as having both a DSM mental health diagnosis and a substance use diagnosis.

Table 180. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
<b>Adjustment Disorder</b>	0	0.6% (n = 1)
<b>Alcohol-related Disorders</b>	0	0.6% (n = 1)
<b>Attention Deficit Hyperactivity Disorder (ADHD)</b>	61.5% (n = 32)	60.5% (n = 104)
<b>Bipolar Disorder</b>	13.5% (n = 7)	7.6% (n = 13)
<b>Cannabis-related Disorders</b>	11.5% (n = 6)	14.5% (n = 25)
<b>Conduct Disorder</b>	9.6% (n = 5)	7.6% (n = 13)
<b>Depressive Disorders</b>	26.9% (n = 14)**	9.9% (n = 17)
<b>Disruptive Behavior Disorder</b>	0	1.2% (n = 2)
<b>Mood Disorder</b>	7.7% (n = 4)	11.0% (n = 19)
<b>Oppositional Defiant Disorder</b>	80.8% (n = 42)	77.9% (n = 134)
<b>Post-traumatic Stress Disorder</b>	11.8% (n = 6)	5.8% (n = 10)

\* < .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 (70.5%, n = 115) were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in treatment with BHJJ, 45.1% (n = 87) 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, 83.0% (n = 176) of youth were currently attending school while at termination, 78.4% (n = 134) 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 181 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 182 displays this information based on completion status. At intake, 10.0% of youth were earning mostly A's and B's and 42.9% were earning mostly D's and F's. At termination from BHJJ, 10.2% of youth were earning mostly A's and B's and 27.1% 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, 23.9% of unsuccessful completers and 28.0% of successful completers received mostly A's, B's, or C's. At termination, 16.3% of unsuccessful completers and 50.4% of successful completers received mostly A's, B's, or C's.

At termination, workers reported that 51.8% (n = 100) of youth were attending school more than before starting treatment and 34.2% (n = 66) of youth were attending school 'about the same' amount compared to before starting treatment. Workers reported that 8.8% (n = 17) were attending school less often than before treatment in BHJJ. At termination, 46.2% (n = 84) of the youth attending school had Individualized Education Plans (IEPs).

Table 181. Academic Performance

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A's and B's	10.0% (n = 17)	10.2% (n = 18)
Mostly B's and C's	17.6% (n = 30)	31.1% (n = 55)
Mostly C's and D's	29.4% (n = 50)	31.6% (n = 56)
Mostly D's and F's	42.9% (n = 73)	27.1% (n = 48)

Table 182. Academic Performance for Youth by Completion Status

Typical Grades	Unsuccessful Completers		Successful Completers	
	Frequency at Intake	Frequency at Termination	Frequency at Intake	Frequency at Termination
Mostly A's and B's	8.7% (n = 4)	9.3% (n = 4)	7.8% (n = 10)	10.7% (n = 14)
Mostly B's and C's	15.2% (n = 7)	7.0% (n = 3)	20.2% (n = 26)	39.7% (n = 52)
Mostly C's and D's	28.3% (n = 13)	37.2% (n = 16)	23.3% (n = 30)	30.5% (n = 40)
Mostly D's and F's	47.8% (n = 22)	46.5% (n = 20)	48.8% (n = 63)	19.1% (n = 25)

## 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



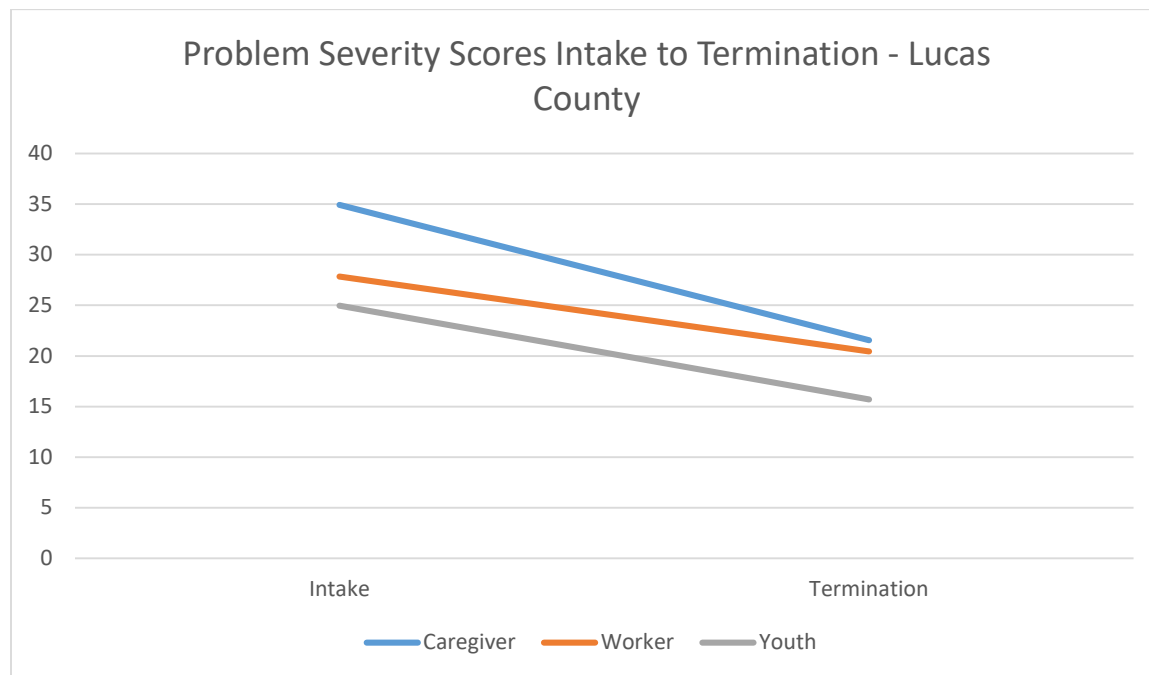
until termination from services. Because termination can occur at any point in time along the continuum of service, separate charts are included that display the means from intake to termination. Decreases in Problem Severity and increases in Functioning correspond to positive change.

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 three-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

Means from intake to termination are presented in Figure 72.

Figure 72



### Caregiver Rating

Paired samples t-tests revealed significant improvements in Problem Severity at both measurement intervals compared to intake (see Table 183). Significant improvements were noted at three months:  $t(18) = 3.63, p < .01$  with a large effect size and at termination  $t(31) = 3.47, p < .01$  with a moderate effect size.

Table 183. Paired Samples T-Tests for Problem Severity – Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	31.05 (SD=12.37; n=19)	20.37 (SD=15.46; n=19)	3.63**	.83
<b>Intake to Termination</b>	34.94 (SD=16.88; n=32)	21.55 (SD=17.89; n=32)	3.47**	.61

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

### Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Problem Severity from intake to three months and to termination (see Table 184). Workers reported statistically significant improvements in Problem Severity scores from intake to three months  $t(123) = 4.10$ ,  $p < .001$  and from intake to termination  $t(176) = 6.17$ ,  $p < .001$  with small effect sizes.

Table 184. Paired Samples T-Tests for Problem Severity – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	26.18 (SD=12.45; n=124)	20.72 (SD=13.07; n=124)	4.10***	.37
<b>Intake to Termination</b>	27.83 (SD=13.51; n=177)	20.43 (SD=14.26; n=177)	6.17***	.46

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

### Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement at termination (see Table 185). Significant improvements in Problem Severity scores were noted for the periods between intake and three months  $t(97) = 4.73$ ,  $p < .001$  and intake and termination  $t(129) = 6.64$ ,  $p < .001$ . A moderate effect size was noted for the period between intake and termination while a small effect size was found for the period between intake and three months.

Table 185. Paired Samples T-Tests for Problem Severity – Youth

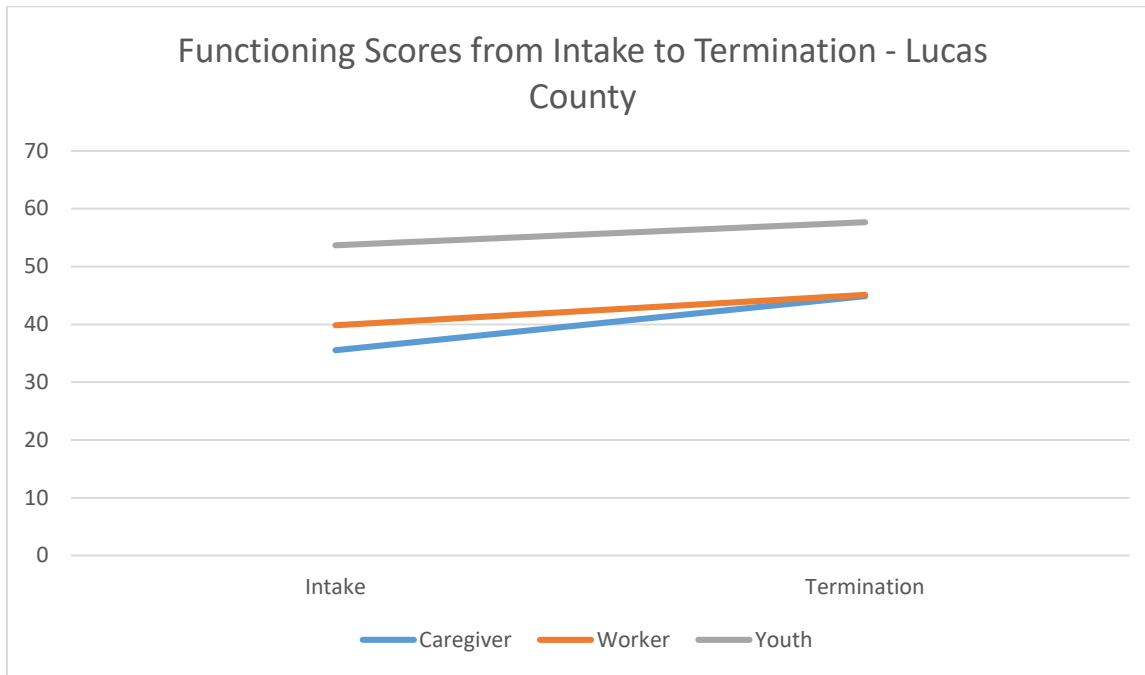
	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	25.07 (SD=14.45; n=98)	17.56 (SD=14.52; n=98)	4.73***	.48
<b>Intake to Termination</b>	24.97 (SD=15.36; n=130)	15.71 (SD=12.44; n=130)	6.64***	.58

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

### Functioning Scores

Means for the Functioning scale by rater and assessment period can be found in Figure 73.

Figure 73



### Caregiver Ratings

Caregivers reported a statistically significant improvement in Functioning scores for the period between intake and termination  $t(32) = -2.98, p < .01$  with a moderate effect size (see Table 186).

Table 186. Paired Samples T-Tests for Functioning Scores – Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	36.90 (SD=14.83; n=20)	44.75 (SD=16.41; n=20)	-1.77	.40
<b>Intake to Termination</b>	35.51 (SD=16.64; n=33)	44.88 (SD=19.21; n=33)	-2.98**	.52

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

### Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Functioning from intake to three months  $t(122) = -2.65, p < .01$  and intake and termination  $t(175) = -4.48, p < .001$  with small effect sizes. (see Table 187).

Table 187. Paired Samples T-Tests for Functioning Scores – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	40.15 (SD=12.12; n=123)	43.49 (SD=13.22; n=123)	-2.65**	.24
<b>Intake to Termination</b>	39.82 (SD=11.81; n=176)	45.10 (SD=15.02; n=176)	-4.48***	.34

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

### Youth Ratings

Paired samples t-tests conducted on youth reported Functioning scores indicated a statistically significant improvement between intake and termination  $t(129) = -2.84$ ,  $p < .01$  with a small effect size (see Table 188).

Table 188. Paired Samples T-Tests for Functioning Scores – Youth

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	54.11 (SD=11.90; n=101)	55.99 (SD=16.20; n=101)	-1.04	.10
<b>Intake to Termination</b>	53.68 (SD=12.51; n=130)	57.67 (SD=14.48; n=130)	-2.84**	.25

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

### 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 28.2% (n = 72) 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.

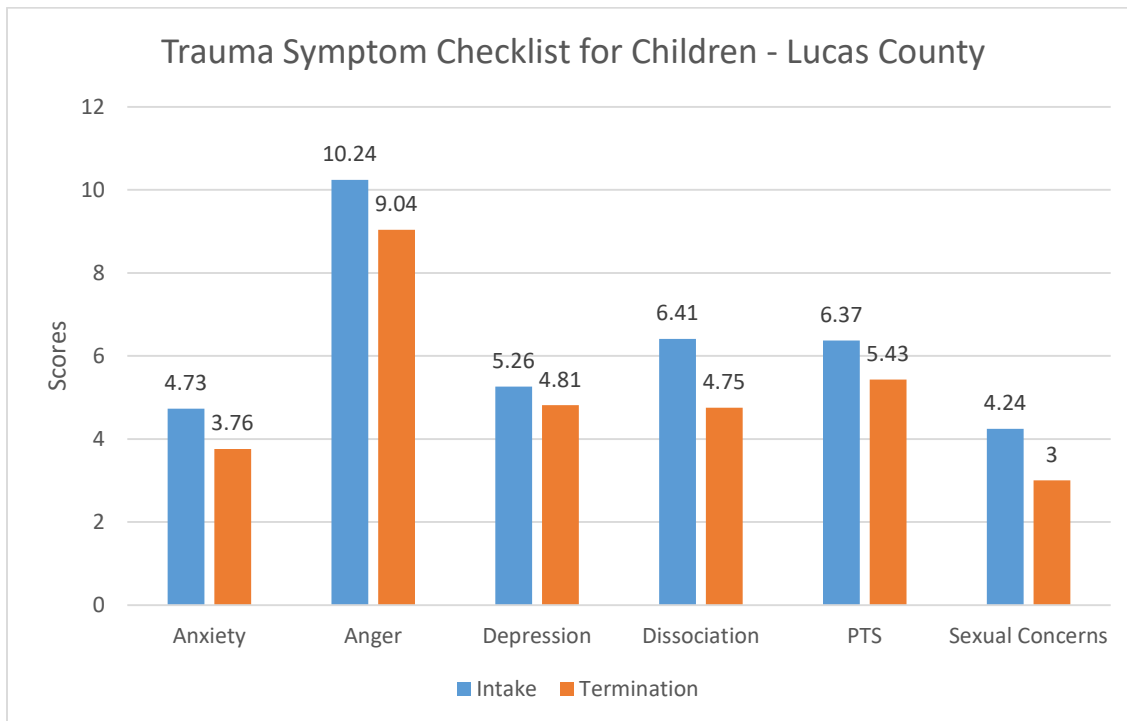
Overall, results from paired samples t-tests indicated that there statistically significant improvements reported for the Dissociation and Sexual Concerns subscales (see Table 189 and Figure 74). Considering Cohen’s (1988) established cutoffs, small effects were found for all subscales. The removal of 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 189. TSCC Subscales from Intake to Termination

	Intake	Termination	t	d
<b>Anxiety</b>	4.73 (SD=3.64; n=68)	3.76 (SD=3.17; n=68)	1.84	.22
<b>Depression</b>	5.26 (SD=4.05; n=69)	4.81 (SD=3.57; n=69)	0.85	.10
<b>Anger</b>	10.24 (SD=5.63; n=69)	9.04 (SD=5.06; n=69)	1.69	.20
<b>Posttraumatic Stress</b>	6.37 (SD=4.53; n=69)	5.43 (SD=4.12; n=69)	1.84	.22
<b>Dissociation</b>	6.41 (SD=3.99; n=68)	4.75 (SD=3.91; n=68)	3.39***	.41
<b>Sexual Concerns</b>	4.24 (SD=3.97; n=69)	3.00 (SD=3.07; n=69)	3.21**	.40

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

Figure 74



## 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 6.8 for females and 4.8 for males (see Figure 75 and Figure 76). For both females and males, paired samples t-tests indicated significant improvements in trauma symptoms for the Dissociation and Sexual Concerns subscales.

Figure 75

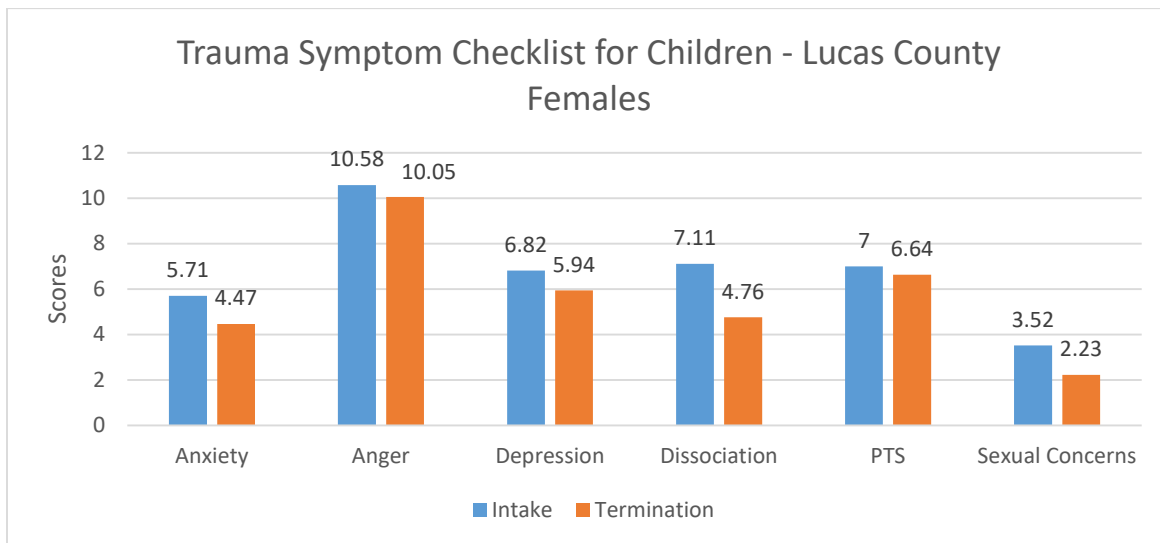
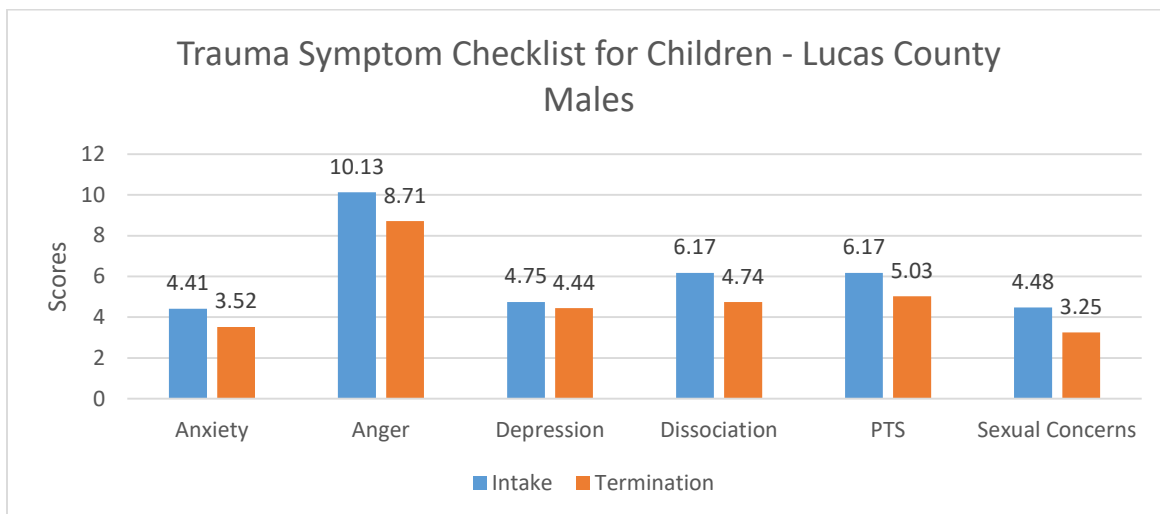


Figure 76



## 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 190 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. None of the youth in Lucas County ever used heroin at intake.

Table 190. Self-Reported Substance Use at Intake

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
<b>Alcohol</b>	62.1% (n = 100)	13.55 (SD = 1.43)	58.5% (n = 31)	12.81 (SD = 1.94)
<b>Cigarettes</b>	45.3% (n = 73)	12.43 (SD = 2.35)	45.3% (n = 24)	13.18 (SD = 1.76)
<b>Chewing Tobacco</b>	4.4% (n = 7)	16.00 <sup>a</sup>	5.7% (n = 3)	13.68 (SD = 1.35)
<b>Marijuana</b>	75.6% (n = 121)	12.60 (SD = 2.05)	69.2% (n = 36)	13.56 (SD = 1.28)
<b>Cocaine</b>	1.3% (n = 2)	13.00 (SD = 1.41)	3.8% (n = 2)	13.00 <sup>a</sup>
<b>Pain Killers (use inconsistent with prescription)</b>	5.0% (n = 8)	14.33 (SD = 1.37)	5.6% (n = 3)	15.00 (SD = 2.83)
<b>GHB</b>	0	N/A	0	N/A
<b>Inhalants</b>	0.6% (n = 1)	14.00 <sup>a</sup>	0	N/A
<b>Heroin</b>	0	N/A	0	N/A
<b>Amphetamines</b>	0.6% (n = 1)	16.00 <sup>a</sup>	0	N/A
<b>Ritalin (use inconsistent with prescription)</b>	4.3% (n = 7)	10.20 (SD = 4.32)	1.9% (n = 1)	14.00 <sup>a</sup>
<b>Barbiturates</b>	0	N/A	0	N/A
<b>Non-prescription Drugs</b>	0	N/A	9.3% (n = 5)	15.00 (SD = 2.31)
<b>Hallucinogens</b>	1.9% (n = 3)	14.33 (SD = 0.58)	1.9% (n = 1)	N/A
<b>PCP</b>	0.6% (n = 1)	13.00 <sup>a</sup>	1.9% (n = 1)	N/A
<b>Ketamine</b>	0.6% (n = 1)	14.00 <sup>a</sup>	1.9% (n = 1)	15.00 <sup>a</sup>
<b>Ecstasy</b>	3.1% (n = 5)	14.17 (SD = 1.17)	9.6% (n = 5)	14.80 (SD = 1.48)
<b>Tranquilizers</b>	2.5% (n = 4)	14.50 (SD = 0.58)	0	N/A

<sup>a</sup>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 77 and Figure 78 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 and marijuana use for females.

The percentage of males using alcohol in the past six months dropped from 57.7% (n = 56) to 50.9% (n = 27) from intake to termination. For females, 62.1% (n = 18) reported past six-month use at intake while 50.0% (n = 7) reported past six-month alcohol use at termination. Over 75% of males (77.3%, n = 51) reported past six-month cigarette use at intake. At termination, 76.9% of males (n = 20) reported past six-month cigarette use.

Past six-month marijuana use declined from 73.5% (n = 83) at intake to 67.7% (n = 42) at termination for males and 58.8% (n = 20) at intake and 37.5% (n = 20) at termination for females.

Figure 77

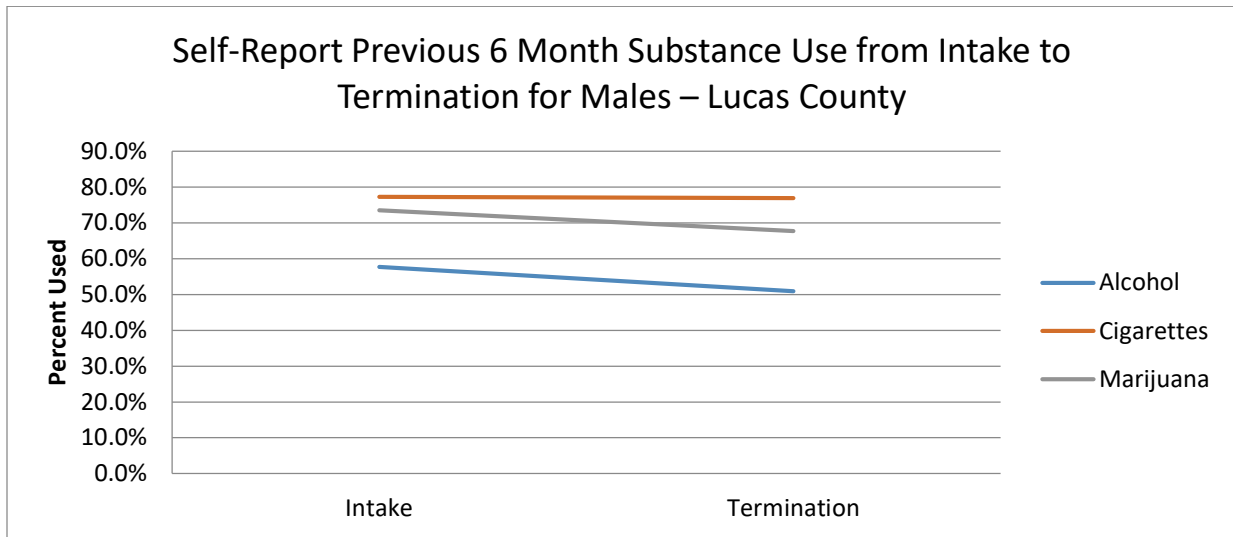
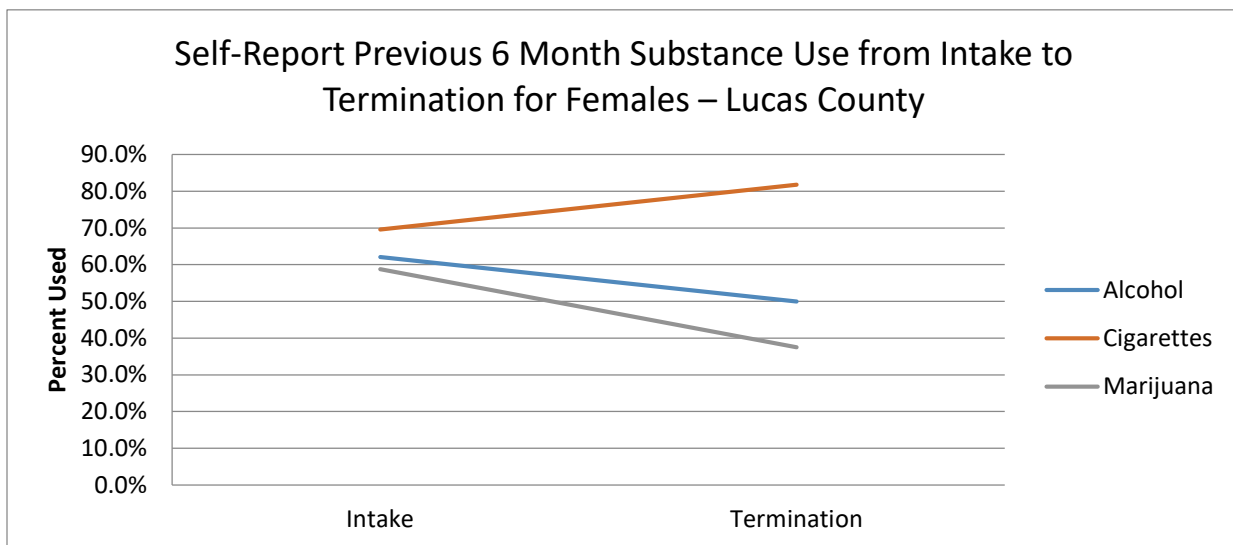


Figure 78





### 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 79 and Figure 80 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 males, the average number of days declined from intake to termination for alcohol. Alcohol use among males decreased from 2.25 days (SD = 3.99; n = 53) at intake to 1.25 days (SD = 1.25; n = 16) at termination.

Figure 79

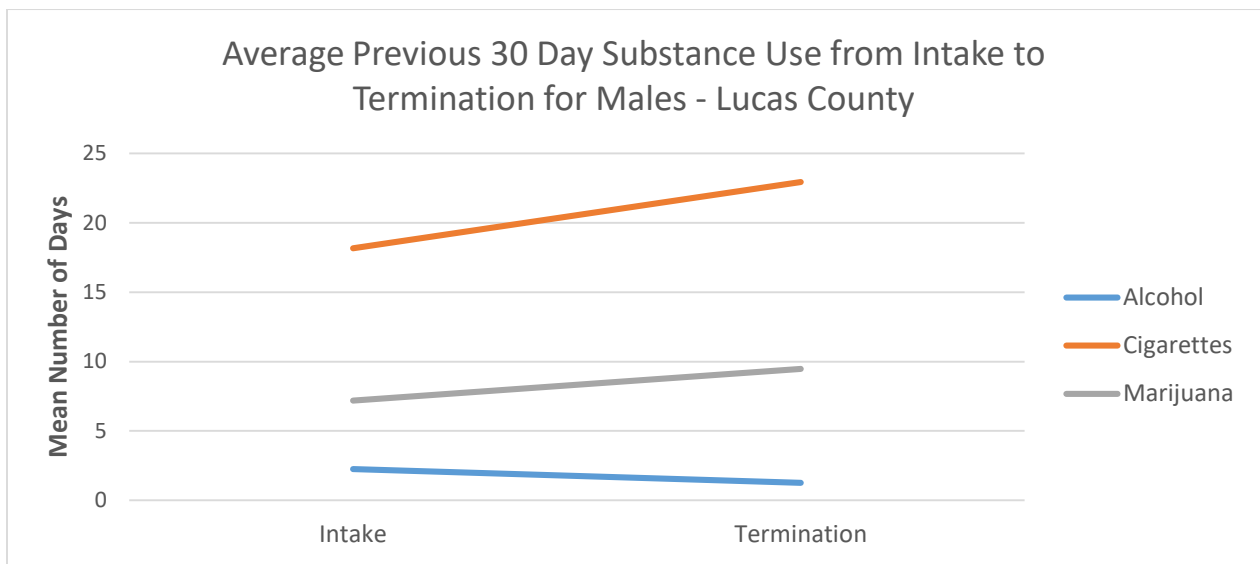
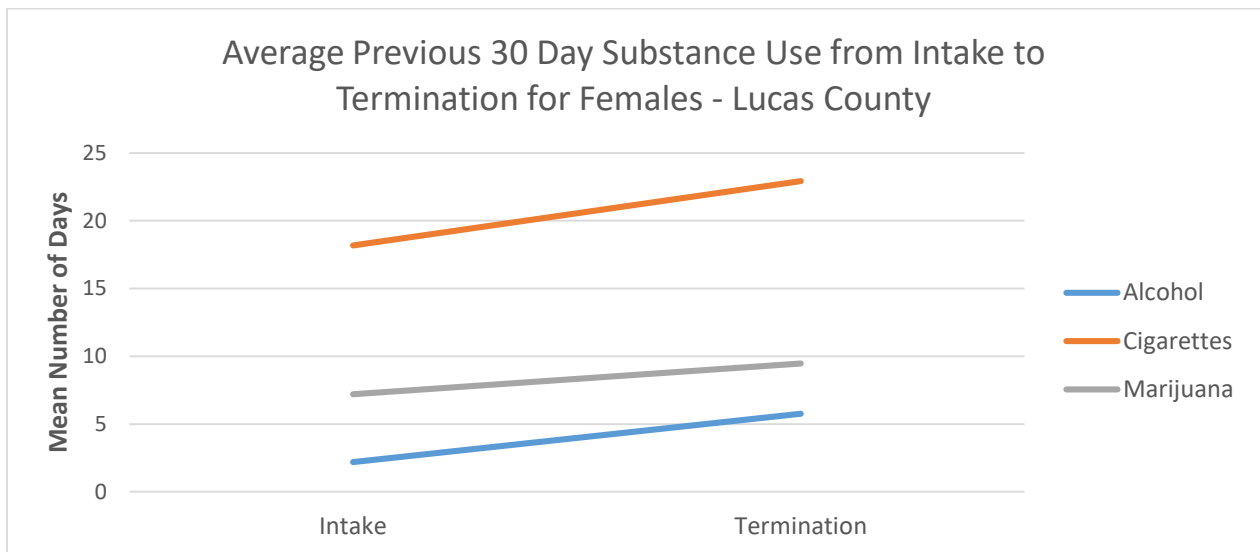


Figure 80



## 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 192 youth terminated from the BHJJ program in Lucas County. Over 73% (73.4%, n = 141) of the youth terminated from the BHJJ program were identified as successful treatment completers. An additional 3.6% of youth (n = 7) were terminated from the program when the youth or family moved out of the county. Therefore, 77.0% (n = 148) 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 Lucas County 1.6% (n = 3) were withdrawn from the program, 7.3% (n = 14) were terminated from the program due to an out of home placement, and 2.1% (n = 4) were incarcerated. Table 191 presents all of the reasons for termination from BHJJ.

In the latest evaluation period that began July 2015 and ended in June 2017, 73.9% (n = 17) of youth terminated successfully from the BHJJ program in Lucas County.

Table 191. Reasons for Termination from BHJJ

Termination Reason	All Youth	Youth Enrolled from July 2015 to June 2017
<b>Successfully Completed Services</b>	73.4% (n = 141)	73.9% (n = 17)
<b>Client Did Not Return/Rejected Services</b>	1.6% (n = 3)	0.0% (n = 0)
<b>Out of Home Placement</b>	7.3% (n = 14)	8.7% (n = 2)
<b>Client/Family Moved</b>	3.6% (n = 7)	8.7% (n = 2)
<b>Client Withdrawn</b>	1.6% (n = 3)	0.0% (n = 0)
<b>Client AWOL</b>	5.2% (n = 10)	0.0% (n = 0)
<b>Client Incarcerated</b>	2.1% (n = 4)	4.3% (n = 1)
<b>Other</b>	5.2% (n = 10)	4.3% (n = 1)

## Average Length of Stay

The average length of stay for youth in the Lucas County BHJJ program was 145 days. For youth identified as completing treatment successfully, the average length of stay was 153 days and for youth identified as unsuccessful treatment completers, the average length of stay was 122 days. For youth enrolled since July 1, 2015, the average length of stay in BHJJ was 129 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, 58.7% of the youth (n = 115) in Lucas County were at risk for out of home placement. At termination, 33.3% (n = 64) of youth were at risk for out of home placement. Of those youth who successfully completed BHJJ treatment, 14.5% (n = 20) were at risk for out of home placement at termination while 82.4% (n = 42) 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 74.6% (n = 144) of the youth and had stayed the same for 19.2% (n = 37) of the youth. Police contacts increased for 4.7% (n = 9) of the youth and the worker was unable to estimate for 1.6% (n = 3).

## 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. Lucas County no longer completes the YSSF, and therefore no new data are available to report.

## Recidivism

### Methodology

Court data were provided by the Lucas 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, 87.7% (n = 193) of the BHJJ youth had misdemeanor charges, 60.0% (n = 132) had at least one felony charge, and 93.2% (n = 205) were adjudicated delinquent (see Table 192).

Previous juvenile court information is presented for youth based on BHJJ treatment completion status (successful vs. unsuccessful). In the 12 months prior to enrollment, 93.9% (n = 124) of successful completers and 95.7% (n = 44) 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 (61.4%, n = 81) than unsuccessful completers (67.4%, n = 31).

Table 192. Charges Prior to BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	56.4% (n = 124)	35.0% (n = 77)	66.4% (n = 146)	54.5% (n = 72)	11.5% (n = 16)	66.7% (n = 88)	63.0% (n = 29)	26.0% (n = 13)	71.7% (n = 33)
<b>6 months</b>	59.1% (n = 176)	47.7% (n = 105)	82.7% (n = 182)	77.3% (n = 102)	50.0% (n = 23)	83.3% (n = 110)	76.1% (n = 35)	50.0% (n = 23)	89.1% (n = 41)
<b>12 months</b>	87.7% (n = 193)	60.0% (n = 132)	93.2% (n = 205)	88.6% (n = 117)	61.4% (n = 81)	93.9% (n = 124)	89.1% (n = 41)	67.4% (n = 31)	95.7% (n = 44)
<b>18 months</b>	70.1% (n = 209)	35.2% (n = 105)	67.1% (n = 200)	92.4% (n = 122)	64.4% (n = 85)	97.7% (n = 129)	95.7% (n = 44)	71.7% (n = 33)	97.8% (n = 45)

## 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, 77.4% (n = 161) of youth were charged with at least one new misdemeanor and 42.3% (n = 88) were charged with at least one new felony. Seventy-four percent (73.6%, n = 153) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 193).

In the 12 months after enrollment in BHJJ 76.4% (n = 97) of successful completers were charged with at least one new misdemeanor, 38.6% (n = 49) were charged with at least one new felony, and 68.5% (n = 87) were adjudicated delinquent. Of the youth who completed unsuccessfully, 84.8% (n = 39) were charged with at least one new misdemeanor, 56.5% (n = 26) were charged with at least one new felony, and 87.0% (n = 40) were adjudicated delinquent in the 12 months after their enrollment in BHJJ.

Table 193. Charges After BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	41.5% (n = 88)	12.3% (n = 26)	38.7% (n = 82)	36.2% (n = 47)	10.0% (n = 13)	33.1% (n = 43)	56.5% (n = 26)	15.2% (n = 7)	47.8% (n = 22)
<b>6 months</b>	60.8% (n = 129)	25.0% (n = 53)	60.4% (n = 128)	57.7% (n = 75)	20.8% (n = 27)	56.9% (n = 74)	73.9% (n = 34)	39.1% (n = 18)	73.9% (n = 34)
<b>12 months</b>	77.4% (n = 161)	42.3% (n = 88)	73.6% (n = 153)	76.4% (n = 97)	38.6% (n = 49)	68.5% (n = 87)	84.8% (n = 39)	56.5% (n = 26)	87.0% (n = 40)
<b>18 months</b>	86.6% (n = 174)	52.7% (n = 106)	84.1% (n = 169)	86.8% (n = 105)	49.6% (n = 60)	83.5% (n = 101)	88.9% (n = 40)	68.9% (n = 31)	91.1% (n = 41)

## 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, 75.7% (n = 134) of youth were charged with at least one new misdemeanor, 40.1% (n = 71) were charged with at least one new felony, and 72.3% (n = 128) were adjudicated delinquent (see Table 194).

In the 12 months following their termination from BHJJ, 75.9% (n = 88) of successful completers were charged with at least one new misdemeanor, 39.7% (n = 46) were charged with at least one new felony, and 69.8% (n = 81) were adjudicated delinquent. Of the youth who completed unsuccessfully, 70.0% (n = 28) were charged with at least one new misdemeanor, 42.5% (n = 17) were charged with at least one new felony, and 75.0% (n = 30) were adjudicated delinquent in the 12 months after their termination from BHJJ.

Table 194. Charges After Termination from BHJJ

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	38.1% (n = 69)	14.9% (n = 27)	39.8% (n = 72)	35.7% (n = 45)	15.1% (n = 19)	36.5% (n = 46)	34.1% (n = 15)	13.6% (n = 6)	40.9% (n = 18)
<b>6 months</b>	53.0% (n = 96)	28.2% (n = 51)	50.3% (n = 91)	54.9% (n = 67)	23.8% (n = 29)	46.7% (n = 57)	39.5% (n = 17)	32.6% (n = 14)	48.8% (n = 21)
<b>12 months</b>	75.7% (n = 134)	40.1% (n = 71)	72.3% (n = 128)	75.9% (n = 88)	39.7% (n = 46)	69.8% (n = 81)	70.0% (n = 28)	42.5% (n = 17)	75.0% (n = 30)
<b>18 months</b>	83.2% (n = 144)	51.4% (n = 89)	79.2% (n = 137)	83.8% (n = 93)	49.5% (n = 55)	79.3% (n = 88)	77.5% (n = 31)	60.0% (n = 24)	77.5% (n = 31)

## 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 110 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, 46.4% (n = 51) were charged with a new felony in the 12 months after their termination from BHJJ.

Seventeen of the 220 BHJJ youth (7.7%) from Lucas County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.



## Mahoning County

### Demographics

Mahoning County has enrolled 35 youth in the BHJJ program since 2013. Of the 35 youth enrolled, 34.3% (n = 12) were female and 65.7% (n = 23) were male (see Table 195).

The majority of the overall sample of youth were either Caucasian (45.7%, n = 16) or African American (42.9%, n = 15). The average age of the youth at intake into BHJJ was 15.67 years old (SD = 1.42) with a range between 12.0 and 17.7 years.

Table 195. Demographic Information for BHJJ Youth

	<b>All Youth Enrolled (2013 - 2017)</b>	<b>Youth Enrolled between July 2015 – June 2017</b>
<b>Gender</b>	Female = 34.3% (n = 12)	Female = 12.5% (n = 1)
	Male = 65.7% (n = 23)	Male = 87.5% (n = 7)
<b>Race</b>	African American = 42.9% (n = 15)	African American = 62.5% (n = 5)
	Caucasian = 45.7% (n = 16)	Caucasian = 0.0% (n = 0)
	Other = 11.4% (n = 4)	Other = 37.5% (n = 3)
<b>Age at Intake</b>	15.67 years (SD = 1.42)	14.46 years (SD = 1.53)

### Custody Arrangement and Household Information

At intake, the majority of youth lived with the biological mother (70.0%, n = 21) (see Table 196). At time of enrollment, 80.0% (n = 24) of the BHJJ youth lived with at least one biological parent.

Nearly all of the BHJJ caregivers (89.3%, n = 25) had at least a high school diploma or GED, and 7.2% (n = 2) had a bachelor's degree or higher (see Table 197). Three caregivers (10.7%, n = 3) reported that they did not graduate from high school.

Caregivers reported their annual household income. The median household income for BHJJ families was between \$10,000 - \$14,999 (see Table 198). Two thirds of all caregivers (n = 20) reported an annual household income below \$20,000 and 30% of BHJJ families (n = 9) reported an annual household income below \$10,000.

Table 196. Custody Arrangement for BHJJ Youth

<b>Custody</b>	<b>BHJJ Youth</b>
<b>Two Biological Parents or One Biological and One Step or Adoptive Parent</b>	6.7% (n=2)
<b>Biological Mother Only</b>	70.0% (n=21)
<b>Biological Father Only</b>	3.3% (n=1)
<b>Adoptive Parent(s)</b>	0.0% (n=0)
<b>Sibling</b>	0.0% (n=0)
<b>Aunt/Uncle</b>	10.0% (n=3)
<b>Grandparents</b>	10.0% (n=3)
<b>Ward of the State</b>	0.0% (n=0)
<b>Other</b>	0.0% (n=0)

Table 197. Educational Outcomes for Caregivers of BHJJ Youth

<b>Number of School Years Completed</b>	<b>Number of Caregivers</b>
Less than High School	10.7% (n=3)
High School Graduate or G.E.D.	28.6% (n=8)
Some College or Associate Degree	53.6% (n=15)
Bachelor's Degree	3.6% (n=1)
More than a Bachelor's Degree	3.6% (n=1)

Table 198. Annual Household Income for BHJJ Families

<b>Annual Household Income</b>	<b>BHJJ Families</b>
Less than \$5,000	26.7% (n=8)
\$5,000 - \$9,999	3.3% (n=1)
\$10,000 - \$14,999	26.7% (n=8)
\$15,000 - \$19,999	10.0% (n=3)
\$20,000 - \$24,999	13.3% (n=4)
\$25,000 - \$34,999	13.3% (n=4)
\$35,000 - \$49,999	3.3% (n=1)
\$50,000 - \$74,999	3.3% (n=1)
\$75,000 - \$99,999	0.0% (n=0)
\$100,000 and over	0.0% (n=0)

## 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 (see Table 199). Due to sample size restrictions, we did not conduct chi-square analyses. Caregivers reported that 16.7% (n = 1) of females and 25.0% (n = 5) of males had a history of being physically abused while 20.0% (n = 2) of females and 15.8% (n = 3) of males had a history of being sexually abused. Caregivers of 30.0% (n = 3) of females and 31.6% (n = 6) of males reported hearing the child talking about committing suicide and 11.1% (n = 1) of females and 15.8% (n = 3) of males had attempted suicide at least once. Half of the caregivers of females (50.0%, n = 5) and a majority of the caregivers of males (72.2%, n = 13) reported a family history of depression.

Table 199. Youth and Family History

Question	Females	Males
<b>Has the child ever been physically abused?</b>	16.7% (n=1)	25.0% (n=5)
<b>Has the child ever been sexually abused?</b>	20.0% (n=2)	15.8% (n=3)
<b>Has the child ever run away?</b>	80.0% (n=8)	55.6% (n=10)
<b>Has the child ever had a problem with substance abuse, including alcohol and/or drugs?</b>	70.0% (n=7)	68.4% (n=13)
<b>Has the child ever talked about committing suicide?</b>	30.0% (n=3)	31.6% (n=6)
<b>Has the child ever attempted suicide?</b>	11.1% (n=1)	15.8% (n=3)
<b>Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?</b>	40.0% (n=4)	65.0% (n=13)
<b>Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?</b>	50.0% (n=5)	72.2% (n=13)
<b>Has anyone in the child's biological family had a mental illness, other than depression?</b>	55.6% (n=5)	50.0% (n=9)
<b>Has the child ever lived in a household in which someone was convicted of a crime?</b>	33.3% (n=3)	42.1% (n=8)
<b>Has anyone in the child's biological family had a drinking or drug problem?</b>	30.0% (n=3)	68.4% (n=13)
<b>Is the child currently taking any medication related to his/her emotional or behavioral symptoms?</b>	20.0% (n=2)	52.6% (n=10)

## 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 (100% and 100% respectively) (see Table 200). Chi-square analysis indicated males had significantly higher rates of hyperactive and attention-related problems.

Table 200. Problems Leading to Services

Problems Leading to Services	Females	Males
Adjustment-related problems	0	5.0% (n = 1)
Anxiety-related problems	10.0% (n = 1)	0
Conduct/delinquency-related problems	100% (n = 10)	100% (n = 20)
Depression-related problems	0	10.0% (n = 2)
Eating disorders	0	0
Hyperactive and attention-related problems	0	35.0% (n = 7)*
Learning disabilities	0	10.0% (n = 2)
Pervasive development disabilities	0	5.0% (n = 1)
Psychotic behaviors	0	5.0% (n = 1)
School performance problems not related to learning disabilities	40.0% (n = 4)	40.0% (n = 8)
Specific developmental disabilities	0	0
Substance use, abuse, dependence-related problems	80.0% (n = 8)	55.0% (n = 11)
Suicide-related problems	0	10.0% (n = 2)

\* < .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 201 shows the distribution of OYAS categories for BHJJ youth by gender and race. Due to some small cell sizes, we did not conduct a Chi-squared test to examine whether differences were statistically significant.

Table 201. OYAS Risk Categories by Gender and Race

	OYAS Low	OYAS Moderate	OYAS High
Female	27.3% (n = 3)	72.7% (n = 8)	0.0% (n = 0)
Male	14.3% (n = 3)	42.9% (n = 9)	42.9% (n = 9)
White	26.7% (n = 4)	46.7% (n = 7)	26.7% (n = 4)
Nonwhite	6.3% (n = 1)	62.5% (n = 10)	31.3% (n = 5)

## 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 females and males was Oppositional Defiant Disorder (see Table 202). Thirty percent (30.0%, n = 6) of males and 22.2% (n = 2) of females were identified as having both a DSM mental health diagnosis and a substance use diagnosis.

Table 202. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
<b>Adjustment Disorder</b>	0	0
<b>Alcohol-related Disorders</b>	0	10.5% (n = 2)
<b>Attention Deficit Hyperactivity Disorder (ADHD)</b>	11.1% (n = 1)	40.0% (n = 8)
<b>Bipolar Disorder</b>	0	0
<b>Cannabis-related Disorders</b>	22.2% (n = 2)	30.0% (n = 6)
<b>Conduct Disorder</b>	33.3% (n = 3)	15.0% (n = 3)
<b>Depressive Disorders</b>	0	0
<b>Disruptive Behavior Disorder</b>	0	0
<b>Mood Disorder</b>	0	0
<b>Oppositional Defiant Disorder</b>	66.7% (n = 6)	73.7% (n = 14)
<b>Post-traumatic Stress Disorder</b>	11.1% (n = 1)	0

\* < .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 sixty percent (60.7%, n = 17) were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in treatment with BHJJ, 52.4% (n = 11) 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, 80.7% (n = 21) of youth were currently attending school while at termination, 90.0% (n = 18) 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 203 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 204 displays this information based on completion status. At intake, 5.0% of youth were earning mostly A's and B's and 35.0% were earning mostly D's and F's. At termination from BHJJ, no youth was earning mostly A's and B's and 16.7% were earning mostly D's and F's.

At termination, workers reported that 38.1% (n = 8) of youth were attending school more than before starting treatment and 52.4% (n = 11) of youth were attending school ‘about the same’ amount compared to before starting treatment. Workers reported that 9.5% (n = 2) were attending school less often than before treatment in BHJJ. At termination, 42.9% (n = 9) of the youth attending school had Individualized Education Plans (IEPs).

Table 203. Academic Performance

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A’s and B’s	5.0% (n = 1)	0
Mostly B’s and C’s	30.0% (n = 6)	27.8% (n = 5)
Mostly C’s and D’s	30.0% (n = 6)	55.6% (n = 10)
Mostly D’s and F’s	35.0% (n = 7)	16.7% (n = 3)

Table 204. Academic Performance for Youth by Completion Status

Typical Grades	Unsuccessful Completers		Successful Completers	
	Frequency at Intake	Frequency at Termination	Frequency at Intake	Frequency at Termination
Mostly A’s and B’s	0	0	0	0
Mostly B’s and C’s	25.0% (n = 1)	66.7% (n = 2)	36.4% (n = 4)	21.4% (n = 3)
Mostly C’s and D’s	50.0% (n = 2)	33.3% (n = 1)	18.2% (n = 2)	57.1% (n = 8)
Mostly D’s and F’s	25.0% (n = 1)	0	45.5% (n = 5)	21.4% (n = 3)

## 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.

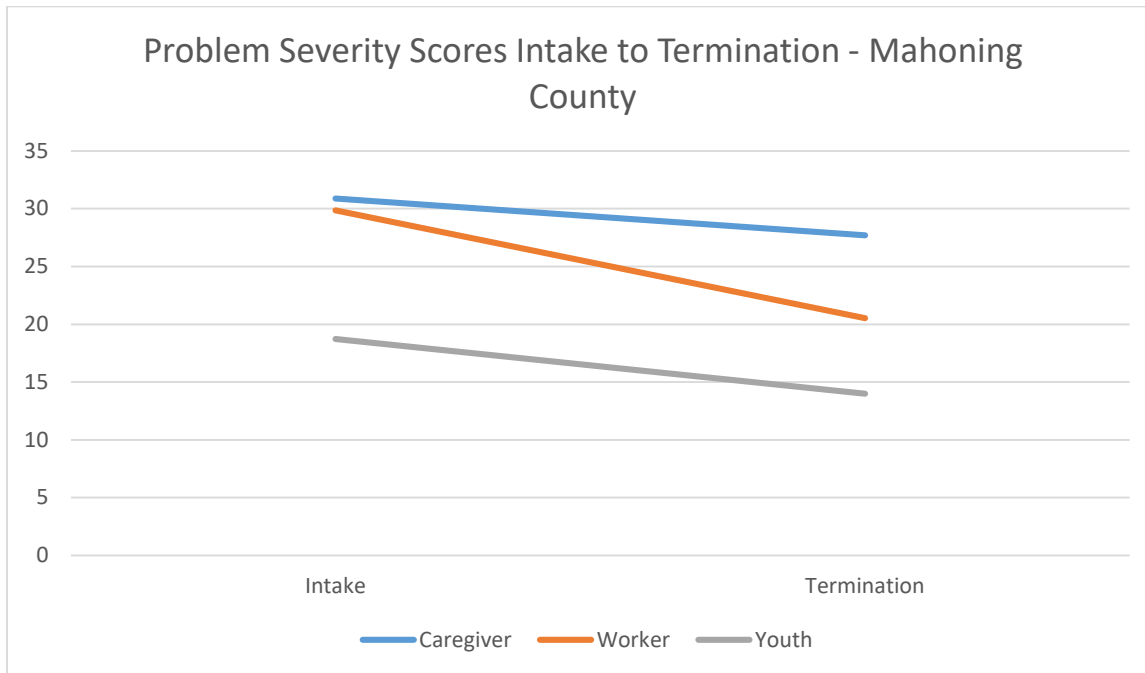
All Problem Severity and Functioning analyses were conducted on assessment periods with enough valid cases to produce meaningful results. Results for Mahoning county will be limited to intake and termination data.

Paired samples t-tests were used to compare Problem Severity scores at intake to Problem Severity scores at termination. 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 termination to be included in the analysis. If the caregiver only has an intake score, his or her data is not included.

## Problem Severity

Means for the Problem Severity scale by rater between intake and termination can be found in Figure 81.

Figure 81



## Caregiver Rating

Caregiver reports indicated no significant improvement in Problem Severity scores from intake to termination (see Table 205).

Table 205. Paired Samples T-Tests for Problem Severity - Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	30.87 (SD=23.07; n=16)	27.69 (SD=19.17; n=16)	0.50	.12

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

## Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Problem Severity from intake to termination (see Table 206). Improvements were noted at termination  $t(17) = 2.47$ ,  $p < .05$  with a moderate effect size.

Table 206. Paired Samples T-Tests for Problem Severity – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	29.86 (SD=15.77; n=18)	20.53 (SD=9.23; n=18)	2.47*	.58

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

### Youth Ratings

Youth reported no significant improvement in Problem Severity scores from intake to termination (see Table 207).

Table 207. Paired Samples T-Tests for Problem Severity – Youth

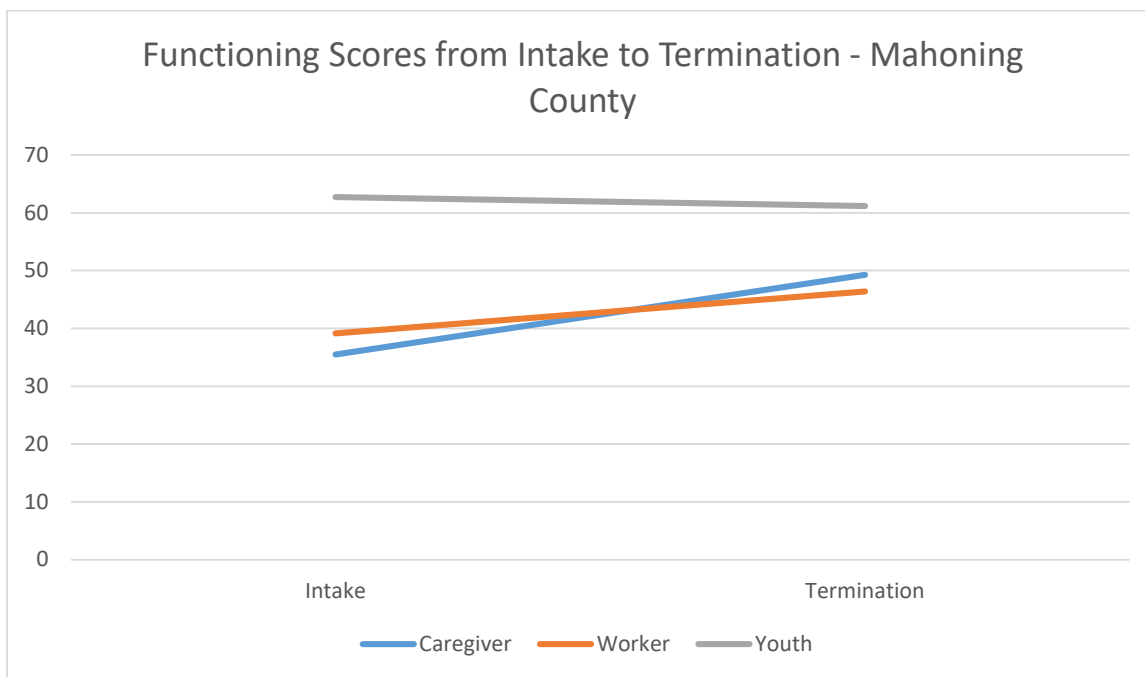
	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	18.72 (SD=16.25; n=11)	14.00 (SD=12.61; n=11)	1.30	.39

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

### Functioning

Means for the Functioning scale by rater between intake and termination can be found in Figure 82.

Figure 82



### Caregiver Ratings

Paired samples t-tests revealed significant improvements in Functioning scores from intake to termination  $t(13) = -3.06$ ,  $p < .01$  with a large effect (see Table 208).

Table 208. Paired Samples T-Tests for Functioning Scores – Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	35.50 (SD=19.29; n=14)	49.28 (SD=16.08; n=14)	-3.06**	.82

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



### Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Functioning scores from intake to termination  $t(17) = -2.98, p < .001$  with a moderate effect (see Table 209).

Table 209. Paired Samples T-Tests for Functioning Scores – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	39.17 (SD=6.93; n=18)	46.39 (SD=7.88; n=18)	-2.98***	.70

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

### Youth Ratings

For youth, the data indicated no statistically significant improvement in Functioning scores from intake to termination (see Table 210).

Table 210. Paired Samples T-Tests for Functioning Scores – Youth

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	62.75 (SD=8.76; n=12)	61.17 (SD=11.31; n=12)	0.78	.23

\* < .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.

Due to sample size limitations, we are only able to present the outcomes for the exposure to violence domain. In addition to the BHJJ data, we also 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).

### 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 42.9% of the BHJJ sample knew someone who was murdered in the past year (see Table 211).

Table 211. Prevalence of Self-Reported Violent Victimization

	<b>% Yes BHJJ Sample (n = 7)</b>	<b>% Yes National Sample</b>
<b>In the last year, did someone threaten to hurt you when you thought they might really do it?</b>	28.6%	14.4% <sup>a</sup>
<b>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?</b>	0.0%	1.9% <sup>b</sup>
<b>In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?</b>	0.0%	2.8% <sup>b</sup>
<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?</b>	42.9%	16.6% <sup>a</sup>
<b>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?</b>	28.6%	5.7% <sup>a</sup>
<b>In the last year, did anyone hit or attack you WITHOUT using an object or weapon?</b>	14.3%	17.7% <sup>a</sup>
<b>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?</b>	42.9%	21.8% <sup>a</sup>
<b>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?</b>	14.3%	0.3% <sup>b</sup>
<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?</b>	0.0%	1.2% <sup>b</sup>
<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?</b>	42.9%	3.3% <sup>b</sup>
<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?</b>	14.3%	12.8% <sup>a</sup>
<b>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?</b>	14.3%	29.0% <sup>a</sup>
<b>In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?</b>	42.9%	5.4% <sup>a</sup>
<b>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?</b>	14.3%	9.7% <sup>a</sup>
<b>Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?</b>	42.9	5.6% <sup>a</sup>

<b>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?</b>	0.0%	1.4% <sup>b</sup>
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<sup>a</sup> Calculated from the raw National Survey of Children Exposed to Violence (NATSCEV) data. <sup>b</sup> 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.

### Self-reported and Peer Delinquency

Due to low sample sizes, we are unable to present the comparisons between intake and termination for both self-reported and peer delinquency.

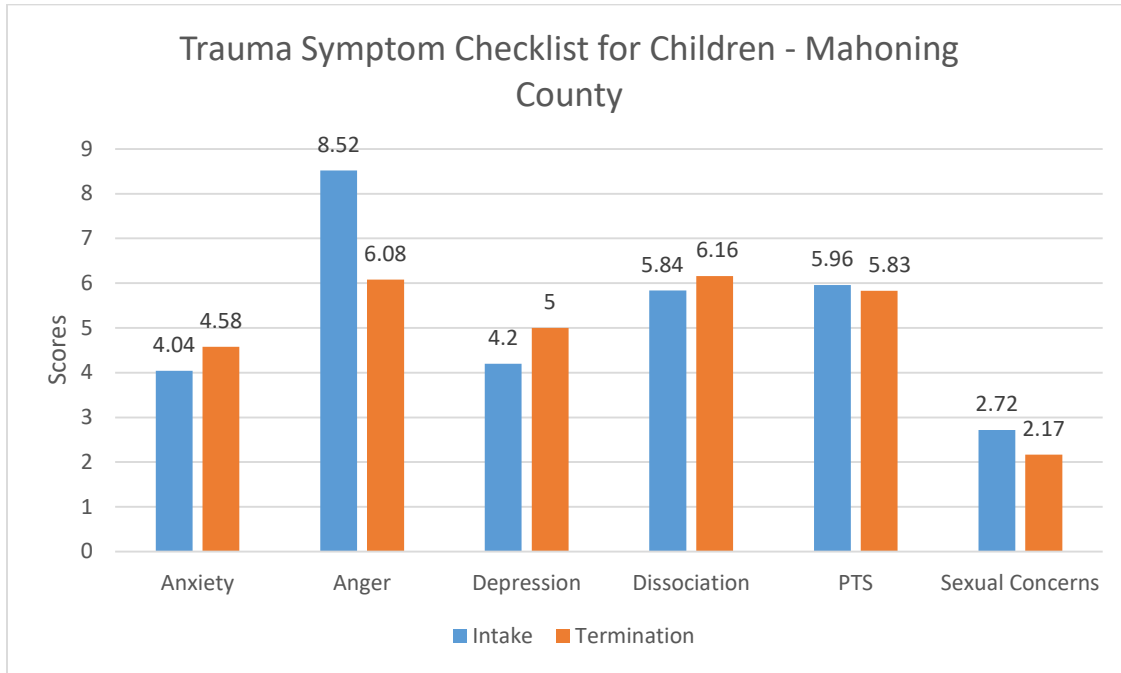
### Trauma Symptom Checklist for Children

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. Paired-samples t-tests were unable to be conducted due to low sample sizes. Therefore, we present the subscale means at intake and termination for all youth. Results indicated that there was a symptom reduction on the Anger and Sexual Concerns subscales from intake to termination (Table 212 and Figure 83).

Table 212. TSCC Subscales from Intake to Termination

	<b>Intake</b>	<b>Termination</b>
<b>Anxiety</b>	4.04 (SD=5.68; n=25)	4.58 (SD=4.56; n=12)
<b>Depression</b>	4.20 (SD=4.06; n=25)	5.00 (SD=5.67; n=12)
<b>Anger</b>	8.52 (SD=6.16; n=25)	6.08 (SD=6.85; n=12)
<b>Posttraumatic Stress</b>	5.96 (SD=7.21; n=25)	5.83 (SD=6.22; n=12)
<b>Dissociation</b>	5.84 (SD=5.87; n=25)	6.16 (SD=7.51; n=12)
<b>Sexual Concerns</b>	2.72 (SD=4.61; n=25)	2.17 (SD=3.53; n=12)

Figure 83



### TSCC and Gender

Due to low sample size, we were unable to examine trauma symptoms by gender.

## 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 213 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. One male (5.6%) ever used heroin at intake in Mahoning County.

Table 213. Self-Reported Substance Use at Intake

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
<b>Alcohol</b>	63.2% (n = 12)	13.17 (SD = 1.47)	71.4% (n = 5)	13.20 (SD = 1.79)
<b>Cigarettes</b>	68.4% (n = 13)	12.08 (SD = 3.50)	100% (n = 8)	14.00 (SD = 2.14)
<b>Chewing Tobacco</b>	26.3% (n = 5)	13.29 (SD = 1.38)	0	N/A
<b>Marijuana</b>	73.7% (n = 14)	13.43 (SD = 2.38)	87.5% (n = 7)	13.29 (SD = 2.98)
<b>Cocaine</b>	10.5% (n = 2)	14.50 (SD = 0.71)	0	N/A
<b>Pain Killers (use inconsistent with prescription)</b>	21.1% (n = 4)	14.50 (SD = 1.29)	25.0% (n = 2)	15.00 (SD = 2.82)
<b>GHB</b>	0	N/A	0	N/A
<b>Inhalants</b>	10.5% (n = 2)	16.00 (SD = 0.00)	0	N/A
<b>Heroin</b>	5.6% (n = 1)	16.00 <sup>a</sup>	0	N/A
<b>Amphetamines</b>	5.9% (n = 1)	13.00 <sup>a</sup>	12.5% (n = 1)	13.00 <sup>a</sup>
<b>Ritalin (use inconsistent with prescription)</b>	11.8% (n = 2)	15.00 (SD = 1.41)	12.5% (n = 1)	13.00 <sup>a</sup>
<b>Barbiturates</b>	0	N/A	0	N/A
<b>Non-prescription Drugs</b>	11.1% (n = 2)	15.50 (SD = 0.71)	25.0% (n = 2)	14.00 (SD = 0.00)
<b>Hallucinogens</b>	10.5% (n = 2)	15.50 (SD = 0.71)	0	N/A
<b>PCP</b>	5.3% (n = 1)	N/A	0	N/A
<b>Ketamine</b>	0	N/A	0	N/A
<b>Ecstasy</b>	10.5% (n = 2)	15.00 <sup>a</sup>	0	N/A
<b>Tranquilizers</b>	10.5% (n = 2)	15.00 (SD = 1.41)	0	N/A

<sup>a</sup>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 84 and Figure 85 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.

The percentage of males using alcohol in the past six months dropped from 61.5% (n = 7) to 50.0% (n = 2) from intake to termination. The percentage of females using alcohol in the past six months dropped

from 60.0% (n = 3) at intake to 0 at termination. At intake, 100% of females (n = 7) reported cigarette use at intake, and 66.7% (n = 2) reported it at termination.

Past six-month marijuana use declined from 61.5% (n = 8) at intake to 60% (n = 3) at termination for males and 71.4% (n = 5) at intake and 66.7% (n = 2) at termination for females.

Figure 84

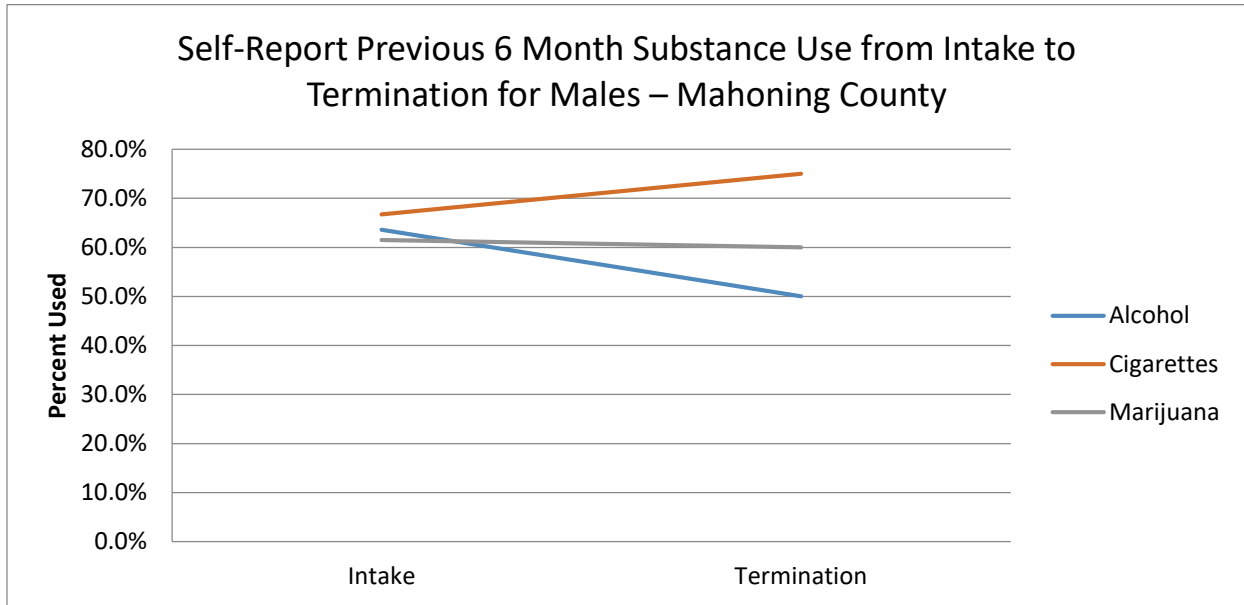
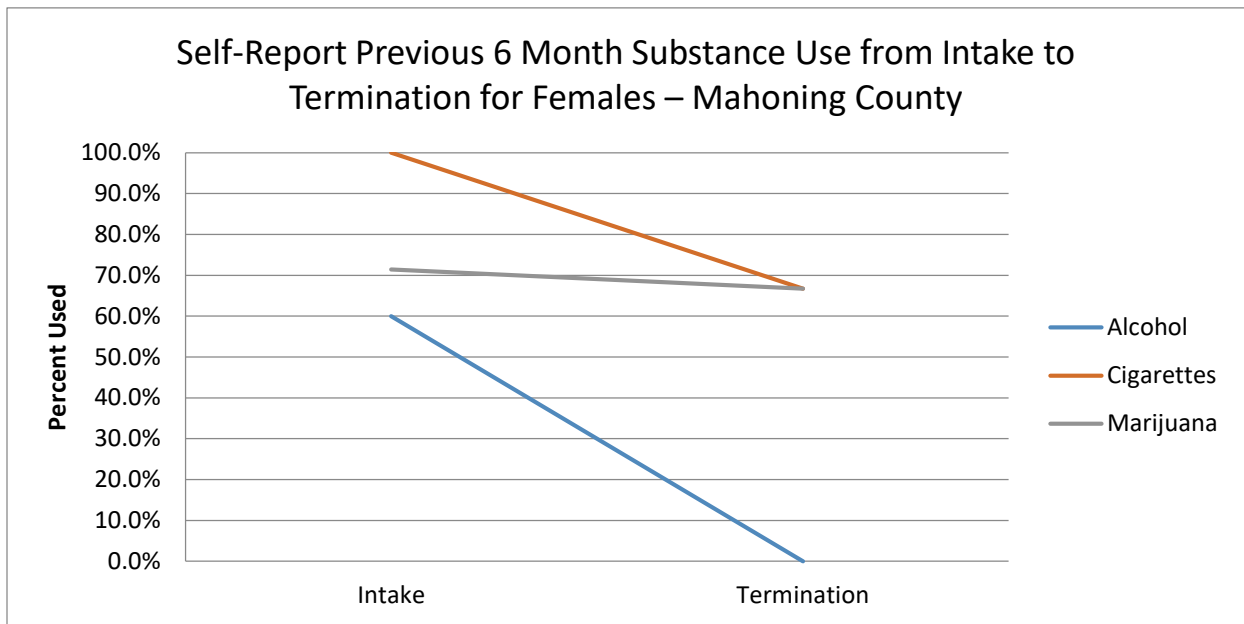


Figure 85



## 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 20 youth terminated from the BHJJ program in Mahoning County. Three out of four (75.0%, n = 15) youth terminated from the BHJJ program were identified as successful treatment completers. In Mahoning County 10.0% (n = 2) were terminated from the program due to an out of home placement and 5.0% (n = 1) were incarcerated. Table 214 presents all of the reasons for termination from BHJJ.

In the latest evaluation period that began July 2015 and ended in June 2017, 66.7% (n = 2) of youth terminated successfully from the BHJJ program in Mahoning County.

Table 214. Reasons for Termination from BHJJ

Termination Reason	All Youth	Youth Enrolled from July 2015 to June 2017
Successfully Completed Services	75.0% (n = 15)	66.7% (n = 2)
Client Did Not Return/Rejected Services	10.0% (n = 2)	33.3% (n = 1)
Out of Home Placement	10.0% (n = 2)	0.0% (n = 0)
t/Family Moved	0.0% (n = 0)	0.0% (n = 0)
Client Withdrawn	0.0% (n = 0)	0.0% (n = 0)
Client AWOL	0.0% (n = 0)	0.0% (n = 0)
Client Incarcerated	5.0% (n = 1)	0.0% (n = 0)
Other	0.0% (n = 0)	0.0% (n = 0)

## Average Length of Stay

The average length of stay for youth in the Mahoning County BHJJ program was 141 days. For youth identified as completing treatment successfully, the average length of stay was 120 days and for youth identified as unsuccessful treatment completers, the average length of stay was 148 days. For youth enrolled since July 1, 2015, the average length of stay in BHJJ was 128 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, 54.5% of the youth (n = 12) in Mahoning County were at risk for out of home placement. At termination, 28.6% (n = 6) of youth were at risk for out of home placement. Of those youth who successfully completed BHJJ treatment, 26.7% (n = 4) were

at risk for out of home placement at termination while 40.0% (n = 2) 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 71.4% (n = 15) of the youth and had stayed the same for 28.6% (n = 50) of the youth.

## 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. Mahoning County provided four surveys, and therefore the sample size was too small to analyze, as each family represented 25% of the total.

## Recidivism

### Methodology

Court data were provided by the Mahoning 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, 54.5% (n = 18) of the BHJJ youth had misdemeanor charges, 18.2% (n = 6) had at least one felony charge, and 48.5% (n = 16) were adjudicated delinquent (see Table 215).

Table 215. Charges Prior to BHJJ Enrollment

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	30.3% (n = 10)	6.1% (n = 2)	21.2% (n = 7)
<b>6 months</b>	45.5% (n = 15)	9.1% (n = 3)	33.3% (n = 11)
<b>12 months</b>	54.5% (n = 18)	18.2% (n = 6)	48.5% (n = 16)
<b>18 months</b>	54.5% (n = 18)	15.0% (n = 6)	48.5% (n = 16)

### 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, 28.0% (n = 7) of youth were charged with at least one new misdemeanor and 20.0% (n = 5) were charged with at least one new felony. Thirty-two percent (n = 8) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 216).

Table 216. Charges After BHJJ Enrollment

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	10.3% (n = 3)	13.8% (n = 4)	17.2% (n = 5)
<b>6 months</b>	15.4% (n = 4)	15.4% (n = 4)	23.1% (n = 6)
<b>12 months</b>	28.0% (n = 7)	20.0% (n = 5)	32.0% (n = 8)
<b>18 months</b>	33.3% (n = 7)	23.8% (n = 5)	38.1% (n = 8)

### 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, 27.8% (n = 5) of youth were charged with at least one new misdemeanor, 11.1% (n = 2) were charged with at least one new felony, and 22.2% (n = 4) were adjudicated delinquent (see Table 217).

Table 217. Charges After Termination from BHJJ

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	10.0% (n = 2)	5.0% (n = 1)	15.0% (n = 3)
<b>6 months</b>	26.3% (n = 5)	10.5% (n = 2)	21.1% (n = 4)
<b>12 months</b>	27.8% (n = 5)	11.1% (n = 2)	22.2% (n = 4)
<b>18 months</b>	37.5% (n = 6)	18.8% (n = 3)	37.5% (n = 6)

### Felony Offenders and ODYS Commitments

None of the 33 BHJJ youth (0.0%) from Mahoning County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.

## Montgomery County

### Demographics

Montgomery County has enrolled 1,754 youth in the BHJJ program since 2006. Of the 1,754 youth enrolled, 46.0% (n = 806) were female and 54.0% (n = 948) were male. Since July 2015, 60.9% (n = 168) of new enrollees have been male (see Table 218).

The majority of the overall sample of youth were either Caucasian (50.4%, n = 878) or African American (39.9%, n = 695). A similar pattern was found for youth enrolled since July 2013, although a slightly lower proportion of African Americans (39.1%, n = 108) was observed. The average age of the youth at intake into BHJJ was 15.5 years old (SD = 1.71) with a range between 8.6 and 18.73 years.

Table 218. Demographic Information for BHJJ Youth

	All Youth Enrolled (2006 - 2017)	Youth Enrolled between July 2015 – June 2017
<b>Gender</b>	Female = 46.0% (n = 806)	Female = 39.1% (n = 108)
	Male = 54.0% (n = 948)	Male = 60.9% (n = 168)
<b>Race</b>	African American = 39.9% (n = 695)	African American = 39.1% (n = 108)
	Caucasian = 50.4% (n = 878)	Caucasian = 51.8% (n = 143)
	Other = 9.6% (n = 168)	Other = 9.1% (n = 25)
<b>Age at Intake</b>	15.48 years (SD = 1.71)	15.24 years (SD = 1.84)

### Custody Arrangement and Household Information

At intake, the majority of youth lived with the biological mother (56.8%, n = 911) (see Table 219). At time of enrollment, 82.9% (n = 1,329) of the BHJJ youth lived with at least one biological parent.

Over 80% of the BHJJ caregivers (80.4%, n = 1,261) had at least a high school diploma or GED, and 9.7% (n = 161) had a bachelor's degree or higher (see Table 220). Nearly one in five caregivers (19.6%, n = 310) 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 - \$24,999 (see Table 221). Three out of four caregivers (74.6%, n = 1,148) reported annual household incomes below \$35,000 and 49.4% (n = 760) reported an annual household income below \$20,000. Over 22% of BHJJ families (22.4%, n = 344) reported an annual household income below \$10,000.

Table 219. Custody Arrangement for BHJJ Youth

<b>Custody</b>	<b>BHJJ Youth</b>
<b>Two Biological Parents or One Biological and One Step or Adoptive Parent</b>	20.1% (n=322)
<b>Biological Mother Only</b>	56.8% (n=911)
<b>Biological Father Only</b>	6.0% (n=96)
<b>Adoptive Parent(s)</b>	3.9% (n=63)
<b>Sibling</b>	0.2% (n=3)
<b>Aunt/Uncle</b>	2.4% (n=38)
<b>Grandparents</b>	8.7% (n=139)
<b>Friend</b>	0.1% (n=2)
<b>Ward of the State</b>	0.3% (n=5)
<b>Other</b>	1.5% (n=24)

Table 220. Educational Outcomes for Caregivers of BHJJ Youth

<b>Number of School Years Completed</b>	<b>Number of Caregivers</b>
<b>Less than High School</b>	19.6% (n=310)
<b>High School Graduate or G.E.D.</b>	28.3% (n=446)
<b>Some College or Associate Degree</b>	41.4% (n=654)
<b>Bachelor's Degree</b>	5.5% (n=87)
<b>More than a Bachelor's Degree</b>	4.2% (n=74)

Table 221. Annual Household Income for BHJJ Families

<b>Annual Household Income</b>	<b>BHJJ Families</b>
<b>Less than \$5,000</b>	14.7% (n=226)
<b>\$5,000 - \$9,999</b>	7.7% (n=118)
<b>\$10,000 - \$14,999</b>	17.7% (n=273)
<b>\$15,000 - \$19,999</b>	9.3% (n=143)
<b>\$20,000 - \$24,999</b>	14.2% (n=219)
<b>\$25,000 - \$34,999</b>	11.0% (n=169)
<b>\$35,000 - \$49,999</b>	12.0% (n=185)
<b>\$50,000 - \$74,999</b>	8.8% (n=135)
<b>\$75,000 - \$99,999</b>	2.3% (n=35)
<b>\$100,000 and over</b>	2.3% (n=36)

## 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 (see Table 222). Chi-square analysis was conducted on each item and significant differences are identified in Table 222. 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 mental illness. A significantly higher proportion of the caregivers of males reported a history of substance abuse and that the child was currently taking emotional or behavioral medication.

Caregivers reported that 17.4% (n = 126) of females and 14.4% (n = 126) of males had a history of being physically abused while 23.1% (n = 164) of females and 8.9% (n = 77) of males had a history of being sexually abused. Caregivers of 47.6% (n = 345) of females and 32.3% (n = 285) of males reported hearing the child talking about committing suicide and 23.5% (n = 168) of females and 10.0% (n = 87) of males had attempted suicide at least once. More than two out of three caregivers of females (68.3%, n = 487) and 64.8% (n = 552) of males reported a family history of depression.

Table 222. Youth and Family History

Question	Females	Males
Has the child ever been physically abused?	17.4% (n=126)	14.4% (n=126)
Has the child ever been sexually abused?	23.1% (n=164)**	8.9% (n=77)
Has the child ever run away?	58.6% (n=421)**	48.8% (n=423)
Has the child ever had a problem with substance abuse, including alcohol and/or drugs?	41.1% (n=297)	51.3% (n=447)**
Has the child ever talked about committing suicide?	47.6% (n=345)**	32.3% (n=285)
Has the child ever attempted suicide?	23.5% (n=168)**	10.0% (n=87)
Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?	39.1% (n=285)	38.8% (n=339)
Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?	68.3% (n=487)	64.8% (n=552)
Has anyone in the child's biological family had a mental illness, other than depression?	51.3% (n=368)*	46.0% (n=387)
Has the child ever lived in a household in which someone was convicted of a crime?	39.0% (n=276)	39.3% (n=337)
Has anyone in the child's biological family had a drinking or drug problem?	63.1% (n=452)	60.1% (n=519)
Is the child currently taking any medication related to his/her emotional or behavioral symptoms?	27.3% (n=195)	36.0% (n=308)**

## 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 (91.3% and 92.2% respectively) (see Table 223). Chi-square analysis indicated females had significantly higher rates of problems related to suicide, school performance, depression, anxiety, adjustment, and eating disorders. Males had significantly higher rates of substance use and hyperactive and attention-related problems.

Table 223. Problems Leading to Services

Problems Leading to Services	Females	Males
Adjustment-related problems	12.5% (n = 96)***	3.2% (n = 29)
Anxiety-related problems	21.1% (n = 162)***	11.7% (n = 105)
Conduct/delinquency-related problems	91.3% (n = 700)	92.2% (n = 829)
Depression-related problems	51.9% (n = 398)***	29.8% (n = 268)
Eating disorders	1.8% (n = 14)**	0.3% (n = 3)
Hyperactive and attention-related problems	25.0% (n = 192)	44.0% (n = 396)***
Learning disabilities	2.9% (n = 22)	3.9% (n = 35)
Pervasive development disabilities	0.9% (n = 7)	1.9% (n = 17)
Psychotic behaviors	1.7% (n = 13)	1.3% (n = 12)
School performance problems not related to learning disabilities	19.9% (n = 153)***	10.2% (n = 92)
Specific developmental disabilities	1.3% (n = 10)	2.3% (n = 21)
Substance use, abuse, dependence-related problems	33.9% (n = 260)	39.7% (n = 357)**
Suicide-related problems	6.9% (n = 53)***	1.8% (n = 16)

\* < .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 224 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. Significant differences on OYAS levels were found for both gender and race. A larger proportion of males were identified as moderate risk on the OYAS (56.3%, n = 218) compared to females (41.3%, n = 99). The proportion of Nonwhite youth identified as high risk (14.9%, n = 49) was nearly double that of White youth (8.1%, n = 24).

Table 224. OYAS Risk Categories by Gender and Race

	OYAS Low	OYAS Moderate	OYAS High
Female	47.9% (n = 115)	41.3% (n = 99)	10.8% (n = 26)
Male**	31.3% (n = 121)	56.3% (n = 218)	12.4% (n = 48)
White	42.8% (n = 127)	49.2% (n = 146)	8.1% (n = 24)
Nonwhite*	32.9% (n = 108)	52.1% (n = 171)	14.9% (n = 49)

\*p < .01 \*\*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 females was Oppositional Defiant Disorder and the most common diagnosis for males was Attention Deficit Hyperactivity Disorder (see Table 225).

Chi-square analysis indicated females were significantly more likely to be diagnosed with Post-traumatic Stress Disorder (PTSD), Depressive Disorders, and Alcohol-related Disorders. Males were significantly more likely to be diagnosed with Cannabis-related Disorders, ADHD, and Conduct Disorder. Forty percent (40.1%, n = 356) of males and nearly one-third of females (32.1%, n = 243) were identified as having both a DSM mental health diagnosis and a substance use diagnosis.

Table 225. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
<b>Adjustment Disorder</b>	4.4% (n = 33)	3.0% (n = 26)
<b>Alcohol-related Disorders</b>	13.1% (n = 99)**	8.1% (n = 71)
<b>Attention Deficit Hyperactivity Disorder (ADHD)</b>	27.4% (n = 207)	52.8% (n = 465)***
<b>Bipolar Disorder</b>	9.5% (n = 72)	7.4% (n = 65)
<b>Cannabis-related Disorders</b>	26.7% (n = 202)	33.7% (n = 298)***
<b>Conduct Disorder</b>	11.8% (n = 89)	22.3% (n = 198)***
<b>Depressive Disorders</b>	32.4% (n = 244)***	14.3% (n = 125)
<b>Disruptive Behavior Disorder</b>	6.6% (n = 50)	5.2% (n = 46)
<b>Mood Disorder</b>	13.3% (n = 100)	10.9% (n = 96)
<b>Oppositional Defiant Disorder</b>	49.0% (n = 369)	52.1% (n = 457)
<b>Post-traumatic Stress Disorder</b>	7.7% (n = 58)***	3.3% (n = 29)

\* < .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. Nearly two-thirds of the youth (65.7%, n = 897) were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in treatment with BHJJ, 33.5% (n = 422) 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, 89.5% (n = 1068) of youth were currently attending school while at termination, 87.2% (n = 969) 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 226 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 227 displays this information based on completion status. At

intake, 22.8% of youth were earning mostly A's and B's and 27.5% were earning mostly D's and F's. At termination from BHJJ, 19.6% of youth were earning mostly A's and B's and 18.9% were earning mostly D's and F's. Academic improvement was impacted by BHJJ completion status. For example, at intake, 39.3% of unsuccessful completers and 46.1% of successful completers received mostly A's, B's, or C's. At termination, 31.8% of unsuccessful completers and 61.4% of successful completers received mostly A's, B's, or C's.

At termination, workers reported that 30.5% (n = 385) of youth were attending school more than before starting treatment and 59.8% (n = 754) of youth were attending school 'about the same' amount compared to before starting treatment. Workers reported that 4.2% (n = 53) were attending school less often than before treatment in BHJJ. At termination, 31.3% (n = 379) of the youth attending school had Individualized Education Plans (IEPs).

Table 226. Academic Performance

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A's and B's	22.8% (n = 232)	19.6% (n = 220)
Mostly B's and C's	25.9% (n = 264)	30.6% (n = 343)
Mostly C's and D's	23.8% (n = 243)	30.8% (n = 345)
Mostly D's and F's	27.5% (n = 280)	18.9% (n = 212)

Table 227. Academic Performance for Youth by Completion Status

Typical Grades	Unsuccessful Completers		Successful Completers	
	Frequency at Intake	Frequency at Termination	Frequency at Intake	Frequency at Termination
Mostly A's and B's	17.5% (n = 69)	9.0% (n = 37)	23.1% (n = 161)	26.1% (n = 182)
Mostly B's and C's	21.8% (n = 86)	22.8% (n = 94)	23.0% (n = 160)	35.3% (n = 246)
Mostly C's and D's	25.4% (n = 100)	37.4% (n = 154)	26.3% (n = 183)	26.8% (n = 187)
Mostly D's and F's	35.3% (n = 139)	30.8% (n = 127)	23.1% (n = 161)	11.8% (n = 82)

## 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 86. Means from intake to termination are presented in Figure 87.

Figure 86

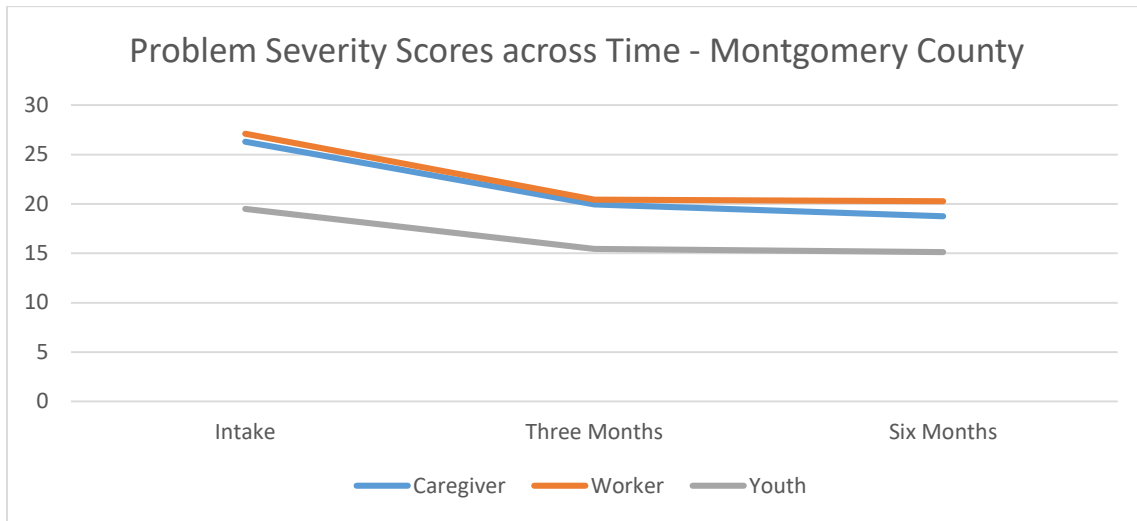
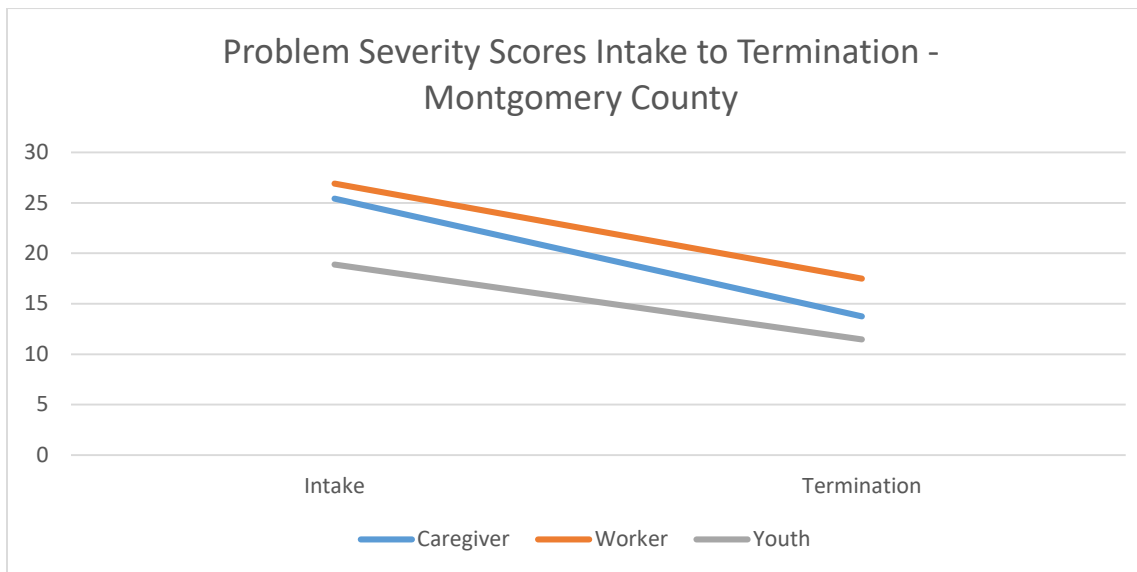


Figure 87



### Caregiver Rating

Paired samples t-tests revealed significant improvements in Problem Severity at each measurement interval (see Table 228) compared to intake. Significant improvements were noted at three months:  $t(338) = 12.27, p < .001$ ; six months:  $t(49) = 5.56, p < .001$ ; and at termination  $t(855) = 22.64, p < .001$ . Moderate effect sizes were noted for each time period.

Table 228. Paired Samples T-Tests for Problem Severity - Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	29.45 (SD=16.35; n=339)	20.11 (SD=13.39; n=339)	12.27***	.66
<b>Intake to Six Months</b>	32.67 (SD=19.77; n=50)	18.48 (SD=15.01; n=50)	5.56***	.79
<b>Intake to Termination</b>	25.43 (SD=16.51; n=856)	13.75 (SD=11.97; n=856)	22.64***	.78

\* < .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 229). Improvements were noted at three months:  $t(361) = 10.34, p < .001$ ; six months:  $t(55) = 5.41, p < .001$ ; and at termination  $t(1,317) = 21.37, p < .001$ . We moderate effect sizes for each time period.

Table 229. Paired Samples T-Tests for Problem Severity – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	27.73 (SD=13.12; n=362)	20.52 (SD=12.38; n=362)	10.34***	.54
<b>Intake to Six Months</b>	32.07 (SD=14.74; n=56)	20.29 (SD=14.98; n=56)	5.41***	.72
<b>Intake to Termination</b>	26.92 (SD=13.80; n=1,318)	17.49 (SD=13.43; n=1,318)	21.37***	.59

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

### Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement at each data collection point (see Table 230). Improvements were noted at three months:  $t(347) = 7.09, p < .001$ ; six months:  $t(49) = 3.78, p < .001$ ; and at termination  $t(845) = 17.84, p < .001$ . Moderate effect sizes were observed for the time periods between intake to six months and intake to termination. A small effect size was noted for the time period between intake and three months.

Table 230. Paired Samples T-Tests for Problem Severity – Youth

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	20.80 (SD=15.19; n=348)	15.58 (SD=12.54; n=348)	7.09***	.38
<b>Intake to Six Months</b>	24.34 (SD=19.64; n=50)	14.87 (SD=13.95; n=50)	3.78***	.54
<b>Intake to Termination</b>	18.88 (SD=14.02; n=846)	11.45 (SD=10.14; n=846)	17.84***	.61

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

## Functioning

Means for the Functioning scale by rater and assessment period can be found in Figure 88 and Figure 89.

Figure 88

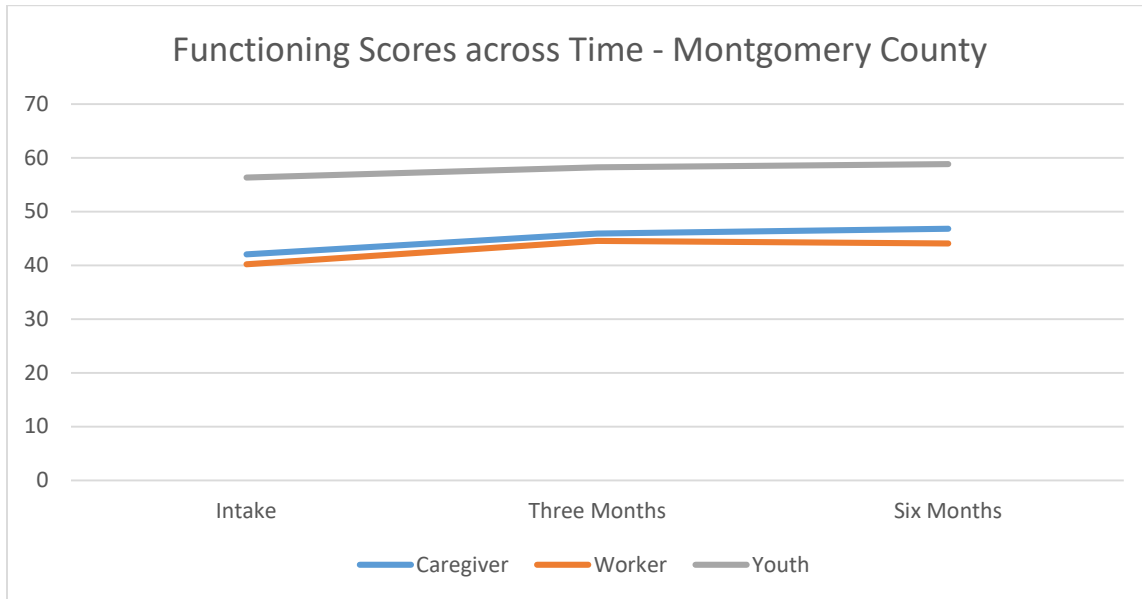
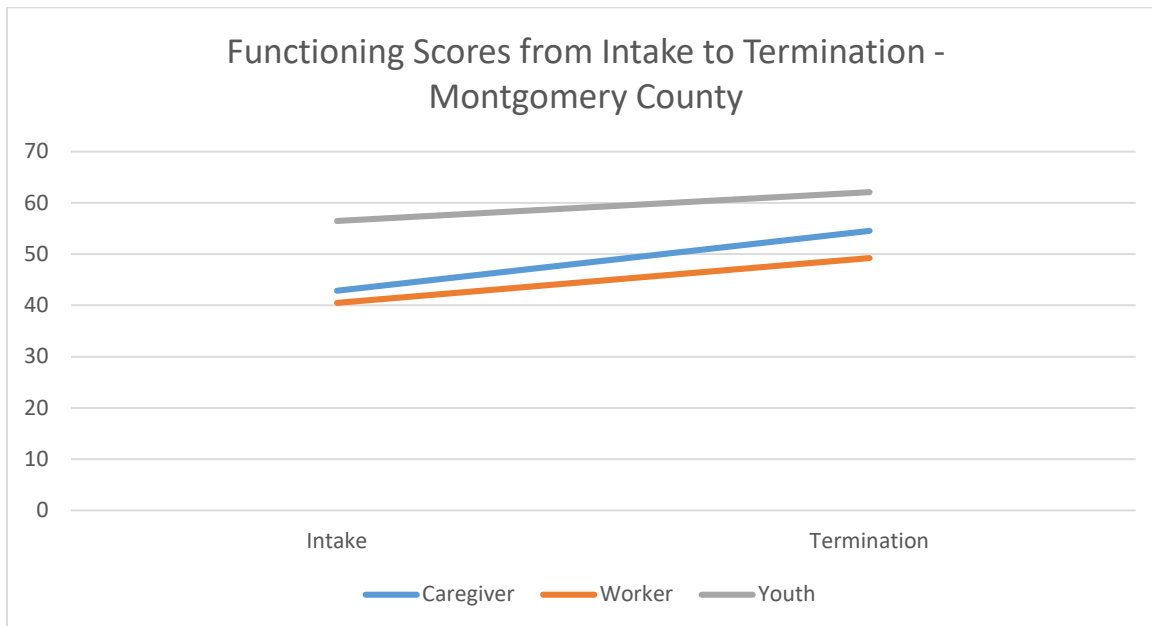


Figure 89



### Caregiver Ratings

Paired samples t-tests revealed significant improvements in Functioning at each measurement interval (see Table 231) compared to intake. Significant improvements were noted at three months:  $t(334) = -8.58, p < .001$ ; six months:  $t(51) = -4.39, p < .001$ ; and at termination  $t(858) = -21.85, p < .001$ . Moderate effect sizes were noted for the periods between intake and six months and between intake and termination. A small effect was noted for the period between intake and three months.

Table 231. Paired Samples T-Tests for Functioning Scores – Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	39.18 (SD=15.55; n=335)	45.97 (SD=15.94; n=335)	-8.58***	.47
<b>Intake to Six Months</b>	36.25 (SD=18.35; n=52)	47.44 (SD=16.71; n=52)	-4.39***	.61
<b>Intake to Termination</b>	42.89 (SD=16.34; n=859)	54.52 (SD=16.16; n=859)	-21.85***	.75

\* < .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 232). Improvements were noted at three months:  $t(359) = -7.11, p < .001$ ; six months:  $t(55) = -3.84, p < .001$ ; and at termination  $t(1,318) = -19.76, p < .001$ . Moderate effects were noted for the time periods between intake and six months and the time period between intake and termination while a small effect was found for the period between intake and three months.

Table 232. Paired Samples T-Tests for Functioning Scores – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	39.82 (SD=11.59; n=360)	44.59 (SD=11.79; n=360)	-7.11***	.37
<b>Intake to Six Months</b>	36.02 (SD=11.88; n=56)	44.09 (SD=13.22; n=56)	-3.84***	.51
<b>Intake to Termination</b>	40.48 (SD=11.20; n=1,319)	49.25 (SD=14.52; n=1,319)	-19.76***	.54

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

### Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement at each data collection point (see Table 233). Improvements were noted at three months:  $t(349) = -4.16, p < .001$ ; six months:  $t(50) = -2.02, p < .05$ ; and at termination  $t(846) = -12.48, p < .001$ . Small effect sizes were noted for each of the time periods we examined.

Table 233. Paired Samples T-Tests for Functioning Scores – Youth

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	55.74 (SD=12.88; n=350)	58.52 (SD=12.93; n=350)	-4.16***	.22
<b>Intake to Six Months</b>	54.23 (SD=13.62; n=51)	59.04 (SD=15.74; n=51)	-2.02*	.28
<b>Intake to Termination</b>	56.50 (SD=12.71; n=847)	62.09 (SD=12.66; n=847)	-12.48***	.43

\* < .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 21.9% of the BHJJ sample knew someone who was murdered in the past year (see Table 234).

Table 234. Prevalence of Self-Reported Violent Victimization

	<b>% Yes BHJJ Sample (n = 397)</b>	<b>% Yes National Sample</b>
<b>In the last year, did someone threaten to hurt you when you thought they might really do it?</b>	39.5%	14.4% <sup>a</sup>
<b>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?</b>	8.2%	1.9% <sup>b</sup>
<b>In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?</b>	9.1%	2.8% <sup>b</sup>
<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?</b>	48.9%	16.6% <sup>a</sup>
<b>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</b>	14.7%	5.7% <sup>a</sup>

<b>with an object or weapon? Somewhere like at home, at school, at a store, in a car, on the street, or anywhere else?</b>		
<b>In the last year, did anyone hit or attack you WITHOUT using an object or weapon?</b>	36.4%	17.7% <sup>a</sup>
<b>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?</b>	28.1%	21.8% <sup>a</sup>
<b>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?</b>	4.0%	0.3% <sup>b</sup>
<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?</b>	5.3%	1.2% <sup>b</sup>
<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?</b>	12.4%	3.3% <sup>b</sup>
<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?</b>	25.2%	12.8% <sup>a</sup>
<b>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?</b>	40.9%	29.0% <sup>a</sup>
<b>In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?</b>	21.9%	5.4% <sup>a</sup>
<b>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?</b>	32.9%	9.7% <sup>a</sup>
<b>Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?</b>	23.2%	5.6% <sup>a</sup>
<b>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?</b>	9.6%	1.4% <sup>b</sup>

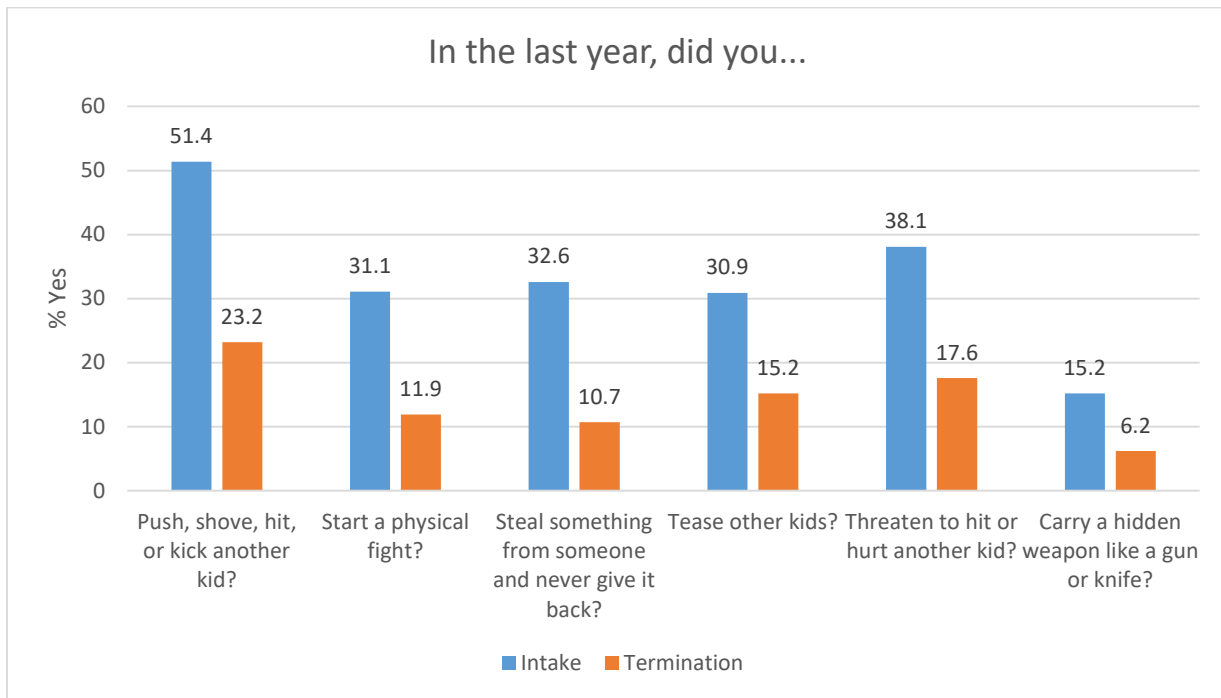
<sup>a</sup> Calculated from the raw National Survey of Children Exposed to Violence (NATSCEV) data. <sup>b</sup> Obtained from Finkelhor, D., Hamby, S.L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. *Child Abuse and Neglect*, 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 VDO. 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 90). For example, at intake, 31.1% of youth reported starting a physical fight in the past year. At termination, 11.9% of youth had started a fight since intake into BHJJ. McNemar’s tests revealed statistically significant improvements from intake to termination for all items.

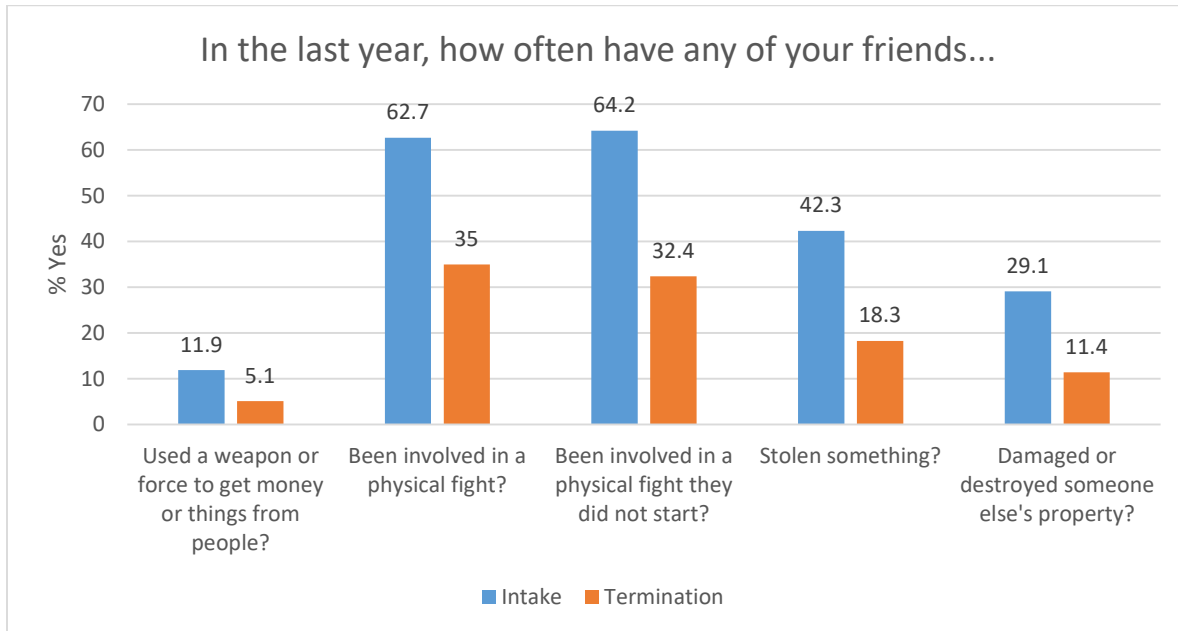
Figure 90



## Peer delinquency

Youth also reported significantly less peer delinquency at termination than intake (see Figure 91). For example, at intake, 62.7% of youth reported that at least one of their friends had been involved in a physical fight. At termination from BHJJ, 35.0% 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 all items.

Figure 91



## 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 underendorsement 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 35.0% (n = 617) 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.

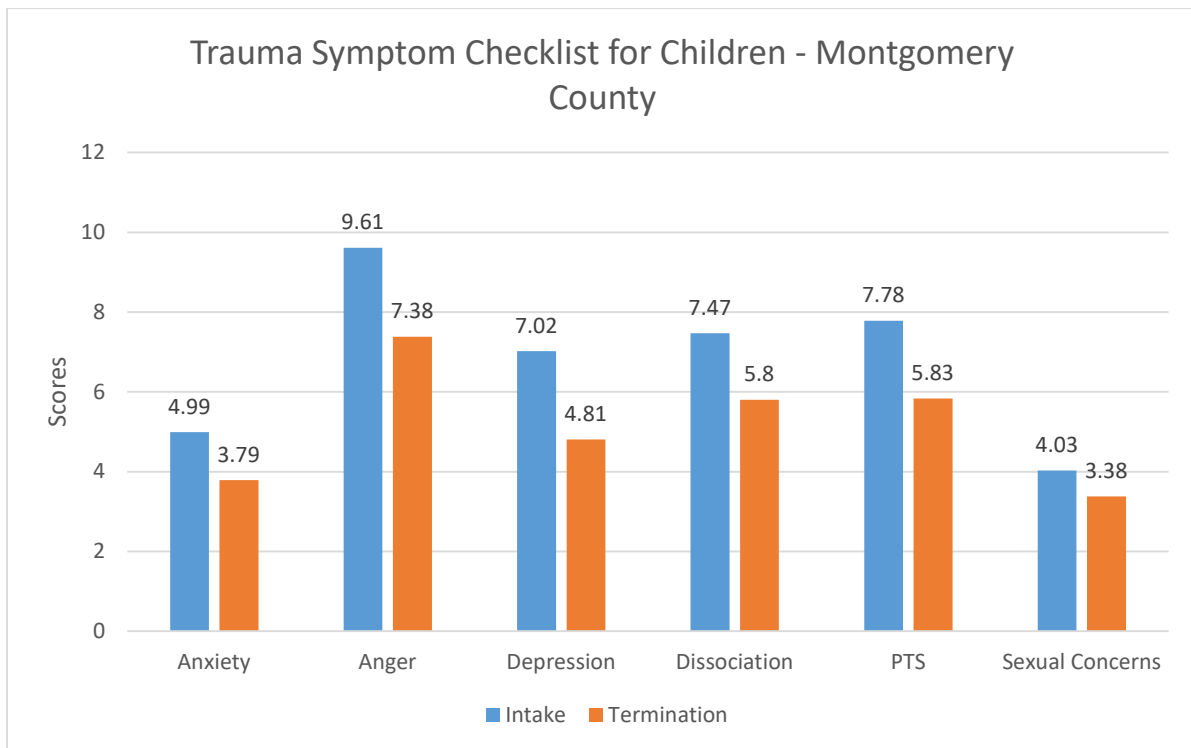
Overall, results from paired samples t-tests indicated that there were significant symptom reductions on all subscales from intake to termination (see Table 235 and Figure 92). Considering Cohen’s (1988) established cutoffs, small effects were found for all subscales except Depression (moderate). The 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 235. TSCC Subscales from Intake to Termination

	Intake	Termination	t	d
<b>Anxiety</b>	4.99 (SD=4.05; n=401)	3.79 (SD=3.42; n=401)	6.89***	.35
<b>Depression</b>	7.02 (SD=5.16; n=401)	4.81 (SD=3.85; n=401)	10.43***	.54
<b>Anger</b>	9.61 (SD=5.63; n=401)	7.38 (SD=4.76; n=401)	8.50***	.43
<b>Posttraumatic Stress</b>	7.78 (SD=5.50; n=399)	5.83 (SD=4.91; n=399)	8.75***	.45
<b>Dissociation</b>	7.47 (SD=5.00; n=398)	5.80 (SD=4.27; n=398)	8.25***	.42
<b>Sexual Concerns</b>	4.03 (SD=3.73; n=398)	3.38 (SD=3.68; n=398)	3.88***	.22

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

Figure 92



## 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 8.9 for females and 5.3 for males (see Figure 93 and Figure 94). For both females and males, paired samples t-tests revealed significant improvements in trauma symptoms for all subscales.

Figure 93

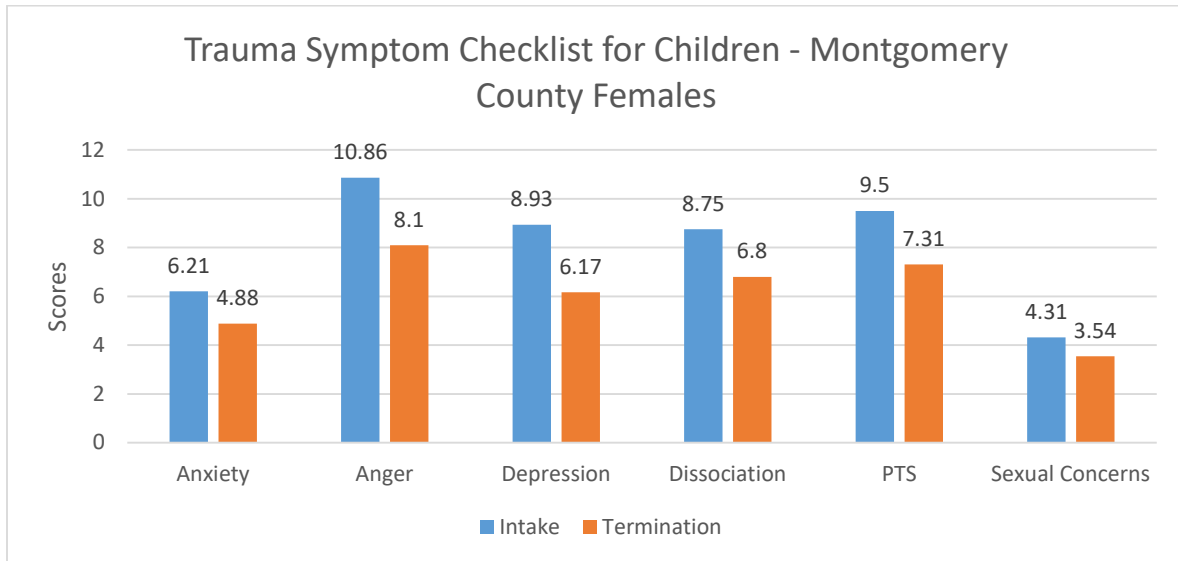
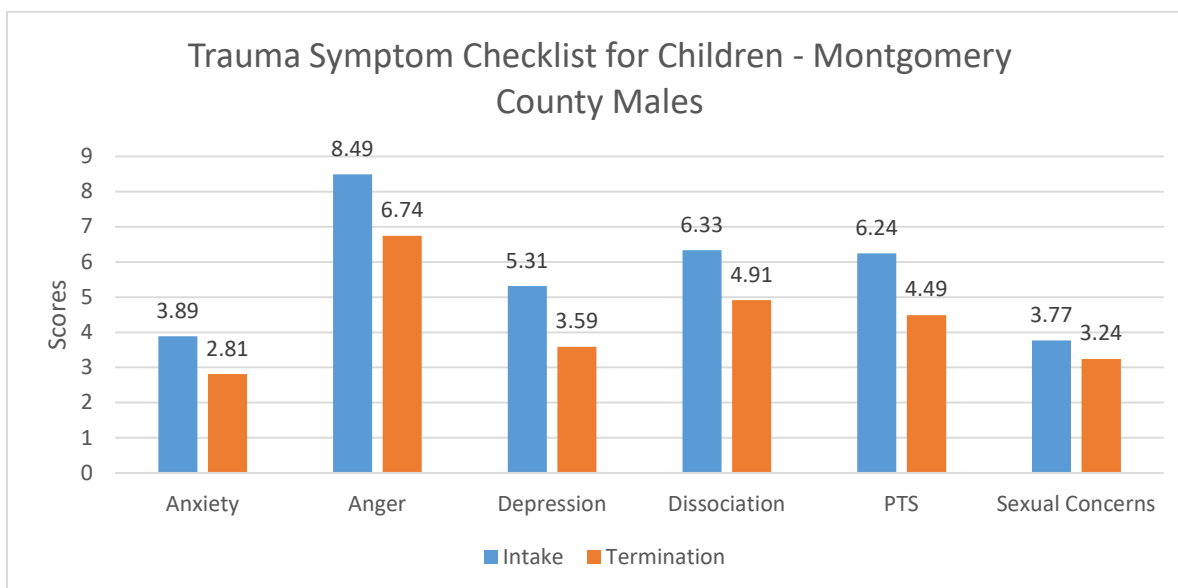


Figure 94



## 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 236 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 marijuana use. One and a half percent of males (n = 13) and 2% of females (n = 14) ever used heroin at intake.

Table 236. Self-Reported Substance Use at Intake

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
<b>Alcohol</b>	52.3% (n = 457)	13.29 (SD = 2.26)	57.1% (n = 404)	13.41 (SD = 1.84)
<b>Cigarettes</b>	52.3% (n = 455)	12.71 (SD = 2.51)	50.1% (n = 356)	12.63 (SD = 2.33)
<b>Chewing Tobacco</b>	16.6% (n = 143)***	13.60 (SD = 2.16)	4.4% (n = 31)	13.93 (SD = 1.60)
<b>Marijuana</b>	63.6% (n = 557)**	13.02 (SD = 2.05)	57.2% (n = 406)	13.26 (SD = 1.71)
<b>Cocaine</b>	5.2% (n = 45)	14.52 (SD = 1.37)	6.7% (n = 47)	14.68 (SD = 1.91)
<b>Pain Killers (use inconsistent with prescription)</b>	14.0% (n = 122)	14.13 (SD = 1.54)	15.3% (n = 108)	13.89 (SD = 1.61)
<b>GHB</b>	0.2% (n = 2)	15.00 (SD = 1.41)	0.1% (n = 1)	14.00 <sup>a</sup>
<b>Inhalants</b>	2.9% (n = 25)	13.71 (SD = 2.40)	2.4% (n = 17)	14.18 (SD = 1.63)
<b>Heroin</b>	1.5% (n = 13)	14.15 (SD = 1.35)	2.0% (n = 14)	14.86 (SD = 0.95)
<b>Amphetamines</b>	3.6% (n = 31)	15.93 (SD = 9.55)	3.1% (n = 22)	14.27 (SD = 1.42)
<b>Ritalin (use inconsistent with prescription)</b>	7.4% (n = 64)	13.63 (SD = 2.58)	6.7% (n = 47)	14.11 (SD = 1.52)
<b>Barbiturates</b>	1.8% (n = 16)	14.06 (SD = 1.39)	1.9% (n = 13)	14.08 (SD = 1.32)
<b>Non-prescription Drugs</b>	5.8% (n = 50)	14.02 (SD = 2.36)	5.3% (n = 37)	13.60 (SD = 1.94)
<b>Hallucinogens</b>	6.5% (n = 57)	14.53 (SD = 1.23)	4.7% (n = 33)	14.76 (SD = 1.25)
<b>PCP</b>	1.4% (n = 12)	15.08 (SD = 1.56)	1.3% (n = 9)	14.33 (SD = 0.50)
<b>Ketamine</b>	0.7% (n = 6)	15.83 (SD = 1.17)*	0.4% (n = 3)	13.33 (SD = 2.08)
<b>Ecstasy</b>	4.0% (n = 35)	15.17 (SD = 1.32)	2.8% (n = 20)	14.53 (SD = 1.50)
<b>Tranquilizers</b>	13.7% (n = 119)	14.48 (SD = 1.69)	13.9% (n = 98)	14.39 (SD = 1.61)

\*\*p < .01, \*\*\*p < .001, <sup>a</sup>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 95 and Figure 96 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 alcohol and marijuana, while males showed a decrease in six-month use for cigarettes. McNemar's tests showed a significant decrease from intake to termination in six-month alcohol, and marijuana use for males and females.

The percentage of males using alcohol in the past six months dropped from 59.8% (n = 146) to 36.0% (n = 45) from intake to termination. For females, 73.2% (n = 41) reported past six-month use at intake while 21.4% (n = 6) reported past six-month alcohol use at termination. Over 75% of males (78.5%, n = 168) reported past six-month cigarette use at intake. At termination, 74.3% of males (n = 81) reported past six-month cigarette use.

Past six-month marijuana use declined from 66.9% (n = 364) at intake to 48.1% (n = 125) at termination for males and 63.6% (n = 250) at intake and 41.1% (n = 76) at termination for females.

Figure 95

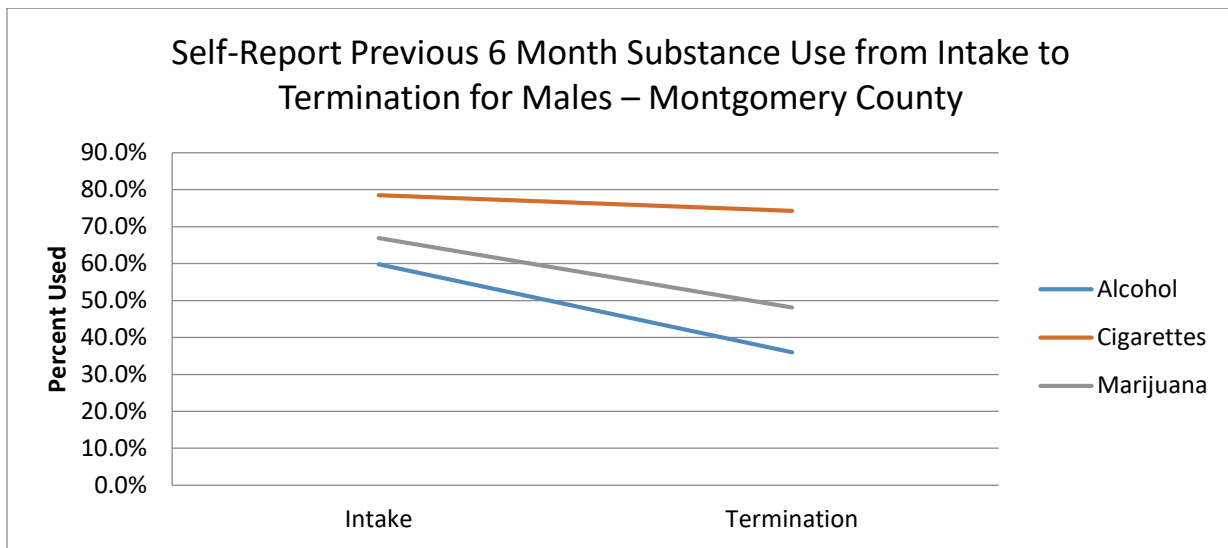
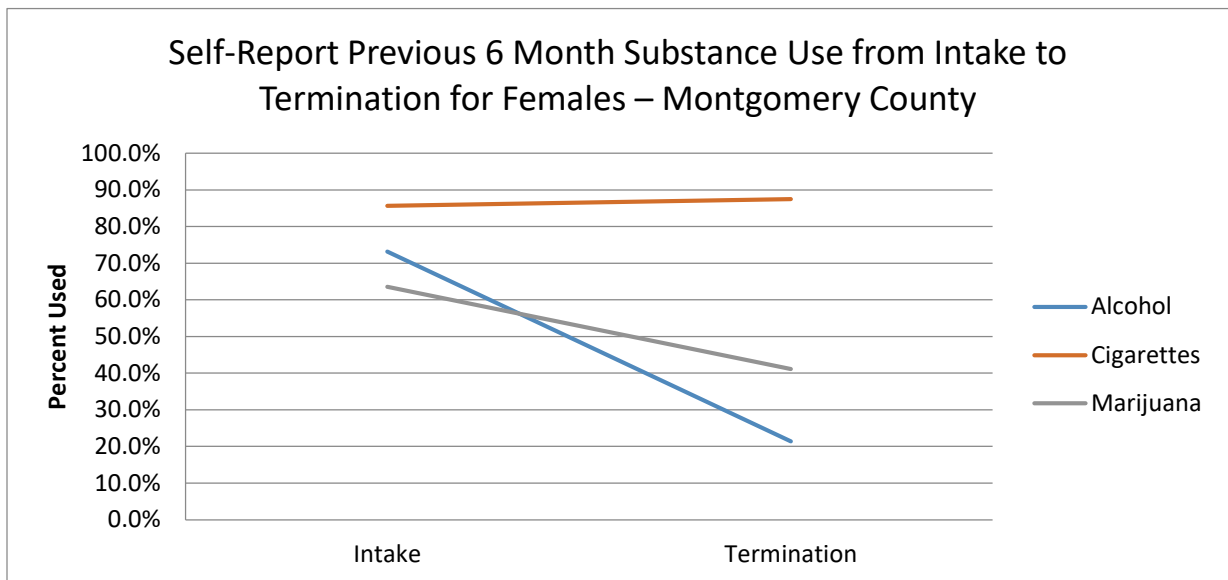


Figure 96



### 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 97 and Figure 98 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 2.39 days (SD = 6.10; n = 181) at intake to 1.45 days (SD = 3.63; n = 44) at termination. Among females, alcohol use decreased from 2.89 days at intake (SD = 7.36; n = 161) to 0.44 days (SD = 0.73; n = 45) at termination. For marijuana, males reported using for an average of 7.38 days (SD = 11.26; n = 306) out of the past 30 days at intake and 4.38 days (SD = 9.83; n = 104) at termination while females reported using for an average of 5.49 days (SD = 9.07; n = 204) at intake and 2.21 days (SD = 6.09; n = 67) at termination.

Figure 97

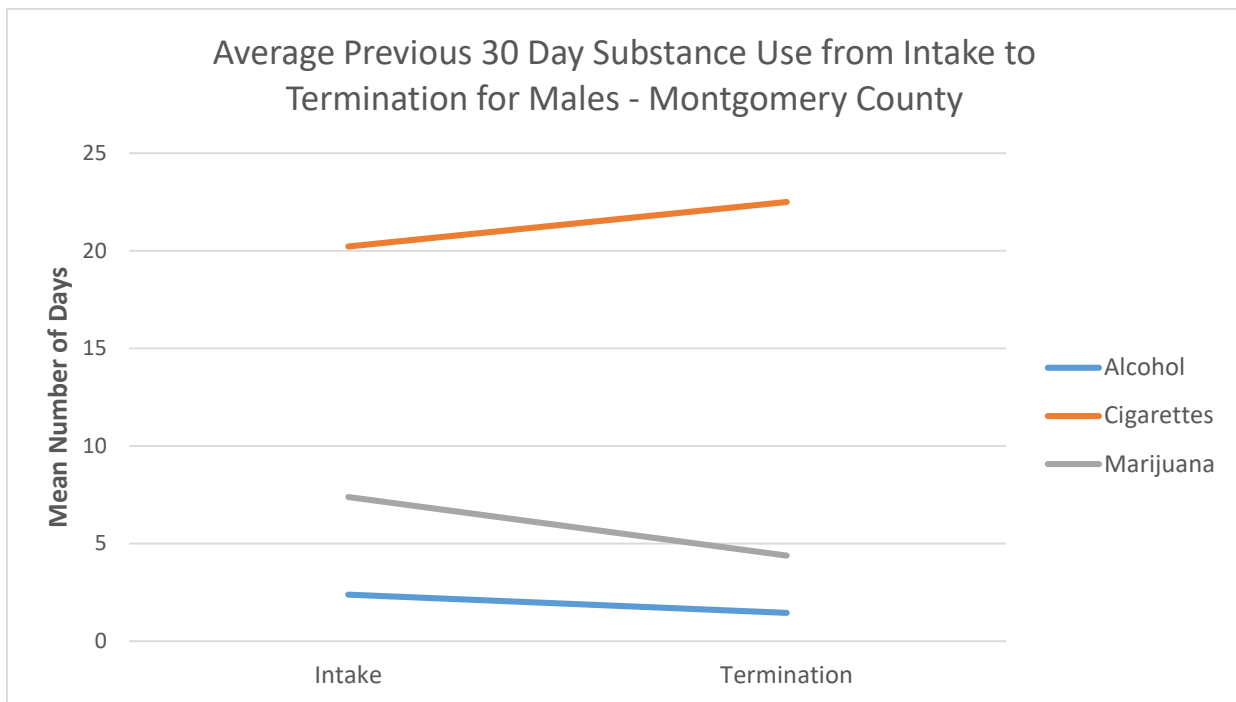
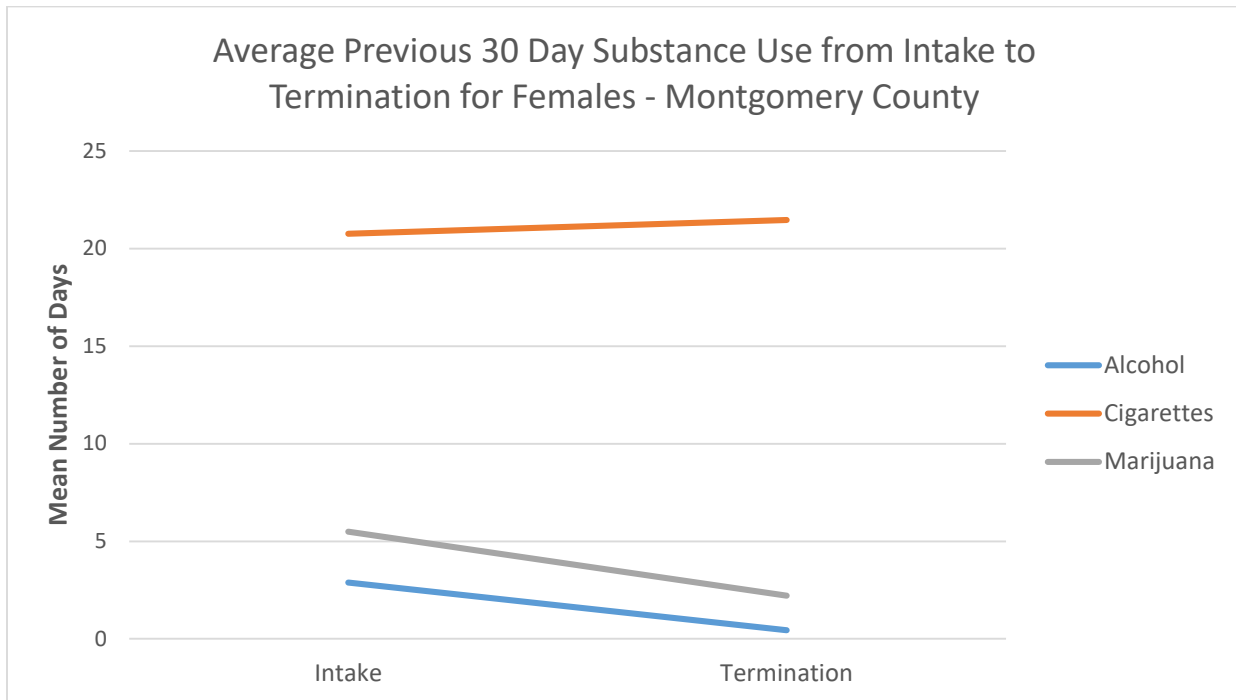


Figure 98



### 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 1,543 youth terminated from the BHJJ program in Montgomery County. Over 60% (60.8%, n = 938) of the youth terminated from the BHJJ program were identified as successful treatment completers. An additional 2.9% (n = 45) of the youth had moved out of the county.

Therefore, 63.7% of youth either successfully completed programming or had moved out of the county and were no longer able to receive services. In Montgomery County, 11.8% (n = 182) were withdrawn from the program, 7.8% (n = 120) were terminated from the program due to an out of home placement, and 2.1% (n = 33) were incarcerated. Table 237 presents all of the reasons for termination from BHJJ.

In the latest evaluation period that began July 2015 and ended in June 2017, 55.4% (n = 112) of youth terminated successfully from the BHJJ program in Montgomery County.

Table 237. Reasons for Termination from BHJJ

Termination Reason	All Youth	Youth Enrolled from July 2015 to June 2017
<b>Successfully Completed Services</b>	60.8% (n = 938)	55.4% (n = 112)
<b>Client Did Not Return/Rejected Services</b>	6.8% (n = 105)	5.0% (n = 10)
<b>Out of Home Placement</b>	7.8% (n = 120)	9.9% (n = 20)
<b>Client/Family Moved</b>	2.9% (n = 45)	3.0% (n = 6)
<b>Client Withdrawn</b>	11.8% (n = 182)	14.4% (n = 29)
<b>Client AWOL</b>	2.6% (n = 40)	3.5% (n = 7)
<b>Client Incarcerated</b>	2.1% (n = 33)	0.0% (n = 0)
<b>Other</b>	5.2% (n = 80)	8.9% (n = 18)

### Average Length of Stay

The average length of stay for youth in the Montgomery County BHJJ program was 153 days. For youth identified as completing treatment successfully, the average length of stay was 164 days and for youth identified as unsuccessful treatment completers, the average length of stay was 135 days. For youth enrolled since July 1, 2015, the average length of stay in BHJJ was 134 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, 51.3% of the youth (n = 835) in Montgomery County were at risk for out of home placement. At termination, 25.0% (n = 386) of youth were at risk for out of home placement. Of those youth who successfully completed BHJJ treatment, 5.4% (n = 50) were at risk for out of home placement at termination while 55.2% (n = 333) of youth who terminated unsuccessfully from the program were at risk for out of home placement.

### Police Contacts

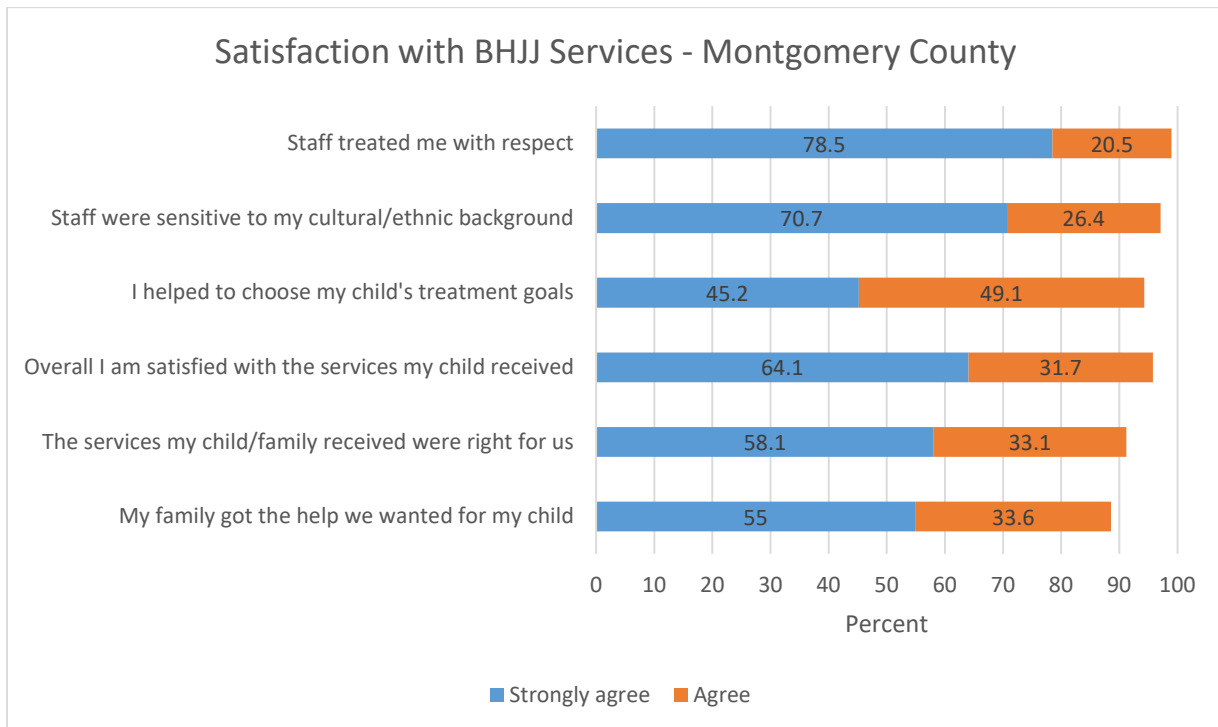
With help from the caregiver and youth, the worker was asked to estimate the frequency of police contacts since the youth has been receiving mental health services through BHJJ. Workers reported that police contacts have been reduced for 61.8% (n = 787) of the youth and had stayed the same for 28.3% (n = 361) of the youth. Police contacts increased for 7.4% (n = 94) of the youth and the worker could not estimate for 2.5% (n = 32) of youth.

## 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.

Figure 99 shows the percentage of youth who either strongly agreed or agreed with each of the YSSF items. At termination from the BHJJ program, 95.8% (n = 755) of caregivers either strongly agreed or agreed that they were satisfied with the services their child received and 91.2% (n = 717) either strongly agreed or agreed that the services their child and/or family receive were right for them. A strong majority (99.0%, n = 778) of caregivers either strongly agreed or agreed that staff treated them with respect and 97.1% (n = 758) indicated that they strongly agreed or agreed with the statement that they were satisfied with the cultural and ethnic sensitivity of BHJJ staff.

Figure 99





## Recidivism

### Methodology

Court data were provided by the Montgomery 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, 66.6% (n = 1,133) of the BHJJ youth had misdemeanor charges, 18.2% (n = 309) had at least one felony charge, and 55.9% (n = 951) were adjudicated delinquent (see Table 238).

Previous juvenile court information is presented for youth based on BHJJ treatment completion status (successful vs. unsuccessful) (see Table 238). In the 12 months prior to enrollment, 56.2% (n = 521) of successful completers and 56.8% (n = 338) of unsuccessful completers were adjudicated delinquent. A slightly lower percentage of successful completers had a felony charge in the 12 months prior to intake (17.4%, n = 161) than unsuccessful completers (19.7%, n = 117).

Table 238. Charges Prior to BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	38.0% (n = 646)	7.4% (n = 125)	27.6% (n = 470)	39.5% (n = 366)	6.6% (n = 61)	27.9% (n = 166)	36.1% (n = 215)	7.9% (n = 47)	27.6% (n = 256)
<b>6 months</b>	54.9% (n = 934)	12.8% (n = 218)	43.6% (n = 741)	55.4% (n = 514)	12.0% (n = 111)	43.3% (n = 401)	54.6% (n = 325)	13.6% (n = 81)	44.2% (n = 263)
<b>12 months</b>	66.6% (n = 1,133)	18.2% (n = 309)	55.9% (n = 951)	66.6% (n = 617)	17.4% (n = 161)	56.2% (n = 521)	67.4% (n = 401)	19.7% (n = 117)	56.8% (n = 338)
<b>18 months</b>	70.4% (n = 1,197)	20.8% (n = 354)	59.7% (n = 1,015)	70.3% (n = 652)	20.1% (n = 186)	59.7% (n = 553)	71.4% (n = 425)	21.8% (n = 130)	61.7% (n = 367)

## 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, 49.4% (n = 682) of youth were charged with at least one new misdemeanor and 16.6% (n = 229) were charged with at least one new felony. Forty-one percent (40.9%, n = 564) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 239).

In the 12 months after enrollment in BHJJ 44.7% (n = 340) of successful completers were charged with at least one new misdemeanor, 10.9% (n = 83) were charged with at least one new felony, and 35.5% (n = 270) were adjudicated delinquent (see Table 239). Of the youth who completed unsuccessfully, 55.1% (n = 272) were charged with at least one new misdemeanor, 24.7% (n = 122) were charged with at least one new felony, and 48.0% (n = 237) were adjudicated delinquent in the 12 months after their enrollment in BHJJ.

Table 239. Charges After BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	19.3% (n = 303)	4.4% (n = 69)	15.7% (n = 247)	14.1% (n = 123)	2.1% (n = 18)	11.7% (n = 102)	25.5% (n = 142)	7.0% (n = 39)	20.5% (n = 114)
<b>6 months</b>	32.4% (n = 490)	9.0% (n = 136)	26.9% (n = 407)	25.8% (n = 216)	4.8% (n = 40)	21.4% (n = 179)	39.9% (n = 214)	14.4% (n = 77)	34.1% (n = 183)
<b>12 months</b>	49.4% (n = 682)	16.6% (n = 229)	40.9% (n = 564)	44.7% (n = 340)	10.9% (n = 83)	35.5% (n = 270)	55.1% (n = 272)	24.7% (n = 122)	48.0% (n = 237)
<b>18 months</b>	61.0% (n = 780)	21.8% (n = 278)	50.4% (n = 644)	58.5% (n = 406)	15.3% (n = 106)	46.7% (n = 324)	64.2% (n = 300)	30.2% (n = 141)	55.5% (n = 259)

## 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, 44.6% (n = 500) of youth were charged with at least one new misdemeanor, 16.1% (n = 180) were charged with at least one new felony, and 37.1% (n = 415) were adjudicated delinquent (see Table 240).

In the 12 months following their termination from BHJJ, 43.4% (n = 285) of successful completers were charged with at least one new misdemeanor, 12.5% (n = 82) were charged with at least one new felony, and 34.7% (n = 228) were adjudicated delinquent (see Table 240). Of the youth who completed unsuccessfully, 44.3% (n = 192) were charged with at least one new misdemeanor, 20.1% (n = 87) were charged with at least one new felony, and 38.8% (n = 168) were adjudicated delinquent in the 12 months after their termination from BHJJ.

Table 240. Charges After Termination from BHJJ

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	15.2% (n = 207)	5.0% (n = 68)	13.7% (n = 186)	13.9% (n = 113)	3.3% (n = 27)	11.9% (n = 97)	15.4% (n = 81)	7.2% (n = 38)	15.4% (n = 81)
<b>6 months</b>	25.8% (n = 328)	8.7% (n = 111)	22.1% (n = 280)	24.1% (n = 181)	6.5% (n = 49)	20.0% (n = 150)	26.4% (n = 130)	11.2% (n = 55)	23.9% (n = 118)
<b>12 months</b>	44.6% (n = 500)	16.1% (n = 180)	37.1% (n = 415)	43.4% (n = 285)	12.5% (n = 82)	34.7% (n = 228)	44.3% (n = 192)	20.1% (n = 87)	38.8% (n = 168)
<b>18 months</b>	57.8% (n = 586)	22.1% (n = 224)	47.5% (n = 481)	55.1% (n = 327)	18.0% (n = 107)	43.8% (n = 260)	59.9% (n = 232)	27.1% (n = 105)	51.7% (n = 200)

## 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 201 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, 27.9% (n = 56) were charged with a new felony in the 12 months after their termination from BHJJ.

Twenty-one of the 1,700 BHJJ youth (1.2%) from Montgomery County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.

## Summit County

### Demographics

Summit County has enrolled 284 youth in the BHJJ program since 2009. Of the 284 youth enrolled, 22.9% (n = 65) were female and 77.1% (n = 219) were male. Since July 2015, 84.6% (n = 44) of new enrollees have been male (see Table 241).

The majority of the overall sample of youth were either Caucasian (22.5%, n = 63) or African American (65.4%, n = 183). African Americans constituted over 78% of youth enrolled since 2015. The average age of the youth at intake into BHJJ was 15.85 years old (SD = 1.31) with a range between 9.1 and 18.5 years.

Table 241. Demographic Information for BHJJ Youth

	All Youth Enrolled (2009 - 2017)	Youth Enrolled between July 2015 – June 2017
<b>Gender</b>	Female = 22.9% (n = 65)	Female = 15.4% (n = 8)
	Male = 77.1% (n = 219)	Male = 84.6% (n = 44)
<b>Race</b>	African American = 65.4% (n = 183)	African American = 78.8% (n = 41)
	Caucasian = 22.5% (n = 63)	Caucasian = 13.5% (n = 7)
	Other = 12.1% (n = 34)	Other = 7.7% (n = 4)
<b>Age at Intake</b>	15.85 years (SD = 1.31)	16.05 years (SD = 1.51)

### Custody Arrangement and Household Information

At intake, the majority of youth lived with the biological mother (61.0%, n = 158) (see Table 242). At time of enrollment, 85.7% (n = 222) of the BHJJ youth lived with at least one biological parent.

Over 80% of the BHJJ caregivers (83.3%, n = 209) had at least a high school diploma or GED, and 8% (n = 20) had a bachelor's degree or higher (see Table 243). Forty-two caregivers (16.7%) reported that they did not graduate from high school.

Caregivers reported their annual household income. The median household income for families was between \$10,000 - \$14,999 (see Table 244). Nearly 90% of caregivers (87.8%, n = 208) reported annual household incomes below \$35,000 and 61.2% (n = 145) reported an annual household income below \$20,000. Over 30% of families (32.5%, n = 77) reported an annual household income below \$10,000.

Table 242. Custody Arrangement for BHJJ Youth

<b>Custody</b>	<b>BHJJ Youth</b>
<b>Two Biological Parents or One Biological and One Step or Adoptive Parent</b>	16.2% (n=42)
<b>Biological Mother Only</b>	61.0% (n=158)
<b>Biological Father Only</b>	8.5% (n=22)
<b>Adoptive Parent(s)</b>	1.9% (n=5)
<b>Aunt/Uncle</b>	2.7% (n=7)
<b>Grandparents</b>	8.9% (n=23)
<b>Other</b>	0.8% (n=2)

Table 243. Educational Outcomes for Caregivers of BHJJ Youth

<b>Number of School Years Completed</b>	<b>Number of Caregivers</b>
<b>Less than High School</b>	16.7% (n=42)
<b>High School Graduate or G.E.D.</b>	39.8% (n=100)
<b>Some College or Associate Degree</b>	35.5% (n=89)
<b>Bachelor's Degree</b>	3.2% (n=8)
<b>More than a Bachelor's Degree</b>	4.8% (n=12)

Table 244. Annual Household Income for BHJJ Families

<b>Annual Household Income</b>	<b>BHJJ Families</b>
<b>Less than \$5,000</b>	26.2% (n=62)
<b>\$5,000 - \$9,999</b>	6.3% (n=15)
<b>\$10,000 - \$14,999</b>	19.0% (n=45)
<b>\$15,000 - \$19,999</b>	9.7% (n=23)
<b>\$20,000 - \$24,999</b>	13.5% (n=32)
<b>\$25,000 - \$34,999</b>	13.1% (n=31)
<b>\$35,000 - \$49,999</b>	7.2% (n=17)
<b>\$50,000 - \$74,999</b>	2.1% (n=5)
<b>\$75,000 - \$99,999</b>	1.7% (n=4)
<b>\$100,000 and over</b>	1.3% (n=3)

## 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 245. Overall, a significantly higher proportion of the caregivers of females reported a history of sexual abuse and talking about committing suicide, while a significantly higher proportion of the caregivers of males reported a lifetime history of substance abuse.

Caregivers reported that 13.8% (n = 8) of females and 8.2% (n = 16) of males had a history of being physically abused while 21.4% (n = 12) of females and 2.6% (n = 5) of males had a history of being sexually abused. Caregivers of 36.1% (n = 22) of females and 19.8% (n = 38) of males reported hearing the child talking about committing suicide and 8.1% (n = 5) of females and 7.9% (n = 15) of males had attempted suicide at least once. Over half of the caregivers of females (57.1%, n = 32) and males (52.3%, n = 92) reported a family history of depression.

Table 245. Youth and Family History

Question	Females	Males
<b>Has the child ever been physically abused?</b>	13.8% (n=8)	8.2% (n=16)
<b>Has the child ever been sexually abused?</b>	21.4% (n=12)**	2.6% (n=5)
<b>Has the child ever run away?</b>	63.8% (n=37)	49.7% (n=92)
<b>Has the child ever had a problem with substance abuse, including alcohol and/or drugs?</b>	52.4% (n=33)	67.2% (n=129)*
<b>Has the child ever talked about committing suicide?</b>	36.1% (n=22)**	19.8% (n=38)
<b>Has the child ever attempted suicide?</b>	8.1% (n=5)	7.9% (n=15)
<b>Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?</b>	41.0% (n=25)	35.2% (n=68)
<b>Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?</b>	57.1% (n=32)	52.3% (n=92)
<b>Has anyone in the child's biological family had a mental illness, other than depression?</b>	43.6% (n=24)	37.8% (n=65)
<b>Has the child ever lived in a household in which someone was convicted of a crime?</b>	31.7% (n=19)	42.8% (n=80)
<b>Has anyone in the child's biological family had a drinking or drug problem?</b>	49.1% (n=27)	51.4% (n=95)
<b>Is the child currently taking any medication related to his/her emotional or behavioral symptoms?</b>	28.8% (n=15)	27.3% (n=45)



## 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 (95.0% and 88.9% respectively) (see Table 246). Chi-square analysis indicated females had significantly higher rates of problems related to suicide.

Table 246. Problems Leading to Services

Problems Leading to Services	Females	Males
<b>Adjustment-related problems</b>	18.3% (n = 11)	24.7% (n = 46)
<b>Anxiety-related problems</b>	30.0% (n = 18)	21.7% (n = 43)
<b>Conduct/delinquency-related problems</b>	95.0% (n = 57)	88.9% (n = 176)
<b>Depression-related problems</b>	45.0% (n = 27)	34.8% (n = 69)
<b>Eating disorders</b>	0	0.5% (n = 1)
<b>Hyperactive and attention-related problems</b>	36.7% (n = 22)	46.5% (n = 92)
<b>Learning disabilities</b>	16.7% (n = 10)	13.6% (n = 27)
<b>Pervasive development disabilities</b>	1.7% (n = 1)	0
<b>Psychotic behaviors</b>	1.7% (n = 1)	3.5% (n = 7)
<b>School performance problems not related to learning disabilities</b>	71.7% (n = 43)	63.1% (n = 125)
<b>Specific developmental disabilities</b>	1.7% (n = 1)	1.0% (n = 2)
<b>Substance use, abuse, dependence-related problems</b>	61.7% (n = 37)	66.2% (n = 131)
<b>Suicide-related problems</b>	21.7% (n = 13)**	8.6% (n = 17)

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

## Ohio Youth Assessment System

Ohio Youth Assessment System (OYAS) (criminogenic risk) data collected at the time point closest to their respective enrollment dates for those enrolled since 2009. Table 247 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. There were no statistically significant differences based on race or gender as similar proportions of males and females and White and Nonwhite youth were identified in each of the OYAS risk categories.

Table 247. OYAS Risk Categories by Gender and Race

	OYAS Low	OYAS Moderate	OYAS High
<b>Female</b>	38.7% (n = 24)	22.6% (n = 14)	38.7% (n = 24)
<b>Male</b>	26.7% (n = 54)	31.7% (n = 64)	41.6% (n = 84)
<b>White</b>	29.2% (n = 59)	28.7% (n = 58)	42.1% (n = 85)
<b>Nonwhite</b>	29.0% (n = 18)	32.3% (n = 20)	38.7% (n = 24)

## 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 females was Oppositional Defiant Disorder and for males it was Conduct Disorder (see Table 248).

Chi-square analysis indicated females were significantly more likely to be diagnosed with Mood Disorders and Oppositional Defiant Disorder. Males were significantly more likely to be diagnosed with Conduct Disorder. Over fifty-five percent (55.4%, n = 107) of males and 48.2% (n = 27) of females were identified as having both a DSM mental health diagnosis and a substance use diagnosis.

Table 248. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
Adjustment Disorder	14.5% (n = 8)	12.6% (n = 24)
Alcohol-related Disorders	10.9% (n = 6)	8.4% (n = 16)
Attention Deficit Hyperactivity Disorder (ADHD)	40.0% (n = 22)	45.5% (n = 87)
Bipolar Disorder	3.6% (n = 2)	2.1% (n = 4)
Cannabis-related Disorders	42.9% (n = 24)	49.2% (n = 95)
Conduct Disorder	25.0% (n = 14)	53.9% (n = 104)***
Depressive Disorders	18.2% (n = 10)	18.8% (n = 36)
Disruptive Behavior Disorder	3.6% (n = 2)	1.0% (n = 2)
Mood Disorder	32.7% (n = 18)**	16.2% (n = 31)
Oppositional Defiant Disorder	45.5% (n = 25)**	22.0% (n = 42)
Post-traumatic Stress Disorder	12.7% (n = 7)	12.6% (n = 24)

\* < .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. Two-thirds of BHJJ youth (66.3%, n = 163) were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in treatment with BHJJ, 50.5% (n = 99) 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, 81.2% (n = 176) of youth were currently attending school while at termination, 79.2% (n = 145) 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 249 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 250 displays this information based on completion status. At

intake, 10.3% of youth were earning mostly A's and B's and 38.8% were earning mostly D's and F's. At termination from BHJJ, 8.5% of youth were earning mostly A's and B's and 39.4% 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, 32.7% of unsuccessful completers and 27.3% of successful completers received mostly A's, B's, or C's. At termination, 18.7% of unsuccessful completers and 35.7% of successful completers received mostly A's, B's, or C's.

At termination, workers reported that 39.1% (n = 77) of youth were attending school more than before starting treatment and 52.3% (n = 103) of youth were attending school 'about the same' amount compared to before starting treatment. Workers reported that 6.6% (n = 13) were attending school less often than before treatment in BHJJ. At termination, 44.4% (n = 71) of the youth attending school had Individualized Education Plans (IEPs).

Table 249. Academic Performance

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A's and B's	10.3% (n = 17)	8.5% (n = 16)
Mostly B's and C's	23.0% (n = 38)	21.8% (n = 41)
Mostly C's and D's	27.9% (n = 46)	30.3% (n = 57)
Mostly D's and F's	38.8% (n = 64)	39.4% (n = 74)

Table 250. Academic Performance for Youth by Completion Status

Typical Grades	Unsuccessful Completers		Successful Completers	
	Frequency at Intake	Frequency at Termination	Frequency at Intake	Frequency at Termination
Mostly A's and B's	5.8% (n = 3)	6.8% (n = 4)	8.3% (n = 10)	9.5% (n = 12)
Mostly B's and C's	26.9% (n = 14)	11.9% (n = 7)	19.0% (n = 23)	26.2% (n = 33)
Mostly C's and D's	25.0% (n = 13)	22.0% (n = 13)	29.8% (n = 36)	33.3% (n = 42)
Mostly D's and F's	42.3% (n = 22)	59.3% (n = 35)	43.0% (n = 52)	31.0% (n = 39)

## Ohio Scales

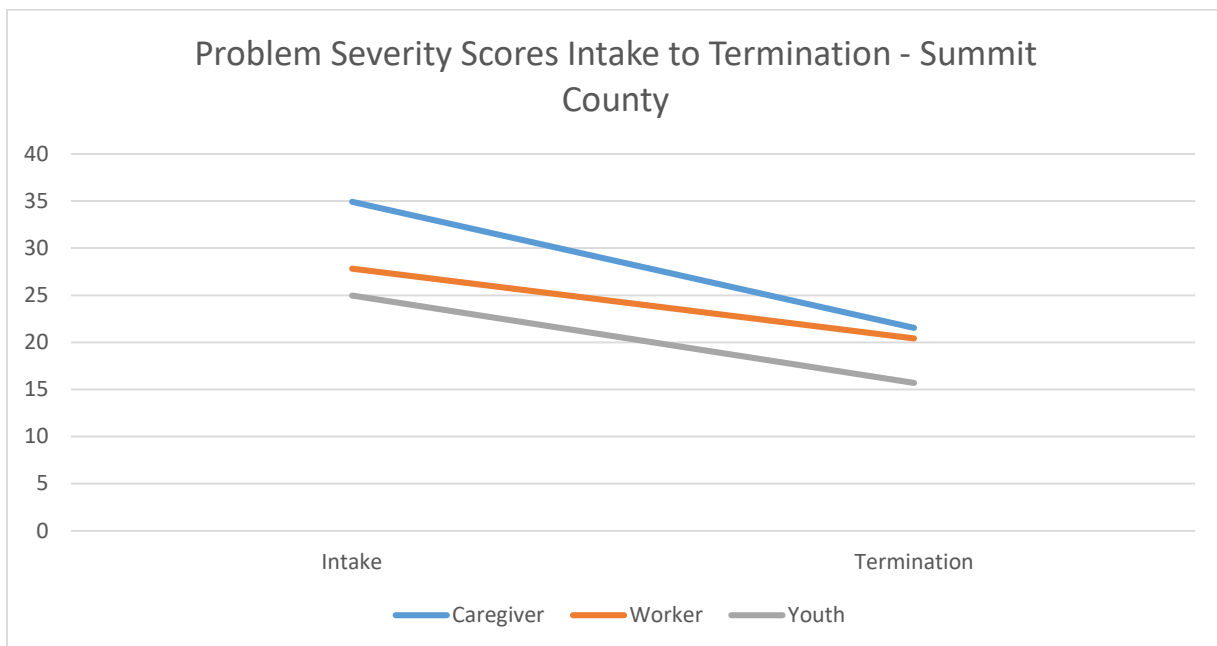
One of the main measures in the data collection packet was the Ohio Scales. The Ohio Scales were completed by the youth, caregiver, and worker at intake and then every three months following intake until termination from services. Because termination can occur at any point in time along the continuum 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 three-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

Means from intake to termination are presented in Figure 100.

Figure 100



### Caregiver Rating

Paired samples t-tests revealed significant improvements in Problem Severity at both measurement intervals between intake and three months and between intake and termination (see Table 251). Significant improvements were noted at three months:  $t(87) = 3.70$ ,  $p < .001$  at termination  $t(106) = 3.79$ ,  $p < .001$  with small effect sizes.

Table 251. Paired Samples T-Tests for Problem Severity - Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	22.57 (SD=17.40; n=88)	16.97 (SD=14.27; n=88)	3.70***	.39
<b>Intake to Termination</b>	22.20 (SD=16.67; n=107)	16.26 (SD=15.18; n=107)	3.79***	.37

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

### Worker Ratings

Workers reported statistically significant improvements in Problem Severity scores from intake to three months  $t(136) = 3.62$ ,  $p < .001$  and from intake to termination  $t(170) = 6.00$ ,  $p < .001$  with moderate effect sizes (see Table 252).

Table 252. Paired Samples T-Tests for Problem Severity – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	22.50 (SD=12.09; n=137)	18.97 (SD=9.47; n=137)	3.62***	.31
<b>Intake to Termination</b>	22.66 (SD=12.31; n=171)	17.07 (SD=9.59; n=171)	6.00***	.46

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

### Youth Ratings

Youth ratings on the Problem Severity scores indicated statistically significant improvements in Problem Severity scores for the periods between intake and three months  $t(132) = 1.99$ ,  $p < .05$  and intake and termination  $t(158) = 6.10$ ,  $p < .001$  (see Table 253). A moderate effect size was noted for the period between intake and termination while a small effect size was found for the period between intake and three months.

Table 253. Paired Samples T-Tests for Problem Severity – Youth

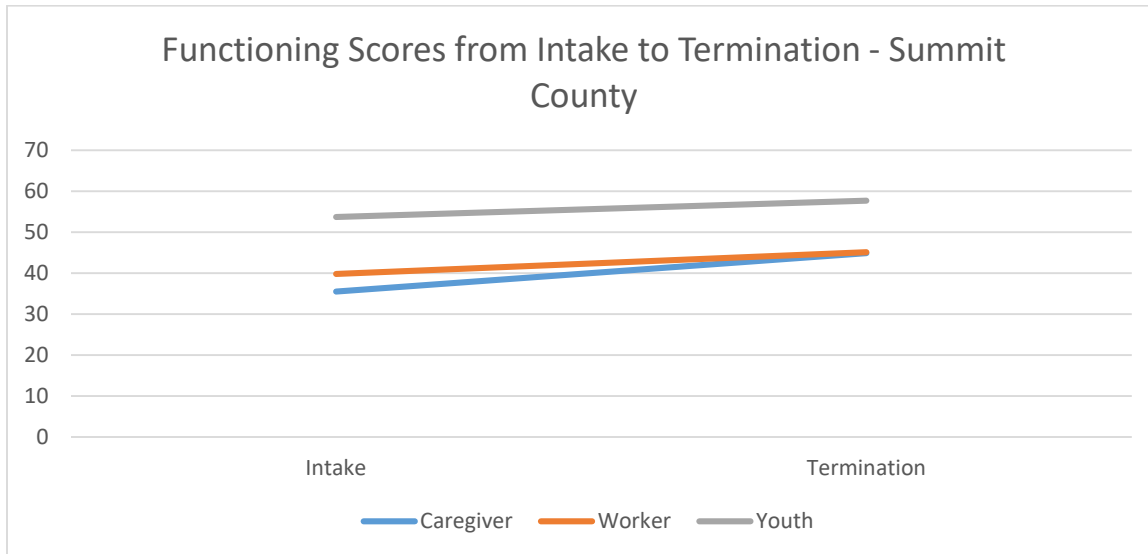
	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	16.68 (SD=13.15; n=133)	14.51 (SD=12.17; n=133)	1.99*	.17
<b>Intake to Termination</b>	17.08 (SD=14.68; n=159)	10.60 (SD=9.06; n=159)	6.10***	.48

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

## Functioning

Means for the Functioning scale by rater and assessment period can be found in Figure 101.

Figure 101



### Caregiver Ratings

Caregivers reported a statistically significant improvement in Functioning scores for the period between intake and three months  $t(88) = -2.98$ ,  $p < .01$  with a small effect size (see Table 254).

Table 254. Paired Samples T-Tests for Functioning Scores – Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	45.59 (SD=17.62; n=89)	50.36 (SD=16.99; n=89)	-2.98**	.31
<b>Intake to Termination</b>	46.71 (SD=17.33; n=109)	49.54 (SD=19.45; n=109)	-1.60	.15

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

### Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Functioning from intake to three months  $t(136) = -2.00$ ,  $p < .05$  and intake and termination  $t(171) = -4.17$ ,  $p < .001$  with small effect sizes. (see Table 255).

Table 255. Paired Samples T-Tests for Functioning Scores – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	43.46 (SD=11.52; n=137)	45.34 (SD=11.29; n=137)	-2.00*	.17
<b>Intake to Termination</b>	43.63 (SD=11.64; n=172)	47.42 (SD=12.43; n=172)	-4.17***	.32

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

## Youth Ratings

Paired samples t-tests conducted on youth reported Functioning scores indicated a statistically significant improvement between intake and three months  $t(131) = -2.22, p < .05$  with a small effect size (see Table 256).

Table 256. Paired Samples T-Tests for Functioning Scores – Youth

	Mean Time 1	Mean Time 2	t	d
Intake to Three Months	60.26 (SD=11.97; n=132)	62.79 (SD=11.51; n=132)	-2.22*	.19
Intake to Termination	60.87 (SD=12.41; n=161)	62.40 (SD=15.73; n=161)	-1.19	.09

\* < .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, including violence exposure (0.78), violence perpetration (0.75), and 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 37.0% of the BHJJ sample knew someone who was murdered in the past year (see Table 257).

Table 257. Prevalence of Self-Reported Violent Victimization

	<b>% Yes BHJJ Sample (n = 29)</b>	<b>% Yes National Sample</b>
<b>In the last year, did someone threaten to hurt you when you thought they might really do it?</b>	41.4%	14.4% <sup>a</sup>
<b>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?</b>	10.7%	1.9% <sup>b</sup>
<b>In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?</b>	20.7%	2.8% <sup>b</sup>
<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?</b>	58.6%	16.6% <sup>a</sup>
<b>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?</b>	13.8%	5.7% <sup>a</sup>
<b>In the last year, did anyone hit or attack you WITHOUT using an object or weapon?</b>	51.7%	17.7% <sup>a</sup>
<b>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?</b>	31.0%	21.8% <sup>a</sup>
<b>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?</b>	0.0%	0.3% <sup>b</sup>
<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?</b>	0.0%	1.2% <sup>b</sup>
<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?</b>	10.3%	3.3% <sup>b</sup>
<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?</b>	48.3%	12.8% <sup>a</sup>
<b>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?</b>	44.8%	29.0% <sup>a</sup>
<b>In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?</b>	37.0%	5.4% <sup>a</sup>
<b>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?</b>	20.6%	9.7% <sup>a</sup>
<b>Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?</b>	13.7%	5.6% <sup>a</sup>



<b>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?</b>	13.7%	1.4% <sup>b</sup>
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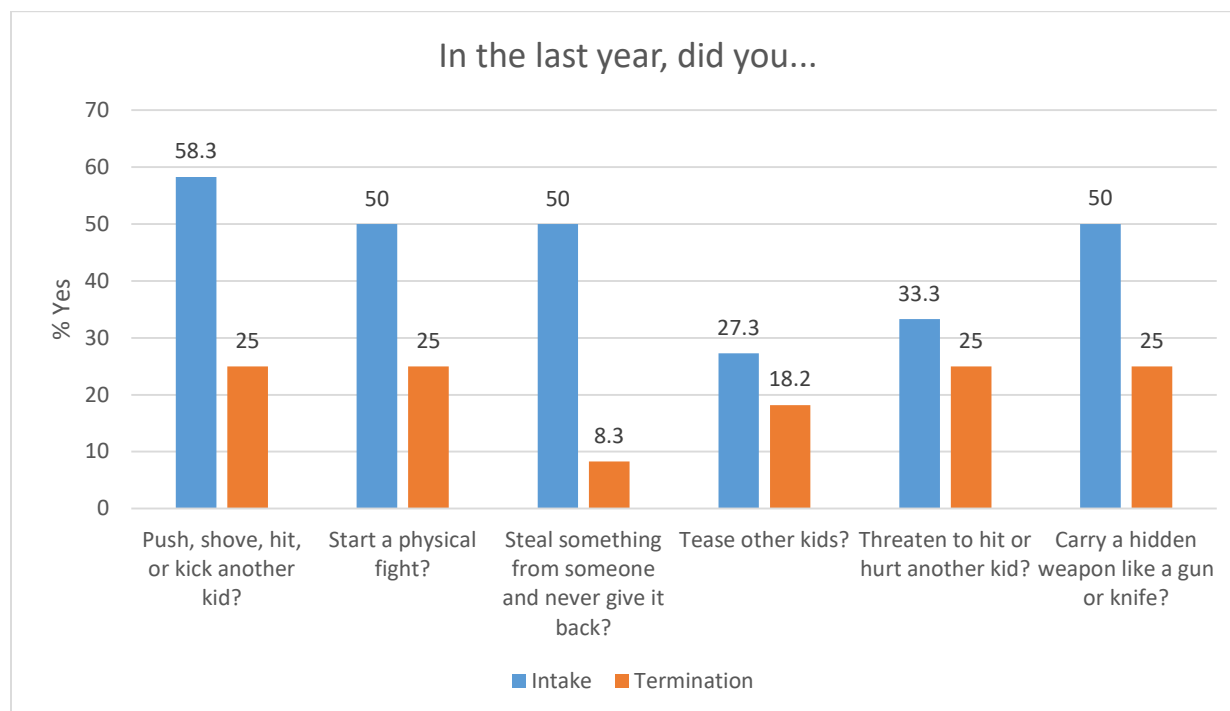
<sup>a</sup> Calculated from the raw National Survey of Children Exposed to Violence (NATSCEV) data. <sup>b</sup> Obtained from Finkelhor, D., Hamby, S.L., Ormrod, R., & Turner, H. (2005). The Juvenile Victimization Questionnaire: Reliability, validity, and national norms. *Child Abuse and Neglect*, 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 VDAQ. 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 less delinquency at termination than intake (see Figure 102). For example, at intake, 50.0% of youth reported starting a physical fight in the past year. At termination, 25.0% of youth had started a fight since intake into BHJJ. Due to a low sample size (n = 12), McNemar’s tests revealed no statistically significant improvements from intake to termination on any item.

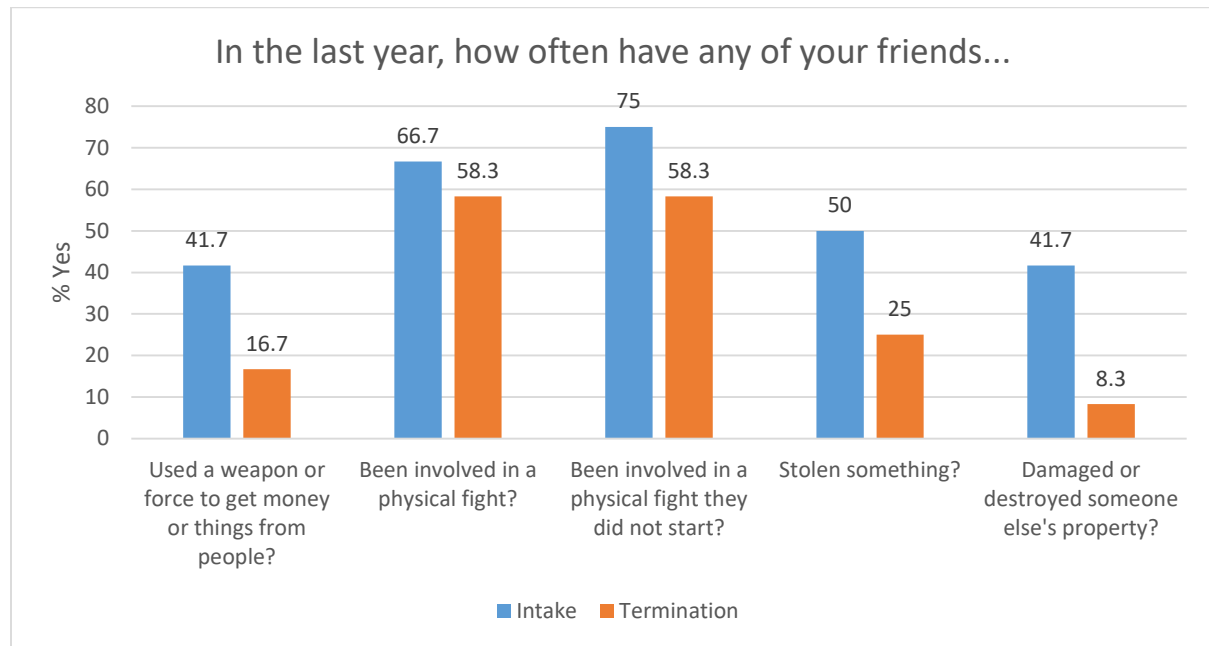
Figure 102



## Peer delinquency

Youth also reported less peer delinquency at termination than intake (see Figure 103). For example, at intake, 50.0% of youth reported that at least one of their friends had stolen something. At termination from BHJJ, 25.0% of youth reported that at least one of their friends had stolen something. Due to a low sample size ( $n = 12$ ), McNemar's tests revealed no statistically significant improvements from intake to termination for any item.

Figure 103



## 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 29.9% ( $n = 86$ ) 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.

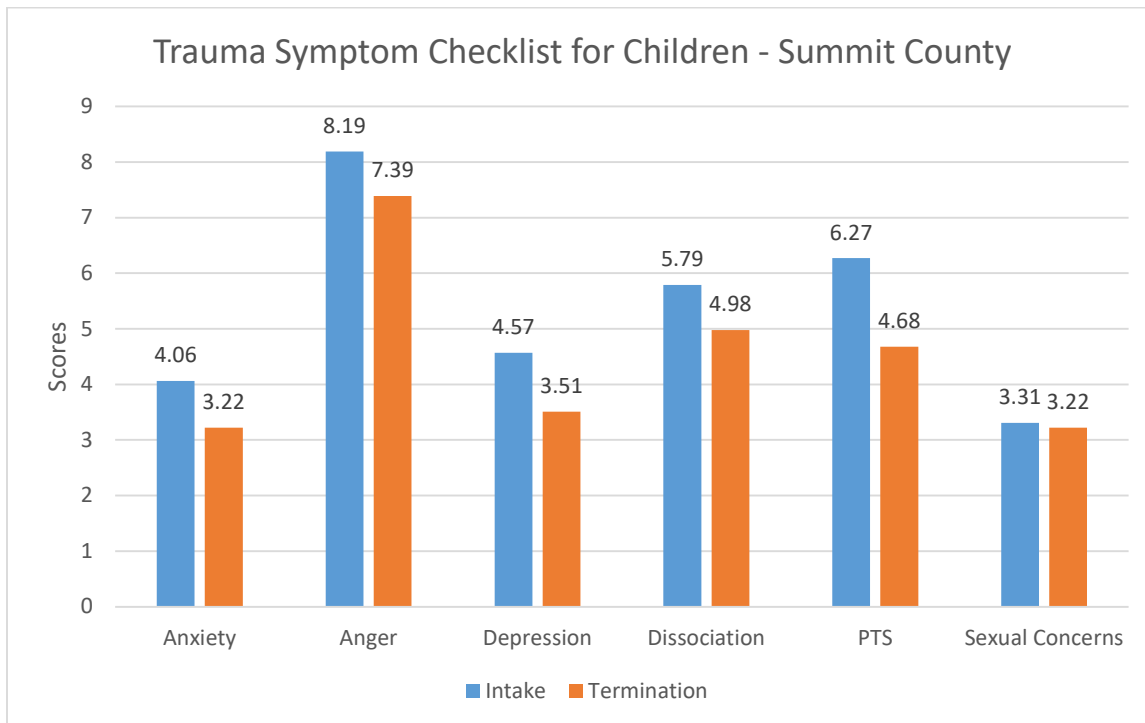
Overall, results from paired samples t-tests indicated that there were significant symptom reductions on the Anxiety, Depression, and Posttraumatic stress subscales from intake to termination (see Table 258 and Figure 104). Considering Cohen’s (1988) established cutoffs, small effects were found for the Anxiety, Depression, Posttraumatic stress, and Dissociation subscales. 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 258. TSCC Subscales from Intake to Termination

	Intake	Termination	t	d
<b>Anxiety</b>	4.06 (SD=4.03; n=87)	3.22 (SD=3.05; n=87)	2.40**	.27
<b>Depression</b>	4.57 (SD=4.14; n=87)	4.51 (SD=3.15; n=87)	2.60**	.29
<b>Anger</b>	8.19 (SD=5.30; n=86)	7.39 (SD=4.77; n=86)	1.60	.17
<b>Posttraumatic Stress</b>	6.27 (SD=5.20; n=87)	4.68 (SD=4.07; n=87)	3.07**	.34
<b>Dissociation</b>	5.79 (SD=4.52; n=87)	4.98 (SD=4.28; n=87)	1.96	.21
<b>Sexual Concerns</b>	3.31 (SD=3.35; n=87)	3.22 (SD=3.39; n=87)	0.23	.03

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

Figure 104



## TSCC and Gender

Research has found that females typically 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, females reported significantly more trauma symptoms for each subscale. For example, at intake, the average score on the Depression domain was 8.8 for females and 3.7 for males (see Figure 105 and Figure 106). For females, paired samples t-tests indicated significant improvements in trauma symptoms for the Anxiety, Depression, and Posttraumatic stress subscales. For males, paired samples t-tests indicated significant improvement in trauma symptoms for the Posttraumatic stress subscale.

Figure 105

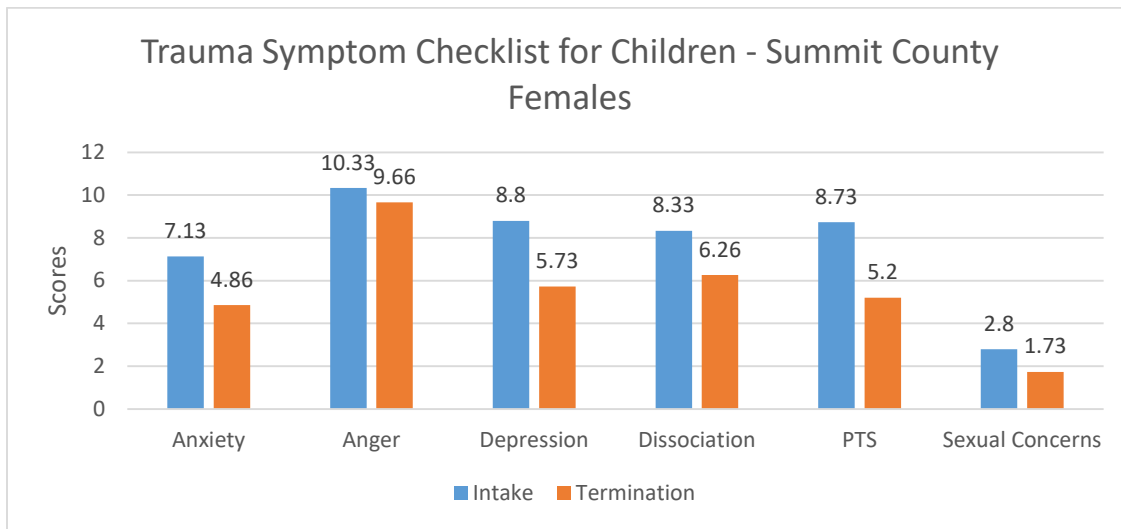
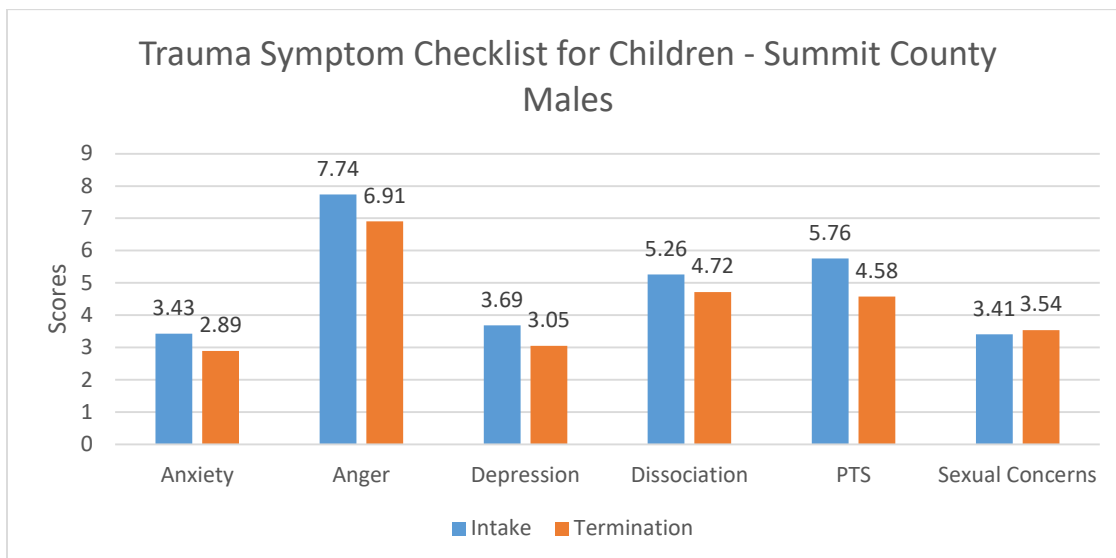


Figure 106



## 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 259 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 females than males reported cocaine use. At intake, one male (0.5%) reported ever using heroin.

Table 259. Self-Reported Substance Use at Intake

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
<b>Alcohol</b>	73.0% (n = 146)	13.35 (SD = 2.07)	72.6% (n = 45)	13.60 (SD = 1.53)
<b>Cigarettes</b>	58.8% (n = 113)	12.85 (SD = 2.25)	56.5% (n = 35)	12.83 (SD = 1.84)
<b>Chewing Tobacco</b>	7.6% (n = 15)	13.40 (SD = 2.06)	3.2% (n = 2)	14.50 (SD = 2.12)
<b>Marijuana</b>	88.0% (n = 176)	13.26 (SD = 5.31)	78.7% (n = 48)	13.06 (SD = 1.87)
<b>Cocaine</b>	3.0% (n = 6)	14.20 (SD = 1.64)	11.6% (n = 7)**	14.71 (SD = 1.11)
<b>Pain Killers (use inconsistent with prescription)</b>	11.9% (n = 24)	14.09 (SD = 1.07)	14.8% (n = 9)	14.11 (SD = 1.54)
<b>GHB</b>	0.5% (n = 1)	14.00 <sup>a</sup>	0	N/A
<b>Inhalants</b>	2.5% (n = 5)	13.50 (SD = 1.34)	0	N/A
<b>Heroin</b>	0.5% (n = 1)	14.00 <sup>a</sup>	0	N/A
<b>Amphetamines</b>	2.0% (n = 4)	14.75 (SD = 0.96)	1.6% (n = 1)	14.00
<b>Ritalin (use inconsistent with prescription)</b>	6.0% (n = 12)	14.22 (SD = 1.56)	9.8% (n = 6)	14.60 (SD = 1.52)
<b>Barbiturates</b>	2.5% (n = 5)	14.60 (SD = 1.14)	4.9% (n = 3)	14.33 (SD = 0.58)
<b>Non-prescription Drugs</b>	13.7% (n = 27)	14.40 (SD = 1.26)	13.1% (n = 8)	14.63 (SD = 1.06)
<b>Hallucinogens</b>	6.0% (n = 12)	14.73 (SD = 1.42)	1.6% (n = 1)	16.00 <sup>a</sup>
<b>PCP</b>	1.5% (n = 3)	14.50 (SD = 0.71)	0	N/A
<b>Ketamine</b>	0.5% (n = 1)	14.00 <sup>a</sup>	0	N/A
<b>Ecstasy</b>	10.4% (n = 21)	14.26 (SD = 0.93)	9.8% (n = 6)	14.17 (SD = 1.17)
<b>Tranquilizers</b>	11.6% (n = 23)	14.41 (SD = 1.30)	13.1% (n = 8)	14.13 (SD = 1.25)

\*\*  $p < .01$ , <sup>a</sup>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 107 and Figure 108 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 marijuana, and females reported a

decrease in alcohol and cigarette use. McNemar’s tests showed a significant decrease from intake to termination in six-month marijuana use for females.

For females, 48.8% (n = 21) reported past six-month use at intake while 40.9% (n = 9) reported past six-month alcohol use at termination. Over 80% of females (82.9%, n = 29) reported past six-month cigarette use at intake. At termination, 78.9% (n = 15) of females reported past six-month cigarette use.

Past six-month marijuana use declined from 64.0% (n = 110) at intake to 58.7% (n = 61) at termination for males and 66.7% (n = 110) at intake and 43.5% (n = 10) at termination for females.

Figure 107

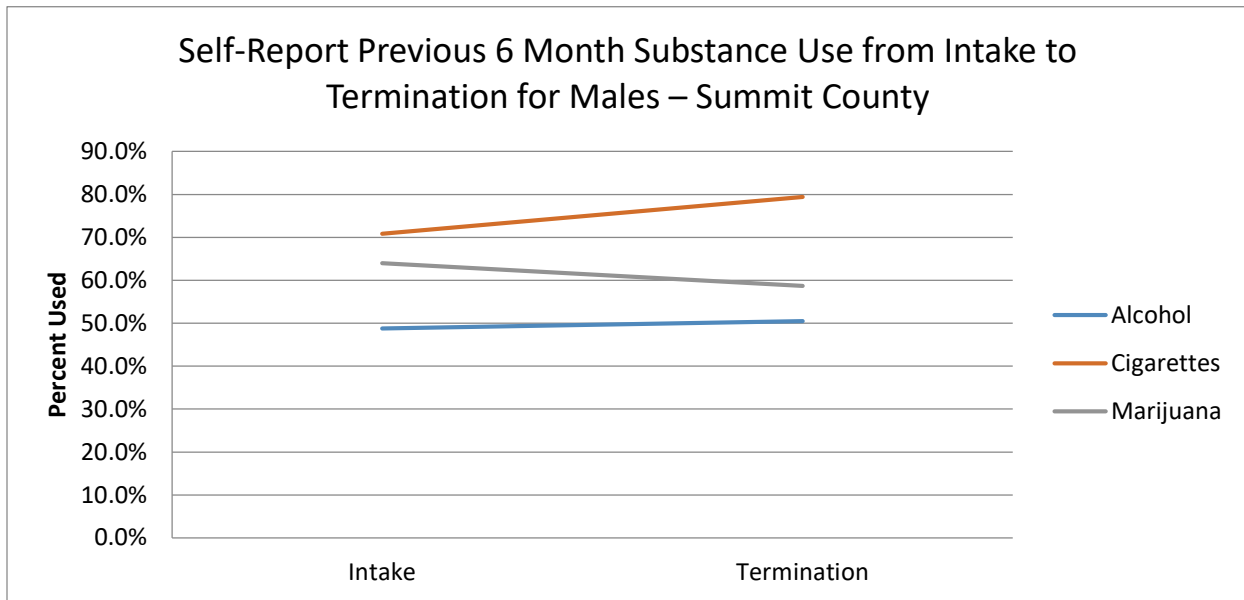
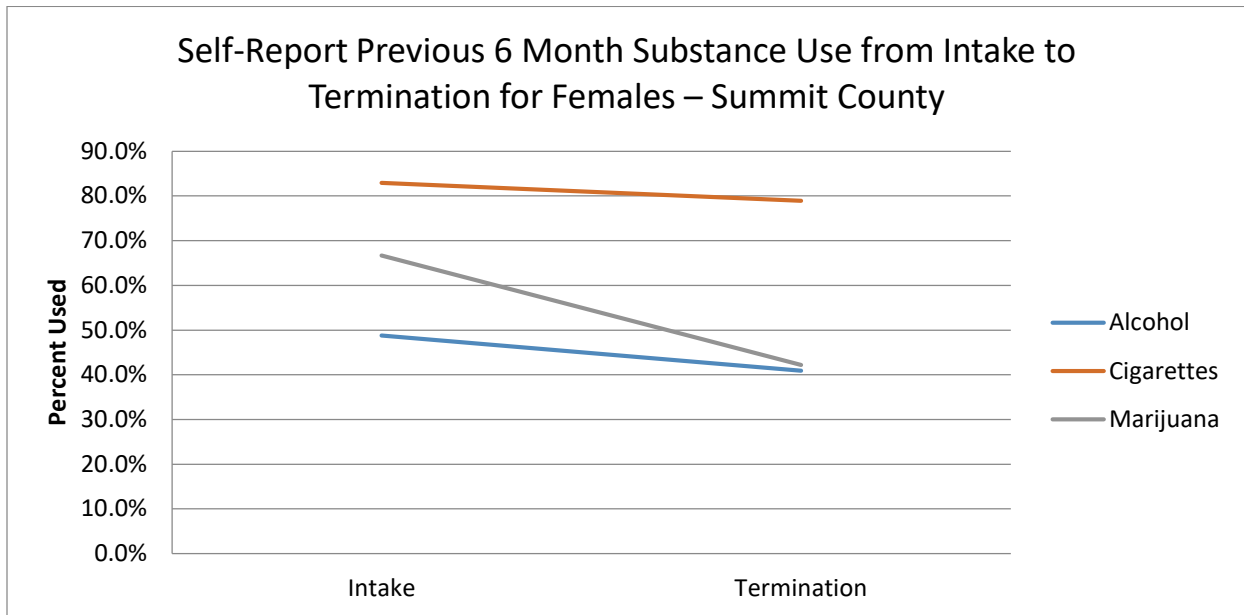


Figure 108



### 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 109 and Figure 110 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. Marijuana use decreased for males. Alcohol use among males decreased from 1.32 days (SD = 2.33; n = 50) at intake to 1.00 day (SD = 2.18; n = 31) at termination. Among females, alcohol use decreased from 1.93 days at intake (SD = 2.37; n = 15) to 1.33 days (SD = 1.97; n = 6) at termination. For marijuana, males reported using for an average of 6.67 days (SD = 12.70; n = 84) out of the past 30 days at intake and 4.73 days (SD = 8.50; n = 37) at termination.

Figure 109

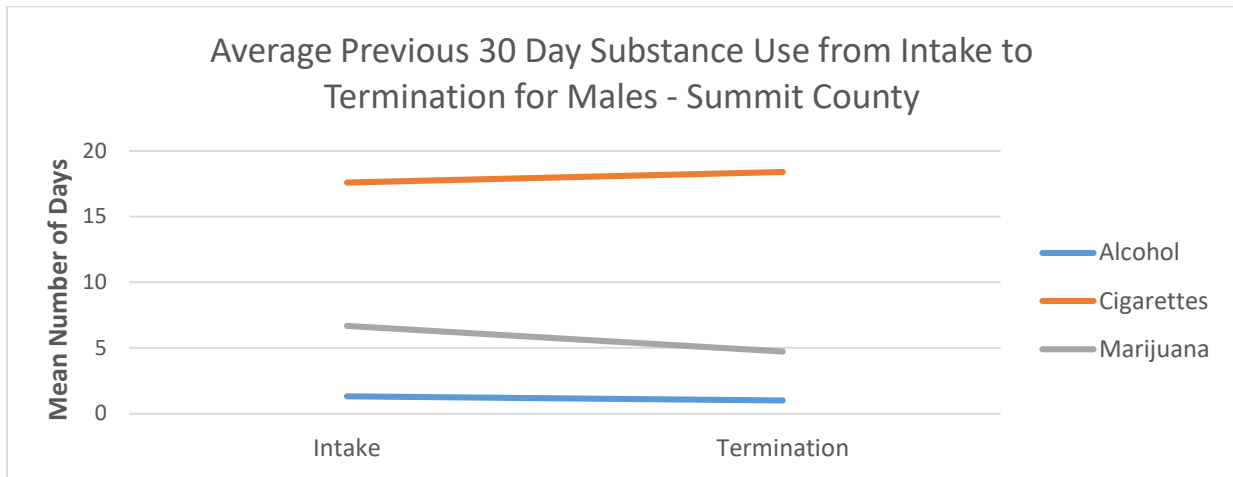
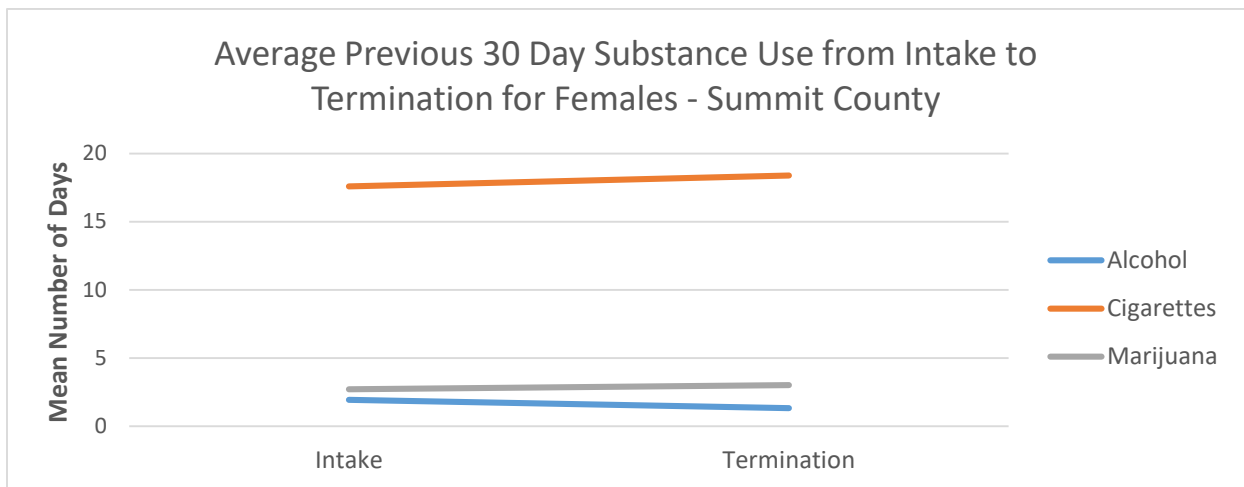


Figure 110



## 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.

To date, there have been 202 youth terminated from the BHJJ program in Summit County. Over 68% (68.3%, n = 138) of the youth terminated from the BHJJ program were identified as successful treatment completers. In Summit County, 2.5% (n = 5) were withdrawn from the program and 8.4% (n = 17) were terminated from the program due to an out of home placement. Table 260 presents all of the reasons for termination from BHJJ.



In the latest evaluation period that began July 2015 and ended in June 2017, 78.9% (n = 15) of youth terminated successfully from the BHJJ program in Summit County.

Table 260. Reasons for Termination from BHJJ

Termination Reason	All Youth	Youth Enrolled from July 2015 to June 2017
<b>Successfully Completed Services</b>	68.3% (n = 138)	78.9% (n = 15)
<b>Client Did Not Return/Rejected Services</b>	3.5% (n = 7)	10.5% (n = 2)
<b>Out of Home Placement</b>	8.4% (n = 17)	5.3% (n = 1)
<b>Client/Family Moved</b>	0.5% (n = 1)	0.0% (n = 0)
<b>Client Withdrawn</b>	2.5% (n = 5)	0.0% (n = 0)
<b>Client AWOL</b>	3.5% (n = 7)	0.0% (n = 0)
<b>Client Incarcerated</b>	6.4% (n = 13)	5.3% (n = 1)
<b>Other</b>	6.9% (n = 14)	0.0% (n = 0)

## Average Length of Stay

The average length of stay for youth in the Summit County BHJJ program was 171 days. For youth identified as completing treatment successfully, the average length of stay was 187 days and for youth identified as unsuccessful treatment completers, the average length of stay was 132 days. For youth enrolled since July 1, 2015, the average length of stay in BHJJ was 173 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, 60.5% of the youth (n = 127) in Summit County were at risk for out of home placement. At termination, 43.8% (n = 88) of youth were at risk for out of home placement. Of those youth who successfully completed BHJJ treatment, 31.6% (n = 43) were at risk for out of home placement at termination while 69.8% (n = 44) 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 74.9% (n = 152) of the youth and had stayed the same for 21.2% (n = 43) of the youth. Police contacts increased for 3.0% (n = 6) of the youth. Workers were unable to estimate for 1.0% (n = 2) of youth.

## 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. Summit County no longer completes the YSSF, and therefore no new data are available to report.

## Recidivism

### Methodology

Court data were provided by the Summit 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, 85.4% (n = 228) of the BHJJ youth had misdemeanor charges, 92.1% (n = 246) had at least one felony charge, and 97.4% (n = 260) were adjudicated delinquent (see Table 261).

Previous juvenile court information is presented for youth based on BHJJ treatment completion status (successful vs. unsuccessful). In the 12 months prior to enrollment, 80.6% (n = 108) of successful completers and 100.0% (n = 130) of unsuccessful completers were adjudicated delinquent in the 12 months prior to their enrollment in BHJJ. A slightly lower percentage of successful completers had a felony charge in the 12 months prior to intake (91.0%, n = 122) than unsuccessful completers (93.1%, n = 54).

Table 261. Charges Prior to BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	49.1% (n = 131)	55.8% (n = 149)	70.8% (n = 189)	44.0% (n = 59)	53.7% (n = 72)	67.9% (n = 91)	46.6% (n = 27)	56.9% (n = 33)	72.4% (n = 42)
<b>6 months</b>	71.5% (n = 191)	79.4% (n = 212)	91.4% (n = 244)	65.7% (n = 88)	76.9% (n = 103)	91.0% (n = 122)	82.8% (n = 48)	82.8% (n = 48)	91.4% (n = 53)
<b>12 months</b>	85.4% (n = 228)	92.1% (n = 246)	97.4% (n = 260)	80.6% (n = 108)	91.0% (n = 122)	97.0% (n = 130)	94.8% (n = 55)	93.1% (n = 54)	100.0% (n = 130)
<b>18 months</b>	88.0% (n = 235)	94.8% (n = 253)	98.5% (n = 263)	84.3% (n = 113)	94.8% (n = 127)	98.5% (n = 132)	96.6% (n = 56)	94.8% (n = 55)	100.0% (n = 58)

## 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, 69.5% (n = 162) of youth were charged with at least one new misdemeanor and 43.8% (n = 102) were charged with at least one new felony. Seventy percent (70.4%, n = 164) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 262).

In the 12 months after enrollment in BHJJ 63.6% (n = 77) of successful completers were charged with at least one new misdemeanor, 36.4% (n = 44) were charged with at least one new felony, and 62.0% (n = 75) were adjudicated delinquent. Of the youth who completed unsuccessfully, 78.2% (n = 43) were charged with at least one new misdemeanor, 58.2% (n = 32) were charged with at least one new felony, and 87.3% (n = 48) were adjudicated delinquent in the 12 months after their enrollment in BHJJ.

Table 262. Charges After BHJJ Enrollment

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	33.3% (n = 80)	17.1% (n = 41)	37.1% (n = 89)	26.0% (n = 33)	10.2% (n = 913)	29.9% (n = 38)	50.0% (n = 27)	25.9% (n = 14)	59.3% (n = 32)
<b>6 months</b>	52.1% (n = 124)	26.9% (n = 64)	54.2% (n = 129)	42.1% (n = 53)	17.5% (n = 22)	44.4% (n = 56)	64.3% (n = 36)	41.1% (n = 23)	73.2% (n = 41)
<b>12 months</b>	69.5% (n = 162)	43.8% (n = 102)	70.4% (n = 164)	63.6% (n = 77)	36.4% (n = 44)	62.0% (n = 75)	78.2% (n = 43)	58.2% (n = 32)	87.3% (n = 48)
<b>18 months</b>	81.7% (n = 183)	51.3% (n = 115)	83.0% (n = 186)	81.0% (n = 94)	44.8% (n = 52)	79.3% (n = 92)	82.7% (n = 43)	67.3% (n = 35)	92.3% (n = 48)

## 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, 75.3% (n = 143) of youth were charged with at least one new misdemeanor, 44.2% (n = 84) were charged with at least one new felony, and 75.3% (n = 143) were adjudicated delinquent (see Table 263).

In the 12 months following their termination from BHJJ, 71.4% (n = 75) of successful completers were charged with at least one new misdemeanor, 37.1% (n = 39) were charged with at least one new felony, and 69.5% (n = 73) were adjudicated delinquent. Of the youth who completed unsuccessfully, 68.8% (n = 33) were charged with at least one new misdemeanor, 50.0% (n = 24) were charged with at least one new felony, and 77.1% (n = 37) were adjudicated delinquent in the 12 months after their termination from BHJJ.

Table 263. Charges After Termination from BHJJ

	Overall			Successful			Unsuccessful		
	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	32.2% (n = 59)	16.4% (n = 30)	31.7% (n = 58)	23.0% (n = 26)	13.3% (n = 15)	24.8% (n = 28)	35.8% (n = 19)	15.1% (n = 8)	32.1% (n = 17)
<b>6 months</b>	52.4% (n = 99)	30.7% (n = 58)	53.4% (n = 101)	43.1% (n = 47)	22.9% (n = 25)	42.2% (n = 46)	55.8% (n = 29)	28.8% (n = 15)	59.6% (n = 31)
<b>12 months</b>	75.3% (n = 143)	44.2% (n = 84)	75.3% (n = 143)	71.4% (n = 75)	37.1% (n = 39)	69.5% (n = 73)	68.8% (n = 33)	50.0% (n = 24)	77.1% (n = 37)
<b>18 months</b>	83.9% (n = 156)	52.2% (n = 97)	83.3% (n = 155)	81.0% (n = 81)	44.0% (n = 44)	79.0% (n = 79)	80.4% (n = 37)	63.0% (n = 29)	87.0% (n = 40)

## 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 175 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, 45.1% (n = 79) were charged with a new felony in the 12 months after their termination from BHJJ.

Twenty-eight of the 267 BHJJ youth (10.5%) from Summit County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.

## Trumbull County

### Demographics

Trumbull County has enrolled 47 youth in the BHJJ program since 2013. Of the 47 youth enrolled, 40.4% (n = 19) were female and 59.6% (n = 28) were male. Since July 2015, 47.6% (n = 10) of new enrollees have been male (see Table 264).

The majority of the overall sample of youth were either Caucasian (57.4%, n = 27) or African American (25.5%, n = 12). Similarly, Caucasians and African Americans constituted 85.7% of youth enrolled since 2015. The average age of the youth at intake into BHJJ was 14.87 years old (SD = 1.551) with a range between 11.8 and 17.6 years.

Table 264. Demographic Information for BHJJ Youth

	All Youth Enrolled (2013 - 2017)	Youth Enrolled between July 2015 – June 2017
<b>Gender</b>	Female = 40.4% (n = 19)	Female = 52.4% (n = 11)
	Male = 59.6% (n = 28)	Male = 47.6% (n = 10)
<b>Race</b>	African American = 25.5% (n = 12)	African American = 23.8% (n = 5)
	Caucasian = 57.4% (n = 27)	Caucasian = 61.9% (n = 13)
	Other = 11.4% (n = 4)	Other = 14.3% (n = 3)
<b>Age at Intake</b>	14.87 years (SD = 1.51)	14.47 years (SD = 1.22)

### Custody Arrangement and Household Information

At intake, the majority of youth lived with the biological mother (46.5%, n = 20) (see Table 265). At time of enrollment, 74.4% (n = 32) of the BHJJ youth lived with at least one biological parent.

Over 80% of the BHJJ caregivers (83.3%, n = 35) had at least a high school diploma or GED, and 19.0% (n = 8) had a bachelor's degree or higher (see Table 266). Seven caregivers (16.7%) reported that they did not graduate from high school.

Caregivers reported their annual household income. The median household income for BHJJ families was between \$15,000 - \$19,999 (see Table 267). Seventy percent of caregivers (n = 28) reported annual household incomes below \$35,000 and 50.0% (n = 20) reported an annual household income below \$20,000. Twenty percent of BHJJ families (n = 8) reported an annual household income below \$10,000.

Table 265. Custody Arrangement for BHJJ Youth

<b>Custody</b>	<b>BHJJ Youth</b>
<b>Two Biological Parents or One Biological and One Step or Adoptive Parent</b>	16.3% (n=7)
<b>Biological Mother Only</b>	46.5% (n=20)
<b>Biological Father Only</b>	11.6% (n=5)
<b>Adoptive Parent(s)</b>	7.0% (n=3)
<b>Aunt/Uncle</b>	4.7% (n=2)
<b>Grandparents</b>	9.3% (n=4)
<b>Other</b>	4.7% (n=2)

Table 266. Educational Outcomes for Caregivers of BHJJ Youth

<b>Number of School Years Completed</b>	<b>Number of Caregivers</b>
<b>Less than High School</b>	16.7% (n=7)
<b>High School Graduate or G.E.D.</b>	33.3% (n=14)
<b>Some College or Associate Degree</b>	31.0% (n=13)
<b>Bachelor's Degree</b>	7.1% (n=3)
<b>More than a Bachelor's Degree</b>	11.9% (n=5)

Table 267. Annual Household Income for BHJJ Families

<b>Annual Household Income</b>	<b>BHJJ Families</b>
<b>Less than \$5,000</b>	12.5% (n=5)
<b>\$5,000 - \$9,999</b>	7.5% (n=3)
<b>\$10,000 - \$14,999</b>	27.5% (n=11)
<b>\$15,000 - \$19,999</b>	2.5% (n=1)
<b>\$20,000 - \$24,999</b>	17.5% (n=7)
<b>\$25,000 - \$34,999</b>	2.5% (n=1)
<b>\$35,000 - \$49,999</b>	12.5% (n=5)
<b>\$50,000 - \$74,999</b>	12.5% (n=5)
<b>\$75,000 - \$99,999</b>	0.0% (n=0)
<b>\$100,000 and over</b>	5.0% (n=2)



## 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 (see Table 268). While Chi-square analysis was conducted on each item, there were no significant differences partly due to a small sample. Caregivers reported that 23.5% (n = 4) of females and 30.8% (n = 8) of males had a history of being physically abused while 35.3% (n = 6) of females and 15.4% (n = 4) of males had a history of being sexually abused. Caregivers of 56.3% (n = 9) of females and 50.0% (n = 13) of males reported hearing the child talking about committing suicide and 25.0% (n = 4) of females and 28.0% (n = 7) of males had attempted suicide at least once. Over half of the caregivers of females (86.7%, n = 13) and males (66.7%, n = 16) reported a family history of depression.

Table 268. Youth and Family History

Question	Females	Males
<b>Has the child ever been physically abused?</b>	23.5% (n=4)	30.8% (n=8)
<b>Has the child ever been sexually abused?</b>	35.3% (n=6)	15.4% (n=4)
<b>Has the child ever run away?</b>	47.1% (n=8)	61.5% (n=16)
<b>Has the child ever had a problem with substance abuse, including alcohol and/or drugs?</b>	17.6% (n=3)	42.3% (n=11)
<b>Has the child ever talked about committing suicide?</b>	56.3% (n=9)	50.0% (n=13)
<b>Has the child ever attempted suicide?</b>	25.0% (n=4)	28.0% (n=7)
<b>Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?</b>	35.3% (n=6)	42.3% (n=11)
<b>Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?</b>	86.7% (n=13)	66.7% (n=16)
<b>Has anyone in the child's biological family had a mental illness, other than depression?</b>	66.7% (n=10)	50.0% (n=12)
<b>Has the child ever lived in a household in which someone was convicted of a crime?</b>	29.4% (n=5)	52.0% (n=13)
<b>Has anyone in the child's biological family had a drinking or drug problem?</b>	62.5% (n=10)	52.0% (n=13)
<b>Is the child currently taking any medication related to his/her emotional or behavioral symptoms?</b>	47.1% (n=8)	30.8% (n=8)

## 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 (100% and 100% respectively) (see Table 269). Chi-square analysis indicated females had significantly higher rates of problems related to depression.

Table 269. Problems Leading to Services

Problems Leading to Services	Females	Males
Adjustment-related problems	11.1% (n = 2)	4.0% (n = 1)
Anxiety-related problems	33.3% (n = 6)	12.0% (n = 3)
Conduct/delinquency-related problems	100% (n = 18)	100% (n = 25)
Depression-related problems	44.4% (n = 8)*	12.0% (n = 3)
Eating disorders	11.1% (n = 2)	0
Hyperactive and attention-related problems	16.7% (n = 3)	20.0% (n = 5)
Learning disabilities	11.1% (n = 2)	0
Pervasive development disabilities	0	0
Psychotic behaviors	0	0
School performance problems not related to learning disabilities	55.6% (n = 10)	48.0% (n = 12)
Specific developmental disabilities	0	0
Substance use, abuse, dependence-related problems	27.8% (n = 5)	40.0% (n = 10)
Suicide-related problems	33.3% (n = 6)	12.0% (n = 3)

\* < .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 270 shows the distribution of OYAS categories for BHJJ youth by gender and race. Due to some small cell sizes, we did not conduct a Chi-squared test to examine whether differences were statistically significant.

Table 270. OYAS Risk Categories by Gender and Race

	OYAS Low	OYAS Moderate	OYAS High
Female	40.0% (n = 4)	20.0% (n = 2)	40.0% (n = 4)
Male	11.8% (n = 2)	52.9% (n = 9)	35.3% (n = 6)
White	14.3% (n = 2)	57.1% (n = 8)	28.6% (n = 4)
Nonwhite	30.8% (n = 4)	23.1% (n = 3)	46.2% (n = 6)

## 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 females and males was Oppositional Defiant Disorder (see Table 271). Twelve percent (12.5%, n = 3) of males and 16.7% (n = 3) of females were identified as having both a DSM mental health diagnosis and a substance use diagnosis.

Table 271. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
<b>Adjustment Disorder</b>	0	0
<b>Alcohol-related Disorders</b>	0	0
<b>Attention Deficit Hyperactivity Disorder (ADHD)</b>	11.1% (n = 2)	29.2% (n = 7)
<b>Bipolar Disorder</b>	5.6% (n = 1)	0
<b>Cannabis-related Disorders</b>	16.7% (n = 3)	12.5% (n = 3)
<b>Conduct Disorder</b>	16.7% (n = 3)	20.8% (n = 5)
<b>Depressive Disorders</b>	5.6% (n = 1)	4.2% (n = 1)
<b>Disruptive Behavior Disorder</b>	0	0
<b>Mood Disorder</b>	33.3% (n = 6)	12.5% (n = 3)
<b>Oppositional Defiant Disorder</b>	50.0% (n = 9)	66.7% (n = 16)
<b>Post-traumatic Stress Disorder</b>	22.2% (n = 4)	12.5% (n = 3)

\* < .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 fifty-three percent (53.6%, n = 22) were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in treatment with BHJJ, 29.6% (n = 8) 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, 94.4% (n = 34) of youth were currently attending school while at termination, 88.0% (n = 22) 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 272 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 273 displays this information based on completion status. At intake, 15.2% of youth were earning mostly A's and B's and 30.0% were earning mostly D's and F's. At termination from BHJJ, 16.0% of youth were earning mostly A's and B's and 16.0% were earning mostly D's and F's.

At termination, workers reported that 48.1% (n = 13) of youth were attending school more than before starting treatment and 37.0% (n = 10) of youth were attending school ‘about the same’ amount compared to before starting treatment. Workers reported that 3.7% (n = 1) were attending school less often than before treatment in BHJJ. At termination, 32.0% (n = 8) of the youth attending school had Individualized Education Plans (IEPs).

Table 272. Academic Performance

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A’s and B’s	15.2% (n = 5)	16.0% (n = 4)
Mostly B’s and C’s	27.3% (n = 9)	44.0% (n = 11)
Mostly C’s and D’s	27.3% (n = 9)	24.0% (n = 6)
Mostly D’s and F’s	30.3% (n = 10)	16.0% (n = 4)

Table 273. Academic Performance for Youth by Completion Status

Typical Grades	Unsuccessful Completers		Successful Completers	
	Frequency at Intake	Frequency at Termination	Frequency at Intake	Frequency at Termination
Mostly A’s and B’s	0	0	25.0% (n = 4)	17.4% (n = 4)
Mostly B’s and C’s	0	0	31.3% (n = 5)	47.8% (n = 11)
Mostly C’s and D’s	0	0	25.0% (n = 4)	26.1% (n = 6)
Mostly D’s and F’s	100% (n = 1)	100% (n = 2)	18.8% (n = 3)	8.7% (n = 2)

## 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.

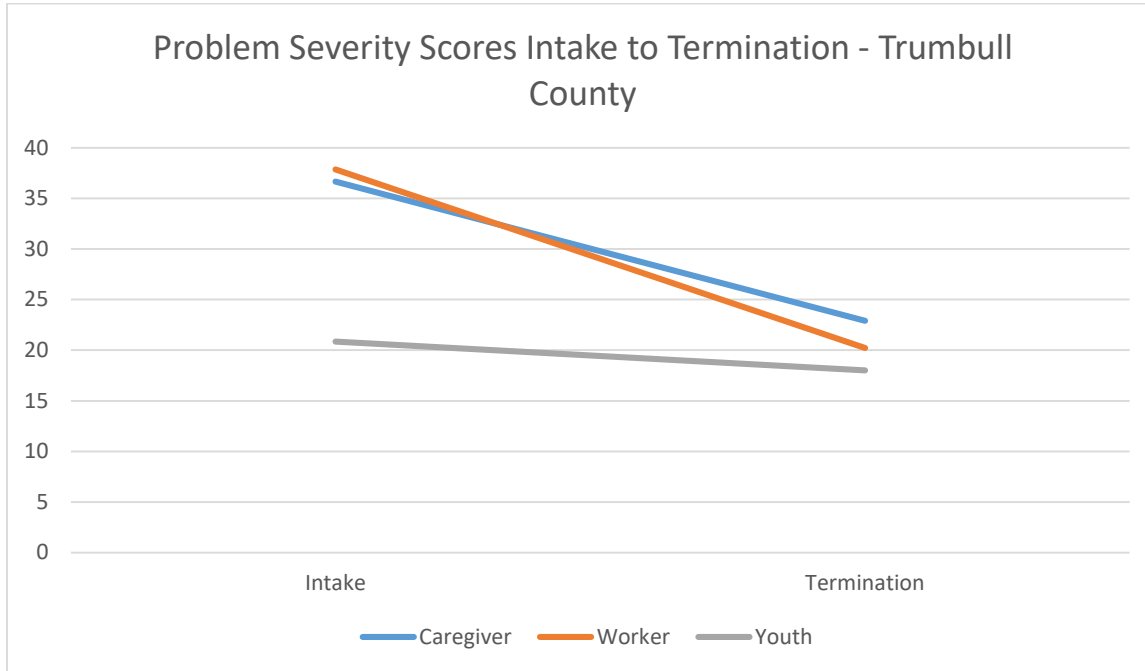
All Problem Severity and Functioning analyses were conducted on assessment periods with enough valid cases to produce meaningful results. While we received some data at three months, there were not enough cases to report. Therefore, results for Trumbull county will be limited to intake and termination data.

Paired samples t-tests were used to compare Problem Severity scores at intake to Problem Severity scores at termination. 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 termination to be included in the analysis. If the caregiver only has an intake score, his or her data is not included.

## Problem Severity

Means for the Problem Severity scale by rater between intake and termination can be found in Figure 111.

Figure 111



### Caregiver Rating

Caregiver reports indicated significant improvement in Problem Severity scores from intake to termination  $t(20) = 3.42$ ,  $p < .01$  with a moderate effect size (see Table 274).

Table 274. Paired Samples T-Tests for Problem Severity - Caregiver

	Mean Time 1	Mean Time 2	<i>t</i>	<i>d</i>
<b>Intake to Termination</b>	36.66 (SD=15.02; n=21)	22.91 (SD=14.43; n=21)	3.42**	.75

\*  $< .05$ , \*\*  $< .01$ , \*\*\*  $< .001$

### Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Problem Severity scores from intake to termination  $t(22) = 7.30$ ,  $p < .001$  with a large effect size (see Table 275).

Table 275. Paired Samples T-Tests for Problem Severity – Worker

	Mean Time 1	Mean Time 2	<i>t</i>	<i>d</i>
<b>Intake to Termination</b>	37.87 (SD=13.20; n=23)	20.22 (SD=8.89; n=23)	7.30***	1.53

\*  $< .05$ , \*\*  $< .01$ , \*\*\*  $< .001$

### Youth Ratings

Youth reported no significant improvement in Problem Severity scores from intake to termination (see Table 276).

Table 276. Paired Samples T-Tests for Problem Severity – Youth

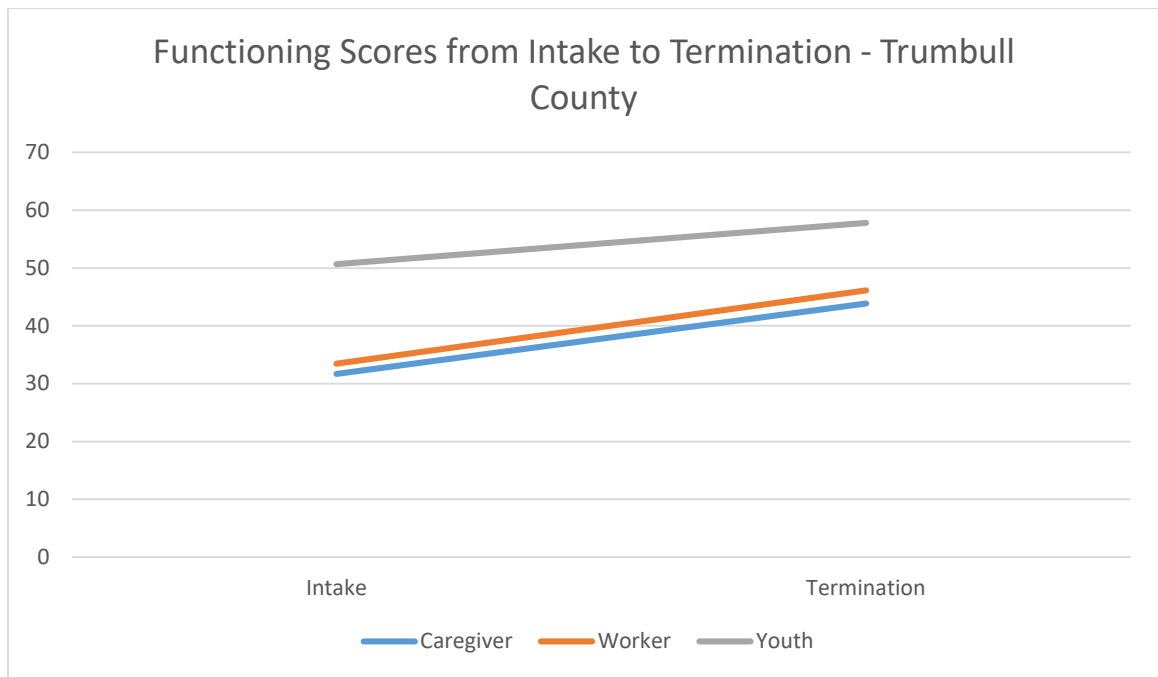
	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	20.86 (SD=14.99; n=20)	18.01 (SD=12.72; n=20)	0.98	.22

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

### Functioning

Means for the Functioning scale by rater between intake and termination can be found in Figure 112.

Figure 112



### Caregiver Ratings

Paired samples t-tests revealed significant improvements in Functioning scores from intake to termination  $t(21) = -3.34$ ,  $p < .01$  with a moderate effect (see Table 277).

Table 277. Paired Samples T-Tests for Functioning Scores – Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	31.68 (SD=12.83; n=22)	43.86 (SD=14.28; n=22)	-3.34**	.71

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

### Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Functioning scores from intake to termination  $t(22) = -6.15$ ,  $p < .001$  with a large effect (see Table 278).

Table 278. Paired Samples T-Tests for Functioning Scores – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	33.48 (SD=7.97; n=23)	46.13 (SD=9.88; n=23)	-6.15***	1.28

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

### Youth Ratings

Youth reported significant improvements from intake to termination in Functioning scores  $t(19) = -2.15$ ,  $p < .05$  with a small effect (see Table 279).

Table 279. Paired Samples T-Tests for Functioning Scores – Youth

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Termination</b>	50.65 (SD=16.85; n=20)	57.80 (SD=13.84; n=20)	-2.15*	.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, including violence exposure (0.78), violence perpetration (0.75), and peer delinquency (0.85) demonstrated acceptable internal consistency.

Due to sample size limitations, we are only able to present the outcomes for the exposure to violence domain. In addition to the BHJJ data, we also 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).

## 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, 5.7% of the national sample and 52.2% of the BHJJ sample reported being attacked with a weapon in the past year (see Table 280).

Table 280. Prevalence of Self-Reported Violent Victimization

	<b>% Yes BHJJ Sample (n = 23)</b>	<b>% Yes National Sample</b>
<b>In the last year, did someone threaten to hurt you when you thought they might really do it?</b>	52.2%	14.4% <sup>a</sup>
<b>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?</b>	17.3%	1.9% <sup>b</sup>
<b>In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?</b>	13.0%	2.8% <sup>b</sup>
<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?</b>	59.6%	16.6% <sup>a</sup>
<b>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?</b>	52.2%	5.7% <sup>a</sup>
<b>In the last year, did anyone hit or attack you WITHOUT using an object or weapon?</b>	52.2%	17.7% <sup>a</sup>
<b>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?</b>	52.2%	21.8% <sup>a</sup>
<b>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?</b>	0.0%	0.3% <sup>b</sup>
<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?</b>	4.3%	1.2% <sup>b</sup>
<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?</b>	43.4%	3.3% <sup>b</sup>
<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?</b>	45.5%	12.8% <sup>a</sup>
<b>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?</b>	50.0%	29.0% <sup>a</sup>
<b>In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?</b>	13.0%	5.4% <sup>a</sup>



<b>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?</b>	56.5%	9.7% <sup>a</sup>
<b>Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?</b>	59.1%	5.6% <sup>a</sup>
<b>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?</b>	22.7%	1.4% <sup>b</sup>

<sup>a</sup> Calculated from the raw National Survey of Children Exposed to Violence (NATSCEV) data. <sup>b</sup> 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.

### Self-reported and Peer Delinquency

Due to low sample sizes, we are unable to present the comparisons between intake and termination for both self-reported and peer delinquency.

### 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 underendorsement 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 17.0% (n = 8) 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.

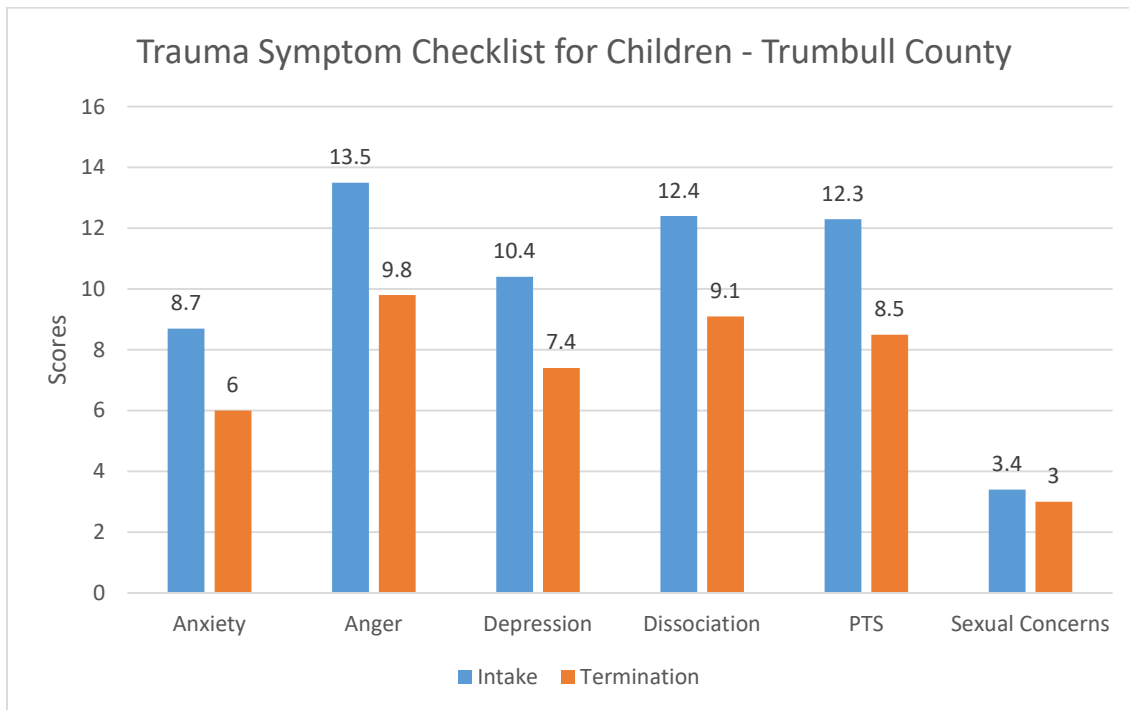
Overall, results from paired samples t-tests indicated that there was a significant symptom reduction on the Anger subscale from intake to termination (see Table 281 and Figure 113). Considering Cohen’s (1988) established cutoffs, moderate effects were found for every subscale except Sexual Concerns. 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 281. TSCC Subscales from Intake to Termination

	Intake	Termination	t	d
<b>Anxiety</b>	8.70 (SD=3.94; n=10)	6.00 (SD=3.80; n=10)	2.22	.71
<b>Depression</b>	10.40 (SD=6.34; n=10)	7.40 (SD=4.40; n=13)	1.93	.54
<b>Anger</b>	13.50 (SD=5.70; n=10)	9.80 (SD=6.21; n=10)	2.35*	.75
<b>Posttraumatic Stress</b>	12.30 (SD=7.02; n=10)	8.50 (SD=6.51; n=10)	1.89	.60
<b>Dissociation</b>	12.40 (SD=8.19; n=10)	9.10 (SD=4.79; n=10)	1.68	.59
<b>Sexual Concerns</b>	3.40 (SD=3.62; n=10)	3.00 (SD=2.00; n=10)	0.36	.12

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

Figure 113



### TSCC and Gender

Due to low sample size, we were unable to examine trauma symptoms by gender.

## 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 282 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 and marijuana use. No youth in Trumbull County reported ever using heroin.

Table 282. Self-Reported Substance Use at Intake

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
<b>Alcohol</b>	68.0% (n = 17)	12.06 (SD = 2.03)	50.0% (n = 9)	13.11 (SD = 2.03)
<b>Cigarettes</b>	62.5% (n = 15)	13.14 (SD = 1.35)	38.9% (n = 7)	12.07 (SD = 2.97)
<b>Chewing Tobacco</b>	29.2% (n = 7)*	13.29 (SD = 1.38)	0	N/A
<b>Marijuana</b>	75.0% (n = 18)*	12.94 (SD = 1.71)	38.9% (n = 7)	13.29 (SD = 1.38)
<b>Cocaine</b>	0	N/A	5.6% (n = 1)	16.00 <sup>a</sup>
<b>Pain Killers (use inconsistent with prescription)</b>	18.2% (n = 4)	14.50 (SD = 0.71)	11.1% (n = 2)	11.33 (SD = 1.53)
<b>GHB</b>	0	N/A	0	N/A
<b>Inhalants</b>	8.3% (n = 2)	14.00 <sup>a</sup>	5.6% (n = 1)	15.00 (SD = .00)
<b>Heroin</b>	0	N/A	0	N/A
<b>Amphetamines</b>	0	N/A	0	N/A
<b>Ritalin (use inconsistent with prescription)</b>	8.3% (n = 2)	15.00 <sup>a</sup>	5.6% (n = 1)	14.00 <sup>a</sup>
<b>Barbiturates</b>	0	N/A	0	N/A
<b>Non-prescription Drugs</b>	4.2% (n = 1)	14.00 <sup>a</sup>	5.6% (n = 1)	14.00 (SD = 0.00)
<b>Hallucinogens</b>	4.0% (n = 1)	16.00 <sup>a</sup>	11.1% (n = 2)	16.00 (SD = 0.00)
<b>PCP</b>	0	N/A	0	N/A
<b>Ketamine</b>	0	N/A	0	N/A
<b>Ecstasy</b>	0	N/A	5.6% (n = 1)	16.00 <sup>a</sup>
<b>Tranquilizers</b>	4.2% (n = 1)	16.00 <sup>a</sup>	0	N/A

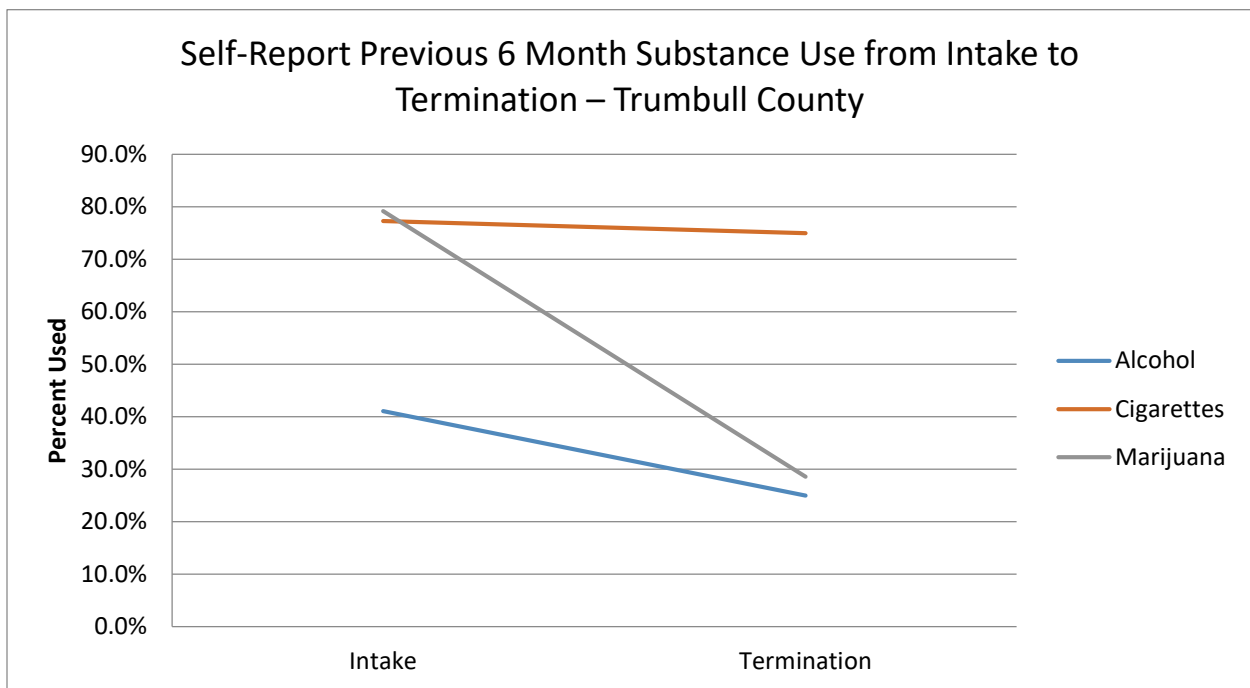
\* $p < .05$ , <sup>a</sup>Standard deviations are not available for averages with one only case

### Six-Month Substance Use

Youth were also asked whether they had used each substance in the past six months. Figure 114 presents past six-month use for the most commonly reported substances for youth among those who reported lifetime use of each specific substance. Youth reported a decrease in six-month use with respect to the most commonly used substances.

The percentage of youth using alcohol in the past six months dropped from 41.1% (n = 9) to 25.0% (n = 2) from intake to termination. Over 75% of youth (77.3%, n = 17) reported past six-month cigarette use at intake. At termination, 75.0% of males (n = 6) reported past six-month cigarette use. Past six-month marijuana use declined from 79.2% (n = 15) at intake to 28.6% (n = 6) at termination.

Figure 114



## 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 27 youth terminated from the BHJJ program in Trumbull County. All but three (88.9%, n = 24) of the youth terminated from the BHJJ program were identified as successful treatment completers. Table 283 presents all of the reasons for termination from BHJJ.

In the latest evaluation period that began July 2015 and ended in June 2017, 84.6% (n = 11) of youth terminated successfully from the BHJJ program in Trumbull County.

Table 283. Reasons for Termination from BHJJ

Termination Reason	All Youth	Youth Enrolled from July 2015 to June 2017
Successfully Completed Services	88.9% (n = 24)	84.6% (n = 11)
Client Did Not Return/Rejected Services	3.7% (n = 1)	7.7% (n = 1)
Out of Home Placement	0.0% (n = 0)	0.0% (n = 0)
Client/Family Moved	0.0% (n = 0)	0.0% (n = 0)
Client Withdrawn	0.0% (n = 0)	0.0% (n = 0)
Client AWOL	3.7% (n = 1)	7.7% (n = 1)
Client Incarcerated	3.7% (n = 1)	0.0% (n = 0)
Other	0.0% (n = 0)	0.0% (n = 0)

## Average Length of Stay

The average length of stay for youth in the Trumbull County BHJJ program was 144 days. For youth enrolled since July 1, 2015, the average length of stay in BHJJ was 145 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, 89.5% of the youth (n = 34) in Trumbull County were at risk for out of home placement. At termination, 23.1% (n = 6) of youth 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

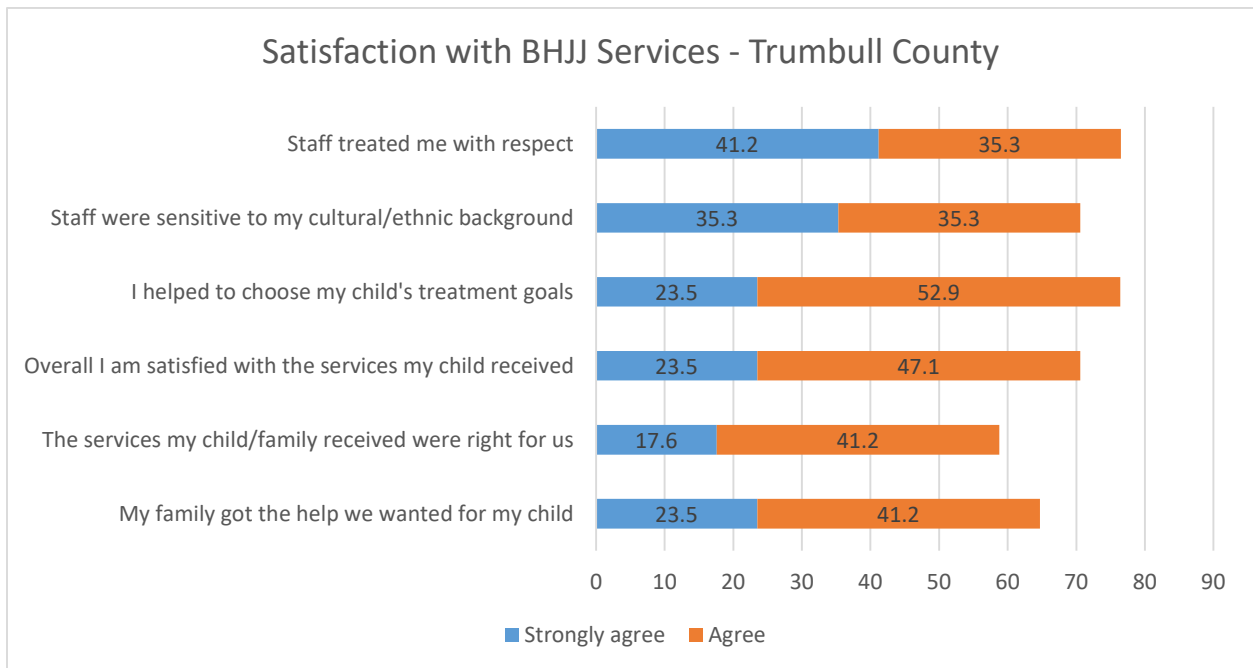
police contacts have been reduced for 77.8% (n = 21) of the youth and had stayed the same for 18.5% (n = 5) of the youth. Police contacts increased for 3.7% (n = 1) of the youths.

### 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, 70.6% (n = 12) of caregivers either strongly agreed or agreed that they were satisfied with the services their child received and 58.8% (n = 10) either strongly agreed or agreed that the services their child and/or family received were right for them (see Figure 115). A majority (76.5%, n = 13) of caregivers either strongly agreed or agreed that staff treated them with respect and 70.6% (n = 12) indicated that they strongly agreed or agreed with the statement that they were satisfied with the cultural and ethnic sensitivity of BHJJ staff.

Figure 115



## Recidivism

### Methodology

Court data were provided by the Trumbull 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, 72.5% (n = 29) of the BHJJ youth had misdemeanor charges, 15.0% (n = 6) had at least one felony charge, and 65.0% (n = 26) were adjudicated delinquent (see Table 284).

Table 284. Charges Prior to BHJJ Enrollment

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	47.5% (n = 19)	7.5% (n = 3)	42.5% (n = 17)
<b>6 months</b>	55.0% (n = 22)	8.5% (n = 4)	50.0% (n = 20)
<b>12 months</b>	72.5% (n = 29)	15.0% (n = 6)	65.0% (n = 26)
<b>18 months</b>	72.5% (n = 29)	15.0% (n = 6)	65.0% (n = 26)

### 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, 57.6% (n = 19) of youth were charged with at least one new misdemeanor and 18.2% (n = 6) were charged with at least one new felony. Forty-five percent (45.5%, n = 15) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 285).

Table 285. Charges After BHJJ Enrollment

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	22.2% (n = 8)	11.1% (n = 4)	16.7% (n = 6)
<b>6 months</b>	36.1% (n = 13)	11.1% (n = 4)	27.8% (n = 10)
<b>12 months</b>	57.6% (n = 19)	18.2% (n = 6)	45.5% (n = 15)
<b>18 months</b>	75.0% (n = 21)	28.6% (n = 8)	60.7% (n = 17)



## 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, 69.2% (n = 18) of youth were charged with at least one new misdemeanor, 19.2% (n = 5) were charged with at least one new felony, and 50.0% (n = 13) were adjudicated delinquent (see Table 286).

Table 286. Charges After Termination from BHJJ

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	44.8% (n = 13)	3.4% (n = 1)	31.0% (n = 9)
<b>6 months</b>	50.0% (n = 14)	10.7% (n = 3)	35.7% (n = 10)
<b>12 months</b>	69.2% (n = 18)	19.2% (n = 5)	50.0% (n = 13)
<b>18 months</b>	81.8% (n = 18)	22.7% (n = 5)	59.1% (n = 13)

## 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 5 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, 20.0% (n = 1) was charged with a new felony in the 12 months after their termination from BHJJ.

One of the 40 BHJJ youth (2.5%) from Trumbull County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.

## Wayne County

### Demographics

Wayne County has enrolled 25 youth in the BHJJ program since 2013. Of the 25 youth enrolled, 32.0% (n = 8) were female and 68.0% (n = 17) were male. Since July 2015, 77.8% (n = 7) of new enrollees have been male (see Table 287).

The majority of the overall sample of youth were either Caucasian (79.2%, n = 19) or African American (12.5%, n = 3). Similarly, Caucasians and African Americans constituted 77.8% of youth enrolled since 2015. The average age of the youth at intake into BHJJ was 14.96 years old (SD = 1.75) with a range between 10.6 and 17.3 years.

Table 287. Demographic Information for BHJJ Youth

	All Youth Enrolled (2013 - 2017)	Youth Enrolled between July 2015 – June 2017
<b>Gender</b>	Female = 32.0% (n = 8)	Female = 22.2% (n = 2)
	Male = 68.0% (n = 17)	Male = 77.8% (n = 7)
<b>Race</b>	African American = 12.5% (n = 3)	African American = 22.2% (n = 2)
	Caucasian = 79.2% (n = 19)	Caucasian = 55.6% (n = 5)
	Other = 8.3% (n = 2)	Other = 22.2% (n = 2)
<b>Age at Intake</b>	14.96 years (SD = 1.75)	14.55 years (SD = 2.35)

### Custody Arrangement and Household Information

At intake, the majority of youth lived with the biological mother (45.5%, n = 10) (see Table 288). At time of enrollment, 77.3% (n = 17) of the BHJJ youth lived with at least one biological parent.

Over 80% of the BHJJ caregivers (81.0%, n = 17) had at least a high school diploma or GED, and 19.1% (n = 4) had a bachelor's degree or higher (see Table 289). Four caregivers (19.0%) 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 - \$24,999 (see Table 290). Nearly 70% of caregivers (69.2%, n = 15) reported annual household incomes below \$35,000 and 45.4% (n = 10) reported an annual household income below \$20,000. Nine percent of BHJJ families (n = 2) reported an annual household income below \$10,000.

Table 288. Custody Arrangement for BHJJ Youth

<b>Custody</b>	<b>BHJJ Youth</b>
<b>Two Biological Parents or One Biological and One Step or Adoptive Parent</b>	13.6% (n=3)
<b>Biological Mother Only</b>	45.5% (n=10)
<b>Biological Father Only</b>	18.2% (n=4)
<b>Adoptive Parent(s)</b>	13.6% (n=3)
<b>Aunt/Uncle</b>	4.5% (n=1)
<b>Grandparents</b>	0.0% (n=0)
<b>Other</b>	4.5% (n=1)

Table 289. Educational Outcomes for Caregivers of BHJJ Youth

<b>Number of School Years Completed</b>	<b>Number of Caregivers</b>
<b>Less than High School</b>	19.0% (n=4)
<b>High School Graduate or G.E.D.</b>	52.4% (n=11)
<b>Some College or Associate Degree</b>	9.5% (n=2)
<b>Bachelor's Degree</b>	14.3% (n=3)
<b>More than a Bachelor's Degree</b>	4.8% (n=1)

Table 290. Annual Household Income for BHJJ Families

<b>Annual Household Income</b>	<b>BHJJ Families</b>
<b>Less than \$5,000</b>	4.5% (n=1)
<b>\$5,000 - \$9,999</b>	4.5% (n=1)
<b>\$10,000 - \$14,999</b>	18.2% (n=4)
<b>\$15,000 - \$19,999</b>	18.2% (n=4)
<b>\$20,000 - \$24,999</b>	9.1% (n=2)
<b>\$25,000 - \$34,999</b>	13.6% (n=3)
<b>\$35,000 - \$49,999</b>	13.6% (n=3)
<b>\$50,000 - \$74,999</b>	13.6% (n=3)
<b>\$75,000 - \$99,999</b>	4.5% (n=1)
<b>\$100,000 and over</b>	0.0% (n=0)

## 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 (see Table 291). Caregivers reported that 14.3% (n = 1) of females and 26.7% (n = 4) of males had a history of being physically abused while 57.1% (n = 4) of females and 6.7% (n = 1) of males had a history of being sexually abused. Caregivers of 85.7% (n = 6) of females and 28.6% (n = 4) of males reported hearing the child talking about committing suicide and 42.9% (n = 3) of females and 20.0% (n = 3) of males had attempted suicide at least once. A majority of the caregivers of females (71.4%, n = 5) and males (86.7%, n = 13) reported a family history of depression.

Table 291. Youth and Family History

Question	Females	Males
<b>Has the child ever been physically abused?</b>	14.3% (n=1)	26.7% (n=4)
<b>Has the child ever been sexually abused?</b>	57.1% (n=4)	6.7% (n=1)
<b>Has the child ever run away?</b>	71.4% (n=5)	40.0% (n=6)
<b>Has the child ever had a problem with substance abuse, including alcohol and/or drugs?</b>	71.4% (n=5)	60.0% (n=9)
<b>Has the child ever talked about committing suicide?</b>	85.7% (n=6)	28.6% (n=4)
<b>Has the child ever attempted suicide?</b>	42.9% (n=3)	20.0% (n=3)
<b>Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?</b>	71.4% (n=5)	40.0% (n=6)
<b>Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?</b>	71.4% (n=5)	86.7% (n=13)
<b>Has anyone in the child's biological family had a mental illness, other than depression?</b>	42.9% (n=3)	50.0% (n=7)
<b>Has the child ever lived in a household in which someone was convicted of a crime?</b>	71.4% (n=5)	53.3% (n=8)
<b>Has anyone in the child's biological family had a drinking or drug problem?</b>	100.0% (n=7)	66.7% (n=10)
<b>Is the child currently taking any medication related to his/her emotional or behavioral symptoms?</b>	57.1% (n=4)	50.0% (n=6)

## 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 (100% and 100% respectively) (see Table 292).

Table 292. Problems Leading to Services

Problems Leading to Services	Females	Males
<b>Adjustment-related problems</b>	57.1% (n = 4)	40.0% (n = 6)
<b>Anxiety-related problems</b>	14.3% (n = 1)	40.0% (n = 6)
<b>Conduct/delinquency-related problems</b>	100% (n = 7)	100% (n = 15)
<b>Depression-related problems</b>	42.9% (n = 3)	20.0% (n = 3)
<b>Eating disorders</b>	0	0
<b>Hyperactive and attention-related problems</b>	14.3% (n = 1)	40.0% (n = 6)
<b>Learning disabilities</b>	14.3% (n = 1)	6.7% (n = 1)
<b>Pervasive development disabilities</b>	0	0
<b>Psychotic behaviors</b>	0	13.3% (n = 2)
<b>School performance problems not related to learning disabilities</b>	14.3% (n = 1)	53.3% (n = 8)
<b>Specific developmental disabilities</b>	14.3% (n = 1)	6.7% (n = 1)
<b>Substance use, abuse, dependence-related problems</b>	57.1% (n = 4)	46.7% (n = 7)
<b>Suicide-related problems</b>	28.6% (n = 2)	20.0% (n = 3)

\* < .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 293 shows the distribution of OYAS categories for BHJJ youth by gender and race. Due to some small cell sizes, we did not conduct a Chi-squared test to examine whether differences were statistically significant.

Table 293. OYAS Risk Categories by Gender and Race

	OYAS Low	OYAS Moderate	OYAS High
<b>Female</b>	0.0% (n = 0)	62.5% (n = 5)	37.5% (n = 3)
<b>Male</b>	37.5% (n = 6)	18.8% (n = 3)	43.8% (n = 7)
<b>White</b>	23.5% (n = 4)	35.3% (n = 6)	41.2% (n = 7)
<b>Nonwhite</b>	40.0% (n = 2)	40.0% (n = 2)	20.0% (n = 1)

## 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 females and males was Oppositional Defiant Disorder (see Table 294). Over twenty percent (21.4%, n = 3) of males and 14.3% (n = 1) of females were identified as having both a DSM mental health diagnosis and a substance use diagnosis.

Table 294. Most Common DSM Diagnoses

DSM Diagnosis	Females	Males
<b>Adjustment Disorder</b>	0	0
<b>Alcohol-related Disorders</b>	0	7.1% (n = 1)
<b>Attention Deficit Hyperactivity Disorder (ADHD)</b>	14.3% (n = 1)	21.4% (n = 3)
<b>Bipolar Disorder</b>	0	0
<b>Cannabis-related Disorders</b>	0	14.3% (n = 2)
<b>Conduct Disorder</b>	14.3% (n = 1)	7.1% (n = 1)
<b>Depressive Disorders</b>	28.6% (n = 2)	7.1% (n = 1)
<b>Disruptive Behavior Disorder</b>	0	7.1% (n = 1)
<b>Mood Disorder</b>	0	7.1% (n = 1)
<b>Oppositional Defiant Disorder</b>	85.7% (n = 6)	85.7% (n = 12)
<b>Post-traumatic Stress Disorder</b>	0	0

\* < .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 of BHJJ youth (72.7%, n = 16) were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in treatment with BHJJ, 18.8% (n = 3) 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, 100% (n = 20) of youth were currently attending school while at termination, 93.3% (n = 14) 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 295 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 296 displays this information based on completion status. At intake, 15.0% of youth were earning mostly A's and B's and 25.0% were earning mostly D's and F's. At termination from BHJJ, 13.3% of youth were earning mostly A's and B's and 6.7% were earning mostly D's and F's.

At termination, workers reported that 70.6% (n = 12) of youth were attending school more than before starting treatment and 23.5% (n = 4) of youth were attending school ‘about the same’ amount compared to before starting treatment. Workers reported that 5.9% (n = 1) were attending school less often than before treatment in BHJJ. At termination, 53.3% (n = 8) of the youth attending school had Individualized Education Plans (IEPs).

Table 295. Academic Performance

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A’s and B’s	15.0% (n = 3)	13.3% (n = 2)
Mostly B’s and C’s	35.0% (n = 7)	46.7% (n = 7)
Mostly C’s and D’s	25.0% (n = 5)	33.3% (n = 5)
Mostly D’s and F’s	25.0% (n = 5)	6.7% (n = 1)

Table 296. Academic Performance for Youth by Completion Status

Typical Grades	Unsuccessful Completers		Successful Completers	
	Frequency at Intake	Frequency at Termination	Frequency at Intake	Frequency at Termination
Mostly A’s and B’s	0	0	20.0% (n = 3)	15.4% (n = 2)
Mostly B’s and C’s	33.3% (n = 1)	0	40.0% (n = 6)	53.8% (n = 7)
Mostly C’s and D’s	33.3% (n = 1)	100% (n = 2)	20.0% (n = 3)	23.1% (n = 3)
Mostly D’s and F’s	33.3% (n = 1)	0	20.0% (n = 3)	7.7% (n = 1)

## Ohio Scales

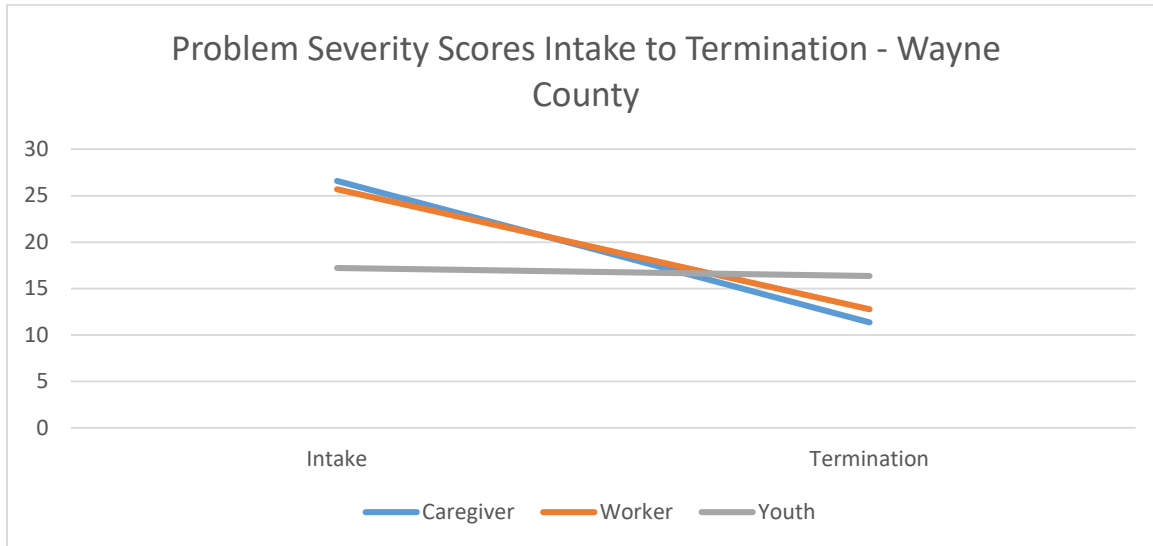
One of the main measures in the data collection packet was the Ohio Scales. The Ohio Scales were completed by the youth, caregiver, and worker at intake and then every three months following intake until termination from services. Because termination can occur at any point in time along the continuum 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 three-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

Means from intake to termination are presented in Figure 116.

Figure 116



## Caregiver Rating

Paired samples t-tests revealed significant improvements in Problem Severity at both measurement intervals (see Table 297) compared to intake. Significant improvements were noted at three months:  $t(10) = 3.29$ ,  $p < .01$  and at termination  $t(15) = 3.90$ ,  $p < .01$  with large effect sizes.

Table 297. Paired Samples T-Tests for Problem Severity - Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	31.32 (SD=17.69; n=11)	13.72 (SD=9.69; n=11)	3.29**	.99
<b>Intake to Termination</b>	26.59 (SD=17.33; n=16)	11.35 (SD=7.18; n=16)	3.90**	.99

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

## Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Problem Severity from intake to three months and to termination (see Table 298). Workers reported statistically significant improvements in Problem Severity scores from intake to three months  $t(15) = 4.28$ ,  $p < .01$  and from intake to termination  $t(16) = 4.46$ ,  $p < .001$  with large effect sizes.

Table 298. Paired Samples T-Tests for Problem Severity – Worker

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	29.06 (SD=10.63; n=16)	16.70 (SD=7.49; n=16)	4.28**	1.07
<b>Intake to Termination</b>	25.70 (SD=10.37; n=17)	12.77 (SD=7.19; n=17)	4.46***	1.08

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



### Youth Ratings

Youth reported Problem Severity scores indicated no significant improvement in the time periods from intake to three months and from intake to termination (see Table 299).

Table 299. Paired Samples T-Tests for Problem Severity – Youth

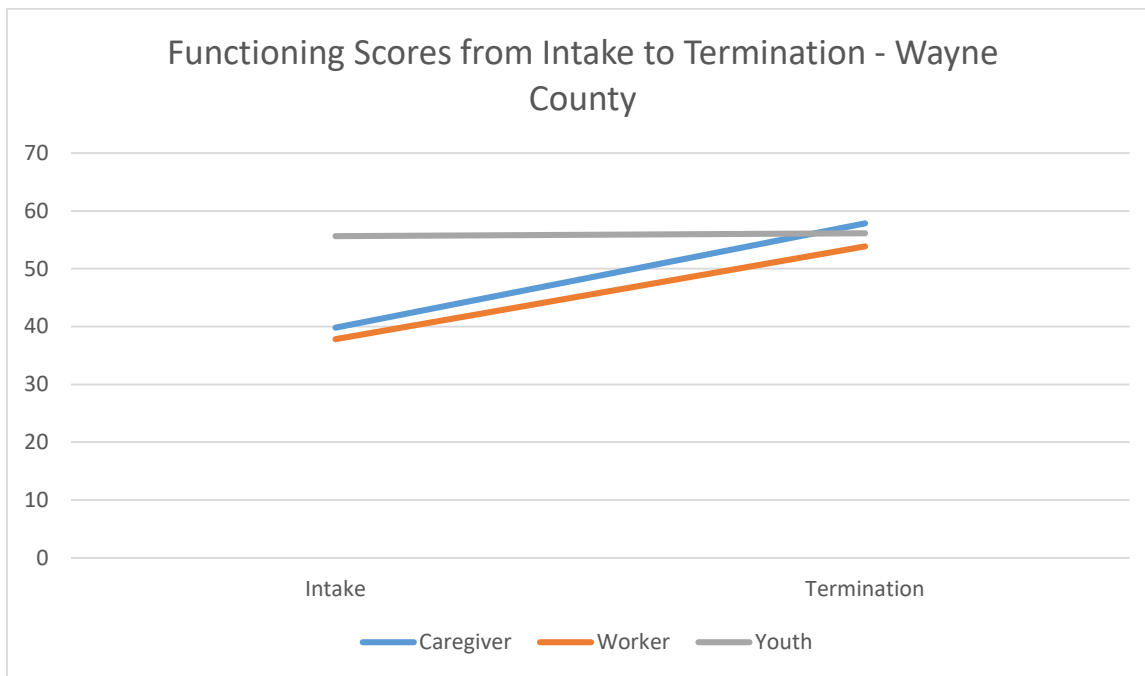
	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	21.08 (SD=12.26; n=14)	18.07 (SD=12.02; n=14)	0.86	.23
<b>Intake to Termination</b>	17.23 (SD=9.72; n=15)	16.37 (SD=13.43; n=15)	0.28	.07

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

### Functioning

Means for the Functioning scale by rater and assessment period can be found in Figure 117.

Figure 117



### Caregiver Ratings

Caregivers reported statistically significant improvement in Functioning scores for the periods between intake and three months  $t(10) = -3.51, p < .01$  and between intake and termination  $t(15) = -4.23, p < .01$  with large effect sizes (see Table 300).

Table 300. Paired Samples T-Tests for Functioning Scores – Caregiver

	Mean Time 1	Mean Time 2	t	d
<b>Intake to Three Months</b>	35.27 (SD=16.26; n=11)	53.00 (SD=10.36; n=11)	-3.51**	1.06
<b>Intake to Termination</b>	39.81 (SD=15.83; n=16)	57.87 (SD=11.78; n=16)	-4.23**	1.06

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

### Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Functioning from intake to three months  $t(14) = -4.39$ ,  $p < .01$  and intake and termination  $t(16) = -4.76$ ,  $p < .001$  with large effect sizes. (see Table 301).

Table 301. Paired Samples T-Tests for Functioning Scores – Worker

	Mean Time 1	Mean Time 2	t	d
Intake to Three Months	36.20 (SD=10.84; n=15)	46.87 (SD=8.57; n=15)	-4.39**	1.13
Intake to Termination	37.82 (SD=10.30; n=17)	53.88 (SD=9.85; n=17)	-4.76***	1.16

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

### Youth Ratings

Youth reported Functioning scores indicated no statistically significant improvement in the time periods between intake and three months and between intake and termination (see Table 302).

Table 302. Paired Samples T-Tests for Functioning Scores – Youth

	Mean Time 1	Mean Time 2	t	d
Intake to Three Months	55.21 (SD=7.50; n=14)	57.00 (SD=10.23; n=14)	-0.94	.25
Intake to Termination	55.62 (SD=10.90; n=16)	56.12 (SD=19.38; n=16)	-0.12	.03

\* < .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, including violence exposure (0.78), violence perpetration (0.75), and peer delinquency (0.85) demonstrated acceptable internal consistency.

Due to sample size limitations, we are only able to present the outcomes for the exposure to violence domain. In addition to the BHJJ data, we also 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).

## 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, 5.7% of the national sample and 50.0% of the BHJJ sample reported being attacked with a weapon in the past year (see Table 303).

Table 303. Prevalence of Self-Reported Violent Victimization

	<b>% Yes BHJJ Sample (n = 8)</b>	<b>% Yes National Sample</b>
<b>In the last year, did someone threaten to hurt you when you thought they might really do it?</b>	62.5%	14.4% <sup>a</sup>
<b>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?</b>	25.0%	1.9% <sup>b</sup>
<b>In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?</b>	25.0%	2.8% <sup>b</sup>
<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?</b>	50.0%	16.6% <sup>a</sup>
<b>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?</b>	50.0%	5.7% <sup>a</sup>
<b>In the last year, did anyone hit or attack you WITHOUT using an object or weapon?</b>	50.0%	17.7% <sup>a</sup>
<b>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?</b>	25.0%	21.8% <sup>a</sup>
<b>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?</b>	0.0%	0.3% <sup>b</sup>
<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?</b>	0.0%	1.2% <sup>b</sup>
<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?</b>	12.5%	3.3% <sup>b</sup>
<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?</b>	37.5%	12.8% <sup>a</sup>
<b>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?</b>	62.5%	29.0% <sup>a</sup>
<b>In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?</b>	0.0%	5.4% <sup>a</sup>

<b>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?</b>	12.5%	9.7% <sup>a</sup>
<b>Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?</b>	12.5%	5.6% <sup>a</sup>
<b>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?</b>	0.0%	1.4% <sup>b</sup>

<sup>a</sup> Calculated from the raw National Survey of Children Exposed to Violence (NATSCEV) data. <sup>b</sup> 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.

### Self-reported and Peer Delinquency

Due to low sample sizes, we are unable to present the comparisons between intake and termination for both self-reported and peer delinquency.

### 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.

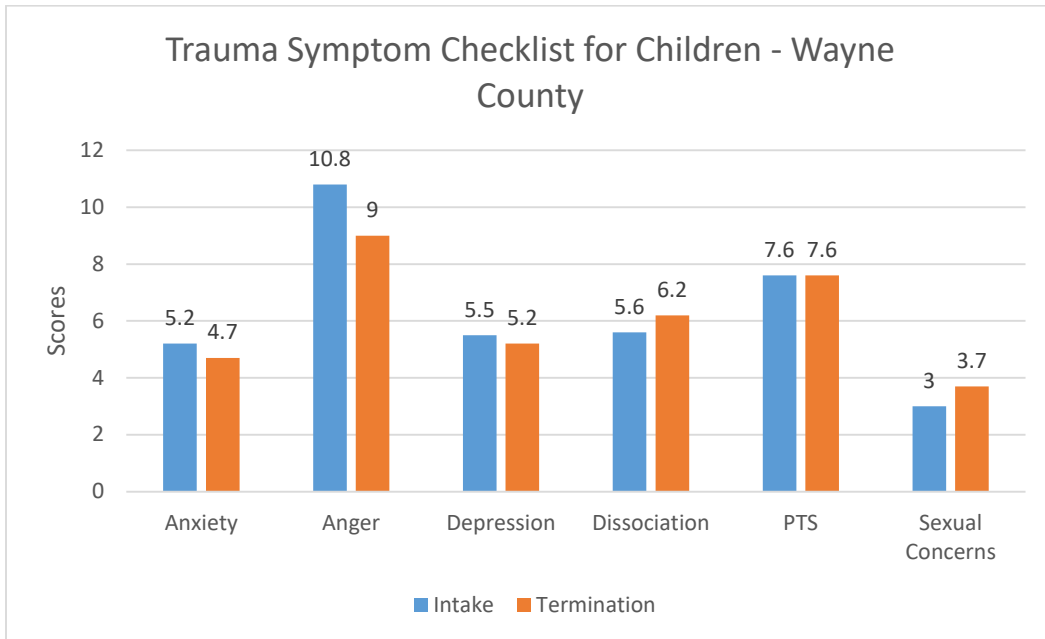
An examination of the Underresponse and Hyperresponse scales revealed that 16.0% (n = 4) of youth were identified as either an underresponder or hyperresponder, and these youths were eliminated from all further data analyses conducted on the TSCC. Paired-samples t-tests were conducted to show whether 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.

Overall, results from paired samples t-tests indicated that there were no significant symptom reductions on any subscale from intake to termination (see Table 304 and Figure 118). Considering Cohen’s (1988) established cutoffs, a small effect was found for the Anger subscale. 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 304. TSCC Subscales from Intake to Termination

	Intake	Termination	t	d
<b>Anxiety</b>	5.20 (SD=3.91; n=10)	4.70 (SD=3.52; n=10)	0.49	.03
<b>Depression</b>	5.50 (SD=2.63; n=10)	5.20 (SD=3.58; n=10)	0.22	.07
<b>Anger</b>	10.80 (SD=5.90; n=10)	9.00 (SD=6.53; n=10)	1.11	.35
<b>Posttraumatic Stress</b>	7.60 (SD=6.31; n=10)	7.60 (SD=5.77; n=10)	0.00	.00
<b>Dissociation</b>	5.60 (SD=3.94; n=10)	6.20 (SD=4.21; n=10)	-0.39	-.12
<b>Sexual Concerns</b>	3.00 (SD=3.19; n=10)	3.70 (SD=3.62; n=10)	-1.10	-.35

Figure 118



TSCC and Gender

Due to low sample size, we were unable to examine trauma symptoms by gender.

## 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 305 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. One female (14.3%) in Wayne County reported ever using heroin.

Table 305. Self-Reported Substance Use at Intake

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
<b>Alcohol</b>	73.3% (n = 11)	12.20 (SD = 1.48)	71.4% (n = 5)	13.20 (SD = 1.64)
<b>Cigarettes</b>	80.0% (n = 12)	11.82 (SD = 1.94)	85.7% (n = 6)	12.83 (SD = 1.84)
<b>Chewing Tobacco</b>	33.3% (n = 5)	13.86 (SD = 1.35)	0	N/A
<b>Marijuana</b>	66.7% (n = 10)	12.60 (SD = 1.17)	85.7% (n = 6)	13.50 (SD = 1.23)
<b>Cocaine</b>	6.7% (n = 1)	14.00 <sup>a</sup>	28.6% (n = 2)	15.50 (SD = 0.71)
<b>Pain Killers (use inconsistent with prescription)</b>	13.3% (n = 2)	15.00 (SD = 0.00)	28.6% (n = 2)	15.50 (SD = 0.71)
<b>GHB</b>	0	N/A	0	N/A
<b>Inhalants</b>	6.7% (n = 1)	14.00 <sup>a</sup>	0	N/A
<b>Heroin</b>	0	N/A	14.3% (n = 1)	16.00
<b>Amphetamines</b>	0	N/A	0	N/A
<b>Ritalin (use inconsistent with prescription)</b>	26.7% (n = 4)	14.00 (SD = 1.41)	0	N/A
<b>Barbiturates</b>	6.7% (n = 1)	N/A	0	N/A
<b>Non-prescription Drugs</b>	0	N/A	14.3% (n = 1)	15.00 <sup>a</sup>
<b>Hallucinogens</b>	13.3% (n = 2)	15.00 (SD = 1.41)	0	N/A
<b>PCP</b>	0	N/A	0	N/A
<b>Ketamine</b>	0	N/A	14.3% (n = 1)	14.00 <sup>a</sup>
<b>Ecstasy</b>	6.7% (n = 1)	N/A	0	N/A
<b>Tranquilizers</b>	13.3% (n = 2)	15.50 (SD = 0.71)	14.3% (n = 1)	15.00 <sup>a</sup>

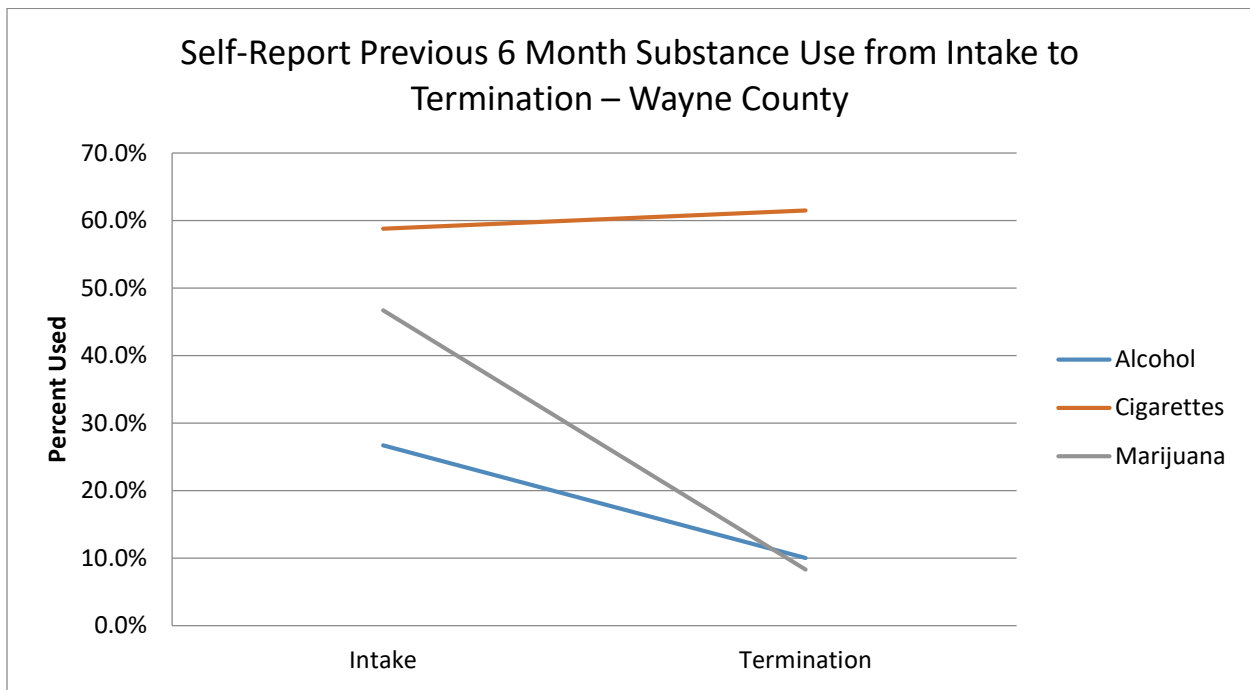
<sup>a</sup>Standard deviations are not available for averages with one only case

### Six-Month Substance Use

Youth were also asked whether they had used each substance in the past six months. Figure 119 presents past six-month use for the most commonly reported substances youth among those who reported lifetime use of each specific substance. Youth reported a decrease in six-month use with respect to alcohol and marijuana.

The percentage of youth using alcohol in the past six months dropped from 26.7% (n = 4) to 10.0% (n = 1) from intake to termination. Past six-month marijuana use declined from 46.7% (n = 7) at intake to 8.3% (n = 1) at termination.

Figure 119



### 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 18 youth terminated from the BHJJ program in Wayne County. Over 83% (83.3%, n = 15) successfully completed services. In the latest evaluation period that began July 2015 and

ended in June 2017, 85.7% (n = 6) of youth terminated successfully from the BHJJ program in Wayne County. Table 306 presents all of the reasons for termination from BHJJ.

Table 306. Reasons for Termination from BHJJ

Termination Reason	All Youth	Youth Enrolled from July 2015 to June 2017
<b>Successfully Completed Services</b>	83.3% (n = 15)	85.7% (n = 6)
<b>Client Did Not Return/Rejected Services</b>	0.0% (n = 0)	0.0% (n = 0)
<b>Out of Home Placement</b>	0.0% (n = 0)	0.0% (n = 0)
<b>Client/Family Moved</b>	0.0% (n = 0)	0.0% (n = 0)
<b>Client Withdrawn</b>	0.0% (n = 0)	0.0% (n = 0)
<b>Client AWOL</b>	0.0% (n = 0)	0.0% (n = 0)
<b>Client Incarcerated</b>	5.6% (n = 1)	14.3% (n = 1)
<b>Other</b>	11.1% (n = 2)	0.0% (n = 0)

### Average Length of Stay

The average length of stay for youth in the Wayne County BHJJ program was 138 days. For youth enrolled since July 1, 2015, the average length of stay in BHJJ was 123 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, 50.0% of the youth (n = 10) in Wayne County were at risk for out of home placement. At termination, 11.1% (n = 2) of youth 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 88.9% (n = 16) of the youth and had stayed the same for 11.1% (n = 2) of the youth.

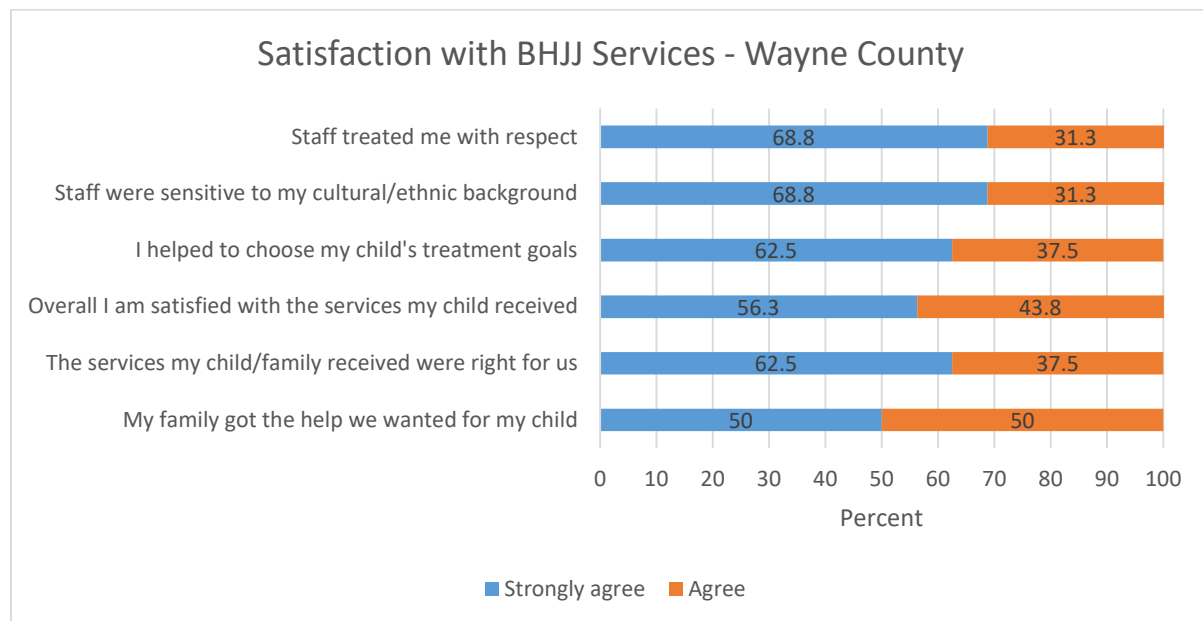


## Youth Services Survey for Families

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, 100% (n = 16) of caregivers either strongly agreed or agreed that they were satisfied with the services their child received and 100% (n = 16) either strongly agreed or agreed that the services their child and/or family receive were right for them (see Figure 120). A strong majority (100%, n = 16) of caregivers either strongly agreed or agreed that staff treated them with respect and 100% (n = 16) indicated that they strongly agreed or agreed with the statement that they were satisfied with the cultural and ethnic sensitivity of BHJJ staff.

Figure 120



## Recidivism

### Methodology

Court data were provided by the Wayne 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, 87.5% (n = 21) of the BHJJ youth had misdemeanor charges, 16.7% (n = 4) had at least one felony charge, and 87.5% (n = 21) were adjudicated delinquent (see Table 307).

Table 307. Charges Prior to BHJJ Enrollment

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	33.3% (n = 8)	0.0% (n = 0)	33.3% (n = 8)
<b>6 months</b>	66.7% (n = 16)	12.5% (n = 3)	66.7% (n = 16)
<b>12 months</b>	87.5% (n = 21)	16.7% (n = 4)	87.5% (n = 21)
<b>18 months</b>	87.5% (n = 21)	20.8% (n = 5)	91.7% (n = 22)

### 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, 58.8% (n = 10) of youth were charged with at least one new misdemeanor and 11.8% (n = 2) were charged with at least one new felony. Fifty-nine percent (58.8%, n = 10) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 308).

Table 308. Charges After BHJJ Enrollment

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	23.8% (n = 5)	4.8% (n = 1)	23.8% (n = 5)
<b>6 months</b>	31.8% (n = 7)	4.5% (n = 1)	31.8% (n = 7)
<b>12 months</b>	58.8% (n = 10)	11.8% (n = 2)	58.8% (n = 10)
<b>18 months</b>	80.0% (n = 12)	20.0% (n = 3)	80.0% (n = 12)

## 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, 41.7% (n = 5) of youth were charged with at least one new misdemeanor, 16.7% (n = 2) were charged with at least one new felony, and 41.7% (n = 5) were adjudicated delinquent (see Table 309).

Table 309. Charges After Termination from BHJJ

	Overall		
	Misdemeanors	Felonies	Delinquent
<b>3 months</b>	0.0% (n = 0)	0.0% (n = 0)	0.0% (n = 0)
<b>6 months</b>	13.3% (n = 2)	6.7% (n = 1)	13.3% (n = 2)
<b>12 months</b>	41.7% (n = 5)	16.7% (n = 2)	41.7% (n = 5)
<b>18 months</b>	45.5% (n = 5)	27.3% (n = 3)	45.5% (n = 5)

## Felony Offenders and ODYS Commitments

None of the 24 BHJJ youth (0.0%) from Wayne County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.

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