An Evaluation of the Cuyahoga County Behavioral Health Juvenile Justice (BHJJ) Initiative

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Fredrick Butcher, PhD | Jeff Kretschmar, PhD | Liuhong Yang, MS | David Rinderle, BA | Margarid Turnamian, BA

JACK, JOSEPH AND MORTON MANDEL SCHOOL OF APPLIED SOCIAL SCIENCES
CASE WESTERN RESERVE UNIVERSITY

Begun Center for Violence Prevention Research and Education

Table of Contents

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

Fredrick Butcher, Ph.D., Jeff Kretschmar, Ph.D., Liuhong Yang, M.S., David Rinderle, B.A., & Margarid Turnamian, B.A.

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

Juvenile justice-involved youth with serious behavioral health issues often have inadequate and limited access to care to address their complex and multiple needs. Ohio's Behavioral Health/Juvenile Justice (BHJJ) initiative was designed to provide these youth evidence and community-based behavioral health treatment in lieu of detention. Twelve counties participated in BHJJ during the most recent biennium: Ashtabula, Cuyahoga, Franklin, Hamilton, Holmes, Lorain, Lucas, Mahoning, Montgomery, Summit, Trumbull, and Wayne. BHJJ was funded through a partnership between the Ohio Departments of Youth Services (ODYS) and Mental Health and Addiction Services (OhioMHAS). The Begun Center for Violence Prevention Research and Education at Case Western Reserve University provided evaluation services for the program. **The majority of findings presented here represent data collected between July 1, 2015 through June 30, 2019.**

Demographics and Youth Characteristics

- Since 2006, 537 youth have been enrolled in BHJJ (57% male, 65% non-White). The average age of youth entering the program was 16.1 years old.
- Between July 1, 2017 and June 30, 2019, 61 youth were enrolled in BHJJ (70% male, 83% non-White). The average age of youth entering the program was 15.9 years old.
- The most common DSM diagnosis for males and females was Cannabis-related Disorders.
- Caregivers reported that 37% of the females had a history of sexual abuse, 59% talked about suicide, and 40% had attempted suicide. 56% of males and 67% of females had family members who were diagnosed with or showed signs of depression.
- 49% of BHJJ females and males had biological family members with drinking or drug problems.
- According to the OYAS, 70% of the BHJJ youth were moderate or high risk to reoffend.
- 41% of youth had a history of child welfare involvement and 75% had received mental health treatment in their lifetime.
- 48% of youth had at least one felony charge in the 12 months prior to BHJJ enrollment.

Educational Information

- About 57% of the youth were suspended or expelled from school in the year prior to their BHJJ enrollment. During treatment, 38% were suspended or expelled.

- At termination, 26% of unsuccessful completers and 59% of successful completers were receiving mostly A's, B's, and C's. At termination, 86 % of youth were attending school.

- At termination, workers reported that 97% of youth were attending school more or about the same amount as they were before starting treatment.

Mental/Behavioral Health Outcomes

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

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

- From intake to termination, there was a decrease in past 30-day use for the four most commonly reported substances (alcohol, tobacco, marijuana, and caffeine).

Termination and Recidivism Information

- 65% of the youth terminated from the BHJJ program completed treatment successfully. The average length of stay in the program was 291 days.

- Workers reported that police contacts have been reduced for 74% of the youth.

- At intake, 51% of the youth were at risk for out of home placement. At termination, 34% of youth were at risk for out of home placement.

- One year after termination, 35% of BHJJ youth had a new felony charge.

- Since 2015, 6 of the 143 youth (4.2%) enrolled in BHJJ for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment in BHJJ.

- The average number of felony charges in the 12 months prior to and after BHJJ decreased from 2.5 to 1.1.

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Juvenile Justice and Mental Health

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

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

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

Juvenile Justice/Mental Health Diversion Programs

The prevalence of juvenile justice youth with mental health issues is cause for alarm. While the juvenile justice system is often the first time a youth is screened for mental health problems, the system is often ill-prepared to properly meet the needs of these youth (Cocozza & Skowyra, 2000; Skowyra & Powell, 2006; Teplin et al., 2002; U.S. Department of Justice, 2005). In response to the growing number of youth entering the juvenile justice system with mental health issues and the lack of comprehensive 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

Twenty 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, this initiative was designed to divert JJI youth with mental health or substance use issues from detention into community and evidence-based treatment. The state identified criteria to be used by participating counties to determine if a youth was appropriate for inclusion in the BHJJ project, including: a DSM diagnosis, aged 10 to 18, substantial mental status impairment, co-occurring substance abuse, a pattern of criminal behavior, charged and/or adjudicated delinquent, a threat to public safety, exposed to trauma or domestic violence, and a history of multi-system involvement. Each county was able to determine which and how many criteria the youth had to meet to be eligible for participation.

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

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

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

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

Measures and Instrumentation

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

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

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

Trauma Symptom Checklist for Children (TSCC)

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

Substance Use Survey – Revised

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

Enrollment and Demographics Form (Enrollment Form)

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

Child Information Update Form (Termination Form)

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

Victimization and Delinquency Questionnaire (VDQ)

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

Caregiver Information Questionnaire (Intake and Termination)

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

Youth Services Survey for Families

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

Resiliency Survey

The Resiliency Survey is a 16-item, self-report survey designed to measure the external and internal assets associated with positive youth development. This survey is completed by youth at both intake into and termination from the BHJJ program. Items are scored on a four-point Likert scale ranging from "Not at all True" to "Very Much True".

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
Resiliency Survey	Youth	Intake, Term

Table 2. Optional BHJJ Questionnaires

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

Date of BHJJ Participation

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

Table 3. Dates of BHJJ Participation

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

Project Description

Cuyahoga County's BHJJ model has evolved as a highly intensive, structured program delivering a continuum of effective, evidenced based treatment and culturally-appropriate services for youth involved in the juvenile justice system. Data provided by Ohio Department of Youth Services (ODYS) in 2018 reflect that among youth adjudicated in Cuyahoga County, 80% are African American and 86% 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
- Pre-adjudicated or adjudicated for misdemeanors or felonies
- Screened and diagnosed with Mental Health/Serious Emotional Disturbance, Substance Use, or Co-Occurring Disorder
- Youth with serious violent charges are individually reviewed
- Youth on traditional probation that are at risk of deeper involvement are individually reviewed

Services and Treatment Models: The BHJJ program within Cuyahoga County is composed of many pieces, including a specialized Juvenile Court docket, a newly implemented Intervention Center, a diversion program for low risk domestic violence offenses, Intensive Probation monitoring, pharmacological and mental health screening and assessment, and intensive use of high fidelity wraparound services. During this grant cycle, the Intervention Center became a part of the diversionary continuum of Cuyahoga County BHJJ. All youth with alleged offenses, with the exception of those youth with the highest level felony offenses, are referred to the Intervention Center. Intervention Specialists are responsible for screening and interviewing all youth referred by Juvenile Court and referring youth to on-site behavioral health clinicians for a further behavioral health consultation and linkage to appropriate services. Project CALM is a part of the Intervention Center programming that provides diversion, assessment, case management, linkage and access to respite through Juvenile Court's contracted services. Respite allows parents to have time to engage in treatment recommendations made during the assessment, preventing immediate refusal of services and parents requesting admission to the Detention Center.

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 focuses 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 in 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: In 2018-2019 BHJJ project, the court expanded screening and referral of youth to intervention and diversion programming. BHJJ participants are identified through the court by the Intervention Center, Phoenix Court, Probation, Jurists, Alternative Case Planning (ACP) Review process or the ODYS Review Committee. Referrals can be made for youth who staff suspect has mental health concerns and/or has an identified substance abuse problem, and all referrals to the BHJJ Phoenix Court are accompanied with copies of youth's most recent collateral information including clinical documents related to their behavioral health needs such as recent diagnostic assessments and Ohio

Youth Assessment System (OYAS). The BHJJ Manager administers the Massachusetts Youth Screening Instrument Version 2 (MAYSI-2) with the youth. The BHJJ Phoenix Court Review Committee is comprised of the Jurist, defense counsel, Guardian Ad Litem, BHJJ Mental Health Coordinator and both MST and ICT staff. They review the case to determine appropriateness of referral and select the appropriate EBP(s) to meet the behavioral health needs of 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 to develop Individualized Service and Court Plans. Upon development of the plans, 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 a 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 from 293 commitments in 2009 to 68 commitments in 2019 which is a 76% reduction and since 2011 the rate of out-of-home placements have significantly reduced due to an effective service model that is intensive and cohesive contributing to successful outcomes for project participants.

Data Analysis Plan

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, 2019 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[1].

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

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

Sample Size

For county-specific reports, where possible, we included data from July 1, 2015 through June 30, 2019. This is a departure from previous reports, where all project data from every project site that ever participated, was included. We decided to include only the most recent data to allow stakeholders at the State and local level to detect recent changes in their outcomes, that otherwise may be masked by analyzing such a large sample size. However, if a larger dataset was needed to conduct statistical analyses, we expanded the pool to include additional years. A few sections contain data from the entire sample as well as from the previous biennium (e.g. termination reasons).

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

Demographics

As of June 30, 2019, 537 youth were enrolled into the BHJJ program in Cuyahoga County. The average age at enrollment was 16.06 years (SD=1.20). More males (57.5%, n = 308) than females (42.5%, n = 228) have been enrolled. White youth (34.5%, n = 185), Black youth (55.8%, n = 299), and Multiracial youth (7.1%, n = 38) comprised the majority of the total sample.

There were 61 new enrollments in Cuyahoga County during the current reporting period (July 1, 2017 through June 30, 2019). The average age at enrollment was 15.93 (SD = 1.30). Males (70.0%, n = 42) outnumbered females (30.0%, n = 18), and more Black youth (73.3%, n = 44) than White youth (16.7%, n = 10) were enrolled. Over six percent (6.7%, n = 4) of the youth self-identified as Hispanic/Latinx.

Unless otherwise noted, the following sections describe data from the past four years of BHJJ programming from July 1, 2015 through June 30, 2019.

Custody Arrangement and Household Information

The remainder of the analyses are based on 148 enrollments between July 1, 2015 and June 30, 2109. At intake, the majority of youth lived with the biological mother (64.6%, n = 93), while 14.6% (n = 21) lived with two biological parents or one biological and one step/adoptive parent (see Table 4). Eighty-two percent (82.0%, n = 118) of BHJJ youth lived with at least one biological parent at enrollment.

Eighty-four percent (84.0%; n = 121) of the BHJJ caregivers had at least a high school diploma or GED, and 13.2% (n = 19) had a bachelor's degree or higher. Sixteen percent of caregivers (16.0%; n = 23) reported they did not graduate from high school (see Table 5).

Caregivers were asked to report their annual household income (see Table 6). The income range with the highest endorsement was between $20,000 and $24,999 (18.4%, n = 26). Overall, 63.8% (n = 90) reported a family income of $24,999 or less. When examined by race, 8.0% (n = 2) of White families, 43.0% (n = 43) of Black families, and 40.0% of Multiracial families reported a household income of $14,999 or less. Table 6 displays the reported household income overall and by race.

Table 4. Custody Arrangement for BHJJ Youth

Custody	BHJJ Youth
Two Biological Parents or One Biological and One Step or Adoptive Parent	14.6% (n = 21)
Biological Mother Only	64.6% (n = 93)
Biological Father Only	2.8% (n = 4)
Adoptive Parent(s)	6.9% (n = 10)
Aunt/Uncle	3.5% (n = 5)
Grandparents	4.9% (n = 7)
Other	2.8% (n = 4)

Table 5. Educational Outcomes for Caregivers of BHJJ Youth

Number of School Years Completed	Number of Caregivers
Less than High School	16.0% (n = 23)
High School Graduate or G.E.D.	33.3% (n = 48)
Some College or Associate Degree	37.5% (n = 54)
Bachelor's Degree	8.3% (n = 12)
More than a Bachelor's Degree	4.9% (n = 7)

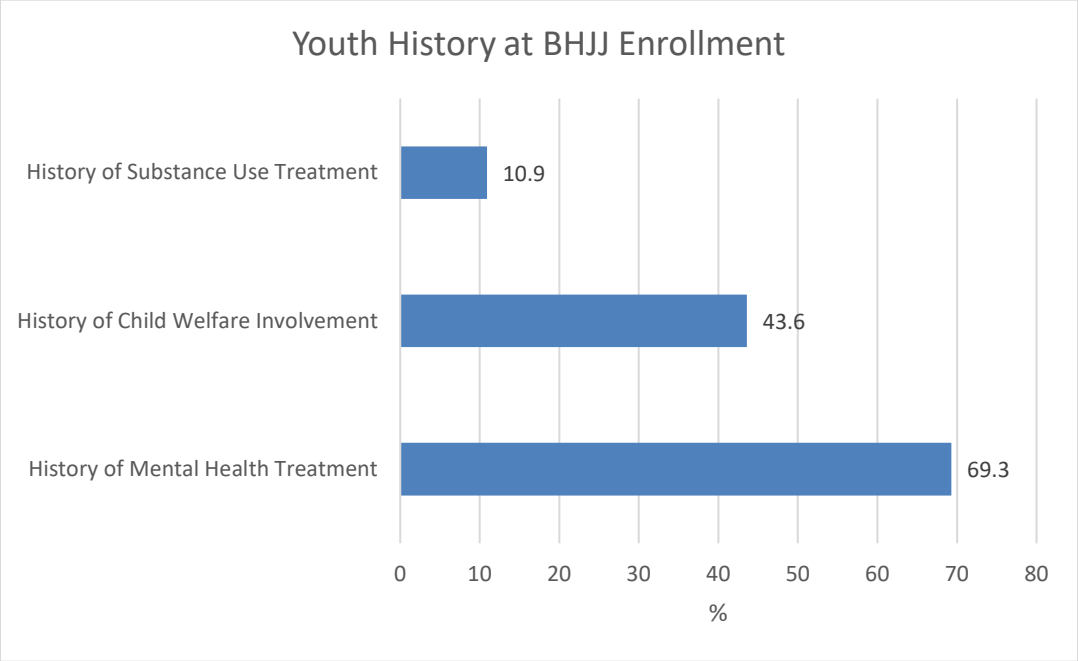
Table 6. Annual Household Incomes for BHJJ Families by Race

Household Income	Overall	White	Black	Multiracial
Less than $5,000	10.6% (n = 15)	NA	15.0% (n = 15)	NA
$5,000 - $9,999	11.3% (n = 16)	4.0% (n = 1)	11.0% (n = 11)	26.7% (n = 4)
$10,000 - $14,999	14.9% (n = 21)	4.0% (n = 1)	17.0% (n = 17)	13.3% (n = 2)
$15,000 - $19,999	8.5% (n = 12)	4.0% (n = 1)	11.0% (n = 11)	NA
$20,000 - $24,999	18.4% (n = 26)	20.0% (n = 5)	16.0% (n = 16)	33.3% (n = 5)
$25,000 - $34,999	13.5% (n = 19)	12.0% (n = 3)	13.0% (n = 13)	20.0% (n = 3)
$35,000 - $49,999	12.8% (n = 18)	24.0% (n = 6)	11.0% (n = 11)	6.7% (n = 1)
$50,000 - $74,999	4.3% (n = 6)	8.0% (n = 2)	4.0% (n = 4)	NA
$75,000 or greater	5.6% (n = 8)	24.0% (n = 6)	2.0% (n = 2)	NA

Youth and Family History

Workers were asked to identify a youth's prior behavioral health and child welfare system involvement (see Figure 1). These three items were new to the past biennium, therefore, data are only available for youth enrolled between July 1, 2017 and June 30, 2019. Over 40 percent (41.5%, n = 22) of youth had a history of child welfare involvement prior to BHJJ enrollment. Seventeen percent (17.3%, n = 9) of youth had received substance use treatment in their lifetime prior to BHJJ enrollment and 75.5% (n = 40) of youth had received mental health treatment in their lifetime prior to BHJJ enrollment.

Figure 1.



Caregivers were asked to respond to a series of questions designed to obtain data related to the youth's family history. Chi-square analyses were conducted to test for gender differences on each item and significant differences are identified in Table 7. A significantly larger proportion of the caregivers of females reported lifetime histories of sexual abuse, running away, talking about suicide and attempting suicide. Caregivers reported BHJJ males had significantly higher levels of substance abuse than female participants.

Caregivers reported that 12.5% (n = 5) of females and 12.9% (n = 13) of males had a history of being physically abused while 36.8% (n = 14) of females and 3.9% (n = 4) of males had a history of being sexual abused. Caregivers of 59.5% (n = 25) of females and 38.2% (n = 39) of males reported hearing the child talking about committing suicide and 40.5% (n = 17) of females and 19.6% (n = 20) of males had attempted suicide at least once. A majority of the caregivers of females (67.5%, n = 27) and males (56.4%, n = 57) reported a family history of depression. Almost half of the caregivers of females (48.8%, n = 20) and males (49.5%, n = 50) reported a family history of problems with substance use.

Table 7. Youth and Family History

Question	Females	Males
Has the child ever been physically abused?	12.5% (n = 5)	12.9% (n = 13)
Has the child ever been sexually abused?	36.8% (n = 14)***	3.9% (n = 4)
Has the child ever run away?	78.6% (n = 33)**	53.0% (n = 53)
Has the child ever had a problem with substance abuse, including alcohol and/or drugs?	57.1% (n = 24)	78.4% (n = 80)*
Has the child ever talked about committing suicide?	59.5% (n = 25)*	38.2% (n = 39)
Has the child ever attempted suicide?	40.5% (n = 17)**	19.6% (n = 20)
Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?	38.1% (n = 16)	32.4% (n = 33)
Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?	67.5% (n = 27)	56.4% (n = 57)
Has anyone in the child's biological family had a mental illness, other than depression?	57.5% (n = 23)	47.4% (n = 46)
Has the child ever lived in a household in which someone was convicted of a crime?	33.3% (n = 13)	35.0% (n = 35)
Has anyone in the child's biological family had a drinking or drug problem?	48.8% (n = 20)	49.5% (n = 50)
Is the child currently taking any medication related to his/her emotional or behavioral symptoms?	57.5% (n = 23)	41.4% (n = 41)

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

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-related problems (88.1% and 85.1% respectively) (see Table 8). Chi-square analyses indicated females had significantly higher rates of problems related to depression-related problems and suicide-related problems. Males had significantly higher rates of hyperactive and attention-related problems.

Table 8. Problems Leading to Services

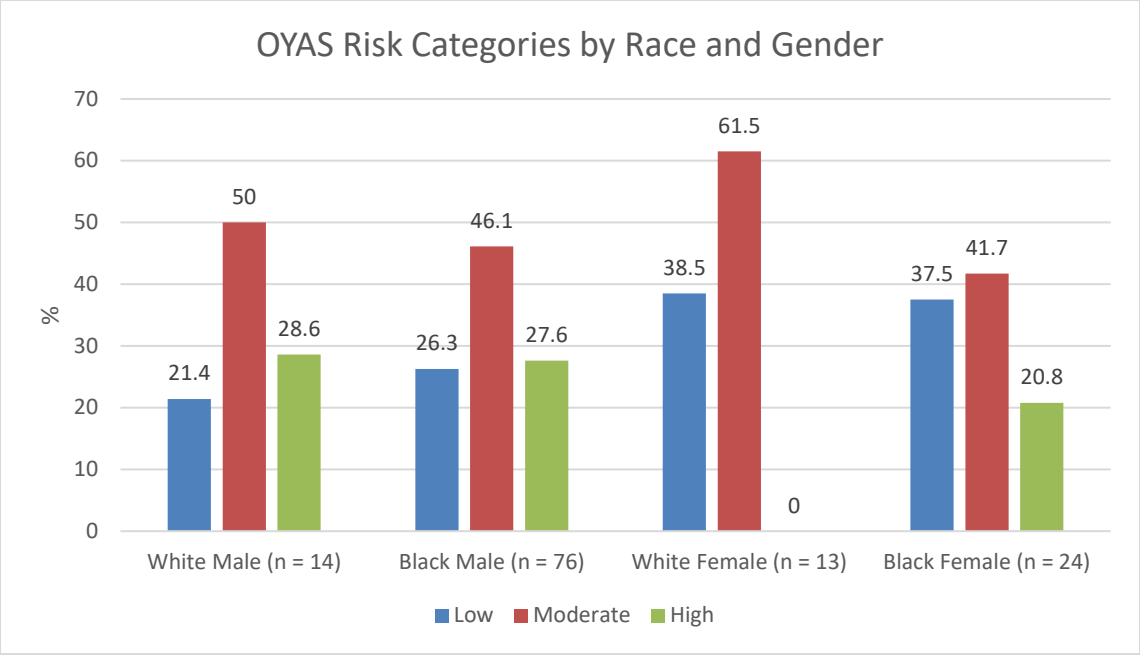
Problems Leading to Services	Females	Males
Adjustment-related problems	33.3% (n = 14)	40.6% (n = 41)
Anxiety-related problems	33.3% (n = 14)	32.7% (n = 33)
Conduct/delinquency-related problems	88.1% (n = 37)	85.1% (n = 86)
Depression-related problems	69.0% (n = 29)**	41.6% (n = 42)
Eating disorders	0	3.0% (n = 3)
Hyperactive and attention-related problems	38.1% (n = 16)	60.4% (n = 61)*
Learning disabilities	11.9% (n = 5)	22.8% (n = 23)
Pervasive development disabilities	2.4% (n = 1)	4.0% (n = 4)
Psychotic behaviors	9.5% (n = 4)	8.9% (n = 9)
School performance problems not related to learning disabilities	59.5% (n = 25)	60.4% (n = 61)
Specific developmental disabilities	0	4.0% (n = 4)
Substance use, abuse, dependence-related problems	65.4% (n = 17)	75.4% (n = 49)
Suicide-related problems	40.5% (n = 17)**	18.8% (n = 19)

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

Ohio Youth Assessment System

Ohio Youth Assessment System (OYAS) data were collected at the time point closest to a youth's respective enrollment dates. Figure 2 shows the distribution of OYAS risk categories for BHJJ youth by race and gender. In Cuyahoga County, 28.6% (n = 4) of White males and 27.6% (n = 21) of Black males enrolled in the BHJJ program were identified as High risk on the OYAS, while no White females and 20.8% (n = 5) of Black females were identified as High risk.

Figure 2.



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 were Cannabis-related Disorders (see Table 9).

Chi-square analysis indicated females were significantly more likely than males to be diagnosed with Depressive Disorders while males were significantly more likely than females to be diagnosed with Cannabis-related Disorders, ADHD, and co-occurring disorders (both a DSM mental health diagnosis and a substance use diagnosis).

Table 9. Most Common DSM Diagnoses

DSM Diagnosis	Females (n = 41)	Males (n = 101)
Adjustment Disorder	0	4.0% (n = 4)
Alcohol-related Disorders	4.9% (n = 2)	12.9% (n = 13)
Attention Deficit Hyperactivity Disorder	19.5% (n = 8)	41.6% (n = 42)**
Bipolar Disorder	0	4.0% (n = 4)
Cannabis-related Disorders	**56.1% (n = 23)**	**77.2% (n = 78)***
Conduct Disorder	7.3% (n = 3)	16.8% (n = 17)
Depressive Disorders	31.7% (n = 13)*	15.8% (n = 16)
Disruptive Behavior Disorder	0	1.0% (n = 1)
Mood Disorder	14.6% (n = 6)	12.9% (n = 13)
Oppositional Defiant Disorder	29.3% (n = 12)	20.8% (n = 21)
Post-traumatic Stress Disorder	12.2% (n = 5)	7.9% (n = 8)
Trauma and Stressor Related Disorder	4.9% (n = 2)	2.0% (n = 2)
Disruptive Mood Dysregulation Disorder	22.0% (n = 9)	16.8% (n = 17)
Co-Occurring Disorder	53.7% (n = 22)	70.3% (n = 71)*

* < .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. The wording on some items (e.g. IEP at intake, attendance at intake) was changed from previous versions of the forms. For those items, we present data from only the past biennium (when the new forms were in use). Those items will have smaller sample sizes compared to items that have been consistent for the past four years.

Over fifty-six percent (56.8%, n = 79) of youth were either suspended or expelled from school in the 12 months prior to their enrollment in the BHJJ project. While in BHJJ treatment BHJJ, 38.2% (n = 50) of the youth were expelled or suspended from school (a 32.3% decrease from intake to termination).

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, 87.2% (n = 41) of youth were currently attending school while at termination, 86.3% (n = 101) 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 10 displays the grades typically received by the BHJJ youth at intake and termination from the program while Table 11 displays this information based on completion status. At intake, 43.5% of youth were earning mostly A's and B's, and C's while at termination, 48.0% were earning mostly A's, B's, or C's. Academic improvement varied by BHJJ completion status (see Table 11). For example, at intake, 44.8% of youth who would go on to be unsuccessful completers and 45.5% of youth who would go on to be successful completers received mostly A's, B's, or C's. At termination, 25.6% of unsuccessful completers and 58.6% of successful completers received mostly A's, B's, or C's.

Table 10. Academic Performance

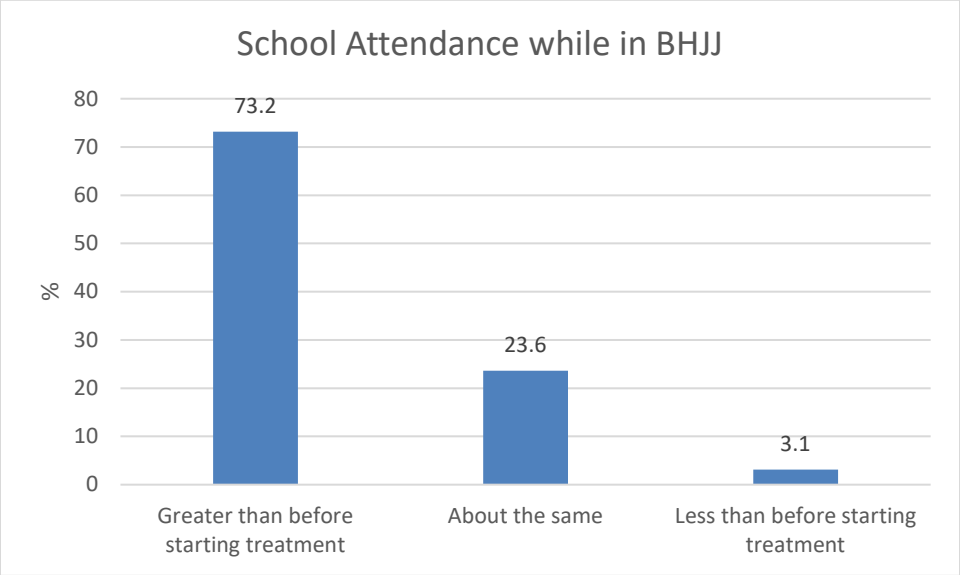
Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A's and B's	16.8% (n = 22)	17.6% (n = 22)
Mostly B's and C's	26.7% (n = 35)	30.4% (n = 38)
Mostly C's and D's	24.4% (n = 32)	26.4% (n = 33)
Mostly D's and F's	32.1% (n = 42)	25.6% (n = 32)

Table 11. Academic Performance for Youth by Completion Status

	Unsuccessful Completers		Successful Completers	
Typical Grades	Frequency at Intake	Frequency at Termination	Frequency at Intake	Frequency at Termination
Mostly A's and B's	23.7% (n = 9)	7.7% (n = 3)	15.6% (n = 12)	22.0% (n = 18)
Mostly B's and C's	21.1% (n = 8)	17.9% (n = 7)	29.9% (n = 23)	36.6% (n = 30)
Mostly C's and D's	18.4% (n = 7)	33.3% (n = 13)	26.0% (n = 20)	23.2% (n = 19)
Mostly D's and F's	36.8% (n = 14)	41.0% (n = 16)	28.6% (n = 22)	18.3% (n = 15)

At termination, workers reported that 73.2% (n = 93) of youth were attending school more than before starting treatment and 23.6% (n = 30) of youth were attending school 'about the same' amount compared to before starting treatment (see Figure 3). At intake, 52.0% (n = 26) of the youth attending school had Individualized Education Plans (IEPs) while at termination, 58.3% (n = 74) of the youth attending school had Individualized Education Plans (IEPs).

Figure 3.



Ohio Scales

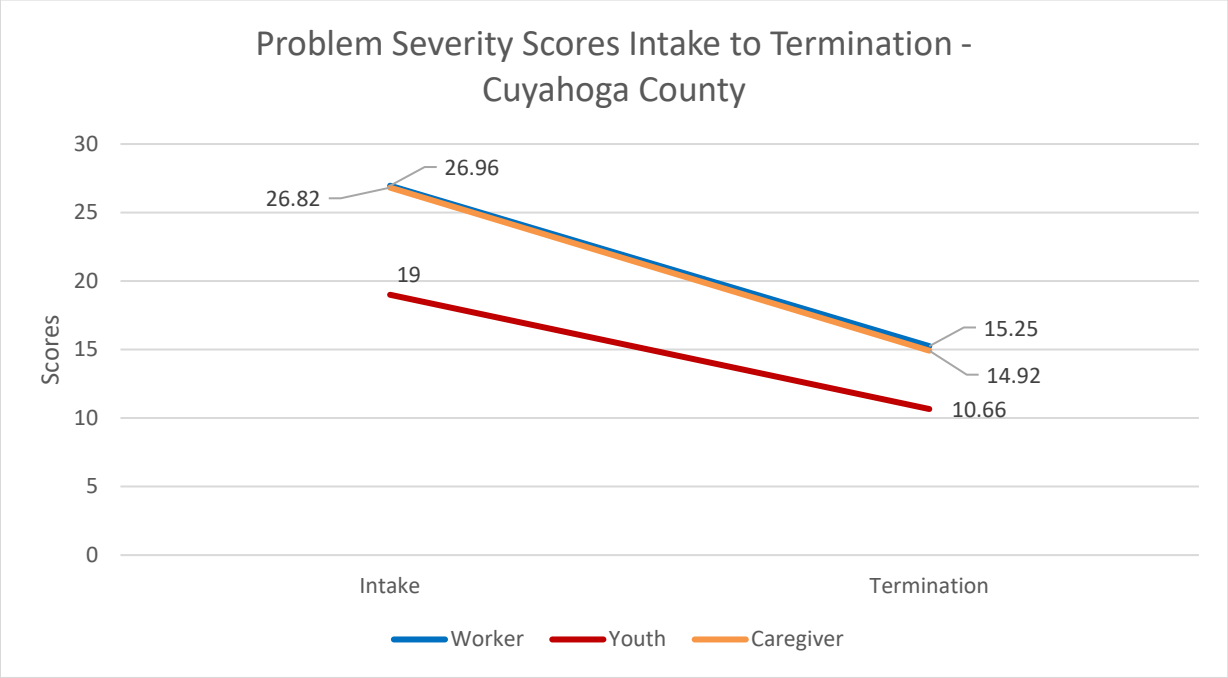
One of the main measures in the data collection packet was the Ohio Scales. The Ohio Scales were completed by the youth, caregiver, and worker at intake and then every three months following intake until termination from services. Because termination can occur at any point in time along the continuum 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. 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 between intake and termination for Cuyahoga County youth are presented in Figure 4.

Figure 4.



Worker Ratings

For workers, paired samples t-tests revealed significant improvements in Problem Severity from intake to each successive data collection point (see Table 12). Significant improvements were noted at three months: $t(124) = 4.67$, $p < .001$; six months: $t(92) = 4.93$, $p < .001$; nine months: $t(52) = 3.90$, $p < .001$; and at termination $t(120) = 9.56$, $p < .001$. A small effect size was found for the period between intake to three months. Moderate effect sizes were found for the period between intake to six months and the period between intake to nine months. A large effect size was found for the time period between intake to termination.

Table 12. Paired Samples T-Tests for Problem Severity – Worker

	Mean Time 1	Mean Time 2	*t*	d
Intake to Three Months	27.86 (SD=12.46; n=125)	21.94 (SD=11.74; n=125)	4.67***	.42
Intake to Six Months	27.20 (SD=11.34; n=93)	19.76 (SD=10.25; n=93)	4.93***	.51
Intake to Nine Months	27.07 (SD=11.10; n=53)	19.06 (SD=11.61; n=53)	3.90***	.54
Intake to Termination	27.12 (SD=12.07; n=121)	15.25 (SD=9.10; n=121)	9.56***	.87

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

Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvements in Problem Severity at each data collection point (see Table 13). Significant improvements were noted at three months: $t(121) = 2.37$, $p < .05$; six months: $t(85) = 2.47$, $p < .05$; nine months: $t(50) = 4.31$, $p < .001$; and at termination $t(110) = 6.28$, $p < .001$. Small effect sizes were noted for the period between intake to three months and the period between intake to six months. Moderate effect sizes were noted for the period between intake to nine months and the period between intake to termination.

Table 13. Paired Samples T-Tests for Problem Severity – Youth

	Mean Time 1	Mean Time 2	*t*	d
Intake to Three Months	19.60 (SD=16.38; n=122)	15.91 (SD=14.07; n=122)	2.37*	.21
Intake to Six Months	19.14 (SD=15.24; n=86)	14.27 (SD=15.23; n=86)	2.47*	.27
Intake to Nine Months	18.49 (SD=14.30; n=51)	11.14 (SD=10.50; n=51)	4.31***	.60
Intake to Termination	19.52 (SD=16.78; n=111)	10.66 (SD=10.17; n=111)	6.28***	.60

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

Caregiver Ratings

For caregivers, paired samples t-tests revealed significant improvements in Problem Severity at each measurement interval compared to intake (see Table 14). Significant improvements were noted at three months: $t(123) = 4.28$, $p < .001$; six months: $t(85) = 4.41$, $p < .001$; nine months: $t(52) = 3.73$, $p < .001$; and at termination $t(104) = 6.94$, $p < .001$. Small effect sizes were noted for the period between intake to three months and the period between intake to six months. Moderate effect sizes were noted for the period between intake to nine months and the period between intake to termination.

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

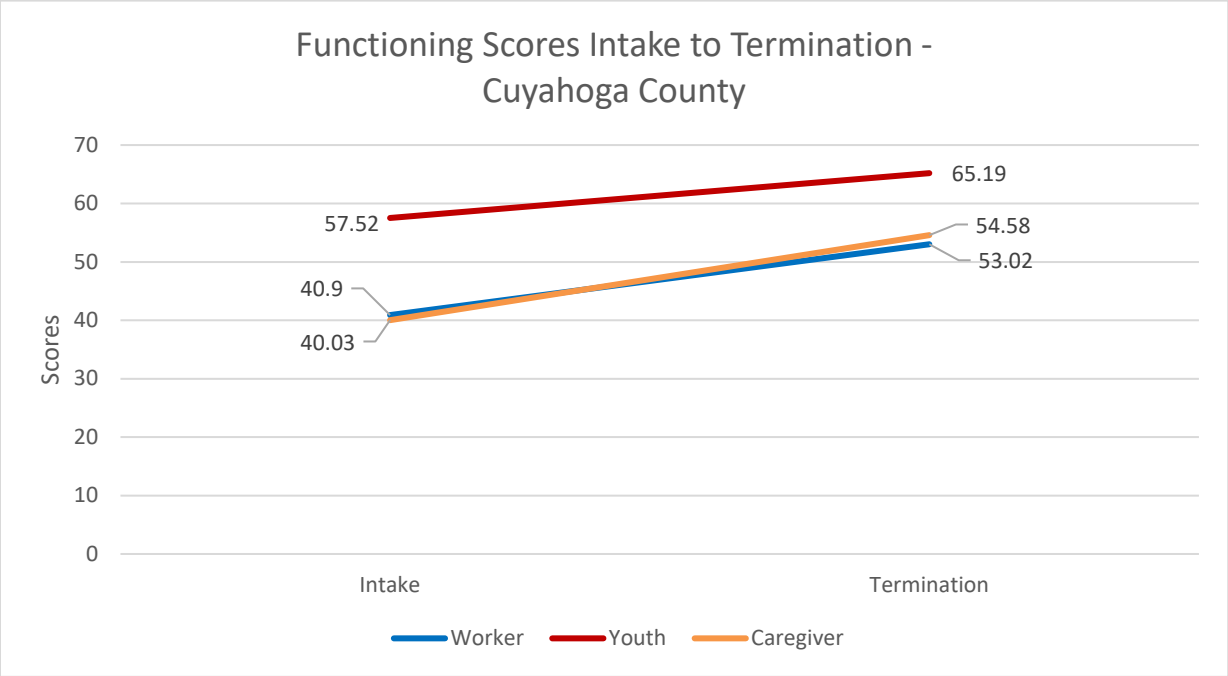
	Mean Time 1	Mean Time 2	*t*	d
Intake to Three Months	28.26 (SD=17.60; n=124)	21.45 (SD=14.66; n=124)	4.28***	.38
Intake to Six Months	27.21 (SD=16.54; n=86)	18.98 (SD=15.50; n=86)	4.41***	.48
Intake to Nine Months	27.54 (SD=15.97; n=53)	17.73 (SD=15.14; n=53)	3.73***	.51
Intake to Termination	27.40 (SD=17.26; n=105)	14.92 (SD=14.56; n=105)	6.94***	.68

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

Functioning Scores

Overall means for the Functioning scale by rater between intake and termination for Cuyahoga County youth are presented in Figure 5.

Figure 5.



Worker Ratings

For workers, paired samples t-tests revealed significant improvements in Functioning scores at each measurement interval compared to intake (see Table 15). Significant improvements were noted at three months: $t(128) = -3.09$, $p < .01$; six months: $t(93) = -5.04$, $p < .001$; nine months: $t(53) = -3.81$, $p < .001$; and at termination $t(118) = -9.22$, $p < .001$. A small effect size was found for the period between intake to three months. Moderate effect sizes were found for the period between intake to six months and the period between intake to nine months. A large effect size was found for the time period between intake to termination.

Table 15. Paired Samples T-Tests for Functioning Scores – Worker

	Mean Time 1	Mean Time 2	*t*	d
Intake to Three Months	40.36 (SD=9.61; n=129)	44.21 (SD=12.86; n=129)	-3.09**	.27
Intake to Six Months	40.42 (SD=8.56; n=94)	47.87 (SD=11.46; n=94)	-5.04***	.52
Intake to Nine Months	39.48 (SD=8.98; n=54)	47.87 (SD=12.52; n=54)	-3.81***	.52
Intake to Termination	40.62 (SD=9.87; n=119)	53.02 (SD=12.73; n=119)	-9.22***	.84

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

Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvements in Functioning scores at each measurement interval compared to intake (see Table 16). Significant improvements were noted at nine months: $t(50) = -3.06$, $p < .01$; and at termination $t(109) = -5.28$, $p < .001$. A small effect size was found for the time period between intake to nine months. A moderate effect size was found for the time period between intake to termination.

Table 16. Paired Samples T-Tests for Functioning Scores – Youth

	Mean Time 1	Mean Time 2	*t*	d
Intake to Three Months	57.28 (SD=13.22; n=123)	59.05 (SD=14.64; n=123)	-1.31	.12
Intake to Six Months	57.31 (SD=12.07; n=86)	60.17 (SD=15.23; n=86)	-1.66	.18
Intake to Nine Months	57.74 (SD=11.41; n=51)	63.25 (SD=11.48; n=51)	-3.06**	.43
Intake to Termination	57.50 (SD=12.79; n=110)	65.19 (SD=14.64; n=110)	-5.28***	.50

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

Caregiver Ratings

For caregivers, paired samples t-tests revealed significant improvements in Functioning scores at each measurement interval compared to intake (see Table 17). Significant improvements were noted at three months: $t(123) = -2.88$, $p < .01$; six months: $t(85) = -3.79$, $p < .001$; nine months: $t(51) = -3.66$, $p < .01$; and at termination $t(106) = -8.91$, $p < .001$. Small effect sizes were found for the period between intake to three months and the period between intake to six months. A moderate effect size was found for the period between intake to nine months. A large effect size was found for the time period between intake to termination.

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

	Mean Time 1	Mean Time 2	*t*	d
Intake to Three Months	39.42 (SD=16.22; n=124)	43.99 (SD=18.01; n=124)	-2.88**	.26
Intake to Six Months	40.92 (SD=15.15; n=86)	48.01 (SD=16.46; n=86)	-3.79***	.41
Intake to Nine Months	41.44 (SD=15.13; n=52)	50.46 (SD=16.12; n=52)	-3.66**	.51
Intake to Termination	39.76 (SD=16.32; n=107)	54.44 (SD=16.47; n=107)	-8.91***	.86

* < .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".

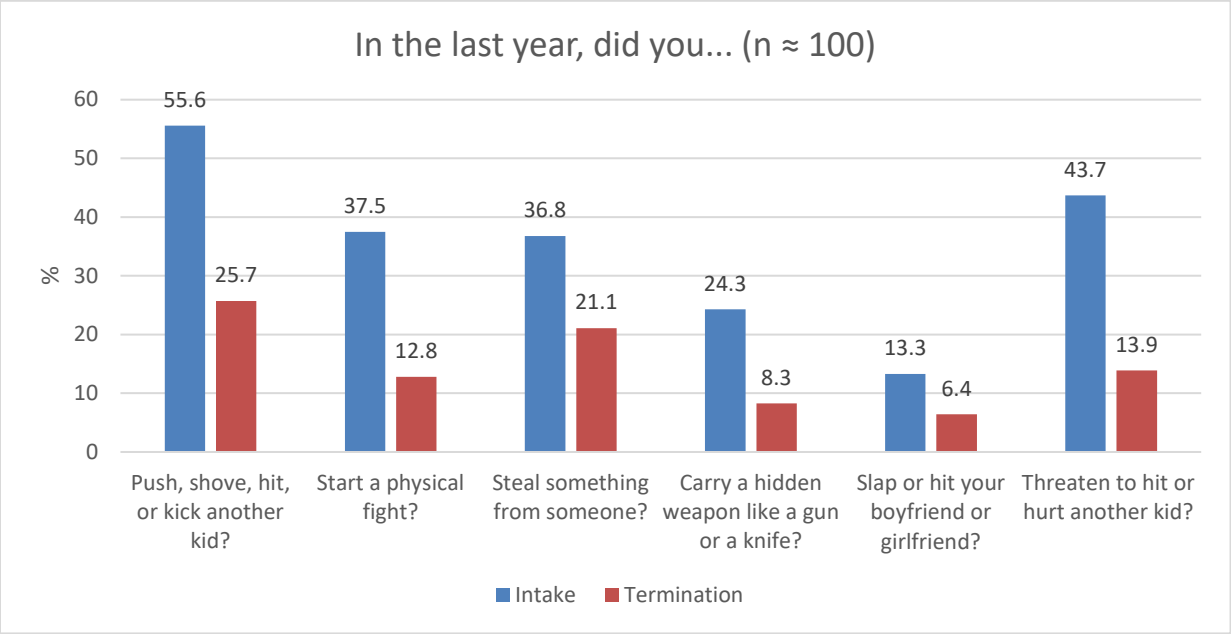
This section will be divided into three distinct parts that examine the prevalence of violence exposure as either a victim or witness, self-reported delinquent behavior from intake to termination, and delinquent behavior by peers from intake to termination. Table 18 provides the percentage of those who had experienced violence as either a victim or witness in the past year.

Table 18. Violence Exposure

	% Yes BHJJ Sample (n = 136)
In the last year, did someone threaten to hurt you when you thought they might really do it?	30.9%
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?	6.6%
In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?	18.4%
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?	44.1%
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?	16.2%
In the last year, did anyone hit or attack you WITHOUT using an object or weapon?	43.4%
In the last year, did you get scared or feel really bad because kids were calling you names, saying mean things to you, or saying they didn't want you around?	14.0%
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?	3.7%
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?	3.7%
In the last year, did you SEE a parent get pushed, slapped, hit, punched, or beat up by another parent, or their boyfriend or girlfriend?	11.0%
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?	33.1%
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?	50.0%
In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?	36.3%
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?	27.2%
Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?	18.4%
When someone is neglected, it means that the grown-ups in their life didn't take care of them the way they should. They might not get them enough food, take them to the doctor when they are sick, or make sure they have a safe place to stay. In the last year, were you neglected?	5.9%

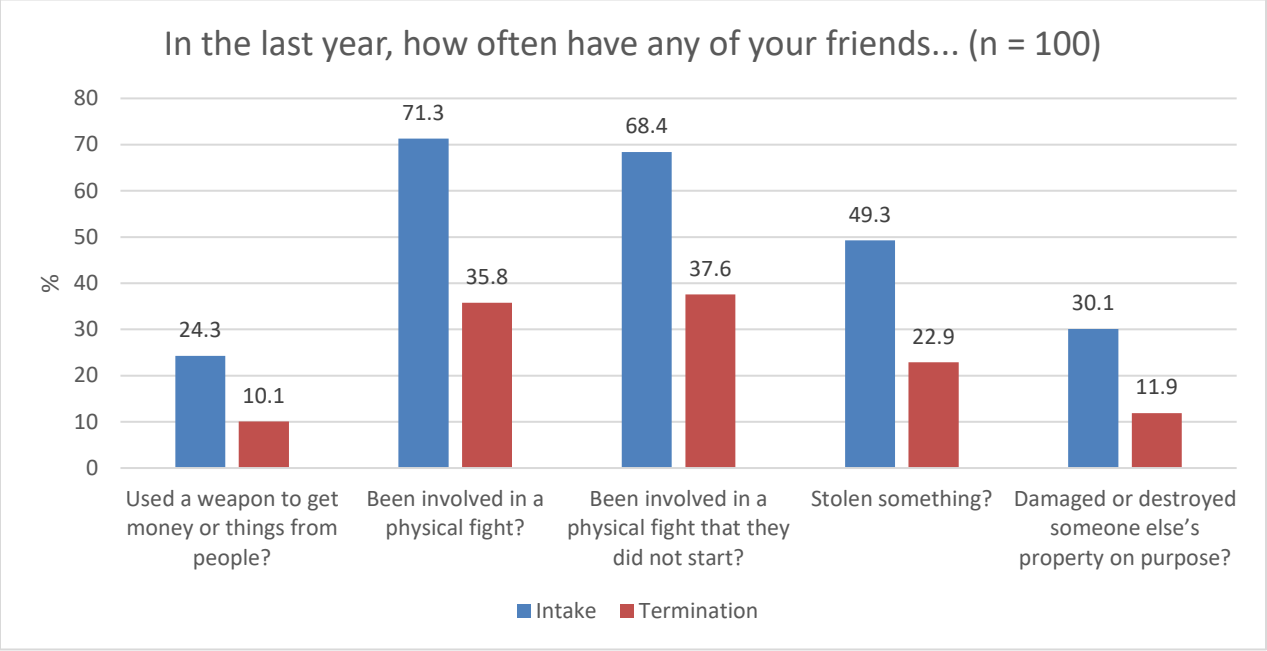
Delinquent behaviors were measured as self-report items of violent and weapon carrying behaviors as well as stealing. At intake, youth were asked how often they engaged in each behavior in the last year while at termination, youth were asked how often they engaged in the behavior since the last time they were asked. Figure 6 presents the percentage of youth who identified that they had engaged in each type of behavior at least once. Depending on the item, data were available for a range between 98 and 100 matched pairs (Mode = 100). McNemar's tests revealed statistically significant improvements from intake to termination for each of the 6 items.

Figure 6.



Self-reported peer delinquency was also measured at intake (how often in the last year) and at termination (how often since the last time they were asked). Figure 7 presents the percentage of youth who identified how often their friends had engaged in delinquent behavior at intake and termination. Depending on the item, data were available for 100 pairs. Statistically significant improvements were found for each of the items between intake and termination.

Figure 7.



Resilience

As part of the 2017 - 2019 evaluation, we added a new scale to measure several aspects of resilience. We define resilience as a set of factors both within the individual and external factors such as relationships with family, peers, and other adults that help to insulate youth from adversity (Dray et al., 2017). As shown in the previous section that showed data on victimization, a large proportion of youth enrolled in BHJJ have directly or indirectly experienced violence. The Resilience survey is a 16-item Likert scale survey that measures internal factors of resilience such as self-efficacy, self-awareness, and empathy, and external factors such as support from peers and family.

Figure 8 shows intake data on self-efficacy, self-awareness, and empathy. As the most frequent responses were “pretty much true” and “very much true”, we combined these responses. The number of valid responses for these questions was 57. Generally, the majority of youth indicated high levels of endorsement for each one of these items. It is important to note, that the largest proportion of youth responding “not at all” or “a little true” were for the three items that measure empathy. Less than half (48.1%; n = 27) identified that the statement “I feel bad when someone gets their feelings hurt” was either pretty much or very much true.

Figure 8.

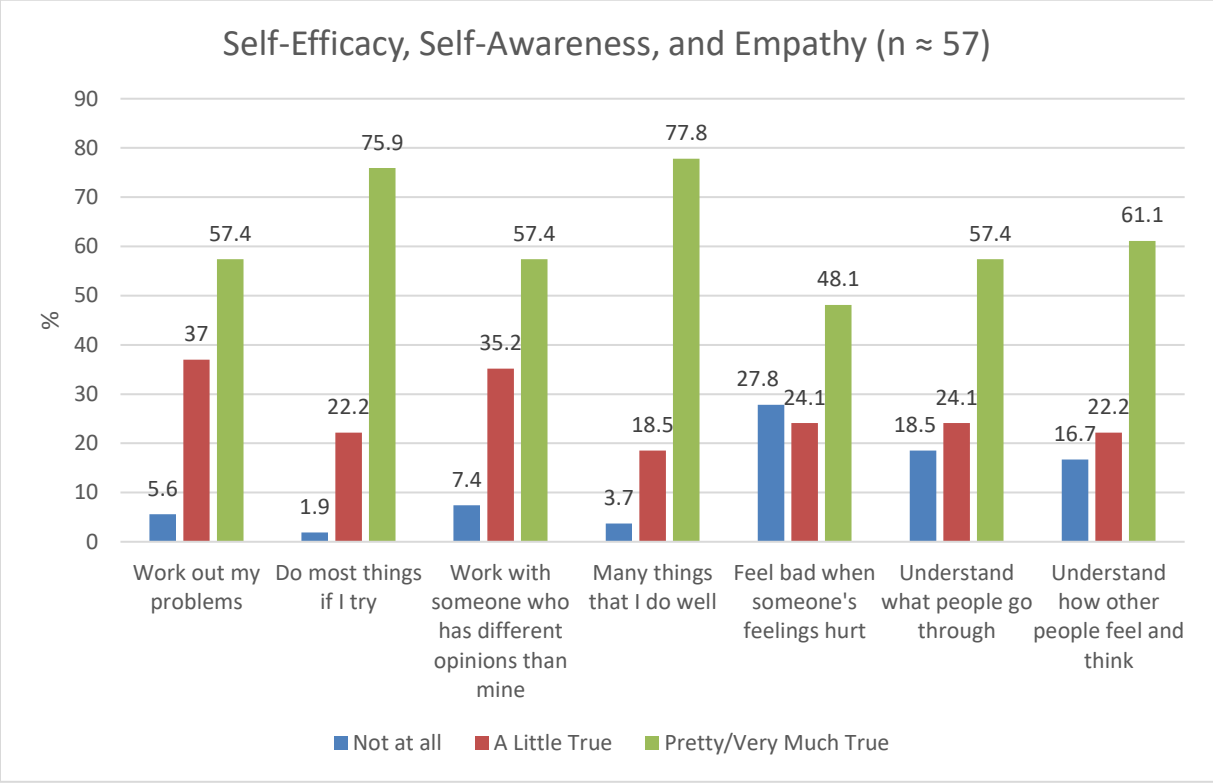


Figure 9 shows intake data on support from peers. Youth were asked whether they have a friend who really cares about them, talks with them about their problems, and helps them when they are having a hard time. The majority of youth identified that each of the statements were either pretty much or very much true.

Figure 9.

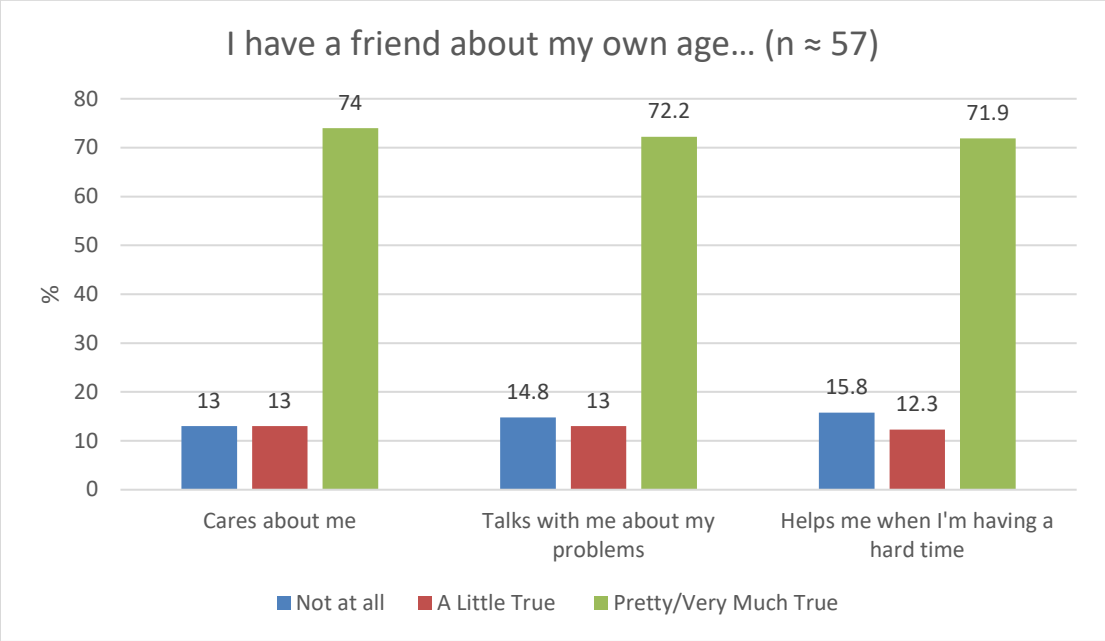
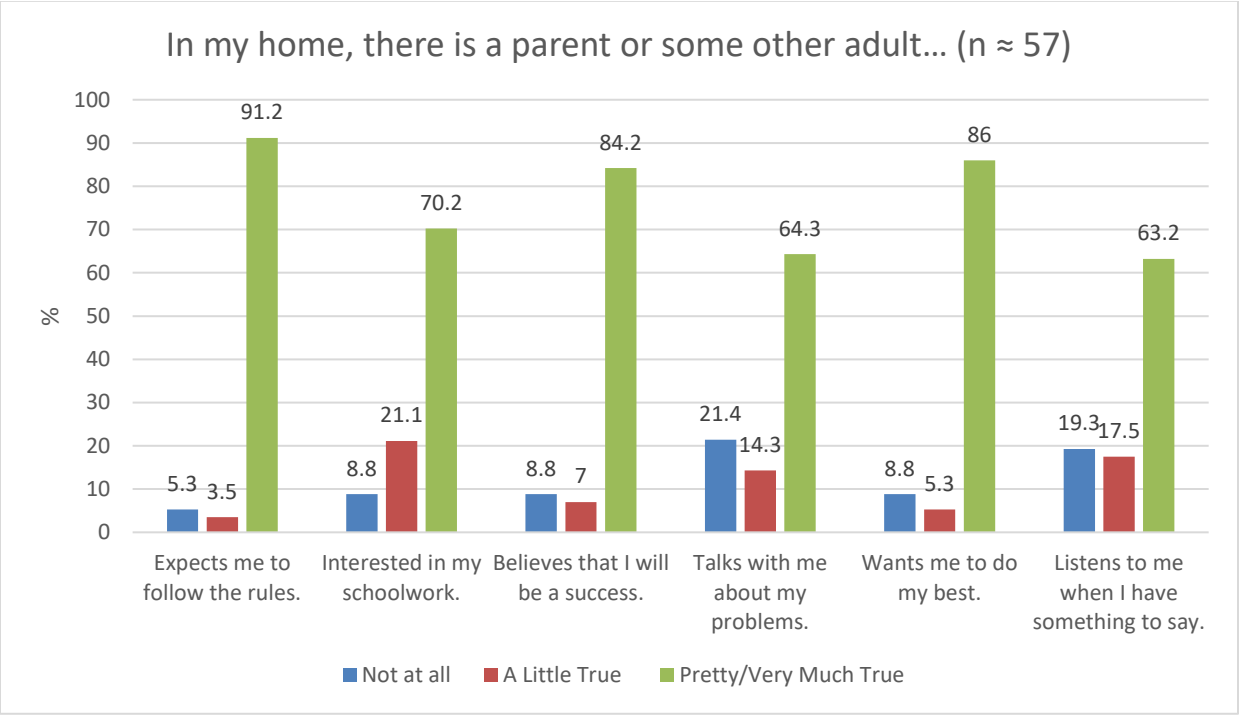


Figure 10 shows intake data on parental or support from other adults in their house. The number of valid responses at intake ranged between 56 and 57. While the majority of youth identified that each of the items were either pretty much or very much true, the two items with the lowest endorsement was "talks with me about my problems" and "listens to me when I have something to say".

Figure 10.



In addition to intake data, Figure 11 through Figure 13 show the proportion of youth who identified that each of the statements were either pretty much or very much true from intake to termination. Due to sample size restrictions, McNemar's tests were not conducted. Figure 11 shows differences from intake to termination for the items measuring self-efficacy, self-awareness, and empathy. The number of valid responses ranged between 38 and 39 for each of the items. Youth exhibited improvement in each of the items measuring self-efficacy, self-awareness, and empathy. For example, 56.4% (n = 22) at intake and 69.2% (n = 27) at termination indicated that the item "I can work out my problems" was either pretty much or very much true.

Figure 11.

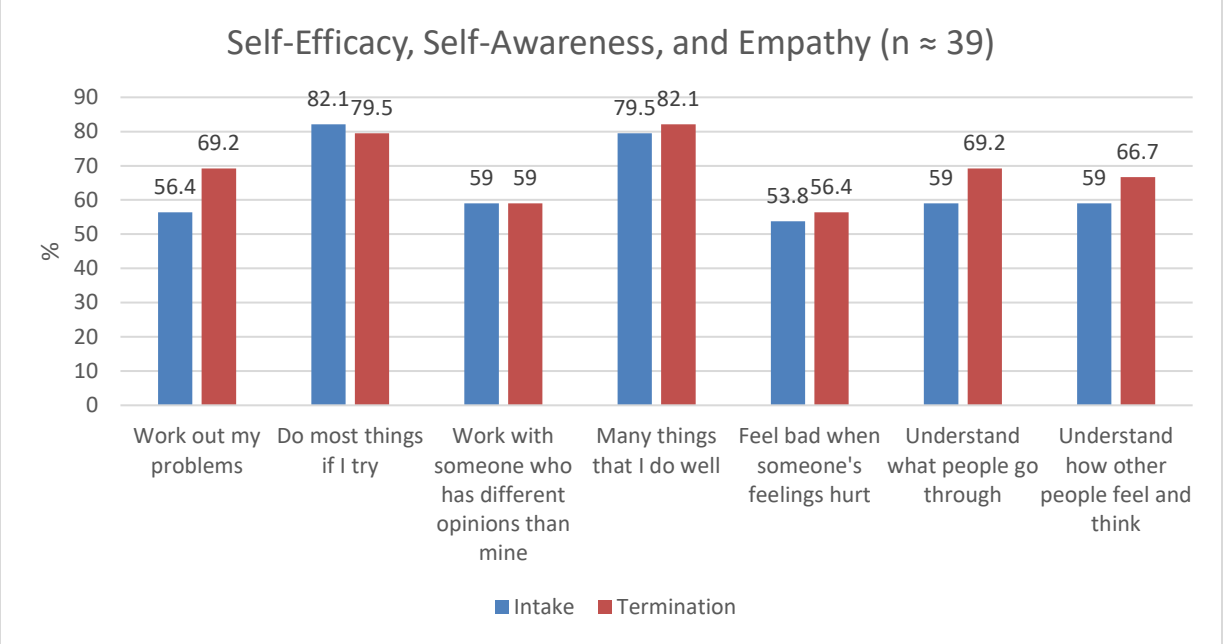


Figure 12 shows the proportion of youth who responded either pretty much or very much true to each of the items measuring peer support. The number of valid responses was 39. For all three items, a slightly lower proportion of youth indicated that the statements were either pretty much or very much true at termination compared to intake.

Figure 12.

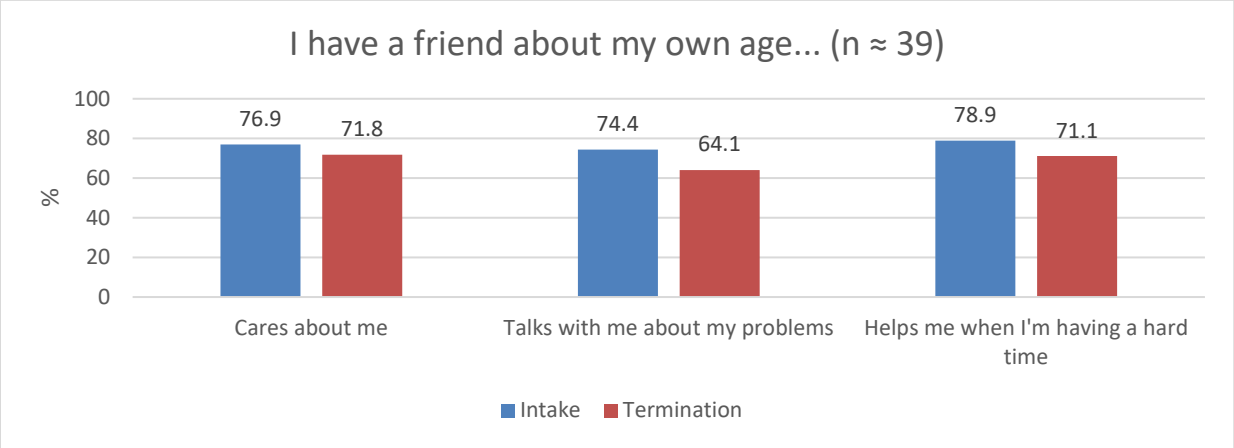
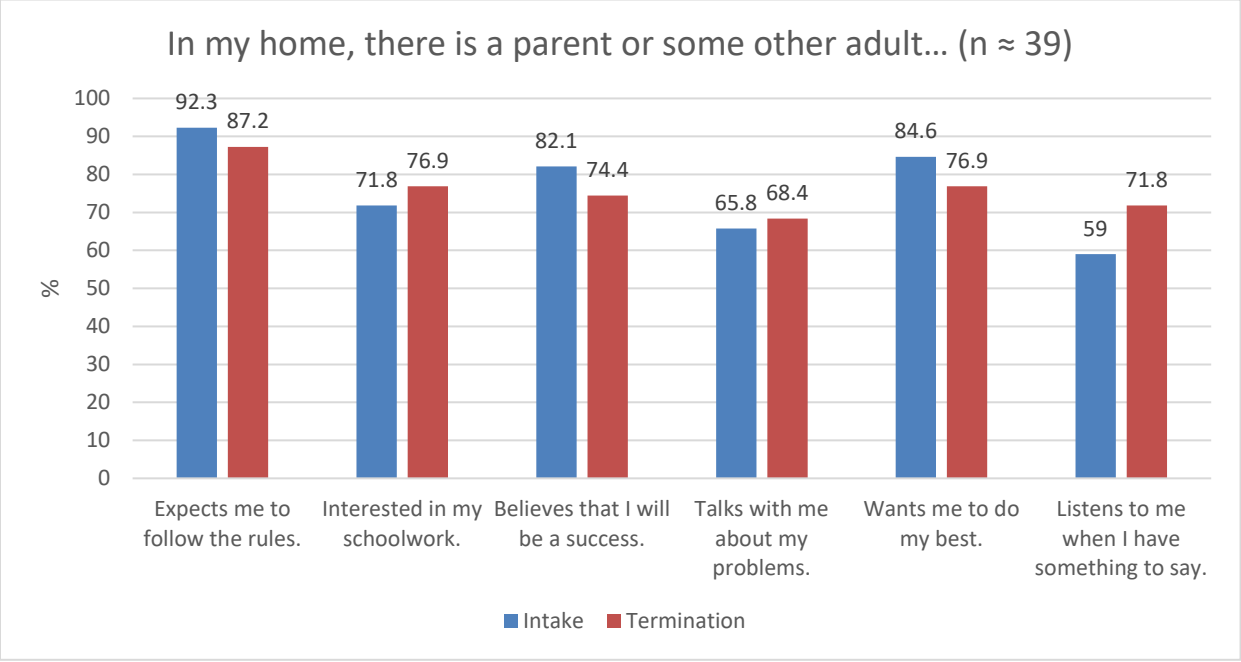


Figure 13 shows the proportion of youth who responded either pretty much or very much true to each of the items measuring parental support or support from other adults in the home. Valid responses to these 6 items ranged between 38 and 39. The proportion of positive responses declined slightly for three items: “expects me to follow the rules”, “believes that I will be a success”, and “always wants me to do my best”.

Figure 13.



TSCC

The TSCC was administered at intake and termination from BHJJ. Paired-samples t-tests were conducted to show whether means at intake and termination on each TSCC subscale differed significantly. Data were analyzed separately for females (see Figure 14) and males (see Figure 15) who had completed the TSCC at both intake and termination in Cuyahoga County.

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 higher scores on each trauma symptom subscale than males. For example, at intake, the average score on the Posttraumatic Stress domain was 7.36 females and 4.85 for males. Paired samples t-tests revealed significant improvements on every domain from intake to termination for females, and significant improvements on Anger, Posttraumatic Stress, and Dissociation domains for males (see Table 19 and Table 20).

Table 19. TSCC Subscales from Intake to Termination among Females

Females	Intake	Termination	t	d
Anxiety	4.93 (SD = 4.94; n = 28)	2.39 (SD = 4.70; n = 28)	2.37*	.45
Depression	7.68 (SD = 6.52; n = 28)	3.54 (SD = 4.47; n = 28)	3.57***	.67
Anger	8.93 (SD = 7.80 ; n = 28)	3.75 (SD = 3.95; n = 28)	3.77***	.71
Posttraumatic Stress	7.36 (SD = 6.31; n = 28)	3.43 (SD = 4.80; n = 28)	3.05**	.58
Dissociation	6.75 (SD = 5.80; n = 28)	3.82 (SD = 5.29; n = 28)	2.67*	.51
Sexual Concerns	3.96 (SD = 3.74; n = 28)	1.07 (SD = 1.54; n = 28)	3.98***	.75

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

Figure 14.

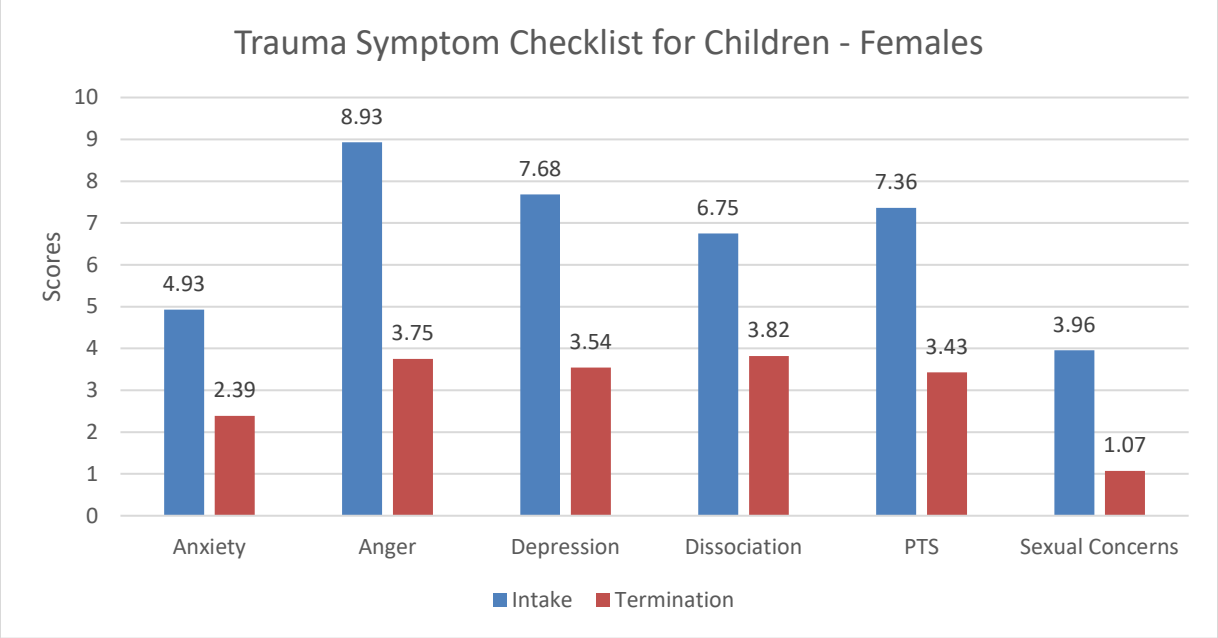
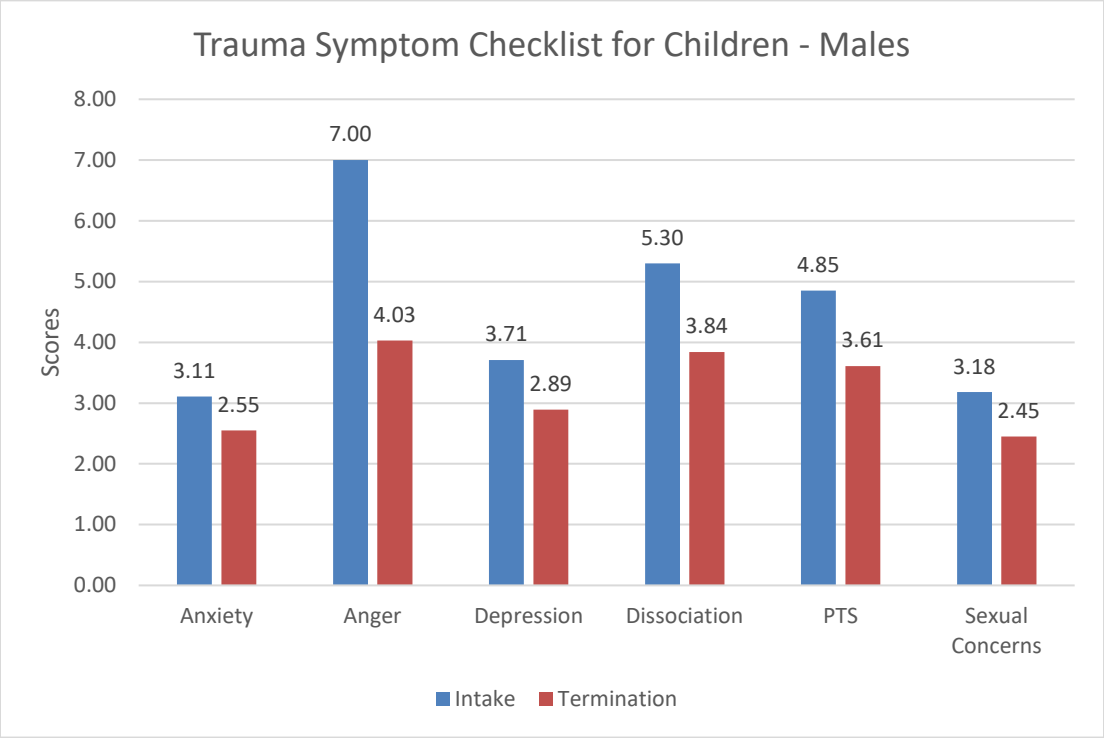


Table 20. TSCC Subscales from Intake to Termination for Males

Males	Intake	Termination	t	d
Anxiety	3.11 (SD = 3.43; n = 66)	2.55 (SD = 3.19; n = 66)	1.43	.18
Depression	3.71 (SD = 4.62; n = 66)	2.89 (SD = 3.61; n = 66)	1.53	.19
Anger	7.00 (SD = 6.08; n = 66)	4.03 (SD = 4.28; n = 66)	4.64***	.57
Posttraumatic Stress	4.85 (SD = 5.53; n = 66)	3.61 (SD = 4.56; n = 66)	2.04*	.25
Dissociation	5.30 (SD = 4.64; n = 66)	3.84 (SD = 4.76; n = 66)	2.59*	.33
Sexual Concerns	3.18 (SD = 3.76; n = 66)	2.45 (SD = 2.99; n = 66)	1.66	.21

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

Figure 15.



Substance Use Survey

The Substance Use Survey was revised for this current evaluation covering the 2017-2019 period to combine and add substances that were not covered in the previous survey and to add general questions regarding youth's perceptions of the ways in which alcohol and drug use has affected their physical health and social functioning. For example, the revised instrument includes opioids as its own category inclusive of heroin, oxycodone, Percocet, opium, and synthetic opioids which were previously represented across multiple categories. In this example, Percocets and Oxycodone were included in the previous instrument with other non-opioid pain killers. Given that there were several categories of substances where there was not an exact match from the previous instrument to the current one, we present data only for the most current evaluation period in this section.

Table 21 shows the proportion of youth in the BHJJ program who reported ever having used alcohol or drugs and the average age of first use by gender in Cuyahoga County. For both females and males, alcohol, tobacco, and marijuana were the most commonly used substances. Chi-squared tests revealed that a significantly higher proportion of males reported ever having used marijuana than females ($\chi^2(1) = 3.99$, $p < .05$).

Table 21. Self-Reported Substance Use at Intake by Gender – Cuyahoga County

	Male		Female	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
Alcohol	67.5% (n = 27)	14.22 (SD = 1.74)	66.7% (n = 10)	13.90 (SD = 1.79)
Tobacco	65.0% (n = 26)	13.69 (SD = 2.56)	40.0% (n = 6)	12.50 (SD = 2.59)
Cannabis	**85.0% (n = 34)**	**13.03 (SD = 2.26)**	**60.0% (n = 9)**	**13.78 (SD = 2.33)**
Hallucinogens	7.9% (n = 3)	15.33 (SD = 0.58)	6.7% (n = 1)	16.00[a]
Inhalants	2.6% (n = 1)	8.00[a]	0.0% (n = 0)	
Opioids	10.0% (n = 4)	15.75 (SD = 1.26)	6.7% (n = 1)	16.00[a]
Sedatives	12.5% (n = 5)	14.60 (SD = 1.14)	6.7% (n = 1)	16.00[a]
Caffeine	22.5% (n = 9)	12.89 (SD = 2.52)	33.3% (n = 5)	10.80 (SD = 5.02)
Stimulants	12.5% (n = 5)	15.60 (SD = 0.89)	7.1% (n = 1)	16.00[a]
Over the counter medications	15.0% (n = 6)	15.00 (SD = 1.00)	6.7% (n = 1)	16.00[a]
Other prescription drugs	5.0% (n = 2)	9.00 (SD = 7.07)	0.0% (n = 0)	
Herbs/Flowers	0.0% (n = 0)		0.0% (n = 0)	

[a] No Standard Deviations are calculated.

Thirty-Day Substance Use

If youth reported any lifetime use, they were also asked the number of days out of the past 30 in which had used each substance. Figure 16 shows the past 30-day use from intake to termination expressed as the average number of days for each of the 4 most commonly reported substances (alcohol, tobacco, marijuana, and caffeine). The data here are restricted to the youth who had reported having ever used each of the four substances. For each of the four substances, the average number of days in which the youth used each of the four substances declined from intake to termination.

Figure 16.

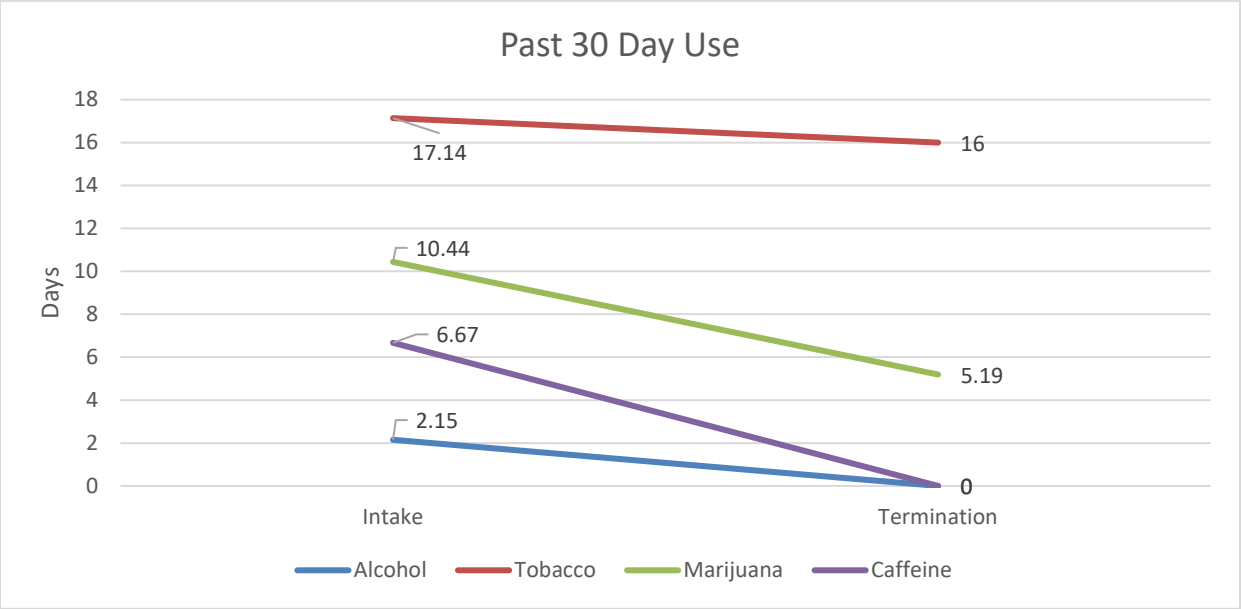
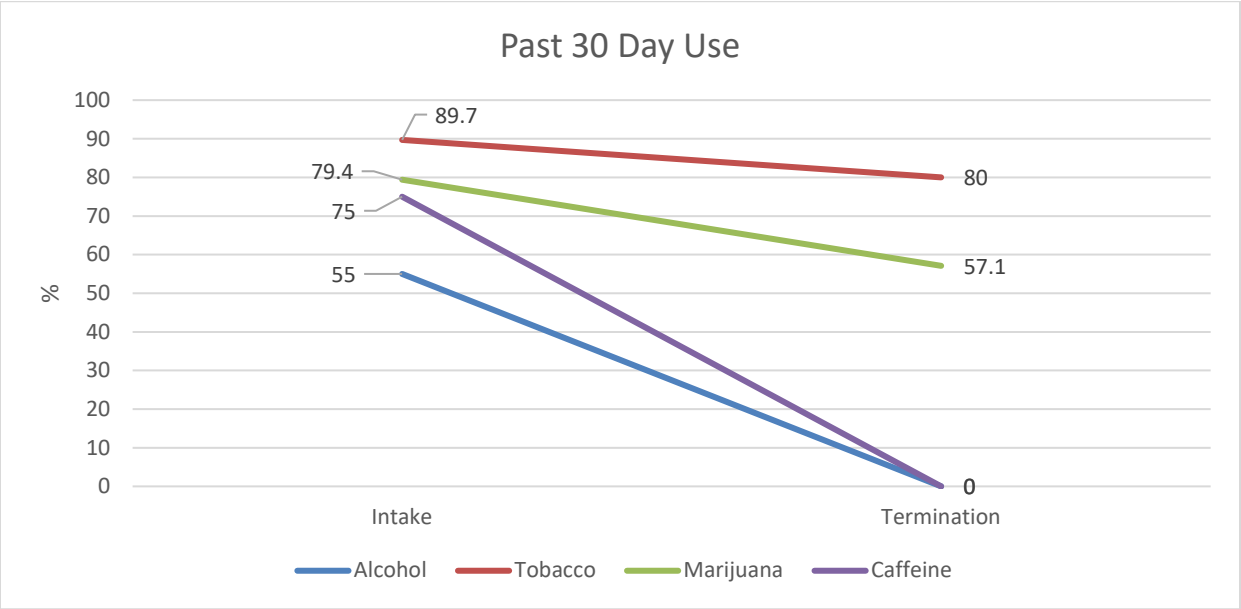


Figure 17 reports the proportion of youth who reported having used any of the four substances at all in the past 30 days. For each of the four most commonly reported substances, the proportion of youth who had reported past 30-day use declined.

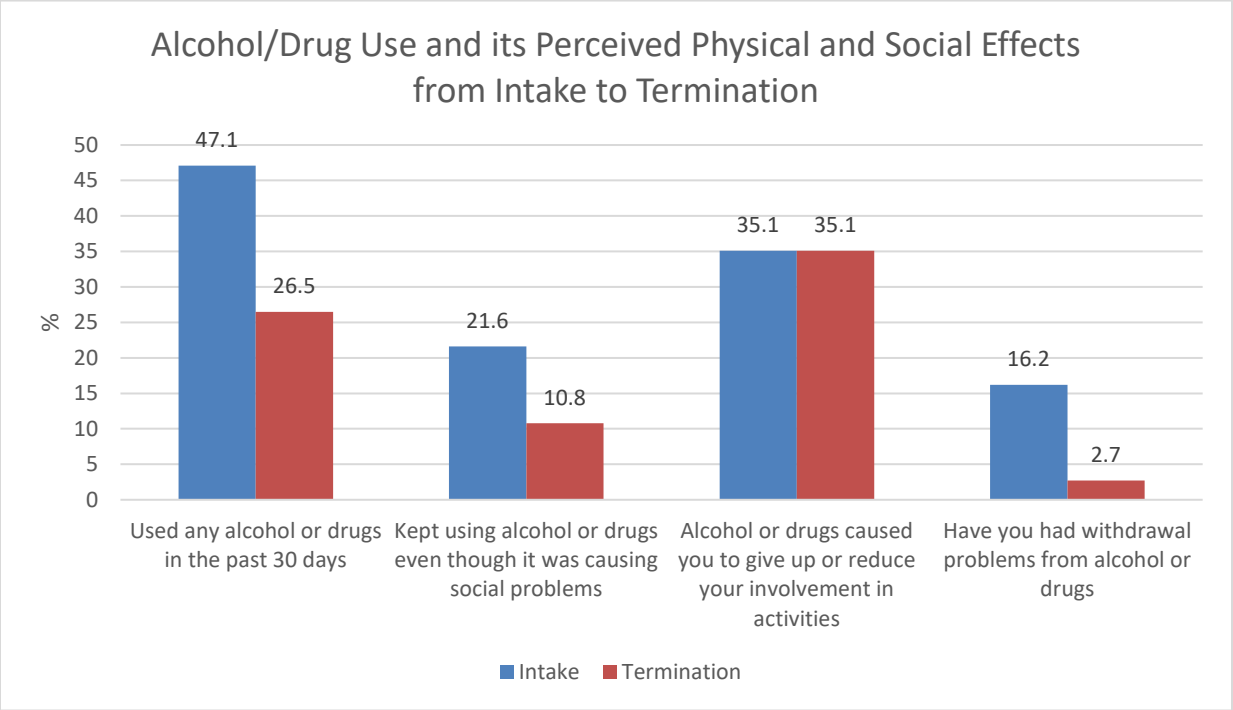
Figure 17.



In addition to questions pertaining to the use of specific substances, youth were asked questions around general alcohol/drug use and its perceived effects on physical health and social functioning (see Figure 18). The proportion of youth who indicated that they had used any alcohol or drugs in the past 30 days decreased from 47.1% at intake to 26.5% at termination. It is important to note here that the percentage of youth who indicated that they had used in the past 30 days in this more general question seems lower than the percentage who indicated past 30-day use in the questions that asked about specific substances. Percentages in Figure 18 included only those who had indicated they had ever used the specific substance. Further, we suspect that when asked a general question about alcohol or drugs, many of the youth may not consider a substance to be a drug and therefore may answer no to a general question about alcohol/drugs.

From intake to termination, the proportion of youth who indicated that they had continued to use alcohol/drugs even though it was causing social problems, leading to fights, or getting you into trouble with other people at least sometimes and those who had withdrawal problems from alcohol or drugs decreased from intake to termination. The proportion of youth who indicated that alcohol/drugs caused them to give up or reduce involvement in activities at work, school, home, and social events stayed the same from intake to termination. While none of these differences were statistically significant, it is likely a function of low cell sizes.

Figure 18.



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.

Between July 1, 2015 and June 30, 2019, there have been 128 youth terminated from the BHJJ program in Cuyahoga County. Sixty-five percent (64.8%, n = 83) of the youth terminated from the BHJJ program were identified as successful treatment completers. Slightly under eight percent (7.8%, n = 10) were terminated from the program due to some level of incarceration. Table 22 presents all of the reasons for termination from BHJJ and displays reasons for termination for White and Black participants.

Table 22. Reasons for Termination from BHJJ

Termination Reason	All Youth Enrolled between July 2015 and June 2019	White Youth Enrolled between July 2015 and June 2019	Black Youth Enrolled between July 2015 and June 2019
Successfully Completed Services	64.8% (n = 83)	63.6% (n = 14)	61.3% (n = 57)
Client Did Not Return/Rejected Services	1.6% (n = 2)	4.5% (n = 1)	1.1% (n = 1)
Out of Home Placement	10.9% (n = 14)	9.1% (n = 2)	11.8% (n = 11)
Client/Family Moved	0.8% (n = 1)	0	1.1% (n = 1)
Client Withdrawn	1.6% (n = 2)	0	2.2% (n = 2)
Client AWOL	3.9% (n = 5)	0	5.4% (n = 5)
Client Incarcerated	7.8% (n = 10)	4.5% (n = 1)	9.7% (n = 9)
Other	8.6% (n = 11)	18.2% (n =4)	7.5% (n = 7)

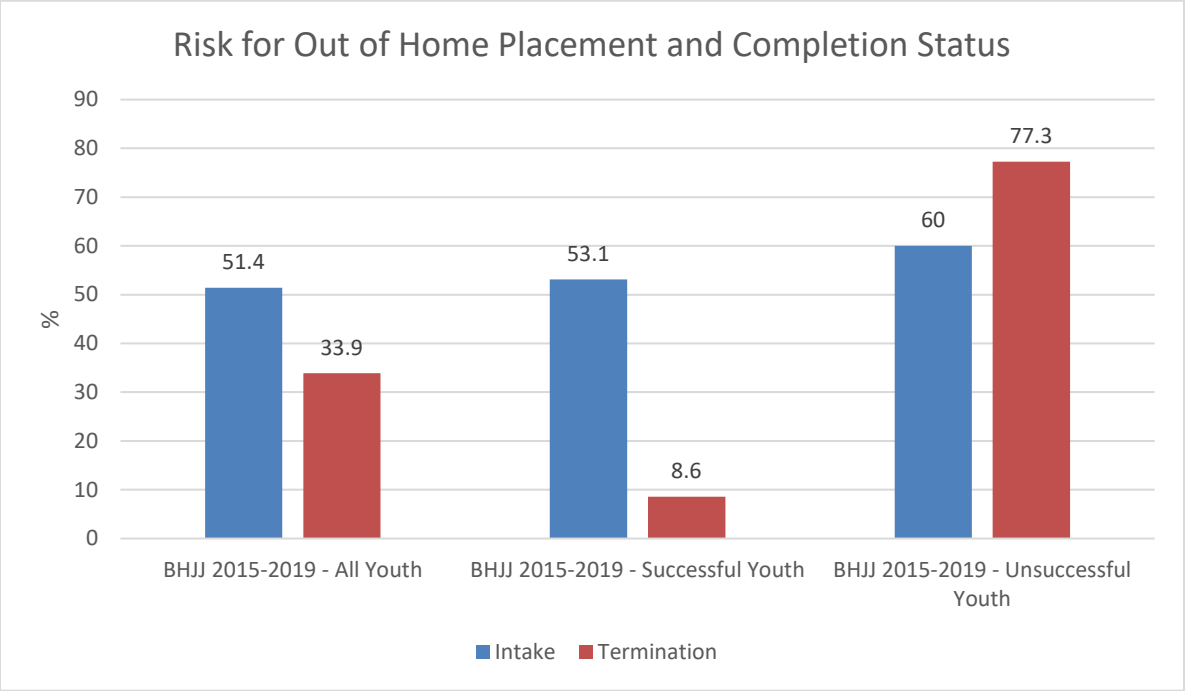
Average Length of Stay

Since the start of BHJJ, the average length of stay (ALOS) in the program was 290.6 days. For youth identified as successful treatment completers, the ALOS was 283.8 days while for unsuccessful treatment completers, the ALOS was 307.2 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, 51.4% of the youth (n = 55) were at risk for out of home placement. At termination, 33.9% (n = 43) of youth were at risk for out of home placement (see Figure 19). Of those youth who successfully completed BHJJ treatment, 8.6% (n = 7) were at risk for out of home placement at termination while 77.3% (n = 34) of youth who completed unsuccessfully were at risk for out of home placement (see Figure 19).

Figure 19.



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 services through BHJJ. Workers reported that police contacts had been reduced for 74.4% (n = 96) of the youth and had stayed the same for 15.5% (n= 20) of the youth. Police contacts increased for 5.4% (n = 7) of the youth and the worker was unable to estimate for 4.7% of youth (n = 6).

YSSF

Upon completion of the BHJJ program, the caregiver was asked about their overall satisfaction with the services they received through the BHJJ program in Cuyahoga County as well as how services impacted their children and family. At termination from the BHJJ program, 93.3% (n = 98) of caregivers either strongly agreed or agreed that BHJJ staff were sensitive to their cultural/ethnic background and 88.8% (n =95) either strongly agreed or agreed that the location of the services was convenient (see Figure 20). Seventy-two percent (72.0%, n = 77) of caregivers reported that as a result of the services their

child/family received, their child gets along better with family members and 66.0% (n = 70) reported their child is better able to do the things they want to do (see Figure 21).

Figure 20.

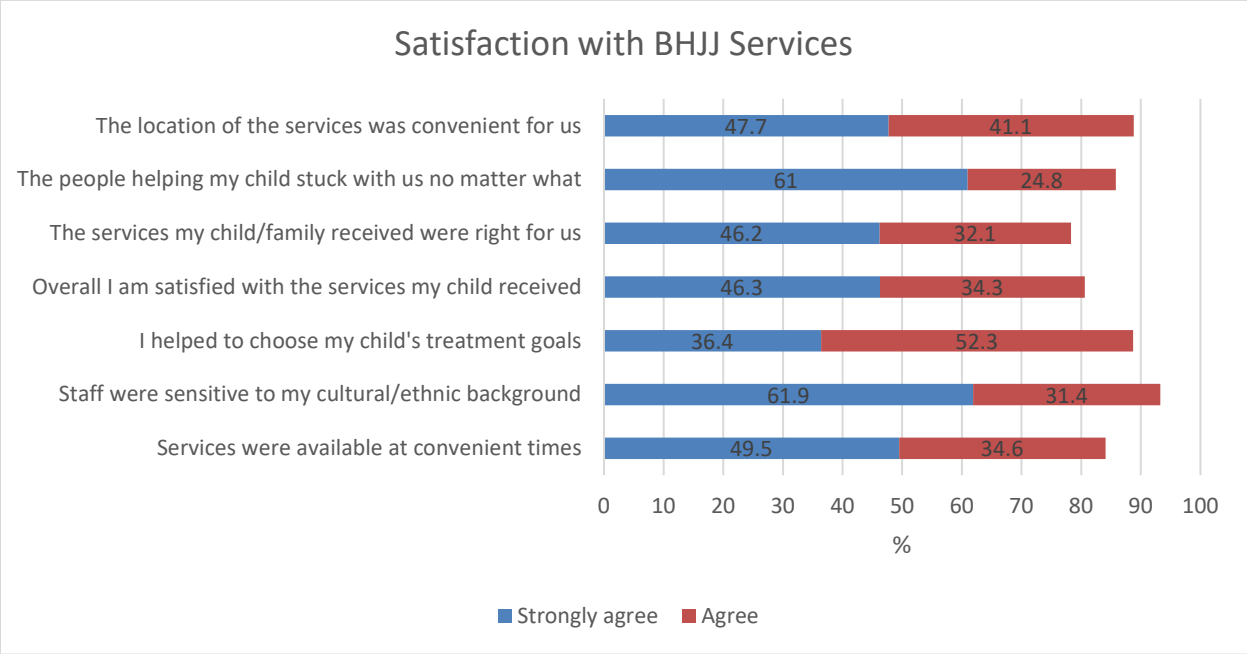
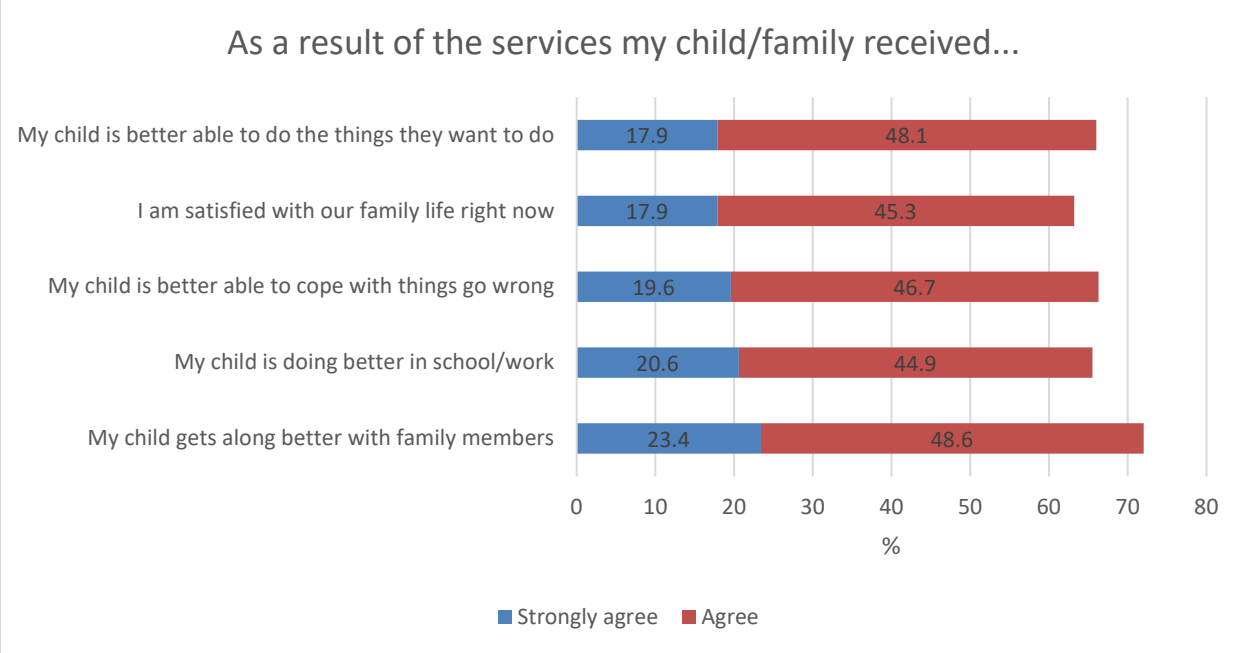


Figure 21.



Recidivism (July 1, 2015 – June 30, 2019)

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 misdemeanor and felony charges are presented in the following sections. Juvenile court history and recidivism information are presented at 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 (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 six months after termination from BHJJ we chose to include only those youth who had been terminated from BHJJ for at least six months prior to the end of the data collection period, June 30, 2019. 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 six month after termination analyses, a youth had to have been 17.5 years old or younger at the time of termination and must have been terminated at least six months prior to the end of the data collection period. The same criteria were applied to the intervals following enrollment in BHJJ. When examining new charges occurring within 12 months after enrollment, youth must be 17 years old or younger at the time of enrollment and the enrollment date must be at least twelve months prior to the end of the data collection period for inclusion in the analysis. These data focus on youth who were enrolled between July 1, 2015 and June 30, 2019.

Results

Previous Juvenile Court Involvement

Overall, 83.9% (n = 120) of BHJJ youth in Cuyahoga county enrolled between July 1, 2015 and June 30, 2019 had a misdemeanor charge, 48.3% (n = 69) or a felony charge, and 95.8% (n = 137) had been adjudicated delinquent in the 12 months prior to enrollment (see Table 23). Previous juvenile court information was similar for youth regardless of their completion status (successful vs. unsuccessful). In the 12 months prior to enrollment in BHJJ, 94.0% (n = 78) of successful completers and 100.0% (n = 44) of unsuccessful completers were adjudicated delinquent (see Table 24 and Table 25). A slightly higher proportion of successful completers had a felony charge in the 12 months prior to enrollment (53.0%; n

= 44) than unsuccessful completers (50.0%; n = 22). Chi-square analyses revealed no statistically significant differences based on completion status.

Table 23. Charges Prior to Enrollment

	% of Youth with Misdemeanors	% of Youth with Felonies	% of Youth Adjudicated Delinquent
6 months (N = 143)	58.0% (n = 83)	23.8% (n = 34)	81.8% (n = 117)
12 months (N = 143)	83.9% (n = 120)	48.3% (n = 69)	95.8% (n = 137)
18 months (N = 143)	91.6% (n = 131)	55.9% (n = 80)	97.9% (n = 140)

Table 24. Charges Prior to BHJJ Enrollment for Youth Who Completed Successfully

	% of Youth with Misdemeanors	% of Youth with Felonies	% of Youth Adjudicated Delinquent
6 months (N = 83)	56.6% (n = 47)	25.3% (n = 21)	83.1% (n = 69)
12 months (N = 83)	83.1% (n = 69)	53.0% (n = 44)	94.0% (n = 78)
18 months (N = 83)	88.0% (n = 73)	60.2% (n = 50)	96.4% (n = 80)

Table 25. Charges Prior to BHJJ Enrollment for Youth Who Completed Unsuccessfully

	% of Youth with Misdemeanors	% of Youth with Felonies	% of Youth Adjudicated Delinquent
6 months (N = 44)	59.1% (n = 26)	27.3% (n = 12)	84.1% (n = 37)
12 months (N = 44)	86.4% (n = 38)	50.0% (n = 22)	100.0% (n = 44)
18 months (N = 44)	97.7% (n = 43)	61.4% (n = 27)	100.0% (n = 44)

Recidivism after Enrollment

We defined recidivism after enrollment as receiving a new charge or adjudication at 6, 12, and/or 18 months after a youth's BHJJ enrollment date (see Table 26). In the 12 months after enrollment in BHJJ, 66.1% (n = 74) of participants were charged with at least one new misdemeanor and 38.4% (n = 43) were charged with at least one new felony. More than two-thirds (67.9%; n = 76) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ.

Table 26. Recidivism after BHJJ Enrollment

	% of Youth with Misdemeanors	% of Youth with Felonies	% of Youth Adjudicated Delinquent
6 months (n = 130)	47.7% (n = 62)	26.2% (n = 34)	40.8% (n = 53)
12 months (n = 112)	66.1% (n = 74)	38.4% (n = 43)	67.9% (n = 76)
18 months (n = 89)	76.4% (n = 68)	46.1% (n = 41)	77.5% (n = 69)

In the 12 months after enrollment in BHJJ, 77.1% (n = 27) of successful completers were charged with at least one new misdemeanor, 26.5% (n = 22) were charged with at least one new felony, and 67.7% (n = 44) were adjudicated delinquent (see Table 27). Of the youth who completed unsuccessfully, 63.1% (n = 41) were charged with at least one new misdemeanor, 54.3% (n = 19) were charged with at least one new felony, and 77.1% (n = 27) were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 28). Chi-square analyses revealed that **a significantly higher percentage of unsuccessful completers were charged with at least one felony than successful completers at each of the examined time points after enrollment.**

Table 27. Recidivism after BHJJ Enrollment for Youth Who Completed Successfully

	% of Youth with Misdemeanors	% of Youth with Felonies	% of Youth Adjudicated Delinquent
6 months (n = 77)	49.4% (n = 38)	27.3% (n = 21)	40.3% (n = 31)
12 months (n = 65)	77.1% (n = 27)	26.5% (n = 22)	67.7% (n = 44)
18 months (n = 52)	76.9% (n = 40)	46.2% (n = 24)	76.9% (n = 40)

Table 28. Recidivism after BHJJ Enrollment for Youth Who Completed Unsuccessfully

	% of Youth with Misdemeanors	% of Youth with Felonies	% of Youth Adjudicated Delinquent
6 months (n = 40)	52.5% (n = 21)	32.5% (n = 13)	47.5% (n = 19)
12 months (n = 35)	63.1% (n = 41)	54.3% (n = 19)	77.1% (n = 27)
18 months (n = 30)	80.0% (n = 24)	56.7% (n = 17)	86.7% (n = 26)

Recidivism after BHJJ Termination

We defined recidivism after termination as receiving a new charge or adjudication in the 6, 12, and 18 months after a youth's BHJJ termination date (see Table 29). In the 12 months after termination from BHJJ, 52.8% (n = 38) of youth were charged with at least one new misdemeanor and 34.7% (n = 25) were charged with at least one new felony, and 56.9% (n = 41) were adjudicated delinquent in the 12 months following their termination from BHJJ.

Table 29. Recidivism after BHJJ Termination

	% of Youth with Misdemeanors	% of Youth with Felonies	% of Youth Adjudicated Delinquent
6 months (n = 92)	34.8% (n = 32)	19.6% (n = 18)	39.1% (n = 36)
12 months (n = 72)	52.8% (n = 38)	34.7% (n = 25)	56.9% (n = 41)
18 months (n = 56)	60.7% (n = 34)	37.5% (n = 21)	64.3% (n = 36)

In the 12 months following their termination from BHJJ, 54.3% (n = 25) of successful completers were charged with at least one new misdemeanor, 34.8% (n = 16) were charged with at least one new felony, and 58.7% (n = 27) were adjudicated delinquent (see Table 30). Of the youth who completed unsuccessfully, 48.0% (n = 12) were charged with at least one new misdemeanor, 36.0% (n = 9) were charged with at least one new felony, and 52.0% (n = 13) were adjudicated delinquent in the 12 months after their termination from BHJJ (see Table 31). Chi-square analyses showed no statistically significant differences.

Table 30. Recidivism after BHJJ Termination for Youth Who Completed Successfully

	% of Youth with Misdemeanors	% of Youth with Felonies	% of Youth Adjudicated Delinquent
6 months (n = 59)	35.6% (n = 21)	20.3% (n = 12)	35.6% (n = 21)
12 months (n = 46)	54.3% (n = 25)	34.8% (n = 16)	58.7% (n = 27)
18 months (n = 34)	64.7% (n = 22)	35.3% (n = 12)	64.7% (n = 22)

Table 31. Recidivism after BHJJ Termination for Youth Who Completed Unsuccessfully

	% of Youth with Misdemeanors	% of Youth with Felonies	% of Youth Adjudicated Delinquent
6 months (n = 32)	31.3% (n = 10)	18.8% (n = 6)	46.9% (n = 15)
12 months (n = 25)	48.0% (n = 12)	36.0% (n = 9)	52.0% (n = 13)
18 months (n = 21)	52.4% (n = 11)	42.9% (n = 9)	61.9% (n = 13)

ODYS Commitments

Among a total of 143 youth who enrolled since July 1, 2015, 4.2% (n = 6) were sent to an ODYS facility at any time following their enrollment in BHJJ, including after a youth's termination from BHJJ. **Conversely, 95.8% of youth participating in BHJJ were not admitted to an ODYS facility at any point after enrollment.**

Average Numbers of Charges and Adjudications

In addition to whether a youth was charged or adjudicated delinquent, we examined whether there were differences in the average number of charges and adjudications in equivalent periods of time prior to enrollment and after termination. We conducted paired samples *t*-tests to examine whether there were statistically significant differences in the mean number of charges and adjudications at each time period prior to and after BHJJ participation. Figure 22 shows the average number of charges for youth who had data at both time periods. This restriction resulted in a sample of 92 youth at 6 months, 72 youth at 12 months, and 56 youth at 18 months. **Paired samples *t*-tests revealed a statistically significant decline in the average number of misdemeanors for each time period and adjudications at 6 and 18 months.** For example, the average number of misdemeanor charges 18 months prior to BHJJ enrollment was 4.75 while the average number of misdemeanor charges 18 months after BHJJ termination was 1.98.

Figure 22.

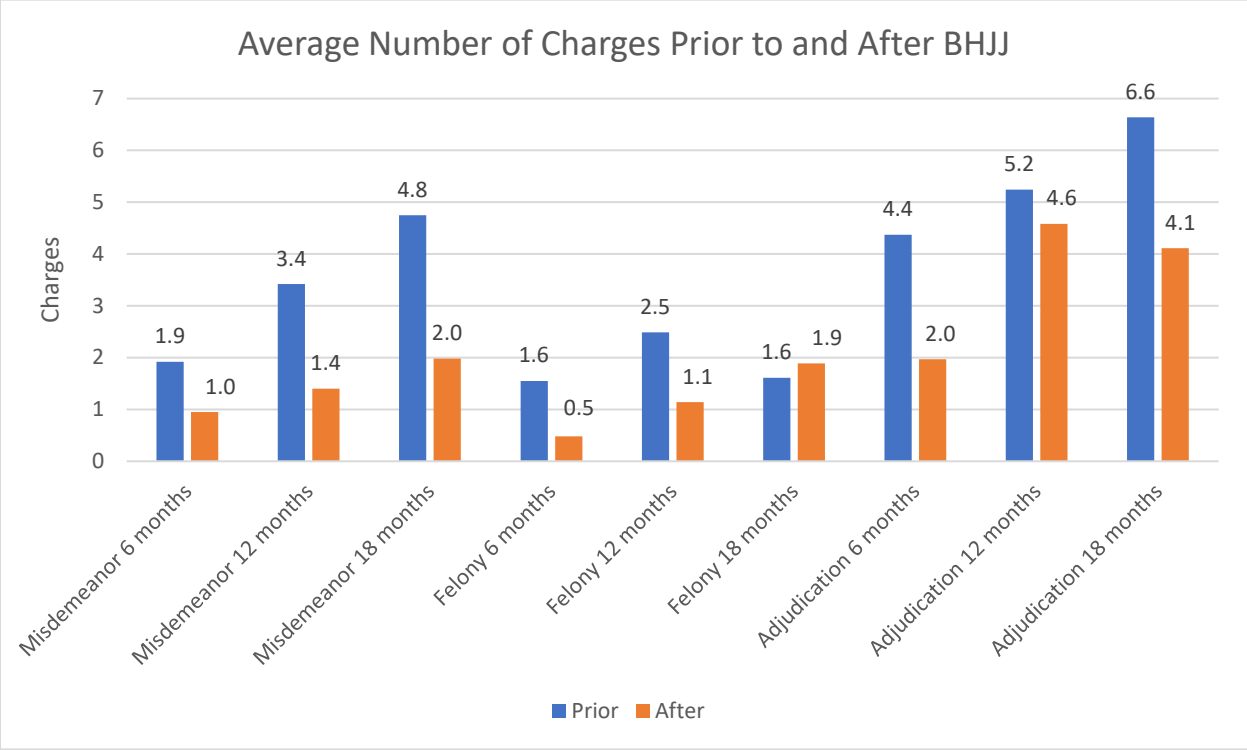


Figure 23 and Figure 24 shows mean differences in charges and adjudications for youth who successfully completed the program and those who did not successfully terminate. To be included in the analysis youth must have data at both time periods. This restricted the sample to 59 youth at 6 months, 46 youth at 12 months, and 34 youth at 18 months for youth who were successfully terminated and 32 youth at 6 months, 25 youth at 12 months, and 21 youth at 18 months for those who terminated unsuccessfully. **For youth who successfully completed, paired samples *t*-tests revealed that there was a significant reduction in the average number of misdemeanor charges in the 12 and 18 month period prior to and after BHJJ and adjudications for each of the time periods we examined.** For example, the average number of delinquent adjudications declined from 6.06 in the 18 months prior to intake to 3.62 after termination. **For youth who terminated unsuccessfully, paired samples *t*-tests revealed that there was a significant reduction in the average number of misdemeanors for each of the time periods we examined.** For example, the average number of misdemeanors was 5.67 in the 18 months prior to intake and 1 in the 18 months after termination.

Figure 23.

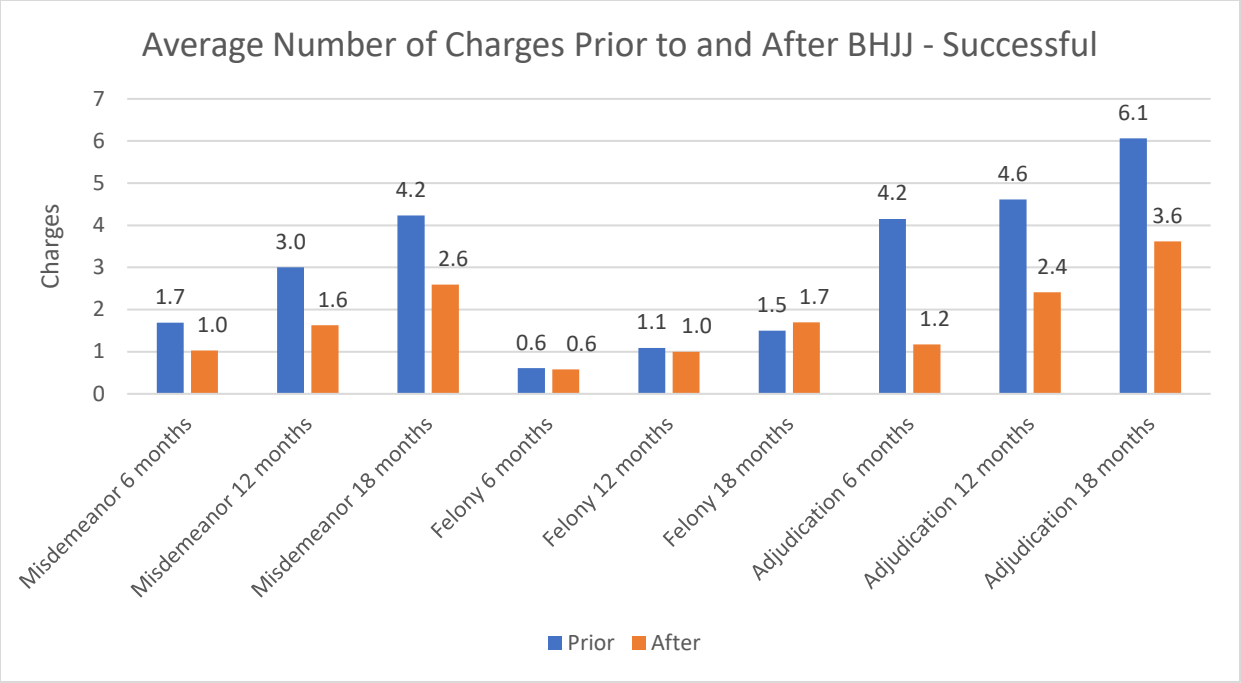
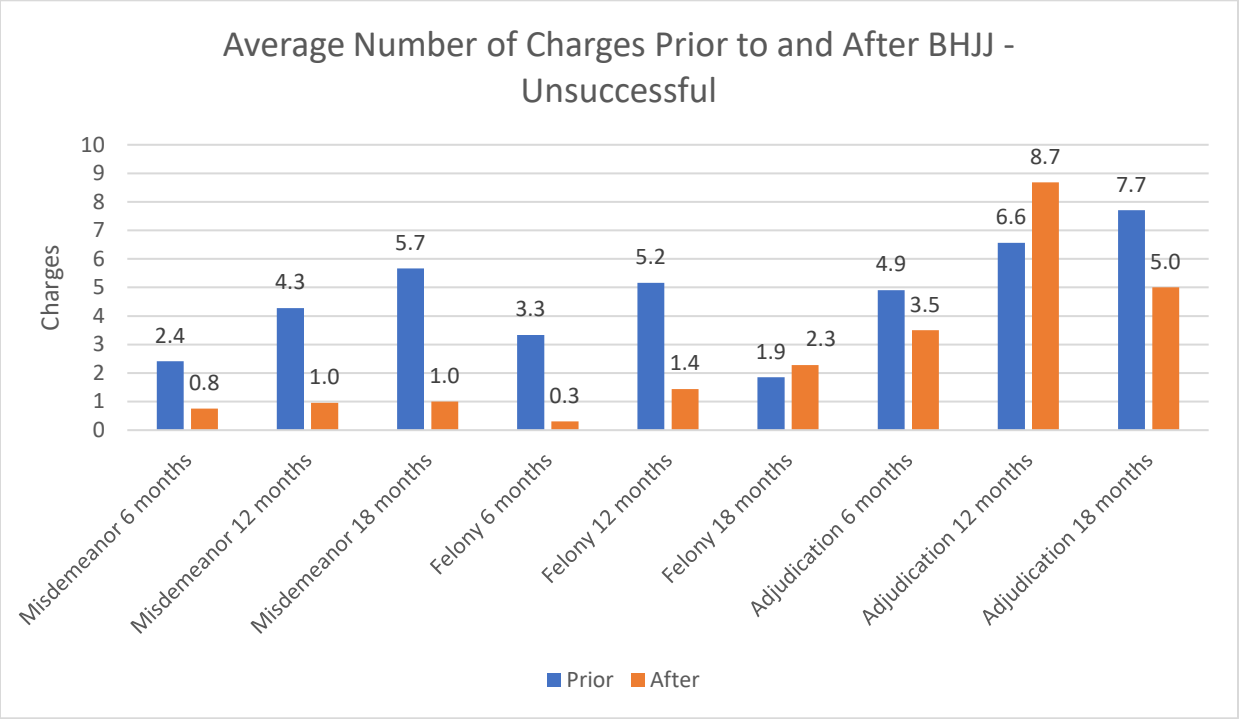


Figure 24.


Average Number of Charges Prior to and After BHJJ - Unsuccessful
Charges
10
9
8
7
6
5
4
3
2
1
0
2.4
0.8
4.3
1.0
5.7
1.0
3.3
0.3
5.2
1.4
1.9
2.3
4.9
3.5
6.6
8.7
7.7
5.0
Misdemeanor 6 months
Misdemeanor 12 months
Misdemeanor 18 months
Felony 6 months
Felony 12 months
Felony 18 months
Adjudication 6 months
Adjudication 12 months
Adjudication 18 months
Prior
After

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 can be obscured by averages, tables, and figures. Counties were asked to provide information on one or two memorable families who participated in the BHJJ program in the form of success stories.

Youth 1

This youth was identified as a candidate for BHJJ Phoenix Court Program due to the youth's trauma history and mental health needs. The youth was able to successfully complete the program after 9 months. The BHJJ Phoenix Court Team identified in the review process that she would be appropriate for services through Bellefaire ICT/TFCBT Program. This program addressed previous sexual abuse trauma, mental health, anger management, domestic violence between family members, and medication management. The youth and family reported the youth had a history of hospitalizations and struggled to regulate her emotions, leading to her increased aggression in the home and at school. There were also concerns with the parents' on-going aggression in the home. Despite attempts for Bellefaire to provide family therapy to all parties, it was determined the home was not a safe environment for the youth. Subsequently, the Cuyahoga County Department of Children and Family Services (CCDCFS) was granted custody and she was placed with a family friend through Kinship Care. While removing a child from a home is never a desired outcome, BHJJ and Bellefaire realized the youth's potential for success was being hindered in her home environment. Being placed out of the home allowed the youth the opportunity to embrace the trauma services being provided. This was made possible by the unwavering support of the new caregiver. Shortly after being placed, she was able to become more self-aware, increase communication, and become more reflective. She was able to problem solve, self-regulate her emotions, and no longer required medications. These positive progressions continued in the community as her academic performance also improved. Moreover, she continued to maintain contact with her family while having a realistic understanding of the family dynamics. At this time, the youth is working towards reunification and has been linked to independent living skills treatment through Bellefaire. The BHJJ and Bellefaire team along with the support of the caregiver recognized the path to reunification began with identifying the individual needs of the child. The youth now has a healthy foundation to begin the family healing that is necessary for reunification.

Youth 2

This youth was placed on probation in 2017 for M1 Assault. His only court order was to participate in and complete the program requirements for BHJJ and Phoenix Court. When he first started in the BHJJ/Phoenix Court program, he was very defiant and disrespectful in the home. He would not follow the rules of the home and refused to take his medication as prescribed (he has multiple mental health diagnoses). He would constantly argue with his parents, and he would get into frequent verbal altercations with his parents that would sometimes lead to minor physical altercations. In addition, his parents did not know how to properly consequence him because when they tried, he would threaten to harm himself. The parents took these threats very seriously. This allowed the youth to manipulate them.

A referral for Multisystemic Therapy (MST) was made for the family. This intensive family therapy focused on empowering parents to be able to better communicate with and manage their children. The therapist worked with the family for five months in 2017. She helped the family a great deal. She

worked with the youth to be able to understand him better, and that allowed her to help the parents be able to set proper rules and provide appropriate consequences for the youth. The youth continued to make improvements on a daily basis and by the end of the program, he was abiding by the rules, he decreased the arguments and conflict, and he was taking his medication as prescribed. He came a long way since when he first started the program.

At the beginning of the 2017-2018 school year, the youth was enrolled in an alternative school. His parents realized that it was important for him to attend school outside of the home (he was previously home-schooled) to help improve his social anxieties and become used to physically attending a school should he decide to go to college, which he indicated that he wanted to do. The youth was very hesitant at first: he was very anxious and did not want to attend school. His attendance at the beginning of the school year was very poor and he would only attend once or twice per week. However, with the help of the MST worker, youth's attendance during his participation in the program increased dramatically. He was attending school every day. With the help of consistent medication and the implementation of stricter rules and consequences from his parents, the youth was able to overcome his anxiety in the school setting and understand the importance of being in school every day. He had good relationships with teacher and other school staff members, and he made new friends. His first semester grades were excellent. He is very smart. The youth received an A in Biology, A- in English, A in Family Consumer Science, A in Physical Education, and A in World Geography. He made Honor Roll in both of his first two quarters. He was on pace to graduate on time and had no behavior issues at school. His parents were very supportive of his education. One of the youth's goals at the start of the program was to stay active to help counteract his mental health symptoms. He participated in several pro-social activities throughout the duration of the program. At the beginning of the program, he was having a difficult time being active. As a result, he was ordered to complete 25 hours of community service. He successfully completed all of these hours. The family also received case management services through a Care Coordinator. They were compliant with this service as well. Youth did not have any drug issues and tested negative on all of his urine screens. Youth did not pick up any new offenses during his time in the BHJJ/Phoenix Court program. He graduated from the program and was successfully terminated from probation in early 2018.

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