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

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

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

Demographics and Youth Characteristics

- Since 2006, 2,155 youth have been enrolled in BHJJ (55% male, 49% non-white). The average age of youth entering the program was 15.4 years old.
- Between July 1, 2017 and June 30, 2019, 190 youth were enrolled in BHJJ (62% male, 56% White). The average age of youth entering the program was 14.8 years old.
- The most common DSM diagnosis for males was Attention Deficit Hyperactivity Disorder and the most common diagnosis for females was Oppositional Defiant Disorder.
- 34% of males and 28% of females were diagnosed with both a mental health and substance use diagnosis.
- Caregivers reported that 13% of the females had a history of sexual abuse, 48% talked about suicide, and 21% had attempted suicide. 68% of males and 63% of females had family members who were diagnosed with or showed signs of depression.
- 43% of BHJJ females and 50% of BHJJ males had biological family members with drinking or drug problems.
- According to the OYAS, 88% of the BHJJ youth were moderate or high risk to reoffend.
- 16% of youth had at least one felony charge in the 12 months prior to BHJJ enrollment.

- 41% of youth had a history of child welfare involvement and 68% had received mental health treatment in their lifetime.

Educational Information

- About 60% of the youth were suspended or expelled from school in the year prior to their BHJJ enrollment. During treatment, 30% were suspended or expelled.

- 33% of unsuccessful completes and 58% of successful completers earned mostly A's, B's, or C's at termination from BHJJ. At termination, 77% of youth were attending school.

- At termination, workers reported that 94% of youth were attending school more or about the same amount as they were before starting treatment.

Mental/Behavioral Health Outcomes

- BHJJ youth reported a significant decrease in trauma symptoms related to anxiety, anger, 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.

Termination and Recidivism Information

- 62% of the youth terminated from the BHJJ program completed treatment successfully. The average length of stay in the program was 114 days.

- Workers reported that police contacts have been reduced for 72% of the youth.

- At intake, 53% of the youth were at risk for out of home placement. At termination, 18% of youth were at risk for out of home placement.

- One year after termination, 11% of successful completers and 12% of unsuccessful completers had a new felony charge.

- The average number of misdemeanor charges 12 months prior to and after BHJJ declined from 1.5 to 0.9.

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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

In Montgomery County, the BHJJ program is referred to as the LIFE Program (Learning Independence and Family Empowerment), and is a county-wide collaborative that has been in existence since 2006. The LIFE Program is made possible through the ongoing collaboration with the following organizations: Montgomery County Juvenile Court; South Community, Inc.; Montgomery County Alcohol Drug Addiction & Mental Health Services (ADAMHS Board); Ohio Department of Mental Health and Addiction Services (OhioMHAS) and the Ohio Department of Youth Services – Southern Regional District 1. The program serves females and males between the ages of 10 and 18 who are involved with Montgomery County Juvenile Court; who have a DSM-5 diagnosis and meet at least one of the following criteria:

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

Youth and families involved in the LIFE Program are referred by Juvenile Court personnel. The youth is assessed by the Caring for Kids Program, which provides 24-hours screening and assessment services for youth involved in the Montgomery County Juvenile Court (MCJC). A MCJC Judge, Magistrate, Probation Officer or Intervention Specialist can also identify an adolescent who meets program criteria and refer the youth directly to the LIFE Program. If there are barriers to the client and family completing a Diagnostic Assessment and a referral is made by the court, the LIFE program is able to go into the home and complete the assessment. Referrals can also be made to the LIFE Program in other instances including: a youth could be paroled from the Ohio Department of Youth Services (ODYS) or released from one of the local MCJC secure facilities and referred directly in to the LIFE Program as a plan for re-entry. When the referral is complete, the youth and family may be referred to three separate therapeutic interventions, Functional Family Therapy (FFT), Functional Family Therapy-Contingency Management (FFT-CM) and/or Seven Challenges.

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

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

All primary LIFE Program therapeutic services are located in the home environment and in the community to alleviate transportation barriers for families. In addition to services from the FFT Therapist and Care Specialist, a LIFE Probation Officer or Intervention Specialist is assigned to the youth to provide intense intervention or probation services. The youth also has access to a South Community psychiatrist and a Natural Helper (a family mentor) through MCJC Reclaiming Futures Natural Helper

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

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

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

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

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).

Demographics

As of June 30, 2019, 2,155 youth were enrolled into the BHJJ program in Montgomery County. The average age at enrollment was 15.4 years (SD=1.74). More males (54.6%, n = 1,168) than females (45.4%, n = 970) have been enrolled. White youth (51.2%, n = 1,093), Black youth (39.1%, n = 835), and Multiracial youth (8.7%, n = 186) comprised the majority of the total sample.

There were 190 new enrollments in Montgomery County during the current reporting period (July 1, 2017 through June 30, 2019). The average age at enrollment was 14.8 (SD = 2.27). Males (62.1%, n = 118) outnumbered females (37.9%, n = 72), and more White youth (56.3%, n = 107) than Black youth (33.7%, n = 64) were enrolled. Two percent (2.1%, 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

At intake, the majority of youth lived with the biological mother (50.3%, n = 246), while 19.6% (n = 96) lived with two biological parents or one biological and one step/adoptive parent (see Table 4). Seventy-five percent (75.5%, n = 369) of BHJJ youth lived with at least one biological parent at enrollment.

Eighty-nine percent (89.3%; n = 425) of the BHJJ caregivers had at least a high school diploma or GED, and 14.9% (n = 71) had a bachelor's degree or higher. Over ten percent of caregivers (10.7%; n = 51) 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 $20,000 - $24,999 (14.6%, n = 67). Overall, 55.9% (n = 256) reported a family income of $24,999 or less. When examined by race, 27.4% (n = 68) of White families, 41.9% (n = 67) of Black families, and 36.2% (n = 17) 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	19.6% (n = 96)
Biological Mother Only	50.3% (n = 246)
Biological Father Only	5.5% (n = 27)
Adoptive Parent(s)	5.7% (n = 28)
Aunt/Uncle	3.5% (n = 17)
Grandparents	12.5% (n = 61)
Other	2.8% (n = 14)

Table 5. Educational Outcomes for Caregivers of BHJJ Youth

Number of School Years Completed	Number of Caregivers
Less than High School	10.7% (n = 51)
High School Graduate or G.E.D.	30.3% (n = 144)
Some College or Associate Degree	44.1% (n = 210)
Bachelor's Degree	8.6% (n = 41)
More than a Bachelor's Degree	6.3% (n = 30)

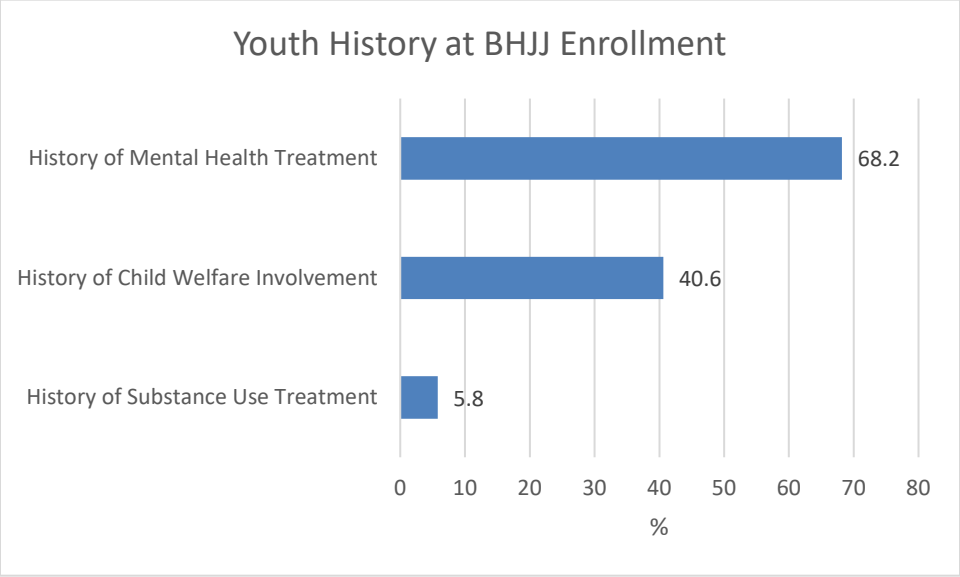
Table 6. Annual Household Incomes for BHJJ Families by Race

Household Income	Overall	White	Black	Multiracial
Less than $5,000	13.8% (n = 63)	7.3% (n = 18)	23.8% (n = 38)	14.9% (n = 7)
$5,000 - $9,999	5.5% (n = 25)	5.2% (n = 13)	4.4% (n = 7)	8.5% (n = 4)
$10,000 - $14,999	14.4% (n = 66)	14.9% (n = 37)	13.8% (n = 22)	12.8% (n = 6)
$15,000 - $19,999	7.6% (n = 35)	6.5% (n = 16)	8.1% (n = 13)	12.8% (n = 6)
$20,000 - $24,999	14.6% (n = 67)	14.9% (n = 37)	14.4% (n = 23)	14.9% (n = 7)
$25,000 - $34,999	10.9% (n = 50)	10.1% (n = 25)	12.5% (n = 20)	10.6% (n = 5)
$35,000 - $49,999	14.0% (n = 64)	15.7% (n = 39)	11.3% (n = 18)	14.9% (n = 7)
$50,000 - $74,999	12.0% (n = 55)	14.9% (n = 37)	8.8% (n = 14)	8.5% (n = 4)
$75,000 or greater	7.2% (n = 33)	10.4% (n = 26)	3.2% (n = 5)	2.1% (n = 1)

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 forty percent (40.6%, n = 54) of youth had a history of child welfare involvement prior to BHJJ enrollment. Nearly six percent (5.8%, n = 8) of youth had received substance use treatment in their lifetime prior to BHJJ enrollment and 68.2% (n = 90) 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 on each item to test for gender differences and significant differences are identified in Table 7. A significantly larger proportion of the caregivers of females reported lifetime histories of running away, talking about suicide, and attempting suicide.

Caregivers reported that 17.5% (n = 32) of females and 15.7% (n = 46) of males had a history of being physically abused while 13.5% (n = 24) of females and 7.9% (n = 23) of males had a history of being sexual abused. Caregivers of 43.3% (n = 81) of females and 50.2% (n = 150) of males reported hearing the child talking about committing suicide and 21.4% (n = 39) of females and 8.4% (n = 25) of males had attempted suicide at least once. A majority of the caregivers of females (63.1%, n = 118) and males (68.4%, n = 201) reported a family history of depression. More than half of the caregivers of females (56.4%, n = 106) and males (53.6%, n = 156) 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?	17.5% (n = 32)	15.7% (n = 46)
Has the child ever been sexually abused?	13.5% (n = 24)	7.9% (n = 23)
Has the child ever run away?	56.7% (n = 106)*	46.0% (n = 138)
Has the child ever had a problem with substance abuse, including alcohol and/or drugs?	43.3% (n = 81)	50.2% (n = 150)
Has the child ever talked about committing suicide?	48.4% (n = 90)**	35.6% (n = 106)
Has the child ever attempted suicide?	21.4% (n = 39)***	8.4% (n = 25)
Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?	32.1% (n = 60)	38.5% (n = 114)
Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?	63.1% (n = 118)	68.4% (n = 201)
Has anyone in the child's biological family had a mental illness, other than depression?	54.1% (n = 100)	54.2% (n = 156)
Has the child ever lived in a household in which someone was convicted of a crime?	39.2% (n = 73)	35.6% (n = 104)
Has anyone in the child's biological family had a drinking or drug problem?	56.4% (n = 106)	53.6% (n = 156)
Is the child currently taking any medication related to his/her emotional or behavioral symptoms?	37.4% (n = 70)	35.4% (n = 104)

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

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 related problems (84.7% and 83.7% respectively) (see Table 8). Chi-square analyses indicated females had significantly higher rates of problems related to anxiety and depression. 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	7.1% (n = 13)	7.8% (n = 23)
Anxiety-related problems	30.6% (n = 56)**	18.4% (n = 54)
Conduct/delinquency-related problems	84.7% (n = 155)	83.7% (n = 246)
Depression-related problems	39.3% (n = 72)**	24.8% (n = 73)
Eating disorders	1.1% (n = 2)	0
Hyperactive and attention-related problems	21.3% (n = 39)	43.9% (n = 129)***
Learning disabilities	4.4% (n = 8)	4.8% (n = 14)
Pervasive development disabilities	2.2% (n = 4)	3.1% (n = 9)
Psychotic behaviors	0	1.0% (n = 3)
School performance problems not related to learning disabilities	8.2% (n = 15)	11.9% (n = 35)
Specific developmental disabilities	2.7% (n = 5)	3.1% (n = 9)
Substance use, abuse, dependence-related problems	29.4% (n = 40)	37.8% (n = 82)
Suicide-related problems	4.4% (n = 8)	2.7% (n = 8)

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

DSM Diagnoses

Workers were asked to report any DSM diagnoses at intake in the BHJJ program. These diagnoses were either identified through a psychological assessment given as part of the enrollment process or in some cases, from psychological assessments given in close proximity to a youth's enrollment in BHJJ. The most common diagnosis for females was Oppositional Defiant Disorder while the most common diagnosis for males was Attention Deficit Hyperactivity Disorder (see Table 9).

Chi-square analysis indicated females were significantly more likely than males to be diagnosed with Bipolar Disorder, Depressive Disorders, and Post-traumatic Stress Disorder while males were significantly more likely than females to be diagnosed with Conduct Disorder, Attention Deficit Hyperactivity Disorder, and Cannabis-related Disorders.

Table 9. Most Common DSM Diagnoses

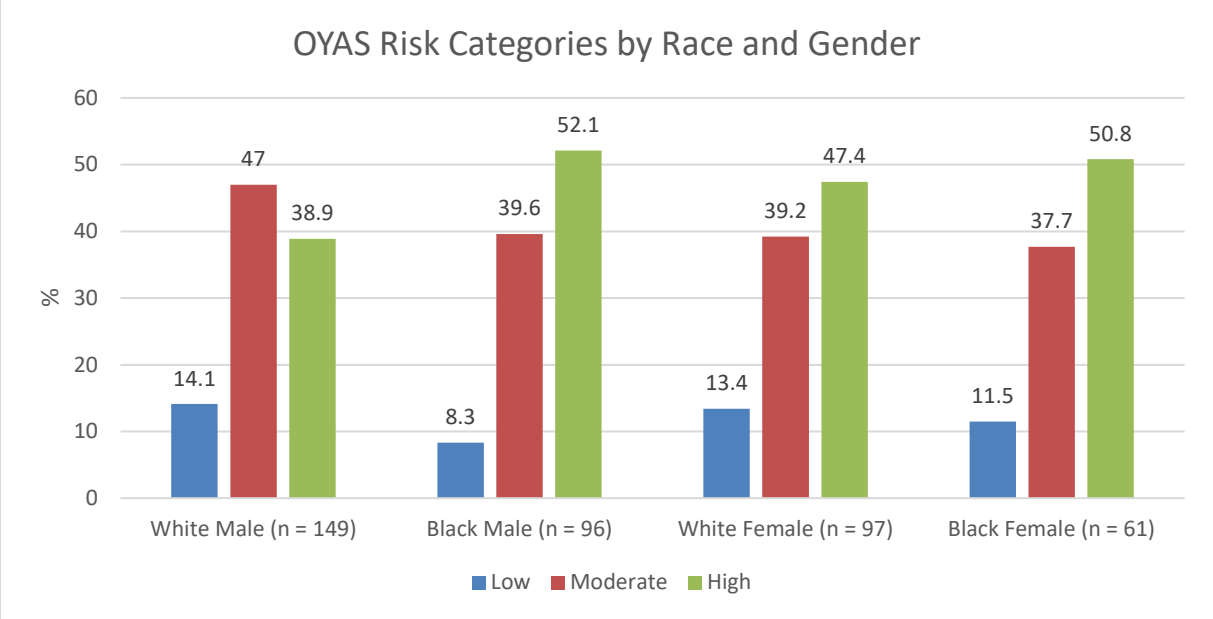
DSM Diagnosis	Females (n = 168)	Males (n = 272)
Adjustment Disorder	4.8% (n = 8)	4.4% (n = 12)
Alcohol-related Disorders	6.5% (n = 11)	4.4% (n = 12)
Attention Deficit Hyperactivity Disorder	28.0% (n = 47)	**50.7% (n = 138)*** **
Bipolar Disorder	5.4% (n = 9)*	1.8% (n = 5)
Cannabis-related Disorders	26.2% (n = 44)	36.8% (n = 100)*
Conduct Disorder	5.4% (n = 9)	15.4% (n = 42)***
Depressive Disorders	25.0% (n = 42)***	12.5% (n = 34)
Disruptive Behavior Disorder	0.6% (n = 1)	0.4% (n = 1)
Mood Disorder	10.7% (n = 18)	3.5% (n = 3)
Oppositional Defiant Disorder	**45.8% (n = 77)**	44.1% (n = 120)
Post-traumatic Stress Disorder	13.7% (n = 23)**	5.1% (n = 14)
Trauma and Stressor Related Disorder	0	0
Disruptive Mood Dysregulation Disorder	14.8% (n = 8)	8.1% (n = 22)
Co-Occurring Disorder	28.0% (n = 47)	34.2% (n = 93)

* < .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 Montgomery County, 38.9% (n = 58) of White males and 52.1% (n = 50) of Black males enrolled in the BHJJ program were identified as High risk on the OYAS, while 47.4% (n = 46) of White females and 50.8% (n = 31) of Black females were identified as High risk.

Figure 2.



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-nine percent (59.7%, n = 280) 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, 30.3% (n = 110) of the youth were expelled or suspended from school (a 49.2% 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, 91.1% (n = 92) of youth were currently attending school while at termination, 77.4% (n = 267) 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, 40.5% of youth were earning mostly A's and B's, and C's while at termination, 48.3% were earning mostly A's, B's, or C's. Academic improvement varied by BHJJ completion status (see Table 11). For example, at intake, 29.7% of youth who would go on to be unsuccessful completers and 44.6% of youth who would go on to be successful completers received mostly A's, B's, or C's. At termination, 32.8% of unsuccessful completers and 57.8% of successful completers received mostly A's, B's, or C's.

Table 10. Academic Performance

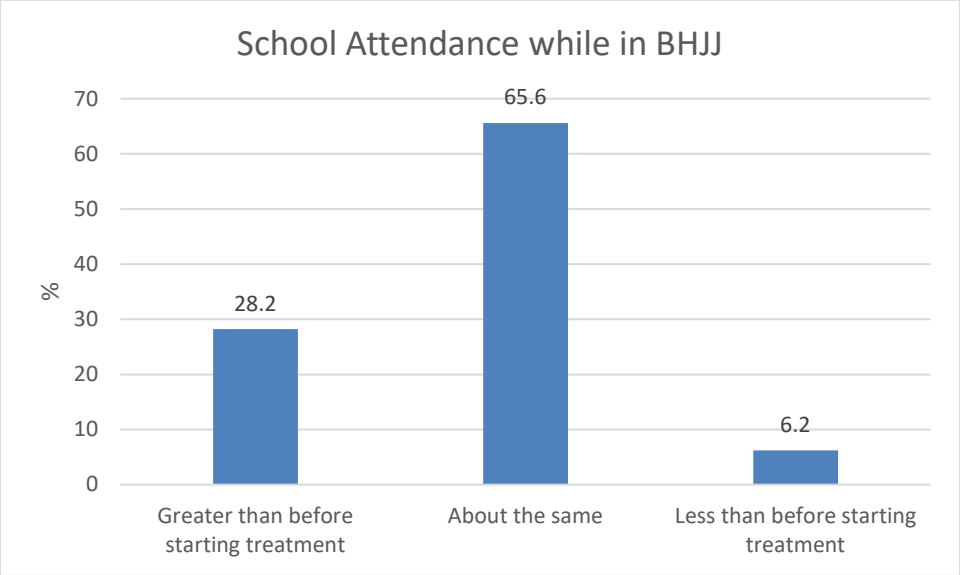
Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A's and B's	17.7% (n = 79)	18.9% (n = 63)
Mostly B's and C's	22.8% (n = 102)	29.4% (n = 98)
Mostly C's and D's	30.2% (n = 135)	35.1% (n = 117)
Mostly D's and F's	29.3% (n = 131)	16.5% (n = 55)

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	15.3% (n = 18)	9.6% (n = 12)	19.6% (n = 40)	24.8% (n = 51)
Mostly B's and C's	14.4% (n = 17)	23.2% (n = 29)	25.0% (n = 51)	33.0% (n = 68)
Mostly C's and D's	28.8% (n = 34)	36.0% (n = 45)	28.9% (n = 59)	34.5% (n = 71)
Mostly D's and F's	41.5% (n = 49)	31.2% (n = 39)	26.5% (n = 54)	7.8% (n = 16)

At termination, workers reported that 28.2% (n = 95) of youth were attending school more than before starting treatment and 65.6% (n = 221) of youth were attending school 'about the same' amount compared to before starting treatment (see Figure 3). At intake, 34.2% (n = 39) of the youth attending school had Individualized Education Plans (IEPs) while at termination, 34.2% (n = 121) 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.

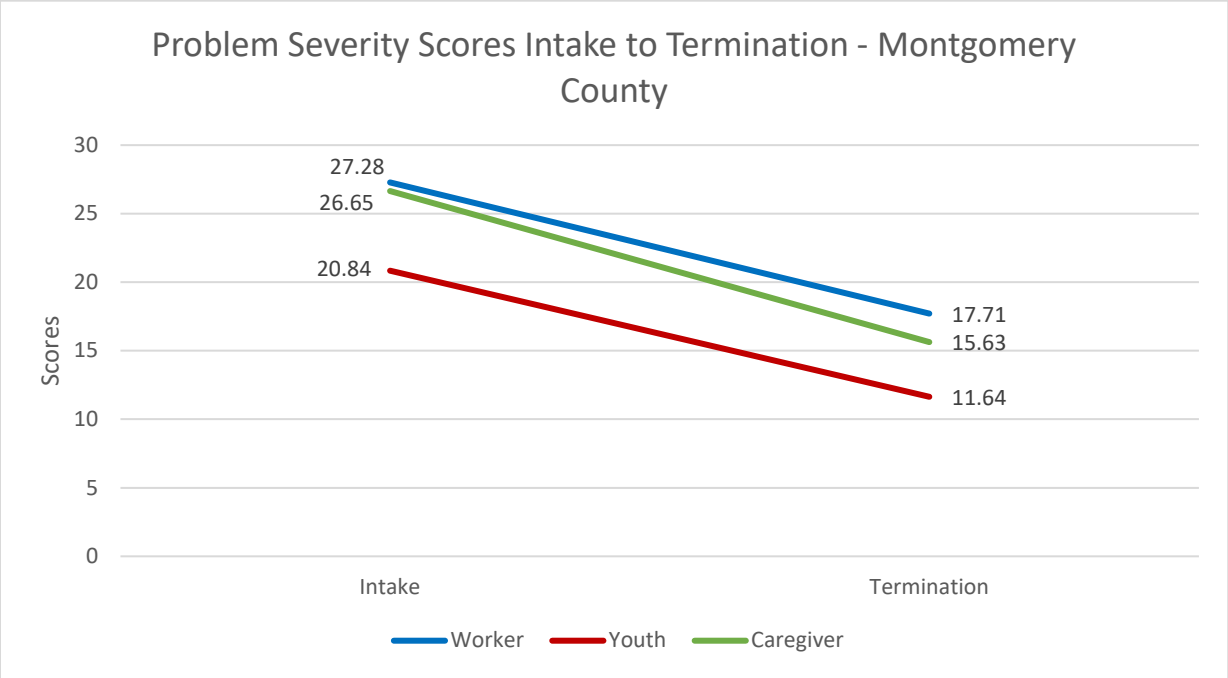
All Problem Severity and Functioning analyses were conducted on assessment periods with enough valid cases to produce meaningful results. Results for Montgomery County will be limited to intake and termination data.

Paired samples t-tests were used to compare Problem Severity scores at intake to Problem Severity scores at termination. A paired samples t-test compares the means of two variables by computing the difference between the two variables for each case and testing to see if the average difference is significantly different from zero. In order for a case to be included in the analyses, the rater must have scores for both assessment periods. For example, a caregiver must supply scores for both the intake and termination to be included in the analysis. If the caregiver only has an intake score, his or her data is not included.

Problem Severity

Overall means for the Problem Severity scale by rater between intake and termination for Montgomery 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 termination $t(353) = 11.82$, $p < .001$ with a moderate effect size (see Table 12).

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

	Mean Time 1	Mean Time 2	*t*	d
Intake to Termination	27.63 (SD=14.83; n=354)	17.89 (SD=13.96; n=354)	11.82***	.63

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

Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvements in Problem Severity from intake to termination $t(218) = 9.80$, $p < .001$ with a moderate effect size (see Table 13).

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

	Mean Time 1	Mean Time 2	*t*	d
Intake to Termination	19.11 (SD=13.46; n=219)	11.53 (SD=10.44; n=219)	9.80***	.66

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

Caregiver Ratings

For caregivers, paired samples t-tests revealed significant improvements in Problem Severity from intake to termination $t(217) = 9.01$, $p < .001$ with a moderate effect size (see Table 14).

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

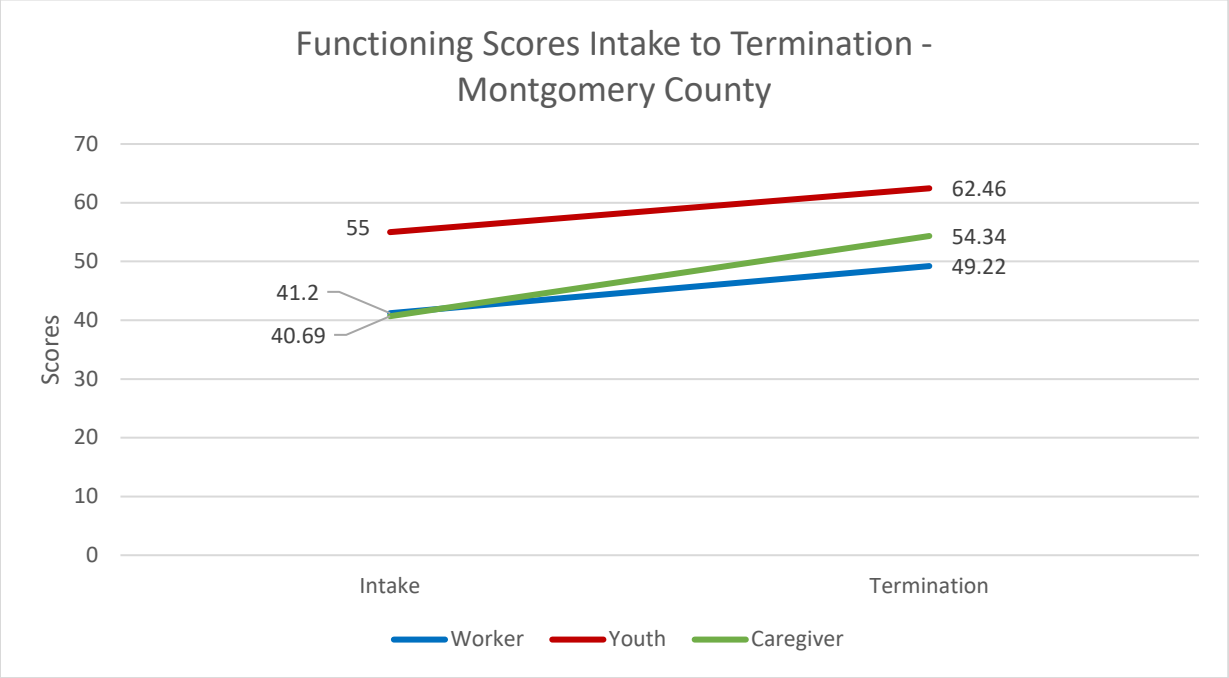
	Mean Time 1	Mean Time 2	*t*	d
Intake to Termination	24.05 (SD=16.61; n=218)	14.96 (SD=14.43; n=218)	9.01***	.61

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

Functioning Scores

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

Figure 5.



Worker Ratings

For workers, paired samples t-tests indicated significant improvement in Functioning scores from intake to termination $t(351) = -9.34$, $p < .001$ with a moderate effect size (see Table 15).

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

	Mean Time 1	Mean Time 2	*t*	d
Intake to Termination	41.07 (SD=11.97; n=352)	49.01 (SD=15.42; n=352)	-9.34***	.50

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

Youth Ratings

Paired samples t-tests conducted on the youth ratings indicated significant improvement in Functioning scores from intake to termination $t(218) = -8.13$, $p < .001$ with a moderate effect size (see Table 16).

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

	Mean Time 1	Mean Time 2	*t*	d
Intake to Termination	55.78 (SD=12.90; n=219)	62.54 (SD=13.44; n=219)	-8.13***	.55

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

Caregiver Ratings

For caregivers, paired samples t-tests revealed significant improvements Functioning scores from intake to termination $t(217) = -10.66$, $p < .001$ with a moderate effect size (see Table 17).

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

	Mean Time 1	Mean Time 2	*t*	d
Intake to Termination	43.23 (SD=16.06; n=218)	54.82 (SD=18.09; n=218)	-10.66***	.72

* < .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".

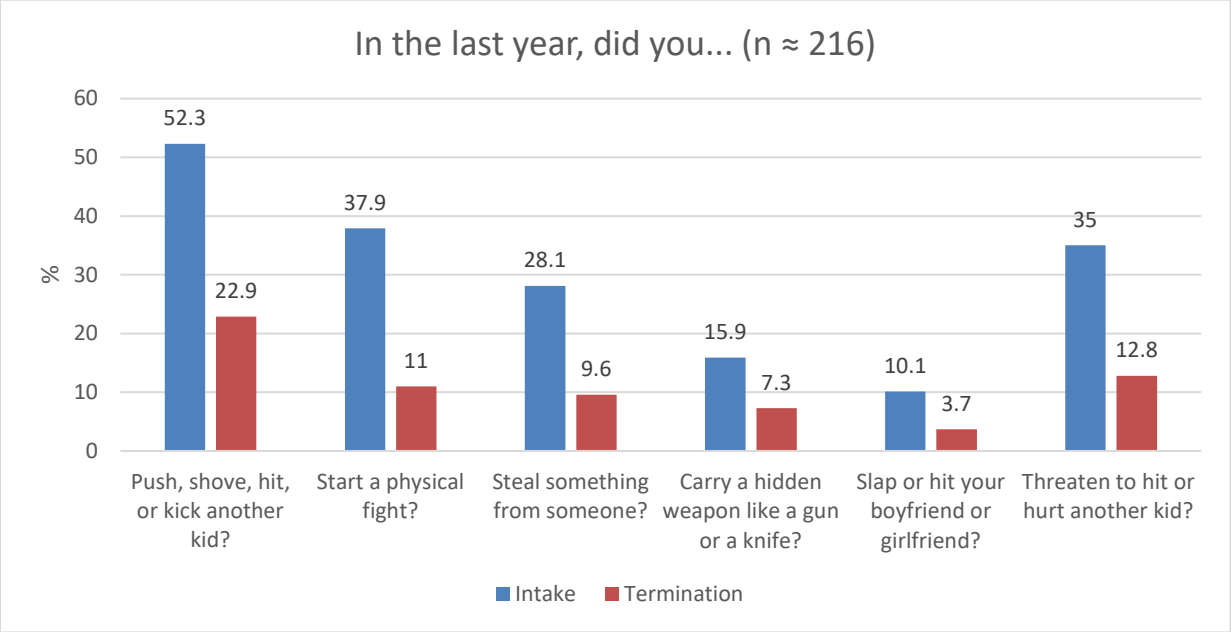
This section will be divided into three distinct parts that examine the prevalence of violence exposure as either a victim or witness, self-reported delinquent behavior from intake to termination, and delinquent behavior by peers from intake to termination. Table 18 provides the percentage of those who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

Table 18. Violence Exposure

	% Yes BHJJ Sample (n = 488)
In the last year, did someone threaten to hurt you when you thought they might really do it?	38.4%
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?	10.5%
In the last year, did a boyfriend or girlfriend or anyone you went on a date with slap or hit you?	9.4%
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?	43.6%
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?	14.4%
In the last year, did anyone hit or attack you WITHOUT using an object or weapon?	35.3%
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?	25.8%
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?	4.8%
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?	4.3%
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?	12.2%
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?	23.7%
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?	35.9%
In the last year, was anyone close to you murdered, like a friend, neighbor, or someone in your family?	20.5%
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?	34.6%
Not including spanking on your bottom, did a grown-up in your life hit, beat, kick or physically hurt you in any way?	22.5%
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?	12.1%

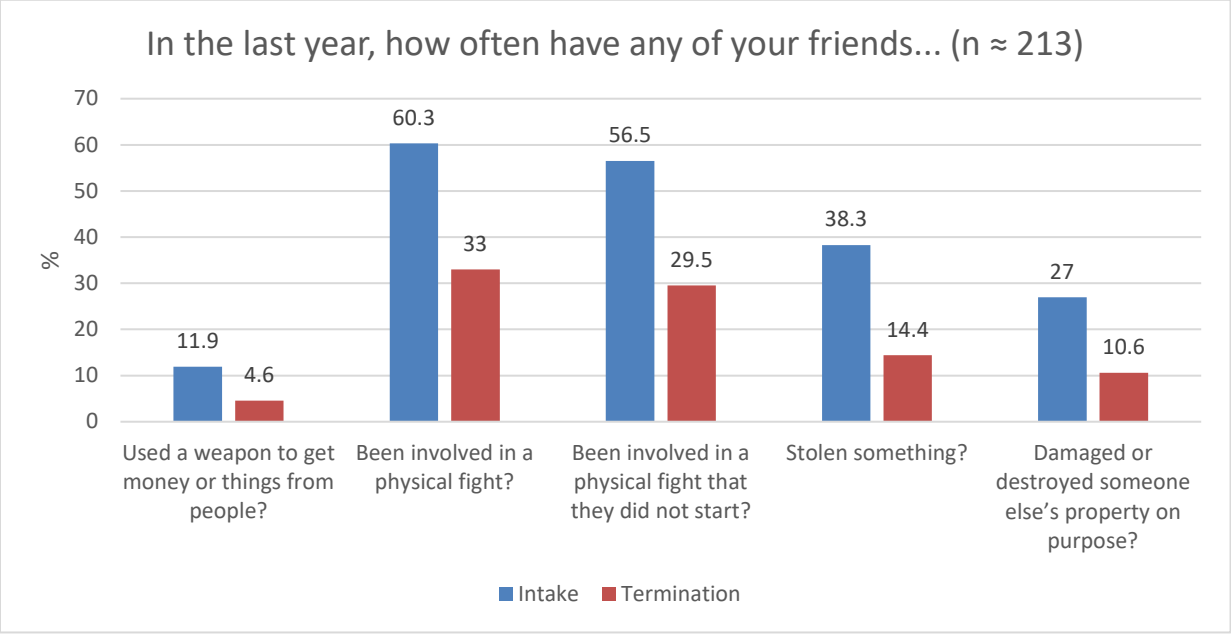
Delinquent behaviors were measured as self-report items of violent and weapon carrying behaviors as well as stealing. At intake, youth were asked how often they engaged in each behavior in the last year while at termination, youth were asked how often they engaged in the behavior since the last time 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 213 and 217 matched pairs (Mode = 216). McNemar's tests revealed statistically significant improvements from intake to termination for five items: push, shove, hit, or kick another kid, start a physical fight, steal something from someone, slap or hit your boyfriend or girlfriend, and threaten to hit or hurt another kid.

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 a range between 212 and 215 matched pairs (Mode = 213). Statistically significant differences 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 between 141 and 142. 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 two of the three items that measure empathy including “I feel bad when someone gets their feelings hurt” and “I try to understand how other people feel and think”.

Figure 8.

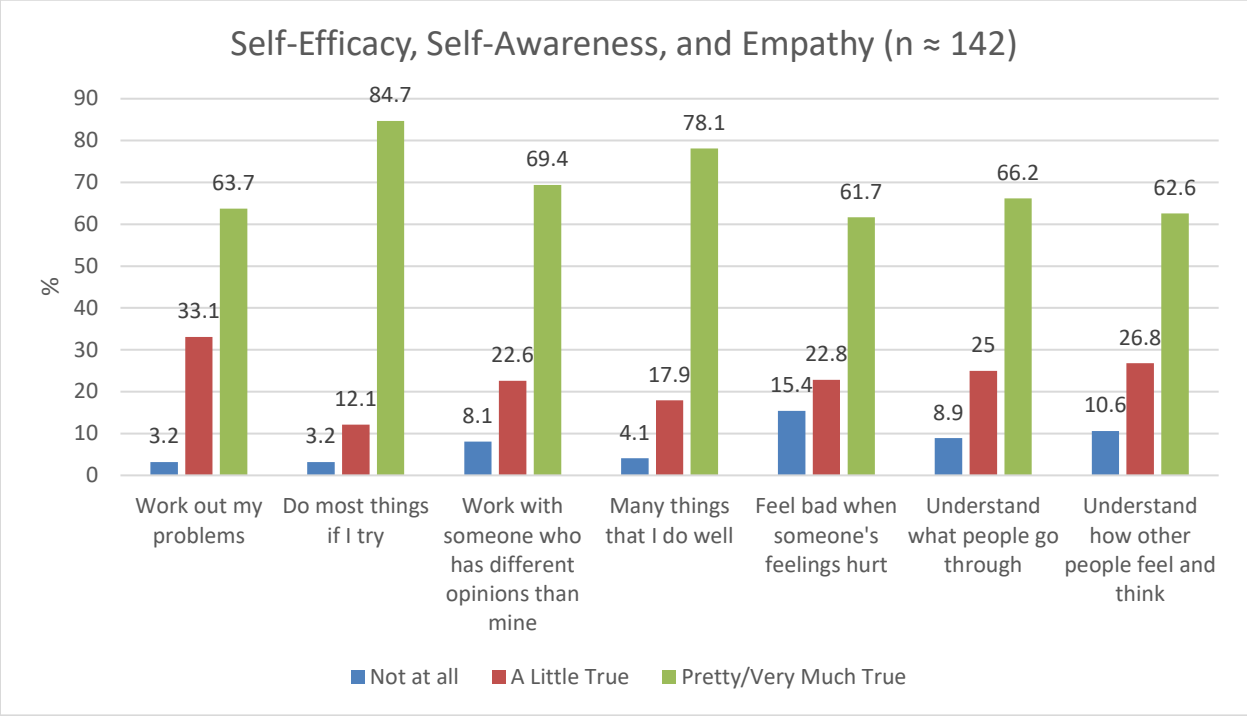


Figure 9 shows intake data on support from peers. Youth were asked whether they have a friend who really cares about them, talks with them about their problems, and helps them when they are having a hard time. There were 141 valid responses for the three items. The majority of youth identified that each of the statements were either pretty much or very much true.

Figure 9.

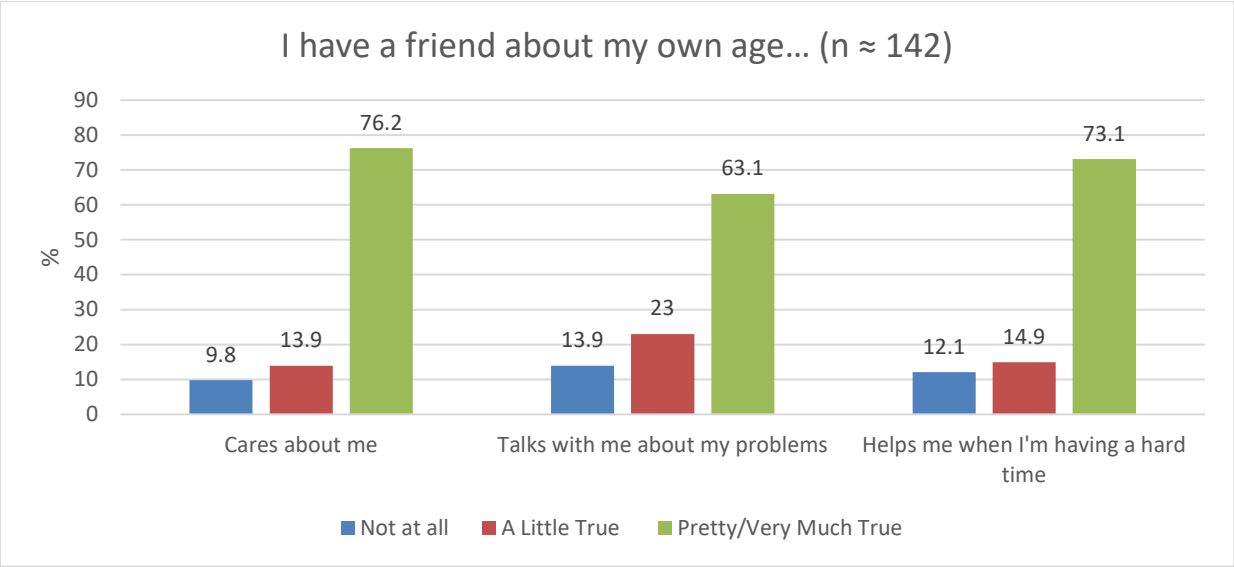
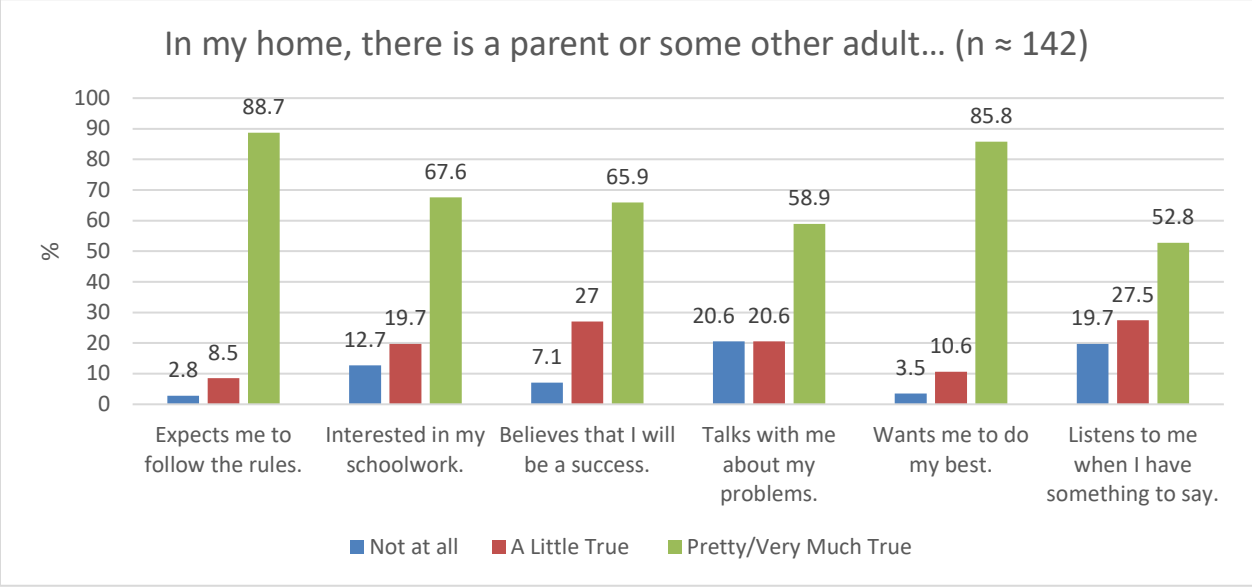


Figure 10 shows intake data on parental or support from other adults in their house. The number of valid responses at intake ranged between 141 and 142. While the majority of youth identified that each of the items were either pretty much or very much true, the two items with the lowest endorsement was “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 was 42 for each of the items. Youth exhibited either an improvement or no change in items measuring self-efficacy, self-awareness, and empathy except "there are many things that I do well. For example, 66.7% (n = 28) at intake and 85.7% (n = 36) indicated that the item "I can work out my problems" was either pretty much or very much true.

Figure 11.

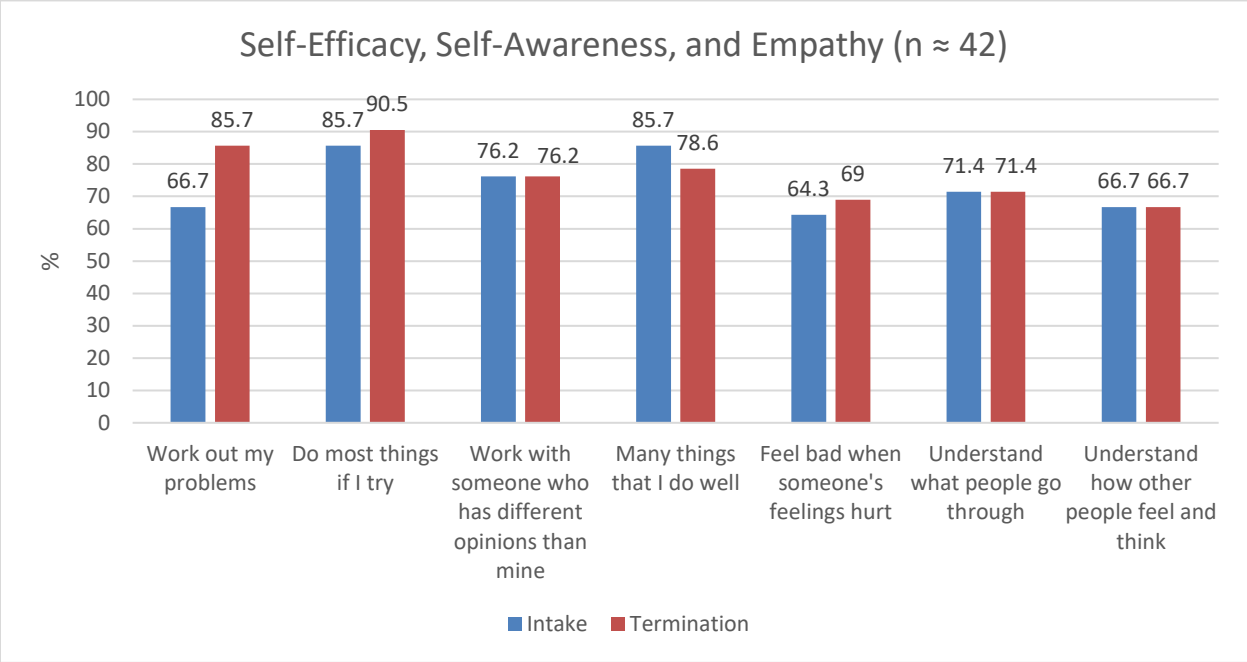


Figure 12 shows the proportion of youth who responded either pretty much or very much true to each of the items measuring peer support. The number of valid responses was between 41 and 42. A slightly lower proportion of youth at termination compared to at intake reported that the items “I have a friend about my own age who really cares about me” and “I have a friend about my own age who helps me when I’m having a hard time” were either pretty much or very much true.

Figure 12.

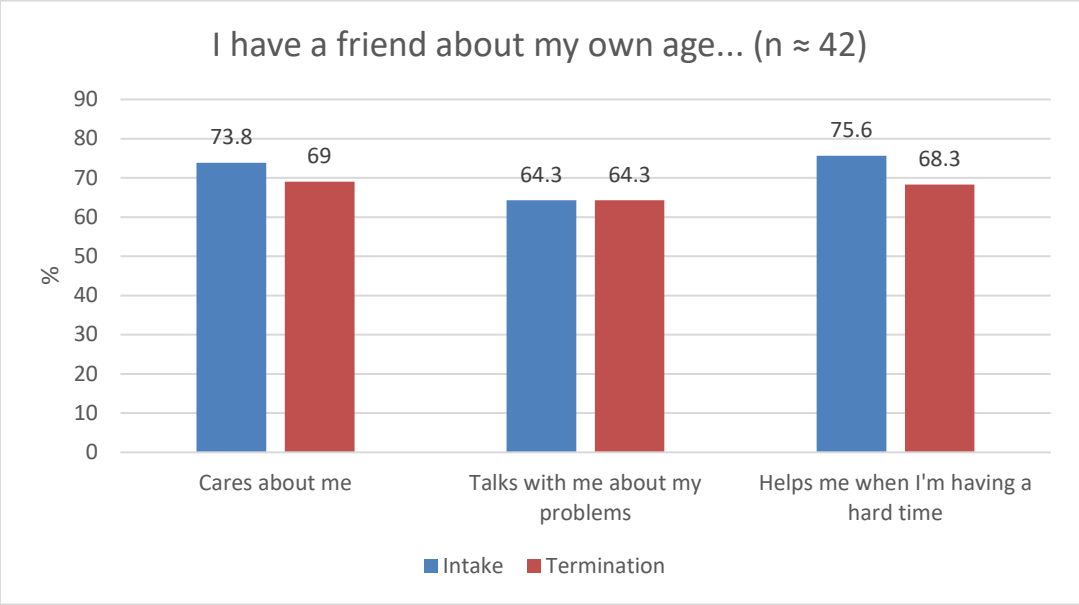
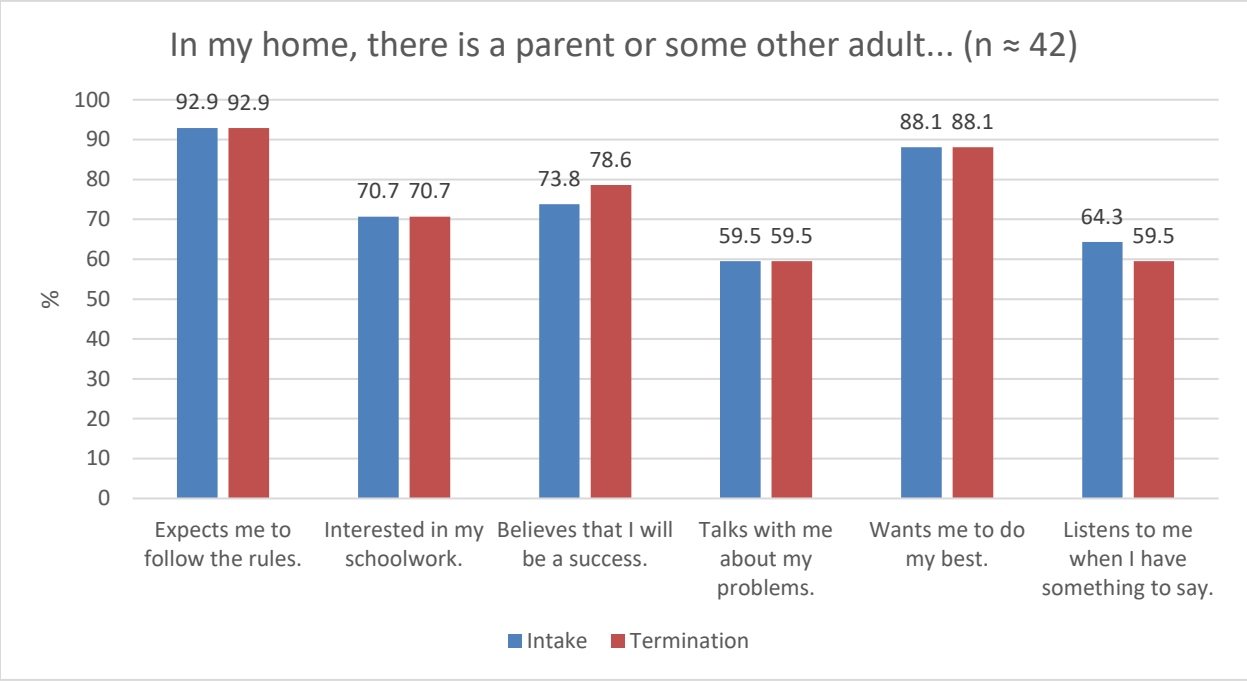


Figure 13 shows the proportion of youth who responded either pretty much or very much true to each of the items measuring parental support or support from other adults in the home. Valid responses to these 6 items ranged between 41 and 42. The proportion of positive responses increased slightly for the item “believes that I will be a success”.

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 Montgomery 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 in Montgomery County reported higher scores on each trauma symptom subscale than males. For example, at intake, the average score on the Depression domain was 6.22 for females and 4.12 for males. Paired samples t-tests revealed significant improvements in trauma symptoms for Anxiety, Depression, and Anger domains for females and each domain except Sexual Concerns for males (see Table 19 and Table 20).

Table 19. TSCC Subscales from Intake to Termination among Females

Females	Intake	Termination	t	d
Anxiety	3.99 (SD = 3.45; n = 81)	2.80 (SD = 3.11; n = 81)	3.11**	.35
Depression	6.22 (SD = 4.57; n = 81)	4.12 (SD = 4.39; n = 81)	3.97***	.44
Anger	7.25 (SD = 5.26; n = 81)	4.47 (SD = 4.89; n = 81)	4.43***	.49
Posttraumatic Stress	5.53 (SD = 5.36; n = 81)	4.35 (SD = 5.34; n = 81)	1.72	.19
Dissociation	5.15 (SD = 4.56; n = 81)	4.23 (SD = 4.70; n = 81)	1.68	.19
Sexual Concerns	2.78 (SD = 3.02; n = 81)	2.14 (SD = 3.43; n = 81)	1.80	.20

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

Figure 14.

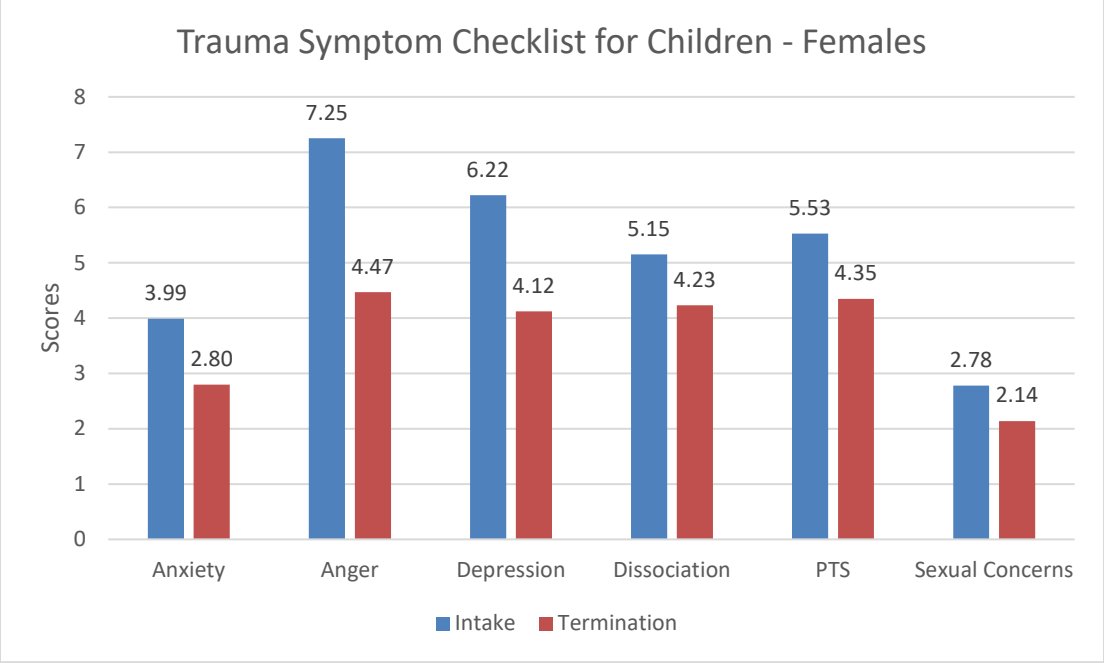
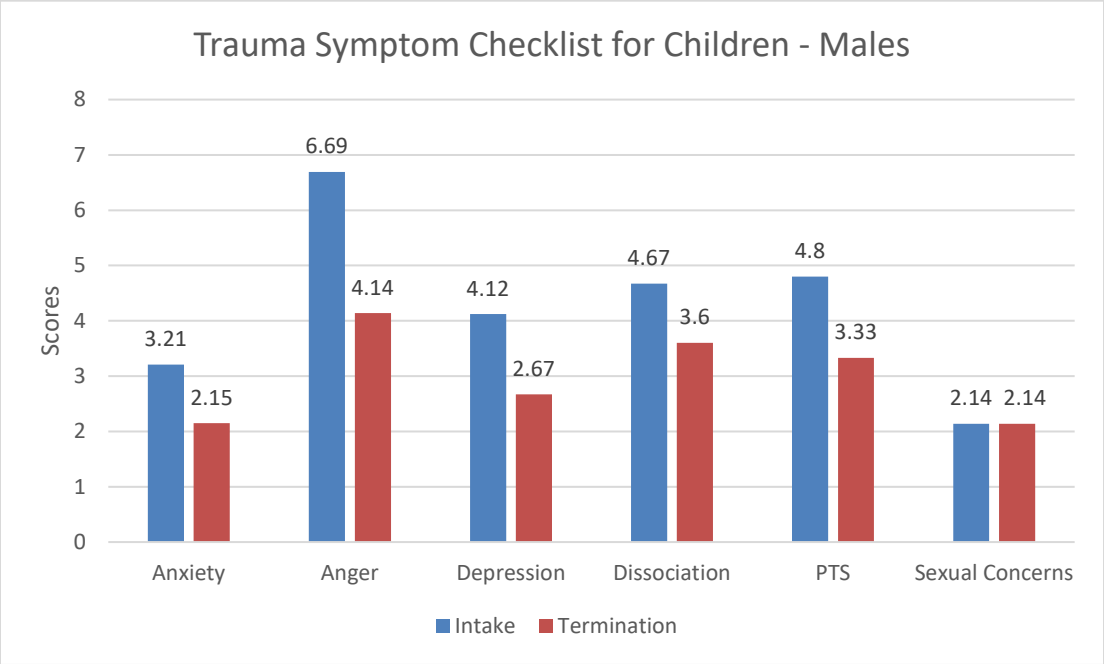


Table 20. TSCC Subscales from Intake to Termination for Males

Males	Intake	Termination	t	d
Anxiety	3.21 (SD = 4.00; n = 123)	2.15 (SD = 3.29; n = 123)	3.75***	.34
Depression	4.12 (SD = 4.94; n = 123)	2.67 (SD = 4.23; n = 123)	3.64***	.33
Anger	6.69 (SD = 5.46; n = 123)	4.14 (SD = 5.12; n = 123)	5.60***	.50
Posttraumatic Stress	4.80 (SD = 5.24; n = 123)	3.33 (SD = 4.63; n = 123)	4.38***	.40
Dissociation	4.67 (SD = 4.98; n = 123)	3.60 (SD = 4.53; n = 123)	2.91**	.26
Sexual Concerns	2.14 (SD = 3.27; n = 123)	2.14 (SD = 3.45; n = 123)	.56	.05

* < .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 Montgomery County. For both females and males, alcohol, tobacco, marijuana, and caffeine were the most commonly used substances. Chi-squared tests revealed that a significantly higher proportion of males reported ever having used tobacco than females ($\chi^2(1) = 5.30$, $p < .05$).

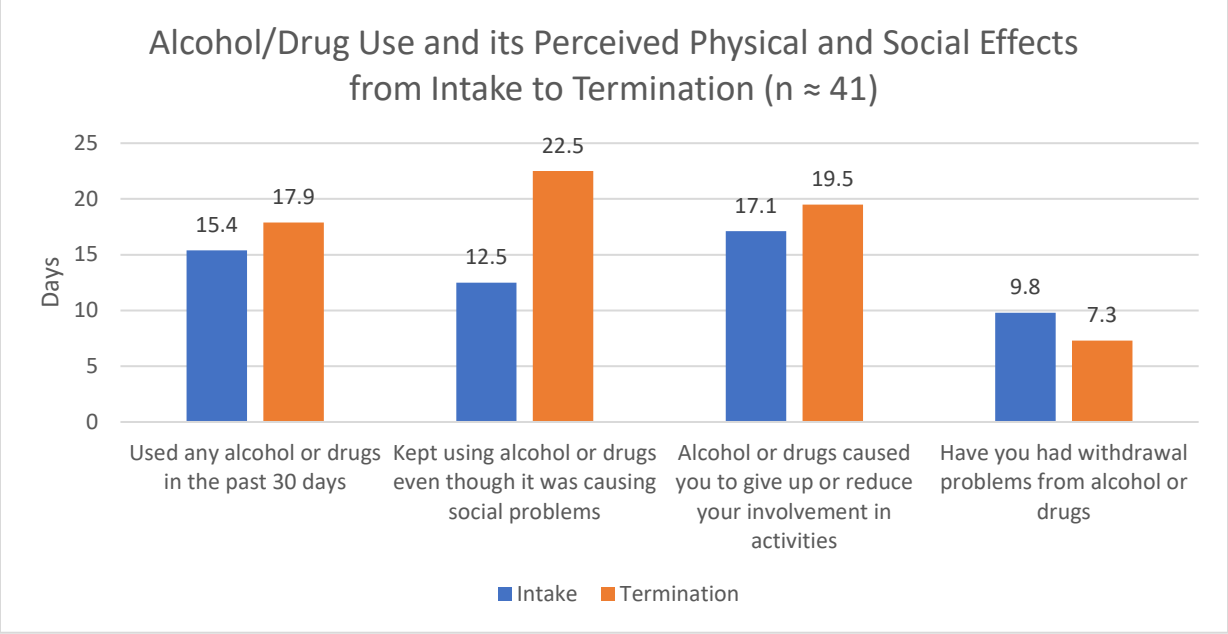
Table 21. Self-Reported Substance Use at Intake by Gender – Montgomery County

	Male		Female	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
Alcohol	41.7% (n = 35)	12.69 (SD = 3.50)	37.5% (n = 21)	12.90 (SD = 3.63)
Tobacco	**40.0% (n = 34)**	**12.50 (SD = 3.04)**	**21.4% (n = 12)**	**12.17 (SD = 1.75)**
Cannabis	57.1% (n = 48)	12.53 (SD = 2.95)	48.2% (n = 27)	13.08 (SD = 1.52)
Hallucinogens	10.6% (n = 9)	14.56 (SD = 2.07)	5.4% (n = 3)	13.67 (SD = 3.21)
Inhalants	3.5% (n = 3)	15.00[a]	0.0% (n = 0)	
Opioids	3.5% (n = 3)	13.33 (SD = 1.53)	3.6% (n = 2)	15.00 (SD = .00)
Sedatives	8.2% (n = 7)	14.29 (SD = 1.98)	10.7% (n = 6)	15.00 (SD = 1.58)
Caffeine	31.8% (n = 27)	9.17 (SD = 3.87)	28.6% (n = 16)	10.70 (SD = 3.62)
Stimulants	7.1% (n = 6)	15.17 (SD = 1.33)	7.3% (n = 4)	15.00 (SD = 1.00)
Over the counter medications	5.9% (n = 5)	14.60 (SD = .55)	1.8% (n = 1)	8.00[a]
Other prescription drugs	4.8% (n = 4)	11.00 (SD = 4.36)	5.4% (n = 3)	13.67 (SD = 3.51)
Herbs/Flowers	1.2% (n = 1)	15.00[a]	1.8% (n = 1)	

[a] No Standard Deviations are calculated.

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. The proportion of youth who indicated that they had used any alcohol or drugs in the past 30 days increased slightly from 15.4% at intake to 17.9% at termination. 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 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 increased from intake to termination (see Figure 16). The proportion of youth who indicated that they had withdrawal problems from alcohol or drugs decreased. None of these differences were statistically significant.

Figure 16.



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 362 youth terminated from the BHJJ program in Montgomery County. Sixty-two percent (61.9%, n = 224) of the youth terminated from the BHJJ program were identified as successful treatment completers. Eight percent (8.0%, n = 29) were terminated from the program due to some type of out of home placement. 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	61.9% (n = 224)	66.3% (n = 132)	58.9% (n = 76)
Client Did Not Return/Rejected Services	5.5% (n = 20)	2.5% (n = 5)	8.5% (n = 11)
Out of Home Placement	8.0% (n = 29)	9.0% (n = 18)	7.8% (n = 10)
Client/Family Moved	3.3% (n = 12)	3.5% (n = 7)	3.1% (n = 4)
Client Withdrawn	12.2% (n = 44)	11.1% (n = 22)	12.4% (n = 16)
Client AWOL	1.9% (n = 7)	3.0% (n = 6)	0.8% (n = 1)
Client Incarcerated	0	0	0
Other	7.2% (n = 26)	4.5% (n = 9)	8.5% (n = 11)

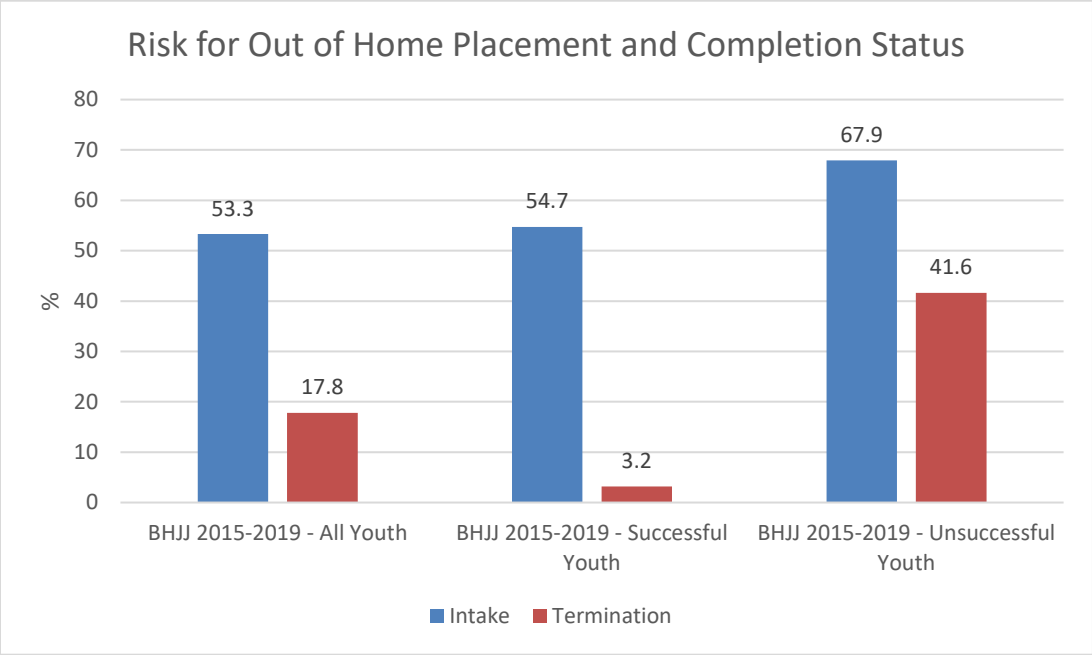
Average Length of Stay

Since the start of BHJJ, the average length of stay (ALOS) in the program was 131.4 days. For youth identified as successful treatment completers, the ALOS was 142.4 days while for unsuccessful treatment completers, the ALOS was 114.2 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, 53.3% of the youth (n = 245) were at risk for out of home placement. At termination, 17.8% (n = 64) of youth were at risk for out of home placement (see Figure 17). Of those youth who successfully completed BHJJ treatment, 3.2% (n = 7) were at risk for out of home placement at termination while 41.6% (n = 57) of youth who completed unsuccessfully were at risk for out of home placement.

Figure 17.



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 72.3% (n = 261) of the youth and had stayed the same for 17.7% (n= 64) of the youth. Police contacts increased for 5.3% (n = 19) of the youth and the worker was unable to estimate for 4.7% of youth (n = 17).

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 Montgomery County as well as how services impacted their children and family. At termination from the BHJJ program, 94.7% (n =217) of caregivers either strongly agreed or agreed that BHJJ staff were sensitive to their cultural/ethnic background and 97.8% (n =225) either strongly agreed or agreed that the location of the services was convenient (see Figure 18). Over seventy-eight percent (78.6%, n = 177) of caregivers reported that as a result of the services their child/family received, their child gets along better with family members and 74.2% (n = 170) reported their child is better able to do the things they want to do (see Figure 19).

Figure 18.

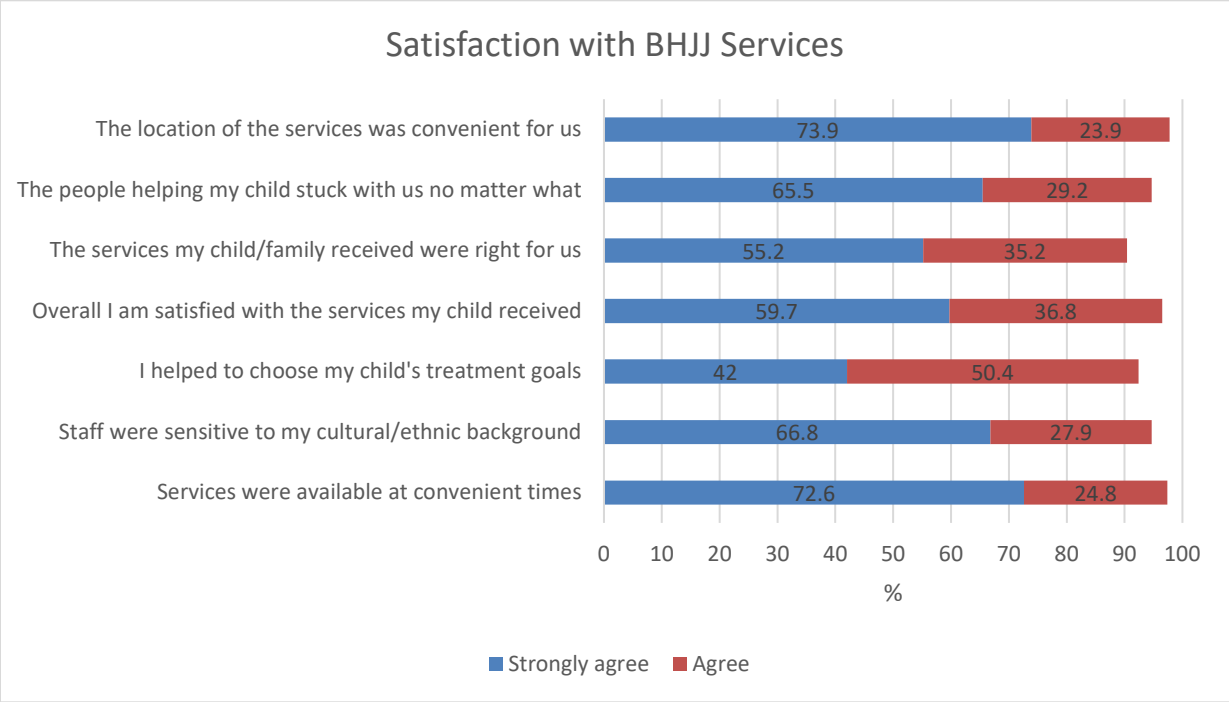
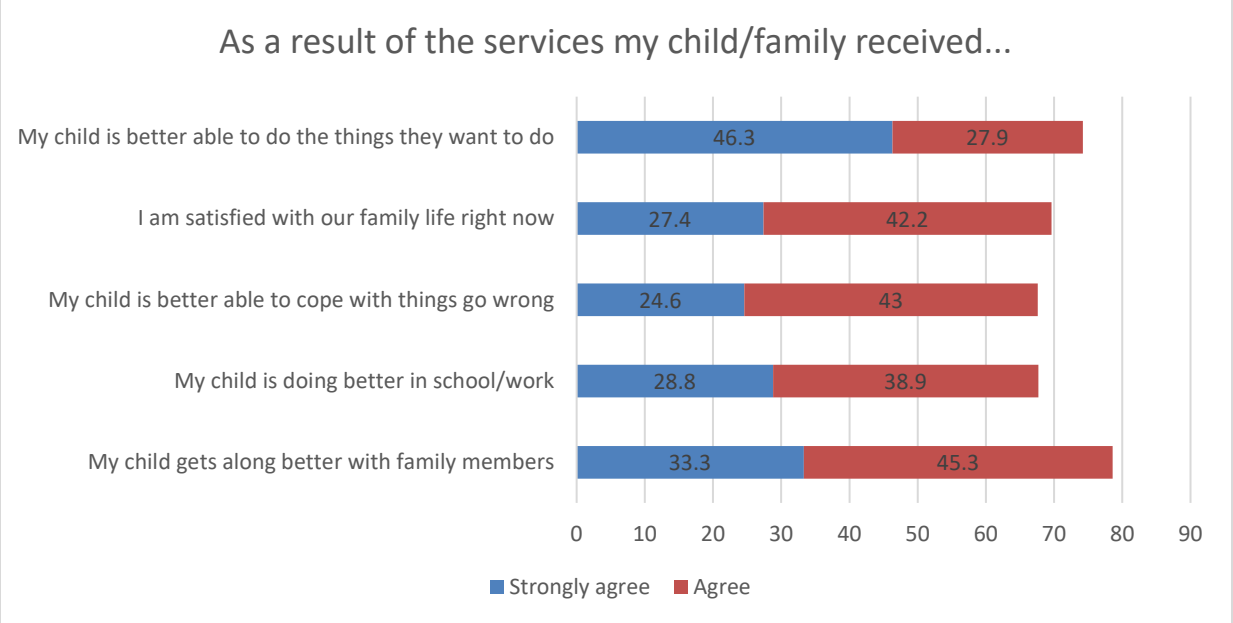


Figure 19.



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, 69.0% (n = 325) of BHJJ youth in Montgomery county enrolled between July 1, 2015 and June 30, 2019 had a misdemeanor charge, 16.3% (n = 77) had a felony charge, and 51.4% (n = 242) 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, 71.8% (n = 155) of successful completers and 68.4% (n = 93) of unsuccessful completers were charged with at least one misdemeanor (see Table 24 and Table 25). A slightly higher proportion of unsuccessful completers had an adjudication in the 12 months prior to

enrollment (50.5%; n = 109) than successful completers (54.4%; n = 74). Chi-square analyses revealed that a significantly larger proportion of youth who completed the program unsuccessfully had at least one felony charge in the 18 months prior to intake.

Table 23. Charges Prior to Enrollment

	% of Youth with Misdemeanors	% of Youth with Felonies	% of Youth Adjudicated Delinquent
6 months (n = 471)	58.2% (n = 274)	9.8% (n = 46)	43.5% (n = 205)
12 months (n = 471)	69.0% (n = 325)	16.3% (n = 77)	51.4% (n = 242)
18 months (n = 471)	72.8% (n = 343)	18.3% (n = 86)	53.1% (n = 250)

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 = 216)	63.9% (n = 138)	8.3% (n = 18)	44.0% (n = 95)
12 months (n = 216)	71.8% (n = 155)	13.4% (n = 29)	50.5% (n = 109)
18 months (n = 216)	73.1% (n = 158)	13.9% (n = 30)	51.4% (n = 111)

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 = 136)	54.4% (n = 74)	10.3% (n = 14)	44.1% (n = 60)
12 months (n = 136)	68.4% (n = 93)	18.4% (n = 25)	54.4% (n = 74)
18 months (n = 136)	73.5% (n = 100)	22.1% (n = 30)	55.1% (n = 75)

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, 40.3% (n = 153) of participants were charged with at least one new misdemeanor, 14.7% (n = 56) were charged with at least one new felony, and 39.2% (n = 149) of the youth were adjudicated delinquent.

Table 26. Recidivism after BHJJ Enrollment

	% of Youth with Misdemeanors	% of Youth with Felonies	% of Youth Adjudicated Delinquent
6 months (n = 435)	27.8% (n = 121)	9.0% (n = 39)	26.0% (n = 113)
12 months (n = 380)	40.3% (n = 153)	14.7% (n = 56)	39.2% (n = 149)
18 months (n = 328)	45.4% (n = 149)	17.4% (n = 57)	43.9% (n = 144)

In the 12 months after enrollment in BHJJ, 33.3% (n = 58) of successful completers were charged with at least one new misdemeanor, 9.8% (n = 17) were charged with at least one new felony, and 30.5% (n = 53) were adjudicated delinquent (see Table 27). Of the youth who completed unsuccessfully, 52.7% (n = 59) were charged with at least one new misdemeanor, 18.8% (n = 21) were charged with at least one new felony, and 50.9% (n = 57) 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 misdemeanor, felony, and had at least one adjudication than successful completers at each of the time points we examined 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 = 200)	19.5% (n = 39)	4.0% (n = 8)	17.5% (n = 35)
12 months (n = 174)	33.3% (n = 58)	9.8% (n = 17)	30.5% (n = 53)
18 months (n = 147)	38.1% (n = 56)	11.6% (n = 17)	36.1% (n = 53)

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 = 126)	41.3% (n = 52)	12.7% (n = 16)	36.5% (n = 46)
12 months (n = 112)	52.7% (n = 59)	18.8% (n = 21)	50.9% (n = 57)
18 months (n = 100)	58.0% (n = 58)	22.0% (n = 22)	53.0% (n = 53)

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, 34.5% (n = 89) of youth were charged with at least one new misdemeanor and 11.6% (n = 30) were charged with at least one new felony, and 29.5% (n = 76) were adjudicated delinquent.

Table 29. Recidivism after BHJJ Termination

	% of Youth with Misdemeanors	% of Youth with Felonies	% of Youth Adjudicated Delinquent
6 months (n = 294)	24.1% (n = 71)	6.8% (n = 20)	24.8% (n = 73)
12 months (n = 258)	34.5% (n = 89)	11.6% (n = 30)	29.5% (n = 76)
18 months (n = 213)	40.8% (n = 87)	13.1% (n = 28)	32.9% (n = 70)

In the 12 months following their termination from BHJJ, 30.3% (n = 46) of successful completers were charged with at least one new misdemeanor, 11.2% (n = 17) were charged with at least one new felony, and 25.0% (n = 38) were adjudicated delinquent (see Table 30). Of the youth who completed unsuccessfully, 40.6% (n = 43) were charged with at least one new misdemeanor, 12.3% (n = 13) were charged with at least one new felony, and 35.8% (n = 38) were adjudicated delinquent in the 12 months after their termination from BHJJ (see Table 31). **A significantly larger proportion of unsuccessful youth were charged with at least one misdemeanor in the 18 months after termination and at least one adjudication in the 6 months after termination.**

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 = 176)	20.5% (n = 36)	5.7% (n = 10)	19.9% (n = 35)
12 months (n = 152)	30.3% (n = 46)	11.2% (n = 17)	25.0% (n = 38)
18 months (n = 121)	33.9% (n = 41)	11.6% (n = 14)	28.1% (n = 34)

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 = 118)	29.7% (n = 35)	8.5% (n = 10)	32.2% (n = 38)
12 months (n = 106)	40.6% (n = 43)	12.3% (n = 13)	35.8% (n = 38)
18 months (n = 92)	50.0% (n = 46)	15.2% (n = 14)	39.1% (n = 36)

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 20 shows the average number of charges for youth who had data at both time periods. This restriction resulted in a sample of 294 youth at 6 months, 258 youth at 12 months, and 213 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 12 months.** For example, the average number of misdemeanor charges 18 months prior to BHJJ enrollment was 1.78 while the average number of misdemeanor charges 18 months after BHJJ termination was 1.14.

Figure 20.

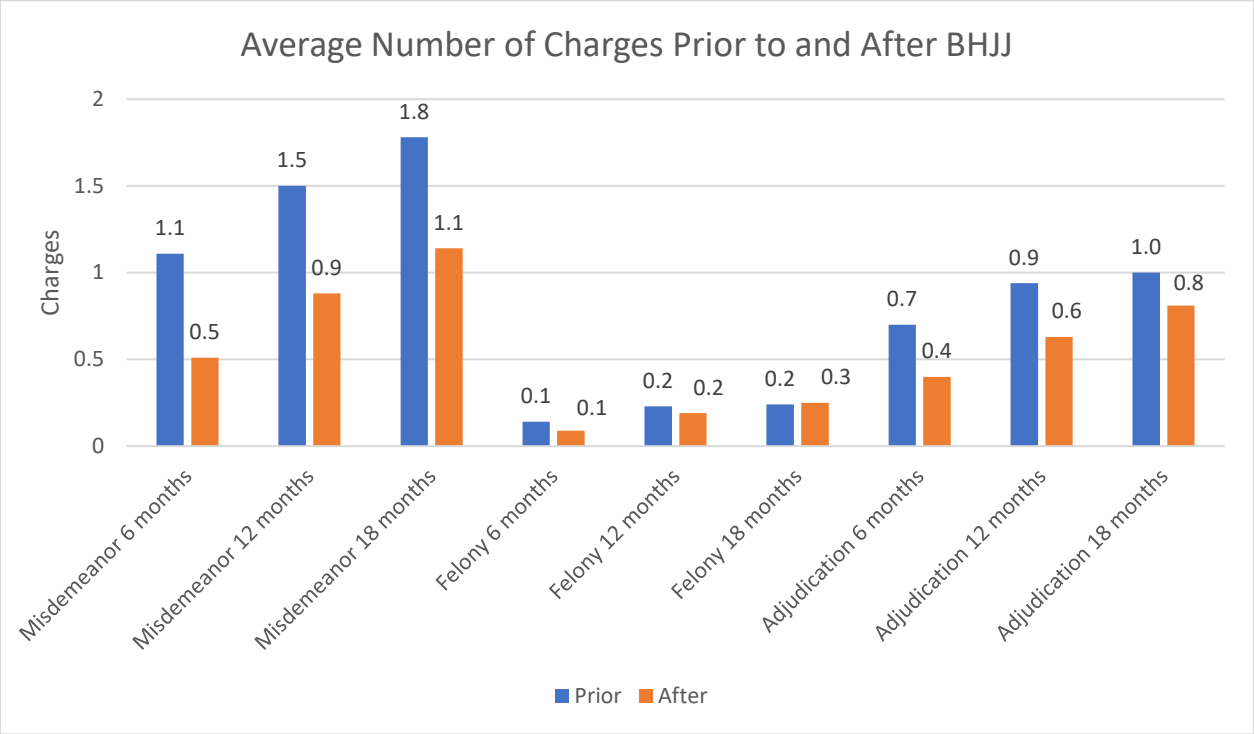


Figure 21 and Figure 22 shows mean differences in charges and adjudications for youth who successfully completed the program and those who did not successfully terminate. To be included in the analysis youth must have data at both time periods. This restricted the sample to 178 youth at 6 months, 152 youth at 12 months, and 121 youth at 18 months for youth who were successfully terminated and 118 youth at 6 months, 106 youth at 12 months, and 92 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 each of the time periods we examined and adjudications for 6 and 12 months.** For example, the average number of misdemeanor charges declined from 1.43 in the 12 months prior to intake to 0.7 in the 12 months after termination. **For youth who terminated unsuccessfully, paired samples *t*-tests revealed that there was a significant reduction in the average number of misdemeanor charges at 6 months.** For example, the average number of misdemeanors was 1.18 in the 6 months prior to intake and 0.71 in the 6 months after termination.

Figure 21.

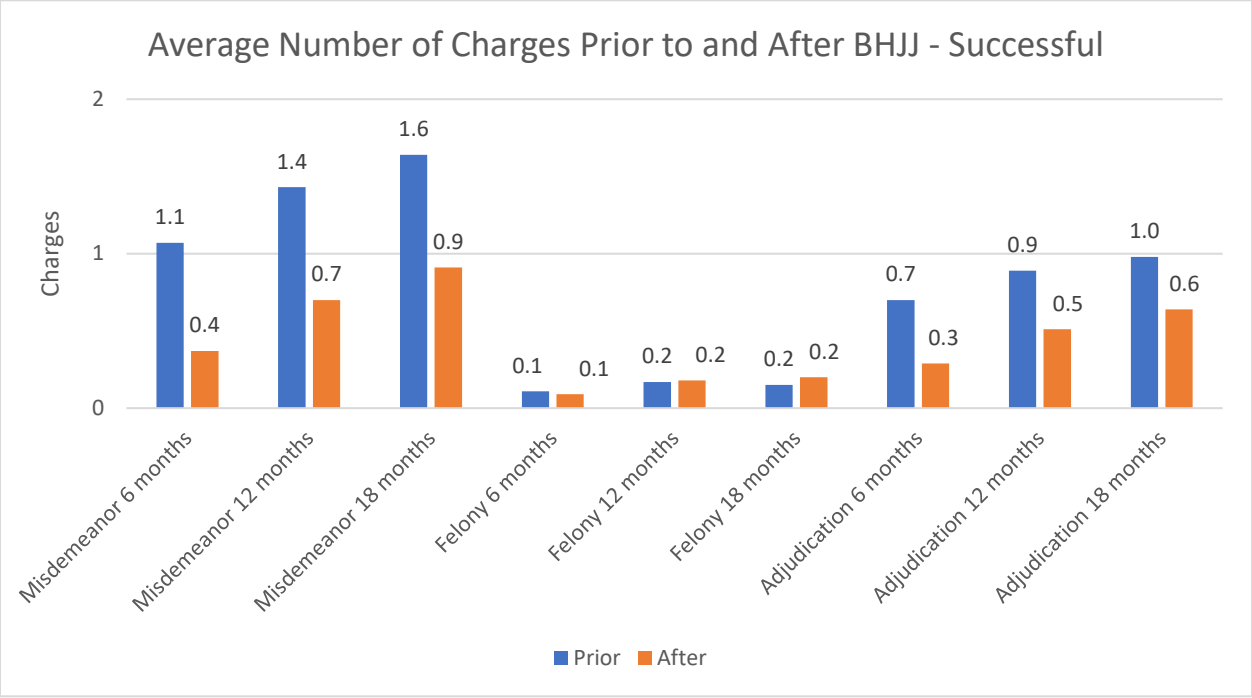
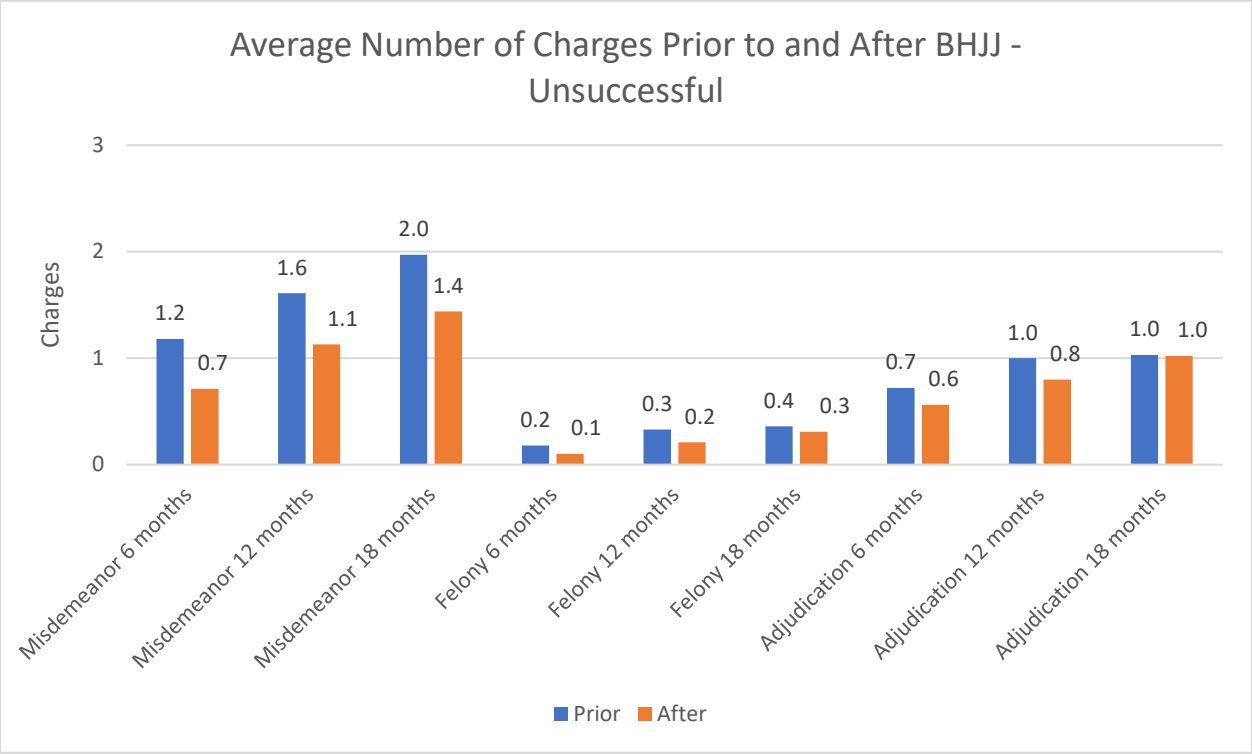


Figure 22.



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.

A youth was referred to the LIFE program by the intervention center for issues with theft and family conflict. The LIFE therapist taught the family communication (impact statements, active listening, and check-ins) and goal-setting skills. Both the youth and his mother were invested and engaged in treatment. His mother would take notes and ask follow-up questions to better understand skills. The family faithfully utilized check-ins and reported significant improvement in their communication and overall relationship. During treatment, the youth came out as transgender. With coaching, the youth and his mother processed this information using impact statements and active listening. During this session, his mother expressed that she now has a better understanding of the youth and that "things make a lot more sense now." Since then, his mother has demonstrated a great deal of support for the youth. She assists him in expressing his gender identity and encourages his involvement in the LGBTQ+ community. The youth is currently using goal-setting skills to plan for college and opening his own boutique.

His mother reported that she has seen a lot of change in the youth – "He's motivated. He's not just sitting on the couch anymore." Mom also stated, "[Before treatment], I couldn't wait until he turned eighteen and left, but now I don't want him to go." The family is on track to successfully complete LIFE in a week. The youth has no new charges and is no longer involved with the intervention center.

References

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Teplin, L. A., Abram, K. M., McClelland, G. M., Dulcan, M. K., & Mericle, A. A. (2002). Psychiatric disorders in youth in juvenile detention. *Archives of General Psychiatry, 59*(12), 1133-1143.

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

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

Wasserman, G. A., McReynolds, L. S., Ko, S. J., Katz, L. M., & Carpenter, J. R. (2005). Gender differences

in psychiatric disorders at juvenile probation intake. *American Journal of Public Health, 95*(1), 131-137.

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

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