

An Evaluation of the Behavioral Health/Juvenile Justice (BHJJ) Initiative: 2013-2015 Holmes County Results

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



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

Begun Center for
Violence Prevention
Research and Education

April 2016

CONTENTS

Executive Summary	3
Juvenile Justice and Mental Health	5
Juvenile Justice/Mental Health Diversion Programs	5
Ohio’s Behavioral Health/Juvenile Justice (BHJJ) Initiative	6
Measures and Instrumentation	7
Ohio Youth Problem, Functioning, and Satisfaction Scales (Ohio Scales)	7
Trauma Symptom Checklist for Children (TSCC).....	7
Substance Use Survey – Revised.....	7
Enrollment and Demographics Form (Enrollment Form)	8
Child Information Update Form (Termination Form)	8
Recent Exposure to Violence	8
Caregiver Information Questionnaire (Intake and Termination).....	8
Youth Services Survey for Families	8
Recidivism	8
Ohio Youth Assessment System (OYAS)	8
Data Collection Schedule	9
Project Description	10
Description of the Analyses Used in the Report.....	12
Holmes County	13
Demographics.....	13
Custody Arrangement and Household Information	13
Youth and Family History.....	15
Ohio Youth Assessment System	15
DSM-IV Diagnoses.....	16
Educational and Vocational Information	17
Educational Data.....	17
Ohio Scales	18
Problem Severity	18

Caregiver Rating.....	19
Worker Rating.....	19
Youth Rating	20
Functioning	20
Caregiver Rating.....	21
Worker Rating.....	21
Youth Rating	22
TSCC.....	23
Substance Use	24
Ohio Scales and Substance Use	25
Termination Information	28
Reasons for Termination	28
Average Length of Stay	28
Risk for Out of Home Placement	28
Police Contacts	28
Satisfaction with Services	28
Recidivism	30
Methodology	30
Results	31
Juvenile Court Involvement Prior to Intake.....	31
Recidivism after Enrollment	31
Recidivism after Termination	32
Felony Offenders and ODYS Commitments.....	33
Success Story	34
References.....	35

EXECUTIVE SUMMARY: AN EVALUATION OF THE BEHAVIORAL HEALTH/JUVENILE JUSTICE (BHJJ) INITIATIVE: 2013–2015 HOLMES COUNTY RESULTS

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

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

Juvenile justice-involved youth with serious behavioral health issues often have inadequate and limited access to care to address their complex and multiple needs. Ohio's Behavioral Health/Juvenile Justice (BHJJ) initiative was intended to transform and expand the local systems' options to better serve these youth. Recent emphasis was placed on decreasing the population of ODYS facilities while providing alternatives to incarceration. Twelve counties participated in BHJJ in the newest biennium: Cuyahoga, Franklin, Cuyahoga, Hamilton, Lucas, Summit, Wayne, Holmes, Trumbull, Mahoning, Lorain, and Wood. BHJJ was funded by 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 research and evaluation services for the program.

The BHJJ program diverts youth from local and state detention centers into more comprehensive, community-based mental and behavioral health treatment. The BHJJ program enrolled juvenile justice-involved youth between 10-18 years of age who met several of the following criteria: a DSM IV Axis I diagnosis, substantial mental status impairment, a co-occurring substance use/abuse problem, a pattern of violent or criminal behavior, and a history of multi-system involvement.

Demographics and Youth Characteristics

- ❖ In Holmes County, 11 youth have been enrolled in BHJJ (81.8% males, 81.8% Caucasian). The average age at intake was about 15 years.
- ❖ Youth averaged 1.4 Axis I diagnoses. One-hundred percent were diagnosed with Oppositional Defiant Disorder.
- ❖ Caregivers reported that 100% of the females ran away and over 50% talked about suicide. Over 77% of males and 50% of females had family members who were diagnosed with or showed signs of depression.
- ❖ According to the OYAS, 70% of the youth served in Holmes County were either moderate or high risk.
- ❖ Of the youth enrolled in Holmes County, 11% had a felony charge in the 12 months prior to enrollment.

Educational Information

- ❖ Over 27% of the youth were suspended or expelled from school in the year prior to their enrollment. At termination, 71% of youth were attending school. At intake, 27.3% of youth

were receiving mostly D's and F's in school, and at termination, 0 were receiving D's and F's in school.

- ❖ At termination, workers reported that 77.7% of youth were attending school more or about the same amount as they were before starting treatment.

Mental/Behavioral Health Outcomes

- ❖ Results from the Ohio Scales indicated the caregiver, worker, and youth all reported decreased problem severity from BHJJ intake to termination.
- ❖ Youth demonstrated a decrease in trauma symptoms from intake to termination.
- ❖ Youth reported decreased six month alcohol and marijuana use.
- ❖ Upon intake, 33.3% of youth were at risk for out of home placement, and 0% of youth were at risk for out of home placement at termination.
- ❖ One-hundred percent of caregivers agreed that they were satisfied with the services their child received through BHJJ and that the services received were culturally and ethnically sensitive.

Termination and Recidivism Information

- ❖ One-hundred percent of the youth terminated from the BHJJ program were identified locally as successful treatment completers. The average length of stay in the program was approximately 5 months.
- ❖ Youth demonstrated decreased juvenile court involvement 12 months after termination from BHJJ compared to before enrollment.
- ❖ One year after termination, 16.7% of completers had a new felony charge. Of the youth entering BHJJ with at least one felony charge, none were charged with a new felony in the 12 months following BHJJ termination.
- ❖ None of the 9 youth enrolled in BHJJ for whom we had recidivism data were sent to an ODYS facility at any time following their enrollment in BHJJ.

AN EVALUATION OF THE BEHAVIORAL HEALTH/JUVENILE JUSTICE (BHJJ) INITIATIVE: 2013-2015 HOLMES COUNTY RESULTS

JUVENILE JUSTICE AND MENTAL HEALTH

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

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

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

JUVENILE JUSTICE/MENTAL HEALTH DIVERSION PROGRAMS

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

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

OHIO'S BEHAVIORAL HEALTH/JUVENILE JUSTICE (BHJJ) INITIATIVE

Over 15 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 youth could be placed in lieu of a detention facility.

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

In 2005, the state allocated new resources to the Behavioral Health/Juvenile Justice (BHJJ) project and funded several counties throughout Ohio to expand upon the work accomplished in the pilot phase. The intent of the BHJJ project was to transform the local systems' ability to identify, assess, evaluate, and treat multi-need, multi-system youth and their families and to identify effective programs, practices, and policies. As in the pilot, the initiative was designed to divert JJI youth with mental health or substance use issues from detention and into community and evidence-based treatment. The state identified criteria to be used by participating counties to determine if a youth was appropriate for inclusion in the BHJJ project, including: a DSM-IV 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, 17 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 agrees 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, 2016; Kretschmar, Butcher, Canary, & Devens, 2015). The current evaluation report includes data from 2006 through June 30, 2015. For information or copies of previous evaluation reports, please contact Dr. Jeff Kretschmar at jeff.kretschmar@case.edu or visit (<http://mha.ohio.gov/Default.aspx?tabid=136>).

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 PROBLEM, 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-IV 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-IV 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.

RECENT EXPOSURE TO VIOLENCE

This 26-item optional scale measures several youth-reported violent acts: threats, beatings, hitting, knife attacks, sexual abuse, and shootings (adapted from Singer, Anglin, Song, & Lunghofer, 1995). Youths respond to a 4-point scale ranging from “0” (never) to “3” (almost every day). Subjects report separately on violence they have experienced directly and violence they have witnessed. For threats, slapping/hitting, and beatings, questions are specific to the setting in which the violence has occurred: at home, at school, or in the neighborhood. The remaining items do not specify the setting in which the violence occurred. This scale, which has an acceptable internal consistency (Cronbach’s alpha = .86), served as our measure of victimization.

CAREGIVER INFORMATION QUESTIONNAIRE (INTAKE AND TERMINATION)

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

YOUTH SERVICES SURVEY FOR FAMILIES

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

RECIDIVISM

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

OHIO YOUTH ASSESSMENT SYSTEM (OYAS)

The OYAS is a criminogenic risk assessment tool designed to assist juvenile court staff with placement and treatment decisions based on a youth’s risk score. The OYAS contains five distinct

versions of the tool administered at different points in the juvenile justice process: Diversion, Detention, Disposition, Residential, and Reentry. Youth receive a total score and fall into three risk levels; low, moderate, or high. Each county’s juvenile court supplied OYAS data to the evaluators.

DATA COLLECTION SCHEDULE

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

Table 1. Required BHJJ Questionnaires

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

Table 2. Optional BHJJ Questionnaires

Measure	Who Completes	When Administered
Ohio Scales	Caregiver	Intake, every 3 months, Term
Recent Exposure to Violence Scale (REVS)	Youth	Intake, Term
Caregiver Information Questionnaire – Term (CIQ-F)	Caregiver with Program Staff	Term
Youth Service Survey for Families (YSSF)	Caregiver	Term

PROJECT DESCRIPTION

Holmes County's BHJJ program is known as the MST Program (Multisystemic Therapy) and serves females and males between the ages of 10 and 17 who are involved with Holmes County Juvenile Court. The youth and families are referred by personnel of the Holmes County Juvenile Court.

The Probation Officers identify youth and their families as candidates for the MST program based on:

- Risk of an out-of-home placement or returning from an out-of-home placement
- Multiple system involvement (legal, PCSA, behavioral health, education)
- Parent(s) or legal guardian(s) is/are willing and committed to participating in the MST program
- Previous failed attempts at treatment
- Significant history of involvement with the juvenile justice system
- Parental and youth dysfunction effecting the family's functioning in positive choices, education, employment and compliance to the law and probation terms.

The MST program is either ordered by the court through the juvenile's court case or agreed upon by the Diversion Officer, youth and parent/guardian in an informal Diversion contract. Once a youth is identified as a possible candidate for the MST program, a member of the probation department makes an initial contact with the family to verify eligibility, discuss the program, and gauge the family's willingness and commitment to participate. If the family is determined to be appropriate, a referral is submitted to the Crisis Intervention and Recovery Center (CIRC) MST supervisor, who will then conduct a thorough screening call with the family.

When the referral is complete, the case is assigned to the Holmes County therapist who contacts the family within 48 hours. The therapist meets with the family in their home to conduct family therapy sessions. The MST process usually lasts 5-7 months and with 3-5 weekly sessions depending on intensity of behaviors and availability of caregiver(s) to meet.

The MST theory of change is that the adolescent antisocial behavior (i.e. criminal activity, substance use, conduct problems) is driven by the interplay of risk factors associated with the multiple systems that youth are involved with, such as the individual (themselves), the family, peers, school, and the community. MST interventions focuses on empowering caregivers to gain the resources and skills needed to be more effective with their children. The family is viewed as critical to achieving and sustaining decreased adolescent antisocial behavior and improved functioning.

The design of MST interventions is based on nine treatment principles.

- 1) Finding the fit - The primary purpose of assessment is to understand the "fit" between the identified problems and their broader systemic context.
- 2) Positive and strength focused - Therapeutic contacts should emphasize the positive and should use systemic strengths as levers for change.
- 3) Increasing responsibility - Interventions should be designed to promote responsible behavior and decrease irresponsible behaviors among family members.
- 4) Present focused, action oriented, and well defined - Interventions should be present focused and action oriented, targeting specific well-defined problems.
- 5) Targeting sequences - Interventions should target sequences of behavior within and between multiple systems that maintain identified problems.

- 6) Developmentally appropriate - Interventions should be developmentally appropriate and fit the developmental needs of the youth.
- 7) Continuous effort - Interventions should be designed to require daily or weekly effort by family members.
- 8) Evaluation and accountability - Intervention efficacy is evaluated continuously from multiple perspectives, with providers assuming accountability for overcoming barriers to successful outcomes.
- 9) Generalization - Interventions should be designed to promote treatment generalization and long term maintenance of therapeutic change by empowering caregivers to address family members' needs across multiple systemic contexts.

The success of the MST process includes:

- Engaging families and mobilizing their strengths
- Promoting positive family relationships and parenting practices
- Steering teens away from deviant peers and toward prosocial friendships and activities
- Improving school performance and preventing dropout
- Helping caregivers develop strong social support networks

Throughout the duration of participation in the MST program, the MST therapist stays in close constant communication with the youth's probation officer, and/or other key participants, through regular phone calls and in person meetings. Determining when the youth has successfully completed the MST program is a collaborative decision between the MST provider, MST consultant, probation officer, youth, parents and other support systems that may be involved with the youth. The ultimate outcomes are to ensure the youth remains in the home, in school, and have no new legal charges at discharge from the program. MST success is determined by the family and youth consistently achieving the identified therapeutic goals for at least a month after termination and the youth does not have a new criminal charge(s) a month after MST has terminated their services with the identified youth.

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 effect¹.

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

HOLMES COUNTY

DEMOGRAPHICS

Holmes County has enrolled 11 youth in the BHJJ program since 2013. Of the 11 youth enrolled, 18.2% (n = 2) were female and 81.8% (n = 9) were male (see Table 3).

The majority of the overall sample of youth were Caucasian (81.8%, n = 9). The remainder were categorized as “Other” (18.2%, n = 2). The average age of the youth at intake into BHJJ was 15.3 years old (SD = 1.69).

Table 3. Demographic Information for BHJJ Youth in Holmes County

	All Youth Enrolled (2013 - 2015)
Gender	Female = 18.2% (n = 2) Male = 81.8% (n = 9)
Race	African American = 0.0% (n = 0) Caucasian = 81.8% (n = 9) Other = 18.2% (n = 2)
Age at Intake	15.3 years (SD = 1.69)

CUSTODY ARRANGEMENT AND HOUSEHOLD INFORMATION

At intake, the majority of youth lived with the biological mother (72.7%, n = 8) (see Table 4). At time of enrollment, 81.8% (n = 9) of the BHJJ youth lived with at least one biological parent.

Ninety percent of the BHJJ caregivers (n = 9) had at least a high school diploma or GED, and 30% (n = 3) had some college or an associate’s degree (see Table 5).

Caregivers reported their annual household income. The median household income for BHJJ families was between \$15,000 - \$19,999 (see Table 6). Over 75% (77.8%, n = 7) reported annual household incomes below \$35,000 and 55.6% (n = 5) reported an annual household income below \$20,000. Over 44% of BHJJ families (44.4%, n = 4) reported an annual household income below \$10,000.

Table 4. Custody Arrangement for BHJJ Youth in Holmes County

Custody	BHJJ Youth
Two Biological Parents or One Biological and One Step or Adoptive Parent	9.1% (n=1)
Biological Mother Only	72.7% (n=8)
Biological Father Only	0.0% (n=0)
Adoptive Parent(s)	18.2% (n=2)
Sibling	0.0% (n=0)
Aunt/Uncle	0.0% (n=0)
Grandparents	0.0% (n=0)
Friend	0.0% (n=0)
Ward of the State	0.0% (n=0)
Other	0.0% (n=0)

Table 5. Educational Outcomes for Caregivers of BHJJ Youth in Holmes County

Number of School Years Completed	Number of Caregivers
Less than High School	10.0% (n=1)
High School Graduate or G.E.D.	60.0% (n=6)
Some College or Associate Degree	30.0% (n=3)
Bachelor's Degree	0.0% (n=0)
More than a Bachelor's Degree	0.0% (n=0)

Table 6. Annual Household Income for BHJJ Families in Holmes County

Annual Household Income	BHJJ Families
Less than \$5,000	22.2% (n=2)
\$5,000 - \$9,999	22.2% (n=2)
\$10,000 - \$14,999	11.1% (n=1)
\$15,000 - \$19,999	0.0% (n=0)
\$20,000 - \$24,999	22.2% (n=2)
\$25,000 - \$34,999	0.0% (n=0)
\$35,000 - \$49,999	11.1% (n=1)
\$50,000 - \$74,999	0.0% (n=0)
\$75,000 - \$99,999	11.1% (n=1)
\$100,000 and over	0.0% (n=0)

YOUTH AND FAMILY HISTORY

Caregivers were asked to respond to a series of questions designed to obtain data related to the youth's family history (see Table 7). Statistical testing for gender differences could not be conducted due to small sample sizes.

Caregivers reported that 77.8% (n = 7) of males and 50.0% (n = 1) of females had a family history of depression. More than three quarters of the caregivers of males (77.8%, n = 7) and 100.0% of females (n = 2) had a family history of problems with substance use.

At intake, caregivers were asked if the youth had ever been pregnant (or if male, had ever impregnated a female) and if they were currently expecting a child. Caregivers reported that none of the youth had ever been pregnant.

Table 7. Youth and Family History in Holmes County

Question	Females	Males
Has the child ever been physically abused?	0.0% (n=0)	0.0% (n=0)
Has the child ever been sexually abused?	0.0% (n=0)	11.1% (n=1)
Has the child ever run away?	100.0% (n=2)	22.2% (n=2)
Has the child ever had a problem with substance abuse, including alcohol and/or drugs?	100.0% (n=1)	11.1% (n=1)
Has the child ever talked about committing suicide?	50.0% (n=1)	66.7% (n=6)
Has the child ever attempted suicide?	0.0% (n=0)	0.0%(n=0)
Has the child ever been exposed to domestic violence or spousal abuse, of which the child was not the direct target?	0.0% (n=0)	33.3% (n=3)
Has anyone in the child's biological family ever been diagnosed with depression or shown signs of depression?	50.0% (n=1)	77.8% (n=7)
Has anyone in the child's biological family had a mental illness, other than depression?	0.0% (n=0)	55.6% (n=5)
Has the child ever lived in a household in which someone was convicted of a crime?	0.0% (n=0)	44.4% (n=4)
Has anyone in the child's biological family had a drinking or drug problem?	100.0% (n=2)	77.8% (n=7)
Is the child currently taking any medication related to his/her emotional or behavioral symptoms	0.0% (n=0)	33.3% (n=3)

OHIO YOUTH ASSESSMENT SYSTEM

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. Distribution of Holmes County youth based on the OYAS risk categories by gender and race are presented in Table 8. Due to sample size restrictions, Chi-square analyses were not performed with OYAS categories based on gender or race.

Table 8. OYAS Categories by Race and Gender for Holmes County

	OYAS Low	OYAS Moderate	OYAS High
Female	37.5% (n = 3)	50.0% (n = 4)	12.5% (n = 1)
Male	0.0% (n = 0)	0.0% (n = 0)	100.0% (n = 2)
White	33.3% (n = 3)	33.3% (n = 3)	33.3% (n = 3)
Nonwhite	0.0% (n = 0)	100.0% (n = 1)	0.0% (n = 0)

DSM-IV DIAGNOSES

Workers were asked to report any DSM-IV Axis I diagnoses at intake into 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. All BHJJ youth had a diagnosis of Oppositional Defiant Disorder (see Table 9). Statistical testing for gender differences could not be conducted due to small sample sizes.

A total of 16 Axis I diagnoses were identified for 11 youth with diagnostic information (1.45 diagnoses per youth). Females reported 2 Axis I diagnoses (1.00 diagnoses per female) and males reported 14 Axis I diagnoses (1.55 diagnoses per male).

Table 9. Most Common DSM-IV Axis I Diagnoses in Holmes County

DSM-IV Axis I Diagnosis	Females	Males
Alcohol-related Disorders	0.0% (n = 0)	0.0% (n = 0)
Attention Deficit Hyperactivity Disorder	0.0% (n = 0)	33.3% (n = 3)
Bipolar Disorder	0.0% (n = 0)	0.0% (n = 0)
Cannabis-related Disorders	0.0% (n = 0)	0.0% (n = 0)
Conduct Disorder	0.0% (n = 0)	0.0% (n = 0)
Depressive Disorders	0.0% (n = 0)	0.0% (n = 0)
Mood Disorder	0.0% (n = 0)	0.0% (n = 0)
Oppositional Defiant Disorder	100.0% (n = 2)	100.0% (n = 9)
Post-traumatic Stress Disorder	0.0% (n = 0)	11.1% (n = 1)

EDUCATIONAL AND VOCATIONAL INFORMATION

EDUCATIONAL DATA

Several items that focused on educational and vocational information were included in the evaluation packet at both intake and termination from the BHJJ program. The items were completed by the worker with help from the youth and caregiver. In the 12 months prior to intake, 27.3% (n = 3) were either suspended or expelled from school. While in treatment with BHJJ, 22.2% (n = 2) of BHJJ youth were either suspended or expelled from school.

Educational data were analyzed for youth who were eligible for inclusion (youth on summer break or who had graduated at the time of the survey were not included in the analyses). At intake, 80.0% (n = 8) of youth were currently attending school excluding those on summer break. At termination, 71.4% (n = 5) of youth were attending school. Again, this does not include youth out of school due to summer break. If the youth was attending school, the worker was asked to identify the types of grades the youth typically received (see Table 10). At intake, 54.6% were receiving mostly A's, B's, or C's while at termination 66.6% of BHJJ youth were receiving mostly A's, B's, or C's.

At termination, workers reported that 44.4% (n = 4) of youth were attending school more than before starting treatment and 33.3% (n = 3) of youth were attending school 'about the same' amount compared to before starting treatment. Workers reported two youth were attending school less often than before treatment in BHJJ.

Table 10. Academic Performance in Holmes County

Typical Grades	Frequency at Intake	Frequency at Termination
Mostly A's and B's	27.3% (n = 3)	22.2% (n = 2)
Mostly B's and C's	27.3% (n = 3)	44.4% (n = 4)
Mostly C's and D's	18.2% (n = 2)	33.3% (n = 3)
Mostly D's and F's	27.3% (n = 3)	0.0% (n = 0)

OHIO SCALES

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

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

PROBLEM SEVERITY

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

Figure 1. Problem Severity Scores across Time - Holmes County

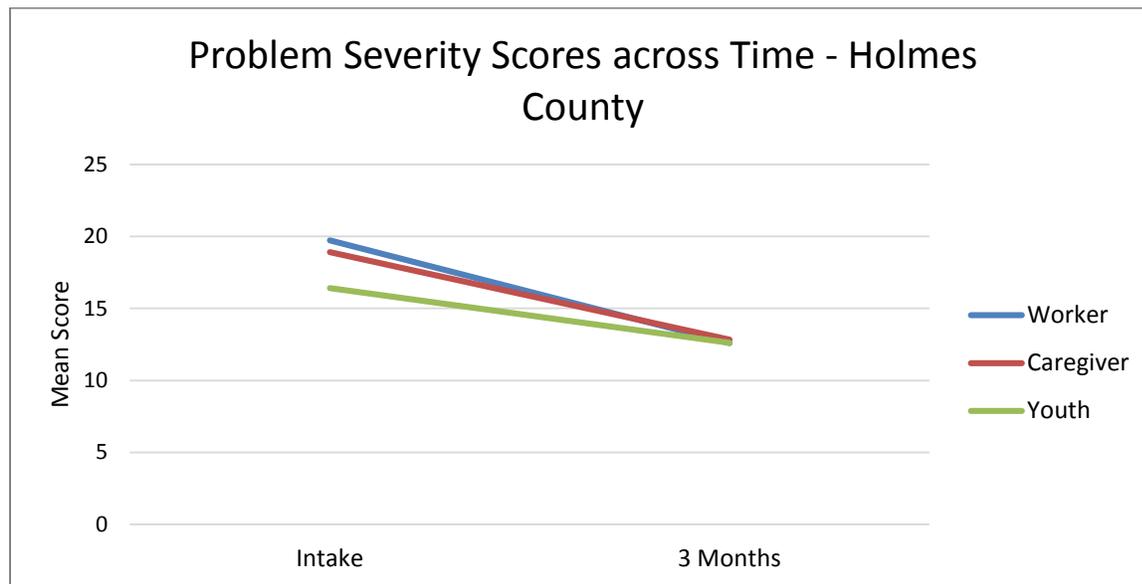
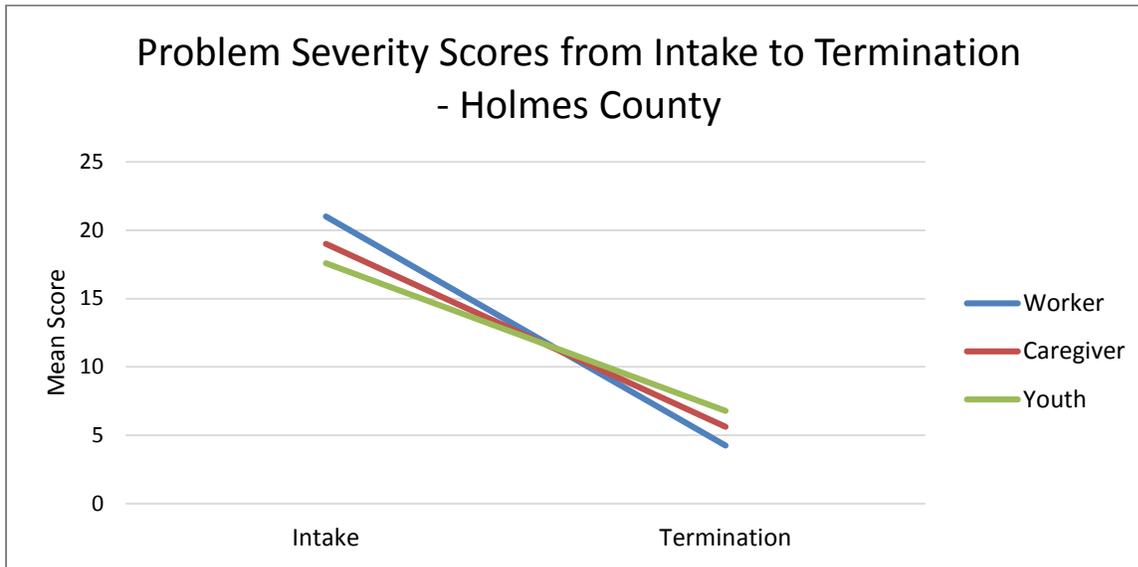


Figure 2. Problem Severity Scores from Intake to Termination - Holmes County



*all comparisons from intake to termination are significant at the $p < .05$ level

CAREGIVER RATING

Paired samples t-tests revealed significant improvements in Problem Severity at termination (see Table 11) compared to intake. Significant improvements were noted at termination: $t(7) = 3.40$, $p < .05$. A small effect size was found for intake to three months. A large effect size was noted for intake to termination.

Table 11. Paired Samples T-Tests for Caregiver Report Problem Severity Scores for Holmes County

	Mean Time 1	Mean Time 2	<i>t</i>	<i>d</i>
Intake to Three Months	17.00 (SD=9.68; n=9)	12.83 (SD=10.17; n=9)	1.25	.42
Intake to Termination	19.00 (SD=9.58; n=8)	5.63 (SD=3.29; n=8)	3.40*	1.87

* $p < .05$

WORKER RATING

For workers, paired samples t-tests indicated significant improvement in Problem Severity from intake to termination (see Table 12). Significant improvements were noted at termination: $t(8) = 5.80$, $p < .001$. A moderate effect size was found for intake to three months, while a large effect size was found for intake to termination.

Table 12. Paired Samples T-Tests for Worker Report Problem Severity Scores for Holmes County

	Mean Time 1	Mean Time 2	<i>t</i>	<i>d</i>
Intake to Three Months	16.90 (SD=8.53; n=10)	12.58 (SD=5.93; n=10)	2.10	.59
Intake to Termination	21.00 (SD=7.73; n=9)	4.26 (SD=2.31; n=9)	5.80***	2.93

*** $p < .001$

YOUTH RATING

Scores on the Problem Severity scale as reported by youth showed significant improvement from intake to termination (see Table 13). Significant improvements were noted at termination: $t(8) = 12.58, p < .01$. A small effect size was observed for intake and three months, and a moderate effect size was observed for the intake and termination.

Table 13. Paired Samples T-Tests for Youth Report Problem Severity Scores for Holmes County

	Mean Time 1	Mean Time 2	<i>t</i>	<i>d</i>
Intake to Three Months	16.56 (SD=10.03; n=10)	12.60 (SD=8.44; n=10)	1.30	.43
Intake to Termination	12.58 (SD=10.07; n=9)	6.78 (SD=7.05; n=9)	3.47**	.67

** $p < .01$

FUNCTIONING

Overall means for the Functioning scale by rater and assessment period for Holmes County youth are represented graphically in Figure 3. Means from intake to termination are presented in Figure 4.

Figure 3. Functioning Scores across Time - Holmes County

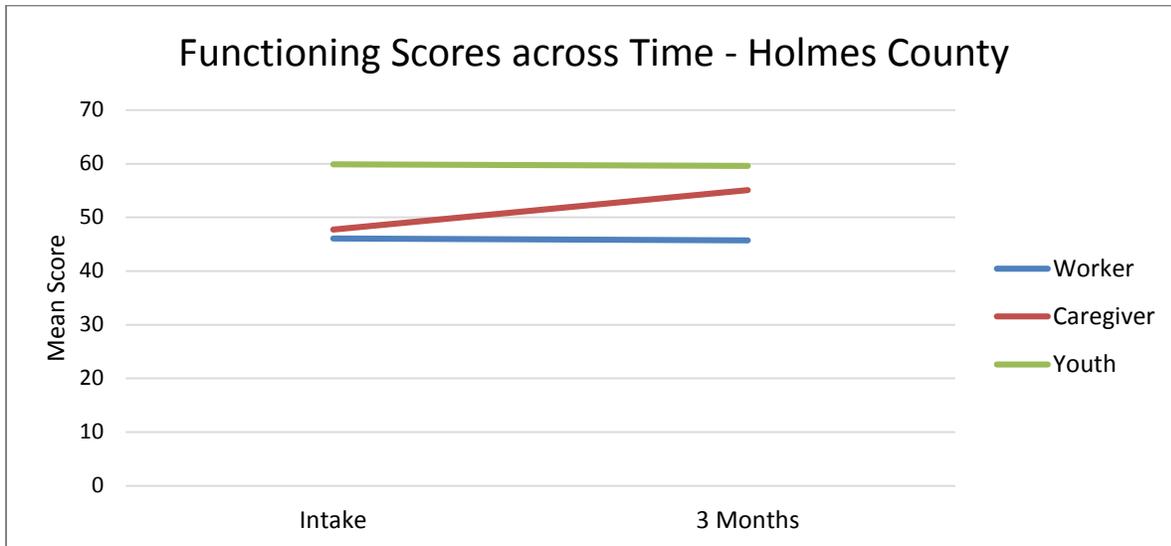
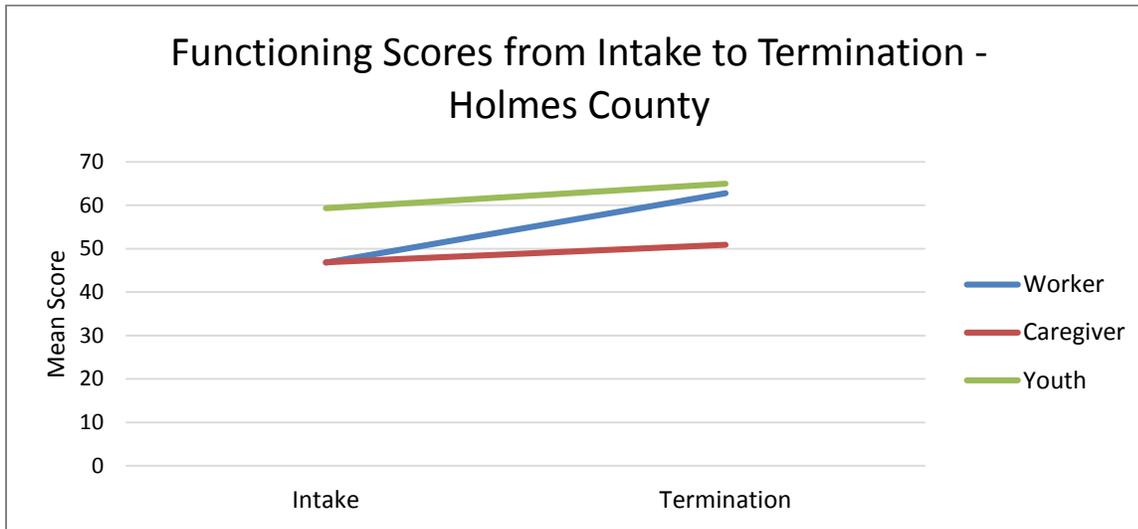


Figure 4. Functioning Scores from Intake to Termination - Holmes County



CAREGIVER RATING

While Functioning increased at both measurement intervals (see Table 14) compared to intake, differences did not reach statistical significance. Small effect sizes were observed for both time points.

Table 14. Paired Samples T-Tests for Caregiver Report Functioning Scores for Holmes County

	Mean Time 1	Mean Time 2	t	d
Intake to Three Months	48.75 (SD=14.87; n=8)	55.13 (SD=19.01; n=8)	-1.84	.37
Intake to Termination	46.88 (SD=15.05; n=8)	50.88 (SD=11.03; n=8)	-0.52	.30

WORKER RATING

For workers, paired samples t-tests indicated significant improvement in the Functioning scale from intake to termination (see Table 15). Significant improvements were noted at termination: $t(8) = -9.11, p < .001$. A small effect size was observed for intake to three months, while a large effect size was noted for intake to termination.

Table 15. Paired Samples T-Tests for Worker Report Functioning Scores for Holmes County

	Mean Time 1	Mean Time 2	t	d
Intake to Three Months	46.10 (SD=6.01; n=10)	45.70 (SD=8.54; n=10)	0.23	.05
Intake to Termination	46.78 (SD=5.95; n=9)	62.78 (SD=4.41; n=9)	-9.11***	3.05

***p < .001

YOUTH RATING

Although Youth-rated Functioning increased at both measurement intervals (see Table 16), these increases were not statistically significant. A small effect size was noted for intake to three months, while a moderate effect size was noted for intake to termination.

Table 16. Paired Samples T-Tests for Youth Report Functioning Scores for Holmes County

	Mean Time 1	Mean Time 2	<i>t</i>	<i>d</i>
Intake to Three Months	59.00 (SD=7.20; n=10)	59.60 (SD=12.36; n=10)	-0.13	.06
Intake to Termination	59.33 (SD=7.55; n=9)	65.00 (SD=11.08; n=9)	-1.14	.60

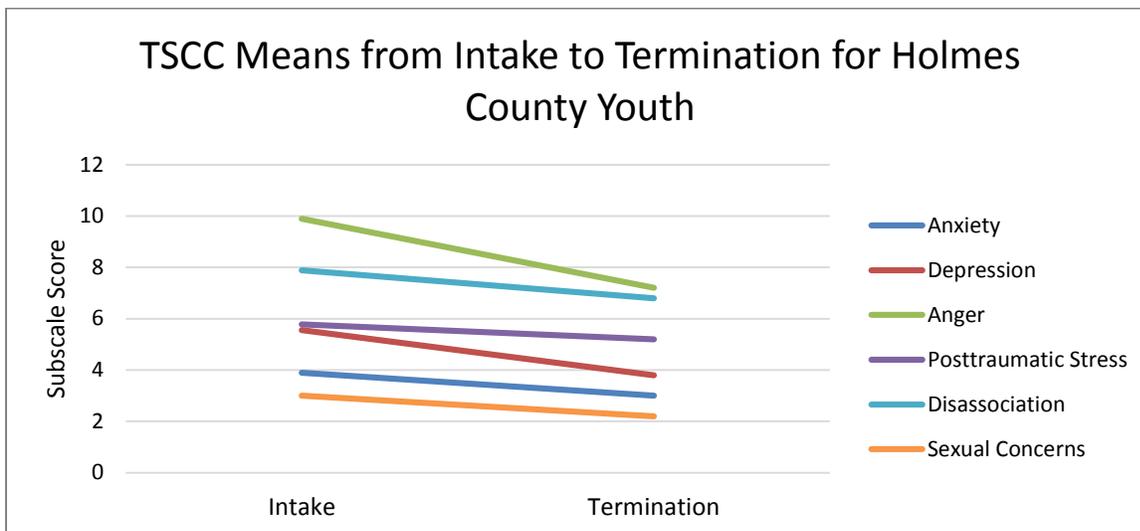
The Trauma Symptom Checklist for Children (TSCC) was administered to youth in the BHJJ program in Holmes County at both intake and termination. The TSCC is made up of six subscales: Anxiety, Depression, Anger, Posttraumatic Stress, Dissociation, and Sexual Concerns. Higher scores on each of the subscales indicate higher levels of trauma symptoms. Table 17 shows the mean TSCC scores at intake and at termination. As described in the TSCC section in the overall BHJJ report, TSCC subscale scores are reported for youth ages 13-17 and those who were not identified as either underresponders or hyperresponders. The removal of such a large number of youth who were identified as “Underresponders” had a significant impact on the results. We are currently examining the practicality of removing these youth from the analyses.

Means and standard deviations were calculated on the six subscales for Holmes County BHJJ youth who have subscale scores both at intake and at termination. Means reported in Table 17 are represented graphically in Figure 5. Means decreased from intake to termination for every trauma domain.

Table 17. Means at Intake and Termination for TSCC Subscales – Holmes County

	Intake	Termination
Anxiety	3.89 (SD=1.90; n=9)	3.00 (SD=3.53; n=5)
Depression	5.56 (SD=2.92; n=9)	3.80 (SD=3.63; n=5)
Anger	9.89 (SD=2.98; n=9)	7.20 (SD=3.42; n=5)
PTS	5.78 (SD=2.64; n=9)	5.20 (SD=4.49; n=5)
Dissociation	7.89 (SD=3.59; n=9)	6.80 (SD=3.27; n=5)
Sexual Concerns	3.00 (SD=2.06; n=9)	2.20 (SD=1.10; n=5)

Figure 5. TSCC Means from Intake to Termination for Holmes County Youth



SUBSTANCE USE

Every six months the youth completed a self-report measure of substance use. The survey was designed to measure any lifetime use of each drug as well as patterns of current use. Table 18 presents the percentages of BHJJ youth who reported ever using alcohol or drugs and the average age of first use. Alcohol, cigarettes, and marijuana were of the three most commonly used substances. Due to small sample sizes, chi-square analyses detecting gender differences for substance use were not possible.

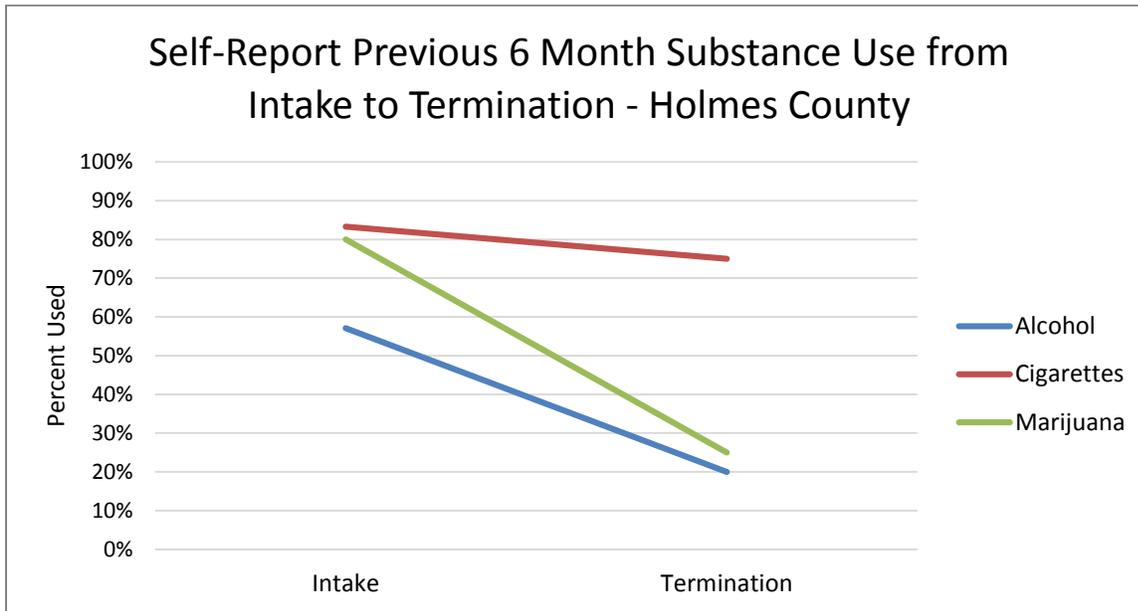
Youth were also asked to report whether they had used each substance in the past six months. Figure 6 present past six month use for the most commonly reported among those who reported lifetime use. The percentage of those using the three most commonly reported substances decreased from intake to termination. Six month alcohol use decreased from 57.1% (n = 4) at intake to 20.0% (n = 1) at termination. Six month cigarette use decreased from 83.3% (n = 5) at intake to 75.0% (n = 3) at termination. Six month marijuana use decreased from 80.0% (n = 4) at intake to 25% (n = 1) reported at termination.

Table 18. Self-Report Substance Use at Intake for Holmes County BHJJ Youth

	Males		Females	
	% Ever Used	Age of First Use	% Ever Used	Age of First Use
Alcohol	55.6% (n = 5)	14.60 (SD = 1.14)	100% (n = 2)	13.00 (SD = 0.00)
Cigarettes	44.4% (n = 4)	12.00 (SD = 4.36)	100% (n = 2)	12.00 (SD = 0.00)
Chewing Tobacco	88.9% (n = 8)	12.67 (SD = 1.53)	50.0% (n = 1)	13.00
Marijuana	33.3% (n = 3)	14.33 (SD = 0.58)	100% (n = 2)	12.50 (SD = 0.71)
Cocaine	0.0% (n = 0)	N/A	0.0% (n = 0)	N/A
Pain Killers (use inconsistent with prescription)	0.0% (n = 0)	N/A	0.0% (n = 0)	N/A
GHB	0.0% (n = 0)	N/A	0.0% (n = 0)	N/A
Inhalants	0.0% (n = 0)	N/A	50.0% (n = 1)	13.00
Heroin	0.0% (n = 0)	N/A	0.0% (n = 0)	N/A
Amphetamines	0.0% (n = 0)	N/A	0.0% (n = 0)	N/A
Ritalin (use inconsistent with prescription)	11.1% (n = 1)	N/A	0.0% (n = 0)	N/A
Barbiturates	0.0% (n = 0)	N/A	0.0% (n = 0)	N/A
Non-prescription Drugs	11.1% (n = 1)	15.00 ^a	50.0% (n = 1)	13.00
Hallucinogens	11.1% (n = 1)	13.00	0.0% (n = 0)	N/A
PCP	0.0% (n = 0)	N/A	0.0% (n = 0)	N/A
Ketamine	0.0% (n = 0)	N/A	0.0% (n = 0)	N/A
Ecstasy	0.0% (n = 0)	N/A	0.0% (n = 0)	N/A
Tranquilizers	0.0% (n = 0)	N/A	0.0% (n = 0)	N/A

^a Standard Deviations are not calculated when only one respondent reported using a substance.

Figure 6. Self-Report Previous 6 Month Substance Use from Intake to Termination - Holmes County



OHIO SCALES AND SUBSTANCE USE

The Ohio Scales contain one Likert-scale item about the youth's problems with alcohol and drugs during the past 30 days. This question appears on all three versions of the Ohio Scales (Caregiver, Worker, and Youth). The responses range from zero to five, with zero indicating no problems at all with drugs or alcohol in the past 30 days and five indicating problems with drugs or alcohol all of the time. Scores on this item were examined at intake and termination for the three raters. All raters reported fewer problems with drugs or alcohol at termination from BHJJ (see Figure 7, Figure 8, and Figure 9). At intake 81.8% (n = 9) of caregivers and 54.5% (n = 6) of workers reported no problems with drugs or alcohol in the past 30 days while 100% (n = 8) of caregivers and 100% (n = 9) of workers reported no problems at termination. Similarly, 63.6% (n = 7) of youth reported no problems in the past 30 days with drugs or alcohol at intake while 100% (n = 9) of youth reported no problems at termination.

Figure 7. Problems with Drugs or Alcohol in the Past 30 Days for Holmes County Youth - Caregiver Ratings

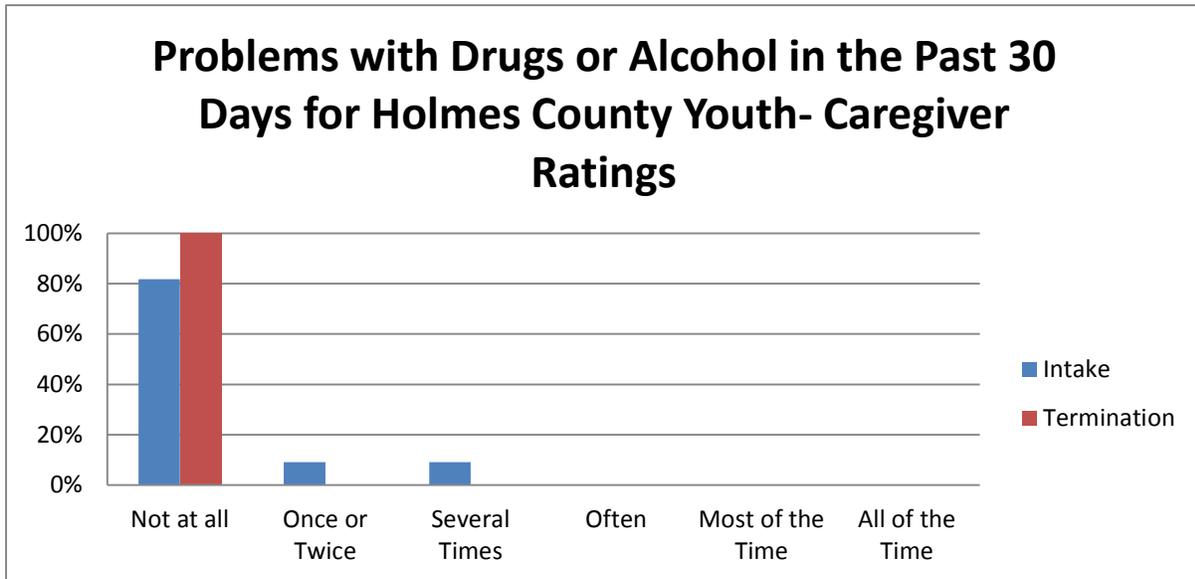


Figure 8. Problems with Drugs or Alcohol in the Past 30 Days for Holmes County Youth - Worker Ratings

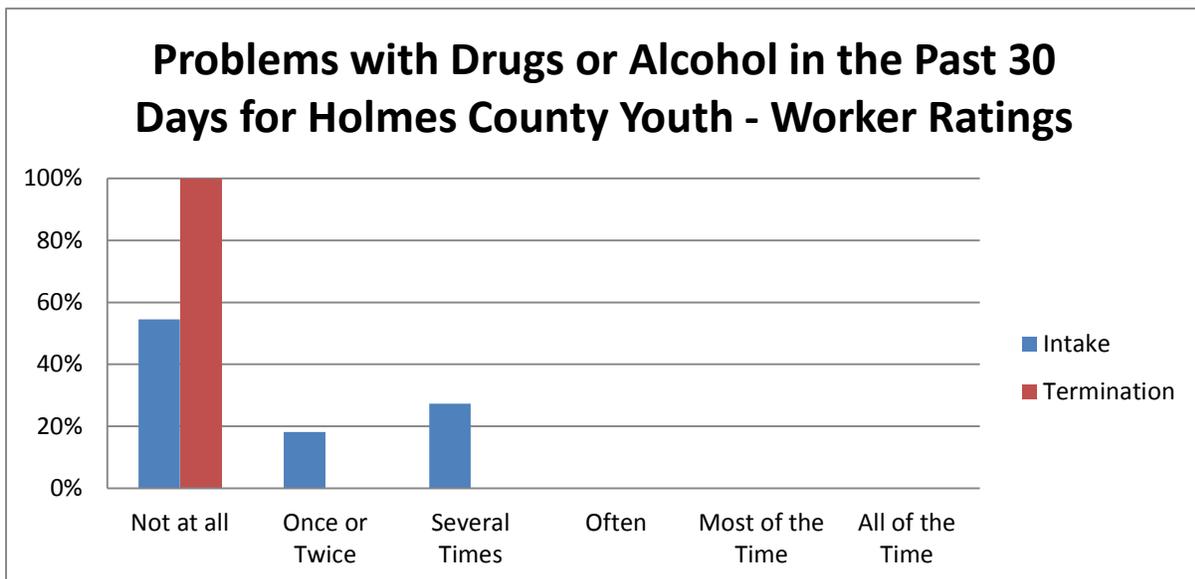
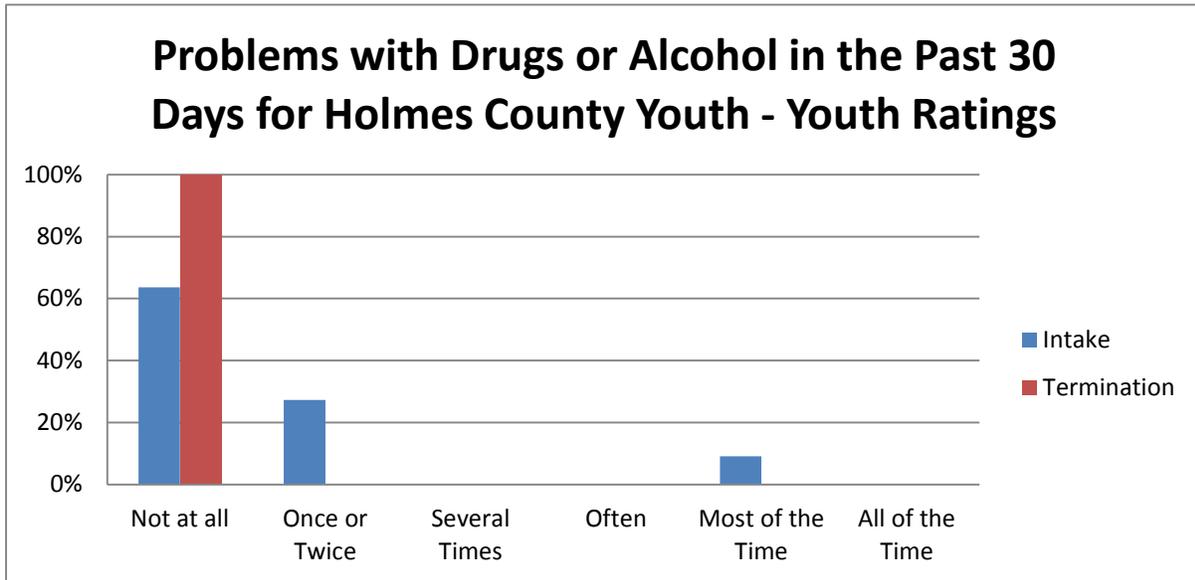


Figure 9. Problems with Drugs or Alcohol in the Past 30 Days for Holmes County Youth - Youth Ratings



TERMINATION INFORMATION

REASONS FOR TERMINATION

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

To date, there have been 9 youth terminated from the BHJJ program in Holmes County. **One hundred percent (n = 9) of the youth terminated from the BHJJ program were identified as successful treatment completers.**

AVERAGE LENGTH OF STAY

The average length of stay for youth in the Holmes County BHJJ program was 159 days. As all of the completers in Holmes County were successful, the average length of stay for youth who were successfully terminated was also 159 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, 33.3% of the youth (n = 3) in Holmes County were at risk for out of home placement. At termination, 0% (n = 0) of youth were at risk for out of home placement.

POLICE CONTACTS

With help from the caregiver and youth, the worker was asked to estimate the frequency of police contacts since the youth has been receiving mental health services through BHJJ. Workers reported that police contacts has been reduced for 100% (n = 8) of the youth.

SATISFACTION WITH SERVICES

Upon completion of the BHJJ program, the caregiver was asked about their overall satisfaction with the BHJJ program (see Table 19). At termination from the BHJJ program, 100% (n = 9) of caregivers either strongly agreed or agreed that they were satisfied with the services their child received and 88.9% (n = 8) either strongly agreed or agreed that services were right for them. One hundred percent (n = 9) of caregivers either strongly agreed or agreed that staff treated them with respect and 100% (n = 9) strongly agreed or agreed that they were satisfied with the cultural and ethnic sensitivity of BHJJ staff.

Table 19. Satisfaction with Services – Holmes County

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Overall I am satisfied with the services my child received	55.6%	44.4%	0.0%	0.0%	0.0%
The services my child and/or family received were right for us	66.7%	22.2%	11.1%	0.0%	0.0%
Staff treated me with respect	77.8%	22.2%	0.0%	0.0%	0.0%
Staff were sensitive to my cultural/ethnic background	77.8%	22.2%	0.0%	0.0%	0.0%

RECIDIVISM

METHODOLOGY

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

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

Enrollment and termination dates were also used to identify youth for the analyses. For example, when examining recidivism data three months after termination from BHJJ we chose to include only those youth who had been terminated from BHJJ for at least three months prior to the end of the data collection period, June 30, 2015. If the youth was terminated one month prior to the end of the data collection, that youth only had one month to recidivate. Therefore, the full extent of their recidivism is not known. For example, in order to be included in the three month after termination analyses, a youth had to have been 17.75 years old or younger at the time of termination and must have been terminated at least three months prior to the end of the data collection period. To be included in the 6 month analysis, youth had to have been 17.50 years old or younger at termination and have been terminated 6 months prior to June 30, 2015. The same criteria were applied to the intervals following enrollment in BHJJ. When examining new charges occurring within three months after intake, youth must be 17.75 years old or younger at the time of enrollment and the enrollment date must be at least three months prior to the end of the data collection period for inclusion in the analysis.

RESULTS

JUVENILE COURT INVOLVEMENT PRIOR TO INTAKE

In the 12 months prior to their BHJJ enrollment, 66.7% (n = 6) of the BHJJ youth had a misdemeanor charge, 11.1% (n = 1) had a felony charge, and 77.8% were adjudicated delinquent (see Table 20).

Table 20. Charges Prior to BHJJ Enrollment – Holmes County

	Misdemeanors	Felonies	Adjudicated Delinquent
3 months	33.3% (n = 3)	11.1% (n = 1)	44.4% (n = 4)
6 months	55.6% (n = 5)	11.1% (n = 1)	66.7% (n = 6)
12 months	66.7% (n = 6)	11.1% (n = 1)	77.8% (n = 7)
18 months	77.8% (n = 7)	33.3% (n = 3)	88.9% (n = 8)

RECIDIVISM AFTER ENROLLMENT

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

In the 12 months after enrollment in BHJJ, 80.0% (n = 4) of youth were charged with at least one new misdemeanor and 0.0% (n = 0) were charged with at least one new felony. Sixty percent (60.0%, n = 3) of the youth were adjudicated delinquent in the 12 months after their enrollment in BHJJ (see Table 21).

Table 21. Charges after BHJJ Enrollment– Holmes County

	Misdemeanors	Felonies	Adjudicated Delinquent
3 months	33.3% (n = 3)	0.0% (n = 0)	33.3% (n = 3)
6 months	50.0% (n = 4)	0.0% (n = 0)	50.0% (n = 4)
12 months	80.0% (n = 4)	0.0% (n = 0)	60.0% (n = 3)
18 months	75.0% (n = 3)	25.0% (n = 1)	75.0% (n = 3)

RECIDIVISM AFTER TERMINATION

We defined recidivism after termination as receiving a new charge or adjudication any time after a youth’s BHJJ termination date. If a charge was eventually dismissed, it was still included in the ‘Misdemeanors’ and ‘Felonies’ column of the associated tables but would not be included in the calculations of delinquent adjudications. Eighteen month recidivism data is not yet available for this county.

In the 12 months after termination from BHJJ, 33.3% (n = 2) of youth were charged with at least one new misdemeanor, 16.7% (n = 1) were charged with at least one new felony, and 33.3% (n = 2) were adjudicated delinquent (see Table 22).

Table 22. Charges after BHJJ Termination – Holmes County

	Misdemeanors	Felonies	Adjudicated Delinquent
3 months	14.3% (n = 1)	0.0% (n = 0)	14.3% (n = 1)
6 months	25.0% (n = 1)	0.0% (n = 0)	25.0% (n = 1)
12 months	33.3% (n = 2)	16.7% (n = 1)	33.3% (n = 2)

FELONY OFFENDERS AND ODYS COMMITMENTS

We examined data for those youth who committed felony offenses in the 12 months prior to their BHJJ enrollment to determine if they had new felony charges after their BHJJ termination. None of the sample were valid for analysis in this county.

None of the 9 BHJJ youth (0.0%) from Holmes County for whom we had recidivism data were committed to an ODYS facility at any time following their enrollment.

SUCCESS STORY

The client was a 16 yr. old Caucasian male who lived with his Mom and step-Dad. The client moved in with his Mom in August 2014 after living with his Dad and step-Mom for 10 yrs. The relationship between biological parents has always been negative with limited communication. The case opened in early 2015. The client displayed verbal aggression, substance use, leaving without permission, and poor school performance. The client was referred to the MST program through the Holmes County Juvenile Court. The client would swear and call his Mom names, argue, rebel against anything she would say to him. He would refuse to comply with any rules she would try to enforce. The client smoked cigarettes and marijuana. He refused to believe marijuana was a dangerous drug and used as often as he could. He would leave without permission and be gone for days associating with other negative peers with like behaviors. The client was attending a local high school and was in the program where he went a half day to school and worked the other half at a local restaurant.

Mom was very frustrated and stated many times that she was worried her son would never love her. This was very hard for her due to past guilt when the client lived with his Dad. One of the first interventions was to stop engaging with the client. This was very hard but very effective. She would not argue and would exit and wait which decreased the negative comments because if she was not engaging with him there was no one to argue with and it stopped. Mom and step-Dad were very good at working the program and involved the other children by putting a list of rules on the refrigerator and having a reward and consequence jar. This was very impressive and worked well.

The client continued to rebel against rules, rewards, and consequences that were put in place to decrease the negative behaviors. It seemed that after 3 months of treatment there was very little progress. The client had spiraled down to the bottom, he had lost his job, his phone, he was skipping school, his grades were dropping, he was testing positive for all drug screens, he lost his girlfriend, and there was no communication with his family. The client left without permission for three days. Mom worked the plan by calling all friends (positive and negative) which she had by having a friends approval list and a 4W plan which had the information of who, where, when, and what the client was doing. Mom went to places she thought he might be, called the police and filed a missing person report, and put his picture on social media. The client turned himself in because he did not like having his picture on Facebook. The client would sleep all the time and was displaying signs of depression.

Mom and therapist agreed that something needed to change because he had nothing and did not care. The client would soon turn 17 yrs. old and needed to learn accountability and responsibility. When we went to a probation violation hearing we discussed a plan with his probation officer to increase the clients' freedom with boundaries. Mom had a cell phone on her account that she could monitor and gave it to the client. The client needed to spend a certain amount of time with the family (not by himself). He was allowed to spend a certain amount of time with approved friends as long as he would check in, was where he was supposed to be, and Mom knew who he was with and approved. Mom would drug screen him on Friday mornings and the client would go to the courthouse on Monday morning and do a drug screen for his probation officer. There were rules, rewards, and consequences for any leaving without permission and for any positive drug screens.

This new plan of giving freedoms with boundaries has worked amazingly. Verbal aggression decreased and there was more open communication between Mom and the client. The client did not leave without permission and was compliant with checking in. He applied for and was hired at another restaurant. At the time of discharge, the client had 5 weeks and 2 days clean from substances.

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. & Skowrya, 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*(3), 302-325.
- Kretschmar, J.M., Butcher, F., Canary, 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.