

Mentally Ill Offender Crime Reduction (MIOCR) Grant Shasta County Local Evaluation Report

Executive Summary

The WINGS II project implemented with MIOCR funding produced some significant results in the lives in the participants and their families. The participants selected for this program were some of the most difficult and highest risk for out of home placement in the juvenile criminal justice system. The program was designed to provide a high number of hours of intensive services to a relatively small number of families. These intensive services were intended to reduce recidivism, reduce youth re-entry into the criminal justice system, reduce high level out of home placements, improve family coping skills (specifically with mental health and drug use), and improve school attendance and school functioning.

The data resulting from this program showed significant positive outcomes related to school attendance and academic functioning, along with pro social skills and overall mental health. Additionally, although not significantly different than the control group percentage, many of the participants would have been removed from the home for placement purposes prior to this program. The participants were selected specifically for their characteristics that make them at higher risk for placement than the rest of the population. Therefore, perhaps not statistically evident when compared to the general population of youth supervised by Probation, the program was successful in keeping nearly all the participants with their families and avoiding out of home placements. Although there were more unsuccessful terminations than were desired, these terminations were ultimately due to more criminal minded participants whose mental health and substance abuse were not primary indicators in their delinquent/criminal behavior.

In addition to the results experienced by the participants and their families, system improvements that will last beyond the grant funding were also accomplished. A substance abuse counselor/social worker specifically dedicated to provide substance abuse counseling to the participants in the program was hired and filled an existing void. This position will be maintained and will continue to be instrumental in providing the service regularly and at a high dosage. Training for the team staff was provided in areas specific to providing the best services throughout the program. Among those were a three-day WRAP Around Conference, Trauma informed practices, facilitating family team meetings, and family finding efforts. The skills learned by the team in these trainings will be used ongoing after the end of the funding. In addition to training for the team, the Juvenile Division was trained in EPICS and the staff in the Juvenile Rehabilitation Facility were trained in Core Correctional Practices. These trainings strengthened the Juvenile System which will help the system provide consistent effective services and increase the success of the entire system, including the population in this program. Not only did this program provide additional tools that will be used to serve the youth for years to come, the program also resulted in strengthened relationships between the agencies involved and an increased desire to continue to providing services to this population thereby limiting the number of high level out of home placements.

As with many new programs, there were barriers that were experienced. One of the primary barriers was the low number of youth served. This barrier is difficult to address as the general population in the juvenile criminal justice system has decreased making it more difficult to get a significant number of participants who met the criteria of the program. Initially, all caseloads for this population were reviewed and screened for potential participation. Although a few referrals were received through this process some of the participant did not ultimately fit the criteria based on low level criminality/drug use/mental health or severe (very high) level serious and violent crimes. Transportation was another barrier experienced in the program. The transportation barrier was addressed by using the Skill Builder as primary transport assistance when needed as well as assisting families in finding their own long term transportation resources.

Although the initial program was written to only include direct services for the participants, over time the team began to recognize the value of incentives and sanctions for the participants and their families. As the program

continued to developed, efforts were made to use the grant money to provide more innovative incentives and sanctions that proved effective in gaining compliance by participants and encouraging families to be engaged in the program.

The average cost of this program per participant was \$35,375.62. The length of stay in the Program was 11.75 months. The cost for the higher level out of home placement typically needed by this population is \$10,000 - \$14,000 per month. The cost savings by serving them intensively while they are still in their home is significant.

Project Description

The project goals for the Shasta County MIOCR grant include the following:

- Reduce juvenile-related crime among the affected population.
- Reduce youth re-entry into the criminal justice system among the affected population.
- Reduce high-level out-of-home placements among the affected population.
- Improve families' ability to effectively cope with youth's mental health issues and/or substance abuse issues.
- Improve school attendance and academic functioning among the affected population.

The objective of the MIOCR project was to duplicate services provided with the Wraparound Interagency Network for Growth and Stability (WINGS) to serve up to 12 additional youth and their families. This expansion provided wraparound family based treatment for youth with mental health and/or substance abuse issues. A customized set of strategies, supports and services were identified by the family team and developed to enhance the capabilities and skills of the youth and family for the purposes of learning how to successfully navigate life situations. Strengthening families and increasing their capabilities are essential in reducing recidivism and keeping families together. The family team included people chosen by the family and are connected to them in addition to the mental health clinician, probation officer, Parent Partner, Skill Builder and substance abuse counselor.

The target population for this program was 14-21-year-old offenders who displayed mental illness when assessed by a probation officer at intake or at any time a probation officer, mental health professional, or judge recommends assessment, and who had a Diagnostic and Statistical Manual of Mental Disorders (DSM-5) diagnosis. The project covered up to 12 participants in the program at any given time.

Once a youth was referred to the WINGS program, an assessment was done and the WINGS team determines if the youth and parents were good candidates for the program. Based on the assessment and recommendation of the WINGS team, appropriate services were selected from preexisting evidence-based interventions. Upon acceptance into the MIOCR program, the youth and family began to receive these services, which most often were administered in the home or at the WINGS office. The services provided were:

- Establishment of mental health treatment goals
- WINGS Court review of youth & parent progress
- The Child and Adolescent Needs and Strengths (CANS) assessment
- A Parent Partner provided direct services to youth and families and secure community-based resources as needed
- A Skill Builder taught skills that enabled youth to problem solve and engage in everyday positive social interactions
- A mental health clinician provided a mental health assessment and therapy to youth, and administered the Triple P program to parents
- A psychological assessment was ordered by the court for those in need
- A social worker provided drug and alcohol counseling
- Evidence based programs were administered including The Parent Project, Girls' Circle, Boys Council, Moral Reconciliation Therapy, Triple P, and Thinking for a Change

Data Collection

Data was collected from JALAN which is the Probation Department's Case Management System. Because this system is an antiquated green screen system, additional items like dosage hours by staff member were documented by individual staff and tracked on a spreadsheet by the Supervising Probation Officer.

CANS data was collected from the Shasta County CANS database periodically throughout the period of the grant and for the final report on 8/9/2018.

To analyze the data, two different methods were used. For those measures that used CANS data (academic functioning, family coping skills, mental health, prosocial skills, and school attendance), composite scores were compared pre- and post- for the program participants. For the remainder of the measures, the outcomes for the program participants were compared to the outcomes of the overall Probation population (excluding the MIOCR program participants) for the same time frame. The comparison group may include youths under the age of 14 due to the inability to separate probation population data by age.

Research Design

Process Evaluation

The process evaluation was designed to answer whether the grant activities were implemented as planned. Specifically, the process evaluation focused on whether the planned number of participants received appropriate services through the expansion of WINGS services. The following process evaluation measures were tracked:

- Number of offenders referred
- Number of program participants served
- Number of participants screened/assessed
- Number of program participants with formal psychological/psychiatric evaluations
- Number of service hours completed per participant
- Number of days from referral by probation officer to first Family Team Meeting

Outcome Evaluation

The following outcome evaluation measures were tracked:

- Number of program participants with a new adjudication while in WINGS program
- Number of program participants with a technical violation found true by the court
- Number of high-level out-of-home placements
- Percent of participants with a positive drug test
- Percent of participants showing improved academic functioning (CANS)
- Percent of participants with improved family coping skills (CANS)
- Percent of participants with improved mental health (CANS)
- Percent of participants with increased prosocial activities (CANS)
- Percent of school days attended by participants (CANS)
- Percent successfully completing terms of probation

For those measures that utilized CANS data, a pre- and post- score was compared for all program participants. The pre-measures are from the CANS conducted at program intake and the post-measures are from the CANS

conducted at program discharge or the most recent CANS for those still enrolled in the program. Four of the measures used a composite score comprised of the average of the individual item scores:

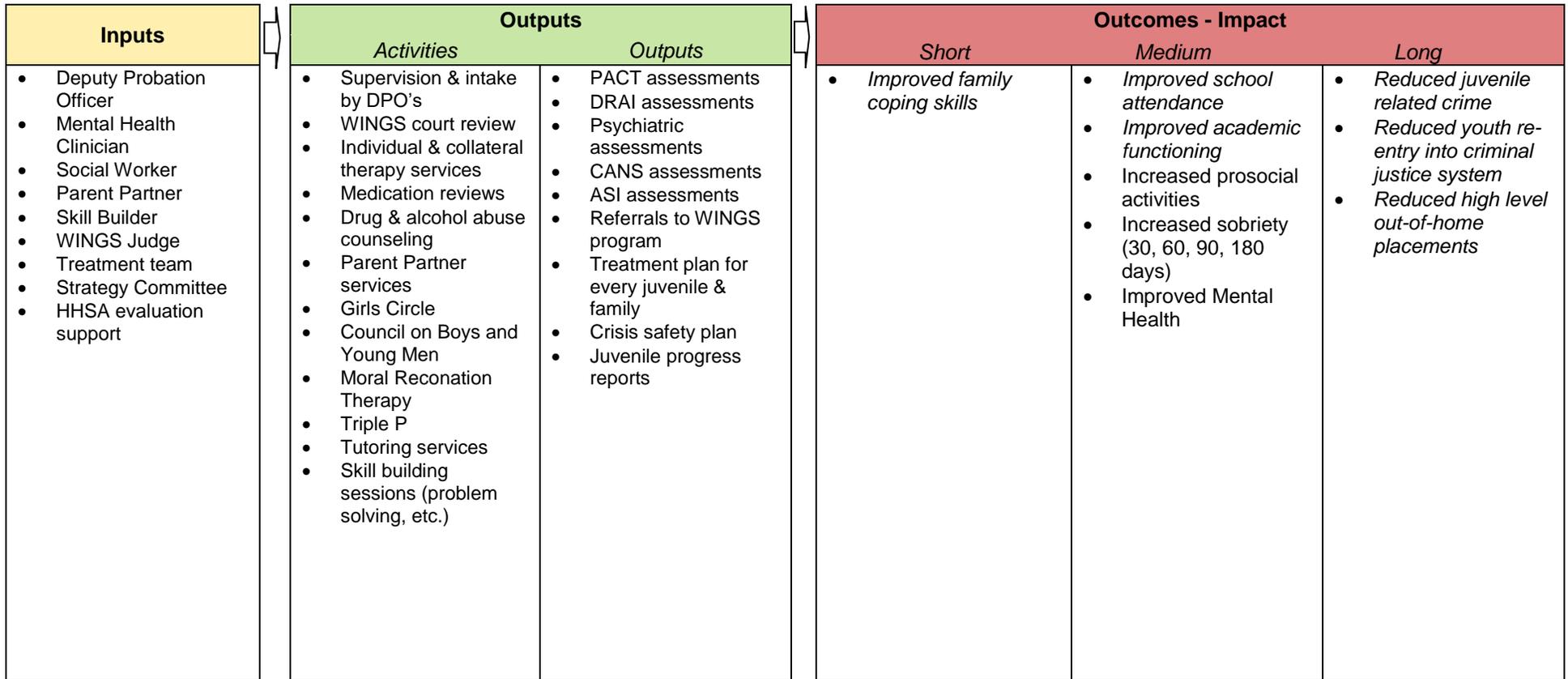
- Academic Functioning includes two CANS items: Life Functioning Needs Domain #44, School Behavior; and #45, School Achievement.
- Family Coping Skills includes three CANS items: Child Strengths Domain #23, Family; and Life Functioning Needs Domain #34, Family; and #35, Living Situation.
- Mental Health includes 21 CANS items: Symptoms Resulting from Exposure to Trauma or Other Adverse Childhood Experiences Needs Domain #15, Adjustment to Trauma; #16, Traumatic Grief; #17, Reexperiencing; #18, Hyperarousal; #19, Avoidance; #20, Numbing; #21, Dissociating; #22, Affective and/or Physiological Dysregulation; Child Behavioral/Emotional Needs Domain #51, Psychosis; #52, Attention/Concentration; #53, Impulsivity; #54, Depression; #55, Anxiety; #56, Oppositional Behavior; #57, Conduct; #58, Substance Abuse; #59, Attachment Difficulties; #60, Eating Disturbances; #61, Behavioral Regressions; #62, Somatization; and #63, Anger Control.
- Prosocial Activities includes two CANS items: Child Strengths Domain #31, Community Life; and Life Functioning Needs Domain #38, Recreational.

The final CANS measure, School Days attended, is made up of Life Functioning Needs Domain #46, School Attendance.

For the remainder of the measures, the outcome percentages for the program participants were compared to the outcome percentages of the overall Probation population (excluding the MIOCR program participants) for the same time frame. The comparison group unduplicated population was 231 between 7/1/2015 and 6/30/2018.

Logic Model

Figure 1: Mentally Ill Offender Crime Reduction Grant Logic Model



Assumptions
<ul style="list-style-type: none"> Target population: Youth 14-21 with DSM-5 diagnosis Expansion from 12 to 24 WINGS participants per year

External Factors
<ul style="list-style-type: none"> High level of substance use and Adverse Childhood Experiences in community Success depends on availability and commitment level of Treatment Team members Space will be needed to house expanded WINGS program

Results and Conclusions

Results

Referral to WINGS II Program and Completion of Individual Assessments

The first youth offenders were referred to the WINGS II program in October 2014. Twenty-one juvenile offenders between the ages of 15 and 20 were referred to the program, and all 21 were accepted into the program. Between July 2015 and June 2018, the monthly average count of participants was eight, with a high of eleven in April 2016 and February 2017, and a low of six in October 2016 and May and June 2018.

One of the 21 youth was enrolled and disenrolled in 2016, re-enrolled in 2017, and successfully graduated in 2018. This individual is only counted once, and all data for both enrollments are combined. Six participants successfully graduated the program, nine participants were terminated without graduating, and six youth are still enrolled in the program as of 7/1/2018.

Referrals were made by probation officers at the Juvenile Division of the Shasta County Probation Department. All participants were assessed using the Positive Achievement Change Tool (PACT), and eleven of 21 (52.4%) received formal psychological/psychiatric evaluations.

Service Hours

Participants completed an average of 34.7 hours with probation officer January 2016 and June 2018. Eighteen completed an average of 47.6 skill builder/pro-social skills hours with an additional three participants having zero hours recorded. Fifteen participants completed an average of 65.0 parent partner/family hours with six additional participants having zero hours recorded. Although there were participants who had zero hours recorded with the Parent Partner and Skill Builder, it's unlikely this data is accurate as both these team members are heavily involved with each participant. It's believed, this missing data is a result of having a very manual tracking system that is subject to human error.

Days to first Family Team Meeting

This data was not recorded.

Academic functioning

Eighteen participants had two or more CANS completed with scores for the academic functioning questions. Fourteen participants (77.8%) had composite scores that improved from intake to discharge, zero had scores that worsened, and three (16.7%) stayed the same. The difference between the participants who increased and those who decreased is statistically significant at the 95% level ($p = 0.0002$).

Family coping skills

Nineteen participants had two or more CANS completed with scores for the family coping skills questions. Seven participants (36.8%) improved from intake to discharge, six (31.6%) had scores that worsened and six (31.6%) stayed the same. The difference between the participants who increased and those whose scores worsened is not statistically significant ($p = 0.7364$).

Mental health

Nineteen participants had two or more CANS completed with scores for the mental health questions. Fourteen participants (73.7%) improved from intake to discharge, three (15.8%) had scores that worsened and two (10.5%) stayed the same. The difference between the participants who increased and those who decreased is statistically significant at the 95% level ($p = 0.0021$).

Prosocial skills

Nineteen participants had two or more CANS completed with scores for the prosocial skills questions. Nine participants (47.4%) improved from intake to discharge, two participants (10.5%) had scores that worsened and eight (42.1%) stayed the same. The difference between the participants who increased and those who decreased is statistically significant at the 95% level ($p = 0.0221$).

School attendance

Eighteen participants had two or more CANS completed with scores for question 46, School attendance. Eleven participants (61.1%) improved from intake to discharge, two worsened (11.1%), and five (27.8%) stayed the same. The difference between the participants who increased and those who decreased is statistically significant at the 95% level ($p = 0.0062$).

Table 1 provides pre- and post- average scores, percent of participants whose score improved, percent of participants whose score worsened, percent of participants whose score remained the same, and p value of the difference between the percent of scores that improved and the percent of scores that worsened for each CANS measure. For a detailed explanation of CANS scores, see Appendix A.

Table 1.

Description	Average Pre- Score	Average Post- Score	Percent of Scores that Improved	Percent of Scores that Worsened	Percent with Same Scores	p value
Academic Functioning	2.18	0.82	77.8%	0.0%	22.2%	0.0002
Family Coping Skills	2.24	1.05	36.8%	31.6%	31.6%	0.7364
Mental Health	1.15	0.73	73.7%	15.8%	10.5%	0.0021
Prosocial Skills	2.22	1.50	47.4%	10.5%	42.1%	0.0221
School Attendance	2.14	0.71	61.1%	11.1%	27.8%	0.0062

p value:	Statistically Significant	No Statistical
	Positive difference	Difference

New adjudications while in the program

Nine of 21 participants (42.9%) had a new adjudication while in the program. The comparison group had 100 of 231 offenders (43.3%) with a new adjudication during the same time frame. This difference is not statistically significant ($p = 0.9698$).

New technical violations found true by the court

Sixteen participants (76.2%) had a new technical violation while in the program. The comparison group had 108 of 231 offenders (46.7%) with a new technical violation during the same time frame. This difference is statistically significant at the 95% confidence level ($p = 0.0178$).

High-level out-of-home placements

Two participants (9.5%) had a placement in a level 12 or higher group home during the evaluation period. The comparison group had 28 of 231 offenders (12.1%) with a level 12 or higher group home placement during the same time frame. This difference is not statistically significant ($p = 0.7286$).

Positive drug tests

Eighteen participants (85.7%) had a positive drug test during the evaluation period. The comparison group had 108 of 231 offenders (46.8%) with a positive drug test during the same time frame. This difference is statistically significant at the 95% confidence level ($p = 0.0027$).

Successfully completing terms of probation

Fifteen participants have been disenrolled from the program. Six of these (40%) successfully completed the program requirements, and nine (60%) were terminated from the program. One of the youth that was terminated

in 2016 was re-enrolled in 2017 and successfully graduated in 2018. This individual is counted only once in all measures. Six participants remain in the program as of 7/1/2018. The comparison group had 66 of 213 offenders (28.6%) successful completed probation requirements. This difference is not statistically significant ($p = 0.3618$).

Table 2 provides percent of MIOCR program participant, percent of Youth Probation population, and p value of the difference between the percent of program participants and probation population for each measure.

Table 2.

Description	Percent of Program Participants	Percent of Youth Probation	p value
New Adjudications	42.9%	43.3%	0.9698
New Technical Violation	81.0%	46.8%	0.0178
High Level Out-of-Home Placements	9.5%	12.1%	0.7286
Positive Drug Tests	85.7%	46.8%	0.0027
Completed Terms of Probation	40.0%	28.6%	0.3618

p value:	Statistically Significant	No Statistical
	Negative Difference	Difference

Conclusions

The objective of the MIOCR project was to provide wraparound family based treatment for youth with mental health and/or substance abuse issues. The project participants showed statistically significant improvement in academic functioning, school attendance, prosocial skills, and overall mental health.

There was no evidence that program participants either improved or declined in family coping skills or were significantly different from the comparison group in new adjudications, high-level out-of-home placements, or successful completion of the terms of probation. The program participants were statistically more likely than the comparison group to have new technical violations and positive drug tests.

Limitations

Limitations to this study include:

- The study population was small which may lead to instability in measurements of change over time. Even a small change in any one score could have a large impact in the measure. Additionally, small sample size limits the power of statistical testing to detect significant results.
- While some of the measures are pre-post, others compare the pilot group to the comparison group. The MIOCR program participants may not be representative of the probation population, which could lead to biased comparisons. Most the comparison group was within the target population age range of 14 to 20, but an unknown (probably small) number of youth under age 14 may be included, which could be a confounding factor.
- Due to logistical challenges, exact adherence to the desired 6-month timeframe between CANS assessments could not be accomplished for each follow-up measurement for each youth. Long time spans between measurements may allow for larger changes than may have been expected, while short time spans may cause smaller increases than expected or even decreases.

- The difference in the CANS pre- and post- family coping composite measure may be confounded by normal adolescent independence seeking behaviors. Comparing this group to data collected from a more representative control group rather than a pre- post- comparison may provide a more accurate measure.
- While the statistical difference between the control group and the population enrolled in the program for new technical violations seems to be a negative result, it is more a function of the type of program implemented. Motivating the youth in the program to be compliant with the terms of an intensive program like this one can be challenging and requires many tools to achieve. One of the essential tools to gaining compliance is to hold participants accountable, which can happen through many ways including technical violations.
- The statistical difference between the control group and the population enrolled in the program for positive drug tests is also a function of the type of program implemented. The frequency of drug testing for those in the program is significantly higher than those in the control group which naturally inflates the likelihood of a positive test. This increased testing frequency is used to determine the severity of the drug use which informs the decision-making process of the team for how to best address the problem. In addition, increased testing frequency is also a tool used to hold participants accountable who are still working to get clean.

Appendix A

The CANS assessment instrument includes three types of domains: Traumatic/Adverse Childhood Experiences, Needs, and Strengths. There are four levels of each item with anchored definitions; however, these definitions are designed to translate into the following action levels (separate for needs and strengths):

For Potentially Traumatic / Adverse Childhood Experiences Domain:

- 0- No evidence of any trauma of this type
- 1- A single incident or trauma occurred or suspicion exists of this type of trauma
- 2- Multiple incidents or a moderate degree of trauma of this type
- 3- Repeated and severe incidents of trauma of this type.

For Needs Domains – Symptoms Related to Trauma/Adverse Experiences, Life Domain Functioning, Acculturation, Child Behavioral/Emotional Needs, Child Risk Behavior, Children Five and Younger, Transition to Adulthood, Caregiver Domain:

- 0- No evidence of a need /no need for action
- 1- Watchful waiting /prevention/mild need
- 2- Action needed/moderate need
- 3- Immediate -- Intensive action /severe need

For Strength Domain:

- 0- Centerpiece strength
- 1- Useful Strength
- 2- Strength has been identified in this area but it must be built
- 3- No strength is identified in this area /no information

For all CANS elements (regardless of whether the question is in the Traumatic/Adverse Childhood Experiences, Needs, or Strengths Domain), zero is the best score and three is the worst. Therefore, a lower composite score is better than a higher one (i.e. the academic functioning post-composite score of 0.82 is better than the pre-measure of 2.18).

Academic functioning

The academic functioning composite score is an average of CANS question 44, School behavior; and 45, School achievement.

Family coping skills

The family coping composite is an average of the following CANS questions: 23, Family (strengths); 34, Family (needs); and 35, Living situation.

Mental health

The mental health composite is an average of the following CANS questions: 15, Adjustment to trauma; 16, Traumatic grief; 17, Reexperiencing; 18, Hyperarousal; 19, Avoidance; 20, Numbing; 21, Dissociation; 22, Affective and/or physiological dysregulation; 51, Psychosis; 52, Attention/concentration; 53, impulsivity; 54, Depression; 55, Anxiety; 56, Oppositional behavior; 57, Conduct; 58, Substance abuse; 59, Attachment difficulties; 60, Eating disturbances; 61, Behavioral regressions; 62, Somatization; and 63, Anger control.

Prosocial skills

The prosocial skills composite is an average of CANS question 31, Community life; and 38, Recreational.

School days attended by participants

The school days attended measure is uses CANS question 46, School attendance.