

# YouthZone

Program Evaluation Report – October 2013

## Healthy Youth, Strong Communities

YouthZone provides family strengthening services to youth and their parents in Garfield and Pitkin Counties in western Colorado. This independent evaluation report summarizes findings from a study of youths who in the majority came with an admission legal problem. They were compared on their pre-post self-assessments in personal adjustment and risk behavior. Analyses also investigated early trauma in the lives of these teens, other information that would be useful to their respective communities of residence, and finally, the success of their case managers in promoting youths' personal growth and reduction in behavior that could return them to the attention of authorities.

YouthZone brings individuals, organizations, and community leaders together in nurturing competent, caring, and responsible children and adolescents. Helping young people means doing more than just solving an immediate problem. It means also thinking about how communities can foster positive relationships

among young people, assist families and schools with resources, and create opportunities that raise expectations for a bright future. In towns where children and youth experience family, school, and community life as positive and where they have relationships with people who guide them, they are much more likely to learn, achieve, mature, and to reach their potential. In this sense then, every child and youth whose faltering well-being is restored contributes to the quality of life where they live. Healthy youth make strong communities.

Life is complex and changing. Necessarily, the approaches to helping youth regain their positive sense of direction call for keeping up with new ideas and evaluating those that appear to be working to improve their results. This report contributes to these objectives. It suggests new ways of looking at common challenges and helps YouthZone be as accountable as possible to its funders, families, and the communities it serves.

## Best Practices in Evaluating Youth Development Services

Across Colorado, intake and staff are challenged to individualize plans that will meet youth and community needs while considering client age, gender, and ethnic diversity, a wide range of family types, and referring problems of varying severity – and doing so within available resources. At YouthZone, staff training and experience with planning services are supplemented by information from the *YouthZone Screening for Positive Youth Development*<sup>®</sup> (“*Screening*”). The Screening tool covers a wide range of youth assets and common risk behaviors. It contains 60 questions, of which seven are identifying and demographic, two ask the youth to assess the quality of their Screening answers, and 51 inquire about their assets and risks. It has a 7<sup>th</sup>-grade reading level and takes about 15 minutes to complete.

The Screening measures five factors that have been shown during the Screening's development to be sensitive to program effectiveness, client recidivism, and improvement in youth adjustment.

### Fig. 1. Screening Scores

#### **Alcohol, Tobacco, and Other Drug Use**

Measures the youth's frequency of substance use, the potential harm of use, risk behaviors closely associated with extent of use (sexual activity and contact with police), and peer use of substances.

#### **Optimism and Problem Solving**

Measures the youth's positive value of him or herself, optimism about his or her future, and report of important skills for solving problems and setting and achieving goals for the future.

#### **School and Community Involvement**

Measures the youth's commitment to achieving in school, attendance, grades, and satisfaction with school, as well as his or her involvement in non-academic activities in school and the community.

#### **Delinquency and Aggression**

Measures the youth's antisocial outlook toward rules and other people, as well as their readiness to engage in verbal and physical conflict and tolerance of use of frankly dangerous substances, e.g., huffing and using illicitly obtained medication.

### Self-Deprecation

Measures the youth's perception of him or herself as a victim of verbal, physical, and sexual abuse, tolerance of substance use, and thoughts and plans to attempt suicide.

## 1. Characteristics of Youth in the "Evaluation Sample"

Between 2010 and 2013, information on 1,548 youth was collected by intake staff. This report concentrates on 621 young people whose referral and services involved a pre- and a post-administration of the YouthZone Screening, with valid results.

**Study Group Demographics** The 621 children and youth, the "evaluation study sample" were 39.7% female and 60.3% male. Only 9.8% were 12 years or younger and just 2.7% were 18 or older. The average age was 15.7 years. Boys and girls entered their programs at similar ages. Boys and girls were equally likely to attend public and private schools. However, younger entrants tended more often to be attending a public school.

Most clients were Caucasian (45.2%) or Latino (42.3%). Among younger youth, a larger proportion was Latino.

Boys and girls were equally likely to be born in the US, with 15.0% born in another country.

The structure of the families in which referred youth were living ranged widely, but 45.9% were living with both of their birth parents and an additional 48.1% were living with one parent and a stepparent or in joint custody with their divorced mother and father. The remainder lived in a single parent home or other arrangements. Only 5.9% were living in a setting where neither birth parent was present. Girls and boys were equally likely to come for a home in which both of their biological parents were present. Latino youth were much more likely to be living with both of their birth parents than any other family structure. Detailed information about the evaluation study group characteristics can be found in Appendix 1 of this report.

## 2. Clients and their Community of Residence

**Community of Residence** Clients in the evaluation study sample came from across Garfield, Pitkin and West Eagle Counties. A few other youth (about 2.6%) were residing permanently in other counties in Colorado or outside the state. As shown in Table 1, those in the immediate area were most often from Rifle, with Glenwood Springs being the second most common community of residence. Girls were seen significantly more often from the Aspen, Basalt and Carbondale communities than they were in other

communities in the catchment area. About three times as many boys as girls were seen from the Rifle to Parachute area. Across catchment area communities, Caucasian youth were seen as often as Latino youth. Although slightly more Caucasian youth were seen in the Aspen, Snowmass and Basalt area, the difference with other communities was not statistically significant.

**Table 1. Youth Community of Residence**

Community Area	Frequency	Percent
Rifle	196	31.6
Glenwood Springs Area	141	22.7
Carbondale Area	83	13.4
New Castle and Silt Area	71	11.4
Parachute Area	48	7.7
Aspen Area	35	5.6
Basalt Area	31	5.0
Other Communities	16	2.6
Total all Communities	621	100.0

The needs of referred clients were not the same in each geographic area. While the use of alcohol and other drugs was approximately the same across the seven communities, statistical analysis found that Optimism and Problem Solving skills among youth were lower in the Parachute area. School & Community Involvement was the most problematic for Parachute youth and was most favorable for clients in the Aspen and Basalt areas. Delinquency and Aggression behaviors were more serious for Rifle, Parachute, and Carbondale youths. Self-Deprecation was a more significant problem for Carbondale and

less an issue for New Castle and Silt youth, than for those in other nearby communities. Nevertheless, as will be discussed in a section below, analysis demonstrated that YouthZone clients from different communities all tended to benefit equally from their YouthZone services. This finding indicated current services worked as well in socio-economically advantaged and less advantaged areas. More information on these issues is available in Appendix 2.

### 3. Clients and their Legal Offenses

**Youths' Type of Legal Offense** About 77.3 of all youths referred to YouthZone arrive with a recent legal offense. In the Evaluation sample, this figure was 92.6%. Details of the wide range of charges for the Evaluation sample are revealed in Appendix 3. In Table 2, these offenses have been grouped together to assist with gaining an

overview of the seriousness of youths' legal problems and to facilitate statistical analysis. In Table 2, offenses were accumulated across communities as it has been shown that law enforcement in catchment area communities follow similar guidelines in arresting youths.

**Table 2. Type of Youth Legal Offenses at Intake**

Offense Seriousness	Frequency	Percent
Substance-related charge	304	52.9
Petty theft	101	17.6
Aggression – Crimes against persons	87	15.1
Crimes involving property	59	10.3
Traffic-related charge	24	4.2
Total	575	100.0

Statistical analysis found significant difference in charges against boys and girls. Boys were arrested (charged) more often than girls were for Crimes Involving Property and Traffic-Related Charges. Girls were more often charged with Aggression – Crimes against Persons, than were boys. The sexes were similar with regard to Substance-Related Charges and Petty Theft.

Setting Traffic-related charges aside, there were significant differences in the average age of clients in the different charge categories. Of particular note is the average age of clients with a Substance-Related Charge. Half of the 304 youths in the category were 16 or older.

There were differences statistically among ethnicities and offenses. Caucasian youths were at greater risk for a Substance-related charge and were in the greatest need for intervention to reduce dependence. That Latino clients were referred more often with Aggression – Crimes against Persons is also cause for reflection on matching services for these clients with ethnic-related issues.

A youth's family type could be important for planning and evaluating services. However, evaluation study

found that this factor was unrelated to charges incurred by youth.

Evaluation also examined offense data to determine if communities in the YouthZone catchment area were using different criteria to charge youth. Analysis found that law enforcement and the courts across YouthZone's catchment area had common perceptions of youth problem and when to charge them with illegal conduct.

Understanding YouthZone's effectiveness in changing the adjustment and risk behavior of clients with different types of legal offenses is also important to planning and evaluating services. Statistical results of this study are laid out in Table 3. These can be summarized in the following terms:

- Those with a *substance legal charge* made substantial gains in all five *Screening* scales. They reduced their substance use, though did not eliminate it, from their enrollment to completion of

**Table 3. Significance of Client Change during Services by Legal Charge on Referral**

YouthZone Screening Survey Scores	Student's <i>t</i> for Pre-Post Change				
	Substance-Related Charge	Petty Theft	Crimes Involving Property	Aggression – Crimes Against Persons	Traffic-Related Charge
Alcohol, Tobacco, & Other Drug Use Score	7.075 ***	1.141 <sup>ns</sup>	2.179 *	1.682 <sup>ns</sup>	.563 <sup>ns</sup>
Optimism & Problem Solving Score	10.367 ***	6.301 ***	2.507 *	3.196 **	4.390 ***
School & Community Involvement Score	7.420 ***	3.958 ***	1.756 <sup>ns</sup>	3.122 **	1.565 <sup>ns</sup>
Delinquency & Aggression Score	12.803 ***	5.993 ***	4.448 ***	6.439 ***	1.629 <sup>ns</sup>
Self-Deprecation Score	2.826 **	.944 <sup>ns</sup>	1.714 <sup>ns</sup>	1.062 <sup>ns</sup>	.641 <sup>ns</sup>

\*\*\* p < .001, \*\* p < .01, \* p < .05, <sup>ns</sup> Not Significant

services. Importantly, their Delinquency and Aggression scores declined, suggesting that their proclivity to become involved in anti-social behavior lessened over time. Their Optimism & Problem Solving self-assessments showed that their feelings about themselves and their sense of self-efficacy rose.

- Clients with Petty Theft and Aggression-Crimes against Persons charges followed a similar pattern of improvement, showing adjustment gains except with substance use, where their intake use was reported as only average for their age. Changes were insignificant on the Self-Deprecation scale, (Self-Deprecation includes several items for which no pre-post change is expected).

- That the Delinquency and Aggression scores of youth with an Aggression-Crime against Persons offense history declined significantly is another favorable sign that for youth who have been involved with law enforcement and the courts. YouthZone program participation is likely to improve not only their self-image, but their conduct as well.

This analysis demonstrates that YouthZone clients from different communities all tended to benefit equally from their YouthZone services. This finding indicates current services work as well in socio-economically less advantaged and more advantaged areas.

## 4. Community Sources Referring Youths

**Sources Referring Youth** Youth came for services from across Garfield, Pitkin and West Eagle Counties and were referred by a long list of agencies, schools and courts. More than 40 different organizations referred cli-

ents to YouthZone. The complete list is available in Appendix 4. Of all youth in the Evaluation Sample (N=621) less than 1% were brought to YouthZone by their parents. Most were referred by a court, as can be seen in Table 4.

**Table 4. Court Referrals of Clients to YouthZone**

Court Referral Source	Frequency	Percent of all Referrals	Cumulative Percent
Municipal court	398	64.1	64.1
County court	99	15.9	80.0
District court	79	12.7	92.8

In the evaluation sample, 92.8% of all clients came from one of these three court sources. An additional 3.9% arrived at YouthZone on referral of their elementary, middle, or high school. Probation Officers initiated 2.4% of the referrals.

Planning YouthZone services and funding allocation decisions rely on understanding not only the varying levels of demand for assistance in different areas of Garfield, Pitkin and West Eagle Counties, but also with appreciating the forces affecting referrals, community by community. The next evaluation task explored this issue and revealed the following key findings:

- Analysis of referrals for boys and girls revealed that county courts across the YouthZone catchment area involved significantly fewer girls as compared to the other court settings.
- It was also determined that court settings varied in the ages of youth with whom they were most commonly involved. The youngest clients were in district courts and the oldest were from county courts. This information, combined with other information about client characteristics related to age, may suggest different program approaches to clients depending on their court source.

- There were statistically significant differences in client ethnicity among referrals from the three court settings. District courts were seeing many more Caucasian youth who they referred to YouthZone than were the other court settings. On the other hand, county courts were sending slightly more Latino clients for program services. Where ethnicity is a consideration in staff assignment or it is related to another aspect of youth services and outcomes, these findings will contribute to service planning and evaluation.
- Evaluation found that court referrals were not influenced by the type of family in which a youth resided

Most striking in these findings are the accessibility of YouthZone services across Garfield, Pitkin and West Eagle Counties, the inclusion of youth from all ethnicities and family backgrounds, and the wide significance of presenting problems case managers must be prepared to screen and plan for services. More information on the sources of YouthZone referrals can be found in Appendix 4 to this report.

## 5. Intake-to-Discharge Changes in YouthZone *Screening* Scores

When all 621 clients who completed a pre- and a post-*Screening* were compared on their five intake and discharge scores, very highly significant improvements

were revealed. Pre and post means and statistics are presented in Table 5.

**Table 5 Pre-Post YouthZone Screening Score Changes for All Clients**

YouthZone Screening Scale	Intake Screening Mean	Discharge Screening Mean	Statistic
Alcohol, Tobacco, and Other Drug Use	23.37	21.81	$F = 52.85$ ****
Optimism and Problem Solving	21.25	19.46	$F = 120.62$ ****
School and Community Involvement	15.75	14.62	$F = 57.09$ ****
Delinquency and Aggression	16.00	14.55	$F = 175.11$ ****
Self-Deprecation	9.62	9.35	$F = 10.33$ ****

<sup>1</sup>Statistical significance levels: <sup>ns</sup> = "not significant," \* =  $p < .10$  "borderline significant," \*\* =  $p < .05$  "significant," \*\*\* =  $p < .01$ , "highly significant" \*\*\*\* =  $p < .001$  "very highly significant"

### Pre-to-Post Change and Age

- As expected, older clients had higher levels of initial and final substance use. The group of above-the-median group of older clients ( $X = 16.9$  years) were at 25% greater risk for substance use than younger clients ( $X$  age = 14.2 years). Change over time was the same for younger and older clients.
- Younger clients initially had lower scores on the Optimism and Problem Solving scale. Both younger and older clients improved, but the younger clients showed greater positive change.
- Older clients reported higher scores on the initial *Screening*. Both older and younger clients made very similar gains over time.

- Older clients initially reported higher School and Community Involvement scores, but both older and younger clients made very similar gains over time.
- Younger clients reported more of Delinquency and Aggression issues initially than did older clients and they showed more improvement pre to post.
- Older clients were more likely initially to report issues in the area of Self-Deprecation than were younger clients. However, both groups showed similar degrees of improvement during services.

These findings say that when interpreting *Screening* scores an appreciation of age norms is essential to reaching a valid conclusion about an individual client. For example, the same Self-Deprecation score for an older and a younger youth would lead to different conclusions about their adjustment.

### Pre to Post Change and Gender

- Boys and girls were at equivalent levels of substance use at intake and girls' reduction in substance use was nearly identical to boys by the time they left YouthZone services.
- Girls reported lower Optimism and Problem Solving when they enrolled than boys did. Both sexes improved their scores in this area and pre-post change was the same for males and females.
- Sex was unrelated to initial scores on School and Community Involvement nor were there differences between boys and girls in their rate of improvement pre-post.
- Boys and girls showed similar levels of Delinquency and Aggression at intake. Improvement over time was equivalent for clients of both sexes.
- Girls had much higher (poorer) scores in Self-Deprecation than boys when they enrolled. Both groups improved to similar degrees. Nevertheless, girls ended YouthZone services with poorer

scores on Self-Deprecation than the boys had at the time of their enrollment.

The family and environmental stress affecting boys and girls affect them differently in some respects and the same in others. Awareness of these differences can strengthen a case manager's effectiveness with planning services for an individual youngster.

### Pre to Post Change and Ethnicity

- When they came to YouthZone, Caucasian youth were much more heavily involved with substances than were Latino clients. Reduction of use was the same for the two groups over time.
- Caucasian clients reported better Optimism and Problem solving at the start of services than Latino clients did. Clients of both ethnic groups improved to the same degree pre to post.
- Latino youth, more than Caucasians, scored lower initially on School and Community Involvement and over time, the gap between the two ethnic groups remained the same.
- There were no ethnicity differences in Delinquency and Aggression at intake or in improvement pre to post.
- Caucasian clients initially reported poorer Self-Deprecation scores than Latino clients did. While both groups of clients improved at similar rates, initial differences between the groups remained, with Caucasian clients having poorer scores.

These findings show that youth reactions to family and environmental stresses are influenced also by their dominant culture. Evidence on the mediating effects of gender, age, and ethnicity argue for interventions that match the needs of youth with different perspectives.

More information from analyses of the YouthZone *Screening* for client characteristics in the Evaluation Sample can be found in Appendix 5.

## 6. YouthZone *Screening* and Recidivism

Also assisting case managers with their intake reviews is information from the *Screening* that will suggest the possibility that a child/youth is more at risk for re-offending *during services* than would be expected for clients in general.

On occasion, youths with legal problems who have been enrolled in YouthZone services are again arrested. This is a distressing event for the youth and their family, as it is for law enforcement and the courts who have been in-

vested in dealing with their misconduct. If it were possible to identify "red flags" that draw attention to a client who may relapse it would serve the client and others, including YouthZone, which has social and fiscal responsibilities for support and rehabilitation. These analyses of client data were directed at the goal of predicting at intake which clients were likely to re-offend even before they completed services related to prior misconduct. The purpose is alerting staff early in the intervention process so re-offenses can be reduced to a minimum and to consider program options that would reduce recidivism.

For this analysis, the following information on clients' background was considered:

1. Age in years
2. Latino or Caucasian
3. Living with biological parents together vs. other living arrangements
4. Whether the client had a history with YouthZone of a prior offense
5. The seriousness of the current offense
6. Whether *Screening* items suggested the client may have a history of trauma

#### 7. The client's five scores on the *Pre-Screening*

Whether client characteristics were useful in predicting girls' re-offense status is shown in Table 6. Of 11 variables, two highlighted variables proved useful in determining whether a female client would succeed in completing services without re-offending. (An additional variable bordered on being significant in this prediction.) Using these two client characteristics, a case manager would shortly after intake predict correctly the client's re-offense status 77.6% of the time.

**Table 6. Significance of 11 Client Characteristics in Classifying Girls' Re-offender Status**

Twelve Client Characteristics		F Statistic	Significance
1.	Pre School & Community Involvement score	6.680	.011 ***
2.	Pre Alcohol, Tobacco, & Drug Use score	5.222	.024 **
3.	Pre Self-Deprecation score	2.667	.104 *
4.	Pre Delinquency & Aggression score	2.475	.118 <sup>ns</sup>
5.	Previously Successfully Completed YouthZone non SB94 Court Program	1.007	.317 <sup>ns</sup>
6.	Pre Optimism & Problem Solving score	.570	.451 <sup>ns</sup>
7.	Age in Years at Intake	.503	.479 <sup>ns</sup>
8.	Trauma-Affected Youth - Above 85% on Trauma History	.070	.792 <sup>ns</sup>
9.	Family Type (Living with both biological parents)	.059	.809 <sup>ns</sup>
10.	Ethnicity	.052	.819 <sup>ns</sup>
11.	Seriousness of Referral Offense (1=most serious, 6=least serious)	.017	.895 <sup>ns</sup>

<sup>1</sup>Statistical significance levels: <sup>ns</sup> = "not significant," \* = p <.10 "borderline significant," \*\* = p <.05 "significant," \*\*\* = p <.01 "highly significant" \*\*\*\* = p <.001 "very highly significant"

**Table 7. Significance of 11 Client Characteristics in Classifying Boys' Re-offender Status**

Twelve Client Characteristics		F Statistic	Significance
1.	Pre School & Community Involvement score	10.397	.001 ***
2.	Pre Alcohol, Tobacco, & Drug Use score	6.474	.011 ***
3.	Family Type (Living with both biological parents)	6.272	.013 ***
4.	Pre Delinquency & Aggression score	6.025	.015 **
5.	Previously Successfully Completed YouthZone on SB94 Court Program	1.284	.258 <sup>ns</sup>
6.	Pre Self-Deprecation Score	1.166	.281 <sup>ns</sup>
7.	Trauma-Affected Youth - Above 85% on Trauma History	.541	.462 <sup>ns</sup>
8.	Age in Years at Intake	.499	.480 <sup>ns</sup>
9.	Seriousness of Referral Offense (1=most serious, 6=least serious)	.386	.535 <sup>ns</sup>
10.	Ethnicity	0.246	.621 <sup>ns</sup>
11.	Pre Optimism and Problem Solving Score	.208	.648 <sup>ns</sup>

In Appendix Table 7, the same analytical approach was used with male clients. With boys, the two top factors replicated findings for girls and it found that two additional variables would sharpen predictions of successful

completion of services. At intake, case managers could predict boys' relapse correctly 64.4% of the time.

These results replicate other studies of recidivism among legal offenders. Personal background and the seriousness of offense do not usually assist case managers in deciding on the level of care – standard or enhanced – that should be provided. On the other hand, review of how clients assess their own beliefs, attitudes, and experiences as compared to self-assessments by other clients can predict their future. For YouthZone clients at risk for

re-offending, these results can be a guide also to prevention.

For boys and girls, interventions that raise school and community engagement and concurrently lower substance use have the greatest promise of supporting a sustained commitment to YouthZone programs.

## 7. Youth Marijuana Use

The advocates for adults’ right to use marijuana, health researchers, substance abuse treatment and prevention specialists, educators, social workers, and parents are all opposed to children and adolescents having access to marijuana. This consensus is driven primarily by the potentially adverse effects on youths’ physical and mental health, social-emotional development, conduct, and learning. Nevertheless, marijuana use is present among middle and high school age boys and girls.

- The *Monitoring the Future Study* for 2012 reported that 30-day use nationally for 8<sup>th</sup>-graders was 6.5%, 10<sup>th</sup>-graders 17.0%, and 12<sup>th</sup>-graders 22.9%
- The 2007 *National Survey on Drug Use and Health* determined that in Colorado 8.5% of youth 12-17 years had used marijuana once or more often in the past month; alcohol use by the same age group was 17.90%
- During the 2011 school year, administration of the *Healthy Kids Colorado Survey* found that 22.0% of high school students were using marijuana monthly or more often
- The Centers for Disease Control and Prevention administers the *Youth Risk Behavior Survey*

where it was determined from a 2011 administration in Colorado that 22.0% of 8<sup>th</sup>-12<sup>th</sup>-graders reported 30-day marijuana use

- Credible medical evidence is accumulating steadily to show that regular marijuana smoking has long-term consequences for youth brain functioning, included depressed intellectual development

Nationally and in Colorado, about one in five 8<sup>th</sup>-12<sup>th</sup>-graders is a monthly or more often consumer of marijuana. In a classroom of 25 high school students, five will use regularly and of these, one to two will sometimes be under the influence during the school day. Surveys of youths themselves show also that their concerns about harms with consumption have declined and their sense of others disapproving of their use has diminished. From 2005 to 2011, before legalization, there were no significant changes in use. The positive angle on these statistics is that most, perhaps 60% of youth, have never used marijuana and view it as undesirable from both health and social risk perspectives.

*Prevalence of Marijuana Use among YouthZone Clients*  
When evaluation looked at all 885 clients who had completed at least the pre-Screening, it found their responses shown in Table 7.

**Table 8. Client Responses: “How do you like to use marijuana?”**

Response Category	Frequency	Percent	Cumulative Percent
I do not use it	556	62.8	62.8
Just a puff or two	88	10.0	72.8
Enough to feel it a little	103	11.6	84.4
Enough to feel it a lot	52	5.9	90.3
Until I get really stoned	81	9.5	99.8
No answer	5	0.1	100.0
Total	885	100.0	

An extensive analysis of client use of marijuana, including gender, age, and ethnicity influences on use, the consequences of use for YouthZone clients, and the effects

of services on marijuana use are reported in depth in Appendix 7.



## 8. "Trauma Informed" YouthZone Services

Concern has been growing for years over the disproportionate number of youth receiving assistance for mental health, behavior, and legal problems who seem to have had traumatic experiences earlier in their lives. Now, there is the belief that youth-serving organizations of all types should screen youth for the likely cognitive-emotional sequels to trauma. If these appear, appropriate assessment and intervention could then be taken. This process – becoming "trauma informed" – promises to improve the match between youth client needs and the knowledge and skills of providers, resulting ultimately in benefits for youth and the strengthening organizations that serve them.

**Screening Tools** The *YouthZone Youth Screening Survey* has been developed during the past 15 years as a method for initially screening youthful clients with school-legal-adjustment problems to determine the best approach to supporting them and their families. The 60-item, self-screening, has received extensive item development, statistical analysis, and validation. Technical development has followed closely the clinical and case management experiences of screened clients. One of the questions raised for this tri-annual YouthZone program evaluation is whether the Survey has the potential to serve as a screening tool for youths' trauma histories.

Self-screening inventories for trauma already exist. These tend to be complex and lengthy, not well-suited for the task of brief screening when large numbers of clients are being seen, most of whom will not have a history of significant trauma. Accordingly, the YouthZone evaluation for trauma screening narrowed its attention to a tool a) of 15 items or less (5 minutes administration time), b) that would be suitable for adolescents, and c) that would provide intake staff with the information they needed to recommend some youths for trauma assessment.

Two options were used in determining which items in the existing *Screening* should be considered:

- *Clinical* Clinicians trained in trauma focused cognitive behavioral therapy inspected *Screening* items and selected those they believe had the most promise for identifying youth who may require a full assessment for trauma experiences
- *Statistical* Youths' answers to the *Screening* in statistical studies were studied to identify items potentially related to trauma

The combination of the two methods led to the final selection of items. Below are the four trauma scales with a description of each scale and the items included.

### Fig. 2. YouthZone Trauma Assessment Scales

1. **"Dysphoria"** Dysphoria (semantically opposite of euphoria) is a clinically recognized mental and emotional condition in which a person experiences persistent and troubling feelings of depression, discontent, detachment, and in some cases indifference to the world around them. It is condition of broader scope than clinical "depression."
2. **"Self-Destructive"** Self-destructive thoughts and behavior are about destructive acts addressed to the self. These emotions, plans, and acts concern self-inflicted harm or abuse toward oneself, often forming a pattern of behavior that can be deliberate, habit-forming, or impulsive and fatal.
3. **"Sexual Victimization"** Sexual victimization is the perception of an adolescent that they have been forced to submit to undesired sexual behavior by another person. Victimization covers *any* treatment by *any* adult toward the youth to stimulate either the adult or the child sexually.
4. **"Parental Rejection"** Parental rejection refers to persistent negative treatment by a parent or other significant adult that disrupts normal parent-child attachment considered essential to children's social, emotional, and cognitive development.

**Application of the Trauma Assessment** Evaluation created cutoff scores for the four trauma scales, and then studied the characteristics of youth with high scores. These results are in Appendix 8. Trauma Screening found girls reported more experiences than boys did. Living away from parents was also found to be related to traumatic experience. Youth with high trauma scores were

found to have much poorer self-assessments than those with lower scores. Comprehensive analysis found that trauma-affected youth had problems that are more serious at YouthZone intake, and, although they improved with services, still had more problems at the time of their discharge than non-trauma affected youth.

## 9. YouthZone Program Outcomes and Case Managers

The final section of this program evaluation overview reports on the relative effectiveness of YouthZone case managers with improving the adjustment of their clients.

Combined evidence from multiple studies in diverse settings about counselor, therapist, and case manager success with achieving client outcomes establishes firmly that some providers are highly effective, some average, and some less than effective. Moreover, while training and supervision of staff are generally desirable, ultimately, the indicator of organization proficiency with helping clients achieve meaningful goals is measured by client progress. For this reason, evaluation compared YouthZone case managers on their abilities to elicit client change with the two client self-assessed *Screening* factors that were the most powerful predictors of successful program completion: School and Community Involvement and Alcohol, Tobacco, and Other Drug use.

**Performance Evaluation Method** Case managers with 10 or more clients in the YouthZone database were selected for this aspect of the program evaluation. Only clients with a pre- and post-*Screening* were included in the case manager performance study.

Analysis found that while there was improvement among clients overall, some case managers were much more effective with promoting improvement in School and Community Involvement and Alcohol, Tobacco, and Other Drug use scores. A few case managers were outstanding in advancing her clients' involvement; other case managers were quite effective. However, the clients of a few case managers made little progress. Review of the in-depth study in Appendix 9 may suggest options for case manager supervision and training.

## Program Evaluation Summary

This report represents findings from an external evaluation of YouthZone programs that served clients during 2010-2013. The evaluation was designed in the belief that all members of Garfield, Pitkin, and West Eagle County communities have a responsibility for and benefit from the well-being of youth. This is especially true for young people who are struggling with fitting in at school, who have trouble with the law, or suffer from emotional or behavioral problems. Success with helping them overcome their problems means they can enjoy the same good life as their peers and it means that their communities can enjoy the contributions that all young people can make to the lives of every resident. The evaluation is about youth served, but it is equally intended to empower their communities to contribute where they can to benefit youth and the quality of life of every person young and old.

To accomplish its broad evaluation goal, data collection, analysis and review have considered youth from communities across the region and its methods have explored fully the unique characteristics of youth so they can be understood as individuals. YouthZone programs work in partnership with communities to deliver quality programs. Accordingly, the evaluation considered the organizations referring clients. Further, the evaluation and report have been designed to support the case manager who meets a young person and their family and recommends promising solutions. It considers information that would be needed by funders who are concerned with their investments and where additional financial assistance may be worthwhile.

Though its methods and reporting are necessarily technical so that they will align with program evaluation and reporting best practices, the report also summarizes key findings that will be of interest to all stakeholders. Some sections point to issues that will be of interest to community residents in general, others to youth and parents, to referring agencies, funders, and leaders in communities.

Finally, the evaluation design and report was intended to direct the YouthZone board and administrators toward program strengths and limitations so that together they can optimize the allocation of limited resources for maximum benefit.

Following are some of the most significant implications of the program evaluation.

**Parents and Youth** Trouble with the police, appearance in juvenile court, and possible probation monitoring are unexpected and highly stressful experiences for youth and parents. Parents may alternate between self-blame and distress with their child. Young people may be confused, embarrassed, and fearful. Though these evaluation findings will do little to ease these emotions, parents and youth can be reassured of excellent support from YouthZone case managers. The evaluation focused on two approaches related to youth and family: whether family type contributed to youth problems and how family type interacted with the results delivered by YouthZone services.

*Family Type and Client Intake Status and Progress* Slightly less than half (45.9%) of the Evaluation Sample was living with both of their biological parents. Almost an equal number (48.1%) was living in other arrangements with their birth parents. The remaining youth were in unique, non-parent situations.

Does the type of family in which a client has been living influence their status when they arrive for YouthZone services? Evaluation did find that girls and boys were equally likely to come from a home in which both of their birth parents cared for them and that Latino youth were much more likely to be living with both of their birth parents than any other family structure. It also determined that a youth's family type was unrelated to any legal charges incurred by youths prior to intake. Family organization may seem to affect clients as they become involved with YouthZone services. However, evaluation did not support this hypothesis. Whether living with both parents, with parents separately, or in some other arrangement, clients did equally well in their response to services. For boys, living away from their birth parents was strongly related to their proneness to re-offend during YouthZone services. This was not the case for girls, however, and other factors with boys carried more weight in predicting relapse.

These findings are reassuring because they indicate that in most respects, a client's family structure – which is beyond the influence of YouthZone services – is not as significant as other factors in clients' intake status and progress with services. The exception, and it is an important one, is that boys who are not living with their parents are much more prone than others to re-offend. Case managers can assure parents that how their son or daughter is doing has much less to do with parents' marital status and more with their child's prevailing self-perceptions and attitudes.

*Client Age, Gender, and Ethnicity and Intake Status and Progress with Treatment* About six in ten clients were male, and their average age was 15.7 years, with most falling in the range of 15-16 years. The dominant ethnicities, Caucasian and Latino were about equally represented. Some of these client characteristics were related to intake and response to treatment measures.

When evaluation looked at legal charges prior to enrollment, it found that it was older youth who were being arrested for substance possession or use. Boys were arrested more often than girls were for Crimes Involving Property and Traffic-Related Charges. Girls were more often charged with Aggression – Crimes against Persons, than were boys. Evaluation found also that client age affected their initial self-assessment results on the *YouthZone Screening*. For the most part, however, progress with services was the same for older and for

younger clients. Age was unrelated to a client's tendency to re-offend. There were differences statistically among ethnicities and offenses. Caucasian youths were at greater risk for a Substance-related charge and Latino clients were referred more often with Aggression – Crimes against Persons.

While these findings on age, gender, and ethnicity are statistically significant, their cause and influence on YouthZone services is less clear. Most importantly for case managers, they can be reassured and can reassure youth, parents, and referring agencies, that YouthZone services work equally well for youth with diverse backgrounds.

**Communities and Referring Agencies** Clients in the evaluation study sample came from across Garfield, Pitkin and West Eagle Counties. Fully 50.7% were living in the Colorado River valley from New Castle to Parachute. Communities differed in the characteristics of youths they referred for services; nevertheless, analyses demonstrated that YouthZone clients from different communities all tended to benefit equally from their programs. This finding indicated current services worked as well in socio-economically advantaged and less advantaged areas.

Evaluation results showed that YouthZone has made its services accessible to residents in towns across the region. Further, the evaluation provides abundant information to YouthZone staff on how it can guarantee it provides services that are culturally competent. Significantly, YouthZone administrators and program supervisors are well informed by the evaluation of program successes and limitations. Communities and agencies can have unique assurance, that youth referred to YouthZone will show a tangible benefit from participation.

**YouthZone Staff and Programs** Evaluation demonstrated through analysis of clients, their families, and their communities of origin that there are few "fixed factors" controlling youth progress. Youth are resilient and their progress on entering YouthZone services has much less to do with who they were at admission or where they came from and more with the quality of their interaction with their case manager. Accordingly, evaluation devoted considerable attention to four topics that would affect program effectiveness: substance use, youth trauma prior to enrollment, client recidivism, and case manager effectiveness. If staff can optimize their interventions in these areas, they may become even more effective than has been demonstrated heretofore.

*Case Managers and Youth Marijuana Use* By far the most common reason for a youth's arrest and referral to YouthZone was using substances. Colorado's legalization of marijuana's use by adults brings special attention to

this subject in the YouthZone evaluation. Additionally, research evidence is building to show that child and youth use of these substances is associated with various adverse physical and emotional development issues.

About 37.2% of YouthZone clients use marijuana and 41.0% use alcohol at one or more levels of frequency. Use of these two substances is correlated, so that consuming one is often associated with the consumption of the other. About one in five Colorado youth and YouthZone clients consume these drugs once a month or more often.

Statistical analysis found that boys and girls were equally likely to be regular users, that regular users were older than clients at the two other use levels, that they were much more likely to come from homes in which neither of their parents were present, and they were predominantly Caucasian clients. A greater proportion of Latino/Latina clients were non-users. It was determined in the evaluation that substance use declined while clients were in service. However, the decline could be best described as “harm reduction,” not quitting use. Whether YouthZone should review its current approaches to youth substance abuse seems to be supported by evaluation findings.

*Case Managers and Client Trauma* Concern has been growing for years within YouthZone and in programs across the country over the disproportionate number of youth receiving assistance for mental health, behavior, and legal problems who seem to have had traumatic experiences earlier in their lives. Evaluation succeeded with the expert assistance of YouthZone’s clinical staff in creating a specific screening – using available information – that would identify clients needing more in-depth assessment for trauma.

*Case Managers and Client Recidivism* During the past three years, 12.25% of clients in the Evaluation Sample were rearrested after the initial offense that led to their YouthZone referral and before court-ordered services were completed. Some clients re-offended within days of their admission. Among all YouthZone clients, these are probably at greatest risk for future personal, family, social, and vocational maladjustment. Success with them in the present could avoid much suffering and personal and social costs. For these reasons, evaluation was invested in learning how a case manager could recognize youth at risk of re-offending on their very first day at YouthZone. Findings were definitive with the most appropriate process for this type of screening.

With girls, case managers’ review of just two *Screening* scales would correctly predict their client’s re-offense status 77.6% of the time. Girls at or above the 85<sup>th</sup> percentile on School and Community Involvement and on Alcohol, Tobacco, and Drug use were unlikely to engage at the outset in case manager services and instead, continue

on their pre-enrollment course of misconduct. With boys case managers needed only four pieces of information to make a similar prediction: the same two *Screening* scores used with girls, supplemented by the information that the client was not living with his birth parents and his Delinquency and Aggression *Screening* score was at or above the 85<sup>th</sup> percentile.

These results replicate other studies of recidivism among legal offenders. Personal background and the seriousness of offense do not usually assist case managers in deciding on the level of care, on the other hand, review of how clients assess their own beliefs, attitudes, and experiences as compared to self-assessments by other clients can predict their future.

For boys and girls, interventions that raise school and community engagement and concurrently lower substance use have the greatest promise of supporting a sustained commitment to YouthZone programs.

*Case Managers and Client Progress with Services* Evaluation gave extended attention to the issue of case manager effectiveness with the two *Screening* scores that predicted both boys and girls engagement with services and avoidance of re-offending. Extensive research elsewhere with psychotherapy and counseling has shown professionals vary in their effectiveness. These findings were replicated with YouthZone case managers. With the two key youth self-assessments, case managers could be seen to fall into three groups that have been identified by other researchers: highly effective, effective, and marginally effective.

Psychotherapy research has found that in-service training and other workforce development efforts seldom equalize therapists’ effectiveness with clients. Systems have been developed, however, that draw on the expertise of current providers resulting in much less variability between the most and least effective. Evaluation supports exploring these options with staff.

Finally, evaluation has established that, on average, youthful clients gain assets and reduce risk behaviors while receiving YouthZone services. Not all clients make these gains and not all clients improve their adjustment in all areas. One implication of the evaluation is that youth who need additional support during and toward the end of services can be identified and available options explored with parents and their child.

Few youth serving programs in the region – or across the state for that matter – are informed about their programs’ effectiveness and where modification is needed and where services are working well. Nearly all service agencies rely on a leap of faith that what they promise, they are delivering. YouthZone, however, has adopted

evaluation practices to assist in building evidence-based services and focusing administration, case managers, the organization's board and the community on where additional attention can improve outcomes.

### ***Acknowledgement***

Evaluation recognizes current and past case managers and supervisory staff, who have contributed ideas to the design and improvement of the evaluation, and who have been dedicated to following the screening process, that makes this program assessment possible.

## Appendix 1

### YouthZone Program Evaluation 2013

#### *Characteristics of Youth in the “Evaluation Sample”*

##### YouthZone Youth

Between 2010 and 2013, information on 1,548 youth was collected by intake staff and entered into the YouthZone client database. This report concentrates on 621 young people whose referral and services involved a pre- and a post-administration of the *YouthZone Screening for Positive Youth Development*<sup>®</sup>, with valid results. These youths became the “Evaluation Sample,” young people on whom sufficient information was available to complete in-depth statistical analyses of their backgrounds, recidivism, and response to services.

##### Evaluation Sample Demographics

The 621 children and youth, the “evaluation study sample” were 39.7% female and 60.3% male. Appendix Table 1-1 shows the distribution of client ages.

**Appendix Table 1-1. Distribution of Evaluation Sample Client Ages**

Client Age	Frequency	Percent	Cumulative Percent
10 Years old or younger	5	.8	.8
11 Years old	15	2.4	3.2
12 Years old	41	6.6	9.8
13 Years old	44	7.1	16.9
14 Years old	68	11.0	27.9
15 Years old	130	20.9	48.8
16 Years old	141	22.7	71.5
17 Years old	160	25.8	97.3
18 Years old	17	2.7	100.0
Total	621	100.0	

Only 9.8% were 12 years or younger and 2.7% were 18 or older. The average age was 15.7 years. Boys and girls entered their programs at similar ages ( $F = 1.346$ ,  $p < .246$ ).

Boys and girls were equally likely to attend public, private, or alternative, or to be home schooled ( $\chi^2 = 8.981$ ,  $p < .110$ ). Among the 37 not attending school, 75.7% were boys. Younger entrants tended more often to be attending a public school.

Appendix Table 1-2 lists the ethnicities and their frequencies among YouthZone clients. Most clients were White (45.2%) or Latino (42.3%). Among younger youth, a larger proportion was Latino ( $F = 26.372$ ,  $p < .000$ ). Boys and girls were equally likely to be White or Latino ( $\chi^2 = 0.852$ ,  $p < .356$ ). Most clients were born in the USA, with 15.0% born in another country.

**Appendix Table 1-2. Distribution of Evaluation Sample Client Ethnicities**

Client Ethnicity	Frequency	Percent	Valid Percent
Caucasian	280	45.1	45.2
Latino	262	42.2	42.3
More than 1 ethnicity	43	6.9	6.9
American Indian	25	4.0	4.0
African American or Black	6	1.0	1.0
Asian or Asian American	2	.3	.3
Native Hawaiian or Pacific Islander	1	.2	.2
Subtotal	619	99.7	100.0
Missing	2	.3	
Total	621	100.0	

The structure of the families in which referred youth were living ranged widely, as can be seen in Appendix Table 1-3.

**Appendix Table 1-3. Distribution of Evaluation Sample Client Ethnicities**

Family Type	Frequency	Percent
Two birth parents	285	45.9
Single parent female	140	22.5
Step and birth parent	102	16.4
Single parent male	39	6.3
50/50 (divorced and living equal time)	18	2.9
Grandparent(s)	17	2.7
Other	16	2.6
Foster parent(s)	2	.3
No adults	2	.3
Total	621	100.0

In the sample, 45.9% were living with both of their birth parents and an additional 2.9% were living with both birth parents equal time following a parental divorce. Only 5.9% were living in a setting where neither birth parent was present. Girls and boys were equally likely to come for a home in which both of their birth parents cared for them ( $\chi^2 = 0.250, p < .883$ ). Latino youth were much more likely to be living with both of their birth parents than any other family structure ( $\chi^2 = 9.511, p < .009$ ).

## Appendix 2

### YouthZone Program Evaluation 2013

#### *Community of Residence and Youth Response to Services*

##### **Community of Residence and Client Characteristics**

Clients in the 2013 evaluation study sample (youths with valid pre-post *YouthZone Screening for Positive Youth Development*<sup>®</sup> surveys) came from across Garfield, Pitkin, and West Eagle Counties. A few other youths (2.6%) were residing permanently in other counties in Colorado or outside the state. As shown in Appendix Table 2-1, those in the immediate area were most often from Rifle, with Glenwood Springs being the second most common community of residence.

Ages of youth varied somewhat across towns, but not to a statistically significant extent ( $F = 1.175$ ,  $p < .318$ ). On the other hand, girls were seen significantly more often from the Aspen, Basalt and Carbondale communities than they were in other communities in the catchment area ( $\chi^2 = 9.959$ ,  $p < .019$ ). About three times as many boys as girls were seen from the Rifle-Parachute area. Across catchment area communities, Caucasian youth were seen as often as Latino youth ( $\chi^2 = 5.557$ ,  $p < .135$ ). Although slightly more Caucasian youth were seen in the Aspen, Snowmass and Basalt area, the difference with other communities was not statistically significant.

**Appendix Table 2-1. Youth Community of Residence**

Community Area	Frequency	Percent
Rifle	196	31.6
Glenwood Springs Area	141	22.7
Carbondale Area	83	13.4
New Castle-Silt Area	71	11.4
Parachute Area	48	7.7
Aspen Area	35	5.6
Basalt Area	31	5.0
Other Communities	16	2.6
Total all Communities	621	100.0

##### **Community of Residence and Youth Needs**

When youths from the Evaluation Sample entered services and completed their intake *Screening*, YouthZone compiled their scores on the five screening scales. Average scores for all youth in each community area are shown in Appendix Table 2-2, with those having unique needs highlighted. (Youths from outside YouthZone main service area were not included in this or following analyses.)



**Appendix Table 2-2 Youth Needs at Intake and Community of Residence<sup>1</sup>**

Community Area	ATOD Use	Optimism & Problem Solving	School & Community Involvement	Delinquency & Aggression	Self-Deprecation
Aspen Area	23.37	21.03	12.09	15.09	9.51
Basalt Area	24.13	20.23	12.55	15.39	9.13
Carbondale Area	24.18	21.77	14.07	16.49	10.60
Glenwood Springs Area	23.19	20.65	16.55	15.65	9.45
New Castle-Silt Area	22.10	21.10	16.10	15.31	8.89
Rifle	23.08	21.28	16.21	16.36	9.53
Parachute Area	24.15	23.31	18.13	16.42	9.94
All Communities	23.30	21.27	15.71	15.97	9.60

<sup>1</sup>Higher scores indicate lower functioning in the Screening score topics

According to a statistical analysis of clients’ own self-reports on the *Screening*, the use of alcohol and other drugs was approximately the same across the seven community areas ( $F = 0.572, p < .753$ ). On the other hand, statistical analysis found that Optimism and Problem Solving skills among youth were lower in the Parachute Area ( $F = 2.173, p < .044$ ). School & Community Involvement was the most problematic for Parachute youth and was most favorable for clients in the Aspen and Basalt Areas ( $F = 9.000, p < .000$ ). Delinquency and Aggression behaviors were more serious for Rifle, Parachute, and Carbondale youths ( $F = 2.173, p < .044$ ). Self-Deprecation was a more significant problem for Carbondale and less an issue for New Castle and Silt youth, than for those in other communities ( $F = 3.402, p < .003$ ).

These results may give some suggestions for how programming could be modified to fit communities with youth of differing needs.

### Community of Residence and Response to Services

Pre to post changes on the *YouthZone Screening for Positive Youth Development*<sup>®</sup> show youths’ self-perceptions from enrollment to concluding their services at YouthZone. While it may seem that clients would tend to describe themselves in more favorable terms at the conclusion of services – hoping others will think well of them – past experience with one-on-one interviews months after leaving have shown youth were quite candid for the most part. They had experienced improvement in their adjustment and risk behaviors, but still presented development issues that would be of concern to their families and their communities of residence.

Appendix Table 2-3 reviews pre to post changes in *Screening* scores for the seven community areas studied in the evaluation. Appendix Fig. 2-1 presents the data on School and Community Involvement in graphic form.

**Appendix Table 2-3. Youth Community of Residence and Pre-Post Change in YouthZone Screening Scores <sup>1</sup>**

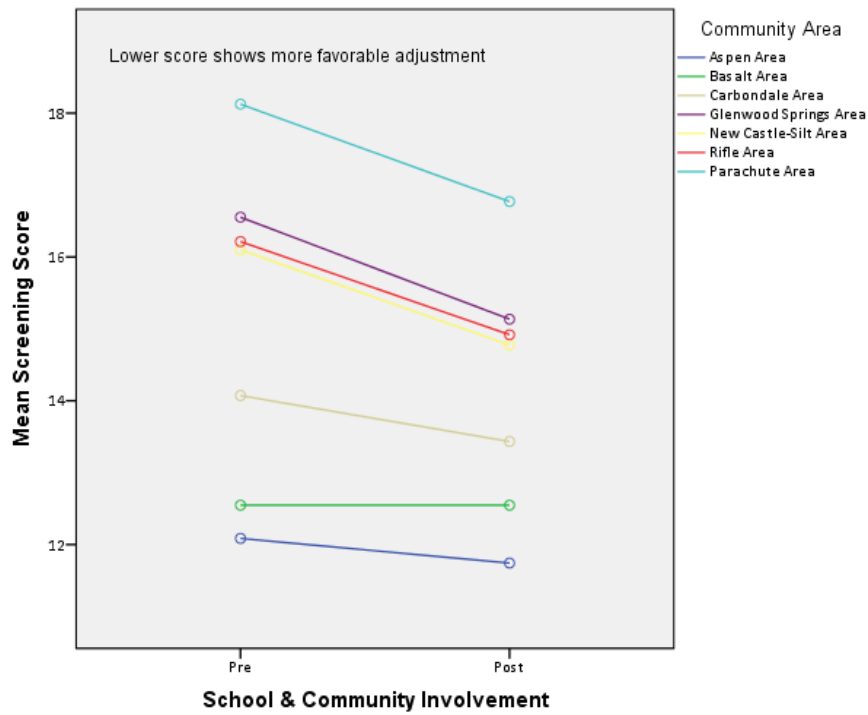
Screening Scale	Comparison of Pre-Post Change by Community Area
Alcohol, Tobacco and Other Drug Use	<ul style="list-style-type: none"> <li>▪ At intake, differences in use were not significant across the seven community areas. Overall, youth in all communities reduced their use to a significant extent. There was no difference in the degree of reduction of substance use by clients in the seven communities (<math>F = 0.505, p &lt; .805</math>). Though reduction in use did occur, youth reported some continuing use of tobacco, alcohol, and other drugs. Youth were not substance-free when their services ended.</li> </ul>
Optimism & Problem Solving	<ul style="list-style-type: none"> <li>▪ Initially, Optimism and Problem Solving were greater problems for Parachute youth and less so for those in the other communities. Nearly all clients improved during their YouthZone services and their progress was similar across communities (<math>F = 0.648, p &lt; .692</math>). By the end of services, however, Parachute clients still reported greater issues in this area than did other clients from other communities.</li> </ul>
School & Community Involvement	<ul style="list-style-type: none"> <li>▪ When they enrolled, School and Community Involvement were at lower levels for Parachute clients and more favorable for Aspen and Basalt area youth. There was an overall statistically significant improvement for youth in all communities. Improvement was similar for clients in the study communities (<math>F = 1.226, p &lt; .291</math>). Initial differences in Involvement were still seen in client's post-screen scores, Parachute youth having a poorer showing. While all clients had benefited from services, they were still not fully engaged in school and community if they had not been involved prior to beginning YouthZone services.</li> </ul>
Delinquency & Aggression	<ul style="list-style-type: none"> <li>▪ Rifle, Parachute and Carbondale youth did describe themselves initially as having more of these attitudes and behaviors than did youth in other communities. By the end of services all youth showed statistically significant improvement that was equivalent across communities (<math>F = 1.249, p &lt; .279</math>). Differences between the seven communities diminished, so that by discharge that residual attitudes and behavior were equivalent across geographic areas.</li> </ul>
Self-Deprecation	<ul style="list-style-type: none"> <li>▪ The intake differences between youth from different communities are shown in Appendix Table 2-2. Clients from all communities improved their adjustment in this area and to a similar degree (<math>F = 0.676, p &lt; .669</math>).</li> </ul>

This analysis demonstrates that YouthZone clients from different communities all tend to benefit equally from their YouthZone services. This finding indicates current services work as well in socio-economically advantaged and less advantaged areas. Another implication is that initial difference in youth needs across communities equalized by the time of their discharge. Community to community disparities were reduced. At the same time, when clients came with serious problems, most likely they were returning to their community better adjusted, but still showing relatively more adjustment difficulties than will be found among typical youth elsewhere in the YouthZone service area.

### Community Follow-up Services for Youth Leaving YouthZone Services

A longitudinal study done three years ago showed that some YouthZone youth were still struggling to cope months after their services had ended. Particularly with clients with relatively high Delinquency and Aggression and Self-Deprecation scores, it was recommended that discharge plans should include recommendations for how assistance can be continued, once legal requirements are met. In the field of behavioral health care, the balance of responsibility has shifted from just recommending suitable services at the end of one program, to actively facilitating the person’s engagement in and benefit from the recommended service. This investment is considered a way of preserving the value of provided services by advocating with both the community and the client before the client leaves the program. YouthZone can review these options.

**Appendix Fig. 2-1. Pre-Post Change in School and Community Involvement**



## Appendix 3

### YouthZone Program Evaluation 2013

#### *Type of Legal Offense and Youth Response to Services*

#### **Youths' Type of Legal Offense**

Of 1,074 clients referred to YouthZone, 830 (77.3%) arrived with a recent legal charge. In the evaluation study sample of 621 clients, 575 (92.6%) had been charged. Details of the wide range of legal offenses are shown in Appendix Table 3-2.

**Appendix Table 3-1. Type of Legal Offense (Evaluation Clients, N = 621)**

Type of Legal Offense	Frequency	Charge Percent	Group Percent
<b>1. Substance-Related Charge</b>	<b>304</b>		<b>49.0</b>
Possession of alcohol	158	25.4	
Possession of cigarettes	2	.3	
Possession of controlled substance including marijuana	100	16.1	
Possession of paraphernalia	44	7.1	
<b>2. Petty Theft</b>	<b>101</b>		<b>16.3</b>
Petty theft	101	16.3	
<b>3. Crimes Involving Property</b>	<b>59</b>		<b>9.5</b>
Arson	2	.3	
Criminal mischief	31	5.0	
Criminal trespass	10	1.6	
Motor vehicle theft	2	.3	
Theft and breaking and entering	14	2.3	
<b>4. Aggression – Crimes Against Persons</b>	<b>87</b>		<b>14.0</b>
Aiding and abetting (complicity, conspiracy)	2	.3	
Assault and battery (disorderly conduct)	53	8.5	
Discharging a firearm	1	.2	
Domestic violence (client charged with)	1	.2	
False reporting	1	.2	
Harassment/menacing	25	4.0	
Possession of weapons (not guns)	3	.5	
Resisting arrest/obstructing an officer	1	.2	
<b>5. Traffic-Related Charge</b>	<b>24</b>		<b>3.9</b>
Traffic offense	24	3.9	
<b>6. Curfew Charge</b>	<b>7</b>		<b>1.1</b>
Curfew	7	1.1	

Evaluation grouped offenses into six categories to assist with gaining an overview of the types of youths' legal problems and to facilitate statistical analysis of clients' backgrounds and progress with services for different types of offenses. In Appendix Table 3-2, offenses were accumulated across communities. Categories 1-5 included a sufficient number of youths for analysis.

### Youth Background and Type of Legal Offense

Planning optimal services for clients referred with legal offenses begins with understanding their backgrounds from the perspective of their age, sex, ethnicity, and family structure. What are the characteristics of those involved in various offenses?

**Appendix Table 3-2. Client Sex and Type of Legal Offense**

Client Sex		Type of Legal Offense					Total
		Substance-Related Charge	Petty Theft	Crimes Involving Property	Aggression – Crimes Against Persons	Traffic-Related Charge	
Female	N	102	31	12	41	3	189
	%	54.0%	16.4%	6.3%	21.7%	1.6%	100.0%
Male	N	202	70	47	46	21	386
	%	52.3%	18.1%	12.2%	11.9%	5.4%	100.0%
Total	N	304	101	59	87	24	575
	%	52.9%	17.6%	10.3%	15.1%	4.2%	100.0%

The largest sex differences in Appendix Table 3-3 contributed to a highly statistically significant association between sex and the type of offenses clients had committed ( $\chi^2 = 17.01, p < .002$ ). This analysis showed that boys were arrested (charged) more often than girls did for Crimes Involving Property and Traffic-Related Charges. Girls were more often charged with Aggression – Crimes against Persons, than were boys. The sexes were similar with regard to Substance-Related Charges and Petty Theft. These data may reflect different tendencies for males and females to break certain laws – or alternatively, for law enforcement and courts to take action depending on a youth's sex. Regardless of client motivation or official action, findings may have important implications for planning gender-competent services.

Statistical analysis of the data in Appendix Table 3-4 found that most of the age differences among offense types were significant ( $F = 28.77, p < .000$ ). Of particular note is the average age of clients with a Substance-Related Charge. Half of the 304 youths in the category were 16 or older. They were maturing to an age when youth services

**Appendix Table 3-4. Client Age and Type of Legal Offense**

Type of Legal Offense	N	Mean Age
Substance-Related Charge	304	16.175
Petty Theft	101	15.358
Crimes Involving Property	59	14.798
Aggression - Crimes Against Persons	87	14.479
Traffic-Related Charge	24	16.809
Total	575	15.660

will no longer be available for intervention with their substance use.

Inspection of the numbers in Appendix Table 3-5 reveal numerous important differences in client ethnicity among the types of legal offenses ( $\chi^2 = 19.56, p < .001$ ). Among the weightiest for service planning and evaluation are the findings that Caucasian youths were at greater risk for a Substance related charge and were in the greatest need for intervention to reduce dependence. That Latino clients were referred more often with Aggression – Crimes Against Persons is also cause for reflection on matching services for these clients with ethnic-related issues.

**Appendix Table 3-5. Client Ethnicity and Type of Legal Offense**

Client Ethnicity		Type of Offense					Total
		Substance-Related Charge	Petty Theft	Crimes Involving Property	Aggression - Crimes Against Persons	Traffic-Related Charge	
Latino	N	116	45	18	55	13	247
	%	47.0%	18.2%	7.3%	22.3%	5.3%	100.0%
Caucasian	N	152	40	29	25	9	255
	%	59.6%	15.7%	11.4%	9.8%	3.5%	100.0%
Total	N	268	85	47	80	22	502
	%	53.4%	16.9%	9.4%	15.9%	4.4%	100.0%

A youth’s family type could be important for planning and evaluating services. If intact family support or adverse influences of distant parents were involved, then interventions may be tailored to meet their needs to follow a course of rehabilitation following their legal problems. Appendix Table 3-6 provides information on this issue.

**Appendix Table 3-6. Client Family Type and Type of Legal Offense**

Family Type		Type of Legal Offense					Total
		Substance-Related Charge	Petty Theft	Crimes Involving Property	Aggression – Crimes Against Persons	Traffic-Related Charge	
Living with 2 birth parents	N	146	40	23	39	11	259
	%	56.4%	15.4%	8.9%	15.1%	4.2%	100.0%
Living with birth parents separately	N	11	1	0	1	2	15
	%	73.3%	6.7%	0.0%	6.7%	13.3%	100.0%
Other family types	N	147	60	36	47	11	301
	%	48.8%	19.9%	12.0%	15.6%	3.7%	100.0%
Total	N	304	101	59	87	24	575
	%	52.9%	17.6%	10.3%	15.1%	4.2%	100.0%

Although some of the differences in Family Type within the Types of Legal Offense categories may appear important, the differences were not statistically significant ( $\chi^2 = 12.191, p < .143$ ). These results suggest that Family Type was not a driving force in youths’ inclination to offend in any one of the above categories.

### City of Residence and Type of Legal Offense

For the data in Appendix Table 3-7, evaluation combined cities within some geographic proximity in order to accomplish statistical analyses. There were no significant differences in the extent of referral in each of the legal type categories from one community group to the next ( $\chi^2 = 16.422, p < .173$ ). These findings suggest that law enforcement and the courts across YouthZone’s catchment area have common perceptions of problem/illegal youth behavior.

**Appendix Table 3-7. Client Community and Type of Legal Offense**

City of Residence		Type of Legal Offense					Total
		Substance-Related Charge	Petty Theft	Crimes Involving Property	Aggression – Crimes Against Persons	Traffic-Related Charge	
Aspen, Snowmass,	N	38	7	6	3	2	56
Basalt	%	67.9%	12.5%	10.7%	5.4%	3.6%	100.0%
Carbondale	N	42	10	6	17	1	76
	%	55.3%	13.2%	7.9%	22.4%	1.3%	100.0%
Glenwood Springs,	N	101	37	15	35	9	197
New Castle, Silt	%	51.3%	18.8%	7.6%	17.8%	4.6%	100.0%
Rifle, Parachute	N	117	43	29	32	10	231
	%	50.6%	18.6%	12.6%	13.9%	4.3%	100.0%
Total	N	298	97	56	87	22	560
	%	53.2%	17.3%	10.0%	15.5%	3.9%	100.0%

Next in the process for understanding how the type of charge a client presents on referral may affect service planning, evaluation studied how youths in each legal category fared considering their five pre-post Survey scores.

### Type of Legal Offense and Client Progress with Services

Clients with different offenses in their recent histories responded differently to YouthZone services. Appendix Table 3-8 presents these analyses:

- Those with a *substance charge* made substantial gains in all five scales. They reduced their substance use, though did not eliminate it, from their enrollment to completion of services. Importantly, their Delinquency and Aggression scores declined, suggesting that their proclivity to become involved in anti-social behavior lessened over time. Their Optimism & Problem Solving self-assessments showed that their feelings about themselves and their sense of self-efficacy rose.
- Petty Theft and Aggression-Crimes against Persons clients followed a similar pattern of improvement, showing adjustment gains except with substance use, where their intake use was reported as only average for their age. Changes were insignificant on the Self-Deprecation scale. (Self-Deprecation includes several items for which no pre-post change is expected.)

That the Delinquency and Aggression scores of youth with an Aggression-Crimes against Persons offense history declined significantly is another favorable sign that for youth who have been involved with law enforcement and the courts, YouthZone program participation is likely to improve not only their self-image, but their conduct as well.

**Appendix Table 3-8. Significance of Client Change during Services by Legal Charge on Referral**

YouthZone Screening Survey Scores	Student's <i>t</i> for Pre-Post Change				
	Substance-Related Charge	Petty Theft	Crimes Involving Property	Aggression – Crimes Against Persons	Traffic-Related Charge
Alcohol, Tobacco, & Other Drug Use Score	7.075 ***	1.141 <sup>ns</sup>	2.179 *	1.682 <sup>ns</sup>	.563 <sup>ns</sup>
Optimism & Problem Solving Score	10.367 ***	6.301 ***	2.507 *	3.196 **	4.390 ***
School & Community Involvement Score	7.420 ***	3.958 ***	1.756 <sup>ns</sup>	3.122 **	1.565 <sup>ns</sup>
Delinquency & Aggression Score	12.803 ***	5.993 ***	4.448 ***	6.439 ***	1.629 <sup>ns</sup>
Self-Deprecation Score	2.826 **	.944 <sup>ns</sup>	1.714 <sup>ns</sup>	1.062 <sup>ns</sup>	.641 <sup>ns</sup>

\*\*\* p < .001, \*\* p < .01, \* p < .05, <sup>ns</sup> Not Significant



## Appendix 4

### YouthZone Program Evaluation 2013

#### *Community Sources Referring Youth*

#### Referral Sources for YouthZone Services

More than 40 different organizations referred clients to YouthZone. Evaluation grouped clients in the Evaluation Sample into the categories shown in Appendix Table 4-1 to assist with gaining an overview of referral sources and to facilitate statistical analysis of clients' backgrounds and progress with services for different types of referrals.

**Appendix Table 4-1. Sources of Client Referral to YouthZone**

Referral Source	Frequency	Percent	Cumulative Percent
1. Municipal court	398	64.1	64.1
2. County court	99	15.9	80.0
3. District court	79	12.7	92.8
4. Probation	15	2.4	95.2
5. Self or Parent	2	.3	95.5
6. Middle school	5	.8	96.3
7. High school	19	3.1	99.4
8. Department of Human Services	1	.2	99.5
9. Other (Church, Mind Springs, Other)	3	.5	100.0
Total	621	100.0	

In the Table, referral sources were accumulated across communities. Sources 1-3 represent youth coming from judicial settings. Experience at YouthZone has found that some district court cases arrive with offenses that are more serious and/or with several prior offenses. Their problems are more significant than clients referred from a court setting for diversion only. Nevertheless, without regard to where a case originated, YouthZone did an assessment and case management with all clients. Accordingly, evaluation asked two questions: Are clients from these three settings similar in their personal backgrounds, and how does their progress with YouthZone services compare? Youth referred by courts (N=576) were selected to answer these questions.

#### Court Settings and Youth Background

Planning effective services for court-linked clients may be assisted by knowing their backgrounds and response to provided services. Evaluation next examined courts from the perspective of clients' sex, age, ethnicity, and family structure.

Analysis of the sex differences in Appendix Table 4-3 revealed that County Courts across the YouthZone catchment area involved significantly fewer girls as compared to the other court settings ( $\chi^2 = 5.816, p < .055$ ).

**Appendix Table 4-2. Client Sex and Court Setting**

Court Setting		Sex		Total
		Female	Male	
Municipal court	N	142	256	398
	%	35.7%	64.3%	100.0%
County court	N	23	76	99
	%	23.2%	76.8%	100.0%
District court	N	24	55	79
	%	30.4%	69.6%	100.0%
Total	N	189	387	576
	%	32.8%	67.2%	100.0%

**Appendix Table 4-3. Client Age and Court Setting**

Court Setting	N	Mean Age
Municipal court	398	15.559
County court	99	16.524
District court	79	15.095
Total	576	15.661

Analysis of the data in Appendix Table 4-4 found that most of the client age differences among the court settings were statistically significant from one another ( $F = 17.215, p < .000$ ). The youngest clients were in District Courts, the oldest were from County Courts. This information, combined with other information about client characteristics related to age, may suggest different program approaches to clients depending on their court source.

**Appendix Table 4-4. Client Ethnicity and Court Setting**

Court Setting		Ethnicity		Total
		Latino	Caucasian	
Municipal court	N	176	172	348
	%	50.6%	49.4%	100.0%
County court	N	48	40	88
	%	54.5%	45.5%	100.0%
District court	N	25	44	69
	%	36.2%	63.8%	100.0%
Total	N	249	256	505
	%	49.3%	50.7%	100.0%

Analysis of the data in Appendix Table 4-4 indicated that there were statistically significant differences in client ethnicity among referrals from the court settings ( $\chi^2 = 5.91, p < .052$ ). District Courts were seeing many more Caucasian youth who they referred to YouthZone than were the other court settings. On the other hand, County Courts were sending slightly more Latino clients for program services. Where ethnicity is a consideration in staff assignment or it is related to another aspect of youth services and outcomes, these findings will contribute to

service planning and evaluation. (These results may be related to the Aspen policy of assigning juveniles to county or district court.)

Whether a youth’s family type affected referrals from the court settings was examined next. Often attributions are made about family type as a contributor to youth problems and their response to youth and family services. Appendix Table 4-5 provides information on this issue.

**Appendix Table 4-5. Client Family Type and Type of Legal Offense**

Court Setting		Family Type			Total
		Living with 2 birth parents	Living with birth parents separately	Other family types	
Municipal court	N	175	6	217	398
	%	44.0%	1.5%	54.5%	100.0%
County court	N	47	6	46	99
	%	47.5%	6.1%	46.5%	100.0%
District court	N	38	3	38	79
	%	48.1%	3.8%	48.1%	100.0%
Total	N	260	15	301	576
	%	45.1%	2.6%	52.3%	100.0%

Evaluation found that court referrals were not influenced by the type of family in which a youth resided ( $\chi^2 = 8.49$ ,  $p < .075$ ).

**Court Setting and City of Residence**

Youth city of residence and the court setting in which they were seen were compared next with the results shown in Appendix Table 4-6. When analyzed statistically it was found that youth from the Aspen, Snowmass, and Basalt area were more likely to have been seen in District Court than were clients living in other community groups ( $\chi^2 = 82.491$ ,  $p < .000$ ).

**Appendix Table 4-6. Court Setting by City Groups**

Court Setting		City Group				Total
		Aspen, Snowmass, Basalt	Carbondale	Glenwood Springs, New Castle, Silt	Rifle, Parachute	
Municipal court	N	20	48	155	167	390
	%	36.4%	63.2%	78.7%	71.4%	69.4%
County court	N	7	13	29	46	95
	%	12.7%	17.1%	14.7%	19.7%	16.9%
District court	N	28	15	13	21	77
	%	50.9%	19.7%	6.6%	9.0%	13.7%
Total	N	55	76	197	234	562
	%	100.0%	100.0%	100.0%	100.0%	100.0%

## Court Setting and Client Progress with Services

Overall, clients referred from the three court settings responded similarly to their YouthZone services – they showed improvement over time – although there were important differences on certain *Screening* scores pre-post. For example, Appendix Table 4-6 shows that those referred from Municipal Courts improved substantially in all measured areas of attitude, self-perception, and behavior. This same level of improvement across assessment domains was not seen in the other two court settings. Clients referred from County Courts did not improve in the Alcohol, Tobacco, & Other Drug Use Score or their Self-Deprecation scores. Youth improvement in other areas tended to be less than for clients referred by Municipal Court. District Court changes pre-post were like those seen with Municipal Court referrals, though no gain in School & Community Involvement Scores was seen.

**Appendix Table 4-6. Client Change during Services and Referring Court Setting**

Court Setting	Student's <i>t</i> for Pre-Post Change				
	Alcohol, Tobacco, & Other Drug Use Score	Optimism & Problem Solving Score	School & Community Involvement Score	Delinquency & Aggression Score	Self-Deprecation Score
Municipal court	5.270***	7.647***	6.484***	11.026***	2.607**
County court	1.217 <sup>ns</sup>	4.634***	3.878***	3.218**	0.600 <sup>ns</sup>
District court	4.673***	6.193***	0.963 <sup>ns</sup>	5.884***	2.502*

\*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , <sup>ns</sup> Not Significant

The implications of these court setting-client progress results for program planning and evaluation will be best determined as all factors related to client progress are assembled.

## Appendix 5

### YouthZone Program Evaluation 2013

#### *Intake to Discharge Changes in Screening Scores*

##### **Understanding Client Changes with YouthZone Services**

The Evaluation Sample of 621 clients was composed of a diverse group of young people. They came from communities with different local cultures, were male and female, had different family types, and were of varying ages and ethnicities. Client changes pre to post *Screening* were related to some of these characteristics. For example, youth age has been found in previous evaluations to be associated with change in substance use. Young clients show little change because their intake substance use is low, while older clients who as a group were using more drugs, report substantial reductions in use. When an older client with use prior to intake shows only negligible reduction in use, this will be a red flag warning of their likely resumption of substance consumption. Understanding connections like these will assist case managers as they prepare their clients for discharge.

##### **Client Progress with YouthZone Services**

Evaluation compared the intake *Screening* of the group of 621 clients with pre- and post- surveys to their post-*Screening* and calculated the significance of these changes. This method provided an understanding of where and the extent to which self-reported progress had taken place. The findings are shown in Appendix Table 5-1. Appendix Table 5-2 reports on these changes for older and younger clients, males and females, and Caucasian and Latino clients.

*Change in Pre to Post Scores for All Clients* When all 621 clients who completed a pre- and a post-*Screening* were compared on their five intake and discharge scores, very highly significant improvements were revealed. Whether it was Alcohol, Tobacco, and Other Drug Use or Self-Deprecation, clients were reporting better behavioral and emotional adjustment. Combining boys and girls, clients of different ages and ethnicities, and those with different legal backgrounds and from different areas of YouthZone's catchment area give a snapshot of overall program benefit. It does not show that clients have unique circumstances that affect their progress. Other data analyses studied how these circumstances were related to change.

*Change in Pre to Post Scores According to Client Age, Sex, and Ethnicity* Pre to post changes for the 621 Evaluation Sample clients were analyzed by age group, sex, and ethnicity. Results showed that: a) clients with different characteristics had different degrees of adjustment problems as shown by the pre-*Screening*, b) youth progress was not always the same for all clients, and c) that on some *Screening* scales, clients of certain characteristics were less adjusted at the conclusion of services than were other clients with different backgrounds. These differences in problem severity and change are explained in Appendix Table 5-2.

**Appendix Table 5-1. Pre-Post YouthZone Screening Score Changes for All Clients**

YouthZone Screening Scale	Intake Screening Mean	Discharge Screening Mean	Statistic
Alcohol, Tobacco, and Other Drug Use	23.37	21.81	$F = 52.85$ ****
Optimism and Problem Solving	21.25	19.46	$F = 120.62$ ****
School and Community Involvement	15.75	14.62	$F = 57.09$ ****
Delinquency and Aggression	16.00	14.55	$F = 175.11$ ****
Self-Deprecation	9.62	9.35	$F = 10.33$ ****

<sup>1</sup> Statistical significance levels: <sup>ns</sup> = "not significant," \* =  $p < .10$  "borderline significant," \*\* =  $p < .05$  "significant," \*\*\* =  $p < .01$ , "highly significant" \*\*\*\* =  $p < .001$  "very highly significant"

**Appendix Table 5-2. Interpretation of Pre-Post YouthZone Screening Score Changes by Client Characteristics**

YouthZone Screening Scale	Client Age Above and Below Median Age Groups	Client Sex	Client Ethnicity
Alcohol, Tobacco, and Other Drug Use	As expected, older clients had higher levels of initial and final use ( $F = 71.42$ ****). The group of above-the-median group of older clients ( $X = 16.9$ years) were at 25% greater risk for substance use than younger clients ( $X$ age = 14.2 years). Change over time was the same for younger and older clients ( $F = 0.81$ <sup>ns</sup> ).	Boys and girls were at equivalent levels of substance use at intake ( $F = 0.03$ <sup>ns</sup> ) and their reduction in substance use was nearly identical by the time they left YouthZone services ( $F = 0.22$ <sup>ns</sup> ).	When they came to YouthZone, Caucasian youth were much more heavily involved with substances than were Latino/a clients ( $F = 20.71$ ****). Reduction of use was the same for the two groups over time ( $F = 2.59$ <sup>ns</sup> ).
Optimism and Problem Solving	Younger clients initially were more adversely affected ( $F = 41.51$ ****). Both younger and older clients improved, but the younger clients showed greater positive change ( $F = 9.44$ ***).	Girls reported lower Optimism and Problem Solving when they enrolled than boys did ( $F = 10.75$ ****). Both sexes improved their scores in this area and pre to post change was the same for males and females ( $F = 0.99$ <sup>ns</sup> ).	Caucasian clients reported better Optimism and Problem solving at the start of services ( $F = 8.88$ ***). Clients of both ethnic groups improved to the same degree pre to post ( $F = 0.20$ <sup>ns</sup> ).
School and Community Involvement	Older clients initially reported higher scores ( $F = 4.96$ **). Both older and younger clients made very similar gains over time ( $F = 0.72$ <sup>ns</sup> ).	Sex was unrelated to initial scores on this scale ( $F = 3.30$ <sup>ns</sup> ) nor were there differences between boys and girls in their rate of improvement pre to post ( $F = 1.36$ <sup>ns</sup> ).	Latino youth, more than Caucasians, scored lower initially on School and Community Involvement ( $F = 11.16$ ****) and over time, the gap between the two ethnic groups did not grow smaller ( $F = 1.69$ <sup>ns</sup> ).
Delinquency and Aggression	Younger clients reported more of these issues initially than did older clients ( $F = 5.30$ **) and they showed more improvement pre to post. ( $F = 5.66$ **).	Boys and girls showed similar levels of Delinquency and Aggression when they enrolled for YouthZone services ( $F = 1.67$ <sup>ns</sup> ). Improvement over time was equivalent ( $F = 2.58$ <sup>ns</sup> ).	There were no ethnicity differences on this scale, either at the time of intake ( $F = 0.69$ <sup>ns</sup> ) or in improvement pre to post ( $F = 0.70$ <sup>ns</sup> ).

YouthZone Screening Scale	Client Age Above and Below Median Age Groups	Client Sex	Client Ethnicity
Self-Deprecation	Older clients were more likely initially to report this issue than were younger clients ( $F = 7.64$ ***). However, both groups showed similar degrees of improvement during services ( $F = 0.15$ <sup>ns</sup> ).	Girls had much higher scores in this area than boys, when they enrolled ( $F = 22.00$ ****). Both groups improved to similar degrees ( $F = 0.71$ <sup>ns</sup> ). Girls ended YouthZone services with poorer scores on Self-Deprecation than boys had at the time enrollment.	Caucasian clients initially reported poorer Self-Deprecation scores than Latino clients did ( $F = 10.54$ ***). While both groups of clients improved at similar rates ( $F = 0.11$ <sup>ns</sup> ), initial differences between the groups remained, with Caucasian clients having poorer scores.

<sup>1</sup>Statistical significance levels: <sup>ns</sup> = "not significant," \* =  $p < .10$  "borderline significant," \*\* =  $p < .05$  "significant," \*\*\* =  $p < .01$  "highly significant" \*\*\*\* =  $p < .001$  "very highly significant"



## Appendix 6

### YouthZone Program Evaluation 2013

#### *Clients Who Re-offend during YouthZone Services*

##### **Client Recidivism**

On occasion, youths with legal problems who have been enrolled in YouthZone services are again arrested. This is a distressing event for the youth and their family as it is for law enforcement and the courts who have been invested in dealing with their misconduct. If it were possible to identify “red flags” that draw attention to a client who may relapse it would serve the client and others including YouthZone that has social and fiscal responsibilities for support and rehabilitation. These analyses of client data were directed at the goal of predicting at intake which clients were likely to reoffend even before they completed services related to prior misconduct. The purpose is alerting staff early in the intervention process so that re-offenses can be reduced to a minimum.

*Method of Data Analysis* For this component, evaluation used all clients who had completed the *Pre-Screening* at enrollment, came to YouthZone with a legal offense, had complete personal background information, and for whom their re-offender status had been determined. The sample was divided into male and female clients. Evaluation used discriminant analysis. This statistical approach computes the relationships between a client characteristic and their status as a reoffender. These relationships are then compared with one another and their relative predictive powers are computed for discriminating between clients who completed their services without re-offending and those who re-offended. The result is a percentage that shows the combined predictive power of knowing a client’s background to predict his/her likelihood of reoffending. Results show also, which of many possible predictors are most important to a case manager when they are considering the possibility of re-offense. For this analysis, the following information on clients’ background was considered:

1. Age in years
2. Latino or Caucasian
3. Living with biological parents together vs. other living arrangements
4. Whether the client had a history with YouthZone of a prior offense
5. The seriousness of the current offense
6. Whether *Screening* items suggested the client may have a history of trauma
7. The client’s five scores on the *Pre-Screening*

*Data Analysis Results* Whether client characteristics were useful in predicting girls’ re-offense status is shown in Appendix Table 6-1. Of 11 variables, two highlighted variables proved useful in determining whether a female client would succeed in completing services without reoffending. (An additional variable bordered on being significant in this prediction.) Using these two client characteristics, a case manager would shortly after intake predict correctly the client’s re-offense status 77.6% of the time.

In Appendix Table 6-2, the same analytical approach was used with male clients. With boys, the two top factors replicated findings for girls and it found that two additional variables would sharpen predictions of successful completion of services. Case managers could predict boys’ relapse correctly at intake 64.4% of the time.

**Appendix Table 6-1. Significance of 11 Client Characteristics in Classifying Girls' Re-offender Status**

Twelve Client Characteristics	F Statistic	Significance
12. Pre School & Community Involvement score	6.680	.011 ***
13. Pre Alcohol, Tobacco, & Drug Use score	5.222	.024 **
14. Pre Self-Deprecation score	2.667	.104 *
15. Pre Delinquency & Aggression score	2.475	.118 <sup>ns</sup>
16. Previously Successfully Completed YouthZone on SB94 Court Program	1.007	.317 <sup>ns</sup>
17. Pre Optimism & Problem Solving score	.570	.451 <sup>ns</sup>
18. Age in Years at Intake	.503	.479 <sup>ns</sup>
19. Trauma-Affected Youth - Above 85% on Trauma History	.070	.792 <sup>ns</sup>
20. Family Type (Living with both biological parents)	.059	.809 <sup>ns</sup>
21. Ethnicity	.052	.819 <sup>ns</sup>
22. Seriousness of Referral Offense (1=most serious, 6=least serious)	.017	.895 <sup>ns</sup>

<sup>1</sup>Statistical significance levels: <sup>ns</sup> = "not significant," \* = p <.10 "borderline significant," \*\* = p <.05 "significant," \*\*\* = p <.01 "highly significant" \*\*\*\* = p <.001 "very highly significant"

**Appendix Table 6-2. Significance of 11 Client Characteristics in Classifying Boys' Re-offender Status**

Twelve Client Characteristics	F Statistic	Significance
12. Pre School & Community Involvement score	10.397	.001 ***
13. Pre Alcohol, Tobacco, & Drug Use score	6.474	.011 ***
14. Family Type (Living with both biological parents)	6.272	.013 ***
15. Pre Delinquency & Aggression score	6.025	.015 **
16. Previously Successfully Completed YouthZone on SB94 Court Program	1.284	.258 <sup>ns</sup>
17. Pre Self-Deprecation Score	1.166	.281 <sup>ns</sup>
18. Trauma-Affected Youth - Above 85% on Trauma History	.541	.462 <sup>ns</sup>
19. Age in Years at Intake	.499	.480 <sup>ns</sup>
20. Seriousness of Referral Offense (1=most serious, 6=least serious)	.386	.535 <sup>ns</sup>
21. Ethnicity	0.246	.621 <sup>ns</sup>
22. Pre Optimism and Problem Solving Score	.208	.648 <sup>ns</sup>

<sup>1</sup>Statistical significance levels: <sup>ns</sup> = "not significant," \* = p <.10 "borderline significant," \*\* = p <.05 "significant," \*\*\* = p <.01 "highly significant" \*\*\*\* = p <.001 "very highly significant"

*Data Interpretation* These findings are very likely to be reliable and valid as they represent YouthZone experiences with hundreds of youths over three sampled years. Yet, this approach to predicting re-offending has limitations. Because predictions are matters of probability in groups, a prediction for any *individual* client may misclassify them as a potential re-offender. Across clients in a year, the findings above will be correct more often than

incorrect. However, misclassifications will occur. Some clients who become re-offenders will be missed. The disadvantage to clients of being misclassified is, however, small. A misclassified client may be engaged in more services than would otherwise have been recommended, though none would receive less than the typical client would.

Appendix Table 6-3 presents a valid approach to case manager assessment of a new client’s risk for re-offending during YouthZone services.

**Appendix Table 6-3. Client Re-offense Risk Assessment**

Client Characteristics	Male Clients		Female Clients	
	Not Likely to Re-offend	Likely to Re-offend	Not Likely to Re-offend	Likely to Re-offend
Pre School & Community Involvement Score	16 or Less	>16	15 or Less	>15
Pre Survey Alcohol, Tobacco, & Other Drug Score	20 or Less	>20	23 or Less	>23
Family Type	Living with both biological parents	Living in another family type	-	-
Pre Survey Delinquency & Aggression Score	15 or Less	>15	-	-

When a case manager is reviewing intake information for a male client referred with a legal offense, their *Pre-Screening* School, Drug and Alcohol, and Delinquency and Aggression scores are greater than 16, 20, and 15 respectively, and they are living in a family arrangement other than with both of their biological parents, there is a 60-70% chance they will reoffend before services have been completed. A similar re-offense risk assessment can be made for girls with the data in Appendix Table 6-3.

These results replicate other studies of recidivism among legal offenders. Personal background and the seriousness of offense do not usually assist case managers in deciding on the level of care – standard or enhanced – that should be provided. On the other hand, review of how clients assess their own their beliefs, attitudes, and experiences as compared to self-assessments by other clients can predict their future. For YouthZone clients at risk for reoffending, these results can be a guide also to prevention.

For boys and girls, interventions that raise school and community engagement and concurrently lower substance use have the greatest promise of supporting a sustained commitment to YouthZone programs.

## Appendix 7

### YouthZone Program Evaluation 2013

#### *Youth Marijuana Use*

#### **Adolescent Use of Marijuana**

The advocates for adults' right to use marijuana, health researchers, substance abuse treatment and prevention specialists, educators, social workers, and parents are all opposed to children and adolescents having access to marijuana. This consensus is driven primarily by the potentially adverse effects on youths' physical and mental health, social-emotional development, conduct, and learning. Nevertheless, marijuana use is present among middle and high school age boys and girls.

- The *Monitoring the Future Study* for 2012 reported that 30-day use nationally for 8<sup>th</sup> graders was 6.5%, 10<sup>th</sup> graders 17.0%, and 12<sup>th</sup> graders 22.9%
- The 2007 *National Survey on Drug Use and Health* determined that in Colorado 8.5% of youth 12-17 years had used marijuana once or more often in the past month; alcohol use by the same age group was 17.90%
- During the 2011 school year, administration of the *Healthy Kids Colorado Survey* found that 22.0% of high school students were using marijuana monthly or more often
- The Centers for Disease Control and Prevention administers the *Youth Risk Behavior Survey* where it was determined from a 2011 administration in Colorado that 22.0% of 8<sup>th</sup>-12<sup>th</sup> graders reported 30-day use
- Credible medical evidence is accumulating steadily to show that regular youth marijuana smoking has long-term consequences for brain functioning, included depressed intellectual development

Nationally and in Colorado, about one-in-five 8<sup>th</sup>-12<sup>th</sup> graders is a monthly or more often consumer of marijuana. In a classroom of 25 high school students, five will use regularly and of these, one to two will sometimes be under the influence during the school day. Surveys of youths themselves show also that their concerns about harms with consumption have declined and their sense of others disapproving of their use has diminished. From 2005 to 2011, before legalization, there were no significant changes in use. The positive angle on these statistics is that most, perhaps 60% of youth, have never used marijuana and view it as undesirable from both health and social risk perspectives.

#### **Marijuana Use as a Youth Risk Behavior**

Adolescent marijuana consumers have concomitant behaviors of great concern, according to findings from the *Healthy Kids Colorado Survey* 2011 report.

- Youth who were physically active every day used less marijuana
- Non-users were much more likely to report involvement in positive social/recreational activities
- Less use was found among youth with better nutritional habits
- Users earned lower grades in school than non-users did
- Youth who did not use marijuana were much less likely to drink alcohol or use alcohol to excess if they did drink
- Three times as many marijuana users reported current sexual activity as compared to youth who did not use

- Marijuana users more often report sad emotions and having thoughts of suicide

Whether marijuana causes these problems or the problems and marijuana use are both caused by another factor, there is no doubt that when an 8<sup>th</sup>-12<sup>th</sup> grader discloses monthly use, it is very likely that they are revealing a great deal about themselves that is of concern to those who care about them. Prevention-intervention strategy research shows that, because risk factors like marijuana use appear together with other behavioral risk factors, success with reducing one will decrease the adverse influence of other risk behaviors. The reverse of this conclusion is true also. Among the majority of youth, reinforcing non-use is a protective factor that will support their commitments to less harmful drinking, caution about sexual activity, and sustain a commitment to do well socially and in school. From the perspective of youth-serving organizations then, program attention to both risk reduction and protective factor enhancement through intervention with marijuana use is desirable.

### Marijuana Use and the 2013 YouthZone Evaluation

If marijuana use is a behavior risk indicator for health, school, and social development, its presence in YouthZone clients is cause for additional staff assessment. Accordingly, the 2013 evaluation studied information from clients who completed valid pre-*Screening* to learn more about marijuana users and those avoiding this drug.

*Prevalence of Marijuana Use among YouthZone Clients* When evaluation looked at all 885 clients who had completed at least the pre-*Screening*, it found their responses shown in Appendix Table 7-1.

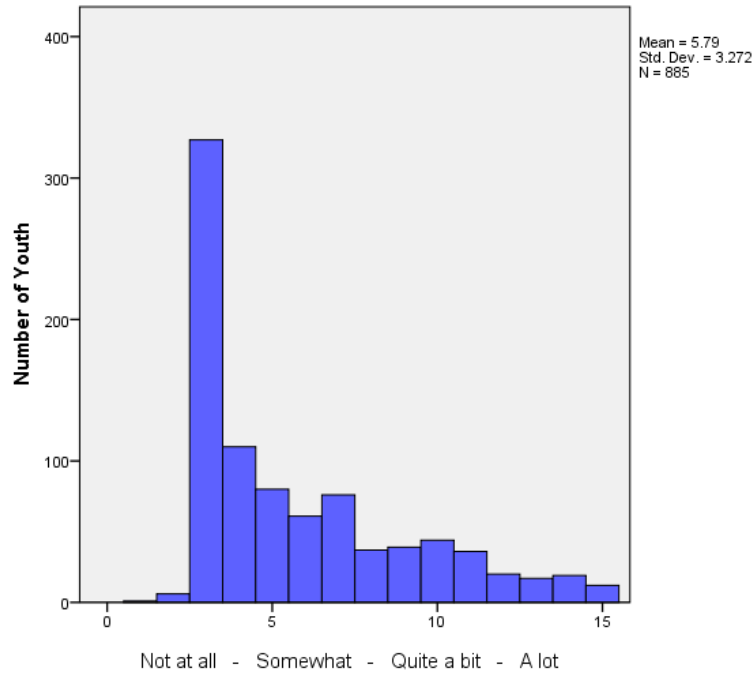
**Appendix Table 7-1. Client Responses: “How do you like to use marijuana?”**

Response Category	Frequency	Percent	Cumulative Percent
I do not use it	556	62.8	62.8
Just a puff or two	88	10.0	72.8
Enough to feel it a little	103	11.6	84.4
Enough to feel it a lot	52	5.9	90.3
Until I get really stoned	81	9.5	99.8
No answer	5	0.1	100.0
Total	885	100.0	

About two in three clients said they do not use, a percentage that is similar to survey results from other sources. As a risk/protective factor, marijuana use/non-use in the population of YouthZone clients is like that in middle and high school students in the catchment area at large. Accordingly, the findings in this evaluation are generalizable to other middle and high school youths in the area.

*Use and Acceptance of Marijuana* Marijuana use among children and youth is known to follow the social acceptance norms in their network of friends and the peers with whom they identify. Evaluation combined three *Screening* items to create an “Acceptance of Marijuana Use” score for each of the 885 pre-*Screening* clients. First, statistical analysis found that individual client responses were similar for these *Screening* items: “Thinking of your 4 best friends, in the past 12 months, how many have used marijuana?”, “How do you like to use marijuana?”, and “During the past 30 days, on how many days did you smoke marijuana?” (Varimax factor analysis yielded a single component.) Therefore, clients’ ratings on each item were added to yield a single number showing “Acceptance of Marijuana Use.” The distribution of Acceptance total scores is presented in Appendix Fig. 7-1.

**Appendix Fig. 7-1. Distribution of Client “Acceptance” of Marijuana Use**



Acceptance on the three-item scale correlated with the user statistics in Appendix Table 7-1. About 60% of enrolling youths said they did not use marijuana. Among occasional users, there was a declining endorsement of consumption, with full acceptance by clients who used once a month or more often.

*Client Characteristics and Marijuana Use* Evaluation divided the 885 enrolling clients who completed the pre-Screening into three groups: those Non-users, Occasional Users, and Regular Users, in order to understand better their backgrounds and possibly prepare case managers to recognize possible at-risk clients and to assist case managers with interpretation of the Screening scores.

Appendix Table 7-2 presents level of marijuana use by client characteristics. Statistical analysis found that boys and girls were equally likely to be Regular Users, that Regular Users were older than clients at the two other use levels, that they were much more likely to come from homes in which neither of their parents were present, and they were predominantly White clients. A greater proportion of Latino/Latina clients were Non-users.

**Appendix Table 7-2. Client Characteristics and Percent at Level of Marijuana Acceptance**

Client Characteristic		Non-Users	Occasional Users	Regular Users	Statistics
Sex	Male	58.7%	24.1%	17.2%	$\chi^2 = 0.34$ <sup>ns</sup>
	Female	60.4%	23.9%	15.7%	
Age	Years	$\bar{\chi} = 15.46$	$\bar{\chi} = 16.04$	$\bar{\chi} = 16.33$	$F = 20.74$ ****
Family Type	Living 2 Birth Parents	61.9%	25.6%	12.5%	$\chi^2 = 12.92$ ***
	Living Birth Parents Sep.	51.7%	37.9%	10.3%	
	Living with Others	57.6%	22.0%	20.4%	
Ethnicity	Latino	65.5%	19.8%	14.7%	$\chi^2 = 11.69$ ***
	Caucasian	53.4%	27.3%	19.2%	

<sup>1</sup> Statistical significance levels: <sup>ns</sup> = “not significant,” \* = p <.10, “borderline significant,” \*\* = p <.05 “significant,” \*\*\* = p <.01, “highly significant” \*\*\*\* = p < .001, “very highly significant”

*Correlates of Marijuana Use* National and state surveys find that marijuana use is a health risk behavior correlated with other risky actions. Whether this relationship exists for YouthZone clients was the next step in evaluation’s study of marijuana. In Appendix Table 7-3, evaluation compared responses to selected items by the three levels of Acceptance.

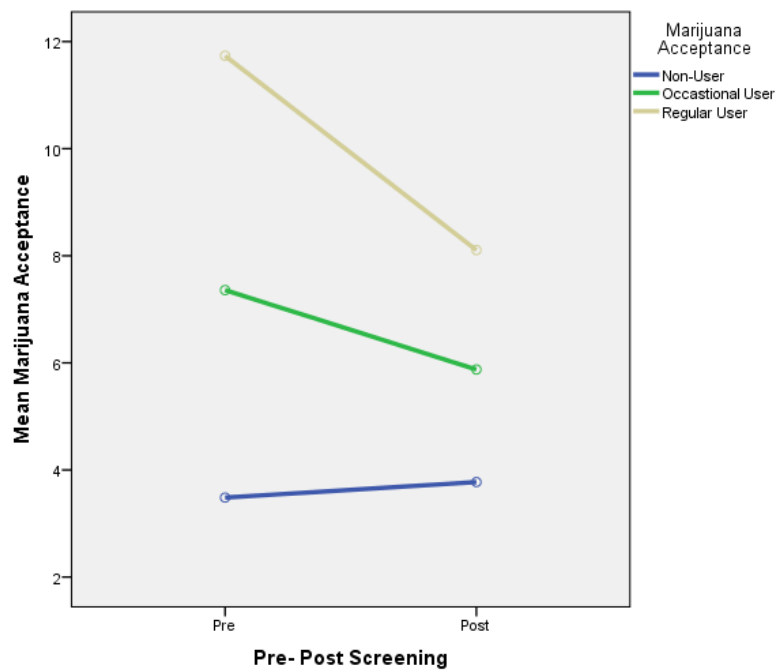
**Appendix Table 7-3. Screening Survey Item Responses and Level of Marijuana Acceptance**

YouthZone Screening Item	F
During the past 30 days, on how many days did you have at least one drink of alcohol	54.046
Have you ever had sexual contact with another person	49.487
During the past 3 months, about how many times did you skip or cut classes	36.788
I feel sad, blue, depressed, or down	24.970
In the past 3 months, I have attended community activities (clubs, sports, place or worship, or other group activities)	20.091
During the past 12 months, did you ever seriously consider attempting suicide	17.009
I help make decisions with my family	14.632
I feel good about myself	13.507
My grades on my last report card were:	13.133
I am happy to be at my school	11.208
I respect myself	10.894
I believe that I can reach the goals I set for myself	10.614
When I had a chance to get into trouble and I did, it was because I wanted to -- it seemed fun	9.175
In the school year, I have participated in school activities (sports, music, drama, and clubs)	7.377
In my life, there is a parent or some other adult who listens to me when I have something to say	7.350
I look forward to having a job or career	3.251

For each item in Appendix Table 7-3, Non-Users gave answers that were more favorable and Regular Users gave less favorable answers. *All differences* were statistically significant. These findings corroborate those of youth surveys conducted by other organizations in Colorado and nationally. Taken as a group, clients who are consuming marijuana once a month or more often, have favorable attitudes toward use and have peers who are users, are at risk for a very wide variety of other problems, including low self-esteem, depression, suicide, underachievement in school, and social isolation.

*Pre-Post-Screening about Marijuana* Evaluation’s Marijuana Acceptance measure is a useful indicator for comparing clients’ responses when they took their initial *Screening* and then when they answered items again at the time they left services. The composite Acceptance measure taps not only use, but also attitudes toward use and perceptions of peers’ use.

**Appendix Fig. 7-2. Change in Client “Marijuana Acceptance” Pre- Post-Screening**



The chart in Appendix Fig. 7-2 displays changes over time in client Acceptance. Non-Users did not change their position, Occasional Users increased their reluctance slightly, and Regular Users were significantly less favorable about use ( $F = 274.54, p < .000$ ). While these results are favorable from a harm/risk reduction perspective, Acceptance remains a concern as former Occasional- and Regular Users never approached the point of view and consumption represented by clients who were not marijuana consumers. Interventions that reduced these clients’ harm of use would be in keeping with concerns for their well-being shown in the section above on concomitant behaviors.



## Appendix 8

### YouthZone Program Evaluation 2013

#### *Trauma-Informed YouthZone Services*

#### **The Need for Trauma Screening**

Concern has been growing for years over the disproportionate number of youth receiving assistance for mental health, behavior, and legal problems who seem to have had traumatic experiences earlier in their lives. Now, there is the belief that youth-serving organizations of all types should screen youth for the likely cognitive-emotional sequels to trauma. If these appear, appropriate assessment and intervention could then be taken. This process – becoming “trauma informed” – promises to improve the match between youth client needs and the knowledge and skills of providers, resulting ultimately in benefits for youth and the strengthening organizations that serve them.

#### **Screening Tools**

The *YouthZone Screening for Positive Youth Development*® has been developed during the past 15 years as a method for initially screening youthful clients with school and legal adjustment problems to determine the best approach to supporting them and their families. The 60-item self-screening has received extensive item development, statistical analysis, and validation. Technical development has followed closely the clinical and case management experiences of screened clients. One of the questions raised for this tri-annual YouthZone program evaluation is whether the *Screening* has the potential to serve as a screening tool for youths’ trauma histories.

Self-screening inventories for trauma already exist. These tend to be complex and lengthy, not well-suited for the task of brief screening when large numbers of clients are being seen, most of whom will not have a history of significant trauma. Accordingly, the YouthZone evaluation for trauma screening narrowed its attention to a tool a) of 15 items or less (5 minutes administration time), b) that would be suitable for adolescents, and c) that would provide intake staff with the information they needed to recommend some youths for trauma assessment.

#### **The YouthZone Youth Survey as a Screening Tool**

Two options were used in determining which items in the existing *Screening* should be considered:

- *Clinical* Clinicians inspected *Screening* items and selected those they believe had the most promise for identifying youth who may require a full assessment for trauma experiences
- *Statistical* Youths’ answers to the *Screening* in statistical studies were studied to identify items potentially related to trauma

Evaluation used 621 valid *Screenings* in its statistical analysis. The process began with selecting one item with a high probability of tapping into a traumatic experience for a young person: “Has anyone ever touched you in a sexual way you did not want?” and correlated all other survey items for the sample with answers to this question. (“Correlation” compares numerical answers to a question with other questions and identifies when answers are close to one another.) Items with a significant correlation were then factor analyzed. (Factor analysis finds the groups of items that respondents tend to answer in a similar way and suggests the respondent attitudes or experiences that would result in these answers.) Results revealed four factors.

## Statistical Results for YouthZone Trauma Screening

The statistical results represent a mathematical answer to the question of which *Screening* items might be useful in identifying youth with trauma experiences. The clinical approach confirmed that the statistically selected items were nearly identical to those clinicians believed were sensitive to a trauma history. The combination of the two methods led to the final selection of items. Below are the four trauma scales with a description of each scale and the items included.

**1. “Dysphoria”** Dysphoria (semantically opposite of euphoria) is a clinically recognized mental and emotional condition in which a person experiences persistent and troubling feelings of depression, discontent, detachment, and in some cases indifference to the world around them. It is condition of broader scope than clinical “depression.”

Pre08. I feel good about myself

Pre18. I think I have a number of good qualities

Pre27. I believe that I can reach the goals I set for myself

Pre30. I have a place where I can go and feel safe

Pre31. I feel sad, blue, depressed, or down

Pre43. In my life, there is a parent or some other adult who listens to me when I have something to say

Pre44. I respect myself

**2. “Self-Destructive”** Self-destructive thoughts and behavior are about destructive acts addressed to the self. These emotions, plans, and acts concern self-inflicted harm or abuse toward oneself, often forming a pattern of behavior that can be deliberate, habit-forming, or impulsive and fatal.

Pre25. During the past 12 months, how many times has someone tried to hurt you by hitting, punching, or kicking you while on school property

Pre31. I feel sad, blue, depressed, or down

Pre38. During the past 12 months, did you ever seriously consider attempting suicide

Pre39. During the past 12 months, did you make a plan about how you would attempt suicide

**3. “Sexual Victimization”** Sexual victimization is the perception of an adolescent that they have been forced to submit to undesired sexual behavior by another person. Victimization covers *any* treatment by *any* adult toward the youth to stimulate either the adult or the child sexually.

Pre21. Has anyone ever touched you in a sexual way that you did not want

Pre24. I have been physically or verbally abused by an adult

Pre34. Have you ever been forced to have sexual contact

**4. “Parental Rejection”** Parental rejection refers to persistent negative treatment by a parent or other significant adult that disrupts normal parent-child attachment considered essential to children’s social, emotional, and cognitive development.

Pre24. I have been physically or verbally abused by an adult

Pre43. In my life, there is a parent or some other adult who listens to me when I have something to say

Pre46. My parents care about how I am doing in school

Application of the *YouthZone Trauma Screening Survey* is discussed in the following sections.

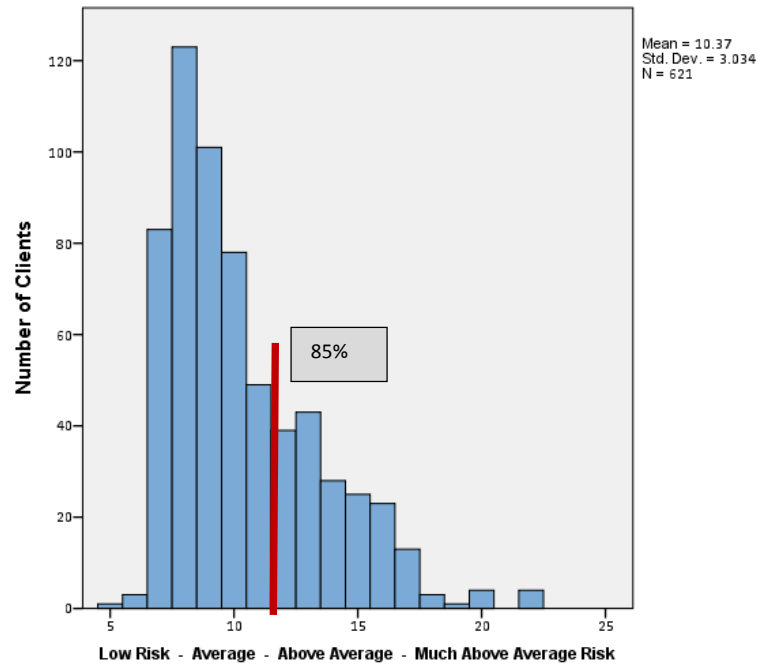
### Application of the YouthZone Trauma Screening Survey

To screen youth referred to YouthZone for possible earlier trauma will require both quantitative and clinical approaches. Case managers will rely on their interview and background information and can supplement these with the scoring methods below to identify youth at risk.

### Distribution of Youth’s Trauma Scale Scores

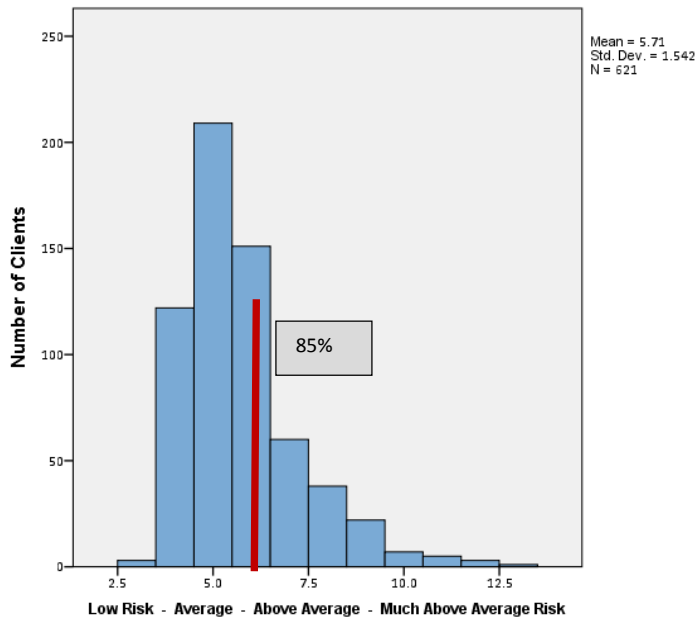
Appendix Fig. 8-1 shows how clients scored on the Dysphoria scale.

**Appendix Fig. 7-1. Client Risk for Traumatic Experience on the “Dysphoria” Scale**

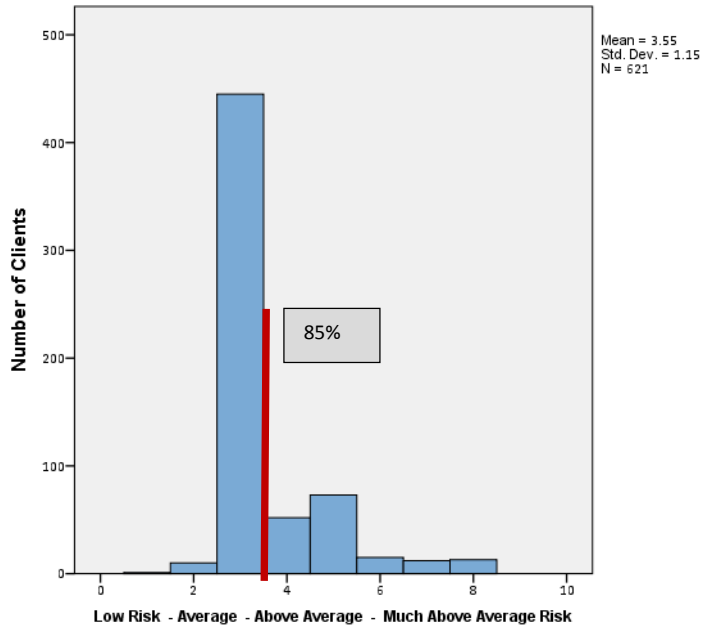


The red line is at the 85 percentile, showing a suggested “cutoff” above which clients may benefit from a clinical assessment of their history for potential traumatic experiences. Experience with these follow-up assessments will show how often trauma can be expected among youth in this “positive-screen” group. The 85<sup>th</sup> percentile cutoff will identify about 30 youth annually as a “high risk” for one form of trauma or another. If clinical assessment of most youth in this group is positive for trauma, then the cutoff number can be lowered. If half do not have a trauma history according to clinical assessment, then the cutoff number may be raised. Distributions and cutoffs for the three remaining trauma scales are presented in the following charts.

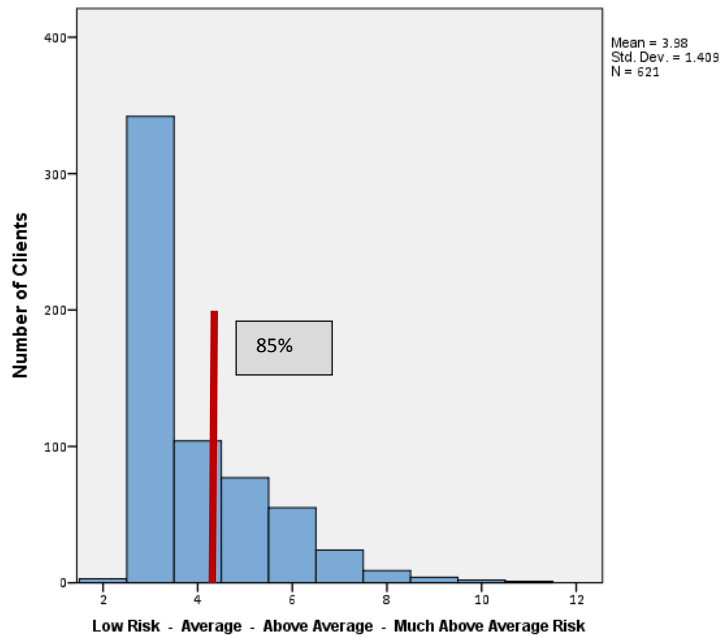
**Appendix Fig. 8-2. Client Risk for Traumatic Experience on the “Self-Destructive” Scale**



**Appendix Fig. 8-3. Client Risk for Traumatic Experience on the “Sexual Victimization” Scale**



**Appendix Fig. 8-4 Client Risk for Traumatic Experience on the “Parental Rejection” Scale**



If it is determined that trauma screening is a valuable addition to the YouthZone *Screening* process, it is recommended that trauma screening be done initially with temporary methods because the cost of modifying the online version of the YouthZone Screening for Positive Youth Development® is considerable.

**Demographics and Trauma**

Evaluation next studied the relationships between client characteristics and the four trauma scores. This table shows the results of statistical analyses on how client demographics vary within the four trauma scales.

**Appendix Table 8-1. Trauma Scales and Youth Demographics**

Demographic	Dysphoria	Self-Destructive	Sexual Victimization	Parental Rejection
Client age	Older youth reported this feeling of pessimism, detachment, and poor self-image more than younger clients	Older youth reported this feeling of self-injury more than younger clients	Client age was not a factor in reporting these experiences; youth of all ages were as likely to report them	Client age was not a factor in reporting these experiences; youth of all ages were as likely to report “Rejection”
Sex	Girls were more likely to have these feelings and self-assessments than boys were	Girls were more likely to have these feelings and self-assessments than boys were	Girls were more likely to report being victimized than were boys	Girls were more likely to report being rejected than were boys

Demographic	Dysphoria	Self-Destructive	Sexual Victimization	Parental Rejection
Family type	Youth living with both of their biological parents had the lowest level of these feelings; those living with separated/ divorced parents next; and those living in other arrangements the most “Dysphoria”	Family type was not related significantly to clients’ feelings on this scale, though there was a tendency for greater trauma to be present among youth not living with both parents	Youth living with both of their biological parents had the lowest level of these feelings; those living with separated/ divorced parents next; and those living in other arrangements the most “Victimization”	Youth living with both of their biological parents had the lowest level of these feelings; those living with separated/ divorced parents next; and those living in other arrangements the most “Rejection”

Results in this table are helpful because they alert case managers and clinicians to client characteristics that may influence trauma score interpretation. For example, a young boy from a two-parent home with a high Dysphoria score would be recognized as at *very* high risk for a history of trauma, much higher than for an older client, because a high Dysphoria score is so unusual for his age.

### Progress of Youth with Positive-Screen Trauma Scores

Professional activity with trauma assessment and intervention has intensified nationally because studies have shown a history of traumatic experiences to be more common among struggling youth. Whether trauma is a concern once a youth is enrolled in supportive services is unknown. Appendix Table 8-2 shows the progress of youth who had a “positive screen” for traumatic experiences as compared to those with a “negative screen” or limited or no history of trauma.

**Appendix Table 8-2. Positive Trauma Screen and Pre-Post Change on the YouthZone Screening for Positive Youth Development®**

YouthZone Screening Scale	Trauma Screening Score: Positive vs. Negative Screen
Alcohol, Tobacco, and Other Drug Use	<ul style="list-style-type: none"> <li>Youth who screened positive for a history of possible traumatic experiences reported significantly <i>higher levels</i> of substance use when they enrolled in YouthZone services. While both trauma groups (positive screen and negative screen) reduced their use an equivalent amount, positive screen clients were still reporting <i>more</i> substance use at the end of their YouthZone involvement.</li> </ul>
Optimism and Problem Solving	<ul style="list-style-type: none"> <li>At YouthZone enrollment, clients who had a positive trauma screen reported significantly <i>lower quality</i> problem solving and sense of self-efficacy than did negative screen clients. Positive screen clients did improve in these self-evaluations, and were still <i>below</i> the levels of the negative screen clients when they left the program.</li> </ul>
School and Community Involvement	<ul style="list-style-type: none"> <li>At YouthZone enrollment, clients who had a positive trauma screen reported significantly <i>lower school adjustment</i> than did negative screen clients. Positive screen clients did improve in these self-evaluations, but were still <i>below</i> the levels of the negative screen clients when they left the program.</li> </ul>

YouthZone Screening Scale	Trauma Screening Score: Positive vs. Negative Screen
Delinquency and Aggression	<ul style="list-style-type: none"> <li>▪ Youth who screened positive for a history of possible traumatic experiences reported significantly <i>higher levels of delinquency and aggression</i> when they enrolled in YouthZone services. While both trauma groups (positive screen and negative screen) reduced their delinquency attitudes and behavior, and positive screen youth reduced theirs' to a greater extent, positive screen clients were still reporting <i>more</i> of these qualities and behaviors at the end of their YouthZone involvement.</li> </ul>
Self-Deprecation	<ul style="list-style-type: none"> <li>▪ Clients who had a positive trauma screen reported significantly <i>poorer quality self-perceptions</i> than did negative screen clients. Positive screen clients did improve their self-perceptions while clients, but were still <i>below</i> the levels of the negative screen clients when they left YouthZone.</li> </ul>

The findings in Appendix Table 8-2 can be briefly summarized with the conclusion that trauma-affected youth have more serious problems at intake, tend to show greater improvement, but still have more problems than non-trauma affected youth at the time of their discharge.