# DIVISION OF CRIMINAL JUSTICE and JUVENILE JUSTICE AND DELINQUENCY PREVENTION COUNCIL IN COLORADO:

YOUTH CHARACTERISTICS AND PROGRAM OUTCOMES FOR FORMULA GRANTEES



Prepared by OMNI Institute July, 2008

Contact: Amanda J. Moreno, Ph.D. 303-839-9422 amoreno@omni.org

# Colorado Division of Criminal Justice and Juvenile Justice and Delinquency Prevention Council Youth Characteristics and Outcomes for Formula Grantees OMNI Institute July 2008

# **Table of Contents**

EXECUTIVE SUMMARY	1
BACKGROUND	3
DESCRIPTION OF THE PROJECT	3
PURPOSE AREA GOALS.	3
ORGANIZATION OF REPORT	4
RESULTS	5
CHARACTERISTICS OF PARTICIPANTS  At Intake: Aggregate Sample  At Intake: Purpose Area Specific.  During Program and at Exit: Aggregate Sample.  During Program and at Exit: Purpose Area Specific.	9 11
RELATIONSHIP BETWEEN YOUTH CHARACTERISTICS AND PROGRAM SUCCESS	20
RELATIONSHIP BETWEEN EXIT FACTORS AND PROGRAM SUCCESS:AGGREGATE	SAMPLE22
CONCLUSIONS	26
RECOMMENDATIONS	28
REFERENCES CITED	29

#### **EXECUTIVE SUMMARY**

Findings refer to the 1137 youth who exited their DCJ Formula programs between September of 2005 and January of 2008.

#### Participant Characteristics

- DCJ served approximately equal numbers of males (592) and females (545).
- DCJ served a large proportion of Latino youth (46.9%) followed by Whites (41.5%), followed by African-Americans (7.3%).
- 37% of youth were first-time offenders. 52% had between one and five prior offenses.

The better-than-average representation of females and minorities was due to the existence of the purpose areas designed to serve those populations.

#### Academic Profiles

- Although a large portion of DCJ youth started their programs with desirable academic profiles, these profiles became even better by program's end (≈75% desirable at intake; ≈90% desirable by exit).
- A closer look at the individual progress of the higher-risk youth with undesirable academic profiles at intake, indicated that close to 70% of these youth improved to the desirable status (actively attending, passing grades) by exit.

Academic issues are a strength for DCJ programs. A large majority of higher-risk DCJ youth were not only attending school by program's end, but doing so with passing grades.

#### Criminal Non-Compliance/Individual Plans

- A very small portion of DCJ youth (6% or less) were criminally non-compliant (e.g., failures to appear, reoffenses, probation violations) during their programs.
- Only 9% of youth who had an individual plan for program success did not successfully complete that plan.

#### Success

- A large portion of DCJ youth (82%) were deemed "successful" by DCJ program staff in completing their programs.
- In the analyses of associations between participant characteristics and success in DCJ programs, most of the variables typically thought to be associated with higher-risk status (e.g., indicators of abuse such as child welfare involvement, criminal histories) were NOT significantly associated with success in DCJ programs.

DCJ programs appear to be equally effective across the full range of youth served. Higher-risk status did not hurt youth's chances of being successful in their programs.

# 4 Factors Associated with Success in DCJ Programs

- Academic Profiles: Youth with failing grades or who were not actively attending school at intake were significantly less successful in DCJ programs than their peers with passing grades and who were actively attending. If these risk factors were present by program's end, the disparity in success was even stronger: 91% successful if actively attending at exit vs. 48% successful if in a school risk category (e.g, truant) at exit; 92% successful with passing grades at exit vs. 61% successful with failing grades at exit.
- Individual Plans: Having and completing individual plans were both important.
- Criminal Compliance During DCJ Programs: However, success and compliance did not match 100%. Non-compliance was not a guarantee of an inability to succeed in the program.
- **Referral to Mental Health Services**: This may indicate that youth in Mental Health programs who received more intensive mental health services benefited from those services.

#### Conclusions and Recommendations

- Build upon programs' strengths in the academic arena. Consider tracking additional academic factors such as coordination with schools.
- Include relevant variables on *all* purpose areas' intake/exit forms (e.g., age at first contact with the law, individual plan development and completion.)
- Connect with statewide databases at the aggregate level to collect recidivism data. Current data collection methods do not provide an accurate distinction between "no criminal activity" and "missing data".

# Colorado Division of Criminal Justice and Juvenile Justice and Delinquency Prevention Council Youth Characteristics and Outcomes for Formula Grantees OMNI Institute May 2008

The Colorado Division of Criminal Justice contracts with OMNI Institute for technical assistance and data collection. Data are collected on "Intake/Exit" forms, which track characteristics of youth, their crimes and criminal histories, their completion of their program, and academic performance. Until recently, OMNI has provided grantee-level summaries and frequencies of each variable collected on the forms, but has not provided any analyses of relationships between factors at the aggregate level. In 2007, OMNI and DCJ, on behalf of the Juvenile Justice and Delinquency Prevention Council, entered into an agreement that would allow OMNI to conduct in-depth analyses of youth participants in the three "Formula" purpose areas: "Help Mental Health and Cooccurring Crisis Intervention and Treatment Needs" (hereafter referred to as "Mental Health"); "Gender Specific Services" (hereafter referred to as "Gender"); and "Reduce Minority Over Representation in Juvenile Justice System" (hereafter referred to as "MOR"). This report is the result of those analyses.

Grantees are expected to deliver strength-based programs with clear and focused objectives. While programs may be designed to meet the needs of the local community, each purpose area has its own principles, overall goals and essential components that are specific to that purpose area. The goals and essential components are as follows:

#### MOR Goal:

- To address, and ultimately reduce, the disproportionate contact of minority youth with the juvenile justice system by:
  - o implementing plans to assist minority youth and their families in navigating the court process
  - o providing access to resources needed to successfully meet probation or supervision requirements, and to reduce the length of incarceration stays.

#### Gender Goal:

- To improve the rate of successful completion of diversion contracts, conditions of probation and dispositions set by the courts through effective, female-specific services.
- Services provided must adhere to the *Guidelines for Female Specific Programs* as developed by the Girls Equitable Treatment Coalition (http://dcj.state.co.us/ors/pdf/docs/girlsrpt.pdf).

#### Mental Health Goal:

- To divert youth with mental illness from the juvenile justice system through appropriate crisis intervention services and to increase the success of youth involved in the system who are not able to access mental health services due to financial limitations.
- Programs must screen for mental illness and Medicaid eligibility and assist in accessing services through community health and social service agencies.

At the beginning of the three year grant cycle, all of the agencies that were awarded funds were trained on the Colorado KIT database. Colorado KIT is a web-based reporting and evaluation

system that allows social service organizations to enter and report data about their programs, participants and service outcomes. As agencies added new staff members they were given the opportunity to be trained on the system through the offering of regular "new user" trainings. Trainings were made available on specific topics as well, including instruction on transition from one grant year to the next, to processes for documenting client satisfaction.

Ongoing technical assistance was provided through site visits, phone calls and web meetings as additional training and assistance became necessary. Grantees are provided with monthly and quarterly reports that detail both their participants' demographics and the number and hours of services provided to them. In addition, the reports advise grantees of the number of intake/exit forms that have been entered into Colorado KIT.

# Organization of this Report

Each of the three Formula purpose areas had slightly different Intake/Exit forms, with factors relevant to the funding stream only asked on that form. For example, for Mental Health, pre-existing mental health diagnosis is tracked and for Gender, sexual abuse and domestic violence are tracked. In this report, "Aggregate" sample or analyses refers to variables that were tracked on all three forms (e.g., school status) and therefore, the data for all purpose areas were combined. In some cases, analyses for variables are also presented broken down by purpose area. That is, for some of the most central variables (e.g., success in the DCJ program), it was important to know whether different profiles or results existed within the purpose areas, in addition to across all purpose areas.

The report begins with a presentation of participant characteristics at intake. First, variables that were tracked across all three purpose areas (e.g., gender, ethnicity, school status) are presented and next, variables tracked only within two or fewer purpose areas are presented.

Next, participant characteristics during the program (e.g., indicators of criminal compliance) and at exit are presented – first in the aggregate and then for variables tracked in two or fewer purpose areas.

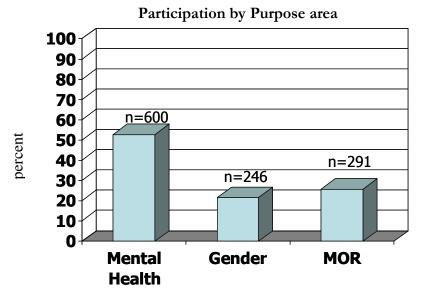
The next section presents analyses that examine the relationship between intake and exit factors. Primarily, the analyses examine the extent to which intake factors (e.g., gender, age, school status) were associated with program success. Two variables – school status and passing grades – were tracked at both intake and exit for all three purpose areas. Thus, we also present analyses on the change over time in these variables, providing an indicator of whether youth improved their academic profiles over the course of their DCJ programs.

Finally, we present analyses that examine the association between participant characteristics during the program and at exit, and success in the programs. These analyses provide insight into the correlates of program success (e.g., are re-offenses during the program associated with unsuccessful completion of the program?)

Also note that when data are collected in each fiscal year, some youth have not yet completed their programs. The data analyzed in this report include the 1137 youth who *completed* their program between September, 2005 and January, 2008.

#### **SECTION 1:**

# Participant Characteristics at Intake: Aggregate Sample



Mental Health had the largest number of participants, followed by MOR, and then Gender. Note that sample sizes will vary for all exit variables due to missing data.

#### Gender, Ethnicity, and Age ■ White ■ Black ■ Latino ■ Asian ■ AI ■ Other ■ Males ■ Females 100 100 90 80 80 **70** 70 60 50 percent 09 n=592 n=545 n=533 n=472 40 40 30 20 20 -83 n=8 n= 10 **Gender Ethnicity**

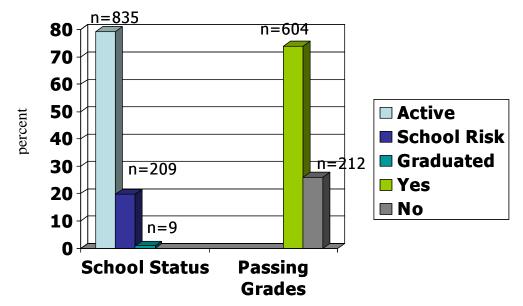
The average age of all participants was 15.60 years (SD = 1.67). Only sixteen youth were over the age of 18.

The aggregate sample contains a substantial portion of female youth (47.9%). Males are typically over-represented in juvenile justice populations and therefore, the relative equality of gender representation here is due to the existence of the all-female Gender purpose area. The male-female ratios in Mental Health and MOR were: 65-35, and 70-30, respectively. Research repeatedly shows that although there is overlap in the needs of male and female youth with criminal justice involvement, females have certain unique needs that may be best served by female-only programming (e.g., Veysey & Hamilton, 2007).

Latino participants comprise the largest ethnic group in the aggregate sample, followed by Whites. As with the Gender representation, the large Latino representation is due to the existence of the MOR purpose area, indicating that these specialized purpose areas are serving the intended populations. The representation of Latinos is 33% in Mental Health, 32% in Gender, and 88% in MOR. Minority overrepresentation continues to be a significant challenge in the juvenile justice system and intervention research indicates that programs with a focus on this issue (e.g., larger numbers of Spanish-speaking staff) may significantly reduce the risk of future criminal system involvement for these youth (Cabaniss, Frabutt, Kendrick & Arbuckle, 2007).

#### School Status and Passing Grades at Intake

Academic variables are tracked in the DCJ programs for good reason: the preponderance of evidence in the juvenile justice literature indicates that increased involvement and success in school serves both a preventative and curative function with respect to juvenile delinquency and criminal behavior (Katsiyannis, Ryan, Zhang & Spann, 2008). In particular, increasing success in academic factors seems to significantly reduce the risk for recidivism (Gavazzi, Yarcheck, Sullivan, Jones & Khurana, 2008).



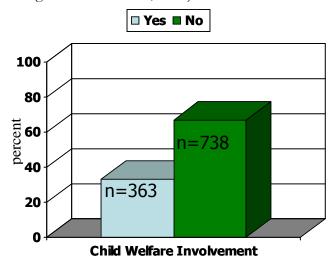
For school status categorizations, several of the response categories on the Intake/Exit form were collapsed to form the category "School Risk". The collapsed response choices were: Truant, Suspended, Drop Out, and Expelled. Actively Attending and Pursuing GED were collapsed to create the "Active" category. 79.3% of the sample was actively attending school at intake, and 19.8% fell into one of the school risk categories.

The passing grades data displayed above include the subset of youth who were attending a school program and whose grades were known. The proportion of youth with passing grades at intake was 74% and the proportion with failing grades was 26%.

In sum, approximately three-quarters of the sample demonstrated an adequate academic profile at intake, both in terms of actively attending school and having passing grades.

#### Child Welfare Involvement

As with academic success, risks associated with child abuse and neglect are important to track in DCJ programs because of their documented association with juvenile delinquency and justice system involvement (Stewart, Livingston & Dennison, 2008).



33% of the sample was identified as having involvement with the child welfare system at intake.

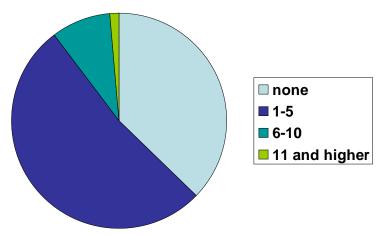
# Juvenile Justice Involvement

This intake question asks the level and type of the youth's current involvement in the juvenile justice system. The numbers total more than the full sample size because more than one category might have applied.

Type of Current Juvenile Justice Involvement	Number of Youth
None	162
Pre-adjudicated (arrest/summons)	587
Pre-trial Detention	18
Diversion/Informal Adjustment	142
Committed to DYC	3
Sentenced – Out of home placement	31
Probation	312
Sentenced Detention	48
DYC Parole	5

#### **Number of Prior Arrests**

This variable was only tracked for Mental Health and Gender and therefore the data below does not include MOR participants.



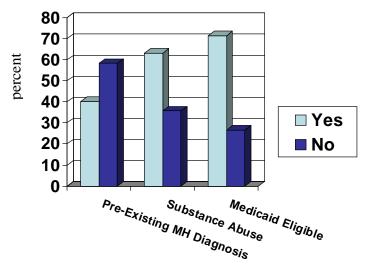
For 37.3% of the sample, the "referring arrest" appears to be the first arrest, whereas an additional 52.3% of the sample had a history of between one and five prior arrests. As expected, only a small minority of the sample had six or more prior arrests.

#### **SECTION 2:**

# Participant Characteristics at Intake: Purpose Area Specific

#### Mental Health

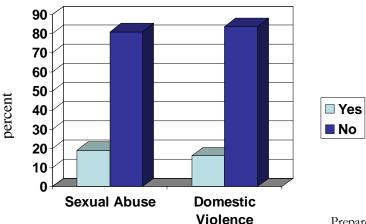
Mental health issues and substance abuse are well-known risk factors for juvenile delinquent and criminal behavior as well as recidivist behavior (Sullivan, Veysey, Hamilton & Grillo, 2007). Most importantly, programs with a specific focus on mental health and substance abuse have been shown to be effective in reducing recidivism (Cocazza et al., 2005; Cuellar, McReynolds & Wasserman, 2006).



Approximately 40% of the 600 youth in the Mental Health purpose area entered their programs with a pre-existing mental health diagnosis and a large majority (63.2%) entered with substance abuse problems. 73.5% of youth were Medicaid eligible.

#### Gender

As discussed above, child abuse in general is a predictor of juvenile delinquency and criminality. Studies show that rates of sexual abuse are also higher among criminally involved populations, particularly for females (Raj et al., 2008) and that sexual abuse in particular is highly correlated with criminal activity in adolescent females (Vesey & Hamilton, 2007).



Prepared by OMNI Institute

45 out of 236 girls reported having a history of sexual abuse and 39 out of 241 girls reported having a history of domestic violence. 20 girls are duplicated in the abuse types, that is, they reported having a history of both types of abuse.

#### **MOR**

Note: The only participant characteristic tracked exclusively in MOR is whether program attendance was mandatory. Program attendance was mandatory for all participants in Gender, and was not tracked in Mental Health.

Program attendance was mandatory for 16%, or 43 out of the 269 MOR participants with available data for this variable.

#### **SECTION 3:**

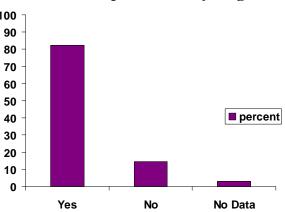
# Participant Characteristics During Program and at Exit

# Success and Compliance During the Program

# **Completed Court-Ordered Sanctions**

#### 

# Successful Completion of DCJ Program



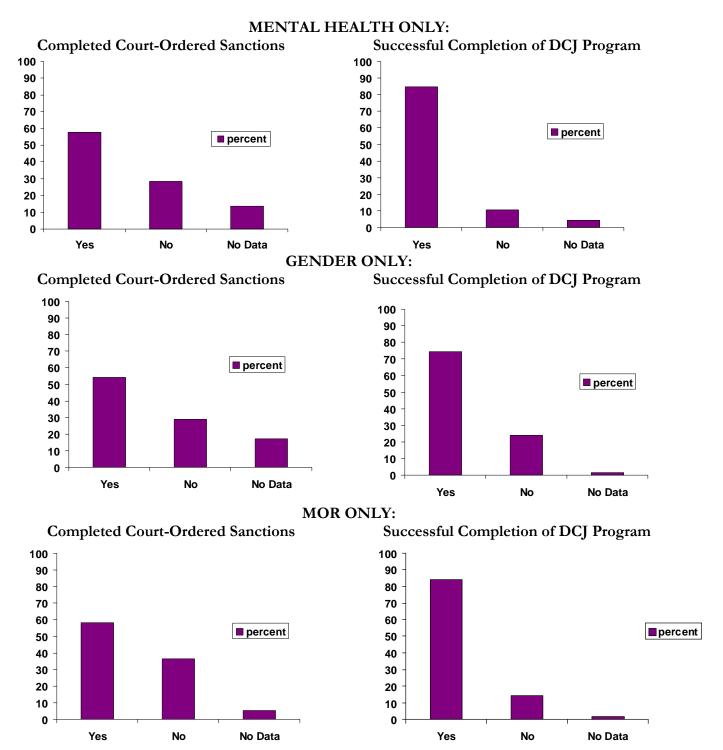
Success in Formula programs was determined by program administrators. 82.3%, or 936 youth were categorized as having completed their program successfully, and 14.5%, or 165 youth were categorized as unsuccessful.

Far fewer youth, although still a majority (57.2%, 650 youth) completed all their court-ordered sanctions.

This indicates that factors other than the completion of court-ordered sanctions are weighed by program administrators when they determine whether a participant was overall successful or not. 21% (238 youth) were categorized as successful despite not having completed their court-ordered sanctions.

The above data represent all three purpose areas combined. The next set of graphs presents completion of court-ordered sanctions and successful completion of DCJ programs by purpose area separately.

# Success and Compliance During the Program for Each Purpose area



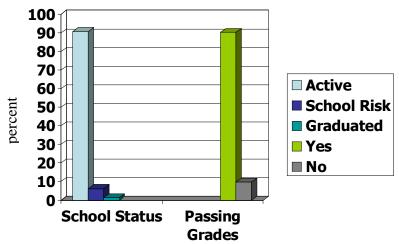
As shown above, two separate indicators of youth's performance during DCJ programs were very similar across purpose areas. For clarity, the percentages and actual frequencies represented in the purple bar graphs above are summarized in the tables below:

Completed Court-Ordered Sanctions			
%	Mental Gender MO		MOR
(frequency)	Health		
Yes	57.8	54.1	58.4
	(347)	(133)	(170)
No	28.5	28.9	36.4
	(171)	(71)	(106)
No Data	13.7	17.1	5.2
	(82)	(42)	(15)

Successful Completion of DCJ Program			
%	Mental	Mental Gender Mo	
(frequency)	Health		
Yes	84.8	74.4	83.8
	(509)	(183)	(244)
No	10.7	24.0	14.4
	(64)	(59)	(42)
No Data	4.5	1.6	1.7
	(27)	(4)	(5)

In sum, the purpose areas had similar rates of successful completion of court-ordered sanctions as well as successful completion of the DCJ program.

# School Status and Passing Grades at Exit



School status improved by program exit (see p. 4 for intake data). The number of Active and Graduated Youth increased and the number of youth categorized as School Risk decreased.

The same is true for participants' grades. Once "n/a" responses are discounted, the proportion of participants with passing grades by exit was 90% (671 youth) and only 9.7% (72 youth) had failing grades by the end of their DCJ programs.

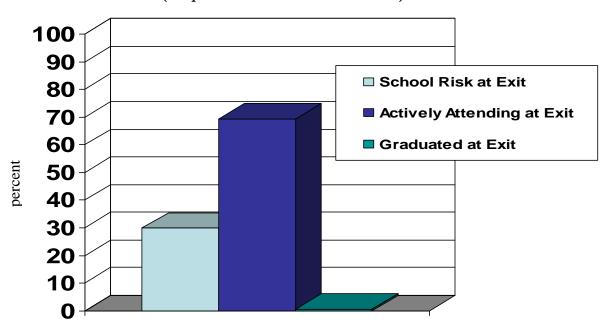
Thus, on the group-level, the DCJ youth started out with relatively good academic standing, i.e., approximately 75% Actively Attending and Passing Grades, and academic standing improved even more by program exit, i.e., approximately 90% Actively Attending and Passing Grades

Cross-tabulations of the intake and exit counts for each of these variables confirms the improvement over time *on an individual level*. The graphs below depict the change from intake to exit of these two important indicators of DCJ youths' academic profiles during their programs.

# Individual-Level Change from Intake to Exit in Academic Standing

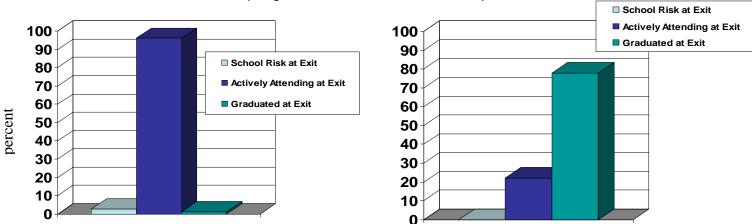
#### **School Status**

# Youth Who Were in SCHOOL RISK Category at Intake (Graph indicates their status at exit)



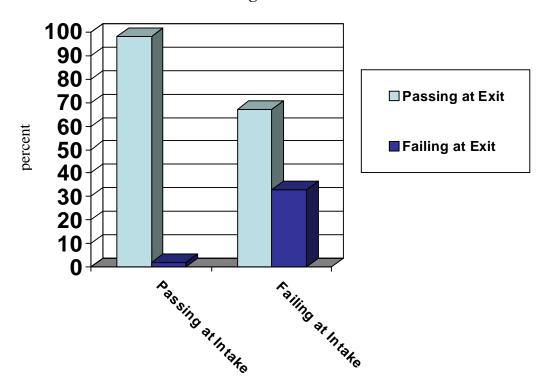
Thus, for school status, of the youth who started out in the School Risk category (147 youth), which is presumably the group to be most concerned about, 69.4% of them (102 youth) had improved to the Active category by program exit (the dark blue bar).

Youth Who Were Actively Attending at Intake Youth Who Had Graduated at Intake (Graphs indicate their status at exit)



Youth who started out actively attending or having graduated, as expected, overwhelmingly remained in those same categories by exit (dark blue bar and teal bar, respectively).

#### **Passing Grades**



In the above graph, both groups of youth – those who were passing at intake and those who were failing at intake – are included.

As shown, of the 152 youth who present the greater concern — those who were failing at intake (on the right) - 67.1% (102 youth) of them had passing grades by exit (light blue bar).

In sum, for both school status and grades, the overwhelming majority of youth had desirable profiles at both intake and exit (79% and 75%, respectively).

The key finding with respect to assessing the potential impact of DCJ programs on participants was that for both variables, of the youth who were in a risk category at intake, more than 2/3 had the desirable standing by exit -69.4% for School Status and 67.1% for Passing Grades.

The intake-exit change in these academic variables was re-analyzed by purpose area (section below). In each case, the box that is highlighted in yellow indicates the group that started out in the high-risk category (School Risk or Failing Grades), to assess their standing by exit.

# Individual Change from Intake to Exit in Academic Standing for Each Purpose area

Mental Health Only

Wichtai IICa				
	School Status			
%	School	Actively	Graduated	
(frequency)	Risk	Attending	Exit	
	Exit	Exit		
School	24.4	74.4	1.1	
Risk Intake	(22)	(67)	(1)	
Actively	1.7	98.3	0.0	
Attending	(7)	(409)	(0)	
Intake				
Graduated	0.0	0.0	100	
Intake	(0)	(0)	(2)	

Passing Grades			
%	Passing	Failing	
(frequency)	Exit	Exit	
Passing	99.7	.3	
Intake	(302)	(1)	
Failing	66.7	33.3	
Intake	(42)	(21)	
		. ,	

**Gender Only** 

0011001				
	School Status			
%	School	Actively	Graduated	
(frequency)	Risk	Attending	Exit	
	Exit	Exit		
School	24.0	76.0	0.0	
Risk Intake	(6)	(19)	(0)	
	. ,	` /	,	
Actively	1.6	95.3	3.1	
Attending	(3)	(182)	(6)	
Intake				
Graduated	0.0	50.0	50.0	
Intake	(0)	(2)	(2)	

Passing Grades			
%	Passing	Failing	
(frequency)	Exit	Exit	
Passing	96.0	4.0	
Intake	(143)	(6)	
	` '	` ,	
Failing	65.5	34.5	
Intake	(19)	(10)	

**MOR Only** 

School Status			
%	School	Actively	Graduated
(frequency)	Risk	Attending	Exit
	Exit	Exit	
School	50.0	50.0	0.0
Risk Intake	(16)	(16)	(0)
Actively	8.5	89.7	1.7
Attending	(10)	(405)	(2)
Intake			
Graduated	0.0	0.0	100
Intake	(0)	(0)	(3)

Passing Grades			
% (frequency)	Passing Exit	Failing Exit	
Passing Intake	95.1 (58)	4.9 (3)	
Failing Intake	68.3 (41)	31.7 (19)	

The results are similar for all three purpose areas, and echo the aggregate results discussed on pages 11-12. Generally speaking, the largest group of youth is the one that had a desirable status at both intake and exit for both school status (actively attending) and grades (passing). Also similar to the aggregate results, the next largest group for all three purpose areas – the boxes that are highlighted in yellow - was the group that improved their status over the course of the DCJ program (School Risk to Actively Attending or Failing to Passing).

One result stands out as somewhat dissimilar from the other purpose areas: While Mental Health and Gender had greater than 2/3 of their youth who started out in School Risk improve to Actively Attending, MOR had an equal proportion improve to Actively Attending and remain in School Risk. This finding cannot be interpreted to mean that MOR was less effective with respect to school outcomes for two main reasons. First, the sample sizes in each of the cells is small (16 and 16 in the improved and remained in School Risk categories). Second, the other variable assessing academic standing – passing grades – demonstrated an equal or better improvement than the other two purpose areas (68.3% changed from failing to passing in MOR; the same results for Mental Health and Gender, respectively, were 66.7% and 65.5%). More research is needed to determine whether this slight difference is replicable and if so, what might be the underlying reasons.

#### Criminal Compliance During the Program

	Failures to Appear	Reoffenses	Probation Violations	Probation Revocations
				(New Charge)
Yes	29	48	67	37
No	1096	1085	1055	1082

For each measure of criminal compliance during Formula programs, 94% or more of the participants were compliant.

#### Individual Plans: Development, Completion, and Disposition

Note: These variables were not tracked on the Gender forms. Thus, these data refer to 891 total participants.

In the Mental Health and MOR programs, 636 youth (71.4%) had an individual plan that they also completed successfully. Out of those who did develop a plan, 66, or 9.3% did not complete that plan. 123 youth (13.8%) did not complete an individual plan.

As noted, disposition data were not collected for Gender. In addition, 124 MOR or Mental Health participants had missing data for this variable. Therefore, the disposition results below are for the remaining 767 youth in MOR and Mental Health programs. Also note, the numbers below total somewhat more than 767 because some youth received multiple dispositions (e.g., probation and community service).

Disposition	Number of Youth
Dismissed	48
Fines	9
Diversion	51
Probation	403
Restitution	3
Deferred	31
Committed	23
Community Service	14
Restorative Justice	7
Other	211

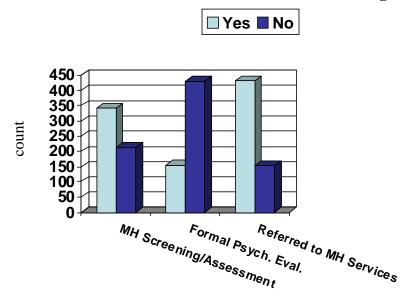
Probation was by far the most common disposition. Given that the next most common type was "other", it may be worth examining whether more common/useful categories should be added to the form.

#### **SECTION 4:**

# Participant Characteristics During the Program and at Exit: Purpose Area Specific

This section will refer to the 258 participants in Mental Health programs only, because the other two program types do not have any additional factors tracked exclusively. That is, all characteristics during the program and at exit for Gender and MOR were reported in the previous section on those variables in the aggregate sample.

# Mental Health Services Received in Mental Health Programs



A larger proportion (71.8%) of youth were referred to mental health services than entered with a diagnosis or were given a mental health screening. It is expected that a small proportion (25.8%) of participants would have received the more serious formal psychiatric evaluation compared to the proportion that received the more basic mental health assessment (56.8%)

#### **SECTION 5:**

# Relationship between Youth Characteristics and Program Success

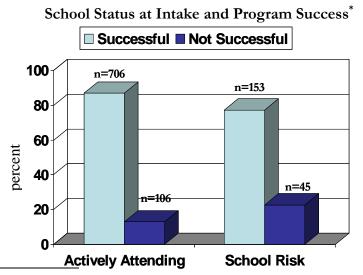
The large majority of characteristics assessed were not substantial correlates of successful completion of DCJ programs. The following factors were examined in relation to program success and NO relationship was found:

- Gender
- Ethnicity
- Child Welfare Involvement
- Age
- Number of Prior Arrests
- Sexual abuse
- Domestic violence
- Whether or not program attendance was mandatory
- Medicaid eligibility
- Pre-existing mental health diagnosis

These findings may indicate that all youth, regardless of indicators of higher-risk status (e.g., abuse history, lower SES as in Medicaid eligibility) had an equal chance of succeeding in their DCJ programs.

Substance abuse, which was measured in the Mental Health purpose area, was marginally related to program success in the opposite direction of expectations. That is, there was a slight tendency for those with a substance abuse history to be more successful in their program (91% vs. 85%). This is likely due to another correlation with an unmeasured variable. For example, if having a history of substance abuse is associated with receiving more intensive services, it could be that the intensity of services caused the greater success, and not the history of substance abuse.

Conversely, the two indicators of academic profile, school status and passing grades, were strong correlates of program success.

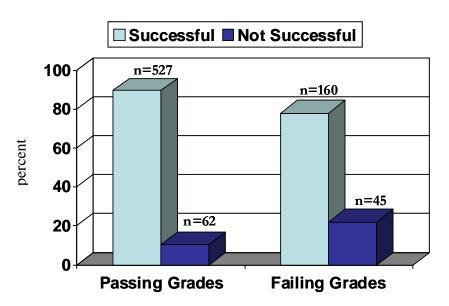


<sup>\*</sup> The "graduated" group was removed from these analyses since the subgroup sample size (n=9) was too small to justify comparisons of relative proportions.

Since a large majority of the overall sample was deemed Successful (82.3%, see p. 11), any examination of success in a sub-sample will also reveal a majority of successful completions. Thus, what is important in these analyses is the *relative* level of success across the groups.

In the graph on the previous page, the "Successful" bar is shorter and the "Not Successful" bar is taller in the "School Risk" group. While a large proportion of the "School Risk" group was Successful (77%), this level was significantly lower than the Actively Attending group, which was 86.9% successful. Thus, it is encouraging that such a large proportion of a high-risk group was successful, and at the same time, there is clear evidence that their "presenting" risk did affect their chances of success.

# Grades at Intake and Program Success



Similar to the results for School Status, passing grades appears to be a significant protective factor for success in DCJ programs. While 89% of those with passing grades were successful, 78% of those with failing grades were successful.

#### **SECTION 6:**

# Relationship between Exit Factors and Program Success: Aggregate Sample

A high degree of association between program success and exit factors is to be expected, to some degree, since they are assessed concurrently. That is, variables are more likely to be correlated when they are assessed at the same time (both at program exit) vs. when they are separated in time (one at intake and one at exit).

Another reason to expect a high degree of association between exit factors and success is that it may be these very factors that are weighed by program staff when making the decision to categorize youth as successful or not successful. For example, if a participant has failed to appear at a court date during the program, that may be what causes the program administrator to categorize that youth as not successful, despite having technically completed the program. Therefore, the associations at exit might be more accurately thought of as correlations than predictions.

# Criminal Compliance During the Program and Success

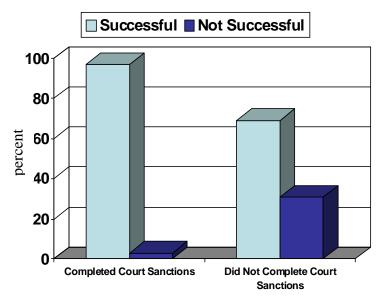
In keeping with this idea, it makes sense that all indicators of criminal compliance during the program were significantly associated with program success:

- FTA's
- Reoffenses
- Probation Violations
- Probation Revocations
- Completed Court Sanctions

	Successful Group	Not Successful	p-value
	Mean	Group Mean	
Number of FTA's	.01	.14	.01*
Number of Reoffenses	.03	.19	.00*
Number of Probation Violations	.05	.63	.02*
Number of Probation Revocations	.02	.15	.00*

As shown above, every mean is less than 1, which is consistent with the earlier finding that greater than 90% of the sample was criminally compliant during the program, and would therefore have had a value of zero for each of the variables. Nonetheless, the results indicate that despite the low degree of variance in criminal compliance, there is a small, but statistically significant tendency for criminal non-compliance to be correlated with the program's assessment of youth as not successful in the program.

# **Completed Court Sanctions and Success**

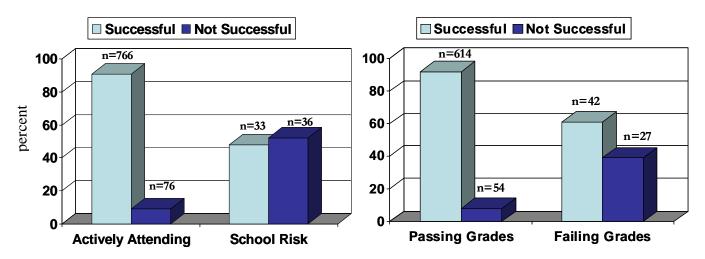


Similarly, the results for the completion of court sanctions revealed that 97% of those who completed their court sanctions were called successful (625 out of 644 youth), whereas only 69% of those who did not complete their court sanctions were called successful (238 out of 344 youth).

In sum, indicators of criminal compliance during DCJ programs likely play a role in staff's determination that a youth was successful or not successful in the program. However, these are not the only factor that staff use, since a majority of youth who committed crimes or were non-compliant were still categorized as successful in their programs. Thus, criminal non-compliance was a risk factor but did not preclude the possibility of success in DCJ programs.

#### School Status and Passing Grades at Exit and Success

The association between academic profiles and success was even more strong at exit that it was at intake.

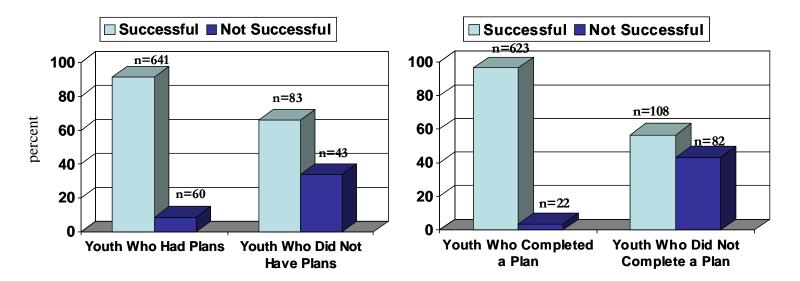


Recall that nearly 70% of those students who had undesirable academic profiles at intake improved to a desirable status by exit. Therefore, it stands to reason that the small proportion of youth who were struggling academically even after attending a DCJ program would have been less successful participants.

As shown above, being in the School Risk category at exit was strongly associated with lack of success in the program. In fact, this is the only result for which the proportion of youth in the Not Successful category is actually larger than the proportion in the Successful category (52% vs. 48%). Similarly, those youth with failing grades by exit are less likely to be successful than those youth with passing grades (61% successful with failing grades at exit vs. 92% successful with passing grades at exit).

#### **Individual Plans: Development and Completion**

The results below apply only to the MOR and Mental Health purpose areas since Gender does not track individual plan development or completion.



It makes sense that the successful *completion* of an individual plan would be virtually perfectly correlated with program success. Therefore, it is not surprising that the graph on the right above displays 97% of youth who successfully completed their individual plans were also categorized as successfully completing their DCJ program. However, note that the converse is not true: slightly more than half of those who did not complete their plans (56.8%) nonetheless were deemed to be successful in their programs.

However, the significant association between the *having* an individual plan and program success is an interesting potential indicator of program effectiveness. 91% of youth who had an individual plan were successful whereas only 66% of youth who did not have an individual plan were successful. The lack of plan *development* may contribute uniquely to being unsuccessful in the program if it means that there is less structure and less goal-direction during the youth's time in DCJ services. Thus, it appears that plan development is helpful and may be worthy of consideration as a required element of program participation.

Finally, with respect to exit factors and success, the only purpose area with exit factors specific to it is Mental Health. Those factors are: Mental Health Screening, Formal Psychological/Psychiatric Evaluation, and Referred for Further Mental Health Services.

Neither type of mental health assessment (less or more formal/serious) was significantly associated with program success in Mental Health programs.

However, there was a small but statistically significant tendency for those who had been referred to mental health services to be more successful in their program than those who were not referred (91% vs. 82%, p = .00). This could indicate that youth who received more intensive mental health services benefited from those services.

#### **SECTION 7:**

# **Summary and Conclusions**

The purpose of this report was to describe a new analytical project untaken to describe aggregate-level findings of the "Formula" grantees of the Division of Criminal Justice, Juvenile Justice and Delinquency Prevention Council in Colorado. The "Formula" funding source through DCJ funds three purpose areas: Mental Health, Gender (female-only programming) and Minority Overrepresentation (MOR). The findings in this report refer to the 1137 youth who exited their DCJ Formula programs between September, 2005 and January, 2008.

DCJ Formula programs served approximately equal numbers of males and females and a large proportion of Latino youth (46.9%). In both cases, this impressive representation of typically underserved populations was a result of the existence of purpose area programming designed to specifically increase services for those populations. Gender programming is female only; the malefemale ratios in the other two purpose areas were 65-35 and 70-30 in Mental Health and MOR, respectively. The representation of Latinos in the MOR purpose area was 88%, whereas Latino representation in the other two purpose areas was 33% and 32% in Mental Health and Gender, respectively. Although mental health factors were not tracked in the other two purpose areas, youth served in Mental Health programs had much higher levels of pre-existing mental health conditions (over 40%) and substance abuse (over 60%) than the general population. Thus, it appears that all three purpose areas are indeed serving the special populations that they were specifically designed to target.

Youth in DCJ programs were not severely recidivist offenders: 37% of youth were first-time offenders and 52% had between one and five prior offenses. We suspect that the overwhelming majority of the 52% had only one prior offense, but this cannot be a definitive conclusion given the way the data were collected. Changes are already underway on the intake/exit forms that would allow a finer-grained analysis of criminal history.

The academic profile variables (School Status and Grades), which were collected at both intake and exit for all three purpose areas, provided useful information and appeared to be a source of strength for programs' effectiveness. On the group level, approximately 75% of youth started their DCJ programs with desirable academic standing, i.e., they were actively attending school and had passing grades. At programs' end, approximately 90% of the group displayed these desirable outcomes.

An examination of individual-level change in the academic profile variables confirmed that these findings were evidence of program impact, and not merely a result of higher-functioning youth being available at exit (or of lower-functioning youth dropping out). That is, of the subgroup of youth with a high-risk academic profile (School Risk or Failing Grades) at intake, nearly 70% of them had individually moved to the desirable status (Actively Attending or Passing Grades) by exit. The fact this was true not just for attendance in school itself but for actually achieving satisfactory grades in school lends credibility to the strength of these positive findings over the course of DCJ programs.

The academic variables also proved to be some of the strongest correlates of successful completion of DCJ programs. Being in school risk status or having failing grades at intake significantly decreased a youth's chances that s/he would be successful in the DCJ program: 86% of those who

were actively attending school and 90% of those with passing grades at intake were successful completers of their programs. In contrast, success rates were 77% for youth in the School Risk category and 78% for youth with failing grades at intake. This indicates that higher-risk academic profiles at intake were a liability in DCJ programs, but did not preclude chances of success. High-risk academic status at exit was an even greater liability for successful completion. When youth were in a high-risk group *after* attending a DCJ program, success rates were dramatically reduced: There was a 47% success rate for youth who finished the DCJ program in the School Risk category vs. greater than 90% success in the other two groups, and a 61% success rate for youth who finished the DCJ program with failing grades vs. greater than 90% success for youth with passing grades at exit. In sum, academic variables appeared to have relevance for DCJ youth's ability to successfully complete their programs and in turn, DCJ programs appeared to be effective in positively impacting these important factors.

All other potential correlates of success in DCJ programs were examined, and the majority demonstrated no significant relationship with success. Variables typically thought to be indicative of higher-risk status such as having an abuse history or having a worse criminal record did not appear to hurt a youth's chances of successfully completing the DCJ program. Said differently, DCJ programs appear to be equally effective across the full range of youth they serve.

However, in addition to the academic variables, three other factors did emerge as significantly associated with successful completion of the DCJ program: Having and completing individual plans, criminal compliance during DCJ programs, and being referred for additional mental health services.

Completing an individual plan is probably an automatic correlate of program success since it likely weighs heavily in the program staff's decision to categorize a youth as successful. However, it is interesting that just *having* an individual plan is a strong correlate of program success as well: 91% of youth who had a plan (independent of whether they completed it) were successful whereas 66% of youth who did not have plans were successful. This may indicate that the structure, direction, and explicit agreement provided by a plan help set youth up for success.

Rates of criminal non-compliance during DCJ programs were extremely low across all indicators (6% or less). Nonetheless, it is to be expected that the small portion of youth who did commit new crimes or didn't comply with probation, would be less likely to be called successful completers by program staff. Although all indicators of criminal non-compliance were significantly related with success in the expected direction, the correlation was not 100%. That is, criminal non-compliance did not guarantee that a youth could not go on to succeed, indicating that program staff took other factors into account. Perhaps the non-compliance was a technicality, or occurred early enough in the program that youth had a chance to demonstrate better performance. In sum, criminal activity during DCJ programs was extremely minimal, and although it was associated with a lower successful completion rate, it did not preclude a youth from succeeding by program's end.

Finally, youth in the Mental Health purpose area who were referred for additional metal health services were more likely to be successful in their programs than youth who were not referred for additional services (91% vs. 82%). This may indicate that youth who needed and received additional mental health services benefitted from those services.

#### **SECTION 8:**

# Future Directions and Recommendations

- Include relevant factors on all Intake/Exit forms
  - o Individual Plan development and completion
  - o Age at first contact with the law
  - O Add categories to "successful completion" question so program staff can track reasons why, e.g., "non-compliant with plan", "continuing in program", "moved out of area"
  - O Add more common categories to "Disposition" question to avoid so many "Other" responses
- Add finer-grained categories to "criminal history" question, e.g., first-time offender, 1 prior offense, 2 prior offenses, 3-4 prior offenses, more than 4 prior offenses.
- Track the severity (misdemeanor or felony) of both presenting offense as well as criminal history.
- Explore the content and structure of individual plans with programs to learn more about why they seem to play an important role in success. Build on these strengths and consider standardizing an individual plan system across grantees.
- On "Plan Completion" question, add response possibility "Plan not complete due to the continuation of agreement past the end of program".
- Build on apparent strength of programs at integrating and maximizing academic factors in relation to delinquent behavior. Explore additional tracking of academic variables e.g., coordination with schools.
- Consider linking intake/exit data to statewide database for recidivism and other document outcomes (e.g., child welfare status).

#### **References Cited**

Cabaniss, E.R.; Frabutt, James A.; Kendrick, M.H.; & Arbuckle, M.B. (2007). Reducing disproportionate minority contact in the juvenile justice system: Promising practices. *Aggression and Violent Behavior*, 12, 393–401.

Cocozza, J.J., Veysey, B.M., Chapin, D.A., Dembo, R., Walters, W. & Farina, S. (2005). Diversion from the Juvenile Justice System: The Miami-Dade Juvenile Assessment Center Post-Arrest Diversion Program, Substance Use & Misuse, 40, 935-951.

Cuellar, A.E.; McReynolds, L.S. & Wasserman, G.A. (2006). A Cure for Crime: Can Mental Health Treatment Diversion Reduce Crime among Youth? *Journal of Policy Analysis and Management, 25*, 197–214.

Gavazzi, S.M.; Yarcheck, C.M.; Sullivan, J.M.; Jones, S.C. & Khurana, A. (2008). Global Risk Factors and the Prediction of Recidivism Rates in a Sample of First-Time Misdemeanant Offenders. *International Journal of Offender Therapy and Comparative Criminology*, *52*, 330-345.

Katsiyannis, A.; Ryan, J.B.; Zhang, D. & Spann, A. (2008). Juvenile Delinquency and Recidivism: The Impact of Academic Achievement. *Reading & Writing Quarterly*, 24, 177–196.

Raj, A.; Rose, J.; Decker, M.R.; Rosengard, C.; Hebert, M.R.; Stein, M. & Clarke, J.G. (2008). Prevalence and Patterns of Sexual Assault Across the Life Span Among Incarcerated Women. *Violence Against Women, 14*, 528-541.

Stewart, A.; Livingston, M. & Dennison, S. (2008). Transitions and turning points: Examining the links between child maltreatment and juvenile offending. *Child Abuse & Neglect, 32*, 51–66.

Sullivan, C.J.; Veysey, B.M.; Hamilton, Z.K. & Grillo, M. (2007). Reducing Out-of-Community Placement and Recidivism Diversion of Delinquent Youth With Mental Health and Substance Use Problems From the Justice System. *International Journal of Offender Therapy and Comparative Criminology*, 51, 555-577.

Vesey, B.M. & Hamilton, Z. (2007). Girls Will Be Girls: Gender Differences in Predictors of Success for Diverted Youth With Mental Health and Substance Abuse Disorders. *Journal of Contemporary Criminal Justice*, 23, 341-362.