

CHAPTER 11

STATEWIDE LONGITUDINAL OUTCOME ASSESSMENT

11.1 Introduction

One of the primary objectives of the Juvenile Justice Educational Enhancement Program (JJEPP) is to examine the longitudinal trajectories of youths released from juvenile justice educational programs. While negative outcomes are the typical focus of juvenile justice evaluation studies, JJEPP also examines positive pathways following release, including return to school, employment, and improved academic performance. This chapter presents individual-level performance as well as programmatic differences in student outcomes. This year marks the first time these outcomes and longitudinal tracking capabilities have been made available to JJEPP, as data were not only obtained from the Department of Education (DOE) but also the Department of Juvenile Justice (DJJ) and the Florida Education and Training Placement Information Program (FETPIP).

The chapter is comprised of four subsequent sections that provide information relating to the longitudinal outcomes of youths released from DJJ (non-residential and residential commitment and aftercare programs) between July 1, 1999 and June 30, 2000. Section 11.2 details the various data sources used in conducting the current analysis. Section 11.3 provides an overview of the methods used to conduct the study. Section 11.4 presents descriptive statistics and longitudinal outcome findings for the cohort of releases. Section 11.5 provides summary discussion of the results, policy implications, and future direction for JJEPP's longitudinal research.

11.2 Data Sources

A cohort of 10,235 youths released from juvenile justice programs in fiscal year 1999-2000 was obtained from the Florida Department of Juvenile Justice and matched to the Department of Education's Survey Five database for the 1999-2000 school year. The formats being used from this database are demographic, end of year status, exceptional student education (ESE) status, disciplinary referral, and attendance.¹ Of the 10,235 youths identified by DJJ, 88% or 8,975 were successfully matched to the DOE databases, while 1,260 (12%) were not found.²

¹ It is possible for a youth to be committed to and released from more than one DJJ program within a year. Therefore, while there were 10,235 youths released during the fiscal year, there were a total of 11,813 releases from commitment programs during this period. Given the focus on individual outcomes and life course trajectories, the unit of analysis here is youth, and in the event that a youth was released from multiple programs during the fiscal year, the last release was the one included in the cohort.

² It is possible that those not found in the DOE databases dropped out or failed to return to school. However, as will be discussed further in Section 11.4, if a youth had a GED diploma prior to being placed in the DJJ

There are four possible reasons why youths may not be found in both datasets. First, if the youth attained a high school diploma or its equivalent prior to being committed to DJJ he/she would not be enrolled in DOE's data. Second, some students may be coming from out-of-state or may leave the state after their incarceration. Third, it is possible that the local school registrar never officially enrolled the student, and finally the youth's social security number or student ID may be reported incorrectly by one or both of the agencies' databases. In an effort to further track youths' educational performance, the cohort was additionally matched to the DOE 2000-01 fiscal year databases. A total of 5,634 youths or 63% of the youths successfully matched with the DOE 1999-2000 data were found in the following year.

The cohort of 10,235 youths released from juvenile justice programs was also matched to the FETPIP database to determine, wherever possible, the number of youths who earned their General Educational Development (GED) diplomas or high school diplomas and the number of youths employed sometime during the 1999-2000 or 2000-2001 fiscal years. FETPIP data include employment and wage information for a specific subset of job classifications (see Appendix G for a list of these job classifications). It is possible for a youth to have been employed in a job classification not tracked in FETPIP and, therefore, have no record in the database.

Finally, youths' educational performance was examined at the program level by comparing outcome data obtained from DJJ, DOE and FETPIP to JJEPP's own quality assurance (QA) review records for juvenile justice programs in Florida. As outlined in Chapter Two of this report, the QA review data provide overall quality assessments of juvenile justice educational programs operating in Florida.

11.3 Methods

The current analysis represents the first attempt to integrate the substantial data records of the DJJ, DOE, FETPIP, and JJEPP. Given the complexity of this process, it is important to briefly describe the methods used to obtain the sample and the operationalization of variables and analyses undertaken.

Figures 11.2-1 and 11.2-2 depict the breakdown of the initial cohort of 10,235 youths released from DJJ programs in fiscal year 1999-2000. As previously noted, 8,975 (88%) youths were successfully found in the DOE 1999-2000 school records. Locating a youth in the DOE databases, however, did not necessarily mean that the data in DOE was consistent with the program release information obtained from DJJ. Four possible scenarios were found in terms of placement and timing correspondence. Group One, consisting of 40% (n=3,622) of the youths successfully located in the 1999-2000 DOE databases had DOE records documenting that the youths had been in the same program from which DJJ indicated they were released and during the same time period DJJ had recorded for their period of commitment. Group Two, representing 14% (n=1,236) of the youths successfully located in the DOE databases, were reported by DOE as being in a different DJJ program during the

program and before the start of the 1999-2000 school year, then he/she would not have a record in the DOE school files for that year.

commitment period. Another 40% (n=3,605) of the original pool found in DOE records, Group Three, were found in DOE records to have been in a non-DJJ school placement during the commitment period with no record of the juvenile justice program release reported by DJJ. Finally, Group Four (6%, n=512), while located in the 1999-2000 DOE database files, had no school placements of any kind, nor any DJJ program placements, which corresponded to the release information obtained from DJJ. There are several reasons why youths' information obtained from DJJ may not directly correspond to DOE records. First, concerning the youths who were enrolled in different DJJ programs according to the different datasets (Group Two), during 1999-2000 multiple DJJ programs were sometimes represented by one school number making it difficult to exactly match DJJ programs with specific school numbers. Furthermore, concerning the youths who were found enrolled in public schools during the time of their incarceration (Group Three), during 1999-2000 some DJJ schools did not have a school number at all, and school districts would enroll students under a public school number. Recently, JJEPP has required the use of individual school numbers by all DJJ schools in the QA standards, which should significantly reduce these data matching problems in the future. The youths who were not enrolled in school during the time of their incarceration (Group Four), given their small percentage, most likely represent youths who had already received their high school diploma and or its equivalent prior to being committed to the DJJ program. This group may also represent a few youths who were not properly enrolled by the DJJ school.

Figure 11.2-1: Percentage of Youths Released from DJJ Located in FY 1999-2000 DOE Records (n=10,235)

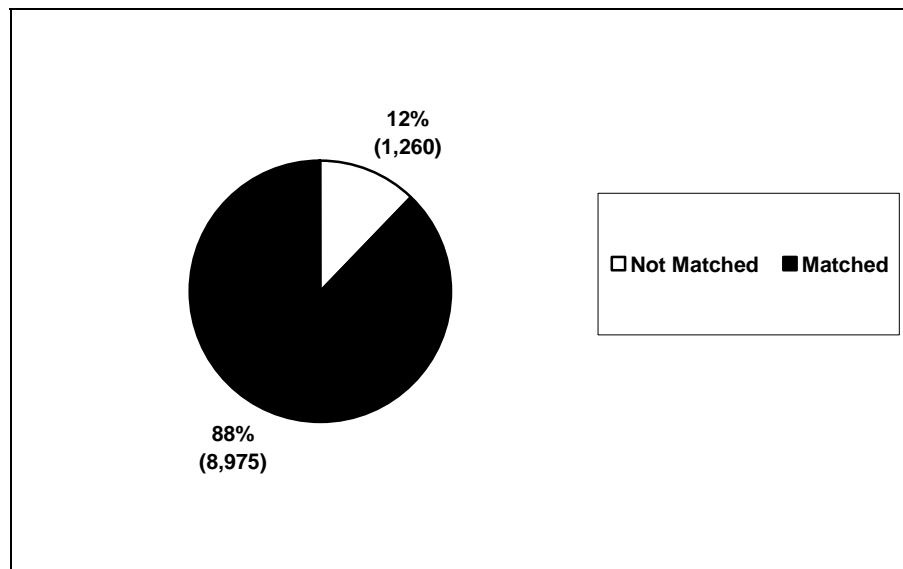
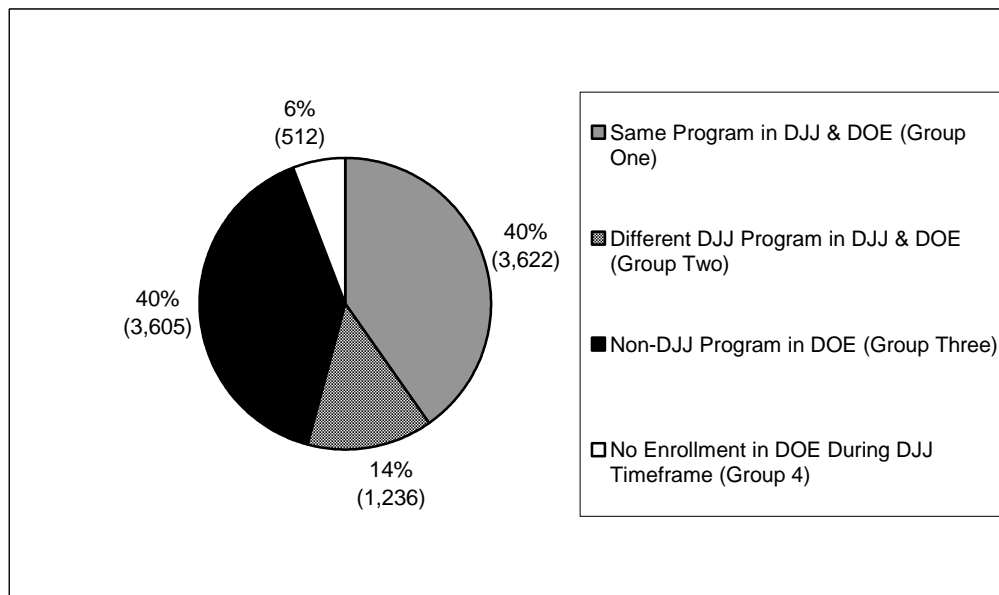


Figure 11.2-2: Records and Program Information for Those Successfully Matched in FY 1999-2000 DOE Records (n=8,975)



For purposes of the current analyses, only Group One and Group Two were included in the final sample, as these were the youths for which follow-up educational performance could most accurately be identified and for whom placement in a DJJ program could be documented. This reduced the sample to 4,858. In those cases where DJJ and DOE records did not correspond, the DOE data were used to identify the juvenile justice program from which the youth was released in 1999-2000. This method was used for two reasons. First, DJJ often identifies multiple programs that are, in fact, served by one centrally located school. Since our research is concerned with educational effects on incarcerated youths, the juvenile justice school, and not necessarily the program, is our unit of analysis. Second, youths are enrolled in juvenile justice schools by the local school registrar when they arrive at the facility. It is therefore less likely that youths who were previously not enrolled in that county would be enrolled in the juvenile justice school by mistake. Conversely a juvenile justice probation officer conducts DJJ program enrollment information from the youth's home county and not necessarily the county where the program is located. While DOE reported school enrollment for youths in Group Three, there was no way of verifying that the youths had, in fact, received juvenile justice educational services. As such, this group and the group of youths with no school placement information (Group Four) were excluded from the final sample in the preliminary analyses reported here.

Another methodological problem encountered in the data integration process involved the matching of records to the FETPIP database. Social security numbers are the only identifiers by which youths can be matched to FETPIP. Eleven percent (n=1,170) of the youths had no social security numbers in the data obtained from DJJ and it was, therefore, not possible to determine whether these youths had received their GED diplomas or high school diplomas, nor was it possible to ascertain whether they had been employed during the study period.

The preliminary analyses conducted for this chapter consisted primarily of descriptive statistics and crosstabulations. Demographic variables included the following: age (measured as age in years at time of release from the DJJ program), race (categorized by DJJ as white, non-white, and other), and gender (female and male).

A number of educational performance, employment, and delinquency measures were used in the analyses as well. The FETPIP database contains information as to whether a youth was employed during the year following release from the DJJ facility. In addition, FETPIP tracks educational attainment and allows for the determination of whether a youth had obtained a GED diploma, a high school diploma, or some post-secondary degree during the 1999-2000 fiscal year. As such, while the completion of a GED or higher may have occurred following program release, it is impossible to make this determination with any certainty. Future annual reports will incorporate more longitudinal data for a longer period of time and allow for more definitive conclusions regarding time sequences and causal connections.

Educational performance and outcomes are measured using the variables of return to school and over-age for grade placement. Return to school is defined as whether the youth returned to a secondary, non-DJJ school within one year following release from the DJJ program. Rather than merely consider grade attainment, the current analysis examines whether sample youths have maintained grade appropriate placement. This is concerned with whether students are in the grade appropriate to their age cohort. To establish a baseline, their grade placement is determined for the period while they were in the DJJ facility and then compared to their status one year following release.

The final individual outcome measure included in the analysis is recidivism, while there are many possible measures of recidivism, the one used in this chapter is based on whether the youth was recommitted to a juvenile justice program within the one-year follow-up period. Given that longitudinal recidivism data were not available from DJJ, it was necessary to reach a conclusion regarding recommitment using the data obtained from DOE. The DOE records include youths' placements in juvenile justice schools, but often do not contain the specificity necessary to discern whether such a placement is merely a transfer commitment,³ an aftercare commitment associated with the original placement which resulted in the youth being included in the 1999-2000 release cohort, or whether the placement is a continuation of the original placement and re-commitment to the same facility. As such, the most conservative approach was taken by defining a recommitment as only placements in a higher security level program⁴ within one year of release from a DJJ program. Individual outcomes were also examined relative to the security levels of the program from which youths were released. DJJ has a five-tier security and restrictiveness level system for its non-residential and residential programs. In order of restrictiveness the levels are as follows: minimum-risk non-residential, low-risk residential, moderate-risk residential, high-risk residential, and maximum-risk residential/juvenile prisons.

³ A transfer commitment refers here to those instances when a youth is removed from one program and placed in another with both placements resulting from the same underlying adjudication, i.e., not a new adjudication and subsequent commitment.

⁴ It is rare that a youth would be transferred to a higher security level program on the original adjudication. Therefore, it is unlikely that this measure of recommitment includes any *true* transfer commitments.

Finally, the primary purpose of this chapter is to compare the individual outcomes with the JJEEP quality assurance review (QA review) scores in an effort to determine whether higher scoring programs are associated with better individual outcomes. While QA review scores are thoroughly defined in Chapter Two, they are categorized here as: low, average, and high QA review scoring programs. It should be noted that 135 youths were released from DJJ programs that did not receive a QA review score during the study period and could, therefore, not be included in the analyses for this component of the study.

11.4 Findings

The current analysis represents the first attempt to track youths released from the Florida juvenile justice system in DOE databases to evaluate both individual- and program-level educational outcomes one year following discharge from a juvenile justice program. This initial effort resulted in 88% of the youths being successfully matched to DOE records, of which 54% (n=4,858) were found to have been released from the program identified by DJJ or another program during the period in which DJJ records show the youths being incarcerated. This sample of 4,858 forms the basis of the results that follow. In addition, basic descriptive statistics and FETPIP information are presented for those youths (12% of total cohort, n=1,260) not located in the 1999-2000 DOE databases. Hereinafter, the 4,858 youths located in DOE files will generally be referred to as the *matched pool* and the 1,260 youths not located will be generally referred to as the *unmatched pool*.

The absence of a youth in the 1999-2000 DOE databases does not necessarily mean that the youth dropped out of school or should be considered a negative outcome. It is possible for a youth to enter a DJJ program having already completed their GED or attained their high school diploma. In which case, it would be reasonable that they would not be enrolled in a non-DJJ school following release. Alternatively, the youth may have failed to enroll in any school after completing his/her term of confinement in a juvenile justice facility, but been gainfully employed since release. Given these and other possible scenarios, it was deemed important to track the unmatched pool as well as those youths located in DOE records. Table 11.4-1 presents descriptive statistics for the matched and unmatched pools. Those in the unmatched pool are generally older than those successfully located in the DOE records. This finding certainly lends credibility to the notion that these youths are nearing the age of majority and at higher risk for dropping out of school than the younger youths in the matched pool. A greater percentage of those located in the DOE databases were non-white, male, and released from a moderate-risk, residential facility than were the unmatched pool. Notably, more than three-quarters of the matched pool had been confined in a relatively low to moderate security juvenile justice program, while the largest percentage (48%) of youths in the unmatched pool were released from a maximum-risk juvenile prison.

Table 11.4-1. Descriptive Statistics of Matched and Non-Matched Pools (n=4,858 and n=1,260, respectively)

Total Youths	Matched to 1999-2000 DOE Records	Not Matched to DOE 1999-2000 Records
	4858	1,260
Age (mean)	16.5	17.7
Race (percentage non-white)	50.1%	39.3%
Gender (percentage male)	86.1%	85.1%
Commitment Levels (in percentages)		
Minimum Risk, Non-Residential	15.6%	23.6%
Low Risk, Residential	11.0%	5.6%
Moderate Risk, Residential	48.9%	14.6%
High Risk, Residential	23.0%	8.3%
Maximum Risk, Residential	1.6%	47.8%
Judicial Regions (in percentages)		
Northwest	17.7%	12.4%
Northeast	17.2%	19.4%
West	37.4%	26.3%
East	11.5%	19.1%
South	10.7%	22.3%
Unknown/Out-of-State	5.5%	0.20%
Percentage With No Social Security Number	11.2%	12.9%
Percentage of Youths Subsequently Matched to FETPIP Records	55.2%	70.3%
Percentage of Youths Subsequently Matched to 2000-2001 DOE Records	62.8%	NA

Educational Attainment and Employment Within One Year of Release

As shown in Table 11.4-1, similar percentages of youths in the matched (11%) and unmatched (13%) pools had missing social security numbers and could, therefore, not be matched to the FETPIP database.⁵ Of those who had a social security number, a much larger percentage of the youths in the unmatched sample were located in FETPIP than were the youths in the matched pool. In the matched pool, 62% (n=2,682) were found compared to

⁵ It should be noted that, unlike FETPIP, the lack of a social security number did not make it impossible to match a youth to the DOE database. This was due to the fact that a pseudo-identifier was created and used to locate youths in the DOE records. It was not possible to employ such a linking process with the FETPIP match. The pseudo-identifier was comprised of a combination of the first four characters of the youth's last name, first three characters of the first name, as well as the month and year of the youth's date of birth.

81% (n=886) of the *unmatched pool* that were subsequently found in the FETPIP database (see Table 11.4-2). Gaining further insight into the outcomes for the youths who were never found in DOE records (*unmatched pool*), 336 youths (31%) had obtained their GED diplomas, high school diplomas, or some post-secondary degree,⁶ and 776 (71%) were employed at some time during the year following release from the DJJ program (11.4-2). While this may, in part, explain their absence from the DOE records, there are still 163 in the unmatched pool for which a match could not be made in either the FETPIP or the DOE databases. This group will continue to be tracked into 2001-2002 and will be examined in next year's report.

The youths in the matched pool were less likely than their counterparts in the *unmatched pool* to have been employed or obtained GED diplomas, high school diplomas, or some post-secondary degree (Table 11.4-2). This is not surprising, because the youths who were found in the DOE database were more likely to have returned to secondary school, never left the DJJ system, or were recommitted to a DJJ program.

Table 11.4-2: Educational Attainment and Employment Status of Matched and Non-Matched Pools (total n=4,858 and n=1,260, respectively) (in percentages)

	Matched to 1999-2000 DOE Records	Not Matched to DOE 1999-2000 Records
Total Youths With Social Security Numbers	4,314	1,097
Youths with Social Security Numbers Subsequently Matched to FETPIP Records	62.20%	80.70%
Youths with GED or Higher in 1999-2000	7.90%	30.60%
Youths Employed Within One Year of release from DJJ Program	56.20%	70.70%
Youths with GED or Higher and Employed	60.00%	25.50%

Return to School

The importance of school in the life course of youths at risk for delinquency has been consistently documented in the research literature (Sampson & Laub, 1995; Moffit, 1991; Patterson, 1989; Rand, 1987; & Hogan, 1978, 1980). Typically however, researchers have examined only whether youths were attending school prior to becoming involved in the juvenile justice system, as it is difficult to obtain access to sufficient delinquency and educational outcome data. One of JJEPP's primary goals has been to document the impact of juvenile justice educational programming on subsequent outcomes following program release. Having combined data from DJJ and DOE, it is now possible to conduct such an evaluation.

⁶ Those who earned GED diplomas or higher represented 27% of the total cohort of 1,260 youths who were not located in the DOE databases.

The matched pool (n=4,858) is used to assess their educational performance following release from a juvenile justice program because these are the only cases that have all of the data required for this analysis. Table 11.4-3 indicates that 1,662 (34%) of the youths returned to a secondary school within one year of release.

Table 11.4-3: Return to School by Demographics and Educational Performance for Matched Pool (n=4,858)

	Did Not Return to School	Returned to School
Total Youths (N=4,858)*	3,196 (65.8%)	1,662 (34.2%)
Age (mean)	16.9	15.5
Gender (percentage male)	87.4%	83.6%
Race (percentage non-white)	50.4%	49.5%
Percentage Employed Within One Year of Release**	55.6%	43.0%
Percentage with GED or Higher **	8.9%	2.3%
Commitment Levels (in percentages)		
Minimum-Risk, Non-Residential*	17.8%	11.4%
Low-Risk, Residential	7.8%	17.0%
Moderate-Risk, Residential	47.0%	52.6%
High-Risk, Residential	25.3%	18.4%
Maximum-Risk, Residential	2.0%	0.1%
Total	65.8%	34.2%

* Includes aftercare

** Note that 4,314 was the n for this computation due to missing social security numbers.

Those who returned to school were generally younger (15.5 vs. 16.9) and released from less secure facilities than youths who did not return to school. In comparison to those who returned to school, a greater percentage of the youths who did not return to school had completed their GED or higher (8.9% vs. 2.3%), or were employed (55.6% vs 43.0%).⁷

Recommitment to DJJ

Table 11.4-4 presents demographic, commitment level, and educational performance data comparing youths who were recommitted with those who were not. In total, 475 youths (10%) in the study sample were recommitted to a higher security juvenile justice program within one year of their release from a lower security level juvenile justice program in fiscal

⁷ This finding is perhaps not surprising given that youths may have earned their GED diplomas prior to the placement that ultimately resulted in their selection for the current study sample of all youths released from DJJ programs in fiscal year 1999-2000. Therefore, any causal link may be wholly missing from this measure, and the GED attainment may have preceded the commitment to the juvenile justice system. It is hoped that this issue will be further examined in next year's report as JJEEP's longitudinal tracking capabilities expand.

year 1999-2000. There is virtually no difference in the mean age (16.4 vs. 16.5), race (48.9% vs. 50.2% non-white), or gender (90.9% vs 86.1% of males) of the two groups. A larger percentage of the recidivists were released from higher security level programs than those not recommitted. This finding is perhaps indicative of more serious juvenile offenders; i.e., those with prior incarcerations in secure juvenile facilities, having a greater likelihood for continued involvement in delinquency and the juvenile justice system. A much higher percentage of those not recommitted returned to school (37.9% vs. 0%), but slightly more of the recommitted group had GED diplomas or higher (7.4% vs. 6.6% six point six percent). The group that was not recommitted had slightly more people who were employed (51.9% vs. 45.5%).

Table 11.4-4 Recommitment by Demographics and Educational Performance for Matched Pool (n=4,858)

Total Youths (N)*	Recommitted	Not Recommitted
	9.7% (475)	90.3% (4,383)
Age (mean)	16.4	16.5
Gender (percentage male)	90.9%	86.1%
Race (percentage non-white)	48.9%	50.2%
Commitment Levels (in percentages)		
Minimum-Risk, Non-Residential*	6.1%	16.6%
Low-Risk, Residential	11.6%	10.9%
Moderate-Risk, Residential	68.2%	46.8%
High-Risk, Residential	13.9%	23.9%
Maximum-Risk, Residential	0.2%	1.7%
Percentage Returned to School	NA	37.9%
Percentage with GED or Higher	7.4%	6.6%
Percentage Employed Within One Year of Release	45.5%	51.9%

* Includes aftercare

** Note that 135 youths were released from DJJ programs that did not receive a QA review score during the study period and could not be included in the tabulations. Therefore, percentages do not add to 100.

QA Scores, Return to School, and Recommitment

QA Scores and Return to School

Getting youths to return to regular schools after leaving juvenile justice educational programs has always been a goal of the juvenile justice system, at least in part because of the belief that delinquency and adult criminality can be reduced through education. Unfortunately, there has been a paucity of research documenting the extent to which youths either return or fail to return to school after being incarcerated in a juvenile justice facility. Furthermore, if they do return to school, there has been little evidence suggesting what the factors are that increase the likelihood that youths will return to school after having been in a juvenile justice program. It may be that the quality of the educational program in the juvenile justice facility can play a significant role in whether or not the youth returns to school after returning to the community, and that question is addressed in Table 11.4-5.

Table 11.4-5: Relationship Between Quality Assurance Scores and Return to School After Release from a DJJ Facility

	QA Score*					
	Low		Average		High	
	n	%	n	%	n	%
Returned to School	302	29%	1,169	35%	142	39%
Did Not Return to School**	747	71%	2,141	65%	222	61%
Total	1,049	100%	3,310	100%	364	100%

*QA scores are not available for 135 cases.

**The operational definition of “did not return to school” is a slight misnomer because it also includes youths who may have transferred out of state, became deceased, earned a high school diploma prior to release from the program, returned to a private school, or who were still under the care of DJJ.

Table 11.4-5 presents the relationship between the QA scores received by DDJ educational programs and the percentage of youths who return to school after being released from a DJJ facility. The QA scores are divided into low (≤ 4.49), average (4.50-6.50), and high (≥ 6.51) categories. In programs that received low QA scores 29% returned to school after returning to the community. For programs with average QA scores 35% returned to school; for programs with high QA scores, 39% of the youths returned to school after being released from a DJJ facility.

While finding a relationship such as this using only two variables and a simple percentage difference approach is important, there are many other variables that have not been controlled in this analysis that could change the results. It is difficult to control for a large number of variables using a percentage difference approach, but there are other multivariate statistical procedures that permit this type of analysis. One of these statistical techniques is logistic regression. This procedure permits the researcher to examine the relationship between QA scores and recommitment while simultaneously controlling for the confounding effect of many other variables. A logistic regression analysis was conducted on this relationship while controlling for all of the important demographic variables that could be measured using the available database. The variables controlled in this analysis were age, sex, race, and program security level. The results are shown in Appendix H. While the numbers look different and require a more sophisticated statistical interpretation, the multivariate results controlling for the variables listed above are consistent with the bivariate results shown in Table 11.4-6 using the percentage difference results. A much greater level of confidence can be placed in the original findings given the multivariate analysis that was conducted.

While it may not appear significant that only 34% (1,613/4,723) of the total sample returned to school after release from a juvenile justice facility, it is particularly encouraging that there is a 10% difference between low and high performing QA programs in the proportion of youths who were found to have returned to school after release. Although a 10% difference is not overwhelming, and there are clearly other factors relevant to this decision, it would appear that the quality of the educational services provided in a juvenile justice facility is a

significant factor in determining whether or not a youth returns to school after returning to the community. Apparently, being exposed to a quality educational experience while incarcerated can provide an incentive for youths to want to continue their education after they have been released. This is a very encouraging and important finding and one that will be explored in greater depth in future longitudinal research. Furthermore, the definition used in this analysis of not returning to school is limited by the states public school data reporting system. Not returning to school will include youths who received their high school diploma or its equivalent (prior to or during incarceration), transferred out of the State of Florida, were deceased, or returned to a private school. Moreover, youths who had not returned to a public school may have still been under the care of DJJ (e.g. in a step-down or aftercare program) and, therefore, were not reported as having returned to school or being recommitted to a program.

QA Scores and Recombitment

In terms of the quality of the educational services provided, another important relationship is examined in Table 11.4-6. This table presents findings concerning the relationship between the QA scores received by juvenile justice educational programs and associated recommitment rates. Recidivism can be measured in many ways, with each approach having advantages and disadvantages. In this study, recidivism is measured by recommitment to a juvenile justice facility after the youth had been released back into the community. (See section 11.3 for a discussion of the procedures used to develop this measure of recidivism). The QA scores, once again, are divided into low (≤ 4.49), average (4.50-6.50), and high (≥ 6.51) categories.

Table 11.4-6: Relationship Between QA Scores and Recombitment After Release from a DJJ Facility

	QA Score					
	Low		Average		High	
	n	%	n	%	n	%
Recommitted	153	15%	295	9%	19	5%
Not Recommited	896	85%	3,015	91%	345	95%
Total	1,049	100%	3,310	100%	364	100%

*QA scores are not available for 135 cases.

An examination of Table 11.4-6 shows that 15% of the youths who had been incarcerated in a juvenile justice facility that received a low QA score were recommitted during the time period for the study. Correspondingly, nine percent of those who had been in average programs were recommitted, and only five percent of those who had been in high QA scoring educational programs were recommitted.

A difference in the rate of recommitment between programs receiving high and low education QA scores of this magnitude is impressive. To state these percentage difference results in slightly different terms, the ratio of recommitment rates between low and high

scoring programs is 3:1, which can be interpreted as saying that there are three recommitments in the low QA group for every one that is found in the high QA group. Once again, to find a relationship such as this using only two variables and a simple percentage difference approach is impressive, but the researcher has to be concerned about the possible impact of many other variables that have not been controlled. The multivariate logistic regression statistical procedure discussed above also was used in examining the relationship between QA scores and recommitment. The variables controlled were the same as in the previous analysis, age, sex, race, and security level of the program. The results are shown in Appendix H. The multivariate results shown in this table, controlling for age, sex, race, and security level of the program are consistent with the bivariate results shown in Table 11.4-6 using the percentage difference results. Once again, a much greater level of confidence can be placed in the original findings given the results from the multivariate analysis.

Obviously, this is not the final word on the relationship between involvement of youths in quality educational programs and recommitment. There are other variables whose effects could be controlled for, other operational definitions employed, and the data presented represent the findings from only one study, but the findings are consistent with both logical and theoretical expectations. If similar results can be replicated using other datasets, different samples, other operational definitions, and different variables, an even greater level of confidence can be placed in these outcomes. While further research is required and is currently underway, these results are major and should provide encouragement to all those dedicated to quality education in juvenile justice programs. It seems apparent that quality education can make a difference in the lives of youths placed in juvenile justice programs.

QA Scores and Other Variables

Table 11.4-7 contains data on the relationship between QA scores and three other measures of education (over-age for grade placement, over-age for grade placement: improvement at follow-up, and over-age for grade placement: worse at follow-up) and also employment. In this table, only one row of the normal percentage table is shown, the reciprocal numbers can be attained by subtracting the percentages in the table from 1.00.

The findings are not as impressive as those demonstrated in Tables 11.4-5 and 11.4-6, and some inconsistencies are found. In general, very little difference is observed in these variables. Programs did not differ markedly in terms of the percentage of youths employed following release.⁸ It is perhaps not surprising that high scoring programs should have the lowest percentage of youths employed in comparison to the other QA review category programs. This may in part be due to the fact that these youths were more likely to have returned to school, as opposed to dropped out of school and, therefore, were not working at the time.

⁸ Youths may have earned their GED diplomas prior to the placement that ultimately resulted in their selection for the current study sample of all youths released from DJJ programs in fiscal year 1999-2000. Therefore, any causal link may be wholly missing from this measure, and the GED diploma attainment may have preceded the commitment to the juvenile justice system. It is hoped that this issue will be further examined in next year's report as JJEEP's longitudinal tracking capabilities expand.

Table 11.4-7: QA Review Scores by Educational Performance, Recommitment, and Employment for Matched Pool (n=4,858)

	QA Review Scores*		
	Low	Average	High
Over-Age for Grade Placement While in DJJ Program	89%	84%	85%
Over-Age for Grade Placement: Improvement at Follow-Up	12%	8%	12%
Over-Age for Grade Placement: Worse at Follow-Up	19%	21%	17%
Employed (after release)	57%	56%	54%
Total Youths (N)	1,049	3,310	364

* Note that 135 youths were released from DJJ programs that did not receive a QA review score during the study period and, therefore, could not be included here.

Overall, previous research (Moffit, 1991; Patterson, 1989; Rand, 1987; & Hogan, 1978, 1980) has concluded that youths in the juvenile justice system tend to have significant problems in school, have failed and been held back in school, and are approximately two grade levels behind their age cohort. The results from this analysis provide support for these contentions as more than 80% of the youths released from juvenile justice programs in 1999-2000 were over-age for grade level. One year after release, 12% of the youths in both low and high scoring programs had improved their grade placement, while only eight percent of the youths in the average programs had improved. Average programs also had the greatest percentage of youths (21%) whose grade placement status worsened within one year of release, while high scoring programs had the smallest percentage (17%).

11.4 Summary Discussion

This chapter presented findings from longitudinal assessment of education and community reintegration outcomes for a cohort of youths released from juvenile justice programs in Florida during fiscal year 1999-2000. The data integration process for the study was a major undertaking and clearly the first of its kind conducted to date in Florida and probably the United States. The overall hit rate in matching youths in the DJJ cohort to DOE databases was rather significant with 88% of the 10,235 youths successfully located in the state's central educational databases. Of those not found and having social security numbers (n=1,097), more than 70% were employed following release and 31% had completed a GED diploma, a high school diploma, or some post-secondary degree by the end of FY 1999-2000. Given the older average age of the youths not located in DOE records, this group may be more likely to have dropped out than the younger matched cohort, and alternatively is perhaps more likely to have attempted and obtained their GED diplomas. This is further borne out by the finding that a greater percentage of the unmatched pool in comparison to the matched pool were employed or had obtained a GED diploma or higher.

A full third (n=1,662) of the matched sample returned to secondary school following release from DJJ in 1999-2000. The youths who successfully returned to school were generally younger and released from lower security level programs. At the same time, youths who

enrolled in school were less likely than those who did not return to school to be employed following release.

An important element of the analysis was to examine whether programs differed on the basis of their JJEEP QA review scores. The results indicate that, in fact, they do, with higher scoring programs having a significantly greater percentage of youths returning to secondary school following program release than those programs with low QA review scores. This finding was documented at both the bivariate level as well as the multivariate level in which age, sex, race, and security level were controlled.

While a conservative measure of recidivism was used in the current study, it was found that roughly 10% of the youths were subsequently re-adjudicated and recommitted after being released from a DJJ program in 1999-2000. Similar to the educational outcome measure, recommitment was correlated with JJEEP QA review scores, as 15% of the youths released from low scoring programs were recommitted, compared to only five percent of youths from programs that received a high QA review score.

These findings provide validation for the JJEEP QA model and lay the groundwork for future longitudinal and life course analyses. In addition, the complex data integration process undertaken here raised a number of methodological and data tracking issues to be addressed by the state agencies involved. In particular, while it would seem logical to presume that the youths who did not match in DOE were dropouts, this is not a definitive conclusion that can be reached at the moment. Further investigation into matching procedures, data entry protocols of DJJ and DOE, and general descriptive breakdowns of the unmatched pool (e.g., from which programs and school districts were they predominately released, were they primarily released from particular security level programs?) are needed to gain a better understanding of the unmatched cohort.

Another issue is that of DJJ having court data indicating the youth's release from one program and DOE having records showing the youth's enrollment in another juvenile justice program during the same time period. Again, further investigation is required to determine whether this issue is primarily due to data entry errors, differences in tracking procedures, or some other factor not yet identified.

Perhaps most perplexing, however, are those youths who are documented as having been incarcerated in a DJJ program, but for whom DOE has no school records, either from secondary schools predating the DJJ incarceration, or from any secondary or DJJ schools during or after the incarceration. In addition, future examination will seek to develop a more comprehensive method for matching youths to the FETPIP database. As was noted earlier, youths missing social security numbers could not be matched to FETPIP at all. It was also apparent that a number of youths who appeared to match FETPIP records were in fact inaccurate matches, as the findings were logically inconsistent with what was already known about the youth (e.g., the youth was committed and released from a DJJ facility in 1999-2000 when he was 14 years of age and FETPIP records show him as having received his GED diploma in 1991). A potential solution to this issue would be to work with FETPIP personnel to develop a more sophisticated matching process whereby a pseudo-identification number

was created for each youth, similar to that used for the current study to match DJJ to DOE records.

A number of policies are derived from the data integration process and overall findings reported here. First, a strong interagency collaboration should continue to be forged between DJJ and DOE. This initial collaboration has resulted in this unique opportunity to track youths from the juvenile justice system to educational system, thereby providing insight into not only recidivism outcomes but also educational performance and life course trajectories as measured through successful educational outcomes. Interagency collaboration can facilitate the exchange of information as well as the validation of accurate information maintained by both agencies. It is hoped that open dialogue will continue as the interesting methodological obstacles noted above are investigated.

Second, it is important to further pursue the validation of the JJEPP evaluation model and protocol. Future educational outcomes could include not only return to school, but survival analyses documenting time periods to return or failure to return to school, attendance, disciplinary infractions, suspensions and expulsions, grade attainment, and grade point averages. Delinquency outcomes and controls also should be used to further test the predictive and construct validity of the JJEPP model. These measures could include prior delinquency record as a control, re-referral and re-adjudication, and recommitment as documented by DJJ.

Finally, future analysis should include a more detailed review of the specific QA and best practices components that correlate with positive outcomes. This process should include not only bivariate analyses but also inferential analysis using analytic techniques appropriate for multi-level data, such as the youth and program level data reported on here (e.g., Hierarchical Linear Modeling).

The importance of quality education in the mainstream school system has long been recognized, and administrations such as the Florida Governor's Office are advocating a strong model of accountability in ensuring that Florida's youths receive quality educational instruction. Youths in the juvenile justice system are, perhaps, most in need of services focused on strengthening their involvement and performance in school. The results of this study further document the importance of effective education in not only curtailing juvenile offenders' continued involvement in delinquency but also their effective reintegration back into the community.