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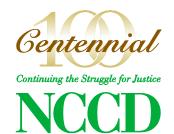
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# In Search of Evidence-based Practice in Juvenile Corrections: An Evaluation of Florida's Avon Park Youth Academy and STREET Smart Program

September 2009

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**National Council on Crime and Delinquency** 

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I would also like to thank our partners for their assistance in designing and conducting this evaluation: Tim Matthews, Eastern Kentucky University, as the co-principal investigator, for his management of the implementation of the research design; staff at the Justice Research Center, Tallahassee, Florida, for their commitment and expertise in conducting the tracking and survey component of the evaluation; and staff at the Avon Park Youth Academy and STREET Smart for the experimental group profile data collection. Among the staff at the National Council on Crime and Delinquency, I would like to acknowledge the contributions of Dr. Dennis Wagner for his expert assistance in research design and data analysis, Theresa Healy for her expert coordination of the random assignment process, and Kathie Oremus for her commitment and expertise in data management and analysis. I am especially grateful to Dr. Wagner and Ms. Oremus for their thoughtful and painstaking analyses of the outcome data and their expert writing of the findings presented in this report.

I would also like to acknowledge the assistance of several of our participants whose cooperation has made this research possible. I would like to thank administrators and staff at the Florida Department of Juvenile Justice for their commitment to this research and their assistance with data access. In particular, we owe a great deal of thanks to Debbie Sutton and the other commitment supervisors and managers for their tireless work over 18 months in conducting the random assignment process. Thanks are also due to the administrators and staff of the Florida Department of Education for their assistance with access to education and employment data. Finally, I would like to acknowledge the administrators and staff of Group 4 Securicor, who operate the Avon Park Youth Academy and STREET Smart program, for their daily efforts to guide and support the youth committed to their care. Without their remarkable work on behalf of youth, this evaluation research would not have been initiated.

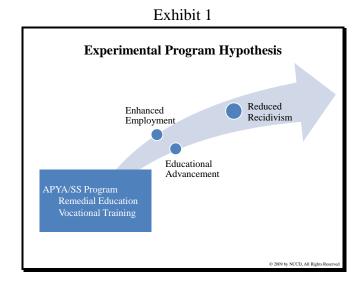
Robert E. DeComo, Ph.D. Principal Investigator

#### **EXECUTIVE SUMMARY**

With the sponsorship of the Office of Juvenile Justice and Delinquency Prevention (OJJDP) and the U.S. Department of Labor (DOL), the National Council on Crime and Delinquency (NCCD) conducted an evaluation of the Florida Department of Juvenile Justice (DJJ) Avon Park Youth Academy (APYA) and the STREET Smart program (SS). This final report presents findings from the NCCD evaluation.

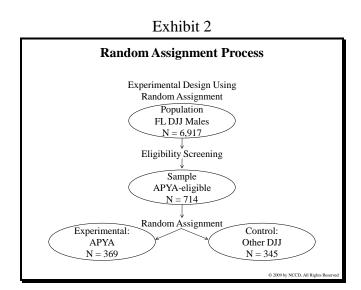
APYA is a secure custody residential facility that provides specialized, remedial education and intensive vocational training to moderate risk youth committed to DJJ. SS was the reentry component of the program, which provided community support and educational and vocational services to APYA participants on a voluntary basis after their release to the community. In the last several years, APYA/SS has received national and international recognition as a "Promising Program" for juvenile offenders. Both OJJDP and DOL determined that a rigorous evaluation was required to assess whether APYA/SS could progress from a "Promising Program" to an "Evidence-based Practice."

To conduct this evaluation, NCCD designed and conducted a field trial that randomly assigned youth committed to DJJ to the APYA/SS program or a control group. This experimental design permitted a rigorous test of the hypothesis that compared to the control group, APYA/SS participants would demonstrate more positive educational achievement, increased labor force participation, and reduced recidivism outcomes after community release (see Exhibit 1).



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Random assignment procedures were successfully implemented. Assignment produced a sufficient sample size (369 experimental and 345 control youth) to detect relatively modest treatment effects (see Exhibit 2), and the experimental (APYA) and control groups were equivalent in terms of critical pre-assignment characteristics including criminal history and demographics.



Based on information provided by APYA/SS program staff, 78% of the youth assigned to the experimental APYA residential program completed it. The average residential length of stay was 9.7 months. Upon exit from APYA, 82% transitioned to the SS reentry component. The average length of stay in SS was 11.2 months.

Following random assignment, control group youth were placed in one of 49 DJJ residential programs located across the state. While these programs varied widely by program type, they all included some educational and/or vocational training components. The average length of residential stay was 8.5 months. Control group youth were not eligible for SS after community release, but they did receive reentry services typically available to DJJ clients. Findings for the study are based on an intent-to-treat (ITT) analysis of all randomly assigned subjects (369 experimental and 345 control youth).

The major findings presented in this final report are as follows.

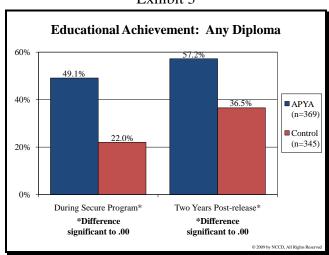
#### **Interviews**

Post-release interviews with 66.8% of the research subjects after their release to the community supported the conclusion that APYA-assigned youth were more likely to receive vocational or job placement services during both secure care and reentry than control group youth. Experimental group subjects were also more likely to credit these services as having helped them with major tasks associated with successful reentry.

## **Education**

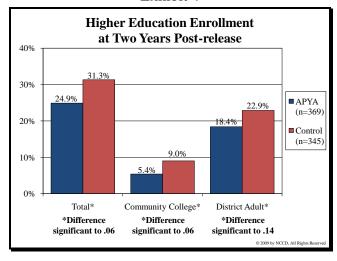
1. Education outcome measures showed that APYA-assigned youth had significantly higher rates of diploma awards both during secure care and over a two-year period following release (see Exhibit 3). In addition, each of the ethnic subgroups assigned to APYA had significantly higher rates of diploma awards (not shown).

Exhibit 3



2. Conversely, control group youth had significantly higher rates of enrollment in higher education after community release. Some of this difference may be attributable to the larger number of these youth seeking high school level diplomas in district adult education programs (see Exhibit 4).

Exhibit 4



# **Employment**

1. Employment outcome measures, based on a cumulative three-year post-release follow-up period, showed that APYA-assigned youth were employed at significantly higher percentages (Years One, Two, and Three) and had higher employment participation and earnings (Years One and Two) than the control group (see Exhibits 5 through 7).

Exhibit 5

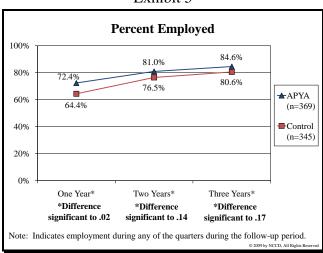


Exhibit 6

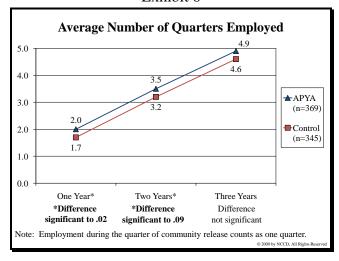
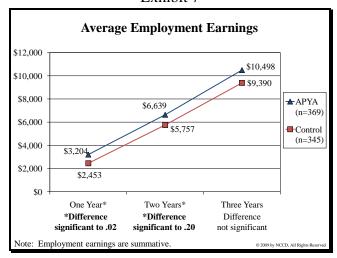


Exhibit 7



2. Cumulative findings indicated **Hispanic** APYA youth were employed at significantly higher percentages (Year One) and had significantly greater employment participation (Years One, Two, and Three) and earnings (Year One) than the control group (see Exhibits 8 through 10). Further, independent third-year employment findings for APYA-assigned Hispanics were very positive (not shown). Finally, significantly higher rates of Hispanic APYA-assigned youth had annual incomes exceeding the poverty threshold (Years One and Three; see Exhibit 11).

Exhibit 8

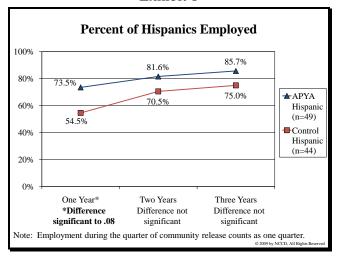


Exhibit 9

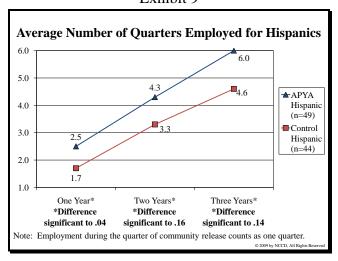


Exhibit 10

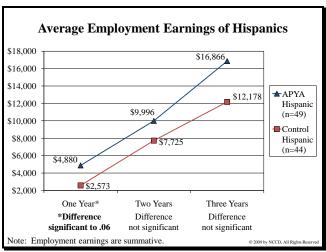
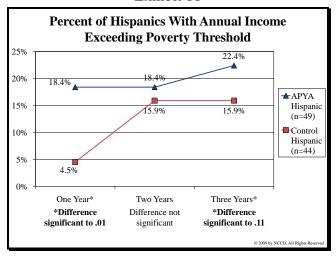


Exhibit 11



3. Caucasian APYA-assigned youth had significantly greater cumulative employment participation and earnings (Year One) than the Caucasian control group (see Exhibits 12 and 13), and significantly higher rates had annual incomes exceeding the poverty threshold (Year One; not shown). However, independent third-year findings indicated lower employment and fewer quarters employed for APYA-assigned Caucasians (not shown). Finally, Caucasian APYA youth had significantly lower receipt of Temporary Assistance for Needy Families (TANF)/food stamp benefits than Caucasian control group youth during the two years of available data for this dependency measure (see Exhibit 14).

Exhibit 12

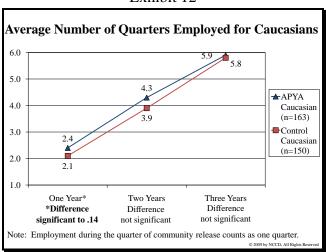


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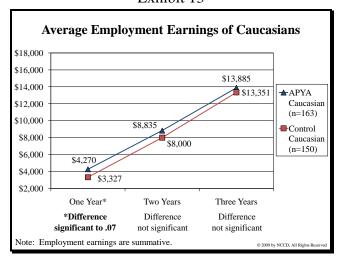
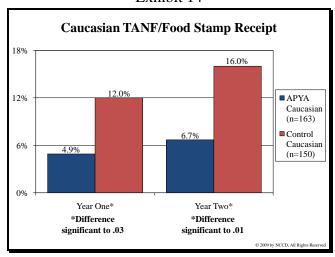


Exhibit 14



4. APYA-assigned **African American** youth were employed at significantly higher percentages (Year One), and significantly higher rates had annual incomes exceeding the poverty threshold (Year Two) (not shown).

#### Recidivism

1. Recidivism outcome measures, based on a cumulative three-year post-release follow-up period, showed that APYA youth had significantly lower rates of property arrest (Year One) and significantly fewer felony and property arrests (Year One) compared to the control group (see Exhibits 15 through 17). However, APYA-assigned youth had significantly higher rates of entry into juvenile or adult supervision (Years One and Two; see Exhibit 18).

Exhibit 15

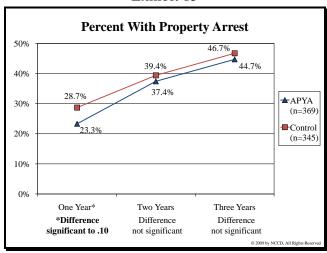


Exhibit 16

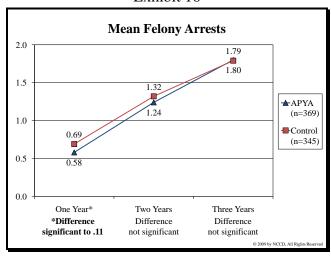


Exhibit 17

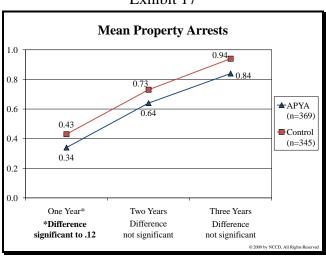
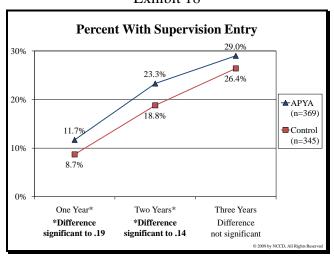


Exhibit 18



2. APYA-assigned **African Americans** had significantly lower rates of felony arrest (Year One; not shown) and significantly lower mean total (Year One), criminal (Year One), felony (Years One and Two), and property (Years Two and Three) arrests than the African American control group (see Exhibits 19 through 22). However, APYA-assigned African Americans had significantly higher rates of supervision entry (Years One and Two; see Exhibit 23).

Exhibit 19

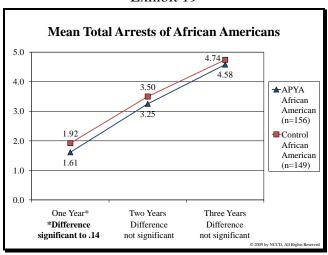


Exhibit 20

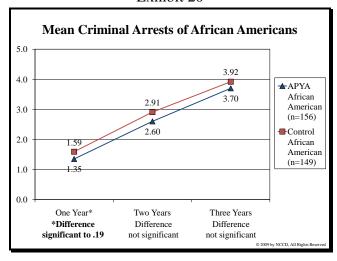


Exhibit 21

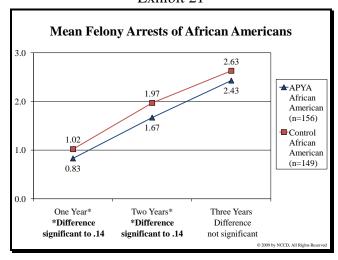


Exhibit 22

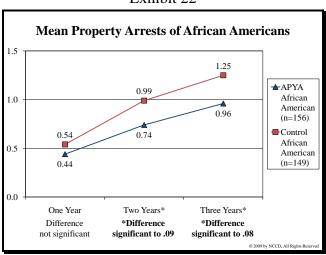
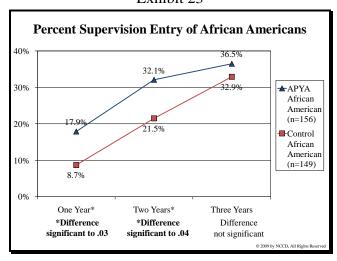


Exhibit 23



3. APYA-assigned **Hispanics** had significantly lower rates of violent felony (Years One, Two, and Three) and property (Years One, Two, and Three) arrest and significantly lower rates of supervision (Years One, Two, and Three) and secure custody (Year Two) than the Hispanic control group (see Exhibits 24 through 27). APYA-assigned Hispanics also had lower mean violent felony (Year One) and property (Year Three) arrests (not shown).

Exhibit 24

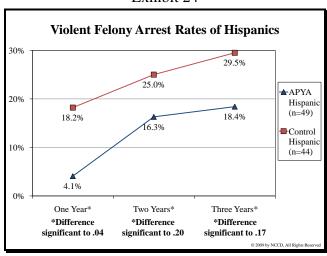


Exhibit 25

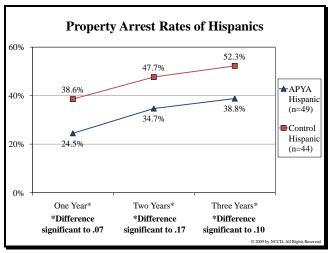


Exhibit 26

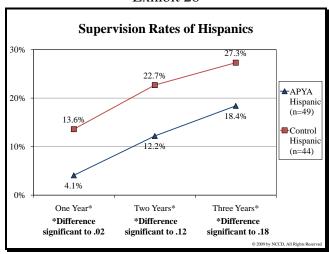
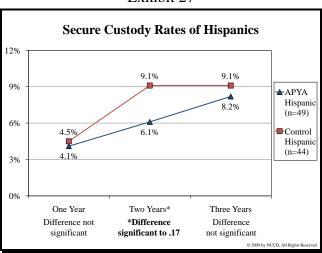


Exhibit 27



4. **Caucasians** assigned to APYA had higher mean total (Year Two) and felony (Years Two and Three) arrests than the Caucasian control group (see Exhibits 28 and 29).

Exhibit 28

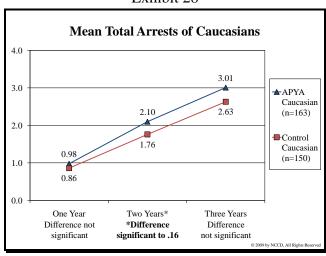
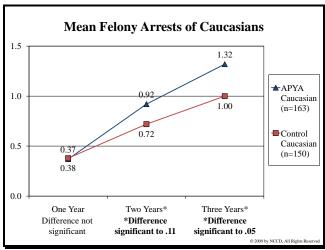


Exhibit 29



# **Total Sample Findings**

#### Year One

At the end of their first post-release year, the 369 youth assigned to APYA had fewer felony and property arrests and lower rates of property arrest than controls but higher supervision entry. Employment outcomes were significantly better on all four measures observed, and the receipt of TANF/food stamp benefits was lower.

#### Year Two

At the end of the second year, recidivism findings were much less positive. The only significant recidivism finding was that supervision entry tested higher for APYA youth. Cumulative employment outcomes for APYA subjects remained positive for three of four measures, but significance tests indicate a diminishing impact.

#### **Year Three**

In the third and final year, recidivism outcomes for APYA youth show no advantage over the control group, and a positive impact is observed on only one cumulative employment outcome (percent employed).

The APYA vocational and education interventions, including SS aftercare enrollment, appear to have a positive impact on both the recidivism and employment of the youth assigned to the program their first year in the community. While this impact diminishes in the second and third post-release years, the program logic, i.e., increased vocational/educational training will reduce recidivism and increase work force participation, is supported by these early evaluation findings. Ethnic group findings indicate that APYA was more successful with some subjects than others.

# **Ethnic Group Findings**

One reason for diminished APYA impact in Years two and three can be traced to ethnic group findings. It is clear that APYA did not benefit all subjects equally in the manner intended.

The summary of evaluation findings for post-release recidivism and employment clearly indicate that Hispanic youth received the greatest benefit from APYA assignment. In their case, APYA interventions appear to have had the intended impact, i.e., workforce participation was increased and recidivism decreased in their first and last years after release. African American APYA subjects had lower recidivism and marginally more positive employment outcomes in the first and second years of the follow-up. At the end of the third year, their property arrests remained significantly lower but there was no discernable, positive impact on employment. Caucasian youth assigned to APYA did not demonstrate improved recidivism at any point. By the third year of the study, their mean felony arrests were higher than that of controls. While cumulative three-year employment findings show no difference in workforce participation, the independent analysis of third-year outcomes indicates lower workforce participation. The findings suggest that Caucasian youth derived the least long-term benefit from APYA assignment. In their last year, recidivism was higher and employment lower than controls.

Future research with the subjects of this evaluation has the potential for adding valuable knowledge about how more effective correctional programs for juvenile offenders might be

<sup>&</sup>lt;sup>1</sup> Caucasian youth assigned to APYA had significantly lower rates of TANF/food stamp receipt in the second year of the study, and third-year findings were not observed.

designed and implemented. This future research could include 1) exploratory analyses for potential explanations of the differential program benefits observed for ethnic groups; 2) the more comprehensive assessment of research subject behavior by expanded data collection to secure employment and recidivism outcomes from national data sources; and 3) extending the observation of current subjects to examine experimental program impacts into adulthood.

The evaluation of the APYA/SS program demonstrates that it has the potential to join the modest but growing list of evidence-based practices in juvenile corrections. However, program modifications and further research may be needed for APYA/SS to fully achieve the status of an evidence-based practice.

#### I. INTRODUCTION

The purpose of this report is to present findings, including recidivism and employment outcomes, from the National Council on Crime and Delinquency's evaluation of two complementary program components: the Avon Park Youth Academy (APYA) and STREET Smart (SS). APYA is a secure residential care program that provides specialized, intensive vocational and educational training to moderate risk youth committed to the Florida Department of Juvenile Justice (DJJ). SS is a reentry program that offers community support, educational services, and vocational services to APYA participants after release to the community.

This evaluation was sponsored by the U.S. Department of Justice's Office of Juvenile Justice and Delinquency Prevention (OJJDP) and the U.S. Department of Labor (DOL). The evaluation was being conducted by the National Council on Crime and Delinquency (NCCD) in partnership with the Florida DJJ, which administers APYA/SS, and Group 4 Securicor, Inc. (G4S, formerly Securicor New Century, Inc.), which operates the program. NCCD was assisted in conducting the evaluation by its subcontractors at Eastern Kentucky University in Richmond, Kentucky, and the Justice Research Center in Tallahassee, Florida.

APYA/SS was selected for formal evaluation by OJJDP and U.S. DOL because of its widely recognized status as a "Promising Program" for juvenile offenders, as evidenced by the following:

- SS was selected as a demonstration site as part of the Youth Offender Demonstration Project (YODP);
- In 2003, APYA was recognized as an innovative juvenile corrections program with an award from the International Corrections and Prisons Association;
- APYA was selected as one of the world's 15 exemplary criminal justice programs for young offenders by the Youth Employment Coalition in cooperation with the Annie E. Casey Foundation, the Youth Development Fund, and the Justice Policy Institute;

 APYA was featured in a national video conference sponsored by OJJDP and U.S. DOL;

 APYA has received numerous visitors from across the country and around the world.

Both the U.S. DOL and OJJDP determined that a rigorous evaluation was required to assess whether APYA/SS could progress from a "Promising Program" to an "Evidence-based Practice." The term "evidence-based practice" has become common parlance in the justice field, and generally refers to programs that have shown positive results based on findings from formal evaluations, particularly those employing experimental designs.

To make this assessment, NCCD, working with its sponsors, partners, and participants, designed and has conducted a randomized field experiment to evaluate the impact of APYA/SS on its participants. This experiment randomly assigned youth committed to residential care in Florida to APYA/SS and a control group. To be eligible for the study, youth had to meet specific pre-screening criteria. These criteria included the following:

- Be between 16 years old and 18 years, three months;
- Be moderate risk level:
- Have an IQ of at least 70;
- Demonstrate a need for or interest in vocational training and/or have the ability to pass the GED;
- Be free of significant mental health diagnosis and/or psychotropic medication;
- Not have a significant substance abuse problem (i.e., not recommended for residential substance abuse treatment) nor any history of inhalant abuse;
- Not have a history of escape from residential placement or absconding from supervision;
- Not have a history of aggressive behavior;

• Not have any chronic, pre-existing medical condition requiring a doctor's supervision (see Appendix A for the screening instrument used for determining study eligibility).

The control group received the educational and vocational programming typically provided by DJJ prior to APYA/SS implementation. This experimental design permitted a rigorous test of the hypothesis that APYA/SS participants will demonstrate more positive educational achievement, labor force participation, and reduced criminal recidivism after community release. In effect, this hypothesis tests whether participation in the specialized APYA/SS program leads to better outcomes than the conventional vocational and educational programming received by youth in the control group.

The remaining sections of this report present an APYA/SS program description, including process outcomes and participant profiles; a description of the control group programs; a description of the evaluation design including the random assignment process; a post–random assignment profile of the experimental and control groups; a description of and findings from the tracking and survey component of the evaluation; findings on education, employment, and recidivism outcomes; and implications for future research.

#### II. EXPERIMENTAL PROGRAM DESCRIPTION

## A. Program Design

APYA opened in July 1998. Managed by the Florida DJJ through a contract with G4S, the program serves youth from four DJJ regions: East Central (Daytona, Ft. Pierce), Northeast (Jacksonville), South (West Palm Beach, Miami), and West Central (Tampa, St. Petersburg, Orlando, Lakeland, and Ft. Myers).

APYA is located on a former Air Force base in Avon Park, Florida. This setting provides for a campus-like, normalized environment in which youth live in 12 fully equipped duplexes and are responsible for maintaining their households, yards, and the appearance of the campus. With funds made available from the U.S. DOL, an enhanced reentry component, STREET Smart (success, transition assistance, reduce recidivism, employment, education, training), was added to build upon the work ethic and skills instilled in the institutional phase of the program. The underlying theory behind the program is that youth need academic support, job training, and life skills in the community in order to be successful adults. The primary goals of APYA/SS are to provide education and job training as well as life and community living skills in order to facilitate self-sufficiency and a prosocial lifestyle. These goals are achieved by providing "real world" work experience and training on independent living skills within a normalized environment. The enhanced reentry component was designed to sustain the services offered at APYA by providing employment searches, job contacts, housing support, transportation support, mental health/substance abuse services, and educational placements.

# 1. APYA Overview

The APYA residential component provides comprehensive services (i.e., intake and classification, diagnostic and evaluation services, counseling and skills training, behavior management, and education) with an overall emphasis on preparing youth for the world of work.

Staff provide training on employability and life skills, help youth develop vocational competencies, and offer meaningful work opportunities. Of youth committed to DJJ, those admitted to APYA are more likely than other youth to be placed in an independent living situation upon successfully completing the program. APYA currently has a capacity of 200. It is designed to serve moderate risk male youth (as assessed by the juvenile court) ages 16 and older.

APYA manages the Second Chance School on the grounds of the APYA campus. The education building is a new building partially built by APYA youth. Although located on the APYA campus, it operates under the auspices of the Polk County Public School District. Objectives for each youth at the school are to attain a vocational certificate and a high school diploma or equivalent. These objectives are accomplished by providing comprehensive pre-vocational, vocational, and academic remediation services. Services are individualized; performance based; and include pre- and post-assessment, computer literacy training, and special education services.

A salient component of the program is the Home Builders Institute (HBI) vocational training service. HBI provides training in several trades, and youth have the opportunity to practice skills learned during supervised community service, on-the-job training, and paid employment. In contrast to other DJJ facilities that spend approximately 10% of each day focusing on employment-related skills, approximately 80% of the day at APYA is spent teaching vocational trades and employability skills. HBI provides instruction in the following trades: plumbing, electrical, carpentry, building and apartment maintenance, and landscaping. To be certified in a specific trade, a youth must log a total of 870 work hours in that trade.

Vocational trades are also taught by the G4S staff. G4S provides instruction in the following trades: culinary arts, desktop publishing, flooring, masonry, horticulture, auto maintenance, and auto detailing.

# 2. SS Overview<sup>2</sup>

SS was operated under a DJJ contract with G4S and was one of the federally funded U.S. DOL YODP sites. SS, the intensive community reentry component of the APYA/SS program, provided a vehicle for a youth's seamless movement from residential placement to living and working in the community upon completion of the APYA program phase. The program's wraparound services were provided from the youth's entry into APYA through 12 months post-release. SS's transition specialists worked with all youth throughout their residential stay to enhance APYA's skill training programs, provided intensive transition planning and preparation, and introduced the youth to their community specialist.

SS's transition specialists served as the link between the APYA staff and SS's community specialists. SS staff were fond of saying that "transition begins the second a youth enters the Academy." Although they were considered a part of the SS staff, the transition specialists worked full-time on the APYA campus. They worked in collaboration with APYA staff on a daily basis and initiated contact with youth upon their arrival at APYA. They participated in the intake process and monitored and advised on key elements of the youths' case planning throughout their stay at APYA. In addition to the needs assessments and performance plans completed by APYA staff, SS staff completed needs assessments at several points in the institutional phase of the program: upon entry to APYA, prior to a transitional home visit, and 10 days prior to a youth's release from APYA. These assessments were used to develop plans containing goals for youth during their transitional home visit and upon their discharge from APYA (community plan). Prepared during the Skillsman or Transition phase, both plans contained specific goals in the following areas: family, employment/vocation, education, housing, independent living skills, medical/physical/mental health/substance abuse issues, and legal/conditional release.

<sup>&</sup>lt;sup>2</sup> In 2005, following the completion of all experimental group youth, SS was converted from a voluntary reentry program to a conditional release program. This change had no impact on the program evaluation.

SS's specially trained community specialists provided individualized transition services upon a youth's release from APYA. Transition services included community job development and placement, ongoing employment and community adjustment training, and mentoring and support. The community specialists maintained relationships with the youths' families, employers, juvenile justice staff, local Workforce Investment Boards, School-to-Work partnerships, community service organizations, and local volunteers.

SS placed a special emphasis on the use of incentives. Among the incentives used were gift certificates to restaurants and retailers, movie passes, and gifts such as electronics. (See "SS Transition Profile," item 16 in Section III of this report, for more detail.)

## **B.** Major Program Strengths

The strengths of the APYA/SS program are indicated below. Many of these strengths are consistent with the literature on "what works" in youth-based employment and reentry programs. Strengths include the following.

- 1. At the time of the evaluation, both program components had reached a level of maturity and stability after continuous operation for several years.
- 2. APYA's phased approach to programming is based on a contingency-rewards model that has demonstrated effectiveness with juvenile populations. The approach enables staff to monitor the progress of each youth and reward him by promoting him to the next phase if his individual goals are met. The five phases of the program and the approximate number of days youth spend in each are as follows: 1) Orientation (30 days); 2) Trainee (45 days); 3) Apprentice (45 days); 4) Journeyman (60 days); and 5) Skillsman (45 days).
- 3. APYA uses a systematic and comprehensive assessment protocol that assesses youth along educational, vocational, and psychosocial dimensions. The assessments form the basis for an overall needs assessment that is used to develop an individual performance/treatment plan for each youth.
- 4. HBI and G4S apply a rigorous work regimen aligned to certifications in specific trades. Consistent with the "what works" literature, the majority (80%) of the youth's day is spent gaining real work experience in trades such as plumbing, carpentry, and electrical engineering, for which there is an identified need in the

labor market. Opportunities are provided to enable youth to complete the necessary work hours for certification and to complete community service hours. Many of these opportunities allow them to practice the workplace competencies featured in the Secretary's Commission on Achieving Necessary Skills (SCANS) report (e.g., effective use of resources, working in teams, and using tools and technology).

- 5. The emphasis on job training is not only focused on expanded employment but also seeks to provide *improved* employment opportunities for youth by matching their interests and aptitude with training that will assist them in obtaining a job they will like and that will pay good wages.
- 6. A multidisciplinary team employs a systematic case management process to ensure that a youth's education, job training, and reentry needs are met. The process involves a coordinated staffing approach in which teachers, job trainers, and transition specialists meet on a regular basis to discuss a youth's progress and explore ways of overcoming any obstacles that may impede his chances of success.
- 7. The program requires a carefully developed partnership between private agencies (G4S and HBI), public agencies (Florida DJJ and the Polk County Public School District), and the community (which provides community service opportunities), all of which play a strategic role in ensuring positive outcomes for youth.
- 8. SS's geographical structure was designed to maximize the use of its resources and increase the level and quality of contacts with youth.
- 9. SS administrators employed a regular staff meeting schedule that was used to reinforce administrative and policy areas, to allow for quality assurance reviews, and to train staff on new strategies or technology.
- 10. HBI and SS transition specialists helped youth obtain employment prior to their discharge from APYA. Additionally, transitional assistance funds, loans, tool kits, and scholarships were provided to help ease youths' transition back to the community.
- 11. Once in the community, SS's community specialists provided employment counseling, using a strengths-based approach, to facilitate a youth's use of community resources and the accomplishment of personal goals. They helped youth achieve their legal goals and provided a system of incentives to motivate them toward successful outcomes.
- 12. SS's community specialists invested a lot of their youth contact time working on SCANS skills such as taking responsibility for one's actions, demonstrating self-management strategies, having confidence in one's abilities, and other personal qualities that will enhance employability. The SS curriculum had chapters devoted to these skills.

- 13. SS placed a special emphasis on the effective use of leisure time. This is a major criminogenic need area that has been strongly linked to recidivism.
- 14. Community specialists formed positive relationships with DJJ's juvenile probation officers, enhancing program operations by complementing one other in the fulfillment of their respective functions.
- 15. APYA and SS maintained management information systems that provided a solid resource for assessing the nature and effectiveness of their services.

#### III. EXPERIMENTAL GROUP PROFILES

#### A. APYA Intake Profile

The experimental group consisted of 369 youth who were screened as eligible for APYA and randomly assigned to this facility over the 18-month period between June 17, 2002, and December 16, 2003. Nine youth never entered APYA—three absconded, three faced new charges, and three were committed to adult jail/prison shortly after random assignment. Data collected on the APYA intake form shortly after admission are presented below for the 360 youths who entered APYA. Tabular data summarized in this section are included in Appendix B.

# 1. <u>Demographics</u>

- 1. The majority (52.2%) of youth were from the Florida DJJ West Central region, with 21.4% from the Southern region, 14.7% from the East Central region, and 11.7% from the Northeast region.
- 2. The racial composition of the group was 44.4% Caucasian, 40.8% African American, 13.6% Hispanic, and 1.1% "other."
- 3. Nearly 90% of youth were 16 years old (42.2%) or 17 years old (47.2%) at the time of admission.

## 2. Social History

- 1. At the time of their arrest or referral, 92.8% of youth were living in their parent/guardian's home.
- 2. The majority of youth experienced chronic, severe, or frequent disruption in their housing (58.9%), family (53.9%), peers (94.2%), and education (83.3%) at the time of arrest.
- 3. Of youth studied, 29.7% had a history of running away from home.
- 4. Of youth studied, 7.5% had at least one dependent.

5. Of youth studied, 46.4% were assessed as chemically dependent based upon the Substance Abuse Subtle Screening Inventory (SASSI).<sup>3</sup>

# 3. Education

- 1. Of youth studied, 40.6% were not attending school or were having severe problems in education at the time of their arrest or referral, with only about one third (35.8%) attending regular schools.
- 2. Of youth studied, 43.6% had completed the eighth grade or below.
- 3. Almost one third (31.9%) had dropped out of school.
- 4. More than one third (37.8%) were assessed as having special education needs. Of these youth, 64.7% were reported to have learning disabilities.
- 5. New Century Education (NCE) testing indicated that almost two thirds (62.5%) had a reading skill level at or below the sixth grade. All youth had math skill levels at the sixth grade level or lower.

# 4. <u>Vocational Training</u>

- 1. Each youth was administered the Chronicle Career Quest Interest Inventory to determine interest and aptitude areas. The top five areas of vocational interest and aptitude were mechanical (32.5%), physical performing (14.2%), plants (11.1%), artistic (10.8%), and protective (8.6%).
- 2. The top five vocational training areas assigned at intake were masonry (20.8%), landscaping (16.1%), carpentry (15.0%), culinary arts (12.5%), and building and apartment maintenance (10.8%).

# 5. <u>Employment</u>

- 1. Over two thirds (68.6%) of the youth had been employed full- or part-time for at least 30 days prior to APYA admission.
- 2. At the time of their arrest, 24.7% were employed full-time and 10.3% were employed part-time.
- 3. The top two categories for most recent type of employment were building trades and construction (21.1%) and fast food (18.1%).

<sup>&</sup>lt;sup>3</sup> Note that 23.3% of youth had no recorded SASSI score.

# 6. <u>Criminal History</u>

- 1. Almost two thirds (63.1%) of these youth were committed for property crimes. The other youth were committed for drug offenses (15.3%), person offenses (13.3%), public order offenses (5.0%), and weapon offenses (3.3%).
- 2. One third (33.1%) of the youth had been adjudicated for a drug offense at some time. The drug offense for one fourth (24.4%) of these youth was for possession with intent to distribute.
- 3. Almost one half (47.8%) of youth had been arrested for the first time by the age of 13. The average age at first arrest was 13.5 years.
- 4. The majority (54.5%) of youth had been under community supervision more than once prior to APYA admission.

## **B.** APYA Transition Profile (APYA Exit)

All 360 experimental group youth who entered APYA exited the facility as of May 3, 2005. The following section presents a summary profile of these youth at the time of their release, drawn from data collected on the APYA transition form. Tabular data summarized in this section are included in Appendix C.

- 1. The majority of youth were 17 years old (43.9%) or 18 years old (41.7%) at the time of their release.
- 2. Of released youth in the experimental group, 80.0% completed the APYA program. The other youth were released for a variety of reasons, including terminations/transfers for age restriction (5.6%), disciplinary reasons (5.0%), health or mental health reasons (2.2%), new charges (2.2%), judicial discharge (1.9%), safety (1.9%), or other reasons (1.1%).
- 3. The average length of stay for all youth released from APYA was 296 days, or 9.7 months. Youth who completed APYA averaged a 10.2-month stay. The average lengths of stay for youth released for other reasons were termination due to age restrictions, 11.2 months; termination or transfer for disciplinary reasons, 9.4 months; transfers for services due to health or mental health reasons, 4.0 months; transfers due to new charges, 4.3 months; judicial discharge, 9.5 months; transfer due to safety reasons, 5.2 months; and transfers for other reasons, 2.5 months.

- 4. The vast majority (83.6%) of youth released from APYA transitioned to SS. Of the remaining youth, 9.7% were transferred to another DJJ facility, 5.6% were directly discharged, and 1.1% were under an "other" status at release.
- 5. During their stay at APYA, 76.7% of youth committed a program violation. The average number of violations per youth was 10.0. The most frequent violations were threat to the safety and security of others, 61.4%; being out of area, 47.2%; battery, 44.4%; verbal intimidation, 40.8%; sexual misconduct, 30.0%; damage and misuse of property, 27.8%; destruction of property, 25.8%; and stealing, 19.2%.

Profile data presented in the remainder of this section are based on APYA transition form data for youth who successfully completed APYA (N = 288). Successful completion includes youth who officially graduated from APYA or were in good standing at the time they were discharged by a juvenile court judge or were released after they had reached age 18, which is the upper age limit of DJJ jurisdiction.

- 6. Upon successful completion, most youth (97.3%) were living with a parent, guardian, or immediate family member.
- 7. Of youth in the experimental group who successfully completed APYA, 62.2% earned their high school diploma or GED while at APYA. Of these youth, 48.0% earned a GED, 23.5% earned an exit option diploma, 17.9% earned a special diploma, and 10.1% earned a regular diploma.
- 8. Of youth in the experimental group who successfully completed APYA, 45.8% were enrolled in school following their release. Of these youth, 28.8% were enrolled in regular schools, 9.1% were enrolled in alternative schools, 34.8% were enrolled in GED studies, 25.0% were enrolled in post-secondary education programs including vocational or technical programs or colleges, and 1.5% were enrolled in other schools.
- 9. The average educational grade level gain in reading for youth who successfully completed APYA was nearly two (1.9) grade levels. The average educational level gain in reading by number of grade levels gained was as follows: less than one level, 10.4%; one level, 29.9%; two levels, 31.6%; three levels, 20.5%; four levels, 5.9%; and five or six levels, 1.7%.
- 10. The average reading grade level at the time of successful APYA completion was eight. The proportion of youth by reading grade level was as follows: level five or lower, 6.9%; level six, 12.2%; level seven, 20.1%; level eight, 18.8%; level nine, 24.3%; and level ten, 17.7%.

- 11. The average educational grade level gain in math for youth who successfully completed APYA was 1.8 grade levels. The average educational level gain in math by number of grade levels gained was as follows: less than one level, 4.9%; one level, 33.7%; two levels, 46.2%; three levels, 11.8%; and four, five, or six levels, 3.4%.
- 12. The average math grade level at the time of successful APYA completion was 5.5. The proportion of youth by math grade level was as follows: level three or lower, 3.1%; level four, 9.0%; level five, 41.0%; level six, 39.2%; level seven, 6.9%; and levels eight or nine, 0.7%.
- While at APYA, 43.8% of youth participated in one of five construction trades. An additional 17.4% participated in building or apartment maintenance; 16.3%, in landscaping; and 9.7% in culinary arts. Other program participation included digital publishing/computer-aided design, 5.2%; auto, 4.2%; horticulture, 3.1%; and other (not specified), 0.3%.
- 14. Of those youth assessed at intake as having experienced chronic, severe, or frequent problems with housing, 83.4% of these youth were assessed as having no problems with housing at the time of their successful completion of APYA.
- 15. Of those youth assessed at intake as having experienced chronic, severe, or frequent problems with peers, 88.1% of these youth were assessed as having no problems with peers at the time of their successful completion of APYA.
- 16. Of those youth assessed at intake as having experienced chronic, severe, or frequent problems in their family, 73.3% of these youth were assessed as having no family problems at the time of their successful completion of APYA.
- 17. Of those youth assessed at intake as having experienced chronic, severe, or frequent problems in their education, 77.3% of these youth were assessed as having no problems in their education at the time of their successful completion of APYA.
- 18. Of those youth assessed at intake as having experienced chronic, severe, or frequent problems in their mental health, 50.0% of these youth were assessed as having no problems in their mental health at the time of their successful completion of APYA.

# C. SS Transition Profile (SS Exit)

Of the 360 youth who participated in the APYA program, 301 entered the SS reentry program. By March 9, 2006, all 301 youth completed (successfully or unsuccessfully) their participation in the SS program. The following information provides a summary profile of these

youth at the time of their program completion. The data were collected from the SS transition form. Tabular data summarized in this section are included in Appendix D.

- Nearly 90% of youth were 18 (43.5%) or 19 (43.2%) at the time they completed their participation in SS.
- 2. The racial composition of the group was 43.2% Caucasian, 41.5% African American, 14.6% Hispanic, and 0.7% "other."
- 3. Of the 301 youth who participated in SS, 183 (60.8%) successfully completed SS and 118 (39.2%) did not. Of those who successfully completed SS, 42.1% achieved all program goals and 57.9% completed the required program time but did not achieve all program goals. Of the 118 youth who did not successfully complete SS, 35.6% were non-compliant with the program rules or demonstrated a lack of progress; 27.1% committed a new offense; 25.4% had unknown whereabouts after repeated attempts to locate; 5.1% voluntarily withdrew; 1.7% had a technical violation; 0.8% were unable to participate due to reclassification, pending court action, medical, or other administrative reasons; and 4.2% had an "other" reason.
- 4. The average length of stay for all youth released from SS was 340 days, or 11.2 months. The average length of stay for youth who achieved all program goals was 12.3 months, while the average length of stay for those who completed the required program time without achieving all program goals was 12.1 months. The average length of stay for youth who did not successfully complete SS due to non-compliance/lack of progress was 10.7 months; committed new offense, 9.4 months; whereabouts unknown, 10.2 months; voluntarily withdrew, 5.8 months; technical violation, 8.4 months; reclassification, etc., 12.1 months; and other reasons, 7.0 months.
- 5. At the time youth completed their participation in SS, 68.8% had been directly discharged from DJJ and were receiving no supervision, 15.3% were either under DJJ supervision or on conditional release, 8.0% were in a secure facility, 1.3% were on adult probation, and 6.6% were under an "other" legal status.

Profile data presented in the remainder of this section are based on SS transition form data for youth who successfully completed SS (N = 183).

6. Of youth who successfully completed SS, 74.3% received direct services from SS staff, whereas 25.7% received support services. Of the 77 youth who achieved all program goals, 81.8% received direct services and 18.2% received support services. Of the 106 who did not achieve all program goals, 68.9% received direct services and 31.1% received support services.

- 7. Community specialists averaged 81.3 successful contacts, 48 face-to-face contacts, 18.1 family/guardian contacts, 3.4 employer contacts, and 2.7 educator/teacher contacts for each youth receiving direct services during their SS participation. For those receiving support services, community specialists averaged successful contacts. 11.4 face-to-face 29.3 11.6 family/guardian contacts, 0.6 employer contacts, and 0.4 educator/teacher contacts.
- 8. Of youth who successfully completed SS, 77.1% were living with their parent, guardian, or an immediate family member upon exiting the program; 19.7% were living independently, either alone in a leased apartment/home, with a significant other, with friends, or in an "other" independent living situation; and 3.3% had an "other" living situation.
- 9. At the time of successful program completion:
  - 58.5% of youth were assessed as having no problems with housing;
  - 61.7% were assessed as having no problems with peers;
  - 53.0% were assessed as having no problems with family;
  - 50.8% were assessed as having no problems with employment; and
  - 77.0% were assessed as having no problems with education.
- 10. Of the 163 youth assessed at their release from APYA as having no problem in housing, 41 (25.2%) were assessed as having situational problems and 25 (15.3%) were assessed as having severe problems with housing at the time of their successful completion of SS.
- 11. Of the 162 youth assessed at their release from APYA as having no problem in peers, 41 (25.3%) were assessed as having situational problems and 21 (13.0%) were assessed as having severe problems with peers at the time of their successful completion of SS.
- 12. Of the 149 youth assessed at their release from APYA as having no problem in family, 52 (34.9%) were assessed as having situational problems and 18 (12.1%) were assessed as having severe problems with family at the time of their successful completion of SS.
- 13. Of the 174 youth assessed at their release from APYA as having no problem in employment, 58 (33.3%) were assessed as having situational problems and 25 (14.4%) were assessed as having severe problems with employment at the time of their successful completion of SS.
- 14. Of the 146 youth assessed at their release from APYA as having no problem in education, 18 (12.3%) were assessed as having situational problems and 10 (6.8%) were assessed as having severe problems with education at the time of their successful completion of SS.
- 15. Of youth who successfully completed SS, 94.5% appeared motivated to change and ready to accept responsibility at the time of program completion.

- 16. Of youth who successfully completed SS, 92.3% earned incentives for meeting the targeted SS goals. Of those receiving incentives, 34.3% earned incentives for maintaining employment or education for 200 or more days. An additional 34.3% earned incentives for maintaining employment or education for at least 100 days.
- 17. Of the youth who successfully completed SS, 3.3% earned their GED/diploma while participating in SS, 65.0% had earned their GED/diploma at APYA, and 4.4% had earned their GED/diploma prior to their participation in APYA.
- 18. At the time of successful program completion, 8.2% were enrolled in school full-time, 6.0% were enrolled part-time, and 85.8% were not enrolled in school.
- 19. Upon successful program completion, 60.7% were employed full-time, 12.0% were employed part-time, 21.9% were not employed but were looking for employment, and 4.4% were not employed and not looking for employment. An additional 1.1% were employed; however, whether this employment was full-time or part-time was unknown.
- 20. Of the youth employed at the time they successfully completed SS, 8.1% had been in the position less than one month, 21.5% had been in the position from one to three months, 21.5% had been in the position from three to six months, 24.4% had been in the position from six to nine months, and 24.4% had been in the position more than nine months.
- 21. Of the youth employed at the time they successfully completed SS, staff reported that 29.6% were employed in jobs related to their specific field of training at APYA.
- 22. The most frequent trades in which youth were employed were building (12.6%), culinary arts (11.9%), carpentry (9.6%), landscaping (8.9%), electrical (6.7%), and fast food (5.9%).
- 23. Of the youth employed at the time they successfully completed SS, 1.5% had a gross weekly salary greater than \$500; 8.9%, between \$401 and \$500; 37.8%, between \$301 and \$400; 34.8%, between \$201 and \$300; 15.6%, between \$101 and \$200; and 17.1% had a gross salary of less than \$100 per week.
- 24. During SS participation, 7.7% of youth were never employed, 31.1% had only one employer, 35.5% had two employers, 15.8% had three employers, and 9.8% had four or more employers.
- 25. Of youth who successfully completed SS, only 11.5% were required to make restitution payments. Of those ordered to make payments, 47.6% made all required payments, 42.9% made some payments, and only 9.5% had not made any payments.
- 26. During SS participation, almost one third (31.1%) of the youth were required to perform community service hours. Of these, 54.4% were required to perform less than 50 hours of community service and 45.6% were required to perform 50 hours

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- or more of community service. Of youth required to complete community service hours, 98.2% completed all community service requirements.
- 27. During SS participation, according to worker report, 10.4% of youth were arrested for a new offense, 2.2% committed technical violations, and 2.2% were arrested for a new offense **and** committed technical violations. Of the youth arrested during their SS participation, 56.5% were convicted/adjudicated guilty for their offenses and 13.0% were returned to custody.

# IV. CONTROL GROUP PROGRAMS

The random assignment process for the control group placed youth not assigned to the experimental group (APYA/SS) in any DJJ placement option in the state for which they were eligible; specifically, any facility or program designated as moderate risk. Control group participants were placed in programs geographically distributed across the state of Florida consistent with the regular assignment process used by DJJ commitment managers.

Three-hundred forty-five control group youth were placed in 49 different facilities (see Appendix E). These facilities vary (often extensively) in the particular approach or philosophy used in their programming. Included among these facilities are wilderness programs, therapeutic communities, halfway houses, and specialized programs that serve substance-abusing or mental health populations. They range in size from 24 to 157 beds. As a point of interest, APYA represents the largest medium security facility in the state, with a capacity of 200. Each facility's security features differ, depending on the location and layout of the facility: some are more staff-secure than others, some use extensive security fences around the perimeter, and some use sophisticated hardware (such as surveillance equipment) to monitor activities. Youth in these facilities have limited access to the community, depending upon the nature of the programming, and the extent to which they are engaged in community-based activities (such as community service) varies according to the mission of the facility (Florida DJJ & Justice Research Center [JRC], 2006). While the programs vary by geographical location, program type, and primary approach, they typically share the following commonalities.

- The programs are required to provide an array of services that include social skills training, vocational training, self-esteem—enhancing activities, independent living skills training, educational services, and transitional planning.
- Youth attend school onsite under the supervision of program staff.

Overlay services, such as mental health and substance abuse counseling, family counseling, and family planning services, are provided as needed (Florida DJJ, 2006, p. ix-131).

As indicated by DJJ and JRC's 2006 Outcome Evaluation Report (2006), the average length of stay varies, but the range is six to nine months for most moderate risk facilities. Of the top 13 facilities where control group youth were placed (see Appendix E for a description of these facilities, including major programmatic activities), 10 had an identified range of stay of 6 to 9 months, 2 had a range of stay of 4 to 6, and 1 had a range of 9 to 12 months. The average length of stay for the 13 facilities with 10 or more control group youth was 257 days, or approximately 8.5 months (see Appendix E). The average length of stay for youth placed at APYA was 338 days, or 11.2 months.

Educational services are provided at all Florida DJJ facilities, including the moderate risk facilities to which study participants were assigned. Programs within these facilities function as separate schools that are operated by the school districts responsible for educational services in their respective areas. These schools make efforts to ensure that students are assigned to an appropriate educational track that includes regular diplomas, exit option diplomas, and GEDs. School attendance is required and individual assessment plans are provided. All of the control group facilities operate educational programs that are required to be in compliance with the quality assurance standards for residential commitment programs. These standards are based on state and federal requirements (Florida Department of Education, Division of Community Colleges and Workforce Education, 2006).

Of particular interest for this study was the nature and extent of vocational training and employment-based services provided. As noted above, these facilities are required to provide some form of vocational training. However, the nature and extensiveness of these programs

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<sup>&</sup>lt;sup>4</sup> These placements made up 199 (57.7%) of the total control group assignments.

differs greatly across facilities. The major difference in the use of vocational training as a component of a facility's activity regimen is one of degree, typically a function of the amount of **time** spent in vocational training and the **type** of vocational training made available. While vocational training is a required component of every program, very few emphasize it as THE major focus for youth development. This is what distinguishes APYA from the control group programs. In contrast to APYA, none of the control group facilities provides the number and level of vocational training opportunities afforded youth at APYA.

In comparing APYA's vocational training regimen to other facilities, it is important to consider the type of facilities in which youth are placed.<sup>5</sup> In general, there were four types of control group programs: academies (or larger residential facilities), halfway houses, wilderness programs, and boot camps. Of control group youth, 153 (44.3%) youth were placed in academies, 86 (24.9%) were placed in halfway houses, 79 (22.9%) were placed in wilderness programs, and 21 (6.1%) were placed in boot camps.<sup>6</sup>

Academies are often located on large campuses with significant security features, making it possible to design larger, more extensive vocational training programs in these locations. Of the four large residential facilities in which control group participants were placed, only Bay Point Schools offered programming that is similar to that provided at APYA. Bay Point Schools provides courses in culinary arts, landscaping, horticulture, and construction trades. They participate in many outside community service projects, including building houses for Habitat for Humanity. Like APYA, they have a partnership with National Home Builders Association that allows youth to enroll in the Home Builders Institute (HBI), where they can earn a 900-hour

<sup>&</sup>lt;sup>5</sup> Of the programs to which control group youth were assigned, 19 (38.8%) were academies, 19 (38.8%) were halfway houses, 7 (14.3%) were wilderness programs, and 4 (8.2%) were boot camp programs.

<sup>&</sup>lt;sup>6</sup> Six control group members did not attend a residential program following random assignment. DJJ lost jurisdiction of one youth due to age, and five were committed to adult jail shortly after random assignment.

pre-apprenticeship certificate that provides job-ready skills for entry-level positions in different trades.<sup>7</sup>

Many of the control group facilities are *wilderness programs*. At these programs, the emphasis is on meaningful work that builds self-esteem; promoting good communication skills (such as listening and speaking); promoting problem solving through negotiation and teamwork; and building leadership skills. Youth typically spend a lot of time outdoors engaged in community service projects or campus beautification projects. For example, at Big Cypress Wilderness Institute, youth participate in service projects that include vegetation removal, interpretive trail construction, and maintenance and debris removal.

At *halfway houses*, since the programs typically operate as therapeutic communities, vocational training is generally focused on teaching employability skills, independent living skills, and interpersonal development. Because these facilities do not have the advantage of available land for extensive programs (such as construction or building trades), their vocational efforts are very limited. Also, the emphasis of these programs is not on providing employment training. More time is devoted to cognitive-behavioral programming, substance abuse treatment, and mental health services.

In summary, the control group participants were assigned to the full array of DJJ moderate risk programs that are available to commitment managers. Assignments were made to academies, wilderness programs, halfway houses, and other program types using the standard assessment and assignment protocols developed by DJJ. These placements represented the "business as usual" approach desired by the U.S. DOL for control group placements as part of the research design. Though all of the facilities are moderate risk, none has the unique focus on vocational education that APYA provides, and none provides the employment-based reentry component with the characteristics of SS.

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<sup>&</sup>lt;sup>7</sup> http://www.baypointschools.com/vocation.html.

NCCD evaluators examined prospects for collecting individual-level data on control group cases regarding their program profiles (e.g., needs assessments) and experiences (e.g., educational and vocational achievement) in order to report information comparable to that of the experimental group presented earlier in this report. To do so, NCCD reviewed a sample of case files compiled by DJJ research and planning staff for control group cases from their post–random assignment programs from around the state. From this review, NCCD determined that relevant information, such as educational needs assessment and achievement, was not consistently collected for the control group cases at the various program sites. Based on the lack of consistent data and the substantial resources required to collect individual data from cases files located at the 49 control group program sites across the state, NCCD concluded that an endeavor to create comparable control group data was not feasible.

# V. COMPARATIVE COSTS OF EXPERIMENTAL AND CONTROL GROUP PROGRAMS

This section presents a comparison of the costs of the secure custody programs for the experimental and control group participants. The experimental group participated in APYA, while the control group participated in 49 other DJJ secure custody programs. Experimental and control group youth participated in secure custody programs between June 26, 2002, and May 3, 2005. This equates to secure custody program participation over three fiscal years (July 1 through June 30), which were FY02–03, FY03–04, and FY04–05.

In order to compare the costs of these programs, NCCD accessed program expenditures and numbers of program participants from reports published by DJJ. Specifically, DJJ's Performance Accountability Measures Report for 2006 included total federal and state expenditures, combined for FY02–03 and FY03–04, for male moderate risk programs. Also, DJJ's 2005 and 2006 Outcome Evaluation Reports included total program releases (i.e., participants) for FY02–03 and FY03–04. Program releases represent all youth who entered a moderate risk secure custody program and then were released from that program during a specific fiscal year for any reason (i.e., success or unsuccessful completion).

Since total program expenditure data were not available from DJJ reports for FY04–05, the comparative program costs presented below are for FY02–03 and FY03–04 only. Also, since DJJ reports do not include expenditures and participants for the specific reentry programs for the control group, it was not possible to include cost comparisons of these programs with SS.

Figure 1 presents the FY02–03 and FY03–04 total federal and state expenditures and total releases for APYA and the 14 programs (Bay Point Schools had two campuses) with the highest number of control group participants (see Section IV and Appendix E). The program cost per release was then calculated by dividing total expenditures by the total number of releases.

Figure 1

Florida DJJ Male Moderate Risk Programs Cost per Release Comparison FY02-03 and FY03-04					
Programs	Total Expenditures	<b>Total Release</b>	Cost per Release		
Riverside	\$12,551,150	347	\$36,170		
Bay Point West	\$10,642,895	351	\$30,322		
Big Cypress	\$2,599,449	87	\$29,879		
Bay Point North	\$1,951,268	67	\$29,123		
ARCHH	\$7,292,415	259	\$28,156		
Pinellas	\$3,511,082	131	\$26,802		
APYA	\$11,515,611	465	\$24,765		
South Pines	\$3,224,517	147	\$21,935		
Space Coast	\$2,147,278	100	\$21,473		
Youth Environment	\$2,264,776	106	\$21,366		
Falkenburg	\$6,508,762	308	\$21,132		
Crossroads	\$2,140,530	102	\$20,986		
Liberty	\$2,492,247	126	\$19,780		
San Antonio	\$1,804,225	105	\$17,183		
Panther	\$2,978,400	240	\$12,410		

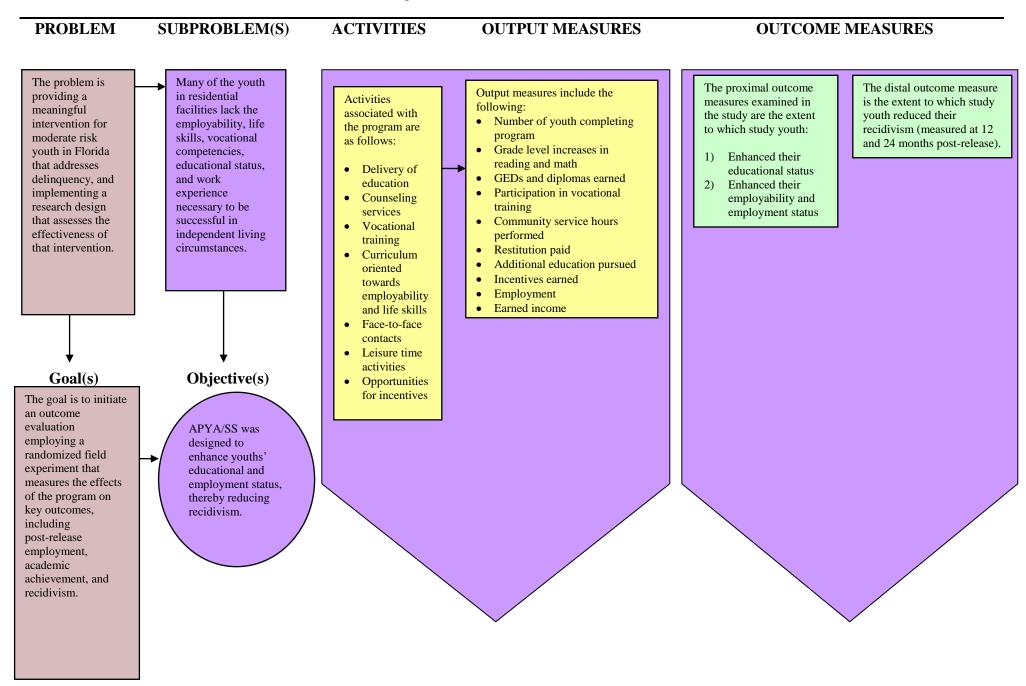
Figure 1 presents the cost per release for APYA and the control group programs in order of highest to lowest cost. It shows that Riverside was the highest cost at \$36,170 per release, while Panther was the lowest cost at \$12,410. Figure 1 also shows that APYA ranked seventh in cost per release at \$24,765.

## VI. DESIGN OF PROGRAM EVALUATION

# A. Logic Model for Evaluation

Figure 2 is a logic model that graphically depicts how the evaluation goals are aligned with the activities, outputs, and outcome measures of the program. As has been discussed, the goal of APYA/SS is to enhance the educational and employment status of youth participating in the program. Activities of the program aimed at promoting this goal include delivering educational services, providing vocational training, and counseling youth in a variety of needs-related areas. Among the outputs expected of participants are educational gains in reading and math, GED attainment, community service, and earned income from employment. The evaluation will measure the proximal effects of these activities on the extent to which study youth enhanced their educational status, employability, and employment status. It will measure the distal effect of the extent to which study youth reduced their recidivism.

Figure 2 Logic Model for Evaluation of APYA/SS



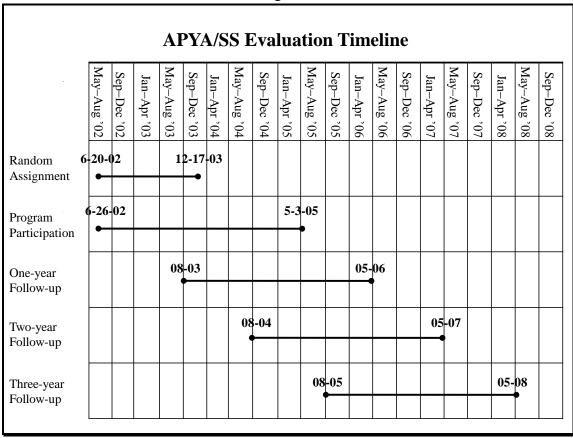
#### **B.** Evaluation Timelines

The APYA/SS evaluation was designed as a randomly controlled trial and implemented in a field setting. Youth committed to secure care in Florida were pre-screened into a random assignment pool based on their assessed risk level and presenting behaviors such as mental health or substance abuse. Youth screened into the assignment pool were immediately randomly assigned to the experimental (APYA/SS) or the control group. Assignment decisions were made by NCCD researchers based on a table of random numbers. Characteristics of youth in both the experimental and control groups are typical of cases assigned to moderate risk residential programs operated by DJJ. After random assignment, youth in both groups entered residential care programs and were eventually released to the community.

An evaluation timeline, which appears in Figure 3, traces major transition points in the evaluation process. It can help orient the reader to the findings presented below. Random assignment of youth to the experimental and control conditions began on June 20, 2002, and ended on February 17, 2003. A total of 714 youth were assigned. These youth participated in residential programs from June 26, 2002, until the last subject was released to the community on May 3, 2005.

Evaluation outcomes described in the logic model require observation of criminal recidivism, educational achievement, and labor force participation for a two-year period following experimental program completion as specified in the original OJJDP solicitation. This equates to a three-year period following community release, accounting for the 12-month period of SS participation after release from APYA. At the time of this report, each research subject had been observed for a three-year (36-month) period after his community release date. All subjects had reached the 36-month follow-up threshold as of May 2008.

Figure 3



## C. Statistical Power Analysis

The advantages of well-executed random assignment experiments are well known. They provide an unbiased comparison of the impact of treatment interventions by controlling selection bias. This benefit is maximized when a sufficient number of subjects is available to detect practical differences in treatment effects. Consequently, shortly after the field implementation of random assignment procedures, NCCD conducted a statistical power analysis to ensure that a sample of sufficient size would be available to support a rigorous evaluation of program impact, i.e., one that could draw conclusions within confidence levels acceptable to both practitioners and researchers in the field. The findings of that analysis are described below.

The APYA/SS evaluation design has several advantages in terms of statistical power and sample size. First, program eligibility screening criteria identified a relatively homogenous population (e.g., risk, age, and offense history) prior to random assignment. While pre-screening provides one advantage, the power of a statistical test to detect differences between the experimental and control groups depends largely on sample size, the hypotheses to be tested, the significance level established for rejecting the null, and the base rates of critical outcome variables.

In this study, post-release recidivism and workforce participation (e.g., employment and earnings) are the primary outcome measures. Prior studies of similar populations have found that employment training tends to reduce recidivism (Pearson & Lipton, 1999; Wilson, Gallagher, & MacKenzie, 2000). Furthermore, independent analyses conducted prior to this evaluation by a DJJ evaluation contractor observed a higher two-year post-release success rate (lower arrests, adjudication, and return to custody) among APYA participants compared to youth with similar characteristics (male, moderate risk) released from other residential programs in 2000 (Florida DJJ & JRC, 2001). Past evidence supports a hypothesis that APYA/SS participation will have a positive impact on post-release recidivism and adjustment.

Lipsey (2000) argues that use of the conventional .05 statistical threshold for concluding that program interventions work may lead researchers to reject approaches that are, in fact, effective (i.e., Type II error). An earlier comment Lipsey made about statistical thresholds for judging program impact is worth citing:

In [such] applied research, the implications of error of inference may be quite different from those in basic research. To "discover" that an applied treatment is effective when, in fact, it is not, does indeed mislead practitioners just as the analogous case misleads theoreticians. Practitioners, however, are often in situations where they must act as effectively as they can irrespective of the state of their formal knowledge, and it is not unusual for them to use treatments and techniques of plausible but unproven efficacy. Moreover, demonstrably effective treatments for many practical problems are not easy to come by and candidates

should not be too easily dismissed. Accepting a relatively high probability of Type I error in applied treatment effectiveness research amounts to giving a treatment the benefit of the doubt about whether statistically modest effects represent treatment efficacy or merely sampling error. (Lipsey, 1990, p. 39)

An example of this concern can be drawn from the recent OJJDP Intensive Aftercare Program (IAP) evaluation conducted by NCCD (Wiebush, Wagner, McNulty, Wang, & Lee, 2005). The IAP evaluation randomly assigned subjects entering secure care in three states. In Colorado, 51 youth were assigned to the control group and 67 to the experimental IAP program. During a one-year post-release follow-up period, 65% of the controls were arrested for a criminal felony or misdemeanor. In this sample, recidivism among youth assigned to IAP had to be 38% or lower to meet a .05 two-tailed significance criterion. In other words, the IAP needed to demonstrate an absolute reduction in recidivism of 27% to be considered effective (e.g., 65% minus 38% = 27%). A difference that large is unlikely to be observed in a practical program evaluation setting.

In his 2000 paper, Lipsey examined meta-analysis findings and established that conclusions drawn from conventional significance testing using conventional null hypotheses suffered from unacceptably high rates of Type II error (Lipsey, 2000, p. 112). Approaches recommended for improving the accuracy of conclusions drawn from statistical tests included specifying an effect size for establishing significance, preferably from sample data, and relaxing the statistical test criteria (e.g., alpha).

Many of the issues Lipsey has raised apply to this study. Very few successful interventions have been documented for youth exiting secure care (see Wiebush et al., 2005). On the other hand, almost every state offers vocational training programs to youth in secure care and could benefit by making program alterations that could reduce recidivism by 10% with a reasonable degree of certainty. Under these circumstances, the cost of adopting a less rigorous statistical test threshold for concluding that the program is effective may be very low.

Consequently, a power analysis conducted to support this evaluation study employed an expected effect size and a reduced test threshold.

The power estimates shown below were completed during the random assignment process. Recidivism expectations were drawn from the annual program accountability report compiled for DJJ residential programs. Recidivism is calculated by observing new juvenile adjudications or adult convictions two years after release. The success rate indicates the percentage of non-recidivists. The 224 youth released from APYA between July 1998 and June 2000 had a success rate of 65% (DJJ & JRC, 2001), and this served as the reference point for evaluating the sample size required to detect meaningful differences in recidivism between the APYA/SS experimental and control group cases. The findings in Figure 4 examine the relationship between various sample sizes, and test sensitivity for one-tailed significance test levels of .05 and .10 within an 80% statistical power threshold (see http://calculators.stat. ucla.edu). Given that there are approximately 345 sample cases in each comparison group (e.g., 369 experimental and 345 control subjects), this study should be able to confirm that a 65% APYA success rate is significantly higher than a control group success rate of 55% given application of a .05 one-tailed test. This corresponds to a 10% absolute difference between the groups, or an APYA success rate 18% higher than the control group's. Application of a .10 one-tailed significance test should detect absolute differences in the 8% to 9% range. Consequently, this evaluation should be able to detect meaningful differences in outcomes within both a practical and scientifically acceptable confidence level. These findings apply to tests applied to all APYA and control group cases. Those conducted within subgroups defined by prior offense history, ethnic, or other criteria will, of course, be less sensitive. Consequently, findings are reported within a .20 two-tailed level (equivalent to .10 one-tailed).

**Test Sensitivity Versus Sample Size** 700 628 600 500 482 462 Sample Size 400 358 315 300 287 200 146 100 0 20% 15% 10% 7% 9% 8% **Absolute Difference Between Comparison Groups ▲**.10 level **-**■-.05 level

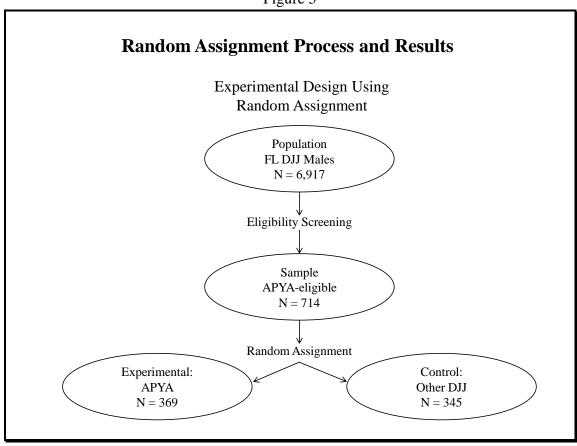
Figure 4

## D. Random Assignment Process

The random assignment schematic shown in Figure 5 describes the experimental design. Youth who passed the pre-screening criteria were randomly assigned to APYA or the control group. The random assignment process, which was administered by NCCD research staff, placed 369 youth in the APYA experimental group and 345 in the control group. Youth assigned to the control group were not denied vocational training. They entered other moderate risk residential programs and received vocational and educational services typically available in DJJ programs.

<sup>&</sup>lt;sup>8</sup> After each youth's pre-screening, DJJ intake staff contacted NCCD for a program assignment made by referencing a table of random numbers.

Figure 5



## E. Group Equivalency

The initial analysis, presented in Table 1, describes characteristics of APYA and control group subjects observed immediately after random assignment in terms of prior arrest history, correctional status, and demographic characteristics, i.e., characteristics which often demonstrate a relationship to post-release recidivism. Mean prior arrest data are shown for several offense categories and for prior adjudications, juvenile probations, and DJJ secure residential commitments. Demographic characteristics include age at first juvenile arrest, age at random assignment, and ethnicity. Total arrests include criminal arrests plus driving under the influence and technical violations of probation or aftercare. Criminal arrests exclude driving under the

<sup>&</sup>lt;sup>9</sup> Juvenile arrest, commitment, and demographic data were extracted from the Florida Juvenile Justice Information System (JJIS). Adult arrest and commitment data were extracted from data provided by the Florida Department of Law Enforcement (FDLE) and the Florida Department of Corrections (DOC).

influence and technical violations. No significant pre-assignment differences between these comparison groups appear in this table. In terms of arrest history of all types, random assignment appears to have produced experimental and control groups with nearly identical characteristics. Prior criminal arrests averaged 5.7 for APYA subjects and 5.8 for controls, while both groups had identical mean prior felony arrests (3.1), prior violent felony arrests (0.5), and property arrests (3.0). Subjects also had similar correctional status histories for adjudication, probation, and DJJ commitment. The ethnicity of experimental and control group subjects and their age at first juvenile arrest (13.8 and 13.7) or random assignment (17.1 and 17.0) vary only slightly.

Table 1							
Arrest History, Correctional Status, and Demographic Characteristics at Random Assignment							
Arrest/Correctional Status	APYA	Control					
Arrest Correctional Status	Mean	Mean					
Total Arrests	7.1	7.3					
Criminal Arrests	5.7	5.8					
Felony Arrests	3.1	3.1					
Violent Felony Arrests	0.5	0.5					
Property Arrests	3.0	3.0					
Drug Arrests	0.8	0.7					
Technical Violations	1.4	1.5					
Prior Adjudications	1.7	1.8					
Prior Probations	1.5	1.7					
Prior Commitments	0.5	0.5					
Demographic Characteristics	Demographic Characteristics						
Age at First Arrest	13.8	13.7					
Age at Random Assignment	17.1	17.0					
Caucasian (percent)	44.2%	43.5%					
Non-Caucasian (percent)	55.8%	56.5%					

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There are no significant differences (at .05 two-tailed) in these critical characteristics. It appears that random assignment produced equivalent groups for evaluating post-release recidivism and employment outcomes. It is also clear that, prior to their assignment and admission to secure care, youth in both groups had significant offense histories evidenced by multiple mean total, criminal, felony, and property arrests. Findings presented below examine criminal recidivism during the first and second years after their release to the community.

#### VII. POST-RELEASE SUBJECT INTERVIEW FINDINGS

Supplemental funding from DOL provided the opportunity to conduct comprehensive interviews with experimental and control group youth following their release to the community from a secure DJJ facility. The interview questions posed to respondents drew heavily on validated surveys used in prior research studies, such as the DOL evaluation of Job Corps, Monitoring the Future, U.S. Census American Community Survey, Tri-Cities Adolescent Employment Survey, and the 2003 Colorado Integrated Youth Survey. The questions constructed were designed to examine educational attainment, employment and income, training and certifications, job search activities, household status (residence and family), health status, and self-reported arrests after youth were randomly assigned to APYA or control groups. Participants were also asked to describe and evaluate their program experiences (e.g., extent to which program participation enhanced job-related skills) and the services they received during secure placement and after release.

These interviews combined telephone and face-to-face interviewing techniques to minimize costs and reduce the attrition rate. A subject tracking and interview schedule was constructed based on a standardized follow-up period of 44–48 months (a four-month window) from the time of random assignment. The survey findings presented here describe the characteristics of the subjects who were located and interviewed. Respondents were asked to identify and evaluate vocational services they received during residential placements and aftercare and report criminal behavior and arrests after their release.

# A. Characteristics of Survey Respondents

Four-hundred and seventy-seven of the 714 research subjects were located and interviewed. As Table 2 indicates, the percentage of APYA and control group respondents is nearly identical—66.4% versus 67.2%.

Table 2							
Survey Completion by Assignment Group							
C	APYA Control Total						
Completed Survey	N	%	N	%	N	%	
Yes	245	66.4%	232	67.2%	477	66.8%	
No	124	33.6%	113	32.8%	237	33.2%	
Total	369	100.0%	345	100.0%	714	100.0%	

The interview method, e.g., face-to-face or telephone, was also similar (see Table 3). Nearly 50% of the subjects in both groups were interviewed in a secure facility.

Table 3								
Sur	Survey Interview Mode by Assignment Group							
APYA Control Total						otal		
Interview Mode	N	%	N	%	N	%		
Telephone interview	114	46.5%	105	45.3%	219	45.9%		
Face-to-face DOC facility or jail	122	49.8%	109	47.0%	231	48.4%		
Face-to-face residence/other	9	3.7%	18	7.8%	27	5.7%		
Total	245	100.0%	232	100.0%	477	100.0%		

Sample response bias is explored in Table 4 by examining the criminal history and demographic characteristics of respondents observed at random assignment to APYA or the control group. The 245 APYA and 232 control group respondents have very similar mean prior arrest histories, and approximately one third of the subjects in each group had a prior DJJ commitment. The age and ethnic composition of respondents are also very similar. Significance tests disclose no group differences in these bivariate comparisons.

Table 4						
Respondent Criminal History and Demographic Characteristics at Random Assignment by Assignment Group						
Prior Arrest/Commitment	APYA (N = 245) Mean	Control (N = 232) Mean	Difference (APYA – Control)	Significance		
# Arrests (Any)	7.5	7.6	14	ns		
# Criminal Arrests	6.0	6.1	14	ns		
# Felony Arrests	3.3	3.3	04	ns		
# Violent Felony Arrests	0.5	0.5	04	ns		
# Property Arrests	3.2	3.0	.19	ns		
# Drug Arrests	0.8	0.8	.01	ns		
# Technical Violations	1.5	1.5	.01	ns		
Prior DJJ Commitment (%)	31.0%	30.0%	1.0%	ns		
Demographic Characteristics						
Mean Age at First Arrest	13.8	13.6	0.2	ns		
Mean Age at Random Assignment	17.1	17.0	0.1	ns		
Caucasian (%)	44.5%	43.1%	1.4	ns		
Non-Caucasian (%)	55.5%	56.9%	-1.4	ns		

<sup>\*</sup>Indicates significance at  $p \le .05$  two-tailed.

Differences were found in comparisons of the 477 survey respondents with the 237 non-respondents (not shown). Significantly higher mean prior arrests were found among respondents, but there were no significant differences in ethnicity, prior DJJ commitment, or age at random assignment.

# **B.** Vocational Services During Secure Custody

The APYA program intervention provided specialized vocational training during secure care and offered vocational assistance through a voluntary aftercare program (SS) to youth who participated. Control group youth participated in a variety of other secure programs offered by DJJ, but were not eligible for SS. However, post-release aftercare supervision from DJJ juvenile parole officers was available to both groups, and vocational or transition support services may have been provided as a result.

Survey respondents were asked to identify and evaluate services they received during secure care and aftercare. While not all respondents reported receiving vocational services in either status, Table 5 shows service receipt as a percentage of the total respondents in each group. This provides a straightforward indication of how the vocational service experiences of APYA and control group respondents differ. It is also consistent with the intent-to-treat (ITT) approach employed in the analysis of recidivism that follows (Hollis & Campbell, 1999; Schulz & Grimes, 2002). The statistical significance of APYA and control differences is reported in the right-hand column of each table. Test results that exceeded .10 (two-tailed) are marked not significant (ns).

The vocational training received during secure custody is shown in Table 5. The findings indicate that APYA participants were significantly more likely than controls to report vocational training for a specific job. This is evidenced by the fact that 94.7% of the 245 APYA respondents versus 44.4% of the 232 controls reported having received it. APYA youth were also much more likely to report completion of a GED or high school diploma during secure custody (53.9% versus 30.2%). They were, however, no more likely to report training in problem solving or social skills.

While APYA participants were much more likely to agree that vocational training during secure care helped them in terms of job training and preparation for independent living/

self-support, there was less difference in their evaluation of the problem-solving, social skills, or self-control training received. With the exception of job training help in the control group, a majority of the respondents in both groups offered positive evaluations of the vocational services they received.

	Table 5			
Vocational Service	s Received Du	ring Secure C	ustody	
Vocational Services	APYA (N = 245)	Control (N = 232)	Difference (APYA – Control)	Significance
Vocational Services Received				
Vocational training for a specific job	94.7%	44.4%	50.3%	.00
Training in problem-solving skills	77.1%	77.2%	0.0%	ns
Training in social skills	80.0%	78.9%	1.1%	ns
Completed GED or diploma	53.9%	30.2%	23.7%	.00
Respondent Evaluation of Secure Care Vocati	onal Services			<u>.</u>
Training in problem-solving skills helped me	59.6%	64.2%	-4.6%	ns
Training helped me improve social skills	65.3%	66.8%	-1.5%	ns
Helped my self-control or discipline	76.7%	75.9%	0.9%	ns
Helped my self-confidence	68.2%	66.8%	1.4%	ns
Helped provide me with job training	83.7%	40.5%	43.2%	.00
Helped improve ability to get along with others	70.6%	70.7%	-0.1%	ns
Helped prepare me for independent living and self-support	71.0%	54.7%	16.3%	.00

Respondents were also queried about the job placement services received in secure custody. As Table 6 indicates, APYA youth were significantly more likely to report receiving job placement training (71.0% versus 41.8%). Respondents also noted the specific types of assistance received. More than half of APYA youth reported assistance in job skill evaluation, resumé writing, interviewing, and job searching versus about one third of the controls. The APYA participants were also significantly more likely to report transition or relocation assistance in returning to the community (31.0% versus 12.5%), but they were no more likely to report receiving more enrollment assistance for education or military service.

	Table 6					
Job Placement Services Received During Secure Custody						
Job Placement Services	APYA (N = 245)	Control (N = 232)	Difference (APYA – Control)	Significance		
Job Placement Services Received						
Received job placement training	71.0%	41.8%	29.2%	.00		
Specific Job Placement Services Received						
Evaluation of job skills	55.9%	27.6%	28.3%	.00		
Resumé writing assistance	66.9%	32.8%	34.2%	.00		
Interviewing skills	64.5%	36.2%	28.3%	.00		
Job search training	60.8%	31.9%	28.9%	.00		
Career and job counseling	45.3%	28.4%	16.9%	.00		
Direct job referral	22.9%	12.1%	10.8%	.00		
Transition or relocation assistance	31.0%	12.5%	18.5%	.00		
Aid in education enrollment	25.3%	19.8%	5.5%	ns		
Aid in joining military	18.0%	13.4%	4.6%	ns		

# C. Vocational Services During Aftercare

Youth who reach the age of majority at release from secure custody are not required to receive aftercare supervision. Voluntary service participation is possible, however, and APYA offered voluntary transition services with a vocational emphasis through its SS aftercare program. Control group youth were not eligible for SS. The vocational services youth reported during aftercare are shown in Table 7. Youth assigned to APYA were significantly more likely to report receipt of aftercare transition services (73.9% versus 63.4%), but a majority of subjects in both groups received some form of transition service. The APYA youth were also more likely to report employment counseling (45.7% versus 28.0%).

Specific aftercare vocational services such as skill evaluation, resumé writing, interviewing, job search, direct job referral, etc., were also reported at a much higher rate among youth assigned to APYA. For instance, APYA participants reported receiving an evaluation of their job skills (32.7% versus 15.1%), job counseling (32.2% versus 13.4%), and transition

assistance (20.8% versus 5.6%) at rates at least twice that of controls. Although specific types of assistance were reported at higher rates than controls, the majority of APYA respondents did not report a specific aftercare vocational service, i.e., service reporting ranged from 10.6% to 37.6% of those responding.

	Table 7					
Vocational Services Received During Aftercare						
Vocational Services	APYA (N = 245)	Control (N = 232)	Difference (APYA – Control)	Significance		
Aftercare Status						
Received aftercare transition services	73.9%	63.4%	10.5%	.01		
Received aftercare employment counseling	45.7%	28.0%	17.7%	.00		
Specific Aftercare Vocational Services						
Evaluation of job skills	32.7%	15.1%	17.6%	.00		
Resumé writing assistance	29.8%	18.1%	11.7%	.00		
Interviewing skills	33.9%	19.4%	14.5%	.00		
Job search training	37.6%	20.3%	17.3%	.00		
Career and job counseling	32.2%	13.4%	18.9%	.00		
Direct job referral	17.1%	9.9%	7.2%	.02		
Transition or relocation assistance	20.8%	5.6%	15.2%	.00		
Aid in education enrollment	17.1%	9.9%	7.2%	.02		
Aid in joining military	10.6%	6.0%	4.6%	.07		

Table 8 examines respondent evaluation of aftercare vocational services. The first two rows show contact with juvenile probation officers (JPO) and aftercare counselors. Both groups reported similar rates of JPO contact, but APYA youth reported significantly more contact with aftercare counselors (53.5% versus 33.2%). The APYA respondents are significantly more likely to credit aftercare vocational experiences with helping them navigate their community transition, such as finding a place to live, opening a bank account, and applying for jobs. They were also significantly more likely to indicate that aftercare services improved their job prospects (33.9% versus 17.7% of controls) or helped them get a job (27.3% versus 17.2%). While they do credit the assistance of aftercare services more frequently, a large percentage of

APYA youth did not indicate positive service impact, i.e., positive evaluation credit ranges from 10.2% to 33.9% of APYA respondents.

Table 8						
Respondent Evaluation of Aftercare Vocational Services						
Vocational Services	APYA (N = 245)	Control (N = 232)	Difference (APYA – Control)	Significance		
Contact with JPO	42.9%	45.3%	-2.4%	ns		
Contact with aftercare counselor	53.5%	33.2%	20.3%	.00		
Respondent Evaluation of Aftercare Vocation	al Services					
Got a job as a result	17.1%	13.8%	3.3%	ns		
Helped me enroll in school	10.2%	10.8%	-0.6%	ns		
Helped me find a place to live	16.3%	6.0%	10.3%	.00		
Helped open bank account	16.7%	6.0%	10.7%	.00		
Helped me apply for jobs	28.6%	16.4%	12.2%	.00		
Helped improve my job opportunities	33.9%	17.7%	16.2%	.00		
Helped me get a job	27.3%	17.2%	10.1%	.00		

Respondents were also asked to report criminal activity occurring between their release to the community and the interview (see Table 9). Responses were sought for several categories of behavior, ranging from arrest to specific criminal acts and gang participation. With the exception of hard drug sales, APYA respondents were less likely to report criminal activity, but the findings proved significant for only one area, i.e., broke into vehicle or building (7.4% versus 14.8%).

	Table 9					
Self-reported Criminal B	ehavior Since I	Release From	Secure Custody			
Criminal Behavior	1 777.1		7.100	T		
Criminal Benavior	APYA (N = 245)	Control $(N = 232)$	Difference (APYA – Control)	Significance		
Got arrested	78.7%	82.1%	-3.4%	ns		
Stolen something less than \$50	10.2%	12.7%	-2.5%	ns		
Stolen something more than \$50	20.1%	21.4%	-1.3%	ns		
Broke into vehicle or building	7.4%	14.8%	-7.5%	.01		
Took vehicle	8.6%	11.8%	-3.2%	ns		
Damaged or destroyed property	13.9%	16.2%	-2.3%	ns		
Involved in a gang	6.1%	8.8%	-2.6%	ns		
Used weapon to get things	7.4%	9.6%	-2.2%	ns		
Hit someone	47.1%	51.8%	-4.6%	ns		
Attacked someone	8.6%	10.5%	-1.9%	ns		
Sold hard drugs	29.1%	28.4%	0.7%	ns		

# **D.** Summary of Preliminary Survey Findings

As noted earlier, 66.4% of APYA and 67.2% of control group subjects were located and interviewed. Response bias examination revealed no significant differences between APYA and control group interviewees regarding demographics and arrest and commitment histories. Differences were observed, however, in comparisons of the 477 survey respondents with the 237 non-respondents. Significantly higher mean prior arrests were found among respondents, but there were no significant differences in ethnicity, prior DJJ commitment, or age at random

assignment. Since interviews were completed several months after release to the community, respondents were asked to reflect back upon their secure care vocational experiences and their aftercare transition back into the community. They were asked specifically to identify vocational, life skills, and employment services they received and to evaluate the impact of these services on them.

The findings support the conclusion that APYA participants were more likely to receive vocational or job placement services during secure custody and after community release than control group youth. They were also more likely to credit these services as having helped them interview for employment, find jobs, open bank accounts, and find places to live. These are the kind of practical tasks associated with successful community reentry for individuals confined in secure facilities (see, for instance, Visher & Lattimore, 2007).

In effect, secure care vocational programming followed by voluntary SS participation and vocational support in the community does appear to have enhanced the vocational services available to APYA youth. It is worth noting, however, that the receipt of vocational training during secure care was reasonably high in both groups (see Table 5). During aftercare, 73.9% of APYA youth reported receiving some transition services, but so did 63.4% of the controls. Controls were much less likely to report receiving specific aftercare vocational services than youth assigned to APYA. However, APYA youth reported receiving aftercare vocational services at relatively low rates, ranging from 10.6% to 37.6% of the respondents (see Table 7). In effect, a large percentage of the APYA participants interviewed did not report receiving a specific vocational service.

#### VIII. EDUCATIONAL OUTCOMES

#### A. Introduction

As the program description indicates, APYA/SS attempted to increase educational achievement during secure care and reentry as a means for improving the employment prospects of its clients. This section of the report examines the educational participation of all research subjects by accessing an independent data source, the Florida K-20 Education Data Warehouse (EDW) maintained by the Florida Department of Education (DOE). A partial data extract was obtained in August 2006, but complete data were not secured until January 2009 due to access limits imposed by the agency. Findings in this section describe subject educational achievement during secure care and the first two years after community release.

The DOE serves as the single state repository of education data from Florida school districts, community colleges, universities, and independent post-secondary institutions. The EDW integrates existing, transformed data extracted from multiple sources available at the state level. The data were generated primarily by social security number; however, EDW employs several steps for maximizing data identification, including the use of last and first names, birth date, gender, and race (see Florida Department of Education, Education Data Warehouse, 2002).

Findings presented here were drawn from multiple student-centric data files provided by DOE. High school level educational achievement prior to, during, and after the secure care program was examined. NCCD matched records by secure program date and program name where possible to ensure accuracy. Higher education enrollment was determined by analysis of five separate files and included vocational center, community college, school district, adult general education, and state university system enrollment. These data contained enrollments and

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<sup>&</sup>lt;sup>10</sup> Approximately one third of youth granted high school awards had an award year only and not an award date, limiting the ability to match exactly to the time in secure care. Further, the school name was frequently listed as "State of Florida," limiting the ability to match exactly by program name.

awards through August 2007, providing a look at education pursued two years following the community release of each subject.

Based on a power analysis completed prior to random assignment (presented in Section VI, Part C), statistical tests employed for the experimental hypotheses are reported at two-tailed significance levels within .20. The findings presented below examine educational outcomes for all subjects randomly assigned to the APYA secure program at Avon Park (369 APYA youth and 345 controls). This conforms to the ITT analytical framework adopted throughout this evaluation. Of the 369 assigned youth, 288, or 78.0%, successfully completed the APYA secure program.<sup>11</sup> Comparable information is not available for control group subjects.

## B. Secure Program Educational Achievement

Educational programming is a required component of Florida DJJ residential commitment programs. Youth assigned to APYA were expected to obtain a high school diploma or equivalent during their secure residential program stay. Similar objectives were set for control group youth who attended other secure residential programs with academic components. These findings permit a comparison of subject academic achievement based on program assignment.

Available data permit observation of three types of high school level educational achievement: high school diploma, general education diploma (GED), and special diploma. Special diploma options are available for students with properly identified disabilities.<sup>12</sup>

As Table 10 indicates, APYA-assigned subjects were significantly more likely to earn a high school level diploma of any type during secure care;<sup>13</sup> approximately half (49.1%) did so,

Based on APYA staff r

<sup>&</sup>lt;sup>11</sup> Based on APYA staff reports.

<sup>&</sup>lt;sup>12</sup> Special diplomas are recognized by employers as high school diplomas. However, special diplomas may not be accepted by military recruiters or vocational schools and are not usually accepted by community colleges.

<sup>&</sup>lt;sup>13</sup> Prior to random assignment and admission to secure care, 4.1% of APYA/SS youth and 2.6% of the controls had earned a GED (n=20), a high school diploma (n=2), or a special diploma (n=2). This is not a significant difference. None of these youth eligible to earn a more advanced high school diploma during secure care was documented as having done so.

versus less than one quarter (22.0%) of control group youth. <sup>14</sup> In terms of degree type, 7.0% of APYA youth earned a high school diploma, 27.6% earned a GED, and 16.5% earned a special diploma. Among controls, 3.5% earned a high school diploma, 19.1% earned a GED, and none received a special diploma. A striking component of this finding is the awarding of special diplomas to 61 APYA youth versus no special diploma awards to control group subjects. The capacity of control group secure programs to provide testing or programming for special diplomas is unknown.

One explanation for higher rates of high school diploma award is that APYA youth were in the secure program approximately three months longer, on average, than their control group counterparts, which extended the opportunity for educational achievement. At release from secure care, youth assigned to APYA received diplomas (49.1%) at more than twice the rate of controls (22.0%). Much of this gain is attributable to special and GED awards.

Table 10							
Assignment Group Comparisons of Secure Program Educational Achievement							
Type of Diploma  APYA (N = 369)  Control (APYA – Control)  Signification (APYA – Control)							
Any Diploma	49.1%	22.0%	27.1%	.00			
High School Diploma	7.0%	3.5%	3.5%	.03			
General Education Diploma	27.6%	19.1%	8.5%	.01			
Special Diploma	16.5%	0.0%	16.5%	.00			

Note: Seven APYA and two control group youth earned both GEDs and high school diplomas while in secure care.

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<sup>&</sup>lt;sup>14</sup> Pearson's chi square was used to test dichotomous variables.

Table 11 observes cumulative educational achievement (e.g., both secure and post-release diploma awards) at the close of the two-year post-release follow-up. At that point, 57.2% of APYA youth and 36.5% of the controls had earned at least one of the three types of high school level diplomas. In effect, APYA youth are still significantly more likely to have acquired a high school diploma of some type two years after release. The trend in the type of diploma awarded observed at release from secure care continued into the two-year community follow-up with one exception: the award of a GED was no longer significantly higher for APYA youth.

Table 11  Assignment Group Comparisons of Educational Achievement									
Type of Diploma  APYA Control (N = 369) (N = 345)  Difference (APYA – Control)  Control)									
Any Diploma	57.2%	36.5%	20.7%	.00					
High School Diploma	11.1%	7.3%	3.8%	.08					
General Education Diploma	eral Education Diploma 30.4% 28.1% 2.3% ns								
Special Diploma	17.6%	1.7%	15.9%	.00					

Note: Seven APYA and two control group youth earned both general education diplomas and high school diplomas while in secure care.

The findings presented in Tables 12 and 13 display educational achievement by ethnicity within each assignment group. The sample includes reasonably large numbers of African American and Caucasian youth in both APYA and control subgroups (generally, 150 subjects in each). There are fewer Hispanic youth, but adequate numbers to support a descriptive analysis. The three subjects who fell outside the three major ethnic groups appear in the "other" category.

Ethnic subgroups were tested for equivalence (see findings in Appendix F) by examining several pre-test criminal history and demographic characteristics. One significant difference was found between Hispanic APYA and control subjects. While these subgroups appeared reasonably equivalent, subjects were randomly assigned to experimental or control conditions,

which does not ensure equivalent ethnic subgroups. Tables 12 and 13 employ bivariate tests of significance since these outcomes are less critical to the evaluation. This issue is addressed further, and in a different manner, in the sections which examine employment and recidivism outcomes.

African American, Hispanic, and Caucasian youth who were assigned to APYA were significantly more likely to receive a diploma (any type) or a special diploma during secure care than their respective control groups (see Table 12). In addition, Caucasian APYA youth earned high school diplomas and GEDs at a significantly higher rate during secure care.

		Table 12								
Assignment Group Comparisons of Secure Program Educational Achievement by Ethnicity										
Type of Diploma	Ethnicity	APYA (N = 369)	Control (N = 345)	Difference (APYA – Control)	Significance					
	African American	41.0%	14.1%	26.9%	.00					
	Hispanic	44.9%	18.2%	26.7%	.01					
Any Diploma	Caucasian	58.3%	31.3%	27.0%	.00					
	Other	0.0%	0.0%	0.0%	ns					
	Total	49.1%	22.0%	27.1%	.00					
	African American	3.2%	3.4%	-0.2%	ns					
	Hispanic	6.1%	2.3%	3.8%	ns					
High School Diploma	Caucasian	11.0%	4.0%	7.0%	.02					
	Other	0.0%	0.0%	0.0%	ns					
	Total	7.1%	3.5%	3.6%	.03					
	African American	16.7%	12.1%	4.6%	ns					
	Hispanic	22.5%	15.9%	6.6%	ns					
General Education Diploma	Caucasian	39.9%	27.3%	12.6%	.02					
Diproma	Other	0.0%	0.0%	0.0%	ns					
	Total	27.6%	19.1%	8.5%	.01					
	African American	21.2%	0.0%	21.2%	.00					
	Hispanic	16.3%	0.0%	16.3%	.01					
Special Diploma	Caucasian	12.3%	0.0%	12.3%	.00					
	Other	0.0%	0.0%	0.0%	ns					
	Total	16.5%	0.0%	16.5%	.00					

Table 13 shows cumulative educational achievement by ethnicity at the close of the two-year post-release follow-up. Assignment to APYA remains associated with a significantly higher rate of diploma acquisition in each ethnic group, but there are some departures from the findings observed at secure care release. The APYA youth do not have significantly higher rates of GED awards. Two years post-release, GED achievement is the same across all ethnic groups. Hispanic and Caucasian APYA youth earned significantly more high school diplomas than their control groups, and all APYA-assigned ethnic groups earned significantly more special diplomas.

		Table 13								
Assignment Group Comparisons of Educational Achievement at Two Years Post-release by Ethnicity										
Type of Diploma	Ethnicity	APYA (N = 369)	Control (N = 345)	Difference (APYA – Control)	Significance					
	African American	50.0%	26.2%	23.8%	.00					
	Hispanic	53.1%	27.3%	25.8%	.01					
Any Diploma	Caucasian	65.0%	49.3%	15.7%	.01					
	Other	100.0%	50.0%	50.0%	ns					
	Total	57.2%	36.5%	20.7%	.00					
	African American	5.8%	7.4%	-1.6%	ns					
	Hispanic	12.2%	2.3%	9.9%	.07					
High School Diploma	Caucasian	15.3%	8.7%	6.6%	.07					
	Other	100.0%	0.0%	100.0%	ns					
	Total	11.1%	7.3%	3.8%	.08					
	African American	21.8%	18.1%	3.7%	ns					
	Hispanic	22.5%	22.7%	-0.2%	ns					
General Education Diploma	Caucasian	41.1%	39.3%	1.8%	ns					
2.5.0	Other	0.0%	50.0%	-50.0%	ns					
	Total	30.4%	28.1%	2.3%	ns					
	African American	22.4%	2.0%	20.4%	.00					
	Hispanic	18.4%	2.3%	16.1%	.01					
Special Diploma	Caucasian	12.9%	1.3%	11.6%	.00					
	Other	0.0%	0.0%	0.0%	ns					
	Total	17.6%	1.7%	15.9%	.00					

# C. Higher Education Enrollment

Higher education pursued within a two-year period after release from secure care was also examined. DOE data from multiple files were analyzed to determine whether youth enrolled in programs at Florida community colleges, district vocational centers, or school district adult general education programs. There were no reported enrollments in the Florida state university system.

Information describing program participation and level of achievement was largely missing. This makes it difficult to determine why subjects enrolled, what programs they chose, or whether they graduated or received some form of certification. Available data indicate that a high school diploma was not required to enroll in community college. Several subjects without diplomas enrolled and appear to have participated in apprenticeship or parenting programs at community colleges. On the other hand, youth who previously received high school diplomas also enrolled in district adult education.

Table 14 shows higher education enrollment by type at the end of the two-year period following secure program release. Control group youth were significantly more likely than APYA youth to enroll in community college or adult education following release. Total higher education enrollment was also significantly higher for control subjects.

Given that significantly fewer control group youth earned high school level diplomas during and after secure care, at least some of the youth enrolled in adult education may have been seeking a high school diploma. Since data describing what program subjects enrolled in are limited, this cannot be determined. If youth enrolled in adult education were awarded a high school diploma, it is likely to have been reported to Florida DOE and included in the findings for diploma awards.

	Table 14									
Assignment Group Comparisons of Higher Education Enrollment at Two Years Post-release										
Higher Education Type $ \begin{array}{c cccc} APYA & Control \\ (N=369) & (N=345) & Control \\ (N=345) & Control \\ \end{array} $ Significance										
Community College	5.4%	9.0%	-3.6%	.06						
District Vocational	2.7%	3.8%	-1.1%	ns						
District Adult	District Adult 18.4% 22.9% -4.5% <b>.14</b>									
Total	24.9%	31.3%	-6.4%	.06						

Table 15 breaks down total higher education enrollment two years following release by ethnicity. The Caucasian control group youth were significantly more likely than Caucasian APYA youth to enroll in higher education.

Table 15  Assignment Group Comparisons of Higher Education Enrollment									
	at T	wo Years Pos	t-release by E	thnicity					
E4lami ai4m	AP	YA	Cor	ntrol	Difference	Cianifiaanaa			
Ethnicity	N	%	N	%	(APYA – Control)	Significance			
African American	156	37.8%	149	33.6%	4.2%	ns			
Hispanic	49	18.4%	44	27.3%	-8.9%	ns			
Caucasian	163	14.7%	150	30.0%	-15.3%	.00			
Other	1	0.0%	2	50.0%	-50.0%	ns			
Total	369	24.9%	345	31.3%	-6.4%	.06			

## D. Summary of Educational Findings

At release from secure care, youth assigned to APYA received high school diplomas of any type at more than twice the rate of controls (49.1% versus 22.0%, respectively). In addition, each of the ethnic subgroups assigned to APYA had significantly higher rates of diploma award. Much of this gain is attributable to the awarding of special and GED diplomas during secure care.

Two years after release, APYA youth still had a significantly higher rate of diploma award (57.2% versus 36.5% for controls), as did each of the three ethnic subgroups. While much of this difference is attributable to the awarding of special education diplomas, it does indicate higher educational achievement and may contribute to enhanced employment.

Subjects could also participate in higher education after release from secure care. Only enrollment information (as opposed to degree or certificate award) was available to examine this educational area. Control group youth appear to have been significantly more likely than APYA youth to enroll in some form of post-secondary education. Control group higher education enrollment was 31.3%, versus 24.9% for APYA. Much of this difference is attributable to high enrollment among Caucasians in the control group. By comparison, 57.2% of APYA youth versus 36.5% of controls received a high school level diploma. Whether high school academic achievement discouraged higher education enrollment of APYA subjects cannot be established.

#### IX. EMPLOYMENT OUTCOMES

#### A. Introduction

The APYA/SS program attempted to improve the vocational skills and educational achievement of its participants in order to improve employment once they returned to the community. Similar objectives were pursued for control group subjects, but the previously reported evidence drawn from subject interviews and academic achievement suggests they did not receive as much vocational or educational assistance (see Tables 5, 6, 7, and 8). This section of the report evaluates the impact of APYA/SS on employment. It tests the hypothesis that assignment to the program had a positive impact on post-release employment outcomes. Employment is one of two critical outcomes the program attempted to improve. Recidivism outcomes are presented in the following section.

Data necessary to support these research findings were obtained from the archives of the Florida Education and Training Placement Information Program (FETPIP) maintained by the Florida DOE. An initial FETPIP extract was secured in calendar year 2005, but access limitations subsequently imposed by the agency delayed the receipt of a second extract until March 2009. Consequently, findings in this section describe, for the first time, the employment and earnings of research subjects during a three-year period following their release to the community.

The outcomes shown below are drawn from 13 quarters (three years) of post-release employment for the 714 subjects randomly assigned to APYA or the control group. The FETPIP data provide relatively limited quarterly employment and earnings summaries, based on social security number, when they are reported by employers. For each quarter of employment, a separate record is generated that contains the North American Industry Classification System

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<sup>&</sup>lt;sup>15</sup> Employers reported by FETPIP are those who submitted Florida wages as received from the Florida Department of Revenue. Data contained the first three letters of the employed person's last name for verification purposes. Of the records provided, 84.4% were found to match the last name as indicated by DJJ. The remaining FETPIP records were excluded from analysis.

(NAICS) occupational code, the NAICS industry job title, quarterly earnings for the employment listed, and total quarterly earnings. Subject employment was observed from the first quarter of community release (i.e., the first quarter containing the date of community release) to the close of the subject's three-year follow-up period. Subjects for whom no records were located were assumed not to be employed, at least in employment situations that were reported to FETPIP. At least one quarterly earnings record was found in FETPIP archives for 84.6% of the APYA youth and 80.6% of the controls. A second data extract available from FETPIP describes food stamp and Temporary Assistance for Needy Families (TANF) benefits on a fiscal-year basis. Only two years were available for each subject.

The majority of findings presented here describe employment status at one, two, and three years after release to the community. At the end of each year, the findings indicate 1) the percentage of youth reported as employed during any previous quarter, 2) the average number of quarters employed, and 3) average earnings. In effect, unless otherwise noted, employment findings are cumulative (as are recidivism outcomes reported in the next section). The extended year-by-year presentation attempts to show how the program impact changes over time. In the first year after release, many APYA youth (301 out of 369) were voluntary participants in the SS reentry program. In the second and third years, many subjects reached the age of majority and left DJJ jurisdiction.

Independent outcomes for the third year of the follow-up are reported separately to provide a snapshot of subject employment during the final 12 months of the follow-up period. Finally, independent annual earnings were calculated at one, two, and three years after release to determine whether youths' income exceeded the 2006 poverty threshold.

Employment outcomes are presented for the full random assignment groups (369 APYA youth and 345 control group youth). This is an ITT analysis of all assigned subjects regardless of actual participation or completion of the APYA program. Employment findings are also

disaggregated by ethnicity (African American, Hispanic, Caucasian, and "other"). The ethnic subgroup analysis was conducted because earlier recidivism findings available at one and two years post-release disclosed that APYA's impact varied by ethnic group. Similar impacts are observed below for employment findings.

Based on a power analysis completed prior to random assignment (presented in Section VI, Park C), statistical test results that fall within a two-tailed significance level of .20 are reported. This threshold was established to permit substantive findings that fell below conventional thresholds to be identified and discussed. Since each table reports the actual significance level within .20 and the observed differences between the groups, readers may apply more restrictive test criteria. Unless otherwise noted, Pearson's chi square test was employed for dichotomous variables and an independent sample t-test for means computed for interval variables. Multivariate findings employ logistic or MLS regression.

# B. Percent Employed After Release

Each table tests the hypothesis that APYA and SS had a more positive impact on workforce participation than the alternative programs to which control group subjects were assigned. As Table 16 indicates, the employment rate for APYA assignments was 72.4% versus 64.4% for controls at the end of the first year, or 8.0% higher. It remained approximately 4.0% higher at the end of years two and three. The year one employment finding was significant at .02, and the 8.0% subtracted difference is 12.5% higher than the control group employment. The APYA impact appears to have decreased at the close of years two and three, but remains within the established reporting threshold. 17

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<sup>&</sup>lt;sup>16</sup> Subjects were randomly assigned to APYA or control secure residential programs, but not all APYA-assigned youth entered SS upon release.

<sup>&</sup>lt;sup>17</sup> Pearson's chi square was employed for dichotomous variables.

	Table 16									
Assignment Group Comparisons of Percent Employed: Years One, Two, and Three										
Follow-up Period	APVA Control Difference									
Year One	72.4%	64.4%	8.0%	.02						
Year Two	81.0%	76.5%	4.5%	.14						
Year Three	84.6%	80.6%	4.0%	.17						

Note: Participants were employed during any of the quarters preceding the end of the follow-up period.

Table 17 disaggregates employment by ethnicity and assignment group. There are approximately 150 African American and Caucasian youth in both the APYA and control subgroups. The Hispanic sample is much smaller (49 APYA and 44 controls) but of adequate size to support a comparative test. Findings for the three subjects (one APYA and two controls) who fell outside these major ethnic groups are presented in the "other" category, but significance is not tested.

Since subjects were randomly assigned to APYA or the control group at admission to residential care, equivalence between experimental and control cases in ethnic subgroups cannot be assumed. Consequently, the equivalence of APYA and control ethnic subgroups was tested by observing 10 pre-assignment measures including age at random assignment, prior arrest by type, prior adjudication, and previous commitment status. Only one significant difference was observed (see Appendix F, Table F6). Hispanic APYA subjects had a significantly higher number of prior adjudications than Hispanic controls. While African American and Caucasian youth appear very similar on available pre-assignment measures, <sup>18</sup> multivariate analyses were employed to control, insofar as possible, for pre-assignment differences. The findings below show the subgroup differences observed in bivariate comparisons, but the significance levels

<sup>&</sup>lt;sup>18</sup> See Appendix F, Table F6, for subgroup equivalence tests. Hispanic APYA youth had a significantly higher number of prior adjudications (within .10 two-tailed). No other significant differences were observed within that level.

reported for ethnic subgroups are based on multivariate analyses described in Appendix F. 19 This presentation approach attempts to make the findings clearer and more accessible to readers unfamiliar with regression coefficients without compromising the test method.

The disaggregated findings show some ethnic group patterns worth noting when interpreting the findings. Controls represent the counterfactual and received the residential and reentry programming typically provided by DJJ. At the end of year one, African American and Hispanic controls have similar employment rates (56.4% and 54.5%, respectively) and both are significantly less likely to be employed than Caucasian youth (75.3%).

In year one program comparisons, APYA subjects show significantly higher employment rates in each ethnic group: African American, Caucasian, and Hispanic. The largest, most significant gains, however, are observed for Hispanics.

At the end of two years, APYA subjects are still employed at a higher rate than their respective controls, but the observed differences narrow, and no ethnic comparison is significant. By the end of year three, only Hispanic APYA youth show significant gains in employment.

In general, Hispanics assigned to APYA are employed at a higher rate than Hispanic controls at the close of each year, with year one and year three findings significant. African Americans assigned to APYA also show a higher employment rate each year, but the difference is significant only in year one. The Caucasian APYA and control groups were both employed at relatively high rates one year after release, which leaves less room for improvement in the years that follow. At the end of year three, employment approaches 90% for both the Caucasian APYA and control groups.

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<sup>&</sup>lt;sup>19</sup> See Appendix F for more detailed descriptions of regression models employed and multivariate findings presented for ethnic subgroups. Note that total significance levels reported for total groups in the tables remain bivariate. Results for multivariate analyses for total groups are also provided in Appendix F.

	Table 17									
Assignment Group Comparisons of Percent Employed by Ethnicity										
Follow-up	Ethnicity	AF	PYA	Cor	ntrol	Difference (APYA –	Logistic Regression			
Period	Etimetty	N	%	N	%	Control)	Significance*			
	African American	156	63.5%	149	56.4%	7.1%	.20			
	Hispanic	49	73.5%	44	54.5%	19.0%	.09			
One Year	Caucasian	163	81.0%	150	75.3%	5.7%	.19			
	Other	1	0.0%	2	50.0%	-50.0%	ns			
	Total	369	72.4%	345	64.4%	8.0%	.02			
	African American	156	74.4%	149	71.1%	3.3%	ns			
	Hispanic	49	81.6%	44	70.5%	11.1%	ns			
Two Years	Caucasian	163	87.7%	150	84.0%	3.7%	ns			
	Other	1	0.0%	2	50.0%	-50.0%	ns			
	Total	369	81.0%	345	76.5%	4.5%	.14			
	African American	156	78.8%	149	73.8%	5.0%	ns			
	Hispanic	49	85.7%	44	75.0%	10.7%	.13			
Three Years	Caucasian	163	90.2%	150	89.3%	0.9%	ns			
	Other	1	0.0%	2	50.0%	-50.0%	ns			
	Total	369	84.6%	345	80.6%	4.0%	.17			

Note: Participants were employed during any of the quarters during the follow-up period. \*Bivariate significance tests are reported for totals (see Table 16).

# C. Average Number of Quarters Employed

Table 18 observes a more sensitive measure of workforce participation: mean quarters of reported employment. The average quarterly participation of APYA assignments was significantly higher (0.3 quarters) at the end of years one and two. Three-year findings were not reportable.

Table 18  Assignment Group Comparisons of Average Number of Quarters Employed:  Years One, Two, and Three								
Follow-up Period Maximum APYA (N = 369) Control (N = 345) Difference (APYA – Control)								
One Year	5	2.0	1.7	0.3	.02			
Two Years	9	3.5	3.2	0.3	.09			
Three Years	13	4.9	4.6	0.3	ns			

Note: Employment during the quarter of community release counts as one quarter.

Among controls, Caucasian youth show the highest average quarters employed, and African Americans the lowest, in each year of the follow-up (see Table 19). In terms of APYA and control comparisons, average quarters employed for Hispanic and Caucasian APYA assignments are significantly higher than controls at the end of the first and second years. The differences observed are smaller in magnitude for Caucasians than Hispanics (0.3 and 0.4 quarters versus 0.8 and 1.0, respectively). Hispanic youth assigned to APYA again demonstrate the greatest program benefit. Their workforce participation is higher than control group counterparts at the close of years one, two, and three. At the end of three years, Hispanic APYA subjects averaged 1.4 more quarters of employment than controls.

	Table 19								
Assignment Group Comparisons of Average Number of Quarters Employed by Ethnicity									
Follow-up	Ethnicity	AF	PYA	Cor	ntrol	Difference (APYA –	MLS Regression		
Period	Ethnicity	N	Mean	N	Mean	Control)	Significance*		
	African American	156	1.5	149	1.4	0.1	ns		
One Year	Hispanic	49	2.5	44	1.7	0.8	.04		
(Maximum of	Caucasian	163	2.4	150	2.1	0.3	.10		
5 quarters)	Other	1	0.0	2	2.0	-2.0	ns		
	Total	369	2.0	345	1.7	0.3	.02		
	African American	156	2.6	149	2.4	0.2	ns		
Two Years	Hispanic	49	4.3	44	3.3	1.0	.11		
(Maximum of	Caucasian	163	4.3	150	3.9	0.4	.19		
9 quarters)	Other	1	0.0	2	3.0	-3.0	ns		
	Total	369	3.5	345	3.2	0.3	.09		
	African American	156	3.5	149	3.4	0.1	ns		
Three Years	Hispanic	49	6.0	44	4.6	1.4	.05		
(Maximum of 13 quarters)	Caucasian	163	5.9	150	5.8	0.1	ns		
	Other	1	0.0	2	4.5	-4.5	ns		
	Total	369	4.9	345	4.6	0.3	ns		

Note: Employment during the quarter of community release counts as one quarter.

<sup>\*</sup>Bivariate significance tests are reported for totals (see Table 18).

# D. Average Employment Earnings

Average earnings for subjects follow a pattern similar to average quarters employed. At the end of year one, mean APYA youth earnings exceeded that of controls by \$751, significant at the .02 level. While APYA earnings remained higher at the close of years two and three, the year two difference (\$882) fell within the reportable statistical threshold, but the difference in third-year earnings (\$1,108) did not.

Table 20									
Assignment Group Comparisons of Average Earnings: Years One, Two, and Three									
Follow-up Period	Follow-up Period APYA Control Difference (N = 369) (N = 345) Significance								
One Year	\$3,204	\$2,453	\$751	.02					
Two Years	\$6,639	\$5,757	\$882	.20					
Three Years	\$10,498	\$9,390	\$1,108	ns					

Note: Employment earnings are summative.

Average earnings for ethnic subgroup comparisons show an interesting pattern. Year one findings are highly significant for both Hispanic and Caucasian APYA youth. Hispanic APYA subjects earned \$2,307 more than controls, and Caucasian APYA subjects earned \$943 more than controls. While the number of subjects is small, Hispanics assigned to APYA clearly show the greatest earnings benefit. They have significantly higher earnings at the end of each year. In addition, Hispanic APYA earnings exceed those reported for Caucasian or African American APYA subjects in every year of the follow-up (see Table 21).

	Table 21									
Assignment Group Comparisons of Average Earnings by Ethnicity										
Follow-up	Ethnicity	AF	PYA	Cor	ntrol	Difference (APYA –	MLS Regression			
Period	Etimicity	N	Mean	N	Mean	Control)	Significance*			
	African American	156	\$1,585	149	\$1,491	\$94	ns			
	Hispanic	49	\$4,880	44	\$2,573	\$2,307	.01			
One Year	Caucasian	163	\$4,270	150	\$3,327	\$943	.04			
	Other	1	\$0	2	\$5,989	\$-5,989	ns			
	Total	369	\$3,204	345	\$2,453	\$751	.02			
	African American	156	\$3,333	149	\$2,898	\$435	ns			
	Hispanic	49	\$9,996	44	\$7,725	\$2,271	.10			
Two Years	Caucasian	163	\$8,835	150	\$8,000	\$835	ns			
	Other	1	\$0	2	\$7,221	\$-7,221	ns			
	Total	369	\$6,639	345	\$5,757	\$882	.20			
	African American	156	\$5,025	149	\$4,567	\$458	ns			
	Hispanic	49	\$16,866	44	\$12,178	\$4,688	.07			
Three Years	Caucasian	163	\$13,885	150	\$13,351	\$534	ns			
	Other	1	\$0	2	\$10,285	\$-10,285	ns			
	Total	369	\$10,498	345	\$9,390	\$1,108	ns			

Note: Employment earnings are summative.

<sup>\*</sup>Bivariate significance tests are reported for totals (see Table 20).

# E. Independent Third-year Employment Findings

All previous employment findings are reported cumulatively. Tables 22 and 23 provide an independent observation of employment outcomes during the third year. In effect, these tables examine the percent employed, average quarters employed, and average earnings during the final 12 months of the follow-up period. At this point in time, the average subject was 21 years of age. As shown in Table 22, the third-year employment outcomes are not significant for youth assigned to APYA.

Table 22										
Assignm	Assignment Group Comparisons of Third-year Employment Outcomes									
Follow-up Period  APYA (N = 369)  Control (APYA – Control)  Significance (APYA – Control)										
Percent Employed (Any Q	Percent Employed (Any Quarter)									
Third Year Only	53.7%	56.2%	-2.5%	ns						
Average Number of Quart	ters Employed									
Third Year Only	1.4	1.4	0.0	ns						
Average Employment Earnings										
Third Year Only	\$3,858	\$3,633	\$225	ns						

Ethnic group findings in the third year showed significant, positive employment outcomes for APYA-assigned Hispanics on all three measures (see Table 23). On the other hand, employment findings for APYA-assigned Caucasians were negative at reportable levels for percent employed and average quarters employed.

			Table 23				
A	ssignment Group Com	parisons o	of Third-yea	r Employı	ment Outco	mes by Ethnic	eity
Follow-up Period	Ethnicity	Al	PYA	Co	ntrol	Difference (APYA –	Logistic/MLS Regression
	Ethnicity	N	Mean	N	Mean	(APYA – Control)	Significance*
Percent Empl	oyed (Any Quarter)						
	African American	156	43.6%	149	45.6%	-2.0%	ns
	Hispanic	49	61.2%	44	43.2%	18.0%	.02
Third Year Only	Caucasian	163	61.3%	150	70.7%	-9.4%	.08
Omy	Other	1	0.0%	2	50.0%	-50.0%	ns
	Total	369	53.7%	345	56.2%	-2.5%	ns
Average Num	ber of Quarters Emplo	yed					
	African American	156	1.0	149	1.0	0.0	ns
	Hispanic	49	1.8	44	1.3	0.5	.03
Third Year Only	Caucasian	163	1.7	150	1.9	-0.2	.17
<i>-y</i>	Other	1	0.0	2	1.5	-1.5	ns
	Total	369	1.4	345	1.4	0.0	ns
Average Emp	loyment Earnings						
	African American	156	\$1,692	149	\$1,670	\$22	ns
	Hispanic	49	\$6,870	44	\$4,453	\$2,417	.06
Third Year Only	Caucasian	163	\$5,050	150	\$5,351	\$-301	ns
Ollly	Other	1	\$0	2	\$3,064	\$-3,064	ns
	Total	369	\$3,858	345	\$3,633	\$225	ns

<sup>\*</sup>Bivariate significance tests are reported for totals (see Table 22).

## F. Percent Exceeding Poverty Threshold

In 2006, the poverty threshold for a single individual under age 65 was \$10,488.<sup>20</sup> Earnings for each follow-up year were observed independently to permit comparison to the annual poverty threshold. This threshold, issued by the U.S. Census Bureau, represents the minimum level of income deemed necessary to achieve an adequate standard of living for a single individual under age 65. Table 24 shows the percent of youth with income exceeding that threshold for the first, second, and third years following community release.

<sup>&</sup>lt;sup>20</sup> The 2006 threshold was selected as a reasonable figure to use for all three follow-up years given that the vast majority of youth were released during 2003 or 2004 (96.7%).

As shown, most youth have reported incomes that fall below the poverty threshold. In effect, the average annual earnings of both APYA and control groups are very low. During the first year following release, a significantly higher percentage of APYA youth have earnings that exceed the threshold. By the second and third years, this difference decreases and is no longer significant. Third-year findings indicate that only 12.7% of APYA subjects and 13.0% of the controls had incomes exceeding the poverty threshold.

Table 24									
Assignment Group Comparisons of Percent With Annual Income Exceeding Poverty Threshold: <sup>21</sup> Years One, Two, and Three									
Follow-up Period $APYA (N = 369)$ $Control (N = 345)$ $Control (APYA - Control)$ Signification $Control (N = 345)$ $Control ($									
One Year	9.8%	3.8%	6.0%	.00					
Two Years	11.7%	10.7%	1.0%	ns					
Three Years	12.7%	13.0%	-0.3%	ns					

Note: Annual earnings were examined independently for comparison to 2006 poverty thresholds.

<sup>&</sup>lt;sup>21</sup> Source: U.S. Bureau of the Census, Current Population Survey, Annual Social and Economic Supplements. Poverty and Health Statistics Branch/HHES Division. Accessed at http://www.census.gov/hhes/www/poverty/histpov/hstpov1.html.

Ethnic group breakdowns appear in Table 25. In the first year, Hispanic and Caucasian APYA youth are significantly more likely than controls to exceed the poverty threshold. Two years post-release, only African American APYA youth were more likely to exceed the poverty threshold than controls. Finally, during the third year, only Hispanic APYA youth exceeded the poverty threshold significantly more than their respective control group.

			Table 25	5					
Assignment Group Comparisons of Percent With Annual Income Exceeding Poverty Threshold: Years One, Two, and Three by Ethnicity									
Follow-up	T-41	Al	PYA	Co	ntrol	Difference	Logistic		
Period	Ethnicity	N	%	N	%	(APYA – Control)	Regression Significance*		
	African American	156	2.6%	149	1.3%	1.3%	ns		
	Hispanic	49	18.4%	44	4.5%	13.9%	.01		
One Year	Caucasian	163	14.1%	150	5.3%	8.8%	.01		
	Other	1	0.0%	2	50.0%	-50.0%	ns		
	Total	369	9.8%	345	3.8%	6.0%	.00		
	African American	156	5.8%	149	2.7%	3.1%	.19		
	Hispanic	49	18.4%	44	15.9%	2.5%	ns		
Two Years	Caucasian	163	15.3%	150	17.3%	-2.0%	ns		
	Other	1	0.0%	2	0.0%	0.0%	ns		
	Total	369	11.7%	345	10.7%	1.0%	ns		
	African American	156	5.1%	149	3.4%	1.7%	ns		
	Hispanic	49	22.4%	44	15.9%	6.5%	.11		
Three Years	Caucasian	163	17.2%	150	22.0%	-4.8%	ns		
	Other	1	0.0%	2	0.0%	0.0%	ns		
	Total	369	12.7%	345	13.0%	-0.3%	ns		

Note: Annual earnings were examined independently for comparison to 2006 poverty thresholds.

<sup>\*</sup>Bivariate significance tests are reported for totals (see Table 24).

# G. Food Stamp and TANF Benefits

Food stamps and TANF eligibility are measures of dependency. Most TANF-eligible cases are adult heads of household with dependent children. Since APYA evaluation subjects were typically minors at community release, they are unlikely to be TANF-eligible as a household head. They may, however, have returned home after release and become an eligible minor in a TANF household. Subjects eligible for food stamps may be a head of a household or a member of an eligible household. Available data are not sufficiently detailed to determine if the subject was head of a household. Findings for food stamp and TANF eligibility are combined in the tables below, but food stamp eligibility is the primary benefit received by these subjects.<sup>22</sup>

Table 26 presents FETPIP findings for receipt of food stamp or TANF benefits. Only two fiscal years (July 1 to June 30) of benefit information were available. The APYA subjects were significantly less likely than controls to have received benefits at the end of year one, consistent with higher workforce participation and earnings observed in the tables above. Second-year findings are not reportable.

	Table 26									
Assignment Group Comparisons of Percent Receiving TANF/Food Stamps: Years One and Two										
Follow-up Period  APYA (N = 369)  Control (N = 345)  Difference (APYA - Control)										
Year One	10.8%	14.2%	-3.4%	.18						
Year Two	13.3%	16.8%	-3.5%	ns						

Note: Outcomes are reported for the first fiscal year (from July 1 to June 30) of release and the fiscal year (FY) following the year of release. For example, if the subject was released in 2002, year one is FY2002–03 and year two is FY2003–04.

<sup>&</sup>lt;sup>22</sup> None of the APYA subjects and only 0.6% of control subjects were identified as receiving TANF benefits; thus, Tables 26 and 27 are largely indicative of receipt of food stamp benefits.

Ethnic group breakdowns show significantly lower TANF/food stamp receipt among Caucasian youth in years one and two.

			Table 27	1					
Assignment Group Comparisons of Percent Receiving TANF/Food Stamps by Ethnicity									
Follow-up	Ethnicity	AP	YA	Cor	ntrol	Difference (APYA –	Logistic Regression		
Period	Ethnicity	N	%	N	%	(AFTA = Control)	Significance*		
	African American	156	18.6%	149	16.1%	2.5%	ns		
	Hispanic	49	6.1%	44	15.9%	-9.8%	ns		
Year One	Caucasian	163	4.9%	150	12.0%	-7.1%	.03		
	Other	1	0.0%	2	0.0%	0.0%	ns		
	Total	369	10.8%	345	14.2%	-3.4%	.18		
	African American	156	21.8%	149	18.1%	3.7%	ns		
	Hispanic	49	8.2%	44	15.9%	-7.7%	ns		
Year Two	Caucasian	163	6.7%	150	16.0%	-9.3%	.01		
	Other	1	0.0%	2	0.0%	0.0%	ns		
	Total	369	13.3%	345	16.8%	-3.5%	ns		

Note: Outcomes were reported for the fiscal year (from July 1 to June 30) of release and the fiscal year (FY) following the year of release. For example, if the subject was released in 2002, year one is the FY2002–03 and year two is FY2003–04.

#### H. Analysis of Employment Outcomes for APYA Secure Care Program Completion

The findings presented above describe experimental program impact on employment for all subjects randomly assigned to the APYA secure program, regardless of their participation. Since APYA staff recorded youth participation, there is reliable information about who did or did not complete APYA. Among the 369 youth assigned to the residential program, 288 completed it. The remaining 81 youth either did not enter (n=9)<sup>23</sup> or did not complete APYA for

<sup>\*</sup>Bivariate significance tests are reported for totals (see Table 26).

<sup>&</sup>lt;sup>23</sup> Of the nine youth who did not enter APYA, three absconded, three faced new charges, and three were committed to adult jail/prison shortly after random assignment. In addition, six control group members did not attend a residential program following random assignment. DJJ lost jurisdiction of one youth due to age, and five were committed to adult jail shortly after random assignment.

a variety of reasons.<sup>24</sup> After release from secure care, 301 (81.9%) subjects assigned to APYA enrolled in the voluntary SS reentry program. Completion of APYA was not a pre-condition for SS entry. Table 28 shows APYA completion rates and SS entry by ethnic group. African American, Hispanic, and Caucasian youth have very similar rates of APYA completion and SS enrollment. Similar information for secure care program completion is not available for youth assigned to the control group, and controls were not eligible for SS.

			Table 28					
	Rates of APYA Co	mpletion an	d STREET S	Smart Enrol	lment by Eth	nicity		
	Ethnicity	APYA Non- Completion		APYA C	ompletion	T	Total	
		N	%	N	%	N	%	
APYA	African American	32	20.5%	124	79.5%	156	100.0%	
Secure	Hispanic	7	14.3%	42	85.7%	49	100.0%	
Program	Caucasian	41	25.2%	122	74.8%	163	100.0%	
	Other	1	100.0%	0	0.0%	1	100.0%	
	Total	81	22.0%	288	78.0%	369	100.0%	
	E4b	No SS Enrollment		SS Enrollment		Total		
	Ethnicity	N	%	N	%	N	%	
STREET	African American	29	18.6%	127	81.4%	156	100.0%	
Smart Reentry	Hispanic	6	12.2%	43	87.8%	49	100.0%	
Program	Caucasian	32	19.6%	131	80.4%	163	100.0%	
	Other	1	100.0%	0	0.0%	1	100.0%	
	Total	68	18.4%	301	81.6%	369	100.0%	

Table 29 displays SS enrollment for the 288 youth who completed the APYA secure program. Completers have a very high percentage (98.6%) of SS enrollment, and the enrollment rates for ethnic subgroups are very similar.

<sup>&</sup>lt;sup>24</sup> Of the 72 youth who did not complete the APYA secure program, the majority were transferred due to health/mental health reasons, safety reasons, or new charges. Others (non-completers) were terminated due to age restrictions or were terminated/transferred for disciplinary reasons.

	Table 29										
STREET Smart Enrollment of APYA Completers (n=288) by Ethnicity											
Ethnicity	Not Enro	olled in SS	SS En	rollment	T	otal					
	N	%	N	%	N	%					
African American	2	1.6%	122	98.4%	124	100.0%					
Hispanic	1	2.4%	41	97.6%	42	100.0%					
Caucasian	1	0.8%	121	99.2%	122	100.0%					
Total	4	1.4%	284	98.6%	288	100.0%					

In effect, nearly all 288 youth who completed the APYA secure program entered SS. Since these subjects were exposed to both the secure and reentry components of APYA, an examination of their post-release outcomes has been an expressed interest of some evaluation stakeholders (Florida DJJ staff, STREET Smart staff, and others). Obviously, outcomes for APYA program completers have to be examined outside the random assignment experimental design. The primary problem, even in a quasi-experimental framework, is the inability to identify similar control group subjects who failed to complete their first residential program assignment. At this point, there is not sufficient information to identify these cases.

In an effort to provide some descriptive information, NCCD conducted multivariate analyses that evaluated outcomes for APYA completers and non-completers relative to the control group while controlling for several pre-test case characteristics.

More detailed findings are presented in Appendix F. In general, APYA completers (compared to controls) show significantly higher employment rates, quarterly employment, and earnings in all three years of the follow-up.

## I. Summary of Employment Findings

Youth assigned to APYA were significantly more likely to have been employed at the close of each year of the three-year follow-up. Other cumulative employment measures also

showed a positive APYA impact. The average number of quarters employed was significantly higher at the close of years one and two. The average earnings of APYA youth also exceeded controls in years one and two. While these positive impacts were significant within the threshold adopted for this study, they were modest in size. Employment among APYA youth exceeded the control group by 4% at the close of year three (84.6% versus 80.6%), and average earnings were approximately \$882 higher at the end of year two.

The examination of ethnic subgroup findings indicated that Hispanic youth benefitted considerably from APYA assignment. While small numbers may limit the utility of these findings, Hispanics assigned to APYA showed a large employment advantage over controls on most employment outcome measures in every year of the follow-up. Caucasians assigned to APYA had positive employment findings in year one, but their independent third-year findings for percent employed and average quarters employed are lower than their control group. On the other hand, TANF/food stamp receipt was significantly lower among APYA Caucasians in years one and two.

Examining the cumulative employment outcomes observed for just the final year of the post-release follow-up, the impact of APYA assignment appears to be limited. Only the percentage of subjects employed was found to be significantly higher in the total assignment group. The impact of APYA on Hispanics, however, was generally positive. They demonstrated significantly better outcomes than controls on all three cumulative employment measures (percent employed, mean quarters employed, and average earnings). APYA-assigned Hispanics were also the only ethnic group assigned to APYA that demonstrated positive employment findings in the independent analysis of year three and had significantly higher rates of income in year three that exceeded the poverty threshold.

## X. RECIDIVISM OUTCOMES

#### A. Introduction

Post-release recidivism is the final outcome measure against which APYA/SS impact is evaluated. The program's efforts to improve vocational skills and educational achievement were intended to increase employment and reduce recidivism.

It is a standard practice in correctional research to observe recidivism across several measures during a standardized post-release follow-up period. In this study, each subject was observed for three years (1,098 days) after the secure residential care release date. During this post-release period, new juvenile or adult arrests and correctional dispositions (return to secure custody or supervision) were observed by accessing three data sources: the Juvenile Justice Information System (JJIS) operated by Florida DJJ, the arrest records maintained by the Florida Department of Law Enforcement (FDLE), and the adult supervision and secure custody records provided by the Florida DOC. These data permit juvenile and adult arrests occurring in Florida to be disaggregated by offense seriousness and type.

Recidivism findings are presented in a format similar to cumulative employment outcomes and the same testing procedures are applied. Cumulative recidivism for APYA and the control group is observed at the end of years one, two, and three. While this requires an extended presentation, it permits the impact of APYA on recidivism to be assessed over time. As noted previously, youth assigned to the APYA secure program could enroll in the voluntary SS reentry program upon release for up to one year, and approximately 82% did so. Control group youth were not eligible for the SS program. The first-year findings correspond to the SS reentry period. Two- and three-year recidivism findings permit the longer-term impact of APYA to be assessed after both the secure care and SS experimental interventions were received.

The test hypothesis is that youth assigned to APYA will have lower recidivism than the control group. Like the employment outcomes, an ITT analytical framework is used

throughout.<sup>25</sup> Two-tailed significance is reported within the .20 level. This permits identification and discussion of substantive findings that fell below conventional thresholds. Also, the observed differences between the groups are shown in each table to provide the reader with more complete information with which to judge the evaluation findings.

Recidivism may be examined by observing dichotomous findings for arrest types (yes/no) or counting the total number of arrests. While both are presented here, subjects may be arrested several times during a three-year follow-up period, and arrest counts may provide a more complete accounting of their behavior. Counts may also more accurately reflect the total law enforcement processing and victim costs attributable to the post-release criminal behavior of the research subjects. Unlike the employment findings, <u>all</u> annual recidivism measures are cumulative. Findings report several recidivism outcome measures, including the following.

- 1. Total arrest: arrest for any reason. <sup>26</sup>
- 2. Criminal arrest: criminal felony or misdemeanor arrest. 27
- 3. Felony arrest: criminal felony offense arrest.
- 4. Violent felony arrest: criminal felony arrest for assaultive offenses. <sup>28</sup>
- 5. Property arrest: felony or misdemeanor property offense arrest.
- 6. Drug arrest: felony or misdemeanor drug offense arrest.
- 7. Supervision: entered juvenile or adult community supervision.
- 8. Secure custody: placed in a secure juvenile or adult facility.

<sup>&</sup>lt;sup>25</sup> Of the 369 youth assigned to APYA, 288, or 78%, completed the secure program and 301, or 82%, entered SS upon release. Findings for ethnic subgroups employ a similar approach.

<sup>&</sup>lt;sup>26</sup> Total arrest includes arrests for all felony and misdemeanor criminal offenses <u>and</u> arrests for technical violations or driving under the influence. Non-felony traffic offenses and violations of county or municipal ordinances are excluded from total arrest.

<sup>&</sup>lt;sup>27</sup> Criminal arrests include felony and misdemeanor offenses <u>excluding</u> arrests for technical violations, status offenses, traffic offenses (including driving under the influence), and violations of county or municipal ordinances.

<sup>&</sup>lt;sup>28</sup> Violent felonies include murder/manslaughter, sexual battery, kidnapping, other felony sex offenses, armed robbery, aggravated assault and/or battery, other robbery, and obstruction of justice with violence.

The arrest, supervision, and custody findings presented here employ definitions and offense categories used by Florida DJJ and reflect Florida criminal statutes. Since many subjects were legally adults shortly after release from juvenile secure custody, juvenile and adult arrests and dispositions observed during the post-release follow-up were combined. The arrest categories reported overlap in that criminal felony offense is a subset of criminal arrest, which is a subset of total arrest. This applies to other categories as well. Several recidivism measures were employed in an effort to provide a more comprehensive view of offender criminal behavior and APYA impact. Arrests in each category can be counted to compute a mean, but supervision and secure custody outcomes are presented only as dichotomous variables.

#### B. One Year Post-release Recidivism

Table 30 shows the percentage of subjects arrested at the close of year one. More than half the APYA and control subjects were arrested for a criminal offense within a year of release. More than one third of the subjects (37.4% APYA and 41.4% control) were arrested for at least one felony. These findings are consistent with other recent random assignment experimental studies of youth released from secure care in that the experimental and control groups have an overall arrest rate that exceeds 50% (see Wiebush et al., 2005).

In terms of experimental and control group comparison, percentages for total arrests and criminal arrests were similar for both groups. Subjects assigned to APYA have a somewhat lower arrest rate for felony and property offenses. Youth assigned to APYA had a significantly lower property arrest rate (at the .10 level).<sup>29</sup> The absolute difference in the property arrest rate is -5.4% (e.g., 23.3% - 28.7%), indicating that APYA youth had a property arrest rate approximately 19% lower than controls. Findings for felony arrest and the other arrest types did not fall within the reporting threshold established for this study. The APYA and control subjects

<sup>&</sup>lt;sup>29</sup> Pearson's chi square test.

also had very similar secure custody rates, but APYA youth were more likely to be placed on supervision in the year following release.

	Table 30									
Percent Arrested, Supervision, and Secure Custody: One Year Post-release										
Recidivism Type	APYA	Control	Difference (APYA – Control)	Significance						
Total Arrests	57.2%	56.2%	1.0%	ns						
Criminal Arrest	53.7%	53.3%	0.4%	ns						
Felony Arrest	37.4%	41.4%	-4.0%	ns						
Violent Felony Arrest	9.8%	11.3%	-1.5%	ns						
Property Arrest	23.3%	28.7%	-5.4%	.10						
Drug Arrest	23.3%	21.4%	1.9%	ns						
Supervision	11.7%	8.7%	3.0%	.19						
Secure Custody	8.1%	7.5%	0.6%	ns						

Mean arrest findings are presented in Table 31. While total and criminal arrests exceed 1.00 in both groups, mean arrests for youth assigned to APYA were lower in every category but drug arrests. Mean felony arrests for APYA tested lower than the controls at the .11 level (.58 versus .69, respectively) and property offenses were lower at the .12 level (.34 versus .43, respectively).

	Table 31									
Mean Arrests: One Year Post-release										
Type of Arrest	Type of Arrest APYA Control Difference (APYA - Control) Significant Significant Control (APYA - Control)									
Total Arrests	1.25	1.36	-0.11	ns						
Criminal Arrest	1.02	1.13	-0.11	ns						
Felony Arrest	0.57	0.69	-0.12	.11						
Violent Felony Arrest	0.12	0.13	-0.01	ns						
Property Arrest	0.34	0.43	-0.09	.12						
Drug Arrest	0.32	0.31	0.01	ns						

Recidivism findings are also disaggregated by ethnicity (African American, Hispanic, Caucasian, and other) within assignment group in Tables 32 and 33.<sup>30</sup> As these tables indicate, there are reasonably large numbers of African American and Caucasian youth in both APYA and control subgroups (about 150 subjects in each). There are 49 Hispanic APYA and 44 control youth. Three subjects who fell outside these three major ethnic groups appear in the "other" category. The recidivism analysis of ethnic groups parallels that presented for employment. Since subjects were randomly assigned to APYA or the control group, the equivalence of the experimental and control cases assigned to ethnic subgroups cannot be assumed.<sup>31</sup> Consequently, multivariate analyses were employed to control for pre-assignment differences. The findings present ethnic group differences observed in bivariate comparisons, but significance levels are based on multivariate analyses described in Appendix G.<sup>32</sup> The findings suggest that APYA/SS has a differential program impact on ethnic subgroups.

In terms of recidivism comparison across ethnic groups, an examination of control subjects indicates that the arrest rates for African American and Hispanic youth are higher than those observed for Caucasians in every reported category but drug arrest and secure custody.

There are, however, some positive findings for African American and Hispanic youth assigned to APYA. Among APYA Hispanic youth, the violent felony rate is 14.1% lower than the control group, which is significant at the .04 level in a multivariate test, and the property arrest rate is also significantly lower. Hispanic youth assigned to APYA were also significantly less likely to enter community supervision. African America APYA youth have a lower felony

<sup>&</sup>lt;sup>30</sup> Preliminary recidivism findings available at one and two years post-release disclosed that APYA impact varied by ethnic group.

<sup>&</sup>lt;sup>31</sup> See Appendix F, Table F6, for subgroup equivalence tests. Hispanic APYA youth had a significantly higher number of prior adjudications (within .10 two-tailed). No other significant differences were observed within that level.

<sup>&</sup>lt;sup>32</sup> See Appendix G for more detailed descriptions of regression models employed and multivariate findings presented for ethnic subgroups. Note that total significance levels reported for the total APYA/control group differences in these tables remain bivariate; however, Appendix G includes multivariate analyses for total groups as well.

arrest rate, but a significantly higher rate of supervision entry. There are no reportable findings for Caucasian youth assigned to APYA.

			Table 3	2			
Perc	ent Arrested, Superv	ision, and	Secure Cust	odv bv Etl	hnicity: On	e Year Post-r	elease
Recidivism			APYA		Control		Logistic
Type	Ethnicity	N	%	N	%	(APYA – Control)	Regression Significance*
	African American	156	71.2%	149	71.8%	-0.7%	ns
	Hispanic	49	53.1%	44	56.8%	-3.8%	ns
Total Arrests	Caucasian	163	45.4%	150	40.7%	4.7%	ns
	Other	1	0.0%	2	50.0%	-50.0%	ns
	Total	369	57.2%	345	56.2%	0.9%	ns
	African American	156	66.0%	149	69.1%	-3.1%	ns
	Hispanic	49	53.1%	44	56.8%	-3.8%	ns
Criminal Arrest	Caucasian	163	42.3%	150	36.7%	5.7%	ns
THICST	Other	1	0.0%	2	50.0%	-50.0%	ns
	Total	369	53.7%	345	53.3%	0.3%	ns
	African American	156	50.0%	149	57.0%	-7.0%	.19
	Hispanic	49	34.7%	44	43.2%	-8.5%	ns
Felony Arrest	Caucasian	163	26.4%	150	26.0%	0.4%	ns
Allest	Other	1	0.0%	2	0.0%	0.0%	ns
	Total	369	37.4%	345	41.4%	-4.0%	ns
	African American	156	14.7%	149	13.4%	1.3%	ns
Violent	Hispanic	49	4.1%	44	18.2%	-14.1%	.04
Felony	Caucasian	163	6.7%	150	7.3%	-0.6%	ns
Arrest	Other	1	0.0%	2	0.0%	0.0%	ns
	Total	369	9.8%	345	11.3%	-1.5%	ns
	African American	156	29.5%	149	33.6%	-4.1%	ns
	Hispanic	49	24.5%	44	38.6%	-14.1%	.07
Property Arrest	Caucasian	163	17.2%	150	21.3%	-4.2%	ns
Allest	Other	1	0.0%	2	0.0%	0.0%	ns
	Total	369	23.3%	345	28.7%	-5.4%	.10
	African American	156	33.3%	149	30.9%	2.5%	ns
	Hispanic	49	18.4%	44	13.6%	4.7%	ns
Drug Arrest	Caucasian	163	15.3%	150	14.7%	0.7%	ns
	Other	1	0.0%	2	0.0%	0.0%	ns
	Total	369	23.3%	345	21.4%	1.9%	ns

	Table 32									
Percent Arrested, Supervision, and Secure Custody by Ethnicity: One Year Post-release										
Recidivism	Ethnicity	AI	PYA	Co	ntrol	Difference (APYA –	Logistic Regression			
Type	Etimicity	N	%	N	%	Control)	Significance*			
	African American	156	17.9%	149	8.7%	9.2%	.03			
	Hispanic	49	4.1%	44	13.6%	-9.5%	.02			
Supervision	Caucasian	163	8.0%	150	7.3%	0.7%	ns			
	Other	1	0.0%	2	0.0%	0.0%	ns			
	Total	369	11.7%	345	8.7%	3.0%	.19			
	African American	156	13.5%	149	9.4%	4.1%	ns			
	Hispanic	49	4.1%	44	4.5%	-0.4%	ns			
Secure Custody	Caucasian	163	4.3%	150	6.7%	-2.4%	ns			
Custous	Other	1	0.0%	2	0.0%	0.0%	ns			
	Total	369	8.1%	345	7.5%	0.6%	ns			

<sup>\*</sup>Bivariate significance tests are reported for totals (see Table 30).

The mean arrest findings reported in Table 33 provide a more comprehensive assessment of first-year recidivism. Mean total, criminal, and felony arrests for African American APYA participants are lower than controls at reportable levels. For instance, African American APYA participants had 0.83 mean felony arrests versus 1.02 for controls, and the difference was significant at the .12 level in the multivariate test. Hispanic youth had significantly lower violent felony arrests (.04 versus .18) than controls in a relatively small sample.

			Table 3.	3			
	Mean A				Post-release		MLS
Type of	Ethnicity		PYA		ntrol	Difference (APYA –	Regression
Arrest	20	N	Mean	N	Mean	Control)	Significance*
	African American	156	1.61	149	1.92	-0.31	.11
	Hispanic	49	1.04	44	1.20	-0.16	ns
Total Arrests	Caucasian	163	0.98	150	0.86	0.12	ns
	Other	1	0.00	2	0.50	-0.50	ns
	Total	369	1.25	345	1.36	-0.11	ns
	African American	156	1.35	149	1.59	-0.24	.17
	Hispanic	49	0.96	44	1.02	-0.06	ns
Criminal Arrest	Caucasian	163	0.75	150	0.71	0.04	ns
Airest	Other	1	0.00	2	0.50	-0.50	ns
	Total	369	1.02	345	1.13	-0.11	ns
	African American	156	0.83	149	1.02	-0.19	.12
	Hispanic	49	0.49	44	0.68	-0.19	ns
Felony Arrest	Caucasian	163	0.37	150	0.38	-0.01	ns
	Other	1	0.00	2	0.00	0.00	ns
	Total	369	0.57	345	0.69	-0.12	.11
	African American	156	0.19	149	0.17	0.02	ns
	Hispanic	49	0.04	44	0.18	-0.14	.04
Violent Felony Arrest	Caucasian	163	0.07	150	0.08	-0.01	ns
relong rulest	Other	1	0.00	2	0.00	0.00	ns
	Total	369	0.12	345	0.13	-0.01	ns
	African American	156	0.44	149	0.54	-0.11	ns
	Hispanic	49	0.37	44	0.50	-0.13	ns
Property Arrest	Caucasian	163	0.25	150	0.31	-0.06	ns
Allest	Other	1	0.00	2	0.00	0.00	ns
	Total	369	0.34	345	0.43	-0.09	.12
	African American	156	0.50	149	0.47	0.03	ns
	Hispanic	49	0.24	44	0.20	0.04	ns
Drug Arrest	Caucasian	163	0.19	150	0.18	0.01	ns
	Other	1	0.00	2	0.00	0.00	ns
	Total	369	0.32	345	0.31	0.01	ns

<sup>\*</sup>Bivariate significance tests are reported for totals (see Table 31).

## C. Two Years Post-release Recidivism

Two-year recidivism rates for the total sample are shown in Tables 34 and 35. At this point, the overall and criminal arrest rates exceed 70% for both groups and the felony arrest rate approaches 60%. The arrest rate differences between the APYA and control group are relatively small. However, APYA participants were more likely than controls to enter juvenile or adult supervision.

Table 34								
Percent Arrested, Supervision, and Secure Custody: Two Years Post-release								
Recidivism Type	APYA	APYA Control Difference (APYA - Control)		Significance				
Total Arrests	75.6%	73.0%	2.6%	ns				
Criminal Arrest	73.2%	70.7%	2.5%	ns				
Felony Arrest	58.8%	60.3%	-1.5%	ns				
Violent Felony Arrest	20.6%	19.1%	1.5%	ns				
Property Arrest	37.4%	39.4%	-2.0%	ns				
Drug Arrest	36.6%	36.8%	-0.2%	ns				
Supervision	23.3%	18.8%	4.5%	.14				
Secure Custody	14.9%	15.4%	-0.5%	ns				

Mean arrest findings at two years also show small differences between APYA and control group subjects. Mean felony and property arrests among APYA youth are lower than controls, as observed at the end of year one, but the differences do not test within the reporting threshold.

Table 35								
Mean Arrests: Two Years Post-release								
Type of Arrest	Arrest APYA		Difference (APYA – Control)	Significance				
Total Arrests	2.57	2.59	-0.02	ns				
Criminal Arrest	2.03	2.11	-0.08	ns				
Felony Arrest	1.24	1.32	-0.08	ns				
Violent Felony Arrest	0.27	0.24	0.03	ns				
Property Arrest	0.64	0.73	-0.09	ns				
Drug Arrest	0.65	0.61	0.04	ns				

Two-year ethnic subgroup findings for arrest rates, supervision, and secure custody appear in Table 36. Arrest rate differences are not reportable for Caucasians or African Americans. Hispanic youth assigned to APYA demonstrate lower rates of violent felony and property arrest and lower rates of supervision and secure custody that fall within the reporting threshold. APYA-assigned African Americans had significantly higher rates of supervision.

Table 36									
Percent Arrested, Super		vision, and Secure Custo APYA		ody by Ethnicity: Two Control		Difference	Logistic		
Type	Ethnicity	N	%	N	%	(APYA – Control)	Regression Significance*		
Total Arrests	African American	156	87.2%	149	84.6%	2.6%	ns		
	Hispanic	49	71.4%	44	68.2%	3.2%	ns		
	Caucasian	163	66.3%	150	63.3%	2.9%	ns		
	Other	1	0.0%	2	50.0%	-50.0%	ns		
	Total	369	75.6%	345	73.0%	2.6%	ns		
	African American	156	85.3%	149	83.9%	1.4%	ns		
	Hispanic	49	69.4%	44	65.9%	3.5%	ns		
Criminal Arrest	Caucasian	163	63.2%	150	59.3%	3.9%	ns		
Affest	Other	1	0.0%	2	50.0%	-50.0%	ns		
	Total	369	73.2%	345	70.7%	2.4%	ns		
	African American	156	74.4%	149	77.2%	-2.8%	ns		
	Hispanic	49	53.1%	44	56.8%	-3.8%	ns		
Felony Arrest	Caucasian	163	46.0%	150	45.3%	0.7%	ns		
Allest	Other	1	0.0%	2	0.0%	0.0%	ns		
	Total	369	58.8%	345	60.3%	-1.5%	ns		
	African American	156	26.3%	149	24.2%	2.1%	ns		
Violent	Hispanic	49	16.3%	44	25.0%	-8.7%	.20		
Felony Arrest	Caucasian	163	16.6%	150	12.7%	3.9%	ns		
	Other	1	0.0%	2	0.0%	0.0%	ns		
	Total	369	20.6%	345	19.1%	1.5%	ns		
	African American	156	44.9%	149	45.6%	-0.8%	ns		
	Hispanic	49	34.7%	44	47.7%	-13.0%	.17		
Property Arrest	Caucasian	163	31.3%	150	31.3%	0.0%	ns		
Allest	Other	1	0.0%	2	0.0%	0.0%	ns		
	Total	369	37.4%	345	39.4%	-2.0%	ns		
Drug Arrest	African American	156	51.3%	149	49.7%	1.6%	ns		
	Hispanic	49	32.7%	44	27.3%	5.4%	ns		
	Caucasian	163	23.9%	150	27.3%	-3.4%	ns		
	Other	1	0.0%	2	0.0%	0.0%	ns		
	Total	369	36.6%	345	36.8%	-0.2%	ns		

	Table 36									
Percent Arrested, Supervision, and Secure Custody by Ethnicity: Two Years Post-release										
Recidivism	Ethnicity	AP	YA	Cor	Control		Logistic Regression			
Type	Etimicity	N	%	N	%	(APYA – Control)	Significance*			
	African American	156	32.1%	149	21.5%	10.6%	.04			
	Hispanic	49	12.2%	44	22.7%	-10.5%	.12			
Supervision	Caucasian	163	18.4%	150	15.3%	3.1%	ns			
	Other	1	0.0%	2	0.0%	0.0%	ns			
	Total	369	23.3%	345	18.8%	4.5%	.14			
	African American	156	25.0%	149	22.1%	2.9%	ns			
	Hispanic	49	6.1%	44	9.1%	-3.0%	.17			
Secure Custody	Caucasian	163	8.0%	150	10.0%	-2.0%	ns			
	Other	1	0.0%	2	50.0%	-50.0%	ns			
	Total	369	14.9%	345	15.4%	-0.5%	ns			

<sup>\*</sup>Bivariate significance tests are reported for totals (see Table 34).

The two-year mean arrest findings for ethnic groups, presented in Table 37, show a different pattern than the arrest rate. African Americans assigned to APYA have significantly lower mean felony and property arrests. Caucasian youth assigned to APYA, however, had mean total and felony arrests that were higher than their control group (differences tested at the .16 and .11 levels, respectively). No reportable findings were observed for Hispanics. Two years after release, the impact of APYA begins to exhibit a different pattern for these ethnic groups.

			Table 3	37			
	Mean A	Arrests by	Ethnicity:	Two Years	Post-releas		
Type of	Ethnicity	AP	YA	Control		Difference	MLS Regression
Arrest	Ethnicity	N	Mean	N	Mean	(APYA – Control)	Significance*
	African American	156	3.25	149	3.50	-0.25	ns
	Hispanic	49	1.98	44	2.41	-0.43	ns
Total Arrests	Caucasian	163	2.10	150	1.76	0.34	.16
THIOSES	Other	1	0.00	2	1.00	-1.00	ns
	Total	369	2.57	345	2.59	-0.02	ns
	African American	156	2.60	149	2.91	-0.31	ns
	Hispanic	49	1.63	44	1.91	-0.28	ns
Criminal Arrest	Caucasian	163	1.61	150	1.39	0.22	ns
Allest	Other	1	0.00	2	0.50	-0.50	ns
	Total	369	2.03	345	2.11	-0.08	ns
	African American	156	1.67	149	1.97	-0.30	.16
	Hispanic	49	0.98	44	1.18	-0.20	ns
Felony Arrest	Caucasian	163	0.92	150	0.72	0.20	.11
Allest	Other	1	0.00	2	0.00	0.00	ns
	Total	369	1.24	345	1.32	-0.08	ns
	African American	156	0.37	149	0.31	0.06	ns
Violent	Hispanic	49	0.20	44	0.32	-0.11	ns
Felony	Caucasian	163	0.19	150	0.15	0.04	ns
Arrest	Other	1	0.00	2	0.00	0.00	ns
	Total	369	0.27	345	0.24	0.03	ns
	African American	156	0.74	149	0.99	-0.25	.06
	Hispanic	49	0.53	44	0.64	-0.11	ns
Property Arrest	Caucasian	163	0.58	150	0.52	0.06	ns
Allest	Other	1	0.00	2	0.00	0.00	ns
	Total	369	0.64	345	0.73	-0.09	ns
	African American	156	1.01	149	0.89	0.12	ns
	Hispanic	49	0.49	44	0.52	-0.03	ns
Drug Arrest	Caucasian	163	0.36	150	0.35	0.01	ns
	Other	1	0.00	2	0.00	0.00	ns
	Total	369	0.65	345	0.61	0.04	ns

<sup>\*</sup>Bivariate significance tests are reported for totals (see Table 35).

# D. Three Years Post-release Recidivism

Tables 38 and 39 report the final, three-year recidivism findings. In the total sample, APYA and control group differences for arrest, supervision, and secure custody rates are small and none are reportable.

Table 38								
Percent Arrested, Supervision, and Secure Custody: Three Years Post-release								
Recidivism Type APYA Control Difference (APYA - Control) Significance								
Total Arrests	81.6%	81.7%	-0.2%	ns				
Criminal Arrest	79.4%	79.4%	0.0%	ns				
Felony Arrest	68.8%	68.4%	0.4%	ns				
Violent Felony Arrest	26.6%	25.8%	0.8%	ns				
Property Arrest	44.7%	46.7%	-2.0%	ns				
Drug Arrest	47.7%	47.5%	0.2%	ns				
Supervision	29.0%	26.4%	2.6%	ns				
Secure Custody	19.8%	20.3%	-0.5%	ns				

Mean arrest findings three years post-release also show small differences between APYA participants and controls that are not reportable.

Table 39								
Mean Arrests: Three Years Post-release								
Type of Arrest APYA Control Difference (APYA - Control) Significance								
Total Arrests	3.63	3.64	-0.01	ns				
Criminal Arrest	2.88	2.93	-0.04	ns				
Felony Arrest	1.80	1.79	0.02	ns				
Violent Felony Arrest	0.37	0.33	0.04	ns				
Property Arrest	0.84	0.94	-0.10	ns				
Drug Arrest	0.94	0.89	0.05	ns				

Three-year ethnic group findings for arrest, supervision, and secure custody rates are shown in Table 40. In the final year of the study, only Hispanic APYA youth exhibit significantly different recidivism rates, all lower. They have lower rates of violent felony arrest, property arrest, and supervision entry. In addition, the supervision entry rate for African Americans assigned to APYA is no longer significantly higher than the control group.

			Table 4	0			
Perce Recidivism	nt Arrested, Supervi		ecure Custo YA		nicity: Thre ntrol	Difference	Logistic
Type	Ethnicity	N	%	N	%	(APYA – Control)	Regression Significance*
	African American	156	91.7%	149	89.3%	2.4%	ns
	Hispanic	49	77.6%	44	75.0%	2.6%	ns
Total Arrests	Caucasian	163	73.6%	150	76.0%	-2.4%	ns
	Other	1	0.0%	2	100.0%	-100.0%	ns
	Total	369	81.6%	345	81.7%	-0.2%	ns
	African American	156	90.4%	149	89.3%	1.1%	ns
	Hispanic	49	73.5%	44	72.7%	0.7%	ns
Criminal Arrest	Caucasian	163	71.2%	150	71.3%	-0.2%	ns
Allest	Other	1	0.0%	2	100.0%	-100.0%	ns
	Total	369	79.4%	345	79.4%	0.0%	ns
	African American	156	85.3%	149	83.2%	2.0%	ns
	Hispanic	49	59.2%	44	63.6%	-4.5%	ns
Felony Arrest	Caucasian	163	56.4%	150	55.3%	1.1%	ns
Allest	Other	1	0.0%	2	50.0%	-50.0%	ns
	Total	369	68.8%	345	68.4%	0.4%	ns
	African American	156	33.3%	149	33.6%	-0.2%	ns
Violent	Hispanic	49	18.4%	44	29.5%	-11.2%	.17
Felony	Caucasian	163	22.7%	150	17.3%	5.4%	ns
Arrest	Other	1	0.0%	2	0.0%	0.0%	ns
	Total	369	26.6%	345	25.8%	0.8%	ns
	African American	156	50.6%	149	54.4%	-3.7%	ns
	Hispanic	49	38.8%	44	52.3%	-13.5%	.10
Property Arrest	Caucasian	163	41.1%	150	38.0%	3.1%	ns
Allest	Other	1	0.0%	2	0.0%	0.0%	ns
	Total	369	44.7%	345	46.7%	-2.0%	ns
	African American	156	66.0%	149	60.4%	5.6%	ns
	Hispanic	49	40.8%	44	43.2%	-2.4%	ns
Drug Arrest	Caucasian	163	32.5%	150	36.7%	-4.2%	ns
	Other	1	0.0%	2	0.0%	0.0%	ns
	Total	369	47.7%	345	47.5%	0.2%	ns

	Table 40									
Percent Arrested, Supervision, and Secure Custody by Ethnicity: Three Years Post-release										
Recidivism	Ethnicity	AP	YA	Cor	Control		Logistic			
Type	Ethnicity	N	%	N	%	(APYA – Control)	Regression Significance*			
	African American	156	36.5%	149	32.9%	3.7%	ns			
	Hispanic	49	18.4%	44	27.3%	-8.9%	.18			
Supervision	Caucasian	163	25.2%	150	20.0%	5.2%	ns			
	Other	1	0.0%	2	0.0%	0.0%	ns			
	Total	369	29.0%	345	26.4%	2.6%	ns			
	African American	156	32.7%	149	32.2%	0.5%	ns			
	Hispanic	49	8.2%	44	9.1%	-0.9%	ns			
Secure Custody	Caucasian	163	11.0%	150	11.3%	-0.3%	ns			
	Other	1	0.0%	2	50.0%	-50.0%	ns			
	Total	369	19.8%	345	20.3%	-0.5%	ns			

<sup>\*</sup>Bivariate significance tests are reported for totals (see Table 38).

Mean arrest findings in the third and final year partially continue the trend observed in year two. Mean property arrests continued to be significantly lower for African American youth assigned to APYA. Hispanic APYA youth also had significantly lower mean property arrests during this final follow-up period. Finally, mean felony arrests were still significantly higher for Caucasian youth assigned to APYA.

			Table 4	1			
	Mean A	rrests by E	thnicity: T	hree Years	Post-release		
Type of	Ethnicity	APYA		Control		Difference (APYA –	MLS Regression
Arrest	Ethincity	N	Mean	N	Mean	(APYA – Control)	Significance
	African American	156	4.58	149	4.74	-0.16	ns
	Hispanic	49	2.78	44	3.43	-0.66	ns
Total Arrests	Caucasian	163	3.01	150	2.63	0.37	ns
	Other	1	0.00	2	2.00	-2.00	ns
	Total	369	3.63	345	3.64	-0.01	ns
	African American	156	3.70	149	3.92	-0.22	ns
	Hispanic	49	2.35	44	2.75	-0.40	ns
Criminal Arrest	Caucasian	163	2.28	150	2.01	0.27	ns
THIEST	Other	1	0.00	2	1.50	-1.50	ns
	Total	369	2.88	345	2.93	-0.04	ns
	African American	156	2.43	149	2.63	-0.20	ns
	Hispanic	49	1.47	44	1.66	-0.19	ns
Felony Arrest	Caucasian	163	1.32	150	1.00	0.32	.05
Miest	Other	1	0.00	2	0.50	-0.50	ns
	Total	369	1.80	345	1.79	0.02	ns
	African American	156	0.49	149	0.42	0.08	ns
Violent	Hispanic	49	0.29	44	0.48	-0.19	ns
Felony	Caucasian	163	0.28	150	0.21	0.07	ns
Arrest	Other	1	0.00	2	0.00	0.00	ns
	Total	369	0.37	345	0.33	0.04	ns
	African American	156	0.96	149	1.25	-0.29	.05
	Hispanic	49	0.69	44	0.86	-0.17	.19
Property Arrest	Caucasian	163	0.79	150	0.67	0.12	ns
THIEST	Other	1	0.00	2	0.00	0.00	ns
	Total	369	0.84	345	0.94	-0.10	ns
	African American	156	1.47	149	1.30	0.17	ns
	Hispanic	49	0.73	44	0.77	-0.04	ns
Drug Arrest	Caucasian	163	0.51	150	0.54	-0.03	ns
	Other	1	0.00	2	0.00	0.00	ns
	Total	369	0.94	345	0.89	0.05	ns

<sup>\*</sup>Bivariate significance tests are reported for totals (see Table 39).

# E. Analysis of Recidivism Outcomes for APYA Secure Care Program Completion

The findings presented above describe program impact on recidivism for all subjects randomly assigned to APYA regardless of program participation. As previously described in Section IX, Part H, 288 of the 369 youth assigned to the APYA residential program completed it and nearly all (98.6%) enrolled in the SS reentry program at release. Since these youth experienced both the secure and reentry components of APYA, some evaluation stakeholders expressed interest in examining their post-release outcomes.

In a fashion identical to that conducted for employment outcomes, NCCD performed multivariate analyses to examine recidivism outcomes for APYA completers and non-completers (relative to all controls) while controlling for pre-test case characteristics. Obviously, these outcomes employ a relatively weak quasi-experimental design and essentially provide descriptive information.

Findings and methods are described in Appendix G. In general, APYA completers (compared to all controls) show a significantly lower rate of property arrest and lower mean felony and property arrests in year one. Rates of supervision entry, however, are higher for APYA completers in both years one and two.<sup>33</sup>

# F. Summary of Post-release Recidivism Findings

The ITT analysis of bivariate findings for the randomized groups indicates that youth assigned to APYA had lower rates of property arrest and fewer arrests for felony and property offenses in the first year after release to the community. However, supervision entry rates were significantly higher for APYA youth in both years one and two. No significant group differences were observed in the three-year recidivism findings. In effect, APYA assignment had very little

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<sup>&</sup>lt;sup>33</sup> No equivalent group of control group non-completers can be identified for comparison (see previous discussion in the Section IX, Part H, and Appendices F and G).

impact on recidivism after subjects finished their first year in the community. A large percentage of APYA youth enrolled in SS during the first year.

When recidivism findings were disaggregated by ethnicity, APYA assignment appears to have benefitted Hispanic and African American youth more than Caucasian youth. At the close of each of the three follow-up years, Hispanic APYA participants had lower rates of violent felony arrest, property arrest, and supervision entry than controls. Hispanic APYA subjects also had fewer violent felony arrests in year one, a lower rate of secure custody at the close of year two, and fewer property arrests in year three.

African American youth assigned to APYA also had positive recidivism findings in some areas. Their felony arrest rate, plus mean total, criminal, and felony arrests, was lower at the close of the first year; mean felony and property arrests were lower at the end of year two; and mean property arrests remained significantly lower at the end of year three. Despite lower arrests, African American APYA subjects had higher rates of supervision entry in both years one and two, but not in year three.

Recidivism findings observed for Caucasian APYA youth were not significant in year one, but Caucasian APYA youth had higher recidivism for mean total and felony arrests in year two and significantly higher mean felony arrests at the close of year three.<sup>34</sup>

If the recidivism summary is confined to the third and final year of the post-release follow-up, APYA assignment had no significant impact on randomly assigned subjects. The ethnic group findings do show some positive and negative impacts. Hispanics assigned to APYA had lower rates of violent felony and property arrests and were less likely to enter community supervision. African American APYA subjects had significantly lower mean property arrests than controls. These are positive findings. However, for Caucasian youth assigned to APYA, mean felony arrests were significantly higher.

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<sup>&</sup>lt;sup>34</sup> The findings for ethnic subgroups used multivariate analyses to control for disparity in pre-assignment risk factors. 94

#### XI. SUMMARY OF RECIDIVISM AND EMPLOYMENT FINDINGS

The evaluation findings raise several questions. One question can be simply stated: What is the relationship between employment and recidivism? A simple way to explore this issue is to cross-reference the summarized employment and recidivism findings. The tables below attempt to do this by highlighting reportable (within a .20 two-tailed threshold) post-release findings for the total sample and the three major ethnic groups. Table 42 includes the 14 recidivism outcomes (eight percentage rates and six mean arrest types) listed by type. Table 43 contains the significance findings for four employment measures and one dependency measure for each of the three cumulative follow-up years. Findings for three additional employment outcomes observed independently in year three are provided in the final column of Table 43.

# **A.** Total Sample Findings

### Year One

At the end of their first post-release year, the 369 youth assigned to APYA had fewer felony and property arrests and lower rates of property arrest than controls but higher supervision entry. Employment outcomes were significantly better on all four measures observed and the receipt of TANF/food stamp benefits was lower.

#### Year Two

At the end of the second year, recidivism findings were much less positive. The only significant recidivism finding was that supervision entry tested higher for APYA youth. Cumulative employment outcomes for APYA subjects remained positive for three of four measures, but significance tests indicate a diminishing impact.

## Year Three

In the third and final year, recidivism outcomes for APYA youth show no advantage over the control group, and a positive impact is observed on only one cumulative employment outcome (percent employed).

The APYA vocational and education interventions, including SS aftercare enrollment, appear to have a positive impact on both the recidivism and employment of the youth assigned to the program their first year in the community. While this impact diminishes in the second and third post-release years, the program logic, i.e., increased vocational/educational training will reduce recidivism and increase work force participation, is supported by these early evaluation findings. Ethnic group findings indicate that APYA was more successful with some subjects than others.

# **B.** Ethnic Group Findings

One reason for diminished APYA impact in years two and three can be traced to ethnic group findings. It is clear that APYA did not benefit all subjects equally in the manner intended.

#### Year One

African Americans

APYA subjects had a significantly lower rate of property arrest and fewer total, criminal, and felony arrests in year one, but supervision entry was higher. While recidivism findings were on balance positive, employment gains were small. Only one of the five measures was positive (percent employed).

## Hispanics

Youth assigned to APYA demonstrated lower rates of violent felony arrest, property arrest, and supervision entry as well as fewer violent felony arrests. Employment outcomes were significant and positive for all four employment measures but not for TANF/food stamp receipt.

#### Caucasians

APYA youth did not have reduced recidivism relative to controls, but all four employment outcomes were higher and TANF/food stamp receipt was significantly lower.

## Year Two

## African Americans

Mean felony and property arrests were lower in year two, but supervision entry remained higher. Only one employment measure (percent exceeding poverty threshold) showed a positive impact among APYA subjects.

#### Hispanics

Violent felony arrest, property arrest, supervision entry, and secure custody rates were significantly lower. Two employment outcomes were significantly higher (average quarters employed and average earnings).

#### Caucasians

Recidivism for both total and felony arrest was higher among APYA subjects. One employment outcome was positive (average quarters employed), and TANF/food stamp receipt was lower.

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## Year Three

African Americans

Property arrests were significantly lower for APYA subjects, but none of the employment measures showed a positive impact.

# Hispanics

Violent felony, property, and supervision entry rates and mean property arrests remained significantly lower for APYA youth. All three cumulative employment outcomes and the percent exceeding the poverty threshold were significantly higher. In addition, all three independent third-year employment outcomes were also positive (percent employed, average quarters employed, and average earnings).

#### Caucasians

Mean felony arrests were significantly higher among APYA subjects. None of the four employment outcomes was positive, and two independent third-year findings showed lower percent employed and lower average earnings than controls (see table note).

Table 42										
Summary of Reportable Recidivism Outcomes for APYA Assignment										
Total Sample/ Ethnicity	One Year	Two Years	Three Years							
Percent Arrested	Percent Arrested									
Total Sample Property Supervision* Supervision* None										
African American	Felony Supervision (≤. 05)*	Supervision (≤. 05)*	None							
Hispanic	Violent Felony (< .05) Property Supervision (≤. 05)	Violent Felony Property Supervision (≤. 05) Secure Custody	Violent Felony Property Supervision							
Caucasian	None	None	None							
Mean Arrests										
Total Sample	Felony Property	None	None							
African American	Total Criminal Felony	Felony Property	Property (≤. 05)							
Hispanic	Violent Felony	None	Property							
Caucasian	None	Total* Felony*	Felony (≤. 05)*							

Note: Findings are reported within a .20 two-tailed threshold. All recidivism measures are cumulative.

<sup>\*</sup>Indicates higher recidivism among APYA subjects than controls.

		Table 43		
Summa	ry of Reportable Em	ployment Outcomes	for APYA Assignmen	nt
Total Sample Ethnic Subgroup	One Year	Two Years	Three Years	Independent Third-year
Percent Employed		1	<u> </u>	
Total Sample	.02	.14	.17	ns
African American	.20	ns	ns	ns
Hispanic	.09	ns	.13	.02
Caucasian	.19	ns	ns	.08*
Average Number of Quar	ters Employed			
<b>Total Sample</b>	.02	.09	ns	ns
African American	ns	ns	ns	ns
Hispanic	.04	.11	.05	.03
Caucasian	.10	.19	ns	.17*
Average Employment Ear	rnings			
<b>Total Sample</b>	.02	.20	ns	ns
African American	ns	ns	ns	ns
Hispanic	.01	.10	.07	.06
Caucasian	.04	ns	ns	ns
Percent With Annual Inco	ome Exceeding Pover	ty Threshold (Years	Observed Independe	ently)
<b>Total Sample</b>	.00	ns	ns	N/A
African American	ns	.19	ns	N/A
Hispanic	.01	ns	.11	N/A
Caucasian	.01	ns	ns	N/A
Percent Receiving TANF/	Food Stamps			
Total Sample	.18	ns	N/A	N/A
African American	ns	ns	N/A	N/A
Hispanic	ns	ns	N/A	N/A
Caucasian	.03	.01	N/A	N/A

<sup>\*</sup>Indicates lower employment among APYA subjects than controls.

# C. APYA Impact

Outcomes observed during the third and final year of the post-release follow-up may provide the best indication of the longer-term impact of APYA vocational and educational interventions. Youth assigned to APYA show relatively little variation in program experience. They received high school level diplomas, successfully completed the secure program, and enrolled in SS at similar rates. The summary of evaluation findings for post-release recidivism and employment reviewed above clearly indicate that Hispanic youth received the greatest benefit from APYA assignment. In their case, APYA interventions appear to have had the intended impact, i.e., workforce participation was increased and recidivism decreased in their first and last years after release. African American APYA subjects had lower recidivism and marginally more positive employment outcomes in the first and second years of the follow-up. At the end of the third year, their property arrests remained significantly lower but there was no discernible positive impact on employment. Caucasian youth assigned to APYA did not demonstrate improved recidivism at any point. By the third year of the study, their mean felony arrests were higher than that of controls. While cumulative three-year employment findings show no difference in workforce participation, the independent analysis of third-year outcomes indicates lower workforce participation. The findings suggest that Caucasian youth derived the least long-term benefit from APYA assignment.<sup>35</sup> In their last year, recidivism was higher and employment lower than controls.

The question raised by these findings is, why did APYA have a different impact in each ethnic group? Why did Hispanic APYA subjects benefit and Caucasians fare relatively poorly? Why did the positive program impact on African American recidivism not lead to improved workforce participation? Since few, if any, recent studies of juvenile offenders have examined the impact of vocational services on recidivism and employment in a randomized field trial, past

<sup>&</sup>lt;sup>35</sup> Caucasian youth assigned to APYA had significantly lower rates of TANF/food stamp receipt in the second year of the study, and third-year findings were not observed.

research offers little guidance, in part because it is difficult to assign the number of subjects necessary to examine impact by ethnicity. This evaluation was able to do so because DOL and OJJDP sponsors continued random assignment until the sample was large enough. First-year evaluation findings from an ongoing evaluation in New York examine an adult prison reentry program with similar features. Since this study assigned a large number of subjects, its findings may eventually provide a basis for ethnic group comparison (see Bloom, Redcross, Zweig, & Azurdia, 2007).

Finally, evaluation findings may be influenced by employer preferences and the job market. A recent study (Pager & Western, 2006) examined the response of New York employers to identical resumes submitted by African American, Hispanic, or Caucasian applicants. Caucasian applicants were most likely to receive an interview call-back, but Hispanics received significantly more than African American applicants. The unemployment rate among youth age 16–24 shows a similar disparity. Based on national reports, it was approximately 12% among Caucasians, 24% among African Americans, and 16% for Hispanic youth in 2008 (U.S. Bureau of Labor Statistics, 2009). All the research subjects experienced a deteriorating labor market at some point after their release. Unemployment in Florida in the general population was relatively low (3.8%) when the last research subject entered the community in 2005. It remained below 4.0% through June of 2007 before rising steadily to 7.6% by August 2009 (U.S. Bureau of Labor Statistics, 2005–2009).

The findings of this APYA evaluation re-emphasize an observation noted by previous researchers: the "important issue is not whether something works but what works for whom" (Sherman et al., 1997). Additional analysis of existing data may disclose more information about the relationship of employment and recidivism, and differential ethnic group impact. One area worth exploring further is the relationship between early subject recidivism and longer-term workforce participation. What is the impact, for instance, of a felony arrest or secure custody

shortly after release on youth employment in the third year of the study? How does acquisition of a high school diploma impact these outcomes? The impact of early employment on longer-term recidivism could also be examined in a similar manner. Both analyses can be conducted by ethnic group. Other researchers have examined the relationship of delinquent behavior and employment (see Wofford & Elliot, 1997, or Wofford, 1988), but the APYA study offers an opportunity to pursue the question in a contemporary setting.

There is evidence from prior studies suggesting that gainful employment helps youth mature out of delinquent behavior as they enter young adulthood (Elliott, 1992). Findings from this study indicate that APYA impact on employment and recidivism changed during the three-year period observed. In 2008, when the study closed, research subjects ranged in age from 20 to 24 years. Extending the observation period would make it possible to determine whether the APYA impacts observed thus far in this study continue or change as these youth enter early adulthood. This would also permit the differential impact of APYA on ethnic groups to be re-evaluated over a longer timeframe.

#### **D.** Limitations

This study has limitations that must be disclosed because they may impact the findings. Workforce participation measures were based on subject earnings reported to the Florida DOE via FETPIP. While these data provide a more comprehensive observation of earnings than any other available source, out-of-state earnings and the unreported cash earnings of subjects were not observed. A similar situation applies to recidivism. Out-of-state arrests are not captured in Florida state data sources. Over the course of a three-year post-release follow-up period, research subjects may leave Florida. For these youth, employment and recidivism outcomes may be only partially observed. Securing data from national databases (e.g., NCIC and SSA) to observe recidivism and employment outcomes would provide a more comprehensive evaluation

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of the program's impact on both recidivism and employment. While those resources were not available for this study, they could benefit future research efforts.

#### XII. INTERPRETATION AND IMPLICATIONS

#### A. Introduction

There are several plausible explanations for why the evaluation results are not more favorable for the experimental group. First, the independent living objectives of the program may not have been fulfilled. Most of the youth returned to their families and the neighborhoods in which they resided prior to being taken into DJJ custody. Second, family risk factors may not have been adequately addressed. Third, there is evidence to suggest that substance abuse risk factors contributed to the high failure rates among program participants. Fourth, there may be responsivity issues related to the selection or assessment criteria used for determining program eligibility that affected program outcomes. Fifth, since the hypothesized outcomes for the experimental group were not realized, the research on "what works" with youthful offenders may offer some explanations and provide considerable direction for future research. Finally, the potential criminogenic effects of employment on youth must be given at least some consideration. Some of these explanations discussed here may be construed as implementation issues. The context for implementation, however, may not always be about issues of program fidelity. Rather, the implementation issues may be better considered in the context of specific program design elements that were NOT implemented as part of the program.

# B. Independent Living

One of the major objectives of the APYA/SS program was to prepare youth for independent living following their release from APYA. Independent living was an important goal of APYA/SS for a couple of reasons. First, there is substantial research documenting the prevalence of family risk factors on delinquent youth. Many of the problems youth encounter are exacerbated by family dysfunction. Returning to families that were not able to prevent prior criminal activity, and where ongoing disruption continues, is not conducive to the development

of pro-social behavior. Youth need regular exposure to positive influences and role modeling. Second, the shift toward social and economic independence as youth move into young adulthood is important to forming the attachments and adult relationships that are essential to personal growth. Attachment to work and positive relationships with adults (e.g., employers) is one of the defining turning points in many people's lives.

Despite evidence from the post-release interviews suggesting that APYA helped prepare youth for independent living (71% of APYA youth indicated this support compared to 55% of control group youth), this goal was not obtained. As noted in Section III, Experimental Group Profiles, 92.8% of youth were living in their parent's/guardian's home at the time of the arrest or referral that led to their placement in APYA. Upon transition from APYA after completing the program, 97.3% were living with a parent, guardian, or immediate family member. Even those youth (N = 183) who successfully completed STREET Smart had difficulty achieving an independent living status. Of those who successfully completed the program, only 20% were living independently following their release.

### **C.** Family Factors

Given that such a large percentage of youth (97%) returned to their families upon their release from APYA, the need for strong and positive family support becomes vital. Though little is known about the specific family circumstances of APYA youth, APYA intake personnel noted that 54% of youth experienced family disruption that was of a chronic, severe, or frequent nature at the time of their arrest or referral. It is safe to speculate that part of the high recidivism rates of APYA/SS youth can be attributed to either a lack of positive family influences or the inability of family members to mediate unlawful behavior. This suggests the need for much stronger family-based interventions than were provided at APYA. After learning that more youth were returning to their families rather than an independent living situation, SS personnel did

acknowledge the need for a family reunification component to the program. They had hoped to hire family therapists for the purposes of conducting an assessment of each youth's family and neighborhood circumstances in order to better understand the environmental conditions under which the youth lived and to plan for transition back to the youth's home. However, this component was never implemented because of the significant reallocation of resources it would have required.

A stronger and more rigorous family-centered approach may have mitigated the risks associated with the subsequent crimes committed by these youth. Family-focused interventions include Multidimensional Treatment Foster Care (MTFC), MultiSystemic Therapy (MST), and Functional Family Therapy (FFT). These programs are Blueprints programs that have been extensively evaluated and supported by OJJDP. It is unclear whether or not combining family counseling in conjunction with a strong vocational component would have produced different results, but it does provide an avenue of future exploration given the high rates of return to their families upon release and the largely unfavorable subsequent recidivism outcomes. There is evidence that those who operate vocational training programs have recognized the need to compliment a program's work component with treatment that addresses other risk factors. For example, Project CRAFT (Community Restitution Apprenticeship-Focused Training), a career oriented training program operated by Home Builders Institute (HBI), has joined with providers of MST, an evidence-based and family-focused program, to deliver a collaborative program (Evidence-based Associates, 2009). Given that a recent study by the Justice Research Center of DJJ's Redirection Initiative (Bontrager, Winokur, Blankenship, & Hand, 2007), a commitment alternative that placed youth in one of two family-centered programs, found positive results and cost savings, it may be that combining vocational training with other evidence-based practices holds considerable promise. Further research is needed.

#### **D.** Substance Abuse Factors

Youth with significant substance abuse problems were not eligible for placement at APYA and were to be recommended for residential substance abuse treatment. However, one of the factors worth noting from the follow-up recidivism data is the rates of arrests for drug offenses among APYA/SS youth. Twenty-three percent of APYA youth were arrested for drug violations within one year following their release, 37% within two years, and almost half (48%) within three years following their release. Rates for control group youth were comparable. In the follow-up interviews conducted with study participants, 29% of APYA youth (compared to 28% of control group youth) self-reported having sold hard drugs since being released from custody.

These data suggest that APYA youth might have benefited from substance abuse education and/or treatment. Since youth identified through DJJ assessments with substance abuse problems were not eligible for placement, there was not a heavy emphasis on providing substance abuse treatment. The lack of emphasis on this risk factor may have contributed to the recidivism rates of APYA youth. It is also possible that the screening and assessment process or instruments used by DJJ's commitment managers and APYA's intake staff may not have been adequate for determining the presence of substance abuse related risk factors.

Cognitive-behavioral Therapy (CBT) is one general approach that has shown to be effective with youthful offenders, including those who are substance abusers. Landenberger and Lipsey (2005) found that CBT is one of the most rigorously evaluated and effective interventions for addressing delinquency. Also, Lowencamp, Hubbard, Makarios, and Latessa (2009) found that offenders participating in this cognitive model had significantly lower recidivism rates than those that did not participate. As a result of these findings, CBT has gained widespread use in the treatment of substance abuse. These programs attempt to address antisocial attitudes and redirect youths' thinking to consider the consequences of drug use and pro-social alternatives.

Among the specific programs that have been widely utilized and documented as effective are Thinking for a Change (TFAC), Aggression Replacement Training (ART), and Moral Reconation Therapy (MRT). While APYA/SS used fairly extensive contingency reinforcement strategies (common in most behavioral therapies), these were not targeted at substance abuse or drug-using behaviors. Thus, this could have been a program gap that was unfilled for many youth.

### E. Responsivity Issues

The failure of APYA/SS to implement program components that address multiple risk factors more directly is suggestive of responsivity issues related to the selection or assessment criteria used for determining program eligibility that may have affected program outcomes. The program focus of the APYA/SS program was clearly on employment, as youth spent approximately 80% of their activity time either learning a trade or focusing on job-related skills. This heavy concentration on employment, without an equivalent concentration on the family and substance abuse risk factors identified above, could help explain the weak findings. Emphasizing employment training without a careful attenuation of individual needs may have been a design flaw. As noted in the introduction, the major criteria for determining program eligibility were being assessed as moderate risk and being free of significant mental health and substance abuse problems. Though additional risk and needs assessments were conducted after placement at the respective programs, it is less clear whether or not these assessments were effective tools for guiding decision making about the appropriate interventions for youth or if they were effective tools that could be applied in the context of case management.

Once these youth were placed at APYA, the die was effectively cast for the type of training they would receive. In other words, since the assessments were conducted post-placement and the program emphasis at APYA/SS was predetermined (vocational training),

there may have been little opportunity to significantly address the criminogenic risk factors in individual cases that contributed to subsequent delinquency, at least not in any substantive way. For example, if youth at APYA/SS had significant family-related or substance abuse problems contributing to delinquency, these problems may have gone largely unaddressed. This issue became even more important when youth were released to the SS or reentry program. The primary focus of the community specialists was continuing to support the employment goals of program youth on release from APYA. This emphasis may have neglected other risk and/or need factors that were present. The remedy for this is to implement a risk and needs/strengths assessment model that guides case planning and management. Had this been done as a component of both APYA and SS, additional case plans could have been developed to address other factors contributing to delinquency using program elements or models like those discussed above. Or, if a case assessment and management model were implemented by DJJ's commitment managers prior to program placement, many of the youth may not have been placed at APYA/SS in the first place.

# F. Implications of Logic Model

Data suggest that APYA did well at implementing job-specific training and educational support. Despite these program implementation successes, these results did not yield the desired sustained outcomes for all APYA/SS youth. One might reasonably conclude from these findings that job training and education are necessary but not sufficient ingredients for success with this particular population. It may be that these program elements must be complemented by other program elements to have a more direct effect on recidivism. The absence of strong family-centered and cognitive-behavioral approaches designed to address the predominant risk factors supports this finding. These approaches have proven effective with at-risk populations. In addition to these approaches, the extant research on "what works" to reduce recidivism

provides considerable direction for future research. Past research has documented the benefits of selected program approaches on reducing the criminality of youthful offenders. In particular, research by Lipsey, Wilson, and Cothern (2000) found that the treatment types that provided the best and most consistent results for institutionalized offenders were interpersonal skills training and teaching family homes. Similarly, individual counseling, interpersonal skills training, and behavioral programs were the most effective for non-institutionalized offenders. Importantly, this same study noted that vocational programs had weak or no effects on recidivism. One might reasonably infer that had APYA/SS incorporated these program types or elements from these types into their treatment regimen in stronger doses, the results might have been different. Of course, implementing other program components has major cost implications. Given the investments made in vocational training and education, it is not likely that additional expenditures on complementary approaches would have been feasible.

Nonetheless, the wealth of evidence supporting the use of interpersonal skills training (social skills) and cognitive-behavioral program elements with delinquent populations suggests that these should be incorporated into the programming whenever assessments indicate that these interventions are needed. Also, one could readily see the potential benefits of a type of residential "step-down" or transitional program, such as a teaching family home, where youth could be eased back into the community with the support of supervising adults who could more closely monitor behavior and support job or educational activities. This type of program component could have increased the rate of youth transitioning to independent living situations. Although social skills development and behavioral programming elements (particularly the use of contingency rewards) were conducted at APYA, they were minor elements not guided by strict protocols that have proven effective with this population. Such protocols are common among the more formalized programs (e.g., Thinking for a Change) where research has shown that attention to program fidelity affects outcomes.

# G. Potential Criminogenic Effects of Employment

It is important to consider the potential criminogenic effects of employment on youthful offenders. Researchers have repeatedly found positive relationships between employment and law violations (Gottfredson & Hirschi, 1990; Wofford & Elliott, 1997; Ploeger, 1997; Cullen, Williams, and Wright, 1997; and Brame, Bushway, Paternoster, & Apel, 2004). Additional research conducted by Uggen (2000) and Bachman and Schulenberg (1993) have suggested agespecific effects of employment on crime. Much of this research was grounded in the theory offered by developmental or "life-course" criminologists, who posit that as offenders age or mature into young adults, they develop stakes in conformity, the most important of which is long-term employment. Sampson and Laub (1993) noted employment as a "turning point" in the life course of criminal offenders, but observed that it did not occur until later in life, when offenders reach their mid- to late twenties. Uggen's (2000) research supported this finding. His research drawn from the Employment in the National Supported Work Demonstration Project, an experimental design that provided work opportunities to criminal offenders, found that for the study participants, recidivism was significantly reduced for offenders over the age of 26. Offenders under the age of 26 did not have lower recidivism rates. In other words, the impact of employment was clearly age graded, and younger offenders were significantly less likely than older offenders to benefit from employment interventions.

In their age-graded theory of informal social control, Laub and Sampson (1993) were clear to point out, however, that when a negative association could be reported it was not "employment by itself" (p. 304) that contributed to the reduction in crime, but the stability and commitment that they demonstrated to the work itself. This research suggests that the APYA/SS emphasis on employment, without an equal or greater focus on other risk factors (e.g., family dysfunction, substance abuse, lack of social skills, cognitive deficiencies), may not have proved sufficiently advantageous to program youth.

# **H.** Employment Outcomes

OJJDP (2000) found that there are several conditions that must be met for youth to be successful in the labor market. Among these are an "attachment" to work, strong employer involvement, and the use of intermediaries to support community reintegration. At APYA, no pipeline to employers (see, for example, the United Auto Workers/General Motors Manufacturing Technology Partnership, as discussed in OJJDP, 2000, p. 27) who agreed to place program completers in jobs existed. Youth were left to work with the community specialists in securing employment. Also, without strong advocacy and formal mechanisms to support employment (e.g., DOL's Federal Bonding Program), employers are often reluctant to take risks on offender populations. Though it is clear that SS's community specialists served as intermediaries on behalf of program youth seeking employment, the results of their efforts may have been more haphazard or sporadic than intended, creating an implementation issue that should guide future employment-based programs.

#### I. Future Research

This evaluation has provided one of the largest samples of youthful offenders that has been studied for three years post-release. It has created a rare opportunity for continuing to conduct longitudinal research with this sample of offenders. Because identifying information exists and official records will be available for this study sample, this type of research is possible for this cohort. Further longitudinal research could be done with modest levels of effort and cost due to the fact that official employment and criminal history records on study participants will be accessible for research purposes. Employment and recidivism outcomes could be observed from late adolescence until study participants are well into their adult lives. By observing these outcomes for youth as their adult lives progress, we could obtain and present vital historical, contextual, and criminal history data that inform what we know about the life course of these

young men. Such data have rich implications for the types of programming that should be implemented by the juvenile justice system.

It is important to consider this research because of the knowledge that can be gained about designing employment-related programs for this challenging population of offenders. The findings from research conducted in future years could have implications related to responsivity, the ongoing maturation of youthful offenders, and the long-term cost savings that could result from enhanced programming. When the evaluation began, the study youth were 15–17 years old. This cohort is now 20-24 years old. Following these youth for an additional 3-4 years would enable researchers to glean valuable insights about the life experiences of these young men and assess their educational, employment, and recidivism outcomes over a multi-year period. Researchers could study the evolving employment record of these youth and attempt to determine if there were any long-term and sustainable benefits of the APYA/SS program. We know from the studies cited above that a maturation effect occurs as youth transition into young adulthood. What we do not know is whether participation in specific programs like APYA/SS can alter the life course in any meaningful way. It seems clear that the early experiences of youth (e.g., high school graduation, enrollment in college, joining the military) inform life circumstances in significant ways. Could 18–24 months of participation in an employmentbased program provide long-term benefits to youth? For example, could the specific trade and employability skills learned in the program be applied in future years?

Longitudinal research with this cohort would allow OJJDP, DOL, and researchers to observe the criminal records of these youth and whether or not the combination of maturation over the life span and participation in APYA/SS produced any positive long-term influences. Most importantly, since there were clearly differential benefits for ethnic subgroups, future research can further explore these findings. This has huge implications for understanding the

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responsivity of this program model and the selection criteria that should be applied to future placements. It could help us determine who is best served by an APYA/SS type program.

#### XIII. CONCLUSIONS

The APYA/SS program was successful in delivery of vocational training and job placement services at a level (i.e., dosage) which exceeded that provided to the control group. The most pronounced differences occurred during the institutional phase. There is also evidence that the experimental program had a positive impact on educational achievement. APYA/SS participants were significantly more likely than controls to receive a high school level diploma of any type while in secure care as well as within two years of community release.

The logic model for the experimental APYA/SS program postulated that more intensive levels of vocational training and services combined with accelerated educational achievement would result in enhanced employability and lower recidivism after community release. There is evidence that the experimental program did have the intended positive impacts on employment and recidivism during the first year following community release, compared to the controls. However, these positive impacts were not sustained for experimental subjects during the second and third years following community release. The notable exception to the trend of diminishing long-term impact of APYA/SS was found for Hispanics, who sustained higher levels of employment and lower recidivism throughout the entire three-year follow-up period.

Several plausible explanations were offered as to why greater overall reductions in recidivism were not achieved. These include failure to achieve independent living objectives as well as to accurately assess and effectively address other criminogenic factors such as family problems and substance abuse. Recommendations were also offered for modifying the APYA/SS program design by implementing additional evidence-based practices to address these factors, which include 1) implementing a transitional living component between secure care completion and community release to reentry; and 2) implementing evidence-based practices such as functional family therapy and cognitive-behavioral therapy, which have the potential for further improving outcomes for future APYA/SS participants. While these enhancements will

increase program costs, these increases may be justified in part by the data showing that APYA/SS achieved some of its positive impacts at a moderate cost level compared to many other DJJ programs in which control group youth participated.

Since few, if any, research studies have examined education, employment, and recidivism outcomes in a randomized field experiment, it is difficult to compare these evaluation findings to past research. In addition, the differential impact of the experimental program on ethnic subgroups further complicates any comparison because randomized studies rarely assign enough subjects to successfully examine the differential impact of interventions on these subgroups. This was made possible in this research because the federal and state sponsors permitted random assignment to continue until the sample was large enough to test ethnic group impact. Given that a primary finding here is the differential benefit of the experimental program to some ethnic subgroups, particularly Hispanics, future studies should replicate ethnic subgroup testing by acquiring larger samples. Randomly assigning experimental or control subjects within ethnic groups could also strengthen research that attempts to address this issue.

Future research with the subjects of this evaluation also has the potential for adding valuable knowledge about how more effective correctional programs for juvenile offenders might be designed and implemented. This future research could include 1) exploratory analyses for potential explanations of the differential programs benefits observed for ethnic groups, 2) the more comprehensive assessment of research subject behavior by expanded data collection to secure employment and recidivism outcomes from national data sources, and 3) extending the observation of current subjects to examine experimental program impacts into adulthood.

The evaluation of the APYA/SS program demonstrates that it has the potential to join the modest but growing list of evidence-based practices in juvenile corrections. However, program modifications and further research may be needed for APYA/SS to fully achieve the status of an evidence-based practice.

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# Appendix A

Florida's Avon Park Youth Academy and STREET Smart Program Description

Avon Park Youth Academy Eligibility Screening Instrument

### Florida's Avon Park Youth Academy and STREET Smart Program

### A. Program Design

APYA opened in July 1998. Managed by the Florida DJJ through a contract with G4S (formerly Securicor New Century, Inc.), the program serves youth from four DJJ regions: East Central (Daytona, Ft. Pierce), Northeast (Jacksonville), South (West Palm Beach, Miami), and West Central (Tampa, St. Petersburg, Orlando, Lakeland, and Ft. Myers). APYA is located on a former Air Force base in Avon Park, Florida. This setting provides for a campus-like, normalized environment in which youth live in 12 fully equipped duplexes and are responsible for maintaining their households, yards, and the appearance of the campus. Many of the basic renovations and refurbishings of APYA were completed by youth as part of their vocational training and onsite job activities. With funds made available from the U.S. DOL, an enhanced reentry component, SS (success, transition assistance, reduce recidivism, employment, education, training), was added to build upon the work ethic and skills instilled in the institutional phase of the program. The underlying theory behind the program is that youth need academic support, job training, and life skills in the community in order to be successful adults. The activities of the program are geared to helping youth obtain and maintain successful employment after reentry into the community. Because of the unique emphasis on vocational training and reentry services, the program has been recognized nationally as one of the most innovative strategies for addressing delinquency. Program staff devoted significant time helping other states replicate the program's key features, which are described below.

The APYA/SS program staff were successful at designing and implementing a service continuum that is seamless and closely coordinated. While many efforts to incorporate institutional and reentry components into a unified program have resulted in fragmented service delivery, the APYA/SS program succeeded in developing comprehensive, continuous, and mutually reinforcing services that began at disposition, continued through 9 months of education

and vocational training in a secure facility, and concluded 12 months later following the completion of a reentry phase.

The primary goals of APYA/SS were to provide education and job training, as well as life and community living skills, in order to facilitate self-sufficiency and a prosocial lifestyle. These goals were achieved by providing "real world" work experience and training on independent living skills within a normalized environment. The enhanced reentry component sustained and built upon the services offered at APYA by providing employment searches, job contacts, housing support, transportation support, mental health/substance abuse services, and educational placements.

### 1. APYA Overview

The APYA residential component provides comprehensive services (i.e., intake and classification, diagnostic and evaluation services, counseling and skills training, behavior management, and education) with an overall emphasis on preparing youth for the world of work. Staff provide training on employability and life skills, help youth develop vocational competencies, and offer meaningful work opportunities. Further, APYA seeks for youth to be placed in an independent living situation upon successfully completing the program. APYA had an original capacity of 212. Due to budget cuts which occurred in 2002, it currently has a capacity of 200. It is designed to serve moderate risk male youth (as assessed by the juvenile court) ages 16 and older. In order to be eligible for APYA, these youth must meet a number of other criteria, which are as follows: 1) must have an IQ of 70 or above; 2) must have a need for and interest in vocational training; 3) must not have been diagnosed with a significant mental health or substance abuse disorder; 4) must not be prescribed psychotropic medication; 5) must not have a history of escape, absconding, or aggressive behavior; and 6) must have no significant

medical condition or physical disability. Only about 11% of all youth committed to DJJ meet all of these eligibility criteria.

Several assessments are completed during the first 10 days following a youth's arrival at APYA. Educational assessments in math and reading are conducted within the first 5 days. These assessments are used to determine initial educational levels for each youth. The youth are retested approximately six weeks prior to their release. Educational staff believe that an increase of two grade levels is a reasonable goal for most youth during their stay at APYA. Prior to a youth's release from APYA, educational counselors conduct an exit conference to discuss progress made while at APYA, future educational goals, and any assistance a youth might need in achieving his educational goals during the SS reentry phase. Students generally pursue one of three diplomas while at APYA: a GED, an exit option diploma, or a regular high school diploma. An exit option diploma is provided to those youth who pass the high school competency test and obtain a GED.

Two vocational assessments are administered. The Conover test is a physical skills test. The Chronicle Career Quest Interest Inventory is used to draw conclusions about a youth's career interests and aptitude.

The following psychosocial assessments are administered within one to two days after a youth's arrival at APYA.

- 1. Substance Abuse Subtle Screening Inventory (SASSI): The SASSI is a one-page pencil-and-paper assessment tool designed to assess whether or not youth suffer from chemical dependence. It is not a tool used to assess change over time.
- 2. The Behavior Assessment System for Children (BASC): The BASC is a multi-method, multidimensional approach to evaluating the behavior and self-perceptions of children. The BASC measures positive (adaptive) as well as negative (clinical) dimensions of behavior and personality. It facilitates a differential diagnosis and educational classification of a variety of children's emotional and behavioral disorders, and aids in the design of treatment plans. The BASC can be used to measure attitudinal change over time. It provides a

- measure of how youth will respond to a classroom environment. It is administered as a pre- and post-test to assess change during their stay at APYA.
- 3. Adolescent Psychopathology Scale (APS): The APS is a multidimensional self-report measure of a wide range of psychopathology, personality, and social-emotional problems and competencies designed for use with adolescents ages 12 to 19 years. The APS items directly evaluate specific DSM-IV symptoms of psychiatric disorders found in adolescents. In addition, the APS also assesses other psychological problems and behaviors that interfere with the adolescent's psychosocial adaptation and personal competence, including substance abuse, suicidal behavior, emotional stability, excessive anger, aggression, alienation, and introversion.

Once the above intake assessments are completed, an overall APYA needs assessment is completed that incorporates the results from these assessments. Each section of the needs assessments is completed by the appropriate APYA department. Sections covered by the needs assessment include the following.

- Family history
- Educational level
- Employment/vocation
- Mental health
- Substance abuse
- Anger management
- Victim accountability
- Physical health
- Social and life skills
- Independent living
- Delinquency history
- Specialized needs
- Court-ordered sanctions
- Transition
- Strengths and weaknesses of youth and family

Once the needs assessment is completed, an individual performance/treatment plan is developed for each youth. It contains all of the youth's APYA goals and objectives and identifies the youth's discharge criteria.

APYA manages the Second Chance School on the grounds of the APYA campus. The education building is a new building partially built by APYA youth. Although located on the APYA campus, it operates under the auspices of the Polk County Public School District. Objectives for each youth at the school are to attain a vocational certificate and a high school diploma or equivalent. These objectives are accomplished by providing comprehensive pre-vocational, vocational, and academic remediation services. Services are individualized; performance based; and include pre- and post-assessment, computer literacy training, and special education services.

A component of the program is the HBI vocational training service. HBI provides training in several trades, and youth have the opportunity to practice skills learned during supervised community service, on-the-job training, and paid employment. In contrast to other DJJ facilities, which spend approximately 10% of each day focusing on employment-related skills, approximately 80% of the day at APYA is spent teaching vocational trades and employability skills. HBI provides instruction in the following trades.

- Plumbing
- Electrical
- Carpentry
- Building and apartment maintenance (BAM)
- Landscaping

To be certified in a specific trade, a youth must log a total of 870 work hours in that trade. Youth attain this goal by performing work on the grounds of APYA and by carrying out assignments in the community. Many youth are allowed off the compound to complete community service projects, such as repairing nature trail bridges and/or landscaping community parks. When youth complete off-compound work, they receive both community service hours and job/trade-related work credits. When youth go off-compound, they are supervised at an average ratio of five youth to one staff member.

Once an HBI youth is released to the community, the HBI transition specialists at APYA help them locate employment. HBI has two staff seeking job placements for their youth. During the transition process, HBI and SS staff work closely together. Because the SS staff are located in the community and see youth on a regular basis, they are in a helpful position to coordinate job searches with the HBI staff. Much of their work is collateral work or following up on initial job contacts made by HBI staff. Thus, SS and HBI staff complement one other in their efforts to meet a youth's employment needs.

Vocational trades are also taught by the G4S staff. G4S provides instruction in the following trades.

- Culinary arts
- Desktop publishing
- Flooring
- Masonry
- Horticulture
- Auto maintenance
- Auto detailing

If the youth has learned a G4S trade, SS transition specialists and community specialists help them locate employment.

All youth get up to \$500 in transitional assistance funds upon their release from APYA. These funds are earned during their Skillsman phase by completing work and community service projects. Youth have been involved in putting up trusses and shingling the roofs for new buildings to be used at APYA. HBI also provides a pool of funds for their youth to use in getting started in the community. Youth may apply for a \$1,000 loan to cover such basic needs as security deposits, down payments, and first month's rent.

Youth are also provided with a tool kit upon their release if they have a trade-related job. The basic kit contains 15–21 different tools and costs an average of \$170–250 per kit. Having a tool kit helps youth demonstrate to employers their readiness for the job, and reduces or removes

any immediate investment they would otherwise have to make in equipment. If youth prefer a stronger focus on attending school, SS has a scholarship program to help youth get started in a school setting.

### 2. SS Overview<sup>36</sup>

SS was operated under a DJJ contract with Securicor New Century, Inc. (now G4S), and was one of four federally funded U.S. DOL demonstration sites. SS, the intensive community reentry component of the program, provided a vehicle for a youth's seamless movement from residential placement to living and working in the community upon completion of the APYA program phase. The program's wraparound services were provided from the youth's entry into APYA through 12 months post-release. SS's transition specialists worked with all youth throughout their residential stay to enhance APYA's skill training programs, provide intensive transition planning and preparation, and introduce the youth to their community specialists.

SS's transition specialists served as the link between the APYA staff and SS's community specialists. SS staff were fond of saying that "transition begins the second a youth enters the Academy." Although they were considered a part of the SS staff, the transition specialists worked full-time on the APYA campus. They worked in collaboration with APYA staff on a daily basis and initiated contact with youth upon their arrival at APYA. They participated in the intake process and monitored and advised on key elements of the youths' case planning throughout their stay at APYA. In addition to the needs assessments and performance plans completed by APYA staff, SS staff completed needs assessments at several points in the institutional phase of the program: upon entry to APYA, prior to a transitional home visit, and 10 days prior to release from APYA. These assessments were used to develop plans containing goals for youth during their transitional home visit and upon their discharge from APYA

<sup>&</sup>lt;sup>36</sup> In 2005, following the completion of all experimental group youth, SS was converted from a voluntary reentry program to a conditional release program. This change had no impact on the program evaluation.

(community plan). Prepared during the Skillsman or Transition Phase, both plans contain specific goals in the following areas.

- Family
- Employment/vocation
- Education
- Housing
- Independent living
- Medical/physical health
- Mental health
- Substance abuse
- Legal/conditional release

Transition specialists attended SS team meetings held on a regular basis at SS headquarters in Lakeland. The sessions were used to exchange information about the youth's progress, any special needs, and future goals, particularly for those who were in the Skillsman or Transition phases. Approximately 25–35 youth are in the Skillsman or Transition phase at any given time. The sessions were also used to update staff on new procedures, discuss field operations, explore any ongoing caseload issues, discuss community contacts and service options, provide technology training, consider meetings with other agencies (e.g., Workforce Investment Board), and prepare for new releases to the community. Following the sessions, several members of the team then traveled to APYA to meet with those youth who had achieved the Skillsman phase (the phase prior to the Transition phase) and were preparing for the transitional home visit, a key element that requires youth go to their home community for a twoto three-day period to apply for employment and solidify housing arrangements. Thus, not only did the institution-based transition specialists reach out to the community to facilitate release preparations, the community specialists also reached in to the institution to meet with youth and prepare for their release.

and placement, ongoing employment and community adjustment training, and mentoring and support. The community specialists maintained relationships with the youth's family, employers, juvenile justice staff, local Workforce Investment Boards, School-to-Work partnerships, community service organizations, and local volunteers.

The SS component of the program was divided into five geographical regions. Placement decisions and assignments to community specialists were based exclusively on geography (i.e., where the youth resided). Four of the five regions had a community specialist supervisor who supervised two community specialists. In the Northeast region, cases were monitored through administrative supervision; these clients were contacted by phone, letters, and email (where available). The community specialists and supervisors carried an average caseload of 20 youth. SS's community specialists made a minimum of four face-to-face contacts per week and one phone call per week with each youth during the first 90 days of service. The frequency of contact was adjusted throughout the program depending on the specific needs of each youth.

Community specialists attempted to make each contact purposeful. They assisted youth in meeting the goals described in targeted priority areas specified in their community plans, which were developed prior to their release from APYA. They also attempted to identify ongoing difficulties or trouble spots, and then used or adapted a component of the SS community adjustment curriculum to address problems the youth might have been experiencing. For example, if a youth quit his job at a particular place of employment because he did not like the work, the community specialist would discuss the circumstances surrounding the job and review Chapter 4 from the curriculum, entitled "I've Lost My Job—Now What?", which contained a worksheet pertaining to personal interest areas.

Community specialists placed a priority on helping youth meet their legal goals and the conditions of their aftercare supervision. For example, they assisted youth in meeting the community service requirement of their disposition by exploring ways for youth to use their

APYA training to help meet needs in their communities. A youth trained in plumbing may have been able to help his neighbors address some of their household plumbing problems, such as fixing a leaking faucet.

Perhaps the most unique aspect of the SS component was its voluntary nature. Youth were not required to participate. There were mixed opinions offered about this aspect of the program. Some specialists felt that court-ordered supervision was necessary to garner greater participation by youth in the program. Others felt that youth were likely to resent court-mandated requirements, maintaining that youth resist compliance under these conditions. One specialist characterized this experience as a "paradoxical intention" in which youth were more willing to accept SS's help if it was unencumbered by legal mandates.

Community specialists did not have the "hammer" that juvenile probation officers (JPOs) have; they did not mete out sanctions. Youth did not view their community specialists as a threat; instead, most youth viewed SS as offering a positive service that was designed to help them succeed. SS helped youth find a job, but they could not make them go to it. They helped them locate treatment for identified needs, but they could not make them attend sessions.

The challenge for SS staff was to cultivate a relationship with youth based on trust and accountability in which the benefits to participation were readily apparent. In other words, staff tried to "eliminate the negative and accentuate the positive." Among the desired qualities for the position were compassion, empathy, a service orientation, and an interest in field work. Some specialists viewed their role as that of a mentor and coach and felt that their job was to demonstrate that they cared about the youth's well-being.

SS also incorporated a "family therapist" concept into the program. Community specialists conducted an assessment of each youth's family status after their placement at APYA. They conducted an assessment of the youth's family and neighborhood circumstances in order to better understand the environmental conditions under which the youth had lived and to plan for

transition back to the youth's home. The community specialists believed that family support and the availability of a support network were key to success. The need for this function became even more evident with the discovery that most youth were returning to their families rather than an independent living situation. Thus, emphasizing this family reunification aspect of the SS intervention became a priority.

As the transition specialists and community specialists became better equipped with this information, they were able to mediate some of the phases of feelings that families often go through with their children. Upon entry to APYA, families often express anger at their children and indicate a desire that they not return home. Upon exit from APYA, they often become more forgiving, express guilt about their own misgivings, and are willing to accept the child back. This approach sought to help all parties to understand these phases and help them to address the issues that were disrupting the family's well-being.

A major part of the job was community resourcing: making contacts with schools, employers, social service providers, and others to help youth attain their goals. Specialists also helped youth meet basic needs. If a youth needed a driver's license, specialists worked with the Department of Motor Vehicles to help him take the test. If a youth needed a place to live, specialists worked with the youth to help locate suitable living arrangements. If food in the refrigerator was needed, specialists found a way to acquire food. This approach was designed to help ease some of the pressures that often prevent youth from successfully taking the initial steps toward prosocial independence. The goal was to help youth remain in the community and "get them to feel normal." In the words of one community specialist, "SS was all about positive field contacts and support services. Just letting them know we were there for them was sometimes enough to keep them focused on their goals."

SS's philosophy allowed for some minor slippage in behavior and provided reasonable timeframes for youth to pursue educational and employment opportunities. Community

specialists had a sense that if a youth received consequences that were too harsh, he became discouraged, lost interest in the program, and was a likely candidate for failure. The community specialists expressed the view that it was the youth's ability to exercise patience and commit to perseverance in the face of adversity that often helped sustain him in the program long enough to enjoy success.

SS placed a special emphasis on the use of incentives. Among the incentives used were gift certificates to restaurants and retailers, movie passes, and gifts such as electronics.

Once a youth had been in the program for a period of time, the community specialists prioritized their contacts and activities according to those youth with the highest risk factors. They used risk instruments administered at APYA to make this determination. Specialists focused on those youth who were either unemployed or not in school. However, they continued to use the existing rewards and incentives structure to provide positive reinforcements to those youth who were doing well.

### 3. <u>SS Activities</u>

Some of the program changes, over time, included the following:

- Family reunification: The caseload sizes dropped, on average, from 18–20 to 12–15. As a result of this, SS's community specialists were able to spend more time visiting the families of the clients who were in APYA. This allowed them to work more closely with the families to discuss changes, expectations, and any other issues they faced prior to release.
- Technology upgrades: In September 2002, the program upgraded its equipment to use desktops instead of laptops and to run Windows XP Professional. The community specialists were still using Palm Pilots to store contact information, mileage forms, and timesheets, as well as phone numbers and task lists. The only difference was that the community specialists could remotely access the central database located at the office and do their own updates and contact log submissions.
- Community Advisory Board: SS staff attended meetings of the APYA Community Advisory Board and provided information about employment

activities and opportunities for outreach and community service. Each community specialist was also actively involved in his/her respective community by developing relationships with employers, schools, transportation, medical facilities, mental health/substance abuse providers, the court system, and DJJ.

 Client profiles: Community specialists worked with SS clients to complete client profiles. These profiles contained descriptions of current progress and successes achieved by the youth. The profiles served as a reminder and encouragement to the APYA residents and gave staff a chance to see how the youth were doing. The profiles were posted on the "Wall of Fame" board located in the APYA education building.

### **B.** Major Program Strengths

The strengths of the APYA/SS program are indicated below. Many of these strengths are consistent with the literature on "what works" in youth-based employment and reentry programs. These include the following.

- At the time of the evaluation, both program components have reached a level of maturity and stability after continuous operations for several years.
- APYA's phased approach to programming is based on a contingency-rewards model that has demonstrated effectiveness with juvenile populations. The approach enables staff to monitor the progress of each youth and reward him by promoting him to the next phase if his individual goals are met. The five phases of the program and the approximate number of days youth spend in each are as follows: 1) Orientation (30 days); 2) Trainee (45 days); 3) Apprentice (45 days); 4) Journeyman (60 days); and 5) Skillsman (45 days).
- APYA uses a systematic and comprehensive assessment protocol that assesses youth along educational, vocational, and psychosocial dimensions. The assessments form the basis for an overall needs assessment that is used to develop an individual performance/treatment plan for each youth.
- HBI and G4S apply a rigorous work regimen aligned to certifications in specific trades. Consistent with the literature on "what works," the majority of the youth's day (80%) is spent gaining real work experience in such trades as plumbing, carpentry, and electrical engineering, for which there is an identified need in the labor market. Opportunities are provided to enable youth to complete the necessary work hours for certification and to complete community service hours. Many of these opportunities allow them to practice the workplace competencies featured in the Secretary's Commission on Achieving Necessary Skills (SCANS) report (e.g., effective use of resources, working in teams, and using tools and technology).

- The emphasis on job training is not only focused on expanded employment but also seeks to provide *improved* employment opportunities for youth by matching their interests and aptitude with training that will assist them in obtaining a job that they will like and that will pay good wages.
- A multi-disciplinary team employs a systematic case management process to ensure that all aspects of the program are coordinated to meet a youth's education, job training, and reentry needs. The process involves a coordinated staffing approach in which teachers, job trainers, and the transition specialists meet on a regular basis to discuss a youth's progress and explore ways of overcoming any obstacles that may impede his chances of success.
- The program requires a carefully developed partnership between private agencies (G4S and HBI), public agencies (Florida DJJ and the Polk County Public School District), and the community (which provides community service opportunities), all of which play a strategic role in ensuring positive outcomes for youth.
- SS's geographical structure was designed to maximize the use of its resources and increase the level and quality of contacts with youth.
- SS administrators employed a regular staff meeting schedule that was used to reinforce administrative and policy areas, allow for quality assurance reviews, and train staff on new strategies or technology.
- HBI and SS transition specialists helped youth obtain employment prior to their discharge from APYA. Additionally, transitional assistance funds, loans, tool kits, and scholarships were provided to help ease a youth's transition back to the community.
- Once in the community, SS's community specialists provided employment counseling, using a strengths-based approach, to facilitate a youth's use of community resources and the accomplishment of personal goals. They helped youth achieve their legal goals and provided a system of incentives that helped motivate youth toward successful outcomes.
- SS's community specialists invested a lot of their youth contact time working with youth on SCANS skills such as taking responsibility for their actions, demonstrating self-management strategies, having confidence in their abilities, and other personal qualities that will enhance employability. The SS curriculum had chapters devoted to these skills.
- SS placed a special emphasis on the effective use of leisure time. This is a major criminogenic need area that has been strongly linked to recidivism.
- Community specialists formed positive relationships with DJJ's juvenile probation officers, enhancing program operations by complementing one other in the fulfillment of their respective functions.

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• APYA and SS maintained management information systems that provide a solid resource for assessing the nature and effectiveness of their services.

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#### AVON PARK YOUTH ACADEMY (APYA) - ELIGIBILITY SCREENING

INSTRUCTIONS: Please refer to the attached instructions when completing this form. Results will be used to determine if a youth is eligible and will be placed in APYA for a study being conducted by the National Council on Crime and Delinquency (NCCD). Upon completion, e-mail assignment@mw.nccd-crc.org to request a random assignment for eligible youth. When e-mailing for an assignment, include the following identifying information: Youth's name, Date of Birth, DJJ #, Commitment/Transfer Date, and Region. NCCD will respond within 24 hours. Following the NCCD assignment, complete item #23 and place the youth consistent with the study's protocol.

COMMITMENT MANAGER INFORMATION		
1) Commitment Manager:,,	2) Date Completed:/	
3) Judicial Circuit #:	mo day year 4) <b>Telephone #:</b> (	
YOUTH'S IDENTIFYING INFORMATION		
5) Youth Name:,	6) Date of Birth (DOB):/ mo day year 8) Committing Judicial Circuit #:	
9) Commitment Date:// OR mo day year	10) <b>Transfer Date:</b> / (leave blank if not applicable) mo day year	
11) <b>DJJ Region:</b> 1) West Central 2) East Central	3) Southern 4) Northeast	
<b>APYA ELIGIBILITY CRITERIA:</b> (Refer to attached definiti definition, check "2) Not Eligible" if not.)	ons. Check "1) Eligible" if youth meets criteria according to the	
12) Age at Screening: Years Months	1) Eligible 2) NOT Eligible	
13) Risk Level:Low Moderate High	1) Eligible 2) NOT Eligible	
14) <b>IQ:</b> IQ <i>below</i> 70 IQ 70 or above	1) Eligible2) NOT Eligible	
15) Vocational Training Need:	1) Eligible 2) NOT Eligible	
16) Mental Health Issues:	1) Eligible 2) NOT Eligible	
17) Psychotropic Medication:	1) Eligible 2) NOT Eligible	
18) Significant Substance Abuse Problem:	1) Eligible 2) NOT Eligible	
19) Escape History or Risk:	1) Eligible 2) NOT Eligible	
20) History of Aggressive Behavior:	1) Eligible 2) NOT Eligible	
21) Significant Medical Condition or Needs:	1) Eligible 2) NOT Eligible	
22) Final Decision Regarding APYA Eligibility:	1) Eligible2) NOT Eligible	
<b>STOP.</b> For eligible youth only, e-mail <a href="mailto:assignment@mw.nccd-crc.org">assignment@mw.nccd-crc.org</a> to request a random assignment. NCCD will respond within 24 hours to indicate where the youth should be placed. Based on the NCCD assignment, complete item 23 by indicating whether the youth was placed in the experimental or control group.		
23) Placement for Study Purposes: APYA (Ex	perimental) Other DJJ Placement (Control)	
Fax the completed form to your Chief Commitment Manager, maintain a copy of all forms in separate file folders for review		

# AVON PARK YOUTH ACADEMY-ELIGIBILITY SCREENING INSTRUCTIONS

INSTRUCTIONS – The APYA Eligibility Screening Form should be completed for every youth screened by DJJ during the study period. This form should be completed by the Commitment Manager assigned to the case, based on information available in the Pre-Dispositional Report (PDR) or through an interview with the offender. The following provides a brief explanation of each item on the form and describes how each item should be recorded.

#### COMMITMENT MANAGER INFORMATION

- 1) **Commitment Manager:** The Commitment Manager completing the form should print their full name beginning with last name, followed by first name.
- 2) **Date Completed:** Enter the date the form was completed. Enter date as mm/dd/yy (e.g., 03/21/02).
- 3) **Judicial Circuit #:** Enter the Judicial Circuit number of the *Commitment Manager* assigned to the case. Enter as 01, 02, 11, 12, etc.
- 4) **Telephone** #: Enter the complete telephone number (including area code) of the Commitment Manager completing this form. (Note: we may need to contact you by telephone to obtain clarifying information.)

#### YOUTH'S IDENTIFYING INFORMATION

- 5) Youth Name: Print the offender's legal last name and first name in the space provided.
- 6) **Date of Birth (DOB):** Record the youth's date of birth. Enter date as mm/dd/yy (e.g., 02/16/02).
- 7) **DJJ#:** Enter the unique number that DJJ uses to identify and track the offender within the juvenile justice system.
- 8) Committing Judicial Circuit #: Record the number of the Judicial Circuit that is committing the youth to DJJ.
- 9) **Commitment Date:** Enter the formal date on which the youth was committed to DJJ. Enter date as mm/dd/yy (e.g., 02/16/02).
- 10) **Transfer Date:** If the youth was transferred from another DJJ status, enter the formal date of the transfer. Enter date as mm/dd/yy (e.g., 02/16/02).
- 11) **DJJ Region:** Check one DJJ region (West Central, East Central, Southern, or Northeast) that has jurisdiction over the youth.

**APYA ELIGIBILITY CRITERIA:** Apply the following criteria when considering APYA eligibility. Check "Eligible" if youth meets the criteria, check "Not Eligible" if not. Items #12 and #13 must be completed for every youth.

- 12) Age at Screening: Youth must be 16 to 18 years, 3 months, of age.
- 13) **Risk Level:** Youth must be moderate risk to enter the program.
- **STOP.** If either #12 or #13 is 'Not Eligible,' complete #22. If <u>any</u> subsequent item response is 'Not Eligible,' go to the bottom of the form and complete #22.
- 14) **IQ:** Youth's full scale IQ must be at least 70.
- 15) **Vocational Training Need:** Youth is in need of vocational training for future job placement and/or has the educational ability to pass the GED and/or youth has expressed an interest in vocational training.

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- 16) Mental Health Issues: Youth must be free of a significant mental health diagnosis.
- 17) **Psychotropic Medication:** Youth must not be on any psychotropic medication or be prescribed psychotropic medication by a doctor.
- 18) **Significant Substance Abuse Problem:** Youth must not be drug addicted, recommended for residential drug treatment, or have a history of inhaling glue, gasoline, or similar substances.
- 19) **Escape History or Risk:** Youth must not have any history of escape from residential placement or absconding while under supervision.
- 20) **History of Aggressive Behavior:** Youth must not have a history of assault, battery, domestic violence, or significant anger management issues.
- 21) **Significant Medical Condition or Needs:** Youth must be physically fit and able to participate in physical education training. Youth must not have a chronic medical condition that requires a doctor's supervision, preexisting medical condition that requires a doctor's supervision, or a condition that would prevent him from participating in vocational training.

\_\_\_\_\_\_

- 22) **Final Decision Regarding APYA Eligibility**: Indicate whether or not the youth is eligible for APYA based on the criteria indicated on this form. If ANY of the responses to questions 12-21 indicate NOT Eligible, then the youth is NOT eligible for APYA.
- Placement for Study Purposes. For eligible youth only, please e-mail assignment@mw.nccd-crc.org to request a random assignment. In the subject line, indicate 'Study.' In the body of the message, indicate 'Group Assignment for: youth's name, DOB, DJJ#, commitment/transfer date, and region. Example: Please make group assignment for William Smith, 1/1/87, DJJ# 123456, 3/15/02, Southern Region. Within 24 hours, NCCD will respond via e-mail indicating the assignment of the youth for study purposes.

Based on the NCCD assignment, complete item 23 by indicating whether or not the youth will be placed in the experimental or control group.

#### **Note**

If you do NOT receive an assignment within 24 hours, please contact the NCCD office at 608-831-8882 and ask for assistance from the research staff. Inform staff that you are calling about the Avon Park evaluation.

#### Questions

If questions arise at any time during this study period, contact the Chief Commitment Manager for the designated DJJ region. If further clarification is required, refer questions to Debbie Sutton, Chief Commitment Manager for the West Central Region (863-534-0231 x101 or SC 515-0667). If there continues to be unresolved questions, contact Tim Matthews, NCCD, at 859-271-8218.

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# Appendix B

**APYA Intake Profile Tables** 

# **Demographics**

Table B1		
Demographics: Item 1 Region of Origin		
Region	N	%
West Central	188	52.2%
Southern	77	21.4%
East Central	53	14.7%
Northeast	42	11.7%
Total	360	100.0%

Table B2		
Demographics: Item 2 Racial Composition		
Race	N	%
Caucasian	160	44.4%
African American	147	40.8%
Hispanic	49	13.6%
Other	4	1.1%
Total	360	100.0%

Table B3		
Demographics: Item 3 Age at Intake		
Age	N	%
15	5	1.4%
16	152	42.2%
17	170	47.2%
18	33	9.2%
Total	360	100.0%

# **Social History**

Table B4  Social History: Item 1 Living Situation of Youth at the Time of Arrest/Referral		
Parent/guardian's home	334	92.8%
Foster care	3	0.8%
Group home	1	0.3%
Independent living—leased apartment	1	0.3%
Independent living—other	7	1.9%
With friends	8	2.2%
Other	6	1.7%
Total	360	100.0%

Table B5  Social History: Item 2  Disruption Level in Areas of Functioning at the Time of Arrest/Referral		
Housing		
Chronic, severe, or frequent	212	58.9%
Situational/minor	96	26.7%
None/N/A	52	14.4%
Family		
Chronic, severe, or frequent	194	53.9%
Situational/minor	123	34.2%
None/N/A	43	11.9%
Peers		
Chronic, severe, or frequent	339	94.2%
Situational/minor	18	5.0%
None/N/A	3	0.8%
Education		
Chronic, severe, or frequent	300	83.3%
Situational/minor	43	11.9%
None/N/A	17	4.7%
Total	360	100.0%

Table B6		
Social History: Item 3 History of Running Away From Home		
History of Running Away	N	%
Has a history of running away	107	29.7%
Does not have a history of running away	253	70.3%
Total	360	100.0%

Table B7		
Social History: Item 4 Number of Dependents		
Number	N	%
Zero	333	92.5%
One dependent	24	6.7%
Two or more dependents	3	0.8%
Total	360	100.0%

Table B8		
Social History: Item 5 Results of Substance Abuse Subtle Screening Inventory (SASSI) Administered at Intake		
Assessment Result	N	%
Chemically dependent	167	46.4%
Probability of substance abuse	8	2.2%
Non-chemically dependent	101	28.1%
Missing assessment	84	23.3%
Total	360	100.0%

## Education

Table B9		
Education: Item 1a School Status at the Time of Arrest/Referral		
Status	N	%
Attending regularly/no problems	31	8.6%
Attending/moderate problems	139	38.6%
Not attending/severe problems	146	40.6%
Other	44	12.2%
Total	360	100.0%

Table B10		
Education: Item 1b Type of School Attended During Most Recent School Enrollment		
Type of School	N	%
Regular	129	35.8%
Alternative	40	11.1%
Other	191	53.1%
Total	360	100.0%

Table B11		
Education: Item 2 Last Grade Completed at the Time of Arrest/Referral		
Grade	N	%
Eighth grade or lower	157	43.6%
Ninth grade	118	32.8%
Tenth grade	57	15.8%
Eleventh grade	24	6.7%
Twelfth grade	4	1.1%
Total	360	100.0%

Table B12			
Education: Item 3 Academic Status at the Time of Arrest/Referral			
Status	N	%	
Above average	16	4.4%	
Average	98	27.2%	
Below average	35	9.7%	
Failing	31	8.6%	
Dropped out of school	115	31.9%	
Other	65	18.1%	
Total	360	100.0%	

	Table B13		
Education: Item 4a Academic Classification at Intake			
Туре	N	%	
Regular student	215	59.7%	
Exceptional Student Education (ESE) student	136	37.8%	
Other	9	2.5%	
Total	360	100.0%	

Table B14			
Education: Item 4b Specific Disabilities or Special Characteristics of ESE Students			
Disability/Characteristic N %			
Autism	1	0.7%	
Emotionally handicapped/severely emotionally disturbed	38	27.9%	
Educable mentally handicapped	10	7.4%	
Gifted—Accelerated Learning Program for High Ability (ALPHA) students	0	0.0%	
Hospital/homebound	0	0.0%	
Hearing impaired	0	0.0%	
Speech/language	9	6.6%	
Specific learning disability	88	64.7%	
Other	6	4.4%	
Total (Identified as ESE Students)	136	100.0%	

Note: APYA staff were able to indicate more than one disability/special characteristic for each youth identified as an ESE student.

Table B15  Education: Item 5a  New Century Education (NCE) Reading Grade Skill Level		
Level five or lower	115	31.9%
Level six	110	30.6%
Level seven	79	21.9%
Level eight	23	6.4%
Level nine	26	7.2%
Level ten	7	1.9%
Total	360	100.0%

<sup>\*</sup>Average reading level = 6.2.

Table B16  Education: Item 5b  New Century Education (NCE) Math Grade Skill Level		
Level two or lower	35	9.7%
Level three	123	34.2%
Level four	137	38.1%
Level five	57	15.8%
Level six	8	2.2%
Total	360	100.0%

<sup>\*</sup>Average math level = 3.8.

# **Vocational Training**

Table B17  Vocational Training: Item 1  Chronicle Career Quest Inventory Top Interest Areas at Intake		
Mechanical	117	32.5%
Physical performing	51	14.2%
Plants	40	11.1%
Artistic	39	10.8%
Protective	31	8.6%
Industrial	22	6.1%
Humanitarian	18	5.0%
Accommodating	15	4.2%
Scientific	12	3.3%
Leading/influencing	8	2.2%
Selling	5	1.4%
Business detail	2	0.6%
Total	360	100.0%

Table B18			
Vocational Training: Item 2 Vocational Training Assigned at Intake			
Vocation	N	%	
Masonry	75	20.8%	
Landscaping	58	16.1%	
Carpentry	54	15.0%	
Culinary arts	45	12.5%	
Building and apartment maintenance	39	10.8%	
Electrical	33	9.2%	
Digital publishing	14	3.9%	
Plumbing	13	3.6%	
Flooring	12	3.3%	
Auto	11	3.1%	
Horticulture	4	1.1%	
HVAC	1	0.3%	
Other	1	0.3%	
Total	360	100.0%	

# **Employment**

Table B19		
Employment: Item 1 Employment History Prior to APYA Placement		
Employment History	N	%
Held a full- or part-time job for more than 30 days prior to APYA placement	247	68.6%
Had not held a full- or part-time job for more than 30 days prior to APYA placement	113	31.4%
Total	360	100.0%

Table B20  Employment: Item 2  Employment Status at the Time of Arrest/Referral		
Employed, full-time	89	24.7%
Employed, part-time	37	10.3%
Unemployed, but looking	153	42.5%
Unemployed, not necessary	81	22.5%
Total	360	100.0%

Table B21  Employment: Item 3  Type of Most Recent Employment		
Building trades/construction	76	21.1%
Fast food restaurant	65	18.1%
Farming/agriculture	20	5.6%
Grocery store	13	3.6%
Retail	6	1.7%
Clerical	6	1.7%
Other	78	21.7%
None	96	26.7%
Total	360	100.0%

## **Criminal History**

Table B22  Criminal History: Item 1  Most Serious Offense Resulting in Current APYA Placement		
Property	227	63.1%
Drug	55	15.3%
Person	48	13.3%
Public order	18	5.0%
Weapon only	12	3.3%
Total 360 100.0%		

	Table B23	
Criminal History: Item 2a Conviction/Adjudication of Drug Charge Prior to Intake		
Drug Charge	N	%
Drug charge conviction/adjudication	119	33.1%
No drug charge conviction/adjudication	241	66.9%
Total	360	100.0%

Table B24		
Criminal History: Item 2b Nature of the Convicted/Adjudicated Drug Offense (Prior to Intake)		
Nature of Drug Offense	N	%
Possession only	85	71.4%
Possession with intent to distribute	29	24.4%
Manufacturing	1	0.8%
Other	4	3.4%
Total	119	100.0%

Table B25		
Criminal History: Item 3  Age at First Arrest		
Age*	N	%
13 or younger	172	47.8%
14 to 16	176	48.9%
17 or older	12	3.3%
Total	360	100.0%

<sup>\*</sup>Average age at first arrest = 13.5.

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Table B26  Criminal History: Item 4  Number of Sentences/Dispositions to Community Supervision Prior to APYA Intake		
None	74	20.6%
One sentence/disposition to community supervision	90	25.0%
Two to four sentences/dispositions to community supervision	164	45.6%
Five or more sentences/dispositions to community supervision	32	8.9%
Total	360	100.0%

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# Appendix C

**APYA Transition Profile Tables** 

Table C1		
Item 1 Age at APYA Transition		
Age	N	%
16	29	8.1%
17	158	43.9%
18	150	41.7%
19	23	6.4%
Total	360	100.0%

Table C2  Item 2  APYA Release Status		
Completed program	288	80.0%
Terminated due to age restriction	20	5.6%
Terminated/transferred for disciplinary reasons	18	5.0%
Transferred for health/mental health reasons	8	2.2%
Transferred due to new charges	8	2.2%
Judicial discharge	7	1.9%
Transferred due to safety reasons	7	1.9%
Transferred for other services for other reasons	4	1.1%
Total	360	100.0%

Table C3		
Item 3 Average Length of Stay in APYA by Release Status		
Reason	N	Mean (in Months)
Completed program	288	10.2
Terminated due to age restriction	20	11.2
Terminated/transferred for disciplinary reasons	18	9.4
Transferred for health/mental health reasons	8	4.0
Transferred due to new charges	8	4.3
Judicial discharge	7	9.5
Transferred due to safety reasons	7	5.2
Transferred for other services for other reasons	4	2.5
Total	360	9.7

Table C4  Item 4  APYA Transition Status		
SS	301	83.6%
Transfer to another DJJ facility	35	9.7%
Direct discharge	20	5.6%
Other release status	4	1.1%
Total	360	100.0%

Table C5		
Item 5a Number of Youth Who Committed Program Violations During APYA Participation		
Violation Status N %		
Program violations committed during stay	276	76.7%
No program violations committed during stay	83	23.1%
Missing data	1	0.3%
Total	360	100.0%

Note: The average number of program violations per youth, including all 360 youths, was 10.0. The average number of program violations per youth, considering only the 276 who committed them, was 13.1.

Table C6			
Item 5b Types of Program Violations Committed During APYA Participation			
Program Violation	N	%	
Threat to the safety and security of others	221	61.4%	
Being out of area	170	47.2%	
Battery	160	44.4%	
Verbal intimidation	147	40.8%	
Sexual misconduct	108	30.0%	
Damage and misuse of property	100	27.8%	
Destruction of property	93	25.8%	
Stealing	69	19.2%	
Possess contraband II (serious)	61	16.9%	
Possess contraband (moderate)	45	12.5%	
Line movement	40	11.1%	
Smoking	27	7.5%	
Assault	22	6.1%	

Table C6  Item 5b  Types of Program Violations Committed During APYA Participation		
Dress code	15	4.2%
Gambling	9	2.5%
Attempted escape	7	1.9%
Verbal assault	7	1.9%
Self-abuse	6	1.7%
Gang activity	5	1.4%
Vandalism/graffiti	5	1.4%
Total 360 100.0%		

Note: All program violations for offending youth, excluding those that were overturned, are included. Percentages represent the rate at which the specific violations were perpetrated based on the 360 youth who attended the program.

Tables presented in the remainder of this section are based on APYA transition form data for youth who completed APYA (N = 288).

Table C7		
Item 6 Living Situation Upon APYA Release		
Living Situation	N	%
Parent/guardian's home	249	86.5%
Immediate family member's home	31	10.8%
Independent living	3	1.0%
Other	5	1.7%
Total	288	100.0%

Table C8		
Item 7a GED/Diploma Status at APYA Release		
GED/Diploma Status	N	%
Earned GED/diploma at APYA	179	62.2%
Earned GED/diploma prior to APYA	11	3.8%
Did not earn GED/diploma	98	34.0%
Total	288	100.0%

Note: Of the 277 youth in need of a GED/diploma, 179 (64.6%) achieved that goal while at APYA.

Table C9			
Item 7b Type of Diploma Earned During APYA Participation			
Diploma Type	N	%	
GED	86	48.0%	
Exit option diploma	42	23.5%	
Special diploma	32	17.9%	
Regular diploma	18	10.1%	
Missing diploma type	1	0.6%	
Total	179	100.0%	

Note: Only youth who earned a GED/diploma at APYA are included.

Table C10			
Item 8a Enrolled in School Following Release From APYA			
School Enrollment	N	%	
Enrolled in school following release	132	45.8%	
Not enrolled in school following release	156	54.2%	
Total	288	100.0%	

Table C11			
Item 8b Type of School Enrolled in Following Release From APYA			
Type of School N %			
Regular school	38	28.8%	
Alternative school	12	9.1%	
GED studies	46	34.8%	
Post-secondary—vocational or technical	6	4.5%	
Post-secondary—college	27	20.5%	
Other	2	1.5%	
Missing information	1	0.8%	
Total	132	100.0%	

Note: Only youth enrolled in a school following APYA release are included.

Table C12			
Item 9 NCE Reading Grade Skill Level Gain From APYA Intake to Release			
Reading Level Gain* N %			
Less than one level	30	10.4%	
One level	86	29.9%	
Two levels	91	31.6%	
Three levels	59	20.5%	
Four levels	17	5.9%	
Five or six levels	5	1.7%	
Total	288	100.0%	

<sup>\*</sup>Average change in reading level = 1.9.

Table C13			
Item 10 NCE Reading Grade Skill Level at APYA Release			
Reading Level*	N	%	
Level five or lower	20	6.9%	
Level six	35	12.2%	
Level seven	58	20.1%	
Level eight	54	18.8%	
Level nine	70	24.3%	
Level ten	51	17.7%	
Total	288	100.0%	

<sup>\*</sup>Average reading level = 8.0.

Table C14			
Item 11 NCE Math Grade Skill Level Gain From APYA Intake to Release			
Math Level Gain*	N	%	
Less than one level	14	4.9%	
One level	97	33.7%	
Two levels	133	46.2%	
Three levels	34	11.8%	
Four levels	7	2.4%	
Five or six levels	3	1.0%	
Total	288	100.0%	

<sup>\*</sup>Average change in math level = 1.8.

Table C15			
Item 12 NCE Math Grade Skill Level at APYA Release			
Math Level*	N	%	
Level three or lower	9	3.1%	
Level four	26	9.0%	
Level five	118	41.0%	
Level six	113	39.2%	
Level seven	20	6.9%	
Level eight or nine	2	0.7%	
Total	288	100.0%	

<sup>\*</sup>Average math level = 5.5.

	Table C16					
Item 13 Youth Trade Participation During APYA						
Trade N %						
Carpentry (construction)	29	10.1%				
Plumbing (construction)	27	9.4%				
Masonry (construction)	27	9.4%				
Flooring (construction)	26	9.0%				
Electrical (construction) 17 5.90						
Building/apartment maintenance 50 17.						
Landscape	47	16.3%				
Culinary arts	28	9.7%				
Digital publishing/computer-aided design	15	5.2%				
Auto	12	4.2%				
Horticulture	9	3.1%				
Other	1	0.3%				
Total	288	100.0%				

# Table C17 Items 14–18 Disruption Levels in Areas of Functioning at APYA Release for Youth Who Were Experiencing Chronic, Severe, or Frequent Disruption at Intake

	N	%	
Housing		·	
No disruption	136	83.4%	
Situational/minor disruption	22	13.5%	
Chronic, severe, or frequent disruption	5	3.1%	
Total Serious Housing Disruption	163	100.0%	
Peers		·	
No disruption	238	88.1%	
Situational/minor disruption	30	11.1%	
Chronic, severe, or frequent disruption	2	0.7%	
<b>Total Serious Peers Disruption</b>	270	100.0%	
Family			
No disruption	107	73.3%	
Situational/minor disruption	32	21.9%	
Chronic, severe, or frequent disruption	7	4.8%	
<b>Total Serious Family Disruption</b>	146	100.0%	
Education		·	
No disruption	184	77.3%	
Situational/minor disruption	54	22.7%	
<b>Total Serious Education Disruption</b>	238	100.0%	
Mental Health			
No disruption	15	50.0%	
Situational/minor disruption	14	46.7%	
Chronic, severe, or frequent disruption	1	3.3%	
Total Serious Mental Health Disruption	30	100.0%	

Note: Assessment of disruption levels at release was completed for the 288 youth who completed the APYA program. This table shows the level of disruption at release only for those youth who were assessed as experiencing chronic, severe, or frequent disruption at intake.

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# Appendix D

**SS Transition Profile Tables** 

Table D1					
Item 1 Age at SS Exit					
Age N %					
16	1	0.3%			
17	28	9.3%			
18	131	43.5%			
19	130	43.2%			
20	11	3.7%			
Total	301	100.0%			

Table D2						
Item 2 Racial Composition						
Race N %						
Caucasian	130	43.2%				
African American	125	41.5%				
Hispanic	44	14.6%				
Other 2 0.7%						
Total 301 100.0%						

Table D3						
Item 3a SS Program Exit Status						
Exit Status N %						
Completion	183	60.8%				
Non-completion	118	39.2%				
Total 301 100.0%						

Table D4						
Item 3b SS Program Exit Status: Program Completion Detail						
Completion Exit Status N %						
Achieved all program goals	77	42.1%				
Completed required time but did not achieve program goals 106 57.9%						
Total 183 100.0%						

Note: Only youth identified as completing the SS program are included.

	Table D5					
Item 3c SS Program Exit Status: Program Non-completion Detail						
Non-completion Exit Status	N	%				
Non-compliant with program rules, lack of progress	42	35.6%				
Committed new offense	32	27.1%				
Whereabouts unknown after repeated attempts to locate	30	25.4%				
Voluntary withdrawal from program	6	5.1%				
Disciplinary reasons, technical violation	2	1.7%				
Unable to participate due to reclassification, medical, pending court action, or other administrative reasons	1	0.8%				
Other 5 4.2%						
Total	118	100.0%				

Note: Only youth identified as not completing the SS program are included.

Table D6						
Item 4 Length of Stay in SS Program by Exit Status						
Exit Status N Mean (Month						
Successful completion, achieved all program goals	77	12.3				
Successful completion, completed required time but did not achieve program goals	106	12.1				
Unsuccessful termination, non-compliant with program rules, lack of progress	42	10.7				
Unsuccessful termination, commit new offense	32	9.4				
Unsuccessful termination, whereabouts unknown after repeated attempts to locate	30	10.2				
Voluntary withdrawal from program	6	5.8				
Unsuccessful termination, disciplinary reasons, technical violation	2	8.4				
Unable to participate due to reclassification, medical, pending court action, or other administrative reasons	1	12.1				
Other	5	7.0				
Total	301	11.2				

Table D7						
Item 5 Legal Status Upon SS Exit						
Legal Status N %						
Direct discharge, no supervision	207	68.8%				
DJJ supervision	19	6.3%				
Conditional release	27	9.0%				
In secure facility	24	8.0%				
Adult probation	4	1.3%				
Other 20 6.6%						
Total 301 100.0%						

Tables presented in the remainder of this section are based on SS transition form data for youth who completed SS (N = 183).

Table D8						
Item 6a SS Supervision Designation						
Supervision Designation N %						
Direct services	136	74.3%				
Support services	47	25.7%				
Total	183	100.0%				

Table D9							
Item 6b Youth Status at SS Exit by Supervision Designation							
Commission Status	Direct Services Support		Services Total		otal		
Completion Status	N	%	N	%	N	%	
Achieved all program goals	63	81.8%	14	18.2%	77	100.0%	
Completed required time but did not achieve program goals	73	68.9%	33	31.1%	106	100.0%	
Total	136	74.3%	47	25.7%	183	100.0%	

Table D10								
	Item 7  Average Number of SS Worker Contacts by Supervision Designation							
Supervision Designation	Supervision Successful Face-to-face Family/ Employer Teacher							
Direct services	136	81.3	48.0	18.1	3.4	2.7		
Support services	47	29.3	11.4	11.6	0.6	0.4		
Total	183	68.0	38.6	16.4	2.7	2.1		

Table D11  Item 8  Living Situation of Youth at the Time of SS Completion		
Parent/guardian's home	122	66.7%
Immediate family member's home	19	10.4%
Independent living—leased apartment or house alone	5	2.7%
Independent living—leased apartment or house with spouse or significant other	17	9.3%
Independent living—leased apartment or house with friends	8	4.4%
Independent living—other	6	3.3%
Other	6	3.3%
Total	183	100.0%

Table D12		
Item 9 Disruption Level in Areas of Functioning at the Time of SS Completion		
Housing		
Chronic, severe, or frequent	28	15.3%
Situational/minor	48	26.2%
None/N/A	107	58.5%
Peers		
Chronic, severe, or frequent	22	12.0%
Situational/minor	48	26.2%
None/N/A	113	61.7%
Family		
Chronic, severe, or frequent	22	12.0%
Situational/minor	64	35.0%
None/N/A	97	53.0%
Employment		
Chronic, severe, or frequent	26	14.2%
Situational/minor	64	35.0%
None/N/A	93	50.8%
Education		
Chronic, severe, or frequent	12	6.6%
Situational/minor	30	16.4%
None/N/A	141	77.0%
Total	183	100.0%

Note: Each area of functioning contains a level of disruption for each of the 183 youth who completed SS.

Items 10–14 Disruption Levels in Areas of Functioning at SS Completion for		
Youth Who Were Experiencing No Disruption at APYA Release  N %		
Housing		
No disruption	97	59.5%
Situational/minor disruption	41	25.2%
Chronic, severe, or frequent disruption	25	15.3%
Total No Housing Disruption at APYA Release	163	100.0%
Peers		
No disruption	100	61.7%
Situational/minor disruption	41	25.3%
Chronic, severe, or frequent disruption	21	13.0%
Total No Peers Disruption at APYA Release	162	100.0%
Family		
No disruption	79	53.0%
Situational/minor disruption	52	34.9%
Chronic, severe, or frequent disruption	18	12.1%
Total No Family Disruption at APYA Release	149	100.0%

Note: Assessment of disruption levels at release was completed for the 183 youth who completed the SS program. This table shows the level of disruption at SS release only for those youth who were assessed as experiencing no disruption at APYA release.

91

58

25

174

118

18

10

146

52.3%

33.3%

14.4%

100.0%

80.8%

12.3%

6.8%

100.0%

No disruption

Education

No disruption

Situational/minor disruption

Situational/minor disruption

Chronic, severe, or frequent disruption

Chronic, severe, or frequent disruption

Total No Employment Disruption at APYA Release

**Total No Education Disruption at APYA Release** 

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Table D14		
Item 15 Attitude at Time of SS Completion		
Attitude	N	%
Motivated to change, accept responsibility	173	94.5%
Generally uncooperative, defensive, not motivated to change	10	5.5%
Total	183	100.0%

Table D15  Item 16a  Program Incentives During SS		
Yes	169	92.3%
No	9	4.9%
Unknown	5	2.7%
Total	183	100.0%

Table D16  Item 16b  Targeted Goals for Which Program Incentives Were Earned		
Maintained employment or education for 200 days or more	58	34.3%
Maintained employment or education for at least 100 days (but less than 200 days)	58	34.3%
Maintained employment or education for at least 10 days (but less than 100 days)	47	27.8%
Other/missing incentive	6	3.6%
Total	169	100.0%

Note: Youth identified as those who received incentives are included.

Table D17		
Item 17 GED/Diploma Status at SS Completion		
GED/Diploma Status	N	%
Earned GED/diploma while in SS	6	3.3%
Earned GED/diploma while in APYA	119	65.0%
Earned GED/diploma prior to APYA	8	4.4%
Had not earned GED/diploma	50	27.3%
Total	183	100.0%

Note: Of the 56 youth who completed SS and were in need of a GED/diploma at program entry, six (10.7%) achieved that goal while in the program.

Table D18			
Item 18 School Enrollment at SS Completion			
School Enrollment	N	%	
Enrolled full-time	15	8.2%	
Enrolled part-time	11	6.0%	
Not enrolled	157	85.8%	
Total	183	100.0%	

Table D19		
Item 19 Employment Status at SS Completion		
Employment Status	N	%
Employed full-time	111	60.7%
Employed part-time	22	12.0%
Not employed, but looking	40	21.9%
Not employed, not looking	8	4.4%
Employed, full-time or part-time unknown	2	1.1%
Total	183	100.0%

Table D20  Item 20  Length of Employment at SS Completion		
Less than one month	11	8.1%
More than one month, less than three months	29	21.5%
More than three months, less than six months	29	21.5%
More than six months, less than nine months	33	24.4%
More than nine months	33	24.4%
Total	135	100.0%

Note: Youth identified as employed (full-time, part-time, and full-time or part-time unknown) are included.

Table D21		
Item 21 SS Staff Indication of Whether Youth Employment at SS Completion Was Related to Specific Field of Training in APYA		
<b>Employment Related to Training</b>	N	%
Yes, employment related to training	40	29.6%
No, employment not related to training	93	68.9%
Unknown	2	1.5%
Total	135	100.0%

Note: Youth identified as employed (full-time, part-time, and full-time or part-time unknown) are included.

Table D22			
Item 22 Trades in Which Youth Were Employed at SS Completion			
Trade	N	%	
Building	17	12.6%	
Culinary arts	16	11.9%	
Carpentry	13	9.6%	
Landscape	12	8.9%	
Electrical	9	6.7%	
Fast food	8	5.9%	
Grocery	7	5.2%	
Retail	6	4.4%	
Auto	4	3.0%	
Masonry	4	3.0%	
Building/apartment maintenance	3	2.2%	
Floor	2	1.5%	
Horticulture	2	1.5%	
Plumbing	2	1.5%	
Clerical	1	0.7%	
Farming	1	0.7%	
HVAC	1	0.7%	
Other	34	25.2%	

Note: Youth were able to indicate more than one area of employment.

Table D23  Item 23  Gross Salary per Week of Youth Employed at SS Completion			
			Weekly Gross Salary N %
\$0-100	2	1.5%	
\$101–200	21	15.6%	
\$201–300	47	34.8%	
\$301–400	51	37.8%	
\$401–500	12	8.9%	
More than \$500	2	1.5%	
Total	135	100.0%	

Note: Youth identified as employed (full-time, part-time, and full-time or part-time unknown) are included.

Table D24  Item 24  Number of Employers During SS Participation			
			Number of Employers N %
None	14	7.7%	
One	57	31.1%	
Two	65	35.5%	
Three	29	15.8%	
Four or more	18	9.8%	
Total	183	100.0%	

Table D25			
Item 25a Restitution Status During SS Participation			
Restitution Status N %			
No restitution required	162	88.5%	
Required to make restitution payments 21 11.5%			
Total 183 100.0%			

Table D26		
Item 25b Restitution Progress at SS Completion		
<b>Restitution Progress</b>	N	%
Youth made all required payments, successfully satisfied condition	10	47.6%
Youth made some payments but still owes restitution	9	42.9%
Youth has not made any payments	2	9.5%
Total	21	100.0%

Note: Youth identified as being required to make restitution payments are included.

Table D27		
Item 26a Community Service Status During SS Participation		
Community Service Status	N	%
No community service hours required	126	68.9%
Community service hours required	57	31.1%
Total	183	100.0%

Table D28			
Item 26b Extent of Community Service Requirement During SS Participation			
Community Service Extent N %			
Required to perform less than 50 hours of community service	31	54.4%	
Required to perform 50 or more hours of community service	26	45.6%	
Total	57	100.0%	

Note: Youth identified as being required to perform community service are included.

Table D29		
Item 26c Community Service Progress at SS Completion		
Community Service Progress	N	%
Youth completed all required community service hours	56	98.2%
Youth did not complete required community service hours	1	1.8%
Total	57	100.0%

Note: Youth identified as being required to perform community service are included.

Table D30			
Item 27a SS Staff Indication of Whether Youth Was Arrested and/or Committed Technical Violations During SS Participation			
Recidivism N %			
No recidivism reported	156	85.2%	
Arrested for a new offense	19	10.4%	
Committed one or more technical violations	4	2.2%	
Arrested for a new offense and committed one or more technical violations	4	2.2%	
Total	183	100.0%	

Note: These unofficial recidivism data do not align with data from JJIS, FDLE, and DOC.

Table D31			
Item 27b SS Staff Indication of Whether Arrested Youth Were Convicted/Adjudicated During SS Participation			
Conviction Status N %			
Conviction	13	56.5%	
No conviction 3 13.0%			
Pending 7 30.4%			
Total 23 100.0%			

Note: These unofficial recidivism data do not align with data from JJIS, FDLE, and DOC.

Table D32			
Item 27c SS Staff Indication of Whether Arrested Youth Were Returned to Custody During SS Participation			
Custody Status N %			
Not returned to custody	20	87.0%	
Returned to custody 3 13.0%			
Total 23 100.0%			

Note: These unofficial recidivism data do not align with data from JJIS, FDLE, and DOC.

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# Appendix E

**List of Control Group Programs and Descriptions** 

Table E
<b>Top 13 Control Group Placements</b>
(Facilities With Ten or More Placements)

Top 13 Control Group Placements	Number of Participants	Average Length of Stay (in Months)
Bay Point Schools	26	10.9
Youth Environmental Services	22	7.8
Big Cypress Youth Environmental Services	20	8.8
Falkenburg Academy	17	8.3
Liberty Juvenile Residential Facility	15	6.5
Crossroads Wilderness Institute	15	8.6
Space Coast Marine Institute	15	9.1
Riverside Academy	13	11.0
South Pines Moderate Risk	13	7.6
Adolescent Residential Campus	12	7.0
Panther Success Center—Hamilton County	11	4.7
Pinellas Boot Camp	10	9.9
San Antonio Boys Village	10	8.2
Control Group Average Length of Stay	257 days	8.5
<b>Experimental Group Placement Average Length of Stay</b>	296 days	9.7

#### **Additional Control Group Placement Programs**

Adolescent Treatment Center Halfway House Manatee Boot Camp

Bay Point Schools North Manatee Wilderness Camp (low risk residential)

Bay Point Schools West Marion Youth Development Center

Blackwater Career Development Center Martin County Boot Camp

Bristol Youth Academy Oaks Juvenile Residential Facility

Britt Halfway House Okaloosa Youth Academy

Duval Halfway House Okeechobee Redirection Camp

Eckerd Challenge Pensacola Boys Base Florida City Youth Center Polk Boot Camp

Grove Opportunities to Achieve Lasting Success

Price Halfway House

Gulf Coast Youth Academy Seminole Work and Learn
GUYS Halfway House Southern Glades Youth Camp

Hastings Moderate Risk Taylor Halfway House
Impact House Thompson Academy
Jefferson Halfway House Volusia Halfway House

Kelly Hall Halfway House West Florida Wilderness Institute
Les Peters Halfway House Youth Development Academy

Polk Halfway House

Florida Environmental Institute

## **Top 13 Control Group Program Placements**

**Source:** http://www.djj.state.fl.us/Residential/Facilities/index.html

#### **Bay Point Schools**

The program is a moderate risk facility residential treatment program for male offenders with an approximate length of stay of six months. The program provides rehabilitation and treatment to the youth classified as a moderate risk to public safety. The program provides therapeutic treatment services, which include personal appearance, health, transportation, employability skills, vocational skills, educational planning, interpersonal skills, and knowledge of community resources. Other services being provided are mental health and substance abuse counseling and treatment planning. This program model is based on the foundation of the boarding school concept, which focuses on education, strong leadership, accountability, and self-discipline, and focuses on four areas of growth: academics, athletics, socialization, and vocations, therefore, providing a foundation for success by preparing each youth toward an education and progressive goal for the future. Boys ages 15–18 are learning self-discipline, going on to college, and entering the community and workforce.

#### **Youth Environmental Services**

This wilderness-based program enhances rehabilitation efforts through environmental education, academic education, and a variety of vocational and life-skills training. The YES program is performance-based and stresses academic achievement, appropriate behavior, a positive attitude, and excellence in performance. Every youth at YES has the opportunity to increase his school grade level and/or prepare for and take his GED. He can earn American Red Cross certifications in first aid, CPR, basic water safety, and lifeguarding. A requirement for successful completion is a confirmed placement in either full-time school or employment or a combination of both. Program provides onsite mental health and substance abuse services. Youth must provide own clothing. Average length of stay is six to nine months.

#### **Big Cypress Wilderness**

Youth must be physically and mentally able to perform strenuous work in a hot, humid environment within the Big Cypress Reserve. Park service projects, activity-driven curriculums, and recreational components provide youth with opportunities for growth in self-esteem, self-image, confidence, social skills, teamwork, and leadership skills. No arson or suicide risks accepted. Youth with asthma require medical clearance. Youth bring own clothing. Average length of stay is nine to 12 months.

#### **Falkenburg Academy**

Falkenburg Academy is a program designed to teach youth accountability through a restorative justice approach and addresses thinking errors through Thinking For a Change cognitive behavioral treatment modality. Structure is offered through implementation of a daily activity schedule, which offers physical education, substance abuse treatment for 29 youth, life skills, anger management, and academics designed to culminate in obtaining either a GED or high school diploma. Due to the active daily schedule, the program precludes youth with severe mental health conditions, physical impairments, or those on psychotropic medications. The program will consider 12- and 13-year-old youth on a case-by-case basis. The program contracts with Annashae Corporation for medical services, and Designated Health Authority, Supplemental Health Care Services, Inc. for registered nurses, and Camelot Community Care for

substance abuse treatment services. The minimum length of stay is seven months. The program provides clothing.

## **Liberty Juvenile Residential Facility**

Liberty Wilderness Crossroads Camp is an environmentally secure moderate risk remote wilderness program for male offenders between the ages of 14 and 18. The program provides a comprehensive multi-service delivery system of residential treatment and a full continuum of care with emphasis on outdoor work projects, physical exercise, and experiential learning. The program has an extensive vocational program with interests in carpentry, welding, gasoline engines, and irrigation technology. Also, the program offers the opportunity through the Department of Transportation to pay off any outstanding court costs and restitution. The program is located in the heart of the Apalachicola National Forest that spans 560,000 acres. Offenders live, learn, and work in an environment that provides them the opportunity to be creative and develop many basic skills that could not be learned in other environments. The average length of stay at Liberty Wilderness Crossroads Camp is six to nine months.

#### **Crossroads Wilderness**

Structured residential program is set in a remote wilderness location. Treatment modalities include life skills training, education, and faith-based programming. Vocational shop classes are provided in woodworking, carving, and building repairs. Average length of stay is six to nine months. Youth should bring personal clothing sufficient for one week. Due to remoteness of location, youth with serious medical problems (medical grade 1) or on psychotropic medications are precluded.

## **Space Coast Marine Institute**

The Halfway House is a moderate risk staff secure program designed as a therapeutic community. The program provides a structured residential environment for committed youth offering opportunities for personal growth, social development, and responsible behavior. The program activities include an onsite education program; vocational education; individual, group, and family counseling; mental health overlay services; community services; drug education and counseling; and structured recreational and leisure activities. This program uses a unique blend of educational and marine science motivational courses as part of the treatment approach. The program focuses on three basic components: work ethic, education, and marine skills. The average length of stay is six to nine months. The current capacity is 35 youth.

#### **Riverside Academy**

Riverside Academy provides specialized treatment services for youth who exhibit primary substance abuse issues as substantiated by a DSM-IV diagnosis. The program provides comprehensive substance abuse, mental health, and medical diagnostic assessments upon admission; individual/group substance abuse treatment services; comprehensive psychological/psychiatric evaluations and individual/group mental health treatment services; onsite education through the Hillsborough County School System; onsite vocational services; onsite medical services; case management services; family system intervention and treatment services; and care and custody services within a structured behavior management system. Program provides uniforms. Length of stay is from six to nine months.

#### **South Pines**

South Pines is a program for adjudicated male offenders with an average length of stay of four to nine months. The program strives to rehabilitate youth by assisting them in developing an

awareness of the rights of their victims and insight into the importance of respecting community safety and values. The goal of the program is to reduce juvenile crime and delinquency by holding youth accountable for their offenses in a therapeutic environment that promotes the reality therapy principles of respect, reality, and responsibility. The youth are taught accountability and the practice of prosocial behaviors and language. The program balances behavioral management with education and behavioral health overlay services (BHOS). The program has a full-time medical department, multidisciplinary team, a comprehensive onsite educational program, vocational rehabilitation program, and a comprehensive case management department. The foundation of the youth's success is built on staff who truly care about the unique worth and potential of each youth who resides at the program.

# **Adolescent Residential Campus Halfway House**

Youth attend school onsite and participate in behavior management programs. The Halfway House program is designed as an intentional therapeutic community. The program provides a structured residential environment for youth that offers opportunities for personal growth, social development, and responsible behavior. The program activities include an onsite education program; vocational education; individual, group, and family counseling; behavioral health overlay services; community services; drug education and counseling; employment experiences; and structured recreational and leisure activities. The average length of stay is six to nine months.

#### **Panther Success Center—Hamilton County**

Panther Success Center is a structured residential treatment program for 48 moderate risk males. The program provides onsite academic programming, a GED curriculum, vocational assessment, and job skill development. Panther is organized as a therapeutic community with a strong emphasis on community service, individual and group counseling, and family counseling. Overlay services also include anger management, mental health, and substance abuse programming. The average length of stay ranges from four to six months and the program provides uniforms.

#### **Pinellas Boot Camp**

Juvenile boot camps are correctional programs for delinquent youth in a military-style environment. These programs typically emphasize discipline and physical conditioning. In addition, the Florida boot camp model emphasizes education and treatment. Commitment to a boot camp is followed by a period of probation or some form of conditional-release supervision. Section 985.309, Florida Statutes, mandates the timeframes for placement in a boot camp program. They consist of a minimum of four months in the boot camp and four months under conditional release with supervision. In addition, each youth placed in a boot camp must meet the following criteria: be at least 14 years of age but less than 18 years of age at adjudication; and be committed for a felony offense other than a capital felony, a life felony, or a violent felony of the first degree. Youth 16 to 18 years of age are given priority and must be screened to ensure their medical and psychological profiles permit participation in rigorous physical activities and strenuous work assignments. Boot camps are required by s.985.309, F.S., to provide the following services: educational assignments, work assignments, physical training exercises, substance abuse programs, vocational programs, decision-making skills training, job skills training, and life skills training. Description taken from http://www.djj.state.fl.us/ QA/2003annualreport/9bootcamp.pdf.

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# San Antonio Boys Village

Located on a rural 12-acre site in eastern Pasco County, the program offers a structured life that reflects a microcosm of society. Services include mental health and substance abuse counseling, vocational training (computer), as well as educational classes provided by the Pasco County School Board. Counseling is provided to individuals, in groups, and for the family. The program seeks to strengthen the family unit, teach responsibility, clarify values, develop social skills, and enhance self-concepts. Program provides uniforms. Average length of stay is six to nine months.

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# Appendix F

Multivariate Analysis of Key Employment Findings

Equivalence of APYA/SS and Control Ethnic Subgroups

Multivariate Analysis of Employment Findings for Ethnic Subgroups

Multivariate Analysis of Employment for APYA Completion

# **Multivariate Analysis of Key Employment Findings**

Because subjects were randomly assigned to APYA or the control group and equivalence between these groups was established, tables in the report indicate bivariate significance for all employment findings at the APYA assignment level (see Tables 16, 18, and 20). However, multivariate analyses were conducted for key employment outcomes to provide full disclosure of results. The model presented in Table F1 estimates the impact of APYA assignment (APYA=1 and controls=0) on employment in year one while controlling for pre-assignment characteristics. Controls were used for criminal history risk factors, including age at first arrest, prior juvenile commitments, prior adjudications, and prior arrests in five categories, i.e., any arrest, felony, property, drug, and violent arrest (felony and misdemeanor) counts. Demographic characteristics include age at random assignment and ethnicity (Caucasian=0 and Non-Caucasian=1).

The odds ratio for APYA assignment is 1.484, indicating a highly significant, positive impact on percent employed (e.g., the Exp[B] log odds ratio of 1.484 is significant at .021).<sup>37</sup> The multivariate significance level for APYA assignment is identical to the bivariate significance level - .02 (see Table 16).

F1

<sup>&</sup>lt;sup>37</sup> An odds ratio of 1.0 indicates no difference in the odds of employment, and ratios lower than 1.0 are associated with lower employment.

	Table F1								
Logistic Regression of APYA Assignment and Pre-assignment Characteristics on Percent Employed at One Year Post-release									
Independent Variables Observed at Random Assignment  B S.E. Wald df Sig. Exp(B)									
APYA Assignment	.395	.171	5.323	1	.021	1.484			
Age at First Arrest	019	.051	.142	1	.706	.981			
Secure Commitments	137	.197	.486	1	.486	.872			
Adjudications	.043	.083	.272	1	.602	1.044			
Total Arrests	057	.036	2.515	1	.113	.945			
Felony Arrests	026	.070	.141	1	.707	.974			
Property Arrests	004	.067	.003	1	.956	.996			
Drug Arrests	121	.098	1.521	1	.217	.886			
Violent Arrests	027	.070	.144	1	.705	.974			
Non-Caucasian	697	.181	14.753	1	.000	.498			
Age at Random Assignment	.756	.151	25.164	1	.000	2.130			
(Constant)	-10.925	2.461	19.712	1	.000	.000			

The same pre-assignment measures used to evaluate the impact of APYA assignment in Table F1 were applied to the two- and three-year follow-up periods. Results of these logistic regressions are shown in Table F2. The multivariate significance levels for the two and three year follow-ups are also identical to the bivariate significance findings reported in the employment section (see Table 16).

	Table F2								
Logistic Regressions of APYA Assignment and Pre-assignment Characteristics on Percent Employed at Year One, Two, and Three Post-release									
Year	B S.E. Wald df Sig. Exp(B)								
One	.395	.171	5.323	1	.021	1.484			
Two	Two .286 .192 2.215 1 .137 1.331								
Three	.281	.206	1.870	1	.171	1.325			

The MLS regression model shown below employs the same approach to examine the impact of APYA on quarters employed. Table F3 shows the impact of APYA assignment on

quarters employed for one year post-release while controlling for pre-assignment characteristics. The coefficient (.284 unstandardized) is significant and indicates a positive impact on quarters employed. This same significance level was generated using a bivariate test (see Table 18).

		Table F3								
MLS Regression of APYA Assignment and Pre-assignment Characteristics on Quarters Employed at One Year Post-release										
Independent Variables Observed at Random		dardized icients	Standardized Coefficients	t	Sig.					
Assignment	В	Std. Error	Beta	,	~-8.					
(Constant)	-6.329	1.673		-3.784	.000					
APYA Assignment	.284	.119	.085	2.391	.017					
Age at First Arrest	058	.035	072	-1.657	.098					
Secure Commitments	429	.141	117	-3.050	.002					
Adjudications	.049	.060	.037	.823	.411					
Total Arrests	054	.026	144	-2.103	.036					
Felony Arrests	005	.050	006	092	.927					
Property Arrests	.011	.048	.015	.225	.822					
Drug Arrests	075	.069	045	-1.092	.275					
Violent Arrests	034	.051	030	663	.507					
Non-Caucasian	492	.123	146	-3.982	.000					
Age at Random Assignment	.568	.101	.212	5.643	.000					

The same pre-assignment measures used to evaluate the impact of APYA assignment in Table F3 were applied to the two- and three-year follow-up periods for quarters employed. Table F4 contains the MLS regression findings for all three years of follow-up. The multivariate significance levels for the two- and three-year follow-ups mirror the bivariate findings (see Table 18).

	Table F4								
	MLS Regressions of APYA Assignment and Pre-assignment Characteristics on Quarters Employed at One, Two, and Three Years Post-release								
Year	Unstandardized Coefficients		Standardized Coefficients	t	Sig.				
	В	Std. Error	Beta	-	2-g.				
One	.284	.119	.085	2.391	.017				
Two	.345	.195	.063	1.769	.077				
Three	.278	.270	.037	1.030	.304				

Regressions on total earnings for each year follow the MLS model shown in Table F3 and are summarized in Table F5. APYA assignment has a significant impact in year one and two but not in year three. Again, the significance levels are closely aligned with those found via bivariate methods.

	Table F5							
MLS Regressions of APYA Assignment and Pre-assignment Characteristics on Total Earnings at One, Two, and Three Years Post-release								
Year	Unstandardized Coefficients Standardized							
	В	Std. Error	Beta	-	~- <b>g</b> ·			
One	748.376	307.663	.087	2.432	.015			
Two	865.503	656.166	.047	1.319	.188			
Three	1038.685	1027.741	.036	1.011	.313			

## **Equivalence of APYA/SS and Control Ethnic Subgroups**

Table F6 examines pre-assignment criminal history and demographic characteristic of ethnic subgroups assigned to APYA and the control group. The findings suggest that random assignment appears to have produced reasonably equivalent APYA and control ethnic groups, but there is one significant disparity. The mean prior DJJ juvenile adjudications were lower for Hispanic APYA subjects than their controls (significant within .05 two-tailed). The other APYA ethnic subgroups show no significant bivariate differences relative to their controls. Despite this finding, regression analysis was employed to estimate APYA impact on ethnic subgroups on employment and recidivism outcomes. These regression models controlled for the variables shown in this table.

	Table F6							
Comparison of Criminal History and Demographic Characteristics at Random Assignment by Ethnicity and Assignment Group								
Prior Arrest/ Commitment	Ethnicity	APYA Mean	Control Mean	Difference (APYA – Control)	Significance			
	African American	9.22	9.38	-0.16	ns			
	Hispanic	6.86	7.64	-0.78	ns			
# Arrests (Any)	Caucasian	7.42	7.57	-0.15	ns			
	Other	10.00	6.50	3.50	ns			
	Total	8.11	8.35	-0.24	ns			
	African American	3.71	3.70	0.00	ns			
	Hispanic	2.73	2.66	0.08	ns			
# Felony Arrests	Caucasian	2.69	2.73	-0.04	ns			
	Other	3.00	1.50	1.50	ns			
	Total	3.13	3.14	-0.01	ns			
	African American	1.42	1.57	-0.15	ns			
	Hispanic	0.94	0.84	0.10	ns			
# Violent Arrests	Caucasian	0.93	1.07	-0.14	ns			
	Other	0.00	0.50	-0.50	ns			
	Total	1.14	1.26	-0.12	ns			
	African American	3.30	3.10	0.20	ns			
	Hispanic	2.43	2.68	-0.25	ns			
# Property Arrests	Caucasian	2.85	2.93	-0.09	ns			
	Other	3.00	2.50	0.50	ns			
	Total	2.98	2.97	0.01	ns			

Table F6						
C	Comparison of Crimin	nal History and	Demographic Ch	aracteristics		
Prior Arrest/ Commitment	at Random Assign Ethnicity	ment by Ethnici APYA Mean	ty and Assignme Control Mean	nt Group Difference (APYA – Control)	Significance	
	African American	0.81	0.81	0.00	ns	
	Hispanic	0.76	0.59	0.16	ns	
# Drug Arrests	Caucasian	0.69	0.71	-0.01	ns	
	Other	1.00	0.00	1.00	ns	
	Total	0.75	0.73	0.02	ns	
	African American	1.55	1.62	-0.07	ns	
	Hispanic	1.35	1.36	-0.02	ns	
# Technical Violations	Caucasian	1.34	1.39	-0.05	ns	
Violations	Other	2.00	1.00	1.00	ns	
	Total	1.43	1.49	-0.05	ns	
	African American	1.89	1.93	-0.04	ns	
	Hispanic	1.37	1.86	-0.50	.05	
# Prior DJJ Adjudications	Caucasian	1.52	1.64	-0.12	ns	
Adjudications	Other	1.00	1.00	0.00	ns	
	Total	1.66	1.79	-0.13	ns	
	African American	33.3%	34.9%	-1.6%	ns	
	Hispanic	26.5%	18.2%	8.7%	ns	
Prior DJJ Commitment (%)	Caucasian	27.6%	24.7%	3.1%	ns	
Communent (70)	Other	100.0%	50.0%	50.0%	ns	
	Total	30.1%	28.4%	1.7%	ns	
Demographic Charact	teristics					
	African American	13.62	13.33	0.30	ns	
	Hispanic	14.34	14.18	0.17	ns	
Mean Age at First Arrest	Caucasian	13.92	13.85	0.06	ns	
Arrest	Other	13.11	14.32	-1.21	ns	
	Total	13.85	13.67	0.18	ns	
	African American	16.98	16.97	0.01	ns	
	Hispanic	17.19	17.05	0.14	ns	
Mean Age at Random Assignment	Caucasian	17.10	17.14	-0.04	ns	
1 issignment	Other	16.41	16.18	0.23	ns	
	Total	17.06	17.05	0.01	ns	

# **Multivariate Analysis of Employment Findings for Ethnic Subgroups**

Regression analyses were conducted to estimate APYA impact on ethnic subgroups for employment outcomes. The significance levels from these multivariate findings were reported for ethnic subgroups in the employment section of this report. Table F7 provides the logistic regression model used to evaluate the APYA impact on the percent of Hispanics employed at one year post-release. The odds ratio for APYA assignment is 2.426, indicating a significant positive impact on employment (e.g., the Exp[B] log odds ratio of 2.426 is significant at .091).

	Table F7									
	Logistic Regression of APYA Assignment and Pre-assignment Characteristics on Percent of Hispanics Employed at One Year Post-release									
Independent Variables Observed at Random Assignment  B S.E. Wald df Sig. Exp(B)										
APYA Assignment	.886	.525	2.850	1	.091	2.426				
Age at First Arrest	054	.162	.110	1	.740	.948				
Secure Commitments	.029	.632	.002	1	.964	1.029				
Adjudications	.166	.248	.448	1	.503	1.180				
Total Arrests	074	.098	.563	1	.453	.929				
Felony Arrests	050	.258	.038	1	.845	.951				
Property Arrests	.006	.229	.001	1	.981	1.006				
Drug Arrests	.407	.347	1.377	1	.241	1.502				
Violent Arrests	271	.311	.761	1	.383	.763				
Age at Random Assignment	1.337	.453	8.712	1	.003	3.807				
(Constant)	-21.465	7.084	9.181	1	.002	.000				

This same model was applied to examine APYA impact on percentage of African American, Hispanic, and Caucasian youth employed at one, two, and three years post-release. The summary of these results is presented in Table F8. Independent third-year findings for percent employed are also included.

	Table F8									
	Logistic Regressions of APYA Assignment and Pre-assignment Characteristics on Percent Employed by Ethnicity at One, Two, and Three Years Post-release <sup>38</sup>									
Year	В	S.E.	Wald	df	Sig.	Exp(B)				
African American										
One	.315	.246	1.646	1	.199	1.371				
Two	.178	.272	.429	1	.512	1.195				
Three	.282	.282	1.004	1	.316	1.326				
Third Year*	106	.236	.204	1	.652	.899				
Hispanic										
One	.886	.525	2.850	1	.091	2.426				
Two	.561	.574	.958	1	.328	1.753				
Three	.968	.639	2.292	1	.130	2.632				
Third Year*	1.228	.517	5.638	1	.018	3.415				
Caucasian	Caucasian									
One	.375	.284	1.744	1	.187	1.455				
Two	.310	.337	.845	1	.358	1.363				
Three	.077	.383	.040	1	.842	1.080				
Third Year*	424	.243	3.055	1	.080	.654				

<sup>\*</sup>Third-year employment findings are independent and not summative.

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 $<sup>^{38}</sup>$  A dummy variable represents each ethnic group. Full model controls for pre-assignment variables are shown in Table F7. F2

Table F9 shows the MLS regression model used to examine the impact of APYA assignment on quarters employed for Hispanics at one year post-release while controlling for pre-assignment characteristics. The coefficient (.865 unstandardized) is highly significant and indicates a positive impact on quarters employed.

		Table F9		Table F9								
MLS Regression of APYA Assignment and Pre-assignment Characteristics on Quarters Employed for Hispanics at One Year Post-release												
Independent Variables Observed at Random		dardized ficients	Standardized Coefficients	t	Sig.							
Assignment	В	Std. Error	Beta	-	~-8							
(Constant)	-5.023	5.084		988	.326							
APYA Assignment	.865	.413	.225	2.096	.039							
Age at First Arrest	092	.128	085	718	.475							
Secure Commitments	911	.505	199	-1.803	.075							
Adjudications	.253	.190	.161	1.332	.186							
Total Arrests	032	.081	068	393	.695							
Felony Arrests	.129	.201	.116	.641	.523							
Property Arrests	139	.184	131	752	.454							
Drug Arrests	.325	.224	.164	1.453	.150							
Violent Arrests	272	.249	154	-1.093	.278							
Age at Random Assignment	.469	.321	.163	1.459	.148							

This same model was applied to examine APYA impact on quarters employed and total earnings of African American, Hispanic, and Caucasian youth at one, two, and three years post-release. These results are presented in Tables F10 and F11. Independent third-year findings for quarters employed and earnings are also included.

		Table	F10						
MLS Regressions of APYA Assignment and Pre-assignment Characteristics on Quarters Employed by Ethnicity at One, Two, and Three Years Post-release <sup>39</sup>									
Year	Unstandardiz	ed Coefficients	Standardized Coefficients	t	Sig.				
	В	Std. Error	Beta		8				
African American									
One	.132	.167	.043	.791	.429				
Two	.110	.265	.023	.416	.677				
Three	.041	.349	.006	.118	.907				
Third Year*	069	.151	026	461	.645				
Hispanic									
One	.865	.413	.225	2.096	.039				
Two	1.121	.695	.177	1.612	.111				
Three	1.918	.981	.213	1.956	.054				
Third Year*	.797	.363	.240	2.195	.031				
Caucasian									
One	.298	.182	.092	1.639	.102				
Two	.398	.302	.075	1.319	.188				
Three	.149	.426	.020	.350	.727				
	<u> </u>		†						

.181

-.079

-1.376

.170

-.249

Third Year\*

<sup>\*</sup>Third-year employment findings are independent and not summative.

 $<sup>^{39}</sup>$  A dummy variable represents each ethnic group. Full model controls for pre-assignment variables are shown in Table F9. O:\6840JJDP\2009 Report\APYA-SS\_FinalReport.doc F4

		Table	F11		
	LS Regressions of A Total Earnings by				
Year		ed Coefficients	Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		9
African American	1				
One	53.957	296.886	.010	.182	.856
Two	351.468	594.077	.033	.592	.555
Three	280.418	855.153	.018	.328	.743
Third Year*	-71.050	403.234	010	176	.860
Hispanic					
One	3115.100	1199.326	.267	2.597	.011
Two	4799.584	2885.756	.174	1.663	.100
Three	8883.718	4744.427	.200	1.872	.065
Third Year*	4,084.134	2,175.000	.210	1.878	.064
Caucasian					
One	1063.005	523.516	.113	2.031	.043
Two	1008.185	1063.548	.053	.948	.344
Three	719.382	1659.463	.024	.434	.665
Third Year*	-288.803	821.271	020	352	.725

<sup>\*</sup>Third-year employment findings are independent and not summative.

Again, the logistic regression model above was applied to examine APYA impact on the percent of African American, Hispanic, and Caucasian youth exceeding poverty thresholds at one, two, and three years post-release and the percent receiving TANF/food stamps at one and two years post-release. These results are presented in Tables F12 and F13.

 $<sup>^{40}</sup>$  A dummy variable represents each ethnic group. Full model controls for pre-assignment variables are shown in Table F9.  $_{0:\6840JJDP\2009\ Report\APYA-SS\_FinalReport.doc}$ 

Table F12  Logistic Regressions of APYA Assignment and Pre-assignment Characteristics on Percent With Annual Income Exceeding Poverty Threshold by Ethnicity at One, Two, and Three Years Post-release <sup>41</sup>										
African American	1									
One	.720	.922	.609	1	.435	2.054				
Two	.824	.624	1.743	1	.187	2.279				
Three	.383	.591	.419	1	.517	1.466				
Hispanic										
One	3.041	1.228	6.130	1	.013	20.928				
Two	.561	.661	.720	1	.396	1.753				
Three	.998	.622	2.574	1	.109	2.714				
Caucasian										
One	1.246	.446	7.812	1	.005	3.475				
Two	111	.316	.124	1	.725	.895				
Three	309	.294	1.107	1	.293	.734				

Table F13									
Logistic Regressions of APYA Assignment and Pre-assignment Characteristics on Percent Receiving TANF/Food Stamps by Ethnicity at One, Two, and Three Years Post-release <sup>42</sup>									
Year	В	S.E.	Wald	df	Sig.	Exp(B)			
African American									
One	.264	.312	.714	1	.398	1.302			
Two	.307	.294	1.085	1	.298	1.359			
Hispanic									
One	946	.773	1.498	1	.221	.388			
Two	539	.719	.562	1	.453	.583			
Caucasian									
One	-1.041	.464	5.041	1	.025	.353			
Two	-1.084	.405	7.155	1	.007	.338			

F6

<sup>&</sup>lt;sup>41</sup> A dummy variable represents each ethnic group. Full model controls for pre-assignment variables are shown in Table F7.

<sup>&</sup>lt;sup>42</sup> A dummy variable represents each ethnic group. Full model controls for pre-assignment variables are shown in Table F7.

# **Multivariate Analysis of Employment for APYA Completion**

The following analysis estimates the impact of APYA completion on employment outcomes while controlling for pre-assignment risk factors. APYA assignment cases were divided into two orthogonal subgroups: APYA completers and APYA non-completers, each coded 1 or 0. Each of these two APYA subgroups can then be compared to controls. The findings provide a relatively straightforward assessment of the impact of APYA completion and SS enrollment on assigned subjects.

Some of the same factors that influence program completion may also impact post-release workforce participation. Subjects who completed the APYA program appear to have more serious criminal histories than youth in the control group.<sup>43</sup> The controls introduced in the multivariate analysis shown here control for pre-assignment risk factors that may later influence program outcomes. These included arrest history, prior correctional status, and demographic characteristics.

Table F12 reports employment outcomes for APYA completers, APYA non-completers, and the control group. The table reports bivariate differences and multivariate statistical test findings to compare APYA completion cases to control group cases. Subjects completing APYA show significantly higher workforce participation than the controls on every measure (percentage employed, mean quarters employed, and average earnings). This occurs in each year of the follow-up. The third year after release, the APYA completers had a 6.9% higher employment rate and earned \$2,625 more than the controls. The 81 subjects who did not complete APYA had lower workforce participation than both program completers and controls on every measure (tests not shown in the table).

F7

<sup>&</sup>lt;sup>43</sup> An analysis of the pre-assignment characteristics of APYA non-completers indicates they were more likely to have a prior juvenile commitment and an arrest history for violent offenses than completers. While these and other pre-test criminal history characteristics were introduced as controls in this analysis, they may not fully account for the failure to identify similar subjects in the control group.

	Table F12									
Em	Employment Outcomes by APYA Completion at One, Two, and Three Years Post-release									
Follow-up		PYA mpletion		YA oletion	Con	ntrol	Difference (APYA	Logistic/		
Period	N	Mean/ %	N	Mean/ %	N	Mean/ %	Completion - Control)	MLS Significance		
Percent Emple	oyed									
One Year	81	61.7%	288	75.3%	345	64.3%	11.0%	.002		
Two Years	81	70.4%	288	84.0%	345	76.5%	7.5%	.013		
Three Years	81	74.1%	288	87.5%	345	80.6%	6.9%	.015		
Average Num	ber of Qua	rters Emplo	yed							
One Year	81	1.49	288	2.14	345	1.72	0.4	.001		
Two Years	81	2.40	288	3.85	345	3.18	0.7	.001		
Three Years	81	3.25	288	5.37	345	4.61	0.8	.008		
Average Empl	loyment Ea	rnings								
One Year	81	\$1,895	288	\$3,572	345	\$2,453	\$1,119	.001		
Two Years	81	\$3,260	288	\$7,590	345	\$5,757	\$1,833	.008		
Three Years	81	\$5,101	288	\$12,016	345	\$9,390	\$2,625	.017		

The logistic regression model in Table F13 shows the impact of APYA completion (first coefficient) and APYA non-completion relative to the control group while controlling for preassignment risk factors. The APYA completion odds ratio of 1.786 is significant at .002, indicating a positive impact on employment that is stronger than shown in the APYA assignment model. Since 98.6% of the youth who completed APYA enrolled in SS, this estimate approximates the impact of the residential and reentry program components. The .818 log odds ratio for the 81 APYA non-completers (.818) indicates lower employment than controls, but it is not significant.

		Table F	13							
Logistic Regression of APYA Completion, Non-completion, and Pre-assignment Characteristics on Percent Employed at One Year Post-release										
Independent Variables Observed at Random Assignment	ndom B S.E. Wald df Sig. Exp(B)									
APYA Completion	.580	.187	9.597	1	.002	1.786				
APYA Non-completion	201	.274	.536	1	.464	.818				
Age at First Arrest	015	.051	.089	1	.765	.985				
Secure Commitments	074	.200	.136	1	.713	.929				
Adjudications	.038	.083	.206	1	.650	1.038				
Total Arrests	057	.036	2.472	1	.116	.945				
Felony Arrests	030	.070	.179	1	.672	.971				
Property Arrests	006	.067	.009	1	.925	.994				
Drug Arrests	123	.098	1.558	1	.212	.884				
Violent Arrests	008	.071	.014	1	.907	.992				
Non-Caucasian	733	.184	15.956	1	.000	.480				
Age at Random Assignment	.767	.151	25.737	1	.000	2.154				
(Constant)	-11.154	2.467	20.438	1	.000	.000				

Similar analyses were employed to estimate employment for each year of the follow-up. Table F14 summarizes the findings. The model 2 log odds ratio for APYA completion is highly significant each year and indicates larger impact than APYA assignment.<sup>44</sup> The combined impact of APYA completion and SS participation on youth employment appears to be very positive.

<sup>&</sup>lt;sup>44</sup> Regression models and summary multivariate results examining the effect of APYA assignment on employment outcomes appear in Tables F1 through F5 of this appendix. APYA assignment values are provided as model 1 in Tables F14, F16, and F17 to permit a convenient comparison between assignment and completion effects.

	Table F14								
	Logistic Regressions of APYA Completion, Non-completion, and Pre-assignment Characteristics on Percent Employed at One, Two, and Three Years Post-release								
Model	Independent Variables	В	S.E.	Wald	df	Sig.	Exp(B)		
Year On	e								
1	APYA Assignment	.395	.171	5.323	1	.021	1.484		
2	APYA Completion	.580	.187	9.597	1	.002	1.786		
2	APYA Non-completion	201	.274	.536	1	.464	.800		
Year Tw	0								
1	APYA Assignment	.286	.192	2.215	1	.137	1.331		
2	APYA Completion	.534	.215	6.194	1	.013	1.706		
2	APYA Non-completion	438	.293	2.227	1	.136	.645		
Year Th	ree								
1	APYA Assignment	.281	.206	1.870	1	.171	1.325		
2	APYA Completion	.565	.233	5.893	1	.015	1.760		
2	APYA Non-completion	499	.306	2.665	1	.103	.607		

The MLS regression model shown below employs the same approach to examine the impact of APYA completion on quarters employed. The APYA completion coefficient (.423) is significant and indicates that APYA completion and SS enrollment have a larger impact than APYA assignment (see Table F16).

Table F15								
Model 2: MLS Regression of APYA Completion, Non-completion, and Pre-assignment Characteristics on Quarters Employed at One Year Post-release								
Independent Variables Observed at Random	C 225 CCC22	dardized icients	Standardized Coefficients	t	Sig.			
Assignment	В	Std. Error	Beta		8			
(Constant)	-6.530	1.663		-3.927	.000			
APYA Completion	.423	.126	.124	3.362	.001			
APYA Non-completion	214	.196	041	-1.091	.276			
Age at First Arrest	054	.035	068	-1.561	.119			
Secure Commitments	373	.141	102	-2.653	.008			
Adjudications	.044	.059	.033	.743	.458			
Total Arrests	054	.026	143	-2.096	.036			
Felony Arrests	007	.050	009	145	.884			
Property Arrests	.008	.048	.011	.174	.862			
Drug Arrests	077	.069	046	-1.125	.261			
Violent Arrests	019	.051	017	378	.705			
Non-Caucasian	514	.123	153	-4.180	.000			
Age at Random Assignment	.577	.100	.215	5.766	.000			

Table F16 summarizes the regression findings for each year. APYA completion is associated with significant gains in quarterly employment in each year of the follow-up. APYA assignment has a significant impact in years one and two, but not by year three. The impact of APYA completion, on the other hand, remains very strong at the end of the third year (coefficient .752 is significant at .008). There are clearly very positive long-term benefits associated with APYA completion and SS enrollment, but these findings are qualified by the non-experimental design. There is no reasonably equivalent group of control group non-completers to compare. Also, those who fail APYA fail for reasons that may be related to poor employment and/or higher recidivism. As noted above, an analysis of APYA completers and non-completers found that non-completers were more likely to have a prior juvenile commitment and a violent offense arrest history. While these and other pre-test criminal history

characteristics were introduced as controls in this analysis, they may not fully account for the selection effect.

		T	able F16						
	MLS Regressions of APYA Completion, Non-completion, and Pre-assignment Characteristics on Quarters Employed at Year One, Two and Three Post-release								
Model	Independent Variables	Unstand	lardized icients	Standardized Coefficients	t	Sig.			
		В	Std. Error	Beta		- <del>- 6</del>			
Year On	e								
1	APYA Assignment	.284	.119	.085	2.391	.017			
2	APYA Completion	.423	.126	.124	3.362	.001			
2	APYA Non-completion	214	.196	041	-1.091	.276			
Year Tw	70								
1	APYA Assignment	.345	.195	.063	1.769	.077			
2	APYA Completion	.670	.205	.120	3.266	.001			
2	APYA Non-completion	818	.320	095	-2.554	.011			
Year Th	ree								
1	APYA Assignment	.278	.270	.037	1.030	.304			
2	APYA Completion	.752	.284	.097	2.648	.008			
2	APYA Non-completion	-1.416	.443	118	-3.195	.001			

Regressions on total earnings for each year are summarized in Table F17. APYA assignment has a significant impact in years one and two, but not in year three. However, APYA completers have significantly higher earnings in all three years. At the end of the third year, the unstandardized coefficient for APYA completion, which approximates earnings in dollars, was \$2,596.8 versus \$1,038.7 for APYA assignment cases. In effect, the total earnings of completing subjects were approximately \$2,596 more than control group youth after controlling for preassignment differences. This finding, combined with those previously presented for employment and quarterly employment, indicates that APYA completion and SS enrollment substantially improved workforce participation.

		T	able F17							
	MLS Regressions of APYA Completion, Non-completion, and Pre-assignment Characteristics on Total Earnings at Year One, Two, and Three Post-release									
Model	Independent Variables		lardized icients	Standardized Coefficients	t	Sig.				
		В	Std. Error	Beta		0				
Year On	e									
1	APYA Assignment	748.376	307.663	.087	2.432	.015				
2	APYA Completion	1113.297	326.145	.127	3.413	.001				
2	APYA Non-completion	-556.121	508.824	041	-1.093	.275				
Year Tw	0									
1	APYA Assignment	865.503	656.166	.047	1.319	.188				
2	APYA Completion	1828.723	692.866	.098	2.639	.008				
2	APYA Non-completion	-2577.755	1080.950	089	-2.385	.017				
Year Th	ree									
1	APYA Assignment	1038.685	1027.741	.036	1.011	.313				
2	APYA Completion	2596.836	1084.404	.089	2.395	.017				
2	APYA Non-completion	-4531.294	1691.794	100	-2.678	.008				

In conclusion, youth who failed APYA had employment outcomes that were often significantly worse than the control group. While there appear to be positive long-term benefits associated with APYA completion and SS enrollment, these finding are qualified by the relatively weak non-experimental design for reasons already noted.

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## Appendix G

Multivariate Analysis of Recidivism Findings

Multivariate Analysis of Recidivism Findings for Ethnic Subgroups

Multivariate Analysis of Recidivism for APYA Completion

## **Multivariate Analysis of Recidivism Findings**

Recidivism findings for the total sample were examined using logistic and multiple least squares (MLS) regression analyses that controlled for pre-assignment risk factors. The criminal history risk factors included age at first arrest, prior commitments, prior adjudications, and several arrest measures (i.e., total, felony, property, drug, violent, and technical violation arrest counts). Demographic characteristics included age at random assignment and ethnicity (Caucasian=0 and Non-Caucasian=1). APYA membership (APYA=1 and control=0) was evaluated while controlling for these characteristics.

Logistic regression findings for property arrest at one year are shown in Table G1. APYA assignment was associated with lower property arrest after the imposition of controls for pre-assignment risk factors; the log odds ratio of 0.752 was significant at the .11 level. Similar logistic regressions were used to examine the remaining arrest rate findings and are shown in Tables G2 through G4 for one, two, and three years post-release.

	Table G1							
Logistic Regression Analysis of APYA Assignment and Pre-assignment Characteristics on Percent Arrested for Property Offense at One Year Post-release								
Independent Variables Observed at Random Assignment B Wald S.E. Sig. Exp(B)								
APYA Assignment	-0.285	0.177	2.591	0.11	0.752			
Age at First Arrest	-0.009	0.053	0.027	0.87	0.991			
Secure Commitments	0.073	0.206	0.124	0.72	1.075			
Adjudications	-0.037	0.087	0.176	0.67	0.964			
Total Arrests	0.007	0.050	0.018	0.89	1.007			
Felony Arrests	0.068	0.074	0.853	0.35	1.071			
Property Arrests	0.050	0.072	0.486	0.48	1.052			
Drug Arrests	-0.258	0.116	4.935	0.02	0.772			
Violent Arrests	-0.025	0.079	0.103	0.74	0.975			
Technical Violations	0.046	0.078	0.356	0.55	1.047			
Age at Random Assignment	-0.379	0.154	6.081	0.01	0.685			
Non-Caucasian	0.579	0.188	9.453	0.00	1.784			
(Constant)	5.044	2.517	4.015	0.045	155.157			

The one-year post-release bivariate findings indicated that the percent of APYA subjects on supervision was significantly higher than controls. After controlling for pre-assignment risk factors, the multivariate analysis found no significant difference in supervision rates. Bivariate and multivariate significance levels of percent arrested for property offenses were almost identical, and the same is true of supervision differences at two years post-release. No new categories became significant as a result of logistic regression analysis that were not already reported as significant via bivariate testing.

	Table G2							
Logistic Regressions of APYA Assignment and Pre-assignment Characteristics on Percent Arrested at One Year Post-release								
Arrest Type	В	S.E.	Wald	df	Sig.	Exp(B)		
Total Arrests	0.072	0.161	0.201	1	0.654	1.075		
Criminal Arrest	0.045	0.161	0.078	1	0.780	1.046		
Felony Arrest	-0.155	0.162	0.919	1	0.338	0.856		
Violent Felony Arrest	-0.092	0.254	0.131	1	0.717	0.912		
Property Arrest	-0.284	0.177	2.564	1	0.109	0.753		
Drug Arrest	0.143	0.189	0.568	1	0.451	1.153		
Supervision	0.282	0.255	1.220	1	0.269	1.326		
Secure Custody	0.031	0.294	0.011	1	0.917	1.031		

	Table G3								
Logistic R	Logistic Regressions of APYA Assignment and Pre-assignment Characteristics on Percent Arrested at Two Years Post-release								
Arrest Type	В	S.E.	Wald	df	Sig.	Exp(B)			
Total Arrests	0.173	0.181	0.916	1	0.338	1.189			
Criminal Arrest	0.163	0.177	0.852	1	0.356	1.177			
Felony Arrest	-0.033	0.163	0.041	1	0.840	0.968			
Violent Felony Arrest	0.178	0.195	0.835	1	0.361	1.195			
Property Arrest	-0.073	0.161	0.204	1	0.652	0.930			
Drug Arrest	0.022	0.165	0.018	1	0.894	1.022			
Supervision	0.264	0.188	1.970	1	0.160	1.302			
Secure Custody	-0.041	0.225	0.033	1	0.856	0.960			

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	Table G4								
Logistic R	Logistic Regressions of APYA Assignment and Pre-assignment Characteristics on Percent Arrested at Three Years Post-release								
Arrest Type B S.E. Wald df Sig. Exp(B)									
Total Arrests	0.018	0.201	0.008	1	0.929	1.018			
Criminal Arrest	0.031	0.193	0.026	1	0.873	1.031			
Felony Arrest	0.060	0.172	0.122	1	0.727	1.062			
Violent Felony Arrest	0.107	0.176	0.367	1	0.545	1.113			
Property Arrest	-0.066	0.157	0.174	1	0.677	0.937			
Drug Arrest	0.035	0.159	0.049	1	0.824	1.036			
Supervision	0.139	0.170	0.667	1	0.414	1.149			
Secure Custody	0.006	0.200	0.001	1	0.975	1.006			

Similar findings were examined for arrest counts, employing the same estimation model and MLS regression. One-year findings were reportable for both felony arrests and property arrests. For instance, the unstandardized regression coefficient for APYA group membership was associated with a -.10 reduction in mean felony arrests (significant at the .13 level; see Table G5) and a -.09 reduction in mean property arrests (significant at the .10 level; see Table G6). Note that these MLS regression findings may be impacted by the non-normal distribution of the dependent variables as well as outliers.

	Table G5									
Multiple Regression (MLS) Analysis of APYA Assignment and Pre-assignment Characteristics on Mean Felony Arrests at One Year Post-release										
Independent Variables Observed at Random Assignment	Unstandardized Coefficients (b)	t Significan								
APYA Assignment	-0.104	0.070	-0.054	-1.499	0.13					
Age at First Arrest	-0.001	0.021	-0.002	-0.035	0.97					
Secure Commitments	-0.037	0.083	-0.017	-0.443	0.66					
Adjudications	0.001	0.035	0.001	0.030	0.98					
Total Arrests	0.017	0.020	0.079	0.864	0.39					
Felony Arrests	0.042	0.030	0.090	1.405	0.16					
Property Arrests	0.011	0.029	0.027	0.387	0.70					
Drug Arrests	0.022	0.042	0.022	0.509	0.61					
Violent Arrests	0.019	0.032	0.029	0.589	0.56					
Technical Violations	-0.006	0.032	-0.010	-0.185	0.85					
Age at Random Assignment	-0.197	0.059	-0.126	-3.321	0.00					
Non-Caucasian	0.377	0.073	0.192	5.192	0.00					
(Constant)	3.518	0.982		3.583	0.00					

Table G6									
Multiple Regression (MLS) Analysis of APYA Assignment and Pre-assignment Characteristics on Mean Property Arrests at One Year Post-release									
Independent Variables Observed at Random Assignment	Unstandardized Coefficients (b)	Standard Library f Significant							
APYA Assignment	-0.094	0.057	-0.060	-1.649	0.10				
Age at First Arrest	0.004	0.017	0.010	0.220	0.83				
Secure Commitments	0.028	0.068	0.016	0.409	0.68				
Adjudications	-0.051	0.029	-0.082	-1.752	0.08				
Total Arrests	0.007	0.017	0.039	0.420	0.67				
Felony Arrests	0.002	0.024	0.005	0.083	0.93				
Property Arrests	0.054	0.024	0.156	2.226	0.03				
Drug Arrests	-0.048	0.035	-0.061	-1.378	0.17				
Violent Arrests	-0.006	0.026	-0.011	-0.223	0.82				
Technical Violations	0.007	0.026	0.014	0.258	0.80				
Age at Random Assignment	-0.153	0.049	-0.121	-3.125	0.00				
Non-Caucasian	0.169	0.060	0.107	2.834	0.00				
(Constant)	2.782	0.808		3.441	0.00				

Multivariate findings observed for all three years of arrest counts appear in summary Table G7. The only significant MLS regression findings were those observed via bivariate methods and detailed above.

		Table G7						
MLS Regression of APYA Assignment and Pre-assignment Characteristics								
on Mean Arrests at One, Two, and Three Years Post-release Unstandardized Standardized								
Year by Arrest Type		ficients	Coefficients	t	Sig.			
rear by milest Type	В	B Std. Error		ľ	oig.			
One Year		•						
Total Arrests	-0.101	0.119	-0.031	-0.849	0.396			
Criminal Arrest	-0.092	0.100	-0.033	-0.923	0.356			
Felony Arrest	-0.107	0.069	-0.055	-1.545	0.123			
Violent Felony Arrest	-0.006	0.029	-0.008	-0.211	0.833			
Property Arrest	-0.094	0.057	-0.060	-1.649	0.100			
Drug Arrest	0.022	0.049	0.016	0.450	0.653			
Two Years		•						
Total Arrests	-0.006	0.186	-0.001	-0.033	0.974			
Criminal Arrest	-0.056	0.151	-0.013	-0.373	0.709			
Felony Arrest	-0.050	0.109	-0.016	-0.461	0.645			
Violent Felony Arrest	0.044	0.041	0.039	1.058	0.291			
Property Arrest	-0.103	0.081	-0.046	-1.266	0.206			
Drug Arrest	0.058	0.074	0.028	0.790	0.430			
Three Years								
Total Arrests	0.023	0.239	0.003	0.095	0.924			
Criminal Arrest	-0.009	0.195	-0.002	-0.045	0.964			
Felony Arrest	0.042	0.134	0.011	0.317	0.751			
Violent Felony Arrest	0.056	0.049	0.042	1.148	0.251			
Property Arrest	-0.101	0.093	-0.039	-1.087	0.278			
Drug Arrest	0.065	0.091	0.025	0.708	0.479			

## Multivariate Analysis of Recidivism Findings for Ethnic Subgroups

Appendix F includes a description of the equivalence of APYA/SS and control group ethnic groups (see Table F6). In the same manner performed for employment findings, regression analyses were conducted to estimate APYA impact on ethnic subgroups for recidivism outcomes. The significance levels from these multivariate findings were reported for ethnic subgroups in the recidivism section of this report. Table G8 provides the logistic regression model used to evaluate the APYA impact on the percent of Hispanics arrested for a violent felony offense at one year post-release. The odds ratio for APYA assignment is .157, indicating reduced recidivism (e.g., the Exp[B] log odds ratio of .157 is significant at .043).

Table G8									
Logistic Regression of APYA Assignment and Pre-assignment Characteristics on Percent of Hispanics Arrested for a Violent Felony Offense at One Year Post-release									
Independent Variables Observed at Random Assignment	В	S.E.	Wald	df	Sig.	Exp(B)			
APYA Assignment	-1.850	.916	4.078	1	.043	.157			
Age at First Arrest	457	.252	3.292	1	.070	.633			
Secure Commitments	537	1.211	.197	1	.657	.584			
Adjudications	047	.333	.020	1	.887	.954			
Total Arrests	129	.157	.667	1	.414	.879			
Felony Arrests	.296	.412	.515	1	.473	1.344			
Property Arrests	077	.405	.036	1	.849	.926			
Drug Arrests	772	.706	1.194	1	.274	.462			
Violent Arrests	498	.566	.775	1	.379	.608			
Age at Random Assignment	.542	.602	.811	1	.368	1.720			
(Constant)	-3.163	9.868	.103	1	.749	.042			

Tables G9 through G11 provide the logistic regressions for the percent of subjects arrested or who experienced supervision or secure custody at one, two, and three years post-release based on the model provided in Table G8.

	Table G9									
1	Logistic Regressions	of APYA As	signment and	Pre-assignn	nent Charac	eteristics on				
Percent Arrested by Ethnicity at One Year Post-release <sup>45</sup> Recidivism Type  Ethnicity  B  S.E.  Wald  df  Sig.  Exp(B)										
	African American	-0.023	0.266	0.007	1	0.932	0.978			
Total Arrests	Hispanic	-0.158	0.459	0.118	1	0.732	0.854			
	Caucasian	0.220	0.238	0.850	1	0.356	1.245			
	African American	-0.152	0.258	0.344	1	0.557	0.859			
Criminal Arrest	Hispanic	-0.158	0.459	0.118	1	0.732	0.854			
THIOSE	Caucasian	0.281	0.242	1.349	1	0.245	1.325			
	African American	-0.317	0.244	1.692	1	0.193	0.728			
Felony Arrest	Hispanic	-0.457	0.484	0.890	1	0.346	0.633			
Allest	Caucasian	0.042	0.265	0.025	1	0.873	1.043			
Violent	African American	0.245	0.360	0.463	1	0.496	1.278			
Felony	Hispanic	-1.850	0.916	4.078	1	0.043	0.157			
Arrest	Caucasian	-0.035	0.457	0.006	1	0.940	0.966			
	African American	-0.229	0.259	0.780	1	0.377	0.796			
Property Arrest	Hispanic	-1.008	0.549	3.366	1	0.067	0.365			
111000	Caucasian	-0.278	0.300	0.859	1	0.354	0.757			
	African American	0.127	0.263	0.233	1	0.629	1.135			
Drug Arrest	Hispanic	0.479	0.649	0.545	1	0.460	1.614			
	Caucasian	0.099	0.327	0.092	1	0.761	1.105			
	African American	0.787	0.362	4.730	1	0.030	2.197			
Supervision	Hispanic	-2.697	1.156	5.445	1	0.020	0.067			
	Caucasian	-0.032	0.454	0.005	1	0.944	0.969			
	African American	0.393	0.395	0.993	1	0.319	1.482			
Secure Custody	Hispanic	-22.676	48,616.663	0.000	1	1.000	0.000			
	Caucasian	-0.665	0.534	1.551	1	0.213	0.514			

 $<sup>^{45}</sup>$  A dummy variable represents each ethnic group. Full model controls for pre-assignment variables are shown in Table G8. O:\6840JJDP\2009 Report\APYA-SS\_FinalReport.doc G8

			Table G10						
I	ogistic Regressions	of APYA Ass	signment and	Pre-assignn	nent Charac	teristics on			
Percent Arrested by Ethnicity at Two Years Post-release <sup>46</sup> Recidivism									
Type	Ethnicity	В	S.E.	Wald	df	Sig.	Exp(B)		
	African American	0.259	0.347	0.557	1	0.455	1.296		
Total Arrests	Hispanic	0.166	0.497	0.111	1	0.739	1.180		
	Caucasian	0.131	0.246	0.282	1	0.595	1.139		
	African American	0.131	0.336	0.151	1	0.697	1.139		
Criminal Arrest	Hispanic	0.175	0.486	0.129	1	0.720	1.191		
rinost	Caucasian	0.174	0.242	0.515	1	0.473	1.190		
	African American	-0.151	0.283	0.286	1	0.593	0.860		
Felony Arrest	Hispanic	-0.171	0.456	0.140	1	0.708	0.843		
	Caucasian	0.048	0.234	0.043	1	0.836	1.050		
Violent	African American	0.216	0.283	0.580	1	0.446	1.241		
Felony	Hispanic	-0.747	0.580	1.661	1	0.198	0.474		
Arrest	Caucasian	0.308	0.328	0.880	1	0.348	1.361		
	African American	-0.022	0.244	0.008	1	0.929	0.979		
Property Arrest	Hispanic	-0.682	0.491	1.927	1	0.165	0.506		
rinest	Caucasian	-0.022	0.253	0.008	1	0.929	0.978		
	African American	0.084	0.246	0.118	1	0.732	1.088		
Drug Arrest	Hispanic	0.444	0.500	0.789	1	0.374	1.559		
	Caucasian	-0.139	0.269	0.268	1	0.605	0.870		
	African American	0.560	0.269	4.349	1	0.037	1.751		
Supervision	Hispanic	-1.006	0.645	2.433	1	0.119	0.366		
	Caucasian	0.164	0.315	0.272	1	0.602	1.179		
	African American	0.149	0.290	0.263	1	0.608	1.161		
Secure Custody	Hispanic	-3.959	2.915	1.844	1	0.174	0.019		
Custody	Caucasian	-0.291	0.419	0.485	1	0.486	0.747		

 $<sup>^{46}</sup>$  A dummy variable represents each ethnic group. Full model controls for pre-assignment variables are shown in Table G8. **G**9

			Table G11						
Logistic Regressions of APYA Assignment and Pre-assignment Characteristics on Percent Arrested by Ethnicity at Three Years Post-release <sup>47</sup>									
Recidivism Type	Ethnicity	В	S.E.	Wald	df	Sig.	Exp(B)		
	African American	0.350	0.409	0.731	1	0.392	1.419		
Total Arrests	Hispanic	0.145	0.545	0.071	1	0.790	1.156		
	Caucasian	-0.122	0.268	0.207	1	0.649	0.885		
	African American	0.177	0.396	0.200	1	0.654	1.194		
Criminal Arrest	Hispanic	0.024	0.519	0.002	1	0.964	1.024		
	Caucasian	0.009	0.258	0.001	1	0.971	1.009		
	African American	0.198	0.331	0.357	1	0.550	1.219		
Felony Arrest	Hispanic	-0.274	0.469	0.341	1	0.559	0.760		
THICST	Caucasian	0.082	0.236	0.120	1	0.730	1.085		
Violent	African American	0.063	0.257	0.060	1	0.806	1.065		
Felony	Hispanic	-0.764	0.557	1.885	1	0.170	0.466		
Arrest	Caucasian	0.343	0.290	1.400	1	0.237	1.409		
	African American	-0.159	0.243	0.429	1	0.512	0.853		
Property Arrest	Hispanic	-0.835	0.509	2.695	1	0.101	0.434		
	Caucasian	0.126	0.241	0.274	1	0.601	1.135		
	African American	0.267	0.251	1.134	1	0.287	1.306		
Drug Arrest	Hispanic	-0.019	0.460	0.002	1	0.966	0.981		
	Caucasian	-0.155	0.248	0.390	1	0.532	0.856		
	African American	0.170	0.245	0.477	1	0.490	1.185		
Supervision	Hispanic	-0.782	0.577	1.836	1	0.175	0.458		
	Caucasian	0.295	0.279	1.122	1	0.289	1.344		
	African American	0.063	0.257	0.060	1	0.807	1.065		
Secure Custody	Hispanic	-0.725	1.438	0.255	1	0.614	0.484		
Custody	Caucasian	-0.058	0.379	0.023	1	0.878	0.944		

 $<sup>^{47}</sup>$  A dummy variable represents each ethnic group. Full model controls for pre-assignment variables are shown in Table G8. O:\6840JJDP\2009 Report\APYA-SS\_FinalReport.doc G10

Table G12 shows the MLS regression model used to examine the impact of APYA assignment on mean total arrests for African Americans at one year post-release while controlling for pre-assignment characteristics. The coefficient (-.323 unstandardized) is significant to .114 and indicates a positive impact, i.e., reduced mean total arrests.

		Table G12							
MLS Regression of APYA Assignment and Pre-assignment Characteristics on Mean Total Arrests for African Americans at One Year Post-release									
Independent Variables Observed at Random		dardized ïcients	Standardized Coefficients	t	Sig.				
Assignment	В	Std. Error	Beta	•	~-8				
(Constant)	10.973	3.074		3.569	.000				
APYA Assignment	323	.204	089	-1.587	.114				
Age at First Arrest	.062	.061	.070	1.010	.313				
Secure Commitments	.025	.229	.007	.110	.913				
Adjudications	054	.096	041	561	.576				
Total Arrests	.079	.042	.203	1.895	.059				
Felony Arrests	.059	.078	.074	.752	.452				
Property Arrests	024	.074	033	321	.748				
Drug Arrests	.125	.115	.075	1.084	.279				
Violent Arrests	063	.078	058	804	.422				
Age at Random Assignment	630	.190	202	-3.321	.001				

This same model was applied to examine APYA impact on all types of mean arrests for African American, Hispanic, and Caucasian youth at one, two, and three years post-release. These results are presented in Tables G13 through G15.

	Table G13								
MLS Regressions of APYA Assignment and Pre-assignment Characteristics on Mean Arrests by Ethnicity at One Year Post-release <sup>48</sup>									
Arrest	Ethnicity	Unstandardized Coefficients		Standardized Coefficients	t	Sig.			
Туре	·	В	Std. Error	Beta					
	African American	-0.323	0.204	-0.089	-1.587	0.114			
Total Arrests	Hispanic	-0.090	0.355	-0.029	-0.255	0.800			
	Caucasian	0.128	0.156	0.047	0.821	0.413			
	African American	-0.243	0.175	-0.077	-1.389	0.166			
Criminal Arrest	Hispanic	-0.016	0.293	-0.006	-0.055	0.956			
	Caucasian	0.051	0.126	0.023	0.402	0.688			
	African American	-0.196	0.126	-0.086	-1.557	0.121			
Felony Arrest	Hispanic	-0.172	0.196	-0.100	-0.876	0.383			
	Caucasian	-0.005	0.082	-0.003	-0.058	0.954			
Violent	African American	0.027	0.055	0.027	0.497	0.619			
Felony	Hispanic	-0.150	0.070	-0.242	-2.149	0.035			
Arrest	Caucasian	-0.012	0.031	-0.021	-0.378	0.706			
	African American	-0.121	0.101	-0.067	-1.201	0.231			
Property Arrest	Hispanic	-0.200	0.162	-0.138	-1.235	0.220			
	Caucasian	-0.062	0.074	-0.047	-0.840	0.402			
	African American	0.031	0.092	0.019	0.341	0.734			
Drug Arrest	Hispanic	0.097	0.137	0.082	0.708	0.481			
	Caucasian	0.017	0.053	0.018	0.316	0.752			

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 $<sup>^{48}</sup>$  A dummy variable represents each ethnic group. Full model controls for pre-assignment variables are shown in Table G12. G12

	Table G14								
MLS Regressions of APYA Assignment and Pre-assignment Characteristics on Mean Arrests by Ethnicity at Two Years Post-release <sup>49</sup>									
Arrest	Ethnicity	Unstan	dardized ficients	Standardized Coefficients	t	Sig.			
Type		В	Std. Error	Beta		_			
	African American	-0.222	0.306	-0.041	-0.724	0.469			
Total Arrests	Hispanic	-0.388	0.597	-0.075	-0.649	0.518			
	Caucasian	0.357	0.252	0.080	1.419	0.157			
	African American	-0.272	0.253	-0.060	-1.076	0.283			
Criminal Arrest	Hispanic	-0.233	0.453	-0.059	-0.514	0.609			
	Caucasian	0.230	0.204	0.063	1.128	0.260			
	African American	-0.274	0.196	-0.078	-1.401	0.162			
Felony Arrest	Hispanic	-0.198	0.300	-0.076	-0.659	0.511			
	Caucasian	0.215	0.134	0.091	1.610	0.108			
Violent	African American	0.084	0.074	0.062	1.133	0.258			
Felony	Hispanic	-0.147	0.125	-0.135	-1.179	0.242			
Arrest	Caucasian	0.037	0.050	0.042	0.727	0.468			
	African American	-0.269	0.143	-0.104	-1.877	0.061			
Property Arrest	Hispanic	-0.156	0.185	-0.094	-0.842	0.402			
	Caucasian	0.053	0.111	0.027	0.479	0.632			
	African American	0.146	0.137	0.059	1.068	0.286			
Drug Arrest	Hispanic	-0.005	0.222	-0.003	-0.024	0.981			
	Caucasian	0.016	0.080	0.011	0.201	0.841			

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 $<sup>^{49}</sup>$  A dummy variable represents each ethnic group. Full model controls for pre-assignment variables are shown in Table G12.

	Table G15								
MLS Regressions of APYA Assignment and Pre-assignment Characteristics on Mean Arrests by Ethnicity at Three Years Post-release <sup>50</sup>									
Arrest	Ethnicity	Unstan	dardized ficients	Standardized Coefficients	t	Sig.			
Туре		В	Std. Error	Beta					
m . 1	African American	-0.103	0.376	-0.016	-0.274	0.784			
Total Arrests	Hispanic	-0.811	0.737	-0.127	-1.101	0.274			
	Caucasian	0.387	0.348	0.063	1.111	0.267			
	African American	-0.158	0.311	-0.028	-0.508	0.612			
Criminal Arrest	Hispanic	-0.537	0.582	-0.107	-0.923	0.359			
	Caucasian	0.270	0.281	0.054	0.961	0.337			
	African American	-0.159	0.228	-0.039	-0.698	0.486			
Felony Arrest	Hispanic	-0.299	0.412	-0.084	-0.724	0.471			
	Caucasian	0.331	0.170	0.109	1.952	0.052			
Violent	African American	0.101	0.084	0.067	1.204	0.230			
Felony	Hispanic	-0.213	0.175	-0.139	-1.211	0.229			
Arrest	Caucasian	0.072	0.059	0.070	1.228	0.220			
	African American	-0.312	0.159	-0.108	-1.967	0.050			
Property Arrest	Hispanic	-0.302	0.227	-0.142	-1.330	0.187			
	Caucasian	0.117	0.129	0.051	0.903	0.367			
	African American	0.211	0.165	0.071	1.280	0.201			
Drug Arrest	Hispanic	-0.060	0.281	-0.025	-0.214	0.831			
	Caucasian	-0.025	0.105	-0.013	-0.235	0.814			

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 $<sup>^{50}</sup>$  A dummy variable represents each ethnic group. Full model controls for pre-assignment variables are shown in Table G12. G14

## **Multivariate Analysis of Recidivism for APYA Completion**

The following analysis estimates the impact of APYA completion on recidivism outcomes while controlling for pre-assignment risk factors.<sup>51</sup> This analysis is nearly identical to the one described in the employment appendix and the same caveats apply to the findings. The same factors that influence program completion may impact post-release recidivism, and subjects who completed the APYA program had more serious criminal histories than youth in either the APYA completer or control groups. Controls introduced in the multivariate analysis included pre-assignment risk factors including arrest history, prior correctional status, and demographic characteristics. The findings provide a relatively straightforward assessment of the impact of APYA completion and SS enrollment on assigned subjects, but this is a weak quasi-experimental test and the findings should be viewed as descriptive.

Tables G16 and G17 report percent arrested and mean arrests for APYA completers, APYA non-completers, and the control group. The differences shown and statistical tests reported in these tables compare APYA completion cases to control group cases. Subjects completing APYA show mixed results for the few reportable recidivism outcomes. The percentage of completers arrested for property offenses at one year post-release is significantly lower than controls; however, the percentage of completers on supervision at one and two years post-release is significantly higher than controls (see Table G16). Completers had significantly fewer felony and property arrests at one year post-release. These results mirror those found for total groups. The 81 subjects who did not complete APYA have arrest rates and means difficult to interpret (tests not shown in the table). Arrests rates for non-completers are often lower but sometimes higher or very similar to completers and controls. Mean arrests for non-completers are generally lower than completers. The only reportable findings for non-completers compared

<sup>&</sup>lt;sup>51</sup> APYA assignment cases were divided into two orthogonal subgroups: APYA completers and APYA non-completers, each coded 1 or 0. Each of these two APYA subgroups can then be compared to controls.

to control subjects indicated lower rates of secure custody for non-completers in the areas at one year (significant at .180) and fewer drug arrests at two years (significant at .183; not shown).

Table G16								
	Regression of APY							
Characte Type of Arrest	APYA Non- completion (N = 81)	APYA Completion (N = 288)	Control (N = 345)	Difference (APYA Completion – Control)	Logistic Regression Significance			
One Year								
Total Arrests	58.0%	56.9%	56.2%	0.7%	ns			
Criminal Arrest	51.9%	54.2%	53.3%	0.8%	ns			
Felony Arrest	37.0%	37.5%	41.4%	-3.9%	ns			
Violent Felony Arrest	9.9%	9.7%	11.3%	-1.6%	ns			
Property Arrest	21.0%	24.0%	28.7%	-4.7%	.160			
Drug Arrest	17.3%	25.0%	21.4%	3.6%	ns			
Supervision	7.4%	12.8%	8.7%	4.2%	.154			
Secure Custody	3.7%	9.4%	7.5%	1.8%	ns			
Two Years	•							
Total Arrests	77.8%	75.0%	73.0%	2.0%	ns			
Criminal Arrest	75.3%	72.6%	70.7%	1.8%	ns			
Felony Arrest	58.0%	59.0%	60.3%	-1.3%	ns			
Violent Felony Arrest	18.5%	21.2%	19.1%	2.1%	ns			
Property Arrest	35.8%	37.8%	39.4%	-1.6%	ns			
Drug Arrest	27.2%	39.2%	36.8%	2.4%	ns			
Supervision	17.3%	25.0%	18.8%	6.2%	.089			
Secure Custody	13.6%	15.3%	15.4%	-0.1%	ns			
Three Years	•			•	•			
Total Arrests	80.2%	81.9%	81.7%	0.2%	ns			
Criminal Arrest	79.0%	79.5%	79.4%	0.1%	ns			
Felony Arrest	72.8%	67.7%	68.4%	-0.7%	ns			
Violent Felony Arrest	25.9%	26.7%	25.8%	0.9%	ns			
Property Arrest	45.7%	44.4%	46.7%	-2.3%	ns			
Drug Arrest	38.3%	50.3%	47.5%	2.8%	ns			
Supervision	22.2%	30.9%	26.4%	4.5%	ns			
Secure Custody	18.5%	20.1%	20.3%	-0.2%	ns			

Table G17									
MLS Regression of APYA Completion, Non-completion, and Pre-assignment Characteristics on Mean Arrests at One, Two, and Three Years Post-release									
Type of Arrest	APYA Non- completion (N = 81)	APYA Completion (N = 288)	Control (N = 345)	Difference (APYA Completion – Control)	MLS Regression Significance				
One Year									
Total Arrests	1.27	1.24	1.36	-0.12	ns				
Criminal Arrest	1.01	1.03	1.13	-0.10	ns				
Felony Arrest	0.58	0.57	0.69	-0.12	.108				
Violent Felony Arrest	0.10	0.12	0.13	-0.01	ns				
Property Arrest	0.31	0.35	0.43	-0.08	.133				
Drug Arrest	0.26	0.34	0.31	0.03	ns				
Two Years									
Total Arrests	2.68	2.53	2.59	-0.06	ns				
Criminal Arrest	2.00	2.04	2.11	-0.07	ns				
Felony Arrest	1.23	1.25	1.32	-0.07	ns				
Violent Felony Arrest	0.23	0.28	0.24	0.04	ns				
Property Arrest	0.60	0.65	0.73	-0.09	ns				
Drug Arrest	0.53	0.69	0.61	0.08	ns				
Three Years									
Total Arrests	3.62	3.64	3.64	0.00	ns				
Criminal Arrest	2.74	2.92	2.93	-0.01	ns				
Felony Arrest	1.80	1.81	1.79	0.02	ns				
Violent Felony Arrest	0.36	0.37	0.33	0.04	ns				
Property Arrest	0.80	0.85	0.94	-0.09	ns				
Drug Arrest	0.79	0.99	0.89	0.10	ns				

The logistic and MLS regression models employed to assess the impact of APYA completion and non-completion on percent arrested and mean arrests are identical to those used for employment and are provided in Tables G18 and G19. Table G18 shows the logistic regression for the percent arrested for property offense at one year post-release. Table G19 shows the MLS regression for mean felony arrests at one year post-release. Given that reportable findings were minimal, detailed summary tables for regressions were not developed.

Table G18									
Logistic Regression of APYA Completion, Non-completion, and Pre-assignment Characteristics on Percent Arrested for Property Offense at One Year Post-release									
Independent Variables Observed at Random Assignment	В	S.E.	Wald	df	Sig.	Exp(B)			
APYA Completion	-0.265	0.189	1.972	1	0.160	0.767			
APYA Non-completion	-0.353	0.308	1.310	1	0.252	0.703			
Age at First Arrest	-0.002	0.052	0.002	1	0.966	0.998			
Secure Commitments	0.090	0.206	0.191	1	0.662	1.094			
Adjudications	-0.030	0.086	0.118	1	0.731	0.971			
Total Arrests	0.027	0.037	0.522	1	0.470	1.027			
Felony Arrests	0.062	0.073	0.714	1	0.398	1.063			
Property Arrests	0.037	0.068	0.293	1	0.588	1.038			
Drug Arrests	-0.277	0.112	6.104	1	0.013	0.758			
Violent Arrests	-0.041	0.074	0.301	1	0.583	0.960			
Non-Caucasian	0.570	0.188	9.158	1	0.002	1.768			
Age at Random Assignment	-0.387	0.153	6.405	1	0.011	0.679			
(Constant)	5.079	2.517	4.073	1	0.044	160.645			

Table G19  MLS Regression of APYA Completion, Non-completion, and Pre-assignment Characteristics on Mean Felony Arrests at One Year Post-release					
В	Std. Error	Beta		Ü	
(Constant)	3.523	0.981		3.591	0.000
APYA Completion	-0.119	0.074	-0.060	-1.610	0.108
APYA Non-completion	-0.064	0.116	-0.021	-0.556	0.578
Age at First Arrest	0.000	0.021	0.001	0.022	0.982
Secure Commitments	-0.039	0.083	-0.018	-0.471	0.638
Adjudications	0.001	0.035	0.002	0.037	0.970
Total Arrests	0.015	0.015	0.067	0.976	0.329
Felony Arrests	0.045	0.029	0.098	1.533	0.126
Property Arrests	0.011	0.028	0.026	0.404	0.686
Drug Arrests	0.022	0.040	0.022	0.540	0.589
Violent Arrests	0.020	0.030	0.030	0.665	0.506
Non-Caucasian	0.376	0.072	0.192	5.185	0.000
Age at Random Assignment	-0.198	0.059	-0.127	-3.359	0.001