



Office of Justice Systems Analysis
Research Report

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***Factors Contributing To Recidivism Among
Youth Placed With The New York State Division For Youth***

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HIGHLIGHTS:

- This study examined recidivism among 9477 juvenile offenders (JOs), juvenile delinquents (JDs), and persons in need of supervision (PINS) who were discharged from the custody of the Division for Youth (DFY) from 1991 through 1995.
- Most of the youth placed in DFY custody were proven recidivists with multiple personal risk factors facing difficult environmental circumstances. Case files were reviewed for a subsample of 2763 JDs and PINS. Nine out of ten of these had prior arrests or PINS petitions, prior probation terms, or prior out of home placements. Over 95 percent had problems in *four or more* of the following areas: mental health, substance abuse, behavior at school, academic performance, handicapping conditions, household characteristics, criminal or abusive family environment, or personal relationships with other family members.
- 81 percent of males and 45 percent of females were arrested within 36 months of discharge from DFY custody.
- PINS had substantially lower recidivism rates than JDs or JOs. There was little difference between recidivism rates for JDs and those for JOs.
- Different factors were associated with the risk of recidivism depending on gender, adjudication, geographic region, and type of recidivism (e.g., violent vs. nonviolent). Across conditions, the three factors that were most consistently associated with the risk of recidivism were criminal history, age at discharge, and community characteristics.
- After controlling for significant risk factors, most analyses found no consistent differences in recidivism by type of residential facility, residential movement pattern, type of first nonresidential service, or residential length of stay. However, for male JDs, an intermediate "step down" from residential centers to group homes was more effective in preventing short-term recidivism than direct release from residential centers to standard community care.
- On-site interviews and existing literature suggested that the high recidivism rates may be attributable to (1) inconsistency of approach among program staff, (2) lack of program continuity in the transition from residential confinement to aftercare, and (3) lack of long-term support systems to carry youth successfully into young adulthood. These problems may also explain why differences in residential length of stay and nominal differences in residential program content did not produce consistent differences in recidivism rates.
- Efforts to strengthen residential programs should be accompanied by development and rigorous evaluation of programs that provide a graduated transition from institutional care to independent living, insure continuity of programming across service settings, and place significantly increased emphasis on aftercare and family circumstances. Three promising program models are summarized to illustrate the kinds of interventions likely to be necessary to reduce recidivism among the high-risk youth placed in state custody. The highlighted programs include two federally-endorsed models--the Intensive Aftercare Program (IAP) model and Multisystemic Therapy (MST)--as well as the agency's own recently-matured Youth Leadership Academy/City Challenge (YLA/CCh) sequence. Of the highlighted models, MST has previously been tested in the widest variety of settings and has accumulated the most empirical evidence demonstrating effectiveness in reducing recidivism. MST is an intensive, family-based intervention aimed at assisting parents of delinquents to become effective rehabilitation agents.
- Subsequent to the time period covered by this study, most of the DFY functions examined here were incorporated in a new agency, the Office of Children and Family Services (CFS). CFS has proactively undertaken a number of initiatives consistent with the recommendations of this report. The capacity of the YLA/CCh sequence has been doubled. A randomized experimental trial of the Intensive Aftercare Program (IAP) model is being conducted for substance abusing youth from Monroe, New York, Bronx, and Queens counties served at the Middletown Residential Center. CFS is also developing and testing Prescriptive Programming, a system of dynamic risk assessment and prescribed interventions keyed to specific risk factors that is designed to function throughout the service continuum. To begin addressing family issues more systematically, CFS has established a family advocacy program to provide direct or brokered services to youths' families, and the agency plans to begin a randomized experimental trial of the MST model in the fall of 1999.

Introduction

The New York State Legislature directed that the Division of Criminal Justice Services (DCJS) undertake a study of the factors affecting recidivism rates among youth discharged from the custody of the Division for Youth (DFY). The present study was designed to address that mandate through the following specific objectives:

- Measure recidivism rates and time to first recidivism for youth discharged from DFY programs, with special attention to violent recidivism.
- Identify youth characteristics and circumstances that affect the probability of recidivism among youth discharged from DFY programs.
- After adjusting for differences in youth characteristics and circumstances, identify programs or program features within existing DFY operations with better than average success in preventing recidivism.
- Determine how DFY recidivism rates compared to comparably measured recidivism rates for comparable youth placed in other programs.
- Based on existing literature and the findings of this research study, identify promising strategies for strengthening DFY programs.

Terminology

During the time period covered by this study, the agency responsible for youth placed in state custody was named the *Division for Youth (DFY)*. The programs examined in the study have since been incorporated within a newly-created agency, the *Office of Children and Family Services (CFS)*. The older term, *DFY*, is used throughout this report, except in some references to present circumstances and recommendations for future efforts.

In New York State, the term *juvenile offenders (JOs)* refers to youth under age 16 who have been convicted in adult court for certain serious offenses. *Juvenile delinquents* are youth under age 16 adjudicated in family court for offenses that would be considered crimes if they were adults. *Persons in*

need of supervision (PINS) are youth under age 16 adjudicated in family court for status offenses--misbehavior such as truancy, running away from home, or refusing to comply with parental direction.

For most of the analyses described in this report, the terms *residence* and *residential care* refer to stays in secure centers, limited secure centers, nonsecure centers, community-based residences (e.g., group homes), and foster care. Foster care was usually categorized as a residential program to be consistent with the classification used by DFY, but it was also treated as a separate category in some analyses.

If a youth received more than 50 percent of his or her residential care in one residential program, that program was labeled the *primary residence*. Multiple stays at the same facility within a single period of custody were added together for the purpose of this calculation. Youth who did not spend 50 percent of their residential time at a single facility were said to have *no primary residence*.

During the period covered by this study, DFY's post-release community supervision program was called *community care*. More recently, the agency has reverted to calling that function *aftercare*. However, this report does not use the two terms interchangeably. Instead, the term *aftercare* is used broadly to refer to all nonresidential services, including standard *community care*, Home-Based Intensive Supervision (HBIS), Evening Reporting Centers (ERC), and City Challenge, as well as other nonresidential services currently under development.

The term *discharge* refers to final exit from a continuous period of DFY custody. This is frequently contrasted with *release*, which is any transfer from a residential setting either to community supervision or to discharge status. The date of the first release to community supervision from residential care is called the *transition date*, and the last residential setting prior to the first release to community supervision is called the *transitional residence*. If a youth was discharged directly from residential care and had no period of community supervision under the custody of DFY, then the transition date was the same as the discharge date.

Recidivism Measures

The legislative mandate specifically identified recidivism as the outcome of primary interest, to be measured as "the re-arrest and re-conviction rates of youth, who have been discharged from the division for youth's custody for at least a three-year period" (Chapter 77, section 42, of the laws of the State of New York, 1995).

The analyses included recidivism measures for two distinct time periods: (1) between *first release* from residential confinement to community supervision and *final discharge* from DFY custody; and (2) following *final discharge* from DFY custody. To comply with the legislative mandate, descriptive summaries include rates of rearrest and reconviction within 36 months of discharge for those cases in which a full three years of followup time was available. However, adopting shorter followup periods made it possible to include a significantly greater number of cases in the analyses, so the most extensive statistical analyses focused on the following four measures:

ANYin12afterREL: Arrest for any felony or misdemeanor within 12 months of first release.

VFOin12afterREL: Arrest for a violent felony offense (VFO) within 12 months of first release.

ANYin30afterDIS: Arrest for any felony or misdemeanor within 30 months of final discharge.

VFOin30afterDIS: Arrest for a violent felony offense (VFO) within 30 months of final discharge.

Samples and Data Sources

The study examined recidivism among juvenile offenders (JOs), juvenile delinquents (JDs), and persons in need of supervision (PINS) who were discharged from DFY custody between January 1, 1991 and December 31, 1994. The study period was extended through the end of 1995 for youth served in one recently established program, the Sergeant Henry Johnson Youth Leadership Academy. The *full cohort* consisted of a total of 9477 juveniles, including both males and females.

Analyses based on the full cohort were limited to information available from existing data bases, primarily the

DCJS computerized criminal history system (CCH), DFY's statistical data base (STATSPOP), the DCJS Uniform Crime Reporting System (UCR), and a commercial source of market research data (The Right Site, 1996) containing aggregate characteristics of geographic areas at the county and zip code levels.

More detailed information about youth characteristics and circumstances was collected from DFY's paper files for a *case file sample* consisting of 2763 JDs and PINS, including both males and females. Case file data were not collected for JOs. The case file sample focused on youths for whom the *primary residence* was any of 11 DFY facilities or 3 private agencies selected for special attention. The details of site selection and case sampling are explained in a companion technical report (Frederick, 1999).

Analyses

The conclusions and recommendations presented in this report are based on a synthesis of evidence from three main lines of inquiry:

- Statistical analyses of (a) overall recidivism rates; (b) youth characteristics and circumstances associated with the probability of recidivism; and (c) differences in recidivism rates among service settings (including DFY programs and selected private agencies), controlling for youth characteristics and circumstances.
- On-site interviews with DFY staff, focusing on three main issues: (a) the ability of program managers to articulate a coherent program philosophy or theory of intervention; (b) consistency of philosophy and methods among staff within a service setting; and (c) continuity of programming across service settings.
- A review of literature pertaining to (a) recidivism rates found in studies of other state systems; (b) theories of delinquency and correctional intervention for juveniles; (c) factors associated with the risk of delinquency and the probability of recidivism; (d) characteristics of effective programs; and (e) recent evidence concerning comprehensive models intended to integrate residential programming with enhanced aftercare.

**ILLUSTRATIVE RISK FACTORS
BY RISK CATEGORY**
(Case File Sample: N = 2763)

Mental Health

42% had one or more of the following:

prior hospitalization	prior odd beliefs
prior outpatient treatment	current odd beliefs
prior psychosocial stress	prior suicide attempts
emotionally disturbed	current suicidal intent
confuses fantasy with reality	

Substance Abuse

61% had one or more of the following:

prior alcohol use	treatment need
prior marijuana use	prior treatment
prior hard drug use	

Behavior Problems at School

78% had one or more of the following:

prior disruptive behavior	prior violent behavior
prior PINS for truancy	

Educational Handicaps

92% had one or more of the following:

prior special education	other learning handicaps
emotional or motivational impediments	

Educational Performance

89% had one or more of the following:

more than 3 years behind in math
more than 3 years behind in reading
low grades in core subjects

Household Characteristics

87% had one or more of the following:

high crime neighborhood	unemployed mother
single parent home	unemployed father
at last address less than 1 year	receiving AFDC

Family Environment

80% had one or more of the following:

family involved in crime	youth sexually abused
substance abuse in family	youth physically abused
negative home assessment	home not accepting youth

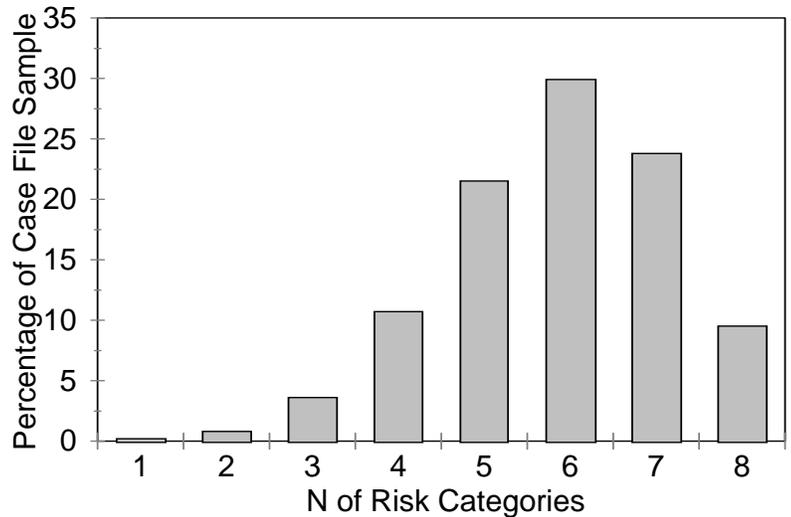
Relations with Parents

65% had one or more of the following:

bad relations with elder male	PINS for disobedience
bad relations with elder female	PINS for runaway
may need surrogate home	

Figure 1

**NUMBER OF CATEGORIES IN WHICH
YOUTH HAD ONE OR MORE RISK FACTORS**



Youth Characteristics and Circumstances

Most of the youth placed with DFY were already proven recidivists. Nine out of ten in the case file sample had prior arrests or PINS petitions, prior probation terms, or prior out of home placements.

In addition to legal history, case file data collection yielded hundreds of details pertaining to educational history, family history, household characteristics, and mental health. To construct an introductory summary of risk factors for youth in the case file sample, 47 of the available attributes were organized into the eight categories listed at the left.

“Damaged” was the term most often used by the staff interviewed for this study to characterize youth placed in DFY custody. According to staff, DFY received “the worst of the worst” and then returned them to high risk circumstances.

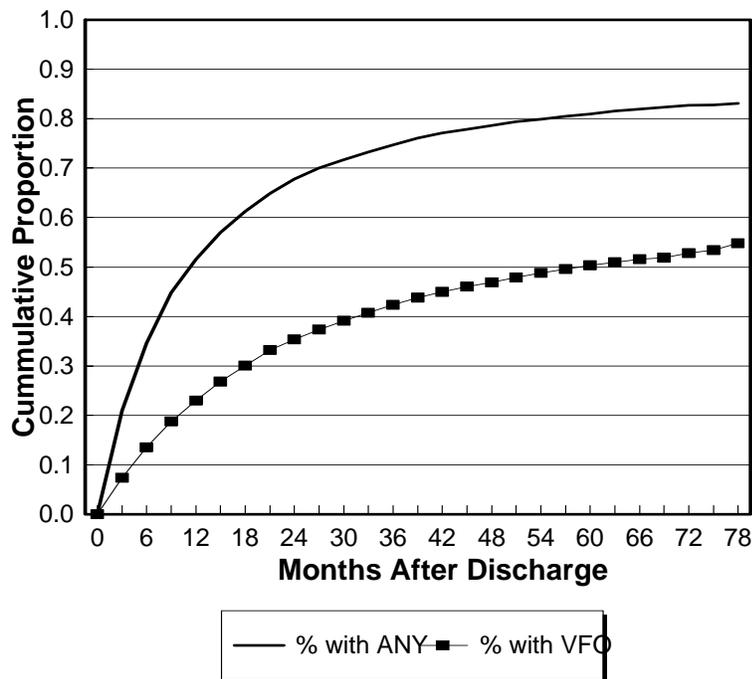
Staff perceptions appear to be borne out by the data collected for this study. Ninety-five percent had risk factors in four or more of the eight categories listed at the left, and 85 percent had risk factors in at least five of the eight categories (see Figure 1). One of the most striking findings was the high proportion of youth with negative household or family circumstances. *Forty-nine percent of the youth in the case file sample had some indication in file documents that other household or family members were suspected or known to be involved in criminal activities.*

Observed Recidivism Rates

Among youth in the full cohort, 81 percent of males and 45 percent of females were arrested within three years of final discharge from DFY custody. For males and females combined, 75 percent were arrested for a felony or misdemeanor, 42 percent were arrested for a violent felony (VFO), and 62 percent had at least one arrest leading to a conviction. A statistical method known as life table analysis permitted reliable estimates of recidivism rates for followup periods of at least 6 years.¹ More than four out of five of the youth included in these analyses were arrested for new crimes within 6 years of final discharge from DFY custody.

studies conducted in other states. A minimal degree of comparability was achieved by organizing the findings according to recidivism measure (arrest, conviction, or incarceration) and the length of the followup period (1 year, 2 years, or 3 years). Although precise control for youth characteristics was not possible, a review of the studies cited suggested that most of the differences in population mix were such as would work to the comparative disadvantage of New York State. Relative to the other studies, the New York studies included high percentages of youth with characteristics found to be associated with recidivism among the youth in the present study.

**Figure 2:
Cumulative Proportion Arrested After Final Discharge From DFY Custody
(Full Cohort - Males and Females Combined)**



Youth faced an especially high risk of rearrest during the first 6 to 9 months following *first release* from residential confinement to community supervision. Twenty-six percent were arrested within the first three months following release; 42 percent were arrested within six months; and more than half were arrested within nine months.

Though the recidivism rates found in this study were high, they were fairly typical of recidivism rates reported for similar youth in other state systems. Recidivism rates were reviewed from two previous studies in New York State and twelve

Table 1 displays the resulting comparisons. The New York studies found rearrest and reconviction rates that were among the lowest reported. These comparisons are not intended to establish New York's rank among states or to suggest that high recidivism rates are inevitable. Rather, the point is that high recidivism rates are common nationwide among the serious, chronic delinquents typically placed in state custody, so it is unlikely that the explanation for high recidivism rates will be found in circumstances peculiar to New York State programs.

¹The standard error of the estimated cumulative percentage at the 6-year point was approximately one-half of one percentage point.

**Table 1: Unstandardized Illustrations of Recidivism Rates Found in Previous Studies, by State
(Methods and characteristics of populations differ across studies)**

State (Reference)	% Arrested			% Convicted			% Incarcerated		
	1 yr	2 yrs	3 yrs	1 yr	2 yrs	3 yrs	1 yr	2 yrs	3 yrs
NY (Melick & Harig 1989)	53	70	76	43	59	67	27	40	54
NY (van Alstyne 1995)									
1988 Releases (est. from graph)	50	66		39	56		28	42	
1991 Releases (est. from graph)	50	63		40	55		29	41	
NY (Present study: 91-95 discharges)	52	68	75	39	55	62	25	39	45
CA Youth Authority (Baird 1987)	70		84			69			
CA Prob. Camps (Palmer & Wedge 1989)				54	65				
CO (Boyles 1996)				35			28		
FL (Florida DHRS 1992)									
Training Schools	70			32					
Halfway Houses	70			42					
"Young Offender" Programs	93			75					
Challenge Camps	80			40					
IL (Steele et al. 1989)									49
MA (Steele et al. 1989)	57		82						
MN (MN Office of Legis. Auditor 1995)									
Male, long-term		53 - 77							
Female, long-term		41 - 58							
PA (Goodstein & Sontheimer 1987)	48	57		28	31		21	23	
TX (Steele et al. 1989)									43
UT (Krisberg et al. 1988)									
Secure	79								
Community-based	77								
Diagnostic + Comm-based	70								
WA (Steiger & Dizon 1991)					68	73			
WI (Steele et al. 1989)									34

Factors Associated with the Probability of Recidivism

Prior research has consistently found associations between juvenile recidivism and various factors related to age, legal history, educational history, peer relationships, and family functioning. The following have been recommended (Baird, 1984; Wiebush et al., 1995) as a core set to be considered in the development of risk assessment instruments for juvenile offenders:

- age of onset of criminality (usually age at first referral, first arrest, or first adjudication)
- number of priors (priors may also be referrals, arrests, or adjudications)
- prior assaults (alternatively, some studies provide evidence for a focus on robbery)
- prior out-of-home placement
- drug/alcohol abuse
- school problems (including truancy, misbehavior in school, and poor achievement)
- negative peer relations
- family problems (including problems with parental control and relationships with family members)

Other potential predictors include gender, personality, early “troublesomeness,” parental or sibling criminality, family size and structure, and family disruption (Jones, 1993). Recent developments include increasing attention to protective factors that have the potential to alleviate or offset presenting risk factors (Yoshikawa, 1994) and consideration of community-level risk factors (Laub and Lauritsen, 1994; Mulvey, Arthur, and Reppucci, 1993; Peeples and Loeber, 1994). One risk assessment instrument that has been the subject of considerable recent research is the Youth Level of Service Inventory (YLSI) developed by Hoge and Andrews (1996). The YLSI consists of a simple checklist with 42 items arranged in eight categories: prior and current offenses, family circumstances/parenting, education/employment, peer relations, substance abuse, leisure/recreation, personality/behavior, and attitudes/orientation. CFS research staff have recently developed and are currently field testing an instrument based on the eight YLSI categories, but incorporating different specific items.

Because it was necessary for the present study to employ a retrospective design, analyses were limited to information available from existing records. Records generally did not include sufficient information about peer relations, parenting styles, or youth attitudes to support analyses of those factors. The present study did examine relationships between recidivism and hundreds of items in the following six categories:

- educational history
- family history
- household characteristics
- mental health (including substance abuse)

- legal history, and
- geographic environment.

The geographic environment measures were derived from aggregate data at the county, municipal, and zip code level, obtained primarily from the Uniform Crime Reporting (UCR) system and a commercial source of market research data (*The Right Site*, 1996). They include local crime rates and a variety of indices derived from census data (area socio-economic status, average educational levels, housing characteristics, divorce rates, population density, etc.)

Factors usually associated with the risk of delinquency in the general population did not necessarily discriminate between recidivists and nonrecidivists among youth placed with DFY. Most of the individual items examined in this research had small or negligible correlations with recidivism, and many were correlated in the counter-intuitive direction. Much of this pattern is attributable to the fact that the youth placed with DFY constituted a highly selected subset of the general population. Two examples illustrate this selection effect:

Age of onset. Yoshikawa (1994) cited research showing that youth first convicted between the ages of 10 and 15 were more likely to become “chronic offenders” than youth who were first convicted at age 16 or older. In New York State, however, sixteen year olds are considered adults, and all of the youth placed with DFY had to have been 15 or younger at “onset.” Within the available range, the observed relationship between age of first arrest or first PINS adjudication and the probability of recidivism was negligible for many of the subgroups examined in this study. Among all males combined, the age-specific rates of rearrest within 30 months of discharge (ANYin30afterDIS) by age of onset were as follows: age 15 (77%), age 14 (80%), age 13 (83%), age 12 (83%), age 11 (83%), and age 10 and under (82%).

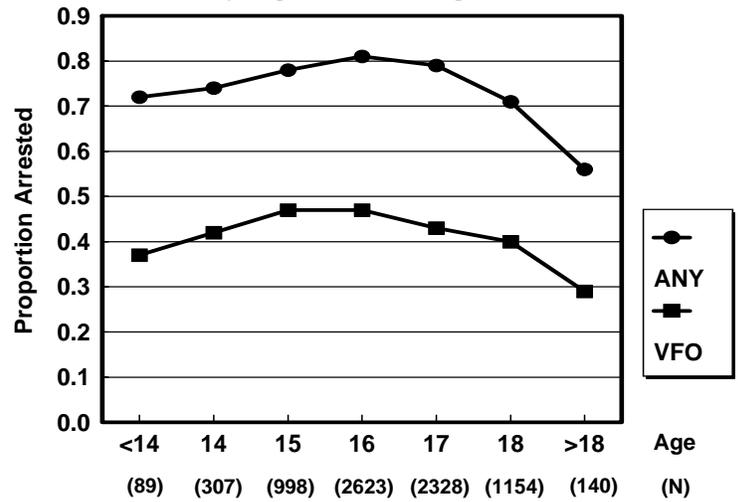
PINS. In the general population, a youth who had been placed with DFY for a PINS adjudication would be expected to be more likely to be arrested in the future than youth with no prior contact with the justice system. Since most youth in the general population would have no prior contacts, prior PINS adjudications, prior JD adjudications, and prior JO convictions would all emerge as risk factors for future criminality. Statistically, this would be reflected as a *positive* correlation between PINS adjudication and future arrests. However, all of the youth placed with DFY were adjudicated PINS, adjudicated JDs, or convicted as JOs, and *PINS had a lower risk of recidivism than the generally high-risk JOs and JDs placed with DFY.* Thus, within this highly selected subset of the general population, adjudication as a PINS (vs. JD or JO) had a strong *negative* correlation with future arrests.

Significant Relationships

There were substantial differences in recidivism rates between males and females and between youth adjudicated PINS and youth adjudicated JD or JO. There was little difference between recidivism rates for JDs and recidivism rates for JOs. There were substantial differences by race, but much of the race effect was accounted for by other factors.

In the case file sample, significant relationships were found between recidivism and specific factors within all six of the broad categories examined. The specific risk factors having the strongest relationships with recidivism within each category differed between one recidivism measure and another, between short-term and long-term followup, and between one subgroup and another. Across conditions, the three factors that were most consistently associated with recidivism were criminal history, age at discharge, and geographic environment.

Figure 3
Percentage of Males Arrested**
Within 30 Months of Discharge
(By Age at Discharge)



**Excluding those discharged directly to jail or prison and those for whom admission to DFY was not the beginning of their placement

The relationship between age at discharge and recidivism was curvilinear, with the lowest recidivism rates associated with the youngest individuals (under age 14) and the oldest individuals (over age 18). The highest rates were associated with youth who were 15, 16, or 17 years old when they were discharged from DFY custody. Among males in the full cohort (excluding those discharged directly to prison or jail), there was an especially sharp drop in recidivism rates between age 18 and age 19 or older (see Figure 3). However, the number of males who were age 19 or older at the time of discharge was relatively small (n = 140), and this result should be interpreted with caution.

Figure 4 summarizes the results of correlational analyses by adjudication and recidivism measure for each of the six categories of potential risk factors. For each combination, the table displays the number of variables examined, the number of variables that exhibited statistically significant correlations with recidivism, and the absolute value of the largest positive or negative correlation coefficient. The accompanying shading is roughly proportional to the absolute value of the largest correlation. The pattern of shading is informative. It shows, for example, that VFO arrest was more predictable than ANY arrest for male JDs, and that recidivism was more predictable for male PINS than for male JDs or females. In particular, items relating to educational history, family history, household characteristics, and mental health had stronger relationships with recidivism among male PINS than among other subgroups. Characteristics of youths' home localities were among the variables most highly and most frequently correlated with VFO recidivism.

Characteristic	ANYin30 afterDIS	VFOin30 afterDIS
Gender		
Male	78%	44%
Female	41%	12%
Race		
White, non-Hispanic	65%	23%
Black, non-Hispanic	75%	46%
Hispanic	75%	43%
Other	57%	28%
Adjudication		
JO	76%	46%
JD	75%	42%
PINS	52%	17%
Geographic Area		
Bronx	76%	49%
Brooklyn	77%	54%
Manhattan	75%	41%
Queens	71%	39%
Staten Island	68%	47%
NYC Suburban	60%	29%
Other Urban	76%	38%
Rest of State	69%	24%

Figure 4
Largest Correlation and Number of Variables with Significant Correlations
by Variable Category, Adjudication, and Recidivism Measure

Variable Category by Recidivism Measure	Adjudication			
	Male JO	Male JD	Male PINS	Female JD/PINS
Range of Cases Available	424 - 773	1697 - 1811	134 - 142	679 - 695
Criminal History	(out of 12 vars)	(out of 53 vars)	(out of 51 vars)	(out of 53 vars)
ANYin12afterREL	.14 3	.11 25	.39 15	.19 19
ANYin30afterDIS	.13 6	.09 19	.30 9	.14 11
VFOin12afterREL	.13 4	.17 22	.27 5	.16 25
VFOin30afterDIS	.11 3	.16 26	.33 11	.20 16
Characteristics of Localities	(out of 62 vars)			
ANYin12afterREL	.15 21	.09 19	.21 5	.12 9
ANYin30afterDIS	.19 30	.07 5	.19 2	.07 1
VFOin12afterREL	.14 10	.19 48	.14 0	.16 39
VFOin30afterDIS	.18 42	.20 54	.31 29	.23 46
Educational History	(out of 6 vars)	(out of 20 vars)	(out of 20 vars)	(out of 20 vars)
ANYin12afterREL	.07 0	.08 6	.28 3	.12 1
ANYin30afterDIS	.12 3	.09 10	.18 1	.08 1
VFOin12afterREL	.09 2	.14 9	.17 1	.08 1
VFOin30afterDIS	.11 3	.11 8	.16 0	.13 2
Family History	(out of 1 var)	(out of 26 vars)	(out of 26 vars)	(out of 26 vars)
ANYin12afterREL	.03 0	.05 3	.24 4	.09 1
ANYin30afterDIS	.08 1	.08 4	.20 3	.11 6
VFOin12afterREL	.01 0	.07 8	.27 4	.08 1
VFOin30afterDIS	.09 1	.06 5	.17 2	.10 1
Household Characteristics	(out of 2 vars)	(out of 12 vars)	(out of 12 vars)	(out of 12 vars)
ANYin12afterREL	.03 0	.05 3	.12 0	.08 1
ANYin30afterDIS	.08 1	.07 3	.22 2	.14 4
VFOin12afterREL	.02 0	.08 7	.23 1	.06 0
VFOin30afterDIS	.04 0	.11 8	.23 4	.16 2
Mental Health & Substance Abuse	(out of 2 vars)	(out of 14 vars)	(out of 14 vars)	(out of 14 vars)
ANYin12afterREL	.07 0	.06 3	.16 0	.10 2
ANYin30afterDIS	.05 0	.07 2	.18 1	.08 2
VFOin12afterREL	.08 1	.07 4	.19 1	.10 2
VFOin30afterDIS	.02 0	.06 2	.25 1	.08 2

NOTE: The number before the shading is the absolute value of the largest positive or negative correlation coefficient. The number after the shading is the number of variables with statistically significant correlations ($p < .05$). The shading is roughly proportional to the absolute value of the largest correlation. Fewer variables were available for Male JOs, because case file data were not collected for JOs.

Risk Control Models

A number of statistical models were developed relating weighted combinations of risk factors to the probability of recidivism. The purpose of these models was to control for youth characteristics and circumstances in analyses of the differences in recidivism rates associated with different service settings. A total of 22 logistic regression models were developed, each tailored for use in analyses of a specific recidivism measure for a specific combination of subgroups and service settings. Throughout this report, these statistical models are called *risk control models*, and the probability of recidivism generated by the applicable model for an individual youth is called the *a priori risk*.

The risk control models developed for this study achieved predictive power ranging from very weak to moderately strong, roughly paralleling the range of predictive power reported for standardized risk assessment instruments studied in previous research. Several reviews of such research have found correlations between risk assessment instruments and actual recidivism averaging approximately .30, with some of the stronger instruments occasionally yielding correlations of .40 or higher (Gendreau, Little, and Goggin, 1996; Klein and Caggiano, 1986; Bonta and Motiak, 1985). The 22 risk control models constructed for this study yielded correlations between modeled probabilities and actual recidivism ranging from a low of .20 to a high of .57. These models were too highly specialized to be practical or generalizable for use as general risk assessment tools, but they provided stronger statistical control for most of the comparisons in this research than could likely have been achieved using a single generic instrument. A discussion of model construction and details of each individual model are presented in the technical report (Frederick, 1999).

Most of the models that incorporated case file data included items from all or most of the six categories listed in Figure 4. Models that were based on subgroups for which case file data were not available tended to be heavily dependent on criminal history information and geographic characteristics. For both the full cohort and the case file sample, geographic environment factors were consistently among the items most highly correlated with recidivism, and they remained significant in the risk control models after accounting for youths' educational histories, family histories, household characteristics, selected mental health characteristics, and criminal histories.

Differences in Recidivism Among Service Settings

Differences in recidivism rates among adjudication subgroups and service settings were examined in several different ways. Comparisons were made among observed rates, and between observed rates and the expected rates

derived from the risk control models.² The statistical significance of differences among groups was tested by determining whether adding group membership to the applicable risk control model significantly improved the model fit after controlling for significant a priori risk factors. The analyses examined differences associated with five ways of grouping cases:

- differences among adjudication categories;
- differences among service types within adjudication;
- differences among primary residences within security levels;
- differences among transitional residences within security levels; and
- differences among movement patterns and varying lengths of residential stay.

As previously noted, a youth's *primary residence* was defined as a residential setting in which the youth spent more than 50 percent of his or her residential confinement. Youth who did not spend more than 50 percent of their residential time at a single facility were said to have *no primary residence*. The last residential setting prior to the first release to community supervision was defined as the *transitional residence*. Unless otherwise noted, references in the text to specific facilities generally refer to primary residence. References to transitional residence are explicitly identified as such.

Differences Among Adjudication Categories

Male JOs versus male JDs. Male JOs and Male JDs had nearly identical observed recidivism rates. Seventy-seven percent of JOs and 78 percent of JDs were arrested within 30 months of discharge. VFO arrest rates were 48 percent for JOs and 45 percent for JDs within 30 months of discharge.

The slight difference in VFO arrest rates was not significant after controlling for significant risk factors. For ANY arrest, JOs had a slightly lower short term recidivism rate than expected, but the absolute difference was small and was statistically significant primarily because the analysis was based on a very large sample (see Figure 5). For specific JO and JD subcategories (JO, JO granted Youthful Offender status, Restricted JD, Nonsecure JD, and Limited secure JD), the absolute differences between observed recidivism rates and expected rates were generally 5 percentage points or less.

JDs versus PINS. Sixty-eight percent of male PINS and 31 percent of female PINS were arrested within 30 months of discharge. In the same time period, 26 percent of male PINS and 6 percent of female PINS were arrested for a VFO.

²Expected recidivism rate was defined as the group average of the individual probabilities of recidivism (a priori risk) calculated for each youth according to the applicable risk control model.

Figure 5
COMPARISONS AMONG ADJUDICATIONS AND RESIDENTIAL SERVICE SETTINGS
(Observed Rates and Expected Rates Shown Only For Statistically Significant Comparisons)

Summary of Significance Tests				
COMPARISONS	ANY in 12m of 1st rel.	VFO in 12m of 1st rel.	ANY in 30m of disch.	VFO in 30m of disch.
Adjudication				
JO v JD (males)	sig	--	--	ns
JD v PINS (males)	--	--	ns	ns
JD v PINS (females)	--	--	ns	--
Residence Types				
for male JDs	--	--	ns	sig
for male PINS	--	--	ns	ns
for female JDs/PINS	--	--	sig	--
Sec. Cntrs (males)	--	--	sig	ns
Male JD sex offs				
Highland v Other	ns	ns	--	--
Male JDs by facility				
--Ltd Secure Cntrs				
by primary resid.	ns	ns	ns	ns
by transitional res.	ns	ns	--	--
--Nonsecure Cntrs				
by primary resid.	sig	ns	ns	ns
by transitional res.	sig	ns	--	--
Note: -- indicates no test conducted ns indicates no significant differences (p < .05) sig indicates significant differences (p < .05)				

Adjudication	N	Exp	Obs
JOs	400	59%	55%
JDs	5522	55%	56%

Primary Residence	N	Exp	Obs
No primary	702	45%	52%
Ltd secure	1574	49%	51%
Nonsecure	1490	46%	46%
Com based	163	41%	36%
Voluntary	1314	42%	38%
Foster care	44	35%	21%

Primary Residence	N	Exp	Obs
JDs: no primary	142	49%	47%
Ltd secure	278	49%	53%
Nonsecure	128	49%	51%
Com based	52	47%	38%
Voluntary	135	41%	34%
PINS: no primary	49	40%	43%
Nonsecure	72	38%	47%
Com based	43	37%	29%
Voluntary	178	24%	23%

Secure Center	N	Exp	Obs
Brookwood	56	71%	57%
Other secure	368	79%	81%

Nonsecure Center	By Primary Residence			By Transitional Residence		
	N	Exp	Obs	N	Exp	Obs
Grt. Valley	66	60%	61%	70	59%	60%
Allen	134	58%	49%	113	59%	51%
Tryon	204	61%	61%	272	62%	63%
Annsville	142	61%	70%	114	61%	71%
Other	84	50%	54%	105	62%	59%

NOTE: Significance tests were not conducted for all possible comparisons, because risk control models were developed only for selected combinations of adjudication groups and recidivism measures. The most complete analyses were conducted for male JDs served in limited secure and nonsecure centers.

The differences in recidivism rates between PINS and JDs were not significant, after controlling for differences in criminal history, educational history, family history, household characteristics, mental health characteristics, and geographic environment. The differences were nonsignificant for both males and females.

This pattern of differences among adjudication categories suggests that the justice system did tend (on average) to produce JO convictions and JD adjudications for higher risk males and produce PINS adjudications for lower risk males. However, whatever combinations of legal constraints and evaluations of risk factors resulted in JO convictions for some youth and JD adjudications for others, JOs had neither higher *a priori* risk of recidivism nor higher actual recidivism rates than JDs placed with DFY.

Differences Among Primary Residential Service Setting Categories

For these analyses, cases were grouped according to the residential service setting category associated with each youth's *primary residence* (as defined above). Analyses were based on the full cohort and were conducted separately for male JDs, male PINS, and female JDs/PINS combined. Differences in recidivism rates, controlling for significant risk factors, were examined among the following categories: DFY limited secure centers, DFY nonsecure centers, DFY community based residences, DFY foster care, and voluntary agencies.

Males. There were no significant differences between voluntary agencies and DFY residential programs for arrest within 30 months of discharge among male JDs, for arrest within 30 months of discharge among male PINS, or for VFO arrest within 30 months of discharge among male PINS. Compared to DFY limited secure and nonsecure centers, both DFY community-based facilities and voluntary agencies had significantly lower rates of VFO arrest within 30 months of discharge among male JDs, but the differences between observed and expected rates were small (see Figure 5).

Females. For JDs and PINS combined, both DFY community-based facilities and voluntary agencies were associated with significantly lower rates of arrest within 30 months of discharge than DFY limited secure or nonsecure centers (see Figure 5).

Differences By Primary and Transitional Residence Within Service Setting Categories

The facilities targeted for the case file sample included four limited secure centers for boys (The Youth Leadership Academy, Industry, Oatka, and Highland), four nonsecure centers for boys (Great Valley, Allen, Tryon, and Annsville), three voluntary agencies serving boys (Berkshire Farm,

Lincoln Hall, and George Junior Republic), two limited secure centers for girls (Tryon and Lansing), and one nonsecure center for girls (Tryon). In addition, the case file sample included random samples of cases from the following aggregate categories: other limited secure centers, other nonsecure centers, other voluntary agencies, DFY foster care, and all DFY community based residences combined.

Secure centers. Since case file data were not collected for JOs served in secure centers, these analyses were based on the full cohort and limited to data available from existing data bases. Youth for whom Brookwood was the primary residence had substantially lower recidivism rates than other DFY secure centers. The difference was statistically significant for ANY arrest within 30 months of discharge but not for VFO arrest within 30 months of discharge (see Figure 5).

The relative advantage of Brookwood over other secure centers should be interpreted with caution. Discussions with DFY staff suggested that youth placed at Brookwood may have been "softer" (in some sense not captured by the measures available for JOs in this study) than those placed at other secure centers. If more detailed data on risk factors had been available, *a priori* risk may have accounted for more of the observed difference. In addition, a recent audit by the New York State Commission of Correction (1995, pp. 50 - 68) found Brookwood to be among the secure centers with the weakest program implementation with respect to Commission criteria. It is unclear whether Commission program implementation criteria were actually unrelated to outcomes, or whether the influence of program characteristics examined by the Commission was overcome by some positive factor that remains to be identified. In any case, the difference in recidivism rates between Brookwood and other secure centers remains unexplained by any of the information available for this study, and may warrant further investigation.

Male JD sex offenders. DFY operated a separate unit at Highland specializing in programming for male sex offenders. After controlling for differences in youth characteristics and circumstances, the recidivism rate for sex offenders served at Highland was not significantly different from the rate for sex offenders served at other DFY facilities.

Limited secure and nonsecure centers. Whether JDs were grouped by primary residence or by transitional residence, the analyses found no significant differences for male JDs in any of the following comparisons:

1. among limited secure or nonsecure facilities with respect to VFO arrest within 30 months of discharge,
2. among limited secure or nonsecure facilities with respect to ANY arrest within 30 months of discharge,

3. among limited secure or nonsecure facilities with respect to VFO arrest within 12 months of first release, or
4. among *limited secure* facilities with respect to ANY arrest within 12 months of first release.

However, the analyses did find significant differences among *nonsecure facilities* with respect to ANY arrest within 12 months of first release. The observed spread in rearrest rates between male JDs whose primary residence was Allen and those whose primary residence was Annsville was 21 percentage points (49 percent versus 70 percent, respectively). The observed rate for Allen was about 9 percentage points below modeled expectation and the observed rate for Annsville was about 9 percentage points above modeled expectation (see Figure 5).

Community-based facilities. Male JDs who received their primary residential care in community-based facilities had a rearrest rate of 50 percent within 12 months of first release, which was 10 to 20 percentage points lower than the rates for most individual limited secure and nonsecure centers. However, this rate was only about 7 percentage points lower than expected on the basis of the applicable risk control model and the difference was not statistically significant.

Nonresidential service settings. There were no significant differences in recidivism following first release among youth grouped according to whether they received standard community care, home-based intensive supervision (HBIS),

enrollment at an evening reporting center (ERC), or no post-release supervision (direct discharge). The statistical significance of differences in recidivism rates among specific community care offices could not be tested using the risk control models developed for this study, because the models included geographic factors that would have made the analyses definitionally circular.

Length of stay

A set of analyses examined the relationship between the length of the first continuous period of residence and arrest rates following first release from residence to community supervision (or discharge, if that was the first release). After controlling for significant risk factors, there were no significant relationships between length of stay and recidivism for any of the recidivism measures for which risk control models were available. Table 3 displays the observed (unadjusted) results for one recidivism measure, any arrest within 12 months of first release, separately for each adjudication subgroup. Despite the fact that there were significant numbers of youth with initial residential stays as short as 1 to 3 months and as long as 24 months or more, there was little variation in recidivism rates across the entire range of initial length of stay.

Most of the variation that was observed was associated with small samples and did not follow a consistent pattern. For male JOs, there were significant correlations between long term recidivism and length of stay (lower recidivism rates

Table 3 Proportion With Any Arrest Within 12 Months of First Release By Length of First Continuous Period of Residence										
Length of Stay in Months	Adjudication Subgroup									
	Male JOs		Male JD Sex Offs		Male JDs		Male PINS		Female JD/PINS	
	p	(n)	p	(n)	p	(n)	p	(n)	p	(n)
1 - 3	.54	(112)	-	-	.53	(143)	.30	(27)	.14	(72)
4 - 6	.68	(65)	.38	(8)	.58	(1312)	.42	(97)	.15	(167)
7 - 9	.64	(66)	.55	(20)	.56	(1268)	.33	(93)	.18	(182)
10 - 12	.57	(82)	.27	(37)	.53	(1461)	.35	(101)	.19	(262)
13 - 15	.54	(79)	.43	(37)	.59	(523)	.39	(44)	.24	(124)
16 - 18	.53	(70)	.30	(30)	.57	(559)	.33	(49)	.18	(107)
19 - 21	.59	(56)	.44	(18)	.57	(211)	.29	(21)	.27	(64)
22 - 24	.54	(41)	.10	(20)	.55	(239)	.47	(17)	.14	(58)
more than 24	.46	(169)	.37	(60)	.51	(710)	.37	(68)	.23	(196)

NOTE: Column for Male JOs includes JOs granted youthful offender (YO) status.

among youth held longer), but these correlations were completely accounted for by a priori risk derived from youth characteristics and circumstances. Surprisingly, in these instances, the JOs held in initial residential confinement the longest were those with the *lowest* a priori risk of recidivism.³ This apparent anomaly was due primarily to the fact that minimum sentences imposed by the criminal courts tended to be longer for JOs with lower a priori risk of recidivism.

Residential movement patterns

For the purposes of this study, movement histories were grouped into categories along two dimensions. First, they were divided into those involving a single continuous period of residence (which could have been served at more than one facility) versus those involving two or more periods of residence interrupted by intervening periods of community supervision. The former was labeled *continuous* residence and the latter was labeled *discontinuous* residence. These broad categories were then further subdivided according to the pattern of movements among facilities during the first continuous period of residence, as follows:

- Single facility: all of the initial period of residence was served at a single DFY facility or voluntary agency program.
- DFY progressive: at least one move was downward in security level, and all moves were either downward in security level or lateral within a security level.
- DFY regressive: at least one move was upward in security level, and all moves were either upward in security level or lateral within a security level.
- DFY straight: all moves were lateral within a security level.
- DFY bidirectional: regressive and progressive moves during the same period of residence.
- Voluntary (including voluntary only, DFY-to-vol, vol-to-DFY, DFY-vol-DFY, or vol-DFY-vol).

Recidivism rates were higher for youth with multiple periods of residence (discontinuous residence) than for youth with only a single period of residence (continuous residence). This merely reflects the fact that discontinuous residence was generally a result of failure under community supervision.

Among youth served entirely in DFY facilities, recidivism rates were lowest for youth with progressive moves during their initial period of residence, highest for youth with straight

or regressive moves, and intermediate for youth with bidirectional patterns and youth who spent their entire initial period of residence at a single facility. Progressive and single facility patterns probably reflected the relatively most favorable judgments by program staff concerning youth readiness for release. Discussions with DFY staff suggested that youths with regressive, straight, or bidirectional patterns were most likely the youths who were having the most difficulties in adjusting to the expectations of residential programs (resulting in staff judgment that a different setting might be more appropriate).

Movement history, controlling for risk and length of stay.

After controlling for significant risk factors and length of initial period of residence, most analyses found no significant differences in post-release or post-discharge recidivism by residential movement pattern or type of first nonresidential service. However, there were two salient exceptions for male JDs:

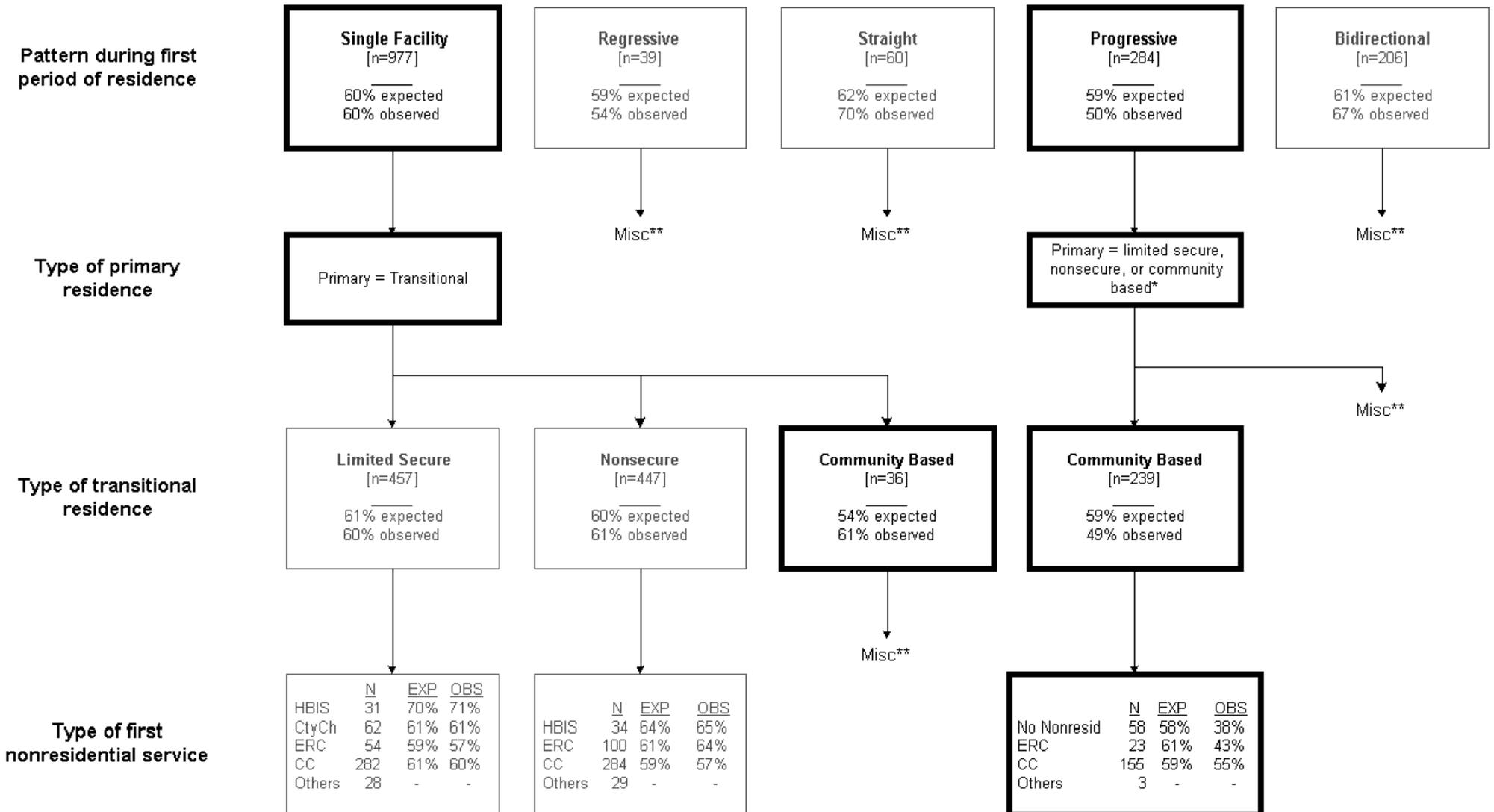
- An aggregate category of negative movement patterns (regressive, straight, or bidirectional) was associated with a higher-than-expected rate of VFO arrest within 30 months of discharge. This effect was mostly attributable to the large difference between observed and expected for DFY straight patterns (68% observed versus 53% expected). This provides indirect evidence that youth who were having difficulty adjusting to the expectations of residential programs were more likely than others to be rearrested for VFOs, even after controlling for significant risk factors.
- After controlling for significant risk factors and residential length of stay, progressive moves were associated with a lower-than-expected rate of any arrest within 12 months of first release (see Figure 6).

In the latter case, progressive movement patterns yielded a significantly lower short-term recidivism rate than single stay patterns (50% vs. 60%), and the rate associated with progressive movement patterns was also lower than expected on the basis of a risk control model that included extensive case file data (50% vs. 59%). This difference was primarily attributable to low recidivism rates for two specific progressive patterns: <residential center> to <group home> to <evening reporting center> (followed by various patterns prior to discharge); and <residential center> to <group home> to <final discharge> (with no nonresidential service). These compared to higher recidivism rates for the dominant single stay pattern, <residential center> to <community care> (followed by various patterns prior to discharge).

³This occurred for a priori risk of both ANYin30afterDIS and VFOin30afterDIS.

Figure 6

**Expected [EXP] vs. Observed [OBS] Recidivism Rates for Male JD's with Selected Residential Movement Patterns
[Recidivism = any arrest within 12 months of first release]**



HBIS - Home Based Intensive Supervision
CtyCh - City Challenge

ERC - Evening Reporting Center
CC - Community Care

*A community based facility could be the “primary residence” in a progressive pattern if youth spent more time there after a “step down” from a higher security level than was spent initially at the higher level facility

**Miscellaneous combinations of primary, transitional, and non residential service.

These two progressive patterns were associated with lower short-term recidivism rates in spite of two potentially countervailing influences:

- (1) the fact that, for those progressive patterns that ended with discharge from group homes, the 12 month followup period began with final discharge, so youth did not receive any post-release supervision during the followup period; and
- (2) the likelihood that youths with progressive patterns were perceived by residential program staff to be less ready for release than youth with single-stay patterns.

The latter assertion is based on interviews with DFY staff, who suggested that youth who are due for release but appear to need continued structure or support are the ones for whom a special effort is made to arrange placement in a community based residence or day reporting program. This is consistent with the finding that average length of initial stay in a residential center was roughly the same (slightly over 7 months) for youth released directly to community care and those released to a community based residence, but the average total period of initial residence (residential center plus community based residence) was about twice as long (approximately 14 months) for the latter.⁴

Among this group of male JDs, progressive patterns that did not involve group homes were also associated with lower-than-expected short term recidivism rates, whereas the single-stay pattern involving group homes-- <group home> to <community care> (followed by various patterns prior to discharge)--was associated with higher-than-expected short term recidivism rates. Thus, it seems more likely that the relative advantage of the two dominant progressive patterns is attributable to the gradual transition pattern than to the involvement of group homes per se.

On-Site Interviews

DFY program staff were interviewed on-site at four limited-secure residential facilities, one nonsecure residential facility, four community care offices, and three alternative community supervision programs. Site selection was based on preliminary statistical analyses and discussions with DFY central office staff. The selected sites were associated with a range of observed recidivism rates and most of the residential program sites were considered to have experienced relatively stable leadership and program focus.

The types and numbers of staff who were interviewed varied according to facility size and staffing patterns. In general, they included program directors or assistant directors,

selected midlevel staff (e.g., Youth Division Counselors, Senior Youth Division Counselors, psychologists, education supervisors), and direct care staff (e.g., Youth Division Aides, teachers). Additional information was obtained from program documentation and discussions with DFY central office staff.

The interviews focused on three main issues: program rationale, consistency of philosophy and methods within a service setting, and continuity of philosophy and methods across service settings.

Program Rationale

Considerable attention was given to the ability of staff to articulate a coherent program philosophy or theory of intervention. A meta-analysis reviewing methodologically strong evaluations of programs for adjudicated juvenile delinquents found that programs based on explicit theoretical principles were "five times more effective than those that had no particular theoretical basis . . . [and] programs that included a *cognitive* component were more than twice as effective as programs that did not" (Isso and Ross, 1990, p.138). Programs based on cognitive theories of intervention include those variously characterized as cognitive-behavioral, social-cognitive, interpersonal cognitive problem-solving (ICPS) or behavioral social skills training (BSST) programs (Palmer, 1991, p. 337; Mulvey, Arthur, and Reppucci, 1993, p. 139). Such programs generally focus on teaching youth how their perceptions and thinking patterns lead to undesirable behavior; they often include training in specific social skills such as interpreting social situations, evaluating alternatives, considering the consequences of behavior, resisting peer pressure, and recognizing and controlling anger; and they may incorporate a focus on values or moral reasoning (Chavaria, 1997; Mulvey, Arthur, and Reppucci, 1993; Glick and Goldstein, 1987).

Beginning in the late 1980s, DFY programming appears to have been evolving along three related paths: (1) toward greater centralization in program planning and operational decision-making; (2) toward an agency-wide commitment to a multi-faceted habilitation philosophy; and (3) toward greater reliance on cognitive-behavioral curricula. However, none of these are yet fully established, more than one cognitively-oriented approach appears to be emerging, and it is not yet clear how the emerging cognitive curricula will integrate with other program components within or across service settings.

As described in DFY documents and explained by central office staff, the design of DFY's core program is intended to include many of the features found in past research to characterize effective intervention programs. DFY espouses an integrated "habilitation" philosophy aimed at "preventing delinquency through positive youth development." To promote positive development, DFY offers services designed to enhance educational, employment and social competence, and to encourage beliefs, attitudes, and aspirations consistent with

⁴Note that the analysis cited above controlled for these differences in length of residential stay.

integration into legitimate society. In the early 1990s, DFY established individualized youth service plans (YSPs) that incorporate a standard set of "core service goals" consistent with key components of the habilitation model. YSPs also include a standard set of operational objectives (for example, "Clear rules, norms, expectations and limits;" and "Trusting relationships with positive adult role models").

In very broad terms, the rationale behind the habilitation model is that certain program structures and services will induce a greater degree of positive youth development than would otherwise occur, which in turn will lead to stronger connections with legitimate society and, ultimately, to a lower probability of recidivism than would be expected if such development did not occur. These ideas are theoretically consistent with literature supporting a broad developmental perspective (e.g., Palmer, 1992) and an emphasis on "social capital" and "turning points in the life course" (e.g., Laub and Sampson, 1994).

Although agency literature and DFY's Youth Service Plan system appear to suggest a core program philosophy, staff and managers at individual program sites historically had considerable latitude to adopt their own strategies and procedures. Substantial differences in program philosophy and methods still persist among the program sites visited for this study. For example, the emerging emphasis on cognitive-behavioral curricula was initiated independently at different facilities and at different points in history. This has led naturally to two kinds of variations among DFY programs: (1) staff at the facilities that participated in these early developments still appear to be more committed to cognitive precepts than staff at other locations; and (2) there are important differences in underlying principles and specific program components even among the programs with the strongest commitment to cognitive approaches.

A cognitive-behavioral curriculum known as aggression replacement training (ART) has recently been established as a required program component across all of DFY's service settings, including aftercare programs. ART was developed at DFY's Annsville Youth Center during the 1980s. The ART curriculum has three components: (1) a moral reasoning component, which involves group discussion of moral dilemmas; (2) anger control training, a 10 week sequence in which youth are taught specific techniques for responding nonviolently to "hassles;" and (3) structured learning, a 50-skill curriculum that provides youth with instruction, practice, and feedback concerning social skills, dealing with emotions, alternatives to aggression, coping with stress, and planning skills.

During the period when the study cohort was in DFY custody (late 1980s and early 1990s), ART was only active in selected DFY residential centers. Though it was nominally operational in all DFY service settings at the time of the interviews, it appeared that there was still considerable

variation among programs in the degree of staff commitment to ART and the likelihood that all youth would participate in the full ART sequence. Ironically, among the sites visited for this study, the two programs with the strongest commitment to cognitive-behavioral interventions (Highland and the Youth Leadership Academy/City Challenge sequence) appeared to deemphasize ART somewhat in favor of other cognitive strategies.

Among the sites visited, Industry and some of the aftercare settings appeared to have the weakest commitment to cognitive-behavioral approaches. Staff at Industry presented an eclectic picture that emphasized behavioral management techniques and a number of relatively independent program components that appeared generally consistent with a habilitation philosophy (e.g., academic education, vocational training, individual counseling, group discussion, and athletics/recreation), and operated an ART program as required, but did not appear to have a central focus comparable to the guiding principles evident at Highland and YLA/CCh. Some of the staff we interviewed in aftercare settings also either deemphasized ART or explicitly questioned its relevance to the circumstances facing youth returning to their home communities.

Given the large body of research demonstrating the superiority of theory-driven programs in general and cognitive-behavioral approaches in particular, it would have been reasonable to expect Highland and YLA/CCh to be associated with the lowest recidivism rates, Industry to be associated with the highest rates, and other facilities visited for this study to have intermediate rates. Instead, after controlling for significant risk factors, the recidivism rates for Highland, YLA/CCh, and Industry were not significantly different, and the only facility with higher-than-expected recidivism rates was Annsville, the facility where ART was originally developed.

The relative lack of variation in recidivism rates in spite of apparently important differences in program philosophy and design, together with the generally high recidivism rates across all settings, suggested a need to focus on problems that might be common across settings. The interviews identified two potential problems consistent with concerns highlighted in recent literature:

1. inconsistency among staff within service settings; and
2. discontinuity of programming among service settings, especially in the transition from residential confinement to aftercare.

Internal Consistency

Sites appeared to vary substantially in the degree to which the program philosophy and methods espoused by senior managers were understood and faithfully implemented by

middle management and direct care staff. At nearly every site, one or more of the staff who had the most interaction with youth in their custody (e.g., Youth Division Aides, teachers, community care workers) appeared to misunderstand, ignore, or disagree with the guiding principles espoused by program managers. Youth Division Aides responsible for direct supervision of youth in residential settings seemed particularly ambivalent about the conflicting demands of maintaining order, mentoring, and delivering some of the components of curriculum-based programs. Some complained of insufficient training or lack of input into program decisions. A few openly admitted subverting program efforts (for example, by indicating to youth that a particular curriculum was “b_s_,” but that they had to go through the motions anyway), though they seemed to consider such behavior necessary in order to develop rapport with the youth.

Among the staff interviewed for this study, only those at the Henry Johnson Youth Leadership Academy (YLA) and its companion aftercare program, City Challenge (CCh), appeared to be unanimous in their understanding of and commitment to the program’s guiding principles. In general, there was a tendency for more faithful implementation to be associated with more clearly articulated models. There also appeared to be greater consistency among staff in settings with fewer staff, but Highland, a large limited-secure center with a well articulated philosophy, was nevertheless one of the sites with relatively greater internal consistency. Highland presents an informative illustration: the interview responses showed remarkable consistency among senior leadership and middle management from the assistant directors down through Sr. YDCs and YDCs. However, after several years of evolution and refinement of approaches based on cognitive behavioral principles, some of the direct care staff at Highland still did not appear to be fully conversant with or committed to the program’s nominal guiding principles.⁵ Examples such as this suggest that there may have been less difference among programs in the actual interventions experienced by youth than might be suggested by the nominal differences in program philosophy. This may have been especially true during the time the study cohort was in DFY custody, when the evolution toward structured cognitive-behavioral curricula was in its early stages and staffing was in flux due to budget cutbacks.

Continuity Across Service Settings

Both residential staff and aftercare staff cited the sharp discontinuity between residential programming and aftercare as a problem potentially contributing to high recidivism rates. Residential staff suggested that their efforts may appear ineffective because they were not carried through on aftercare, and because the youth faced difficult circumstances upon

returning to their home communities. Aftercare staff also recognized the discontinuity between residential confinement and aftercare, and some agreed that certain efforts begun in residence should be carried through to aftercare to a greater extent than is currently the case, but others explicitly questioned the relevance of the residential curriculum to the circumstances youth face upon returning to the community.

In recent years, DFY has taken steps to establish consistency across program settings with respect to two of the agency’s curriculum-based interventions, the Independent Living Program (ILP) and Aggression Replacement Training (ART). ILP is offered in all service settings, and individual program modules are taught according to the same calendar schedule across all settings. Thus, youth moving from one setting to another can continue ILP without missing or repeating components. ART is also supposed to be offered in all settings, but it was less clear whether ART was well-established in aftercare settings.

The YLA-City Challenge sequence showed a high degree of continuity of programming at the time the interviews were conducted. However, this continuity was not yet well-established during the period for which youth cohort data were collected for this study. The current program sequence is discussed in more detail later in this report.

Some of the staff we interviewed offered suggestions for alleviating the discontinuity between residential confinement and aftercare, but there was little congruence among the various suggestions offered. Some suggested more routine use of “step down” placements through intermediate levels of control in settings such as group homes and evening reporting centers, while one argued that group homes are inappropriate for most youth (because it is better for youth to be surrounded by prosocial peers than other delinquents). Some argued that aftercare should include DFY-operated alternative schools to ease the transition back to public schools, while others suggested youth should be held in residential care until they graduate from high school (or reach age 21). Some suggested augmenting aftercare to include much greater emphasis on preparing families to provide a prosocial environment for youth returning home, while others suggested much greater reliance on foster care to remove youth from criminogenic family circumstances. While all of these are suggestions worth exploring, they also serve to highlight the problems cited above: DFY had not yet succeeded in establishing consistent staff commitment to a coherent program philosophy.

A conceptual framework for evaluating continuity of programming is introduced in the discussion section which follows, where a variety of continuity issues are discussed in greater depth.

⁵Highland management seemed to be aware of this problem, and the need to include direct care staff more routinely in planning and development efforts was a topic of open discussion at the facility.

Discussion and Recommendations

This was a retrospective study designed to identify youth characteristics and circumstances associated with the risk of recidivism, measure differences in recidivism rates among programs after accounting for differences in the characteristics and circumstances of the youth they served, and evaluate program characteristics to develop possible explanations for the differences between actual recidivism rates and statistically-derived base expectancies. However, the study did not find much deviation from expected rates, either for DFY programs or for voluntary agencies serving youth placed through DFY.

There were a few exceptions to the general pattern of non-significant differences, but they were typically associated with special circumstances that make it difficult to draw strong conclusions:

Brookwood had a significantly lower recidivism rate than other DFY secure centers for one of the two measures tested. However, case file data were not collected for JOs, and DFY staff offered the subjective impression that youth placed at Brookwood were “softer” than those placed at other secure centers, so it is possible that more complete data on youth characteristics might have accounted for more of the observed difference.

Females served primarily in DFY community based facilities or voluntary agencies had significantly lower rates than expected on one recidivism measure, but the analysis was based on a weak risk control model that also lacked case file data, so again, a stronger statistical model might have accounted for more of the observed difference.

Male JDs for whom Annsville was either the primary residence or the transitional residence had a significantly higher short term recidivism rate than expected on one measure, but their long term recidivism rates were not different than expected, and this analysis also was based on a weak risk control model.

In addition, the findings for Brookwood and Annsville were counter-intuitive. A recent audit by the New York State Commission of Correction (SCOC) found deficiencies in the implementation of counseling and rehabilitative programs at all of DFY’s secure centers. However, Brookwood (with the lowest recidivism rate among secure centers in the present study) appeared to be among the centers with the weakest implementation with respect to the criteria applied by SCOC (New York State Commission of Correction 1995, pp. 50 - 68). Annsville (with higher than expected recidivism rates) appeared to be highly regarded among DFY staff as the facility where the Division’s Aggression Replacement Training (ART) program was developed and refined.

Given that some of these findings are counter-intuitive, that

they were based on some of the weaker risk control models, that the analyses incorporating stronger risk control models typically found no significant differences among service settings, and that the large number of potential effects tested in this study would be expected to yield a few significant findings by chance alone, it appears best to interpret these differences cautiously. Nevertheless, these deviations from expected rates remain unexplained by any of the quantitative or qualitative information considered in this study, and they may warrant further investigation.

Overall, even where differences from statistically derived expectation were significant, the effects were generally small relative to the absolute level of recidivism. That is, for all service settings and movement patterns, recidivism rates were high. This was especially so for male JOs and male JDs, the groups which constitute the overwhelming majority of youth still placed with DFY (now CFS).

Why Are Recidivism Rates So High?

The remainder of this report presents a synthesis of evidence from our own quantitative analyses, insights gained from interviews with DFY staff, and information drawn from previous literature to address two overriding questions - “Why are the recidivism rates so high?” and “What, if anything, can be done about it?”

The generally high rates of recidivism found in this and previous studies, the lack of significant variation in outcomes in spite of interview data suggesting important differences in program philosophy among service settings, and the apparent lack of any relationship between residential length of stay and recidivism rates all suggest a need to explore factors the residential programs have in common. Interviews with DFY staff and a review of research literature suggested several factors that may account for the generally high recidivism rates across service settings. These are explained in the sections that follow.

Consistency Among Staff: Shared Commitment to a Coherent Program Model

Considerable attention was given to the ability of staff to articulate a coherent program philosophy or theory of intervention. Interviews with DFY staff presented a mixed picture with respect to specification and faithful implementation of coherent program models.

On the one hand, there were differences among sites in the ability of program managers to articulate clear program designs, differences in the particular guiding principles espoused by program managers, and differences in how faithfully those principles appeared to be followed by program staff. Not surprisingly, there was also a tendency for more faithful implementation to be associated with more clearly articulated

models. However, these differences might be expected to produce parallel differences in outcomes, and they did not.

On the other hand, at nearly every site visited, some of the direct care staff expressed opinions or described job-related behavior at variance with the nominal guiding principles of their respective programs. To the extent that the common demands of direct supervision lead to a common emphasis on behavioral management to the exclusion of other program components, it is possible that the nominal differences among residential programs do not translate into significantly different experiences for the residents. Alternatively, a small number of staff with divergent approaches at each site could cause youth to receive inconsistent messages at every site. In either of these scenarios, there would be little reason to expect differences in outcomes among programs.

Staff at all levels in the Youth Leadership Academy (YLA) /City Challenge (CCh) sequence did appear to be unanimous in their understanding of and commitment to the program's guiding principles. Some of the implications of this are discussed in more detail later.

Continuity of Program: the Implications for Aftercare

Another explanation for the apparent lack of differential effectiveness among nominally different residential programs is that they all released youth to aftercare programs which were highly similar to one another and which tended not to continue the efforts begun in residential care.⁷ Many of the DFY staff interviewed for this study cited the sharp discontinuity between residential confinement and typical aftercare as an important factor contributing to recidivism. The same point is made repeatedly in recent literature. To understand the scope of this problem, it is necessary to recognize that there are actually several distinct components of continuity.

Continuity of control. Residential confinement is often characterized as a "highly structured" environment. Youth typically begin their stay under the tightest control and, for consistent compliance with program expectations, gradually earn small privileges and slightly greater freedom. When youth are released to ordinary community supervision, this constant, external control abruptly disappears. Most experts recommend a more gradual transition into the community. This transition should typically include a period of intensive supervision, at least for high-risk youth and perhaps for all youth during the high-risk period immediately following release.

In a national survey of juvenile intensive supervision programs (Armstrong, 1988a, 1988b), over three-quarters of the programs cited intensive surveillance as their primary goal. However, intensive supervision that focuses primarily on surveillance has not been shown to decrease recidivism (Altschuler and Armstrong, 1994a, p. 3). More comprehensive program models are discussed later in this report.

Continuity of services. Chronic delinquents in state custody typically have a variety of basic service needs, such as medical and dental care, the "free appropriate public education" guaranteed by law, mental health services, specialized programming for drug dependence or sex offenses, access to recreation and leisure activities, family services, vocational training, and job placement. Continuity of services in the transition from residential care to community supervision can be difficult to achieve. It requires a strong commitment to integrated planning and coordination across disciplines, agencies, and levels of government.

Continuity of program content. Simply arranging for a service to be continued does not fully satisfy the need for continuity. This is fairly obvious in education, where it is important that a student continue in a compatible curriculum at the appropriate level. It is no less important in other areas. Residential programming and aftercare should be jointly designed so that the lessons introduced in residential confinement can be applied, evaluated, and continually reinforced during aftercare. If youth are taught specific anger management techniques, specific social skills, specific cognitive strategies, or specific value orientations in the residential phase, the aftercare phase should provide opportunities for youth to practice and discuss those very same lessons. Aftercare staff and residential staff should be guided by the same basic concepts and should be able to use the same vocabulary in discussions with the youth in their custody. Youth should be expected to demonstrate mastery of program content in relatively more structured settings like day programs, counseling sessions, and other circumstances where aftercare workers are present to guide them, and then to apply what they have learned in more natural settings such as their homes, schools, or jobs.

In particular, research has shown that a cognitive-behavioral curriculum similar to programs employed in many DFY residential centers can also be effective as a component of community supervision. In one study, for example, high-risk probationers were randomly assigned to regular probation, life skills training, or an

80-hour program focused on modifying the impulsive, ego-centric, illogical, and rigid thinking of the offenders; developing their social perspective-taking and values; and teaching them to stop and think before acting, consider the consequences of their behavior, conceptualize alternative ways of responding to interpersonal problems, and consider

⁷JOs for whom final discharge from DFY was also a release from residential confinement to community supervision were supervised by the Division of Parole, not DFY's community care offices. However, parole supervision and DFY's standard community care may be very similar with respect to the components of continuity discussed here.

the impact of their behavior on other people After nine months, reconviction rates for the regular probation, attention control (life skills), and cognitive group[s] were 70%, 48%, and 18%, respectively” (Izzo and Ross, 1988, p. 140).

Unfortunately, although DFY has begun to introduce one such curriculum (Aggression Replacement Training - ART) into its community supervision programs, some of the staff interviewed for this study did not seem convinced of its relevance to community reintegration and, in general, did not seem to view continuation of curricula begun in residence as an integral part of aftercare.

To assert that continuity of content is not possible or desirable would be to concede that the lessons taught in residential programs are not relevant to post-release circumstances. However desirable it might be, though, continuity of content could be difficult to achieve. One difficulty for DFY (now CFS) is that the agency’s geographical organization inhibits strong linkages between residential programs and aftercare. Youth released to the custody of the aftercare office in a given region come from residential programs scattered throughout the state. Thus, many of the residential programs releasing the youth are geographically distant from the aftercare setting. More importantly, program content differs from one residential program to another within DFY. Consequently, in order to provide true continuity of content, each aftercare office might have to provide several different programs simultaneously, which is not practical. To overcome this problem, CFS will either have to impose greater standardization of program content among its residential programs or move toward geographic specialization. An example of the former strategy is the Division’s recent effort to implement the same Aggression Replacement Training (ART) curriculum and the same Independent Living Program (ILP) across all of its residential and aftercare service settings. An example of the latter strategy is the close linkage between the Youth Leadership Academy (YLA), which serves only limited secure JDs from New York City, and the City Challenge day program, which receives all of the YLA graduates.

Continuity of social environment. The lessons learned in residence may, in fact, not be applicable in the natural social environments to which youth return. One of the facility directors interviewed for this study offered a potentially useful insight into this problem. He noted that a youth typically returns to several distinct social environments: home, peers, school, and perhaps a job. The rules of social engagement may be different in those different environments. The skills and attitudes promoted in residential programs may be useful in conventionally-oriented environments such as school or work; they may or may not be applicable at home; and they may be dangerous to the youth in relationships with peers “on the street.”

It is important to engineer a transition that provides immediate opportunities for youth to apply social skills, while working to engage youth in natural environments that will support positive behavior in the long term. For the long term, aftercare should be designed to develop and support positive home environments and attachment to prosocial peers. Recent research shows that family, school, and peer environments can be improved through programmatic interventions, and that such interventions can substantially decrease the likelihood of delinquent behavior (Henggeler, 1997; Kumpfer, 1994; Mulvey, 1993).

The home environment is especially critical, for two reasons: it could be the influence that determines what type of environment is dominant in the youth’s post-release experience; and programmatic interventions have a greater potential to alter the individual home environment than the prevailing street culture. Interventions that address parenting skills directly or address other family problems that inhibit effective parenting have been shown to reduce recidivism by fifty percent or more, compared to therapy that focuses on the youth alone (Greenwood, 1986, p. 227; Mulvey et al., 1993, p.146; Henggeler, 1997).

Continuity of attachment. Many of the residential program staff interviewed for this study expressed the belief that youth in their programs do not begin to make real progress until they form trusting relationships with one or more of the program staff. When youth are released from residential care to community supervision, prior attachments are lost, and the process of building trust must begin anew. As with the other components of continuity, it may be best to engineer a gradual transition from attachment with DFY staff to building trusting relationships with persons in the community who are likely to exert a prosocial influence. A similar issue exists with respect to relationships between youths’ families and juvenile justice or social service agencies. Arranging to have a single person or team handle all interactions with the family from as early in the process as possible may help lessen resistance and increase the likelihood of engaging family members in the rehabilitative process.

Geographic Specialization

Aggregate characteristics of localities were among the strongest predictors of recidivism in this study. In every one of the twenty-two risk control models, one or more geographic factors remained significant even after accounting for available measures of youths’ educational histories, family histories, household characteristics, selected mental health characteristics, and criminal histories. In addition, the relationships between recidivism and some individual-level youth characteristics varied from one locality to another. Relationships with geographic factors were especially strong for *violent* recidivism. These findings are consistent with a long history of criminological research and theory relating

community-level characteristics to delinquency and the incidence of violence (Yoshikawa, 1994, p. 36; Sampson and Lauritsen, 1994, pp. 43-90).

Relationships were found between various recidivism measures and a wide variety of local area characteristics, including various measures of local crime rates, population composition (age, gender, race, ethnicity), population density, housing density, residential stability, urbanization, income distribution, unemployment rates, concentration of homelessness, distribution of educational attainment (especially the percentage of adults with less than a high school education), area-wide SES composite scales, marriage rates, and divorce rates. Prior research suggests that area-wide characteristics such as these affect delinquency indirectly through the influence of community social disorganization on informal social controls (Sampson and Lauritsen, 1994) and family interactions (Yoshikawa, 1994).

Whatever the causes, it is clear that youth released to some communities face a substantially greater risk of recidivism than similar youth released to other communities. Moreover, the community environments in areas with high recidivism rates are often qualitatively different from those in areas with low recidivism rates. These two facts have corresponding implications for the design of residential and aftercare programming: (1) it may be necessary to provide earlier intervention with families, smaller aftercare caseloads, and more intensive aftercare programming in high risk communities; and (2) program content may need to be tailored to local circumstances.

Comprehensive Integrative Models

To address basic concerns for justice and community safety, it is necessary to confine for some period of time those youths whom parents, schools, social service agencies, and the juvenile justice system have previously been unable to control in the community. From a rehabilitative perspective, though, there are inherent limits to what can be accomplished in the artificial environment of institutional confinement. According to staff, youth placed in residential programs appear to reach a “readiness plateau” within the average length of stay,⁸ after which further rehabilitative progress may require the challenges inherent in a more natural community setting.

What is most important is that residential programs and aftercare programs be tightly integrated, so that the progress begun in residence can be continued through aftercare. Historically, residential services have been given priority, while aftercare has been underemphasized, both with respect to development of rehabilitative theory and with respect to the allocation of resources. However, recent literature suggests

that programs for chronic and serious delinquents should combine cognitive-behavioral approaches with comprehensive family-oriented interventions, beginning both types of intervention while the youths are in the institutional setting and continuing both after the youths are released to community supervision. “Service provision should be reconceptualized as an ongoing care model that emphasizes intervention in multiple spheres of an adolescent’s life. The most promise lies in a comprehensive, long-term commitment, not in the development of any singular, more powerful approach” (Tate, Reppucci, and Mulvey, 1995, p. 780).

The remainder of this section cites three promising program models. It is not suggested that these are the only (or necessarily the best) models available. However, all three reflect a comprehensive orientation with explicit attention to continuity of programming and integration of program components. The objective of this presentation is to illustrate the level of effort required to design and implement truly integrated programming and to offer concrete examples of programs that have succeeded in doing so.

The Intensive Aftercare Program (IAP) model. The Office of Juvenile Justice and Delinquency Prevention (OJJDP) has been supporting a research and development initiative to develop and test comprehensive juvenile aftercare programs. Begun in 1988 and still continuing, this OJJDP-sponsored initiative was designed to proceed in four stages: (1) a comprehensive review of existing programs, research, and theoretical literature; (2) development of a program model and associated policies and procedures; (3) development of training materials; and (4) pilot testing of prototype programs in selected jurisdictions. The first three phases have been completed, and pilot testing of prototype programs is under way in four states: Virginia, New Jersey, Colorado, and Nevada.

The IAP model derives its underlying principles and specific program elements from a broad model of causation that integrates the three dominant traditions in delinquency theory—strain theory, social learning theory, and social control theory. The underlying principles that are intended to guide IAP program development and operation are (1) preparing youth for progressively increased responsibility and freedom in the community; (2) facilitating youth-community interaction; (3) working with both the offender and targeted community support systems to arrange socialization opportunities; (4) developing new resources and supports when a community does not offer natural opportunities for involvement in conventionally-oriented environments; and (5) monitoring youth and the community regarding their ability to deal with each other productively.

⁸Over the past decade, the length of continuous residential stay for JDs and PINS served in DFY/CFS facilities has consistently *averaged* between 10 and 12 months. However, significant numbers of youth remain in residence for more than 12 months or less than 6 six months.

Adhering to these principles does not necessarily require the same program content and operating procedures in all jurisdictions. However, the principles do imply a generic set of components: (1) a strategy for dealing with organizational factors and the external environment; (2) overarching case management; and (3) management information and program evaluation.

The IAP model does not specify program content. That is, it does not specify the particular behavioral, emotional, cognitive, or social objectives to be pursued for the youths and participants in the youths' social networks, and it does not specify particular curricula, modalities, or other methods to be applied in pursuit of such objectives. To the extent these are acknowledged, they are left to be resolved at the individual level through the case management system. However, while an overarching case management system makes continuity of content possible, it does not necessarily promote or enforce it. Without further guidance regarding program content, individualized case management could yield a confusing and unmanageable array of intervention strategies. Therefore, though the general framework does not seem to require it, any particular realization of the model should be guided by a commonly-agreed-upon set of program concepts, objectives, and intervention strategies that are mutually compatible and consistent across service settings.

The National Council on Crime and Delinquency (NCCD) is applying rigorous experimental designs to evaluate the impact of IAP in the four OJJDP-sponsored demonstration sites. The final results of these evaluations are not yet available. However, preliminary reviews of program progress have found that all four sites have been successful in implementing key components of overarching case management, such as "risk-assessment guidelines," "individualized case plan[ning] that incorporates a family and community perspective," "service delivery . . . that focuses on known risk factors," "high levels of required community supervision and monitoring," "attention to service brokerage and linkage to community resources," and "a graduated response capability in which consequences and positive reinforcement are used" (Altshuler and Armstrong, 1997, p. 82).

The primary source of evidence supporting the IAP model is the large body of theoretical and empirical literature behind the set of general principles that guided development of the model. As noted above, the development of the IAP model was a multi-year effort "including a comprehensive literature review focused on research, theory, and programs; a national mail survey of juvenile corrections officials to identify innovative or promising programs and approaches; telephone interviews with the directors of 36 recommended programs; [and] onsite factfinding at 23 programs" (Altshuler and Armstrong, 1994a, p. 2), all culminating in an integrated theoretical framework and set of guiding principles that

provide the rationale for the model's goals, program elements, and service areas.

CFS is currently pilot testing a version of the IAP model that integrates residential and post-residential rehabilitative services for a shortened residential component and extended aftercare. The pilot effort incorporates a randomized experimental design for samples of substance abusing youth from Monroe, New York, Bronx, and Queens counties served at the Middletown Residential Center.

The Youth Leadership Academy/City Challenge model. DFY has developed a program sequence consisting of approximately five months of residential care at the Sergeant Henry Johnson Youth Leadership Academy (YLA), followed by approximately six months of post-residential day treatment in the City Challenge program. This program sequence is especially noteworthy for the degree of *consistency* of approach among program staff and for the degree of *continuity* of control, services, program content, social environment, and attachment in the transition from YLA to City Challenge.

The YLA is often portrayed as a "juvenile boot camp," but its quasi-military orientation may not be the most fundamental feature of the program. The essential elements of the YLA program include a strong *values* orientation; an emphasis on *leadership, skill development, and academic education*; and a strong linkage to *family* and other potential support systems--all organized in a *graduated sequence*. These elements are not dependent on a military framework. Nevertheless, the quasi-military routine is one means to an end, and it is consciously structured to promote specific outcomes that serve the broader goals of the program (especially in the earliest phases of the YLA component).

The YLA program and all of its components are organized around "four essential self values through which each child evaluates himself and his daily achievements or failures" (*The Magic Within*, YLA/CCh program documentation, no date, no page numbers). All of the YLA staff interviewed for this study were able to articulate "the four values" and explain how they personally integrate reinforcement of the values into their particular program components and interactions with individual youth. The four values are self discipline (personal accountability), affiliation (teamwork, ability to form trusting relationships), self esteem (personal competence), and self worth (valuing self and others enough to consider the consequences of behavior).

The four values are integrated into every aspect of YLA programming, but they are also separately introduced and reinforced through a structured group discussion curriculum called "The Magic Within." The Magic is a cognitively oriented program designed to help youth understand how what they value and what they believe about themselves influence what they perceive to be their options and how they ultimately

choose to behave.⁹ Consistent with this approach, other components of the YLA program are designed to help each youth build a genuine basis for positive beliefs and values. The program places considerable emphasis on skill development, working with family members, and arranging a gradual transition from basic tasks to more difficult and complex challenges, as well as a gradual transition from an institutional environment with a high degree of control to community living with a greater degree of independence.

The YLA's principal method for promoting skill development and the four values is an approach called the Leadership Model. It is based on contemporary military training methods, exemplified more by the role of a platoon leader than the role of a drill sergeant. According to program documentation, "Autocratic, top driven, coercion based leadership does not develop people who can take on responsibility under great stress. Tough minded, demanding, expectation based, empowering leadership does. This is a lesson learned from Vietnam and applied to the volunteer forces who proved their readiness in Desert Storm. . . . [YLA cadets] are led by professionals . . . who benefited from that style of leadership in the 80s and early 90s in the services." Cadet leaders do not demean the youth under their tutelage. Instead, the Leadership Model is based on a set of clearly articulated principles and expectations grounded in a series of positive assumptions about human nature (e.g., people want to improve, people move toward a leader who feeds their sense of self worth, etc). The Leadership Model applies to direct care staff functioning as leaders and role models, it applies to youth in leading themselves and eventually leading others, and it defines a mentoring relationship between staff and youth.

Upon graduation from the YLA, youth return to New York City and are enrolled in the City Challenge day reporting program. Growth in the four values and achievement in specific skill areas need to be monitored, reinforced and extended after release from residence into the community. Accordingly, key components of the YLA program are continued in the City Challenge day program. Youth continue to participate in The Magic Within discussions, which are often led by the YLA Director or the YLA staff psychologist, each of whom visit the the City Challenge site approximately once a week. City Challenge staff adhere to the same Leadership Model as YLA staff, and the City Challenge staff

interviewed for this study were conversant in both the Leadership Model and "the four values."

Among program sequences in DFY, the YLA/City Challenge combination appears to provide a unique degree of continuity of programming, including at least some attention to all of the key components of continuity (control, service delivery, content, social environment, and attachment).

After controlling for available risk factors, the present study found no significant differences between the recidivism rates for YLA graduates and the recidivism rates for limited-secure JDs served in other DFY residential programs. However, the time period covered by this study was not representative of current program design and operations. The requirements of this study dictated that analyses be limited to YLA participants who were *discharged* from DFY custody in the period from 1991 through 1995 (which means they had to have been *released* from residence in the YLA even earlier). YLA implementation did not stabilize until early 1993 (approximately nine months after the YLA began operating), and the City Challenge component was not effectively implemented until very recently. Consequently, approximately half of the YLA graduates included in this study participated in the program during a period when the YLA was experiencing serious start-up problems, and none of the YLA graduates included in this study participated in the present City Challenge program.

A separate study comparing youth placed in the YLA with a group of limited-secure JDs from New York City who were served in other DFY residential programs has recently been completed by the Evaluation Research Group at the University of Maryland (MacKenzie et al., 1997). They studied a sample of 213 youth who *entered* the YLA between its inception and February of 1996, with special attention to those who entered after March 1, 1993. This "late sample" excluded the youth who participated in the YLA during its problematic start-up period and included a small number of youth who participated in a version of City Challenge that was similar to the present program. They found that the late YLA sample had a slightly lower rearrest rate than the overall YLA sample.

CFS has recently doubled the capacity of its YLA/CCH sequence. Based on its congruence with sound principles, our own interview data suggesting strong implementation, and evidence from MacKenzie et al. (1997) suggesting that outcomes may be improving as the program matures, the YLA/City Challenge sequence warrants further study employing a more rigorous, prospective research design.

The Multisystemic Therapy (MST) model. Multisystemic Therapy is an intensive family-centered intervention originally developed as an alternative to out-of-home placement for youth with serious behavior disorders. It is presented here in the belief that it also has potential as an aftercare model. MST

⁹This approach has its roots in a relatively recent development in cognitive psychology known as "control theory," which has no connection whatsoever to the criminological theory called by the same name. In cognitive psychology, control theory rests on the premise that "behavior is the control of perception," where "control" refers to internal feedback mechanisms that adjust behavior to bring perceived reality into line with internal models or goals. It is this orientation that has given rise to "visualization techniques" in sports psychology, as well as more fundamental insights in the psychology of motivation (Powers, 1973; Glasser, 1984).

has been successfully applied with families of abused and neglected youth, adolescent sex offenders, youth presenting psychiatric emergencies (psychoses, suicide threats, etc.), youth with substance abuse problems, juvenile probationers, and “violent and chronic offenders at imminent risk of out-of-home placement,” in both inner city and rural settings (Henggeler, 1997).

MST is grounded in an empirically-supported causal theory about the interrelationships among individual youth, their families, peers, school or employment, neighborhood, and community support systems (Henggeler, Melton, and Smith, 1992). It is a team approach in which trained counselors evaluate a variety of conditions such as academic and vocational performance, peer relationships, and problems interfering with parental control (e.g., drug abuse, psychiatric conditions, financial problems, limited social supports, parental competence), then develop interventions for improving these conditions (Henggeler, 1997, p. 2). MST is a *comprehensive* approach in that it seeks both to improve the psychological functioning of the youths and to improve their social environments in ways that encourage prosocial behavior and discourage antisocial behavior. Interventions across these various “systems” tend to be *integrated* because they are all planned, initiated, and coordinated by a single counseling team, and because they tend to be pursued through a common avenue, the family.

Working with the family directly and assisting the family in relationships with schools and other community support systems, MST counselors seek to enhance the youth’s academic and employment prospects, reduce associations with deviant peers, promote friendships with prosocial peers, and generally increase the effectiveness of parental control.

MST is provided through a treatment team “consisting of one doctoral-level supervisor and three to four master-level therapists” (Henggeler, 1997, p.3). A team works with a given family for approximately 3 to 5 months and serves a total of approximately 50 families per year. Counseling services are provided directly by team members, and there is usually daily contact with both the youth and other family members. Meetings usually take place in the home, school, or other neighborhood locations, team members are available to families 24 hours per day, 7 days per week, and scheduled meetings frequently occur evenings and weekends. Though the period of treatment is brief, it is specifically designed to prepare families themselves to continue fostering a more prosocial environment after the MST intervention itself has concluded.

Of the three models discussed here, MST has been operational the longest and has accumulated the most empirical evidence demonstrating its effectiveness. Several studies have shown MST to have dramatic effects on recidivism (Henggeler, 1997, pp. 3-7). These studies have

typically employed randomized experimental designs to compare MST to “usual services,” which may include ordinary probation, community-based individual therapy (IT), or referral to mental health, educational, or vocational services. Thus, the findings of these studies are relevant to consideration of MST as a potential enhancement to DFY’s standard community care, which is similar in many respects to the control conditions against which MST has typically been evaluated.

In Simpsonville, South Carolina, violent and chronic offenders receiving MST averaged .87 rearrests during a 59 week followup compared to an average of 1.52 rearrests for youth receiving usual services. Although slightly more than 60% of the MST group were rearrested during a longer followup period (about two and one-half years), more than 80% of the comparison group were rearrested during the same period. MST programs in Columbia, Missouri showed even more dramatic effects. Serious juvenile offenders with substance abuse problems were rearrested on substance-related charges at about one-fourth the rate of those receiving individual counseling (4 percent versus 16 percent within 4 years). In a four year followup of chronic juvenile offenders, those who received MST had a much lower rearrest rate (22 percent) than youth who received individual therapy only (72 percent) or youth who refused to participate in either treatment (87 percent). Among a small sample of adolescent sex offenders, those receiving MST were rearrested for sex crimes at about one-eighth the rate of those receiving individual therapy (12.5 percent versus 75 percent within 3 years). In addition, studies in Simpsonville, South Carolina and Memphis, Tennessee, found that MST had positive effects on youths’ emotional maturity and peer relations and that MST increased family warmth and cohesion. Studies of a number of other MST-based programs are currently in progress.

Some earlier studies of various forms of family therapy suggested that those interventions might be less effective with older, chronic delinquents than with younger, aggressive children, and that family interventions sometimes experienced high dropout rates (Mulvey et al., 1993, p. 147). However, the more recent research cited above generally involved chronic delinquents in their mid-teens, and even youth in families who began MST and then *dropped out* had significantly better outcomes, on average, than youth who *completed* individual therapy. In addition, MST is probably not the only family-centered model worth exploring as a potential component of aftercare for chronic delinquents. Another family-centered approach, called functional family therapy, has also been shown to have significant effects on recidivism rates for serious, chronic delinquents following their release from state institutions (Gordon and Arbuthnot, 1990).

CFS plans to begin pilot testing two versions of MST in the fall of 1999. Randomized experimental designs will be employed to evaluate MST as an alternative to incarceration for adjudicated youth placed with the Onondaga County Department of Social Services and as an aftercare model for

youth placed with CFS from Onondaga, Bronx, and Queens counties.

The Life-Course Perspective

To this point, continuity of programming has been discussed in terms of relatively short term interventions--a few months of residential programming integrated with a few months of aftercare, all occurring primarily during the mid-teens. However, there are long term issues to be considered as well. A useful framework for examining these long term issues is a developmental perspective that addresses both continuity and turning points in the entire "life course" from early childhood through adulthood (Laub and Sampson, 1994, 1993b; Laub and Lauritsen, 1993). In particular, the transition to adult roles can produce turning points in the life course. A stable job and a cohesive marriage may motivate an individual with a delinquent history to refrain from criminal activity as an adult. Conversely, lack of such attachments weakens social control and may lead to a late onset of criminal behavior. Laub and Sampson emphasize that it is the strength and quality of these ties that matter, not the nominal role, per se. Thus, for example, a deteriorating marriage could weaken social bonds and increase the likelihood of antisocial behavior.

These potential turning points have obvious relevance to policies regarding programming for adjudicated adolescents. Among youth discharged from DFY in 1996, more than 80 percent were seventeen years old or younger at the time of final discharge (Office of Children and Family Services, 1997). Perhaps even sooner than nondelinquent youth, youth discharged from state custody must face the task of managing a transition to stable adult roles. Effective parents with satisfactory resources would typically continue their support until their children achieve all-important adult attachments. However, given the circumstances to which many adjudicated youth return, it is not clear where they can receive the long term guidance and support necessary to carry them successfully into adulthood. Predischarge interventions aimed at strengthening families might help indirectly, but it may also be desirable to make more direct assistance available for a longer period than is typical under current practice.

Recommendations

The Office of Children and Family Services (formerly DFY) faces a truly difficult task. Most of the youth placed in its care are proven recidivists with multiple personal risk factors facing difficult environmental circumstances. There is little evidence that systems in other states serving similar youth have any greater success in preventing recidivism. After controlling for differences in risk factors, this study also found little evidence of systematic differences in recidivism rates for male JDs¹⁰ between private programs and DFY

¹⁰Male JDs were studied more extensively in this research than other subgroups, because of their numbers and because DFY was responsible for both residential care and aftercare for JDs. The case files retrieved for this

programs or among sites within DFY operating under nominally different program models.

There were a few hopeful signs. There were some indications that programs are setting appropriate objectives for youths and attempting to establish the types of programs previous research has found to be most effective. Our analyses also suggested a possible advantage for program sequences that incorporate a gradual "step-down" from institutional care to community-based residence and day reporting programs prior to ordinary community care and final discharge. A separate study by researchers at the University of Maryland found a slight advantage for graduates of the Youth Leadership Academy and suggested that even more positive results might be obtained in the future, now that its City Challenge (day reporting program) component is operational. The present study also found some counter-intuitive differences that could not be explained by any of the available quantitative or qualitative information and may warrant further investigation.

Consistent with other studies, though, this research generally found alarmingly high recidivism rates, particularly during the first few months following release. Rates were especially high for male JOs and JDs. A synthesis of the quantitative findings from this study, insights gained from interviews with DFY program staff, and theory and research drawn from existing literature suggest that the high recidivism rates may be attributable to three problems: (1) incomplete program implementation due to inconsistency of approach among program staff; (2) lack of continuity across program settings (especially in the transition from residential programs to aftercare); and (3) lack of long-term support systems to carry youth successfully into young adulthood. A growing body of literature suggests that the latter two problems--weak transition to aftercare and lack of long-term support--may be major factors inhibiting the effectiveness of many programs for serious, chronic delinquents .

CFS also faces an organizational issue concerning the relationship between program specialization and the geographic distribution of program sites. This study highlighted the importance of geographical differences. Youth returning to different geographical areas faced substantially different risks of recidivism, even after controlling for personal characteristics and circumstances. In addition, different individual risk factors appeared to be important in different

study were less complete for JOs, and JOs received post-release supervision through the Division of Parole. For females, there were some differences favoring DFY community-based programs and private programs, but these findings involved small numbers of cases. There were also some significant differences between private programs and DFY programs for PINS, but PINS are no longer placed in DFY (now CFS) programs.

geographic areas. These findings suggest that both the intensity and the content of aftercare may need to be tailored to local circumstances. However, geographic specialization and better continuity of programming will be difficult to accomplish simultaneously, given the fact that residential programming currently tends to be centralized at sites that serve youth from throughout the state and are distant from the population centers to which most youth return.

In many ways, CFS appears to already be moving in positive directions. Some of its residential programs have been engaged for several years in gradual development and refinement of the kinds of cognitive-behavioral strategies that most research has shown to be more effective, on average, than strictly behavioral or psychotherapeutic approaches. One such curriculum, Aggression Replacement Training (ART), is now a required program component in all of the agency's residential and community supervision programs, though it appears to have been more enthusiastically embraced at some sites than at others. Continuity of content in the agency's Independent Living Program (ILP) has been improved by establishing an agency-wide course calendar, such that the same modules are being taught at the same time in all service settings. CFS researchers are developing and pilot testing a "Prescriptive Programming" model that incorporates a standardized risk assessment instrument designed to guide release decisions, assist in planning for post-release supervision, and prescribe programmatic interventions keyed to specific reoffense risk factors. CFS has also begun pilot testing an intensive aftercare program following the IAP model developed for OJJDP by Altschuler and Armstrong, and the agency plans to begin a pilot test of the Multisystemic Therapy model in the fall of 1999.

Thus, the specific recommendations offered below are generally consistent with existing efforts and the agency's plans for the future. It is important that these efforts be continued, fully supported (both fiscally and organizationally), and brought to fruition.

The Office of Children and Family Services (CFS) should develop, test, and implement comprehensive program models that provide a graduated transition from institutional care to independent living and insure continuity of programming across service settings.

It may be desirable for CFS to explore a small number of alternative models and consider strategies for some degree of geographic specialization. Whatever models are adopted, they should conform to certain basic principles: they should attend explicitly to how all program components will be integrated within and across service settings; they should be consistent with the guiding principles of the IAP framework; they should be family-centered; and they should be engineered to insure essential continuity of behavioral control, program services, program content, social environment, and social attachments

across all of the transitions from institutional confinement through independent living.

This recommendation relates primarily to programs for youth placed with CFS as juvenile delinquents, since CFS operates both the residential programs and aftercare for those youth. These efforts would not initially be applicable to programming for JOs, who serve the incarcerative portions of their sentences in facilities operated by CFS but, if paroled, are supervised in the community by the Division of Parole. Nevertheless, except for offense history, JOs and JDs have similar risk profiles, similar a priori probabilities of recidivism, and similar actual recidivism rates. Therefore, whatever models ultimately prove effective in integrating residential programming and aftercare for JDs should also be tested jointly by CFS and Parole for their applicability to JOs.

The existing Youth Leadership Academy/City Challenge sequence, the Intensive Aftercare Program being developed by CFS, the Multisystemic Therapy model, and other comprehensive, integrative program models adopted or developed by CFS should be subjected to rigorous, prospective evaluation examining their conceptual integrity, operational viability, fidelity of implementation, and effects on recidivism.

The evaluation studies should examine both process and outcome questions, with particular focus on the integration of program components within and across settings. Such studies should incorporate the strongest experimental or quasi-experimental designs possible within legal and operational constraints. They should examine contemporary operations, circumstances, and cases prospectively, in order to permit the use of measures which can be specifically tailored to the purposes of the research and which can be captured efficiently and consistently as youth progress through the programs. Given the high concentration of rearrests within the first 6 to 12 months following release, prospective studies with strong designs and short term followup can be expected to yield more timely information and stronger conclusions than retrospective studies with long term followup.

The Legislature should amend the Executive Law and the Family Court Act to require that parents or guardians participate in a delinquent's rehabilitation program.

A separate report presents an analysis of parental responsibility laws in New York and other states (Lansing, - 1999). Included among the report's recommendations are suggestions for amending the Family Court Act and the Executive Law to provide the authority and mechanisms to require parental participation in a delinquent's rehabilitation program. The recommended changes in law would complement development of family-oriented aftercare programs.

CFS, the Legislature, and Executive policy makers should evaluate the potential for substantially lengthening the period of aftercare for juvenile delinquents placed with CFS.

Both recent research examining turning points in development across the life course and evidence from the present study that recidivism rates decline with age at discharge suggest it may be important to continue aftercare (or some other source of guidance and support) until families are able to provide effective control, guidance, and support, or the youth are able to establish stable adult roles.

The period of aftercare should be lengthened sufficiently to permit up to several months of intensive family assistance, a period of participation in day reporting or other transitional program, an opportunity to complete the “current” academic semester in day treatment or other alternative educational program, and sufficient time to monitor progress under relatively independent circumstances to allow for relapse and recovery within a system of graduated consequences. Beyond that, it may be useful to consider maintaining some less directive outreach that provides avenues through which young adults might feel comfortable seeking help. The general aim would be to provide for those CFS graduates who lack effective family support a partial substitute for the kind of guidance and support that nondelinquents with effective parents could normally expect throughout their late adolescence and early adulthood.

CFS should examine the impact of its geographic organization on the ability to establish greater continuity of programming and should develop plans for adjusting its geographic organization if needed.

Both continuity of programming and geographic specialization could be accomplished by linking residential centers to particular localities, as has been done with the Youth Leadership Academy/City Challenge combination. However, adopting this strategy systemwide would create other problems that would need to be addressed, including problems with economy of scale and reduced flexibility in the use of scarce bed space. This is a difficult issue that requires thorough study to evaluate both programmatic and logistical ramifications, and no specific recommendations are offered as to how CFS should proceed. However, insuring greater continuity of programming between residential care and aftercare should be a high priority objective, and it should be recognized that the current geographic organization could be a barrier to achieving that objective.

CFS should continue its efforts to develop, validate, and implement practical, standardized risk assessment procedures designed to guide release decisions and assist in planning post-release supervision.

A series of retrospective analyses of data available in one of DFY’s existing data bases suggested that the intake

assessment data already routinely collected would *not* be sufficient to construct a practical risk assessment instrument with adequate power to differentiate among groups with low, medium, and high probabilities of recidivism and guide programmatic decisions. Consequently, CFS researchers have undertaken a prospective study collecting new types of data to test the utility of an CFS-developed instrument based on the widely-cited Youth Level of Service Inventory (YLSI).

Based on the findings of the present study, it is recommended that CFS researchers also evaluate a potential enhancement to the instrument currently being developed. One source of potentially useful information is the array of community-level indicators available for specific localities. Aggregate characteristics of localities were among the strongest predictors of recidivism in this study, especially for violent recidivism. While the geographic area indicators used in the present study are probably only surrogates for the community-level factors that actually affect recidivism directly, it is likely that further research in this area could identify factors that improve differentiation among risk categories and also provide information relevant to the design of aftercare for youth returning to specific localities.

CFS should conduct or commission an organizational study to examine the fidelity of program implementation at all levels and to evaluate training, supervision, and staff development needs as they relate to the fidelity of program implementation.

The agency has recently enhanced its internal training programs. Nevertheless, additional improvements may be necessary. Effective program implementation depends on direct care staff who are thoroughly committed to the program’s underlying principles. A recent audit by the State Commission of Corrections noted implementation problems at secure centers that the auditors attributed to inadequate staff training. Interviews conducted for this study suggested there may be similar problems in other service settings. In particular, it appeared that some staff with long tenure in the agency may be resistant to the evolution toward cognitive-behavioral approaches, or may be frustrated by limited involvement in the program development process and by inadequate training for new responsibilities. Thus, (re)training and (re)orientation of existing staff may need to be emphasized to an even greater extent than training and orientation of new staff. A thorough evaluation of these issues will require a different kind of research than could be incorporated in the present study.

Balanced Intervention

The juvenile justice system has been severely criticized for failing to hold youth accountable for antisocial behavior and criminal activity. First offenses, unless they are very serious, rarely result in meaningful sanctions, and current laws governing record-keeping for juveniles make it difficult to identify repeat offenders, with the result that youth “get too many second chances.” Critics charge that when youth are finally adjudicated and placed in programs intended to control, deter, or rehabilitate them, “it is neither soon enough nor for long enough to have any meaningful effect on their lives” (Kramer, 1994, p. 52). In response to these concerns, the federal government now requires that states have juvenile accountability-based sanctioning (ABS) systems in place in order to be eligible for certain formula grant funds. The Office of Juvenile Justice and Delinquency Prevention (OJJDP) recommends that accountability be established through a system of graduated sanctions that includes the following components:

- Immediate sanctions within the community for first-time, nonviolent offenders.
- Intermediate sanctions within the community for more serious offenders and repeat nonviolent offenders.
- Secure care programs for the most serious and violent offenders, including chronic offenders.
- Aftercare programs that provide high levels of social control and treatment services (OJJDP, 1997, p. 1).

The demands of justice and public protection may compel policy makers to consider lengthening institutional confinement for those chronic and violent offenders whom previous interventions have failed to deter. Whether or not it affects post-discharge recidivism rates, incarceration is considered just punishment, and it serves to protect the public during the period of confinement. There is also some evidence that youth who are at least 18 years old at the time of discharge are less likely to recidivate than younger individuals, possibly a consequence of emancipation from criminogenic family circumstances or simply being of an age that permits establishing stable adult roles.

However, there is little empirical evidence to suggest that length of residential confinement, per se, has any effect on recidivism rates. This does not necessarily imply that longer confinement would be ineffective in all circumstances; if coupled with aftercare designed to build on the institutional experience, a longer time to prepare for aftercare might prove important. What is clear is that, for the DFY programs examined in this study, longer confinement without integrated aftercare had no effect on recidivism rates. There is no point in preparing youth to function in conventional society (no matter how thoroughly they are prepared), if they are then returned to unconventional circumstances.

There is evidence that intensive, family-centered aftercare for serious, chronic delinquents can be effective in reducing recidivism. Effective interventions place considerable emphasis on connecting youth with prosocial environments through approaches involving families, peers, schools, and employers. This heavy emphasis on environmental influences may appear to conflict with the need to focus on individual responsibility and insist that youth be personally accountable for the consequences of their actions. As parents, however, we would not fail to recognize the importance of both personal responsibility and environmental contingencies. While striving to be consistent in holding our children accountable for their actions, we would also provide as much guidance and support as we could in helping our children learn appropriate behavior, work to maintain a prosocial environment at home, place our families in the best communities and best schools we could afford, attempt to arrange for our children to spend as much of their time as possible with positive role models in settings conducive to positive development (e.g., school, church, athletics, clubs), and strive to insulate them as much as possible from negative peer influences. Similarly, there is no reason that social policy should not simultaneously establish personal accountability for antisocial behavior and contrive to establish circumstances that improve the odds of prosocial behavior.

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