

NATIONAL EVALUATION OF
THE NEW PRIDE REPLICATION PROGRAM

FINAL REPORT

VOLUME II: CLIENT IMPACT EVALUATION

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CLIENTS, SERVICES, AND PROGRAM OUTCOMES

INTRODUCTION

The replications of Project New Pride were funded by the Special Emphasis Division at OJJDP for varying lengths of time. The initial grant to all ten sites was two years in duration. Thereafter, individual projects had to meet certain standards of project organization and provide service to an adequate number of clients if they were to qualify for third-year continuation awards. Seven were provided subsidies in the third year. By the fourth year of the Replication Program the number of sites was further reduced by three, and only four sites continued to provide services.

Although funding of the action projects began in March, 1980, the sites needed some time before their full contingent of staff was hired and the New Pride program components could be implemented. Most sites were building their programs from scratch and had to begin their start-up period with the most basic task of securing a facility. Despite such preparatory work, three sites accepted their first clients in June, one in July, four in August, and one in September. The Camden program had already been providing some New Pride types of services prior to the New Pride grant, so its start-up was much simpler. Table 1 shows the number and proportion of clients admitted to each project during each of the three funding years.

While the number of clients officially admitted to the program during the entire four years of the initiative was 1,355, the data presented in this study cover only those admitted in the first 34 months. The availability of adequate time to follow up the official reoffense records of project youth was the major consideration in determining the population targeted by this report.

Between their start-up and January 1, 1983, the ten New Pride programs admitted a total of 1,167 clients. As shown in Table 1, the number of clients admitted during this time span ranged from a low of 47 at Boston to a high of 175 at Camden.

Three New Pride programs – Boston, Georgetown, and Los Angeles –closed prematurely, before the three-year funding period had ended. Both Boston and Georgetown admitted their last clients in July, 1981, and Los Angeles took in no new clients after September, 1981. Kansas City began to wind-down early in 1982, and admitted only four clients after March. They did not stop their program officially, however, until the end of the third-year funding cycle in March, 1983.

Due to early closure and incomplete data entered into the Management Information System's data base, the Boston, Georgetown, and Los Angeles clients are only partially represented in the following client statistics, especially the Georgetown clients. At this site the only relatively complete data are client demographic data. In addition, there is a limited amount of school, employment, and offense data and a few test scores from the diagnostic testing process. No termination, service delivery, or IISP data were entered in Georgetown so we have no information on how long clients stayed in the project, what objectives were set for them, what services they received, or why they were terminated. Data collected from Boston and Los Angeles are far more complete, yet still not as complete as those from the other seven projects.

CLIENT PROFILES

At all ten sites, basic demographic characteristics of each New Pride client were collected at the time of intake. These data give us a picture of the types of clients served by the New Pride programs.

Sex

The overwhelming majority, 92 percent, of the New Pride clients were male, ranging from 100 percent in Chicago to 84.5 percent at San Francisco, where there were 24 female clients (see Table 2). This sex ratio is not unusual since serious juvenile offenders, like adult felons, are predominantly male (BJS:33).

Ethnicity

Twenty-eight percent of all the youth served by New Pride replication projects were white and 72 percent were minority group members. Of the latter, 53 percent were black and 15 percent were Hispanic. Less than one percent of the clients were American Indian or Asian. The "other" category constitutes three percent of the total, and includes some Portuguese and Jamaican youth as well as some clients from other less common ethnic groups (see Table 3).

The ethnic distribution among individual sites varies widely. Only at Kansas City did whites constitute the majority. Five sites had a majority of black clients, with very high majorities at Boston and Georgetown; at the latter project, only one client was not black. All three California sites had more Hispanic than white youth. At Los Angeles, over three-fourths of the clients were Hispanic.

Table 1
Clients By Site By Year

Site	1980		1981		1982		Total Clients
	N	%	N	%	N	%	
Boston	23	48.9	24	51.1	0	-	47
Camden	40	22.9	97	55.4	38	21.7	175
Chicago	13	9.2	71	50.0	58	40.8	142
Fresno	32	24.2	51	38.6	49	37.1	132
Georgetown	14	18.9	60	81.1	0	-	74
Kansas City	19	16.7	77	67.5	18	15.8	114
Los' Angeles	16	27.6	42	72.4	0	-	58
Pensacola	41	27.2	78	51.7	32	21.2	151
Providence	19	16.0	57	47.9	43	36.1	119
San Francisco	51	32.9	52	33.6	52	33.6	155
Total	268	23.0%	609	52.2%	290	24.9%	1,167

Table 2
Clients By Site By Sex

Site	Male		Female		Total Clients
	N	%	N	%	
Boston	44	93.6	3	6.4	47
Camden	162	92.6	13	7.4	175
Chicago	142	100.0	0	-	142
Fresno	120	90.9	12	9.1	132
Georgetown	73	98.6	1	1.4	74
Kansas City	108	94.7	6	5.3	114
Los Angeles	54	93.1	4	6.9	58
Pensacola	137	90.7	14	9.3	151
Providence	102	85.7	17	14.3	119
San Francisco	131	84.5	24	15.5	155
Total	1,073	91.9%	94	8.1%	1,167

Table 3
Clients by Site by Ethnicity

Site	Black		White		Hispanic		AmerIndian		Asian		Other		Total Clients
	N	%	N	%	N	%	N	%	N	%	N	%	
Boston	40	85.1	3	6.4	2	4.3	0	—	0	—	2	4.3	47
Camden	79	45.1	75	42.9	21	12.0	0	—	0	—	0	—	175
Chicago	88	62.0	34	23.9	15	10.6	1	0.7	1	0.7	3	2.1	142
Fresno	54	40.9	25	18.9	51	38.6	2	1.5	0	—	0	—	132
Georgetown	73	98.6	0	—	0	—	0	—	0	—	1	1.4	74
Kansas City	48	42.1	59	51.8	7	6.1	0	—	0	—	0	—	114
Los Angeles	9	15.5	4	6.9	44	75.9	0	—	1	1.7	0	—	58
Pensacola	90	59.6	61	40.4	0	—	0	—	0	—	0	—	151
Providence	44	37.0	57	47.9	7	5.9	1	0.8	0	—	10	8.4	119
San Francisco	98	63.2	9	5.8	27	17.4	3	1.9	2	1.3	16	10.3	155
Total	623	53.4%	327	28.0%	174	14.9%	7	0.6%	4	0.3%	32	2.7%	1,167

Age

New Pride's eligibility criteria set age guidelines for clients of between 14 and 17 years old and 95.3 percent of all clients were within the appropriate age range for the program's target population. The replication projects also accepted a few youth who were 12, 13, or 18; yet these comprise only 4.7 percent of the total.

Sixteen was the modal age at intake, and included one-third of all clients. The average age for all clients at the time of admission into New Pride was 16.3. The average age at intake was quite similar at the individual sites, ranging from a low of 15.9 at Chicago to a high of 16.6 at Los Angeles (see Table 4).

Grade-Level

Upon admission to New Pride, the largest proportion of youth with recorded grade-levels, 34.3 percent, were in the ninth grade (see Table 5). The average grade-level at the individual sites ranged from a low of 8.4 at Georgetown to a high of 9.8 at Los Angeles (see Table 6). This range of close to one and one-half grade-levels at the different sites is substantially greater than that of client ages, where the difference between the two extremes is only 0.7 years. Interestingly, in many instances the relative average grade-level at a specific site does not correspond to the relative average age. For example, Georgetown clients, who had the lowest average grade-level, were not the youngest group but rank fourth oldest among the ten programs. Providence clients had the second lowest average grade-level at intake but were the second oldest group.

The correlation of age at intake with grade-level at intake shows this discrepancy across sites. Typically, for every year of increase in age, students are supposed to achieve a year in grade-level. Thus, ideally one would expect age and grade-level in school to be almost perfectly correlated. For every increase in age one would expect a one-year increase in grade. If students fail

Table 4
Clients by Age at Intake¹

Site	12		13		14		15		16		17		18		Total Number of Clients	Average Age
	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
Boston	0	-	1	2.1	5	10.6	13	27.7	19	40.4	9	19.1	0	-	47	16.2
Camden	0	-	5	2.9	7	4.0	41	23.4	54	30.9	61	34.9	7	4.0	175	16.5
Chicago	0	-	3	2.1	22	15.5	48	33.8	54	38.0	15	10.6	0	-	142	15.9
Fresno	0	-	4	3.0	24	18.2	32	24.2	43	32.6	29	22.0	0	-	132	16.0
Georgetown	0	-	1	1.4	7	9.5	20	27.0	25	33.8	20	27.0	1	1.4	74	16.3
Kansas City	1	0.9 ²	2	1.8	6	5.3	28	24.8	33	29.2	34	30.1	9	8.0	113 ²	16.5
Los Angeles	0	-	0	-	3	5.2	14	24.1	18	31.0	21	36.2	2	3.4	58	16.6
Pensacola	0	-	9	6.0	20	13.2	36	23.8	46	30.5	39	25.8	1	0.7	151	16.1
Providence	0	-	2	1.7	6	5.0	26	21.8	38	31.9	44	37.0	3	2.5	119	16.6
San Francisco	0	-	2	1.3	18	11.6	42	27.1	49	31.6	42	27.1	2	1.3	155	16.2
Total	1	0.1%	29	2.5%	118	10.1%	300	25.7%	379	32.5%	314	26.9%	25	2.1%	1,166 ²	16.3 years

1 Age is age at time of admission into New Pride and is calculated in the number of weeks between birth-date and case-action-date divided by 52.179.

2 One Kansas City client had a missing birth-date.

Table 5
Clients by Grade-Level at Intake

Grade Level	Clients	Percent
2	1	0.1
4	2	0.2
6	18	1.9
7	95	10.2
8	173	18.5
9	321	34.3
10	237	25.3
11	67	7.2
12	15	1.6
Ungraded	6	0.6
Total	935 ¹	100.0%

¹ Missing Data = 232.

Table 6
Average Grade Level at Intake by Site

Site	Average Grade Level	Clients
Boston	8.5	44
Camden	8.6	109
Chicago	8.8	130
Fresno	9.3	129
Georgetown	8.4	64
Kansas City	9.6	74
Los Angeles	9.8	34
Pensacola	8.9	133
Providence	8.5	76
San Francisco	9.5	136
Total	9.0	929 ¹

1 Six clients from ungraded school programs are not included here, and these data are missing for 232 clients.

to achieve as expected here, the correlation would be less than perfect. For New Pride clients the relationship between age and grade-level is far from perfect¹. It is significantly related to grade-level, but not to the extent that it should be. Obviously, many New Pride clients have not progressed as expected through school. In fact, on the average, for every year of increase in age, New Pride clients progress only .612 years in grade level, far below that typically expected.

Social Class

Tables 7 and 8 show the respective educational levels of clients' mothers and fathers crosstabulated by ethnicity. While this information is missing or inappropriate (the parent may have died) for 10.6 percent of the mothers, 34.3 percent, or over one-third of the fathers fall into this category. The proportion is highest for black fathers, where it is 41.8 percent.

Of parents for whom there is information on this variable, a majority of both parents – 58 percent of the mothers and 59 percent of the fathers – did not complete a high school education. Census statistics report that in 1979, 32 percent of all adults in the country had not completed high school.² New Pride parents, then, are substantially less educated than the national population.

As well as being undereducated, the parents of New Pride clients are underemployed. Of those for whom employment data are appropriate, just 52 percent of the fathers or male heads of household were employed full-time (see Tables 9 and 10). Forty-three percent were unemployed entirely. Mothers were employed full-time in 34 percent of the cases and unemployed in

1 $r = .5183, N = 929, t = 18.45, p < .0001$

2 All comparative figures are derived from "USA Statistics in Brief 1980," U.S. Department of Commerce, Bureau of the Census.

Table 7

Mothers' Education by Ethnicity

Ethnicity	Eighth Grade or Less		Some High School		High School Graduate		Post-High School Education		Missing/ Inappropriate
	N	%	N	%	N	%	N	%	N
Black	65	15.7	151	36.6	106	25.7	91	22.0	(42)
White	40	15.0	112	42.1	78	29.3	36	13.5	(28)
Hispanic	47	36.2	55	42.3	21	16.2	7	5.4	(23)
Other ¹	9	31.0	8	27.6	5	17.2	7	24.1	(6)
Total	161	19.2%	326	38.9%	210	25.1%	141	16.8%	(99)

1 In this and Tables 8, 9, 10, and 11, "other" includes American-Indian (6), Asian (3), and other less common ethnic groups (26).

Table 8

Fathers' Education by Ethnicity

Ethnicity	Eighth Grade or Less		Some High School		High School Graduate		Post-High School Education		Missing/ Inappropriate
	N	%	N	%	N	%	N	%	N
Black	61	23.0	101	38.1	61	23.0	42	15.8	(190)
White	40	17.7	71	31.4	66	29.2	49	21.7	(68)
Hispanic	39	37.5	41	39.4	15	14.4	9	8.7	(49)
Other	8	38.1	5	23.8	7	33.3	1	4.8	(14)
Total	148	24.0%	218	35.4%	149	24.2%	101	16.4%	(321)

Table 9

Mothers' Employment Status by Ethnicity

Ethnicity	Part-Time		Full-Time		Unemployed		Missing/ Inappropriate
	N	%	N	%	N	%	N
Black	53	12.0	144	32.7	243	55.2	(15)
White	33	11.8	102	36.4	145	51.8	(14)
Hispanic	11	7.3	39	26.0	100	66.7	(3)
Other	2	5.9	19	55.9	13	38.2	(1)
Total	99	11.0%	304	33.6%	501	55.4%	(33)

Table 10
Fathers' Employment Status by Ethnicity

Ethnicity	<u>Part-Time</u>		<u>Full-Time</u>		<u>Unemployed</u>		<u>Missing/ Inappropriate</u>
	N	%	N	%	N	%	N
Black	18	5.9	134	43.6	155	50.5	(148)
White	10	4.1	154	63.6	78	32.2	(52)
Hispanic	3	2.5	57	47.5	60	50.0	(33)
Other	1	4.0	16	64.0	8	32.0	(10)
Total	32	4.6%	361	52.0%	301	43.4%	(243)

55 percent. Based on the total group for whom we have data (1,598 mothers and fathers), the overall unemployment rate for parents of New Pride youth is 50 percent. Another eight percent were employed only part-time.

When these unemployment figures are broken down by ethnicity, racial differences appear. Hispanic and black parents have the highest rates of unemployment, 59 and 53 percent respectively. Hispanic mothers have the highest proportion of unemployment; in this group, two-thirds of those for whom we have data were unemployed.

Considering their low educational level and employment rates, it is not surprising that a high proportion of the New Pride clients come from families at or below the poverty level. Of those families for whom we have data, 64 percent had a yearly income of less than \$10,000. Twenty-two percent of these families had an income of less than \$5,000. Given that most of these families had five persons in their household (the mean number of persons per family was 4.9), it is clear that most clients were living in poverty.

As with the previous figures, there are strong ethnic differences in family income level. Black families have the highest proportion of incomes below \$10,000 – 76 percent. Sixty-nine percent of the Hispanic families fall into this category. Only 43 percent of the white families have incomes of less than \$10,000.

Forty-four percent of the families of New Pride clients received public assistance (AFDC or welfare). While only 25 percent of the white families received this aid, the figures rise to 54 percent for black families and 56 percent for Hispanic families.

Close to half of the families of clients rent private housing, while 38 percent own their homes and 14 percent live in public housing (see Table 11). Nationally in 1978, 65 percent of all occupied housing units were owned and 35 percent were rented. If we consider public housing as rental units, the national figures are nearly reversed for New Pride families.

Table 11
Family Residence by Ethnicity

Ethnicity	Own Home		Private Rental		Public Housing		Total
	N	%	N	%	N	%	
Black	135	30.4	214	48.2	95	21.4	444
White	159	54.8	116	40.0	15	5.2	290
Hispanic	44	28.9	92	60.5	16	10.5	152
Other	14	40.0	17	48.6	4	11.4	35
Total	352	38.2%	439	47.7%	130	14.1%	921

Again, ethnic differences in these statistics show that far more white families (55 percent) own their homes than do blacks (30 percent) or Hispanics (29 percent) and fewer white families live in public housing than do families from the other racial groups.

Family History

The most common living arrangement for New Pride youth was in a single-parent family with their mother. Forty-eight percent were in this category at the time they entered the program. Only a small proportion (4 percent) were living with their father as the single parent. This brings the total who were living in single-parent homes to 51 percent (599 youths) of all clients.

Twenty-four percent, or less than half the number of those who were living with a single parent, were living with both parents. An additional 11 percent were living with one natural parent and either a step-parent or a "significant other" to that parent (see Table 12).

There was a large amount of residential mobility among New Pride youth. Of those clients who completed a survey at intake, 13 percent were not living with the same people they had been living with two months before. This survey asked clients about the length of time they had been living at their present residence. Twenty-eight percent responded that they had lived there for one year or less. Forty-two percent said they remembered their family having moved four or more times.

For most of the young people in the New Pride program, the relationship with their mother is their primary tie. Forty-five percent of the clients were raised by their mother alone until they were 12 years old. Another eight percent were raised by their mother and stepfather or other adult. Only 37 percent of the youth were raised by both parents up to the age of 12.

Table 12
Clients By Living Arrangement

Living Arrangement	Clients	Percent
Mother and Father	275	23.6%
Mother Only	555	47.6
Father Only	44	3.8
Mother and Stepfather	84	7.2
Father and Stepmother	17	1.5
Mother and Other	29	2.5
Father and Other	4	0.3
Relatives	84	7.2
Friends	3	0.3
Independent	5	0.4
Foster Home	15	1.3
Group Home	15	1.3
Other	16	1.4
Missing Data	21	1.8

Seventy-seven percent of all clients who responded said that their earlier relationship with their mother or female head of household had been a good one. Less than five percent said it had been a bad relationship. When asked about their present relationship with their mother or female head of household, nearly as many – 75 percent –reported that it was still good. The proportion of clients who indicated that it was a bad relationship remained the same. That this relationship continued to be positive despite the throes of adolescence and the additional stresses of delinquent behavior attests to its importance in the lives of these young people.

The relationships New Pride clients have with their fathers are not as close or as positive, however. Less than 39 percent of the fathers took an active role in raising their children up to the age of 12. When asked how they got along with their father (or male head of household) when they were growing up, 49 percent of those who replied said the relationship had been good, 10 percent said it had been bad, and 20 percent indicated there had been no male head of household. When asked how that relationship was at present, 43 percent said it was good, 12 percent that it was bad, and 26 percent that there was no male head of household.

Since the mother plays the primary parental role for most New Pride clients, it is not surprising that she (or the female head of household) is the one who most often disciplines the children. This was the case for 61 percent of the youth who responded to this question. Only 20 percent said that their father (or male adult) disciplined them more frequently.

These families are also marked by some degree of violence and substance abuse. Close to a third of the clients who responded said that they were disciplined physically by members of their family. There appears to be a high incidence of drug or alcohol abuse in the families of clients, for 31 percent of the clients reported that a member of their family had a drug or alcohol problem.

Work History

According to a survey administered at intake, 86 percent of all clients who entered the program were unemployed at the time they were admitted into New Pride. This survey also indicates that 68 percent of the clients had not had a job within the last six months that lasted for at least two weeks. Table 13 shows these employment figures for clients by their age at intake. It is clear that more older youth were employed, yet the differences among the age groups are not as great as one might expect. While 91 percent of the 12, 13, and 14 year olds were unemployed at intake, 79 percent of the 17 and 18 year olds were unemployed. The differences among the age groups are somewhat greater when looking at the six-month period preceding intake. Eighty percent of the youngest group had no job which lasted longer than two weeks during this period, while 61 percent of the oldest group were unemployed during this time.

Presenting Offense at Intake

Chief among the New Pride eligibility criteria were the following requirements (as revised in February, 1981):

1. Clients must have "documented judicial determination of involvement (guilt) in two previous criminal events regardless of whether there has been an entry of adjudication or a finding of guilt, and
2. are under court supervision subsequent to an adjudication or finding of delinquency for a serious misdemeanor or felony which could result in a commitment."¹

To meet these criteria each youth had to have a finding of delinquency or adjudication on three offenses: two priors and a presenting offense.

¹ Project New Pride: Replication, Request for Proposals; July, 1979, page 2.

Table 13

Employment History at Intake by Age

Employment Status	12 to 14 Years Old		15 and 16 Years Old		17 and 18 Years Old		Total	
	N	%	N	%	N	%	N	%
Present Status								
No Job	96	90.6	447	88.3	191	79.3	734	86.0
Part-Time Job	10	9.4	44	8.7	33	13.7	87	10.2
Full-Time Job	-	-	15	3.0	17	7.1	32	3.8
Within Last Six Months								
No Job	75	79.8	298	68.3	119	61.3	492	68.0
Part-Time Job	19	20.2	109	25.0	47	24.2	175	24.2
Full-Time Job	-	-	29	6.7	28	14.4	57	7.9

The priors and presenting offenses were to be "serious misdemeanors and/or felonies (preferably robbery, burglary, or assault)."¹ Table 14 shows the number and percent of clients by site who have burglary, assault and/or battery, or robbery as their presenting offenses. Overall, 29 percent of all New Pride clients had a charge of or directly related to burglary as their presenting offense, 11.7 percent had an assault and/or battery charge, and 8.3 percent had a robbery charge. For all sites, 48.9 percent, or close to half of all presenting offenses were of these targeted types.

Table 15 gives a breakdown by site of clients whose presenting offense was either larceny or unauthorized use or theft of a motor vehicle. These figures show that larceny charges were a common type of presenting offense; close to a quarter of all clients (24.3 percent) had a charge of larceny as their presenting offense. Charges of unauthorized use of a motor vehicle or motor vehicle theft accounted for an additional 8.5 percent of all presenting offenses.

A substantial number of youth, 13 percent of all clients, had a misdemeanor, status offense, or probation violation as their presenting offense (Table 16). The proportion of clients with this type of offense ranged from a low of 5.4 percent at Georgetown to a high of 22 percent at Fresno. Generally, these are less serious offenses than the other types. There is an exception, however, in that in some jurisdictions, clients on probation who commit additional offenses, some quite serious, are not charged with these specific new offenses but with violating their probation. This was the judicial practice in Fresno, and accounts for the high proportion of this type of offense at that site.

Altogether, the types of offenses covered in Tables 14, 15, and 16 account for 94.7 percent of all the presenting offenses of New Pride clients. Thus, very few presenting offenses fall outside of the categories presented in these tables.

Juvenile Court Status at Intake

In surveying the replication sites to determine how youth are referred to the program and how they have been processed by the court, we found, as

Table 14
Clients with Burglary, Assault and/or Battery, or Robbery
as Their Presenting Offense

Site	Burglary (+ Breaking and Entering, Burglar's Tools)		Assault and/or Battery		Robbery		Total	
	N	% ¹	N	% ¹	N	% ¹	N	% ¹
Boston	4	8.5	3	6.4	9	19.1	16	34.0
Camden	41	23.4	35	20.0	18	10.3	94	53.7
Chicago	61	43.0	10	7.0	22	15.5	93	65.5
Fresno	33	25.0	18	13.6	0	—	51	38.6
Georgetown	22	29.7	10	13.5	12	16.2	44	59.5
Kansas City	31	27.2	11	9.6	5	4.4	47	41.2
Los Angeles	12	20.7	8	13.8	7	12.1	27	46.6
Pensacola	65	43.0	16	10.6	6	4.0	87	57.6
Providence	33	27.7	8	6.7	9	7.6	50	42.0
San Francisco	36	23.2	17	11.0	9	5.8	62	40.0
Total	338	29.0%	136	11.7%	97	8.3%	571	48.9%

¹ Percent of total clients at the site or in the entire replication.

Table 15

**Clients with Larceny or Unauthorized Use of Motor Vehicles and
Motor Vehicle Theft as Their Presenting Offense**

Site	Larceny		UUMV and Motor Vehicle Theft	
	N	% ¹	N	% ¹
Boston	14	30.3	5	10.6
Camden	42	24.0	12	6.9
Chicago	28	19.7	4	2.8
Fresno	33	25.0	15	11.4
Georgetown	13	17.6	10	13.5
Kansas City	40	35.1	10	8.8
Los Angeles	9	15.5	6	10.3
Pensacola	43	28.5	5	3.3
Providence	28	23.5	15	12.6
San Francisco	33	21.3	17	11.0
Total	283	24.3%	99	8.5%

¹ Percent of total clients per site or in the entire replication.

Table 16

Clients with Misdemeanor, Status, and Probation
Violation Presenting Offenses

Site	Clients	% ¹
Boston	8	17.0
Camden	18	10.3
Chicago	11	7.7
Fresno	29	22.0
Georgetown	4	5.4
Kansas City	14	12.3
Los Angeles	8	13.8
Pensacola	12	7.9
Providence	18	15.1
San Francisco	30	19.4
Total	152	13.0%

¹ Percent of total clients per site or in the entire replication.

expected, a wide variety of judicial procedures in operation. Table 17 shows the different types of court status of the New Pride clients at intake. As expected for a program which was designed to be an alternative to incarceration, the large majority of clients – 83.7 percent – were on formal probation at the time of intake. Another 5.1 percent were on informal probation at that time, a status usually indicative of less serious delinquents, and used more frequently in larger jurisdictions where overburdened judicial systems reserve formal adjudication for only the most serious cases. A small proportion of clients (2.2 percent) were on parole when admitted into New Pride, indicating they had been committed to a state correctional institution. Not all of these clients actually spent time in such an institution, however, for in some jurisdictions commitment may be suspended and the youth referred to an alternative program. These simple categories can be somewhat misleading, however. In one jurisdiction, for example, youth may have been incarcerated in a state institution, recalled from that institution, returned to probation status, and referred to New Pride. This was the case for some clients in the Camden program. Nevertheless, the data in Table 17 indicate that most youth did enter New Pride via probation, the expected pathway.

Information was also collected on the legal status of the presenting offense at intake (see Table 18). As legal terminology and procedures are often unique to a particular jurisdiction, categories listed on this table are "generic" and at each site the actual status may vary slightly and have a different name. The first category, deferred prosecution, is usually a District Attorney decision to delay prosecution in a case where the petition has been filed and the sentence is rather serious, but the youth is given one "last chance." This was not a common type, and included only six clients. The deferred or continued petition is another form of "one more chance" for juveniles, and tends to be used in less serious cases than the former type. The petition is neither sustained nor dismissed but remains latent, to be sustained if the youth does not abide by behavioral standards set by the judge or dismissed if he/she does. Two and three-tenths percent of the clients had this status. The sustained petition, where the judge finds the youth delinquent as charged, was the most frequent and included 78.5 percent of the intakes. In 13.1 percent of the cases, the youth had a

Table 17
Clients by Court Status at Intake

Site	Informal Probation		Formal Probation		Parole		Missing	
	N	%	N	%	N	%	N	%
Boston	0	—	44	93.6	2	4.3	1	2.1
Camden	3	1.7	151	86.3	5	2.9	16	9.1
Chicago	21	14.8	116	81.7	1	0.7	4	2.8
Fresno	0	—	132	100.0	0	—	0	—
Georgetown	20	27.0	33	44.6	9	12.2	12	16.2
Kansas City	6	5.3	62	54.4	3	2.6	43	37.7
Los Angeles	1	1.7	29	50.0	2	3.4	26	44.8
Pensacola	2	1.3	147	97.4	1	0.7	1	0.7
Providence	4	3.4	111	93.3	3	2.5	1	0.8
San Francisco	3	1.9	152	98.1	0	—	0	—
Total	60	5.1%	977	83.7%	26	2.2%	104	8.9%

Table 18

Clients by Legal Status of Presenting Offense at Intake

Site	Deferred Prosecution ¹		Deferred/Continued Petition		Sustained Petition		Pending Petition		Missing	
	N	%	N	%	N	%	N	%	N	%
Boston	0	-	7	14.9	37	78.7	2	4.3	1	2.1
Camden	1	0.6	4	2.3	124	70.9	22	12.6	24	13.7
Chicago	0	-	5	3.5	100	70.4	31	21.8	6	4.2
Fresno	0	-	0	-	132	100.0	0	-	0	-
Georgetown	0	-	1	1.4	58	78.4	9	12.2	6	8.1
Kansas City	3	2.6	3	2.6	83	72.8	21	18.4	4	3.5
Los Angeles	0	-	2	3.4	29	50.0	8	13.8	19	32.8
Pensacola	1	0.7	5	3.3	126	83.4	18	11.9	1	0.7
Providence	0	-	0	-	100	84.0	17	14.3	2	1.7
San Francisco	1	0.6	0	-	127	81.9	25	16.1	2	1.3
Total	6	0.5%	27	2.3%	916	78.5%	153	13.1%	65	5.6%

¹ Usually a District Attorney decision.

petition pending and was awaiting a court action on the presenting offense. It is interesting to note that, although youth were technically ineligible for New Pride until there was a "finding of guilt" in their presenting offense, the category of "pending petition" was the second largest type of court status at intake. At one program, as many as 21.8 percent of the clients fell into this category.

Detention and Out-of-Home Placement Prior to New Pride

Of the 1,075 clients for whom we have data on detention prior to intake as a consequence of the presenting offense, 403 or 37.5 percent were detained (see Table 19). The proportion of youth who were detained varies widely by site and indicates important differences in how juveniles are processed in the replication sites' jurisdictions. In Camden only 9.1 percent were detained prior to intake into New Pride, but 93.2 percent of Fresno's clients were detained prior to intake.

Across sites, the average length of detention prior to intake was 30 days. The shortest average detention was 12 days in Pensacola and the longest was 53 days, over a month and a half, in Providence. Overall, 19 percent of all clients detained were detained longer than 40 days, seven percent longer than 60 days, and 3.5 percent longer than 90 days.

The experience of detention was not a new one for these clients since they had a substantial record of out-of-home placements and previous detentions as indicated on Table 20. Thirty-eight percent of all clients had been placed out of their own homes by the courts or other social welfare agencies at least once. Sixteen percent had experienced more than one such placement. The vast majority, 77 percent, had been in detention. Fifty-four percent had been in detention two or more times.

Table 20 breaks down the out-of-home placement and detention variables by ethnicity. A smaller proportion of black clients than of the other ethnic groups were placed out of their home and for fewer times, on the average.

Table 19
Clients Detained Prior to Intake and
Length of Detention

Site ¹	Number of Clients Detained	Percent of Clients Detained	Average Days Detained ²
Camden	16	9.1	27.0
Chicago	53	37.3	22.6
Fresno	123	93.2	31.1
Georgetown	41	55.4	46.5
Kansas City	36	31.6	21.9
Los Angeles	8	13.8	22.9
Pensacola	41	27.2	12.3
Providence	29	24.4	53.2
San Francisco	56	36.1	33.2
Total	403	37.5%	30.4

1 No data were collected on this variable for any Boston client.

2 Averages are only for those clients detained prior to intake.

Table 20
Out-of-Home Placements and Detentions
by Ethnicity

Ethnicity	Clients Placed Out-of-Home		Average N of Placements ¹	Clients Detained		Average N of Detentions ¹
	N	%		N	%	
Black	156	35.8	1.7	342	78.4	3.0
White	107	37.5	2.0	196	68.8	2.7
Hispanic	65	45.5	2.1	134	91.8	4.0
Other	16	47.1	2.6	23	69.7	3.2
Total	344	38.3%	1.9	695	77.2% ²	3.1

¹ These averages are calculated on only those clients who were placed out of their homes or detained.

² 900 clients had data on this variable. Of these, 205, or 22.8 percent, were not detained.

The ethnic group with the highest proportion of clients placed out of their homes were those listed as "other" and Hispanics. Also, they were placed out of their homes more frequently, on the average, than were the other ethnic groups. As for detentions, more Hispanics were detained (92 percent) than any other group, and fewer whites (69 percent). Those Hispanics who were detained had more detentions (an average of four per client) than the others. This high rate of detentions for Hispanics is due to site differences. Most Hispanics were served by the three California sites, where clients were most frequently detained.

Total Offenses

Once a youth was determined to be eligible and he/she was admitted into New Pride, the evaluator was to conduct a thorough search for all court records on that youth, documenting his/her entire history of involvement with the juvenile justice system. A juvenile justice report form was to be completed for every "criminal event" that was found for that client. A criminal event is one or more criminal acts committed by the youth at the same time and place. Although criminal events usually coincide with arrests, this need not be the case for it is not uncommon for several criminal events to be compiled into one arrest and one court case. The purpose of using the criminal event concept was to document the criminal behavior of the subject rather than the charging behavior of the police and juvenile court.

The most serious charge of each criminal event was recorded in detail on the juvenile justice report form. At the bottom of that form was a section called "additional charges." When a criminal event involved more than one charge, the less serious charges were to be documented here with a few basic descriptors (number of events, modifier, counts sustained).

Summary data on all of the clients' known offenses were contained in an "offense file." This file contains 13,376 records of offenses committed by 1,099 clients. After being cleaned of redundant records and records missing crucial variables, the file contained 11,587 records for 1,093 clients (see Table 21).

Table 21
All Offenses and Sustained Offenses of Clients
Throughout Their Delinquent Careers

Site	Clients with Offenses		Average Number of Offenses	Geometric Mean	Clients with Sustained Offenses		Average Number of Sustained Offenses	Geometric Mean
	N	% ¹			N	% ¹		
Boston	46	97.9	7.6	6.4	43	91.5	5.1	4.4
Camden	173	98.9	16.6	13.8	173	98.9	9.9	8.4
Chicago	142	100.0	12.6	10.2	142	100.0	5.5	4.8
Fresno	132	100.0	13.3	11.9	132	100.0	6.8	6.4
Georgetown	27	36.5	3.0	2.5	26	35.1	2.7	2.2
Kansas City	113	99.1	7.3	6.0	113	99.1	6.3	5.3
Los Angeles	41	70.7	6.7	6.0	41	70.7	3.4	3.2
Pensacola	150	99.3	15.1	10.1	149	98.7	13.5	8.5
Providence	118	99.2	30.1	19.1	118	99.2	16.1	9.6
San Francisco	151	97.4	18.0	8.8	150	96.8	7.7	6.0
Total	1,093	93.7%	15.1	10.0	1,087	93.7%	8.8	6.4

¹ These percentages represent the percent of clients at a site or in the entire replication.

These data, we believe, are very complete for seven of the ten sites. The three sites which closed prematurely, Boston, Georgetown, and Los Angeles, have incomplete offense data. The Boston evaluator did collect complete offense histories on clients and kept that file up-to-date until the program ended in 1981. No further data were entered after that time. Los Angeles and Georgetown data are incomplete even in regard to client histories. The Georgetown file has data on only 36.5 percent of its clients, and the Los Angeles file on 70.7 percent. For all ten sites, offense data were recorded and are analyzable for 93.7 percent of the clients. Excluding the three sites which terminated early, data were recorded and are analyzable for 99 percent of the clients at the remaining seven sites.

As shown on Table 21, New Pride clients have an average of 15.1 offenses per client, a remarkably high average for the 1,093 clients for whom we have offense data. As could be expected, the average number of offenses for the three sites which closed early is relatively low. Of the other seven sites, Kansas City clients had the lowest average number of offenses: 7.3 per client. Providence clients had the most offenses, an extraordinarily high average of 30.1. San Francisco clients had the second highest average, 18 offenses per client, followed by Camden with an average of 16.6. One reason these averages are so extreme is that the distribution of number of offenses is positively skewed at each site; there are many subjects with relatively few offenses and a few subjects with a great number of offenses. The medians or geometric means¹ of these distributions better represent the data. The geometric means are also reported in Table 21. Note that the extremes of the distributions are somewhat modified. The geometric mean for Kansas City is 6.0 offenses per client, and for providence is 19.1 offenders per client.

Sixty-two percent of all offenses were sustained, and the overall average number of sustained offenses per client is 8.8 with a geometric mean of 6.4 offenses per client. Interestingly, Kansas City clients had the highest proportion of total offenses sustained, 87.5 percent. Chicago had the lowest proportion of

¹ The geometric mean may be considered as an approximation of the median of each distribution examined. Technically, the geometric mean is equal to the nth root of the nth product of the datapoints across subjects.

Table 22

All Prior Offenses¹ and Sustained Prior Offenses for Clients by Site

Site	Clients with Offenses		Average Number of Offenses	Geometric Mean	Clients with Sustained Offenses		Average Number of Sustained Offenses	Geometric Mean
	N	% ²			N	% ²		
Boston	46	97.9	6.6	5.5	43	91.5	4.5	4.0
Camden	173	98.9	11.8	9.6	173	98.9	7.3	6.1
Chicago	142	100.0	9.8	7.7	142	100.0	4.1	3.7
Fresno	132	100.0	9.7	8.7	132	100.0	5.0	4.6
Georgetown	27	36.5	2.9	2.4	26	35.1	2.7	2.2
Kansas City	113	99.1	5.6	4.6	113	99.1	5.1	4.2
Los Angeles	41	70.7	6.6	5.7	41	70.7	3.4	3.1
Pensacola	148	98.0	13.4	8.3	146	96.7	12.1	7.4
Providence	117	98.3	20.1	11.2	117	98.3	11.0	6.2
San Francisco	151	97.4	13.7	5.6	150	96.8	4.9	3.9
Total	1,090	93.4%	11.4	7.3	1,083	92.8%	6.7	4.8

¹ Prior offenses are all offenses recorded prior to clients' admission to New Pride.

² These figures represent the percent of clients at a site or in the entire replication.

offenses sustained, 47.6 percent, so while Chicago clients had a geometric mean of 10.2 offenses, they had a geometric mean of only 4.8 sustained offenses. Providence clients had the highest geometric mean of sustained offenses, 9.6, followed by Pensacola clients with a geometric mean of 8.5 sustained offenses.

Offenses Prior to New Pride

By analyzing only offenses committed prior to clients' admittance into New Pride, we can isolate a picture of their behavior prior to the program. Table 22 presents these data. The data base contains offense histories for 1,090 clients, 93.4 percent of all clients. Considering only the eight sites with complete data on prior offenses (excluding Georgetown and Los Angeles), 98.7 percent of all clients are represented. The average number of prior offenses is staggering; these New Pride clients had an average of 11.4 offenses at the time of intake with a geometric mean of 7.3 offenses. Providence clients had the highest number of priors, a geometric mean of 11.2. Leaving aside the two sites with incomplete data, Kansas City clients had the lowest number of priors, a geometric mean of 4.6.

Overall, 64.5 percent of all prior offenses were sustained, and the overall average of sustained prior offenses per client was 6.7 with a geometric mean of 4.8. This is greater than the basic eligibility requirement of two priors and a presenting offense. Pensacola clients had the highest number of sustained priors, a geometric mean of 7.4 per client, followed by Providence clients with a geometric mean of 6.2. Chicago clients had the fewest number of priors (disregarding the figures for Georgetown and Los Angeles): a geometric mean of 3.7 per client. Even here these clients are well above the minimum required by the eligibility criteria. These figures leave little doubt that New Pride served a clientele of multiple offenders.

It is useful to see what type of offenses clients committed prior to coming to New Pride. Table 23 presents these data, dividing priors into four categories: property offenses, offenses against persons, drug and alcohol offenses, and all other types of offenses.

Property offenses were the most common type of offense committed by clients prior to entering New Pride. This type of charge was pressed against 87.1 percent of all clients, for an average of 7.5 offenses per client with a geometric mean of 4.3. These were sustained against 83.3 percent of New Pride clients, on an average of 5 times per client with a geometric mean of 3.1.

The "other" category, consisting primarily of misdemeanor offenses, was the second most common type of prior offense. Fifty-six percent of all clients had this type of charge pressed against them an average of 3.7 times with a geometric mean of 2.2, while these charges were sustained against 45.3 percent of the clients an average of 2.1 times per client, with a geometric mean of 1.7.

Offenses against persons were the next most common type of prior offense. Over half of the clients (51.5 percent) were charged with this type of offense. These offenses were sustained for 41.6 percent of all clients, for an average of two offenses per client in the group that is adjudicated for such offenses, with a geometric mean of 1.6.

Offenses against persons include all robberies, assaults, attempted assaults, batteries, rapes, and murders. There is an enormous range of seriousness in these crime categories from school yard robberies for a quarter with neither force nor weapon to armed robberies for large amounts of money; from intentionally shoving or pushing a victim with no medical treatment required to serious beatings resulting in death. Though these events may fit into the same crime categories, they are not equally serious crimes. While PIRE was unable to collect data on the behavioral elements of the criminal events of the offenses in this study, the National Crime Survey reported in 1980 that over all categories of violent crime, only 15 percent of the victims required some kind of medical attention, and 8 percent required hospitalization. Generally speaking, the

Table 23

Offenses Committed Prior to New Pride by Offense Type

Type of Offense	Sites										Total
	Boston	Camden	Chicago	Fresno	Georgetown	Kansas City	Los Angeles	Pensacola	Providence	San Francisco	
Property Offenses											
Clients:											
N	42	169	133	123	18	109	35	145	109	134	1,017
% ¹	89.4	96.6	93.7	93.2	24.3	95.6	60.3	96.0	91.6	86.5	87.1%
Average N Offenses	3.8	7.2	7.4	4.6	2.2	4.4	4.1	11.6	10.8	9.0	7.5
Geometric Mean	3.1	4.9	5.0	3.6	1.8	3.3	3.3	5.9	5.9	3.2	4.3
Clients with Sustained Offenses											
N	39	164	126	112	16	108	32	142	107	126	972
% ²	83.0	93.7	88.7	84.8	21.6	94.7	55.2	94.0	89.9	81.3	83.3%
Average N of Sustained Offenses	2.9	4.7	3.1	2.7	2.1	4.1	2.5	10.5	8.2	3.2	5.0
Geometric Mean	2.4	3.3	2.6	2.4	1.9	3.1	2.2	5.4	3.9	2.5	3.1
Offenses Against Persons											
Clients:											
N	35	109	95	77	16	46	24	51	69	79	601
% ¹	74.5	62.3	66.9	58.3	21.6	40.4	41.4	33.8	58.0	51.0	51.5%
Average N Offenses	2.4	2.5	2.7	2.7	2.1	1.4	2.0	2.0	6.0	5.0	3.1
Geometric Mean	1.8	2.0	2.2	2.2	1.8	1.3	1.6	1.6	2.6	2.1	2.0
Clients with Sustained Offenses											
N	27	89	69	58	15	43	18	46	55	65	485
% ²	57.4	50.9	48.6	43.9	20.3	37.7	31.0	30.5	46.2	41.9	41.6%
Average N of Sustained Offenses	1.9	1.9	1.8	1.6	2.0	1.4	1.4	1.9	3.9	2.2	2.1
Geometric Mean	1.7	1.7	1.5	1.4	1.8	1.3	1.3	1.5	2.0	1.7	1.6
Drug and Alcohol Offenses											
Clients											
N ¹	9	44	16	54	2	19	12	13	20	26	215
%	19.1	25.1	11.3	40.9	2.7	16.7	20.7	8.6	16.8	16.8	18.4%
Average N Offenses	2.3	1.9	1.3	2.5	1.0	1.1	2.4	1.5	1.7	2.3	2.0
Geometric Mean	1.9	1.5	1.2	2.0	1.0	1.1	2.1	1.3	1.4	1.8	1.6
Clients with Sustained Offenses											
N	7	39	4	41	2	17	10	11	12	19	162
% ²	14.9	22.3	2.8	31.1	2.7	14.9	17.2	7.3	10.1	12.3	13.9%
Average N of Sustained Offenses	1.7	1.5	1.3	1.8	1.0	1.1	1.6	1.6	1.8	1.8	1.6
Geometric Mean	1.5	1.4	1.2	1.6	1.0	1.1	1.5	1.3	1.3	1.6	1.4
Other Types of Offenses											
Clients											
N ¹	19	147	61	114	4	34	26	74	92	83	654
%	40.4	84.0	43.0	86.4	5.4	29.8	44.8	49.0	77.3	53.5	56.0%
Average N Offenses	2.1	3.1	2.2	3.3	1.0	2.0	1.9	2.5	7.9	5.0	3.8
Geometric Mean	1.7	2.4	1.7	2.5	1.0	1.5	1.8	1.9	2.9	2.1	2.2
Clients with Sustained Offenses											
N	11	125	40	88	3	30	12	70	79	71	529
% ²	23.4	71.4	28.2	66.7	4.1	26.3	20.7	46.4	66.4	45.8	45.3%
Average N of Sustained Offenses	1.6	2.1	1.7	2.1	1.0	1.9	1.3	2.4	2.2	2.2	2.1
Geometric Mean	1.5	1.8	1.4	1.8	1.0	1.5	1.3	1.8	1.6	1.7	1.7

¹ These figures represent the percent of clients at a site or in the entire replication who have prior offenses of a given type.

² These figures represent the percent of clients at a site or in the entire replication who have sustained prior offenses of a given type.

preponderance of these crimes fall on the less serious end of the spectrum (BJS:1983:22).

Drug and alcohol offenses were the least common type of prior offense. Only 18.4 percent of all clients were charged with this type of offense, and these offenses were sustained for 13.9 percent of all clients. Fresno had the highest proportion of clients charged with this type of offense, 40.9 percent, and the highest proportion against whom they were sustained, 31.1. It appears that the Fresno clients had a high incidence of drug and alcohol abuse, which may have presented special programming problems for that site.

Offense Dispositions

Data on the most serious charge of each criminal event is contained in a "juvenile history file." The information in this file is more complete than in the "offense file," and includes data on whether or not a petition was filed and dispositional data, as well as the basic information regarding charge, offense date, number of counts, modifier, and whether or not the counts were sustained.

Generally, the juvenile justice process begins with an arrest and the filing of a complaint by the police department with the juvenile court. A percentage of these complaints result in formal petitions. In the adjudication process, a percentage of these filed petitions are adjudicated true, while some are not sustained. These percentages depend heavily on the procedures of the juvenile courts in each jurisdiction and differ markedly from site to site. In the Replication Program as a whole, close to one fourth (23.4 percent) of all charged offenses were dismissed by the court (see Table 24). The proportion of charges dismissed, however, varies greatly by site. At Chicago, 45.1 percent of all charges are dismissed. Leaving aside Los Angeles which, along with Georgetown and Boston, have incomplete data in this file, the lowest proportion of cases dismissed is at Pensacola (11 percent), followed by Kansas City (11.5 percent).

Table 24
Offense Dispositions by Site

Type of Disposition	Sites										Total
	Boston	Camden	Chicago	Fresno	Georgetown	Kansas City	Los Angeles	Pensacola	Providence	San Francisco	
Dismissed											
N	44	357	618	368	28	80	4	142	437	196	2,274
%	18.2	19.7	45.1	29.5	34.1	11.5	2.4	11.0	23.3	21.0	23.4%
Informal Probation											
Deferred/Continued Petition											
N	42	444	90	39	0	11	4	71	64	18	783
%	17.4	24.5	6.6	3.1	-	1.6	2.4	5.5	3.4	1.9	8.1%
Formal Probation											
N	46	208	439	178	30	447	71	399	500	222	2,540
%	19.0	11.5	32.1	14.3	36.6	64.2	42.3	30.8	26.7	23.8	26.1%
Continued on Formal Probation											
Deferred/Continued Petition											
N	4	66	36	441	0	3	2	80	22	133	787
%	1.7	3.6	2.6	35.4	-	0.4	1.2	6.2	1.2	14.2	8.1%
DoC Commitment											
Suspended Sentence											
N	61	251	6	0	0	7	0	18	107	113	563
%	25.2	13.9	0.4	-	-	1.0	-	1.4	5.7	12.1	5.8%
DoC Commitment											
Delayed Execution											
N	8	14	7	3	0	0	0	2	2	7	43
%	3.3	0.8	0.5	0.2	-	-	-	0.2	0.1	0.7	0.4%
DoC Commitment											
N	10	313	99	26	4	40	0	31	282	62	867
%	4.1	17.3	7.2	2.1	4.9	5.7	-	2.4	15.0	6.6	8.9%
Other Institutional Commitment											
N	1	3	3	87	1	9	32	149	7	106	398
%	0.4	0.2	0.2	7.0	1.2	1.3	19.0	11.5	0.4	11.3	4.1%
Certified Adult/Adult Waiver											
N	7	6	5	5	0	16	0	108	7	2	156
%	2.9	0.3	0.4	0.4	-	2.3	-	8.3	0.4	0.2	1.6%
Charge Adjusted											
N	0	3	1	82	0	3	5	0	1	28	123
%	-	0.2	0.1	6.6	-	0.4	3.0	-	0.1	3.0	1.3%
Other											
N	14	52	22	5	15	76	1	208	286	29	708
%	5.8	2.9	1.6	0.4	18.3	10.9	0.6	16.1	15.2	3.1	7.3%
Missing Data											
N	5	92	43	12	4	4	49	87	161	18	475
%	2.1	5.1	3.1	1.0	4.9	0.6	26.2	6.7	8.6	1.9	4.9%

The most frequent type of disposition overall is formal probation, and this accounts for 26.1 percent of all dispositions. At Kansas City, 64.2 percent of all charges resulted in a disposition of formal probation. Offenses committed by clients already on formal probation, which resulted in a court order to continue the youth on formal probation or to defer or continue the petition, accounted for an additional 8.1 percent of all dispositions. These two options combined account for 34.2 percent of all dispositions, or, removing those cases which were dismissed or for which the disposition was missing, for 47.7 percent of all dispositional sanctions. Formal probation was the most common sanction used by judges for these New Pride clients.

Clients were placed on informal probation for 8.1 percent of their offenses, undoubtedly offenses committed for the most part in the early period of their delinquent careers. One site, however, used this disposition quite frequently. At Camden, 24.5 percent of all charges resulted in informal probation, over twice the number that resulted in formal probation.

Second only to formal probation, the most common sanction imposed against New Pride clients is a commitment to a state corrections institution. Nine percent of all charges, or 12.4 percent of all charges which resulted in a sanction, resulted in a court commitment to a state DOC. Interestingly, the site with the highest proportion of DOC commitments is Camden (17.3 percent of all charges). In this jurisdiction it appears that the court predominately employs either the least or the most severe sanction.

One hundred fifty-six charges, or 1.6 percent of the total, resulted in a waiver to the adult court or a certification of the youth as an adult. Most of these cases (69.2 percent) were at Pensacola. This high incidence of waivers reflects new Florida state legislation, effective in 1978, which allows the state attorney to file information with the adult criminal court on sixteen or seventeen year olds who have two prior findings of guilt, one being a felony. At Pensacola, this dispositional waiver was used over three times as often as a commitment to DOC.

A special condition of restitution was ordered by the court for 900 sustained offenses, 13.7 percent of all such offenses (see Table 25). These orders resulted in 434 clients, or 40.1 percent of all clients, being under order to pay restitution for at least one of their crimes. Breaking these figures down by site, there is a wide variation across the different jurisdictions. At both Pensacola and Fresno, restitution was used frequently; 72.5 percent of all clients at the former site and 70 percent at the latter were ordered to pay restitution. Restitution was ordered least often at Kansas City (except for Georgetown, where the data are incomplete), where only 5.3 percent of the clients were given this type of special condition.

Table 25
Court-Ordered Restitution

Site	Offenses with Restitution Ordered		Clients with Restitution Ordered	
	N	%	N	%
Boston	32	17.4	19	46.3
Camden	64	5.2	45	26.2
Chicago	32	4.9	23	16.2
Fresno	166	21.2	91	70.0
Georgetown	1	1.4	1	3.8
Kansas City	19	3.1	6	5.3
Los Angeles	17	12.7	11	26.8
Pensacola	307	27.9	108	72.5
Providence	132	12.4	54	45.8
San Francisco	130	18.8	76	50.7
Total	900	13.7%	434	40.1%

DIAGNOSTIC TESTING

The diagnostic component authorized for implementation in the New Pride Replication Program was designed as a four-level testing battery to gather diagnostic information on all clients so that they could receive services designed to meet their individual needs. In addition, the tests were to identify those clients with learning disabilities and to delineate the degree and type of such disabilities so that their particular deficits could be remediated. The diagnostic component was considered important because of the relatively well established assumption that there is a link between learning disabilities and juvenile delinquency mediated through school failure. It was hypothesized that if the learning disabilities were remediated, recidivism would be reduced.

All clients were to receive diagnostic testing within two weeks of their admission into the program and the diagnostic results were to be used to develop an Individualized Integrated Service Plan for each youth. In cases where required tests had been administered to youth within the last year by qualified school personnel, the results of these tests could be used.

According to the original Replication Diagnostic Battery,¹ all New Pride clients were to be given level one testing. In addition, all clients were to be given two level two tests, a WAIS or WISC-R IQ test and the Woodcock Reading Mastery Test. Finally, the KeyMath Diagnostic Math Test, listed under level three, was to be administered to all clients. The Woodcock and the KeyMath were to be administered to all clients on a pre and post-test basis, with the post-test given at least three months after the pre-test.

The testing levels, which had required and optional tests scattered among the first three levels, created confusion at the sites. In January of 1981 a revised diagnostic battery was created and disseminated to the sites. In the

¹ The Replication Diagnostic Battery, in its original and modified forms, is included in Appendix C along with tables showing the number of clients given the different tests.

revised battery, all of level one was required for all clients, as well as the first half of level two. For those youth who were suspected of being learning disabled, a complete level two was mandatory. All youth who were subsequently diagnosed learning disabled were to be given the Detroit Test on a pre and post-test basis.

In actuality, many clients identified as learning disabled were not given even the required tests. Even fewer of them were given those tests designed to confirm the presence of a learning disability. The one test required of all youth diagnosed learning disabled, the Detroit, was given to only 21.9 percent of these clients; it was given to only 7.4 percent as a post-test. Only five sites administered the Detroit to any of their clients.

Despite the fact that many clients did not receive all the appropriate testing, over 24 percent of all clients were identified as learning disabled (see Table 26). As that table indicates, the proportion of clients diagnosed learning disabled varies widely by site. At some sites staff were reticent to label youth as learning disabled. Most sites experienced difficulties in finding and keeping qualified diagnosticians, so that many of the tests necessary to make a diagnosis of learning disabled were not administered. At at least one site designations other than learning disabled, such as educably mentally handicapped or behavior disordered, would qualify clients to receive special services or privileges so that youth were often placed in those categories rather than being classified as learning disabled. At Boston and Georgetown, these data may be incomplete and more youth may have been diagnosed than were reported.

In the analytic tables for the four major diagnostic tests (IQ, WRAT, Key Math, and Woodcock) which are included in this chapter, columns show the number and percent of clients with valid scores and those with invalid scores. The latter figures represent clients' test scores which had to be removed from the analysis because they were "out of bounds," missing a crucial variable, or invalidated due to a problem during the testing process.

Table 26
Clients Diagnosed Learning Disabled

Site	Clients Diagnosed Learning Disabled		Learning Disabled Clients Ever Tested	
	N	%	N	%
Boston	9	19.2	9	100.0
Camden	34	19.4	32	94.1
Chicago	12	8.5	12	100.0
Fresno	61	46.2	61	100.0
Georgetown	4	19.4	1	25.0
Kansas City	34	28.6	34	100.0
Los Angeles	0	-	0	-
Pensacola	29	19.2	29	100.0
Providence	45	37.8	43	93.6
San Francisco	57	36.8	57	100.0
Total	285	24.4%	278	97.5%

IQ Scores

All New Pride clients were to be tested with one of two Weschler Intelligence Scales: the WISC-R for youth under 16 years old, or the WAIS for those 16 and older. At some cities, diagnosticians had a resistance to IQ testing, particularly since the majority of the clients were ethnic minorities. At the San Francisco site, 90.3 percent of all clients were given IQ tests, but 22 percent of the tests given were coded by the diagnostician as invalid, primarily because of "cultural differences and learning disabilities" (see Table 27).

Overall, the average score for clients on the WISC-R was 84.4. In most situations, an IQ on the WISC-R or WAIS is considered normal if it is no more than one standard deviation below the mean (85 or above) or if there is a justification that can be made on an individual basis. For the New Pride clients, however, IQs of 80 and above were considered by model guidelines to represent an average potential. In the case of most clients, patterns of performance indicate that cultural differences, lack of education, or a learning disability have affected the overall score. It is interesting to note that at least two sites' diagnosticians considered it acceptable to add 15 points to the test scores of cultural minorities and lobbied for this practice during the process of revising the diagnostic battery. If 15 points were added to the average New Pride WISC-R score, the overall average would be brought to 99.4, close to the mean for the general population.

The average WAIS score was 91.7, or 7.3 points higher than the scores on the WISC-R. At three sites, Boston, Chicago, and Providence, the average WAIS score was ten or more points higher than that of the WISC-R. It is unclear why there was such a difference between the scores of the two IQ tests. Controlling for the differences between the two tests, there remain significant differences

Table 27
IQ Test Scores and Time to Testing

Site	WISC-R			WAIS			Weeks to Testing ²	Clients with Valid IQ Scores		Clients with Invalid IQ Scores		Clients Ever Tested for IQ	
	Average FSIQ ¹	Std.	Clients With Valid Scores	Average FSIQ	Std.	Clients With Valid Scores		N	% ³	N	% ³	N	% ³
Boston	77.0	13.7	8	88.8	7.0	19	10.8	27	57.4	0	-	27	57.4
Camden	85.2	13.0	10	92.4	10.4	47	8.7	57	32.6	2	1.1	59	33.7
Chicago	81.9	10.5	2	91.6	15.8	8	3.2	60	42.3	0	-	60	42.3
Fresno	83.9	12.1	51	91.3	12.0	68	2.8	119	90.2	8	6.1	127	96.2
Kansas City	86.5	13.8	28	95.4	11.6	66	0.1	94	82.5	5	4.4	99	86.8
Los Angeles	94.3	12.8	6	89.7	10.2	28	3.9	34	58.6	3	5.2	37	63.8
Pensacola	81.7	14.2	49	86.0	10.1	61	6.3	110	72.8	21	13.9	131	86.8
Providence	83.2	10.6	25	95.1	13.2	51	0.2	76	63.9	4	3.4	80	67.2
San Francisco	90.8	12.1	43	92.6	7.9	66	0.8	109	70.3	31	20.0	140	90.3
Total	84.4	12.5	272	91.7	11.2	414	3.3	686	58.8%	74	6.3%	760	65.1%

¹ FSIQ is the full scale IQ score.

² Weeks to Testing are the average number of weeks between four weeks prior to the case action date and the testing date. Many clients, particularly those from Kansas City, Pensacola, and Providence, were tested during the period just preceding their official admission into the program.

³ Percents are based on the total number of clients at a site or in the entire replication.

between sites on the level of reported IQs¹. There are also significant differences between the reported IQs of learning disabled clients and other clients², for the learning disabled clients have lower scores.

WRAT

The Wide Range Achievement Test (WRAT) tests youth in the areas of reading, spelling, and arithmetic. There is no overall score for the test and the three subtests are scored independently. In the original testing battery, all three subtests were mandatory. This was changed in mid-1981, and from this time on only the spelling subtest was required. Despite this fact, only 72 percent of all New Pride clients were given any part of the WRAT (see Table 28).

The average grade ratings for clients on the WRAT subtests are as follows: reading - 6.4, spelling - 5.1, and arithmetic - 4.6. These are substantially lower than the average grade level for clients at intake, 9.0. It is clear that the New Pride clients were achieving far below the level expected for their grade in school.

Measured on the basis of raw scores, there are significant differences between sites on two of the three subtests, reading and spelling³. The third subtest, arithmetic, showed no significant differences between sites⁴.

1 $F = 5.026, df = 8,676, MS_e = 133.73, p < .01$

2 $F = 25.162, df = 1,675, MS_e = 129.12, p < .01$

3 $F=2.151, df=8,691, MS(e) = 233.75, p < .03$ and $F = 2.535, df = 8,785, MS(e) = 75.126, p .01$

4 $F = 1.652, df = 8,685, MS(e) = 26.558, p > .05$

Table 28
WRAT Grade Ratings and Time to Testing

Site	Grade Rating by Subtest						Weeks to Testing ¹	Clients with at Least One Valid Subtest Score		Clients with Invalid Scores		Clients Ever Tested	
	Reading		Spelling		Arithmetic			N	% ²	N	% ²	N	% ²
	Grade	Clients	Grade	Clients	Grade	Clients							
Boston	5.9	32	5.0	32	4.4	32	5.6	32	68.1	0	—	32	68.1
Camden	6.3	116	5.3	117	4.9	117	4.6	117	66.9	4	2.3	121	69.1
Chicago	5.7	62	4.1	62	4.7	62	0.6	62	43.7	0	—	62	43.7
Fresno	6.4	69	4.8	107	4.6	69	2.5	107	81.1	4	3.0	111	84.1
Kansas City	6.7	79	5.5	99	5.2	78	0.5	100	87.7	4	3.5	104	91.2
Los Angeles	6.0	39	4.7	39	4.3	39	7.1	39	67.2	3	5.2	42	72.4
Pensacola	6.0	83	5.3	117	4.6	83	3.7	117	77.5	23	15.2	140	92.7
Providence	6.6	74	5.2	74	4.4	73	0.5	75	63.0	4	3.4	79	66.4
San Francisco	6.8	147	5.1	149	4.5	148	0.7	149	96.1	0	—	149	96.1
Total	6.4	701	5.1	796	4.6	695	2.8	798	68.4%	42	3.6%	840	72.0%

¹ Weeks to Testing are the average number of weeks between four weeks prior to the case action date and the testing date of all subtests. Many clients, particularly those from Kansas City, Pensacola, and Providence, were tested during the period just preceding their official admission into the program.

² Percents are based on the total number of clients at a site or in the entire replication.

Controlling for the differences between sites, there are also significant differences on all subtests between learning disabled and non-learning disabled clients¹, with the learning disabled clients scoring lower than the others.

Once again, controlling for the site differences, there are significant differences on all subtests between the different ethnic groups². White clients score highest, then Hispanics and "others," followed by black clients.

KeyMath

The KeyMath is a standardized test of academic achievement in the area of mathematics. Like the Woodcock it was to be administered twice to all New Pride clients, pre and post, to produce gain scores to assess improvements in mathematics over the course of clients' New Pride experience.

A total of 842 youth, or 72.2 percent of all clients from the 10 sites, have scores for the KeyMath pre-test in the data files. Of these, 777 scores are complete and reliable. As presented in Table 29, the average KeyMath raw score for the entire replication is 157.3 on the pre-test and the average grade equivalent is 6.1. Although this grade equivalent is 1.5 years higher than that achieved on the arithmetic subtest of the WRAT, it is still close to three years below clients' reported school grade level of 9.0 at the time of intake.

Measuring on the basis of KeyMath pre-test raw scores, there are significant differences among sites³. Controlling for the site differences,

1 Reading: $F = 133.31$, $df = 1,690$, $MS(e) = 196.18$, $p < .0001$; spelling: $F = 148.35$, $df = 1,784$, $MS(e) = 63.253$, $p < .0001$; arithmetic: $F = 74.51$, $df = 1,684$, $MS(e) = 23.984$, $p < .0001$

2 Reading: $F = 41.462$, $df = 2,658$, $MS(e) = 204.80$, $p < .01$; spelling: $F = 20.491$, $df = 2,752$, $MS(e) = 72.182$, $p < .01$; arithmetic: $F = 26.784$, $df = 2,653$, $MS(e) = 25.206$, $p < .01$

3 $F = 3.571$, $df = 8,768$, $MS(e) = 772.10$, $p < .0005$

Table 29
Keymath Pre-Test Scores and Time to Testing¹

Site	Average Score	Standard Deviation	Average Grade Equiv.	Weeks to Testing ¹	Clients with Valid Scores		Clients with Invalid Scores		Clients Ever Pre-tested	
					N	% ²	N	% ²	N	% ²
Boston	164.3	13.8	6.3	6.7	18	38.3	4	8.5	22	46.8
Camden	162.5	25.0	6.4	4.9	127	72.6	7	4.0	134	76.6
Chicago	150.5	28.3	5.7	3.2	77	54.2	16	11.3	93	65.5
Fresno	153.6	29.7	5.9	3.7	122	92.4	3	2.3	125	94.7
Kansas City	166.2	27.3	6.8	4.3	83	72.8	3	2.6	86	75.4
Los Angeles	153.7	27.5	5.9	4.4	35	60.3	2	3.4	37	63.8
Pensacola	151.1	30.7	5.8	4.8	120	79.5	20	13.2	140	92.7
Providence	157.7	30.3	6.2	4.7	82	68.9	2	1.7	84	70.6
San Francisco	159.9	24.9	6.2	5.8	113	72.9	8	5.2	121	78.1
Total	157.3	28.2	6.1	4.6	777	66.6%	65	5.6%	842	72.2%

¹ Only those tests given 4 weeks or less before the program are analyzed. Weeks to testing are the average number of weeks between 4 weeks prior to case action date and the testing date.

² Percents are based on the total number of clients at a site or in the entire replication.

significant differences are also found between the scores of those clients diagnosed learning disabled and those who were not, with the latter group scoring higher¹. In addition, still controlling for site differences, there are significant differences between ethnic groups with white clients having the highest scores and blacks the lowest².

From the nine sites which recorded KeyMath scores, there are scores for 435 youth who were post-tested on the KeyMath (see Table 30). Of these, 376 raw scores with corresponding grade equivalents are complete and reliable. Matching these post-test scores with their pre-test counterparts, the average pre-test score is 157.8 and the average post-test score is 166.8. Thus, overall figures for the replication show a mean gain score of 8.9 for the average period of 26.5 weeks which elapsed between the two testing dates. The corresponding grade equivalents show an average gain of .6 grades over the same period of time. When these difference scores are weighted for a 26-week (half year) period, clients show a mean gain of 8.7 points on their raw scores and .6 years on their grade equivalents. The test is standardized so that a .5 year gain in the grade equivalent is expected for a 26-week period. Thus, New Pride clients show a greater gain in their mathematics achievement scores than is expected from the average student.

Overall there are significant improvements in raw scores from the pre-test to the post-test³. Covarying the pre-test scores of all subjects, there are significantly different gains across sites⁴. The overall pre-test to post-test raw

1 $F = 81.745, df = 1,767, MS(e) = 698.64, p < .0001$

2 $F = 50.591, df = 2,738, MS(e) = 692.12, p < .01$

3 $t = 13.342, N = 376, p < .0001$

4 $F = 5.738, df = 7,367, MS(e) = 129.16, p < .01$

Table 30

KeyMath Pre-Test and Post-Test Differences

Site	Average Scores for Clients with Pre and Post-Tests		Difference	26-Week Standard ¹	Average Pre-Test Grade Equiv.	Average Post-Test Grade Equiv.	Difference	26-Weeks Standard ¹ (in years)	Average Weeks Between Tests	Clients with Valid Pre/Post Scores		Clients with Invalid Pre/Post Scores		Clients Ever Pre and Post-Tested	
	Pre-Test	Post-Test								N	% ²	N	% ²	N	% ²
Camden	163.7	172.7	9.0	10.7	6.5	7.3	0.8	1.0	21.8	61	34.9	3	1.7	64	36.6
Chicago	143.2	159.6	16.4	13.9	5.4	6.4	1.1	0.9	30.7	14	9.9	8	5.6	22	15.5
Fresno	155.2	168.4	13.2	10.8	6.0	6.8	0.8	0.7	31.8	73	55.3	10	7.6	83	62.9
Kansas City	165.4	175.3	9.9	8.1	6.7	7.4	0.7	0.6	31.9	53	46.5	4	3.5	57	50.0
Los Angeles	177.0	186.0	9.0	9.4	7.2	8.1	0.9	0.9	25.0	1	1.7	0	-	1	1.7
Pensacola	149.5	154.0	4.5	4.7	5.7	6.0	0.3	0.3	24.7	68	45.0	24	15.9	92	60.9
Providence	160.7	171.4	10.6	8.6	6.5	7.1	0.7	0.6	31.9	42	35.3	3	2.5	45	37.8
San Francisco	158.9	164.0	5.1	7.4	6.1	6.5	0.4	0.6	17.8	64	41.3	7	4.5	71	45.8
Total	157.8	166.8	8.9	8.7	6.2	6.8	0.6	0.6	26.5	376	32.2%	59	5.1%	435	37.3%

6-55

¹ Derived for comparative purposes, the 26-week standard represents the average amount of client gain expected if there were exactly 26 weeks between the pre and post-dates of the tests administered at each site. (Average gain divided by average weeks = gain per week x 26.)

² Percents are based on the total number of clients at a site or in the entire replication.

score gain is 8.9 points. Covarying the pre-test scores of all subjects and the differences between New Pride sites, non-learning disabled clients gain 3.6 points over learning disabled clients¹. With the same covariates, there are also significant differences in gains for different ethnic groups². Whites gain 11.2 points, blacks gain 9.0 points, and Hispanics gain 6.6 points.

Woodcock Reading Mastery

The Woodcock standardized test of reading mastery was administered to 878 clients (75.2 percent) as a pre-test, and scores for 813 youth are valid and reliable (see Table 31). Average pre-test scores range from a high of 134.9 at Kansas City to 120.7 at Georgetown. The overall average score for the New Pride Replication was 129.2. The average grade equivalent was 5.3. This reading measure is 1.1 grade levels below that achieved on the reading subtest of the WRAT, and close to 4 grades below that expected of clients given their grade level in school. The average number of weeks from clients' case action dates to the first testing on the Woodcock was 3.4, or slightly under a month.

Measuring on the basis of Woodcock pre-test raw scores, there are significant differences across sites³. Controlling for the site differences, significant differences are also found between the scores of learning disabled and non-learning disabled clients, with the latter group scoring higher⁴. In addition, still controlling for site differences, there are significant differences between ethnic groups with whites scoring highest and blacks lowest⁵.

1 F = 6.915, df = 1,366, MS(e) = 127.11, p < .009

2 F = 3.798, df = 2,355, MS(e) = 128.16, p < .05

3 F = 3.629, df = 9,803, MS(e) = 421.14, p < .0003

4 F = 121.992, df = 1,802, MS(e) = 366.00, p < .0001

5 F = 38.499, df = 2,768, MS(e) = 386.14, p < .01

Table 31
Woodcock Pre-Test Scores and Time to Testing¹

Site	Average Score	Standard Deviation	Average Grade Equiv.	Weeks to Testing ¹	Clients with Valid Scores		Clients with Invalid Scores		Clients Ever Pre-Tested	
					N	% ²	N	% ²	N	% ²
Boston	131.5	26.2	6.4	3.0	11	23.4	2	4.3	13	27.7
Camden	130.8	19.8	6.0	3.8	127	72.6	5	2.9	132	75.4
Chicago	124.2	21.2	4.9	2.8	78	54.9	7	4.9	85	59.9
Fresno	129.4	17.1	5.2	3.4	119	90.2	5	3.8	124	93.9
Georgetown	120.7	23.2	4.5	3.5	18	24.3	1	1.4	19	25.7
Kansas City	134.9	18.0	6.6	3.9	88	77.2	2	1.8	90	78.9
Los Angeles	130.8	17.4	5.5	5.6	37	63.8	0	-	37	63.8
Pensacola	122.5	24.7	5.1	4.2	119	78.8	23	15.2	142	94.0
Providence	130.2	25.1	6.3	5.3	76	63.9	12	10.1	88	73.9
San Francisco	132.8	18.1	6.0	0.8	140	90.3	8	5.2	148	95.5
Total	129.2	20.8	5.3	3.4	813	69.7%	65	5.6%	878	75.2%

1 Only those tests given 4 weeks or less before the program are analyzed. Weeks to Testing are the average number of weeks between 4 weeks prior to case action date and the testing date.

2 Percents are based on the total number of clients at a site or in the entire replication.

Of the 878 youth who were pre-tested on the Woodcock, 459 were also post-tested. Of these, scores for 55 were removed as either invalid or unreliable, leaving 404 cases with matched pre and post-test scores. Table 32 presents overall data for these pre and post-test scores. The whole sample shows an increase in reading mastery scores of 4.9 points or one year with an average of 25.6 weeks elapsing between the pre-testing and post-testing. When calculated to a 26 week standard, the overall gain is 5 points or one year. This is substantially higher than the .5 years expected from a normal population. Overall, there is a significant gain in pre-test to post-test raw scores¹. New Pride clients made great strides in improving their reading skills while in the program.

Average site difference scores from pre-tests to post-tests differ substantially, from 1.8 years at Camden to .2 years at Pensacola and Providence (when held to the 26-week standard). Covarying the pre-test scores of all subjects, there are significantly different gains between sites². Covarying the pre-test scores of all subjects and the differences between New Pride sites, non-learning disabled clients gain 2.2 points over learning disabled clients³. With the same covariates, there are no significant differences in gains for different ethnic groups⁴.

1 $t = 11.257, N = 405, p < .0001$

2 $F = 5.224, df = 9,394, MS(e) = 66.396, p < .01$

3 $F = 5.455, df = 1,393, MS(e) = 65.857, p < .03$

4 $F = 2.332, df = 2,372, MS(e) = 68.048, p > .05$

Table 32

Woodcock Pre-Test and Post-Test Differences

Site ¹	Average Scores for Clients with Pre and Post-Tests		Dif-ference	26-Week Standard ²	Average Pre-Test Grade Equiv.	Average Post-Test Grade Equiv.	Dif-ference	26-Week Standard ² (in years)	Average Weeks Between Tests	Clients with Valid Pre/Post Scores		Clients with Invalid Pre/Post Scores		Clients Ever Pre and Post-Tested	
	Pre-Test	Post-Test								N	% ³	N	% ³	N	% ³
Camden	130.6	136.0	5.4	6.3	5.8	7.3	1.5	1.8	22.2	62	35.4	4	2.3	66	37.7
Chicago	117.0	123.5	6.5	6.1	4.6	5.6	1.0	0.9	27.7	13	9.2	6	4.2	19	13.4
Fresno	129.1	136.0	7.2	6.1	5.3	6.9	1.6	1.3	30.9	74	56.1	9	6.8	83	62.9
Kansas City	136.1	141.7	5.6	4.6	6.7	7.8	1.1	0.9	31.8	54	47.4	3	2.6	57	50.0
Los Angeles	142.5	143.0	0.5	0.3	6.8	7.1	0.3	0.2	40.5	2	3.4	0	-	2	3.4
Pensacola	123.7	125.9	2.2	2.5	5.4	5.6	0.2	0.2	23.3	71	47.0	19	12.6	90	59.6
Providence	133.1	137.1	4.0	3.3	6.7	7.7	1.0	0.8	31.1	35	29.4	5	4.2	40	33.6
San Francisco	134.6	139.3	4.7	6.4	6.1	7.0	0.9	1.2	19.0	93	60.0	8	5.2	101	65.2
Total	130.6	135.5	4.9	5.0	5.9	6.9	1.0	1.0	25.6	404	38.6%	54	5.2%	458	43.8%

¹ Georgetown is not included for only one pre-post test score was recorded from that site.

² Derived for comparative purposes, the 26-week standard represents the average amount of client gain expected if there were exactly 26 weeks between the pre and post-dates of the tests administered at each site. (Average gain divided by average weeks = gain per week x 26.)

³ Percents are based on the total number of clients at a site or in the entire replication.

INDIVIDUALIZED INTEGRATED SERVICE PLAN (IISP)

The IISP is the key theoretical construct which links clients' problems to the program's intervention strategy. The process of designing and updating this service plan brings all involved staff together to focus on the needs and progress of a particular client. This process is central to New Pride's individualized and holistic treatment model.

For the IISP staffing, during which the plan was designed, all the staff members who had been involved with a particular client brought the information they had gathered during the intake phase and the diagnostic process. They discussed the client's needs, and identified those needs (see Appendix A) that the program intended to meet. The needs were categorized into eight areas: family, emotional development, social, physical, education, employment, legal, and transportation. Next, program staff set measurable objectives which would address the client's needs. Finally, they developed a service plan to meet these objectives, which consisted of specific types of services, who would provide them, and when they would begin. The services were selected from the list of services (also in Appendix A) and were separated into 7 types: intake activities, casework activities, counseling, education, learning disabilities, employment, and other services. All of this information was coded onto the IISP form and subsequently entered into the computer data base.

An example of a need-objective-planned service sequence follows: need – "has problems with school attendance"; objectives – "will reduce absences from 2-3 to zero days ill per month" and "meet for tutorial services once a week"; services planned to achieve objectives – school history documentation (intake service), supervision (casework activity), individual counseling (counseling service), and academic subject tutoring (educational service).

Table 33 shows the number and percent of clients for whom needs, objectives, and planned services were recorded and the average number of these per client. Over all the sites, needs were identified for 71.3 percent of all clients, objectives set for 73.3 percent and services planned for 66.8 percent.

Table 33

IISP Data: Needs, Objectives, and Planned Services

Site	Clients with Identified Needs		Average Needs Per Client	Clients with Objectives		Average Objectives Per Client	Clients with Planned Services		Average Services Planned Per Client	Weeks to IISP Staffing ²
	N	% ¹		N	%		N	%		
Boston	24	51.1	8.0	24	51.1	11.2	0	-	-	-
Camden	118	67.4	4.5	118	67.4	6.3	118	67.4	3.6	3.4
Chicago	74	52.1	10.1	77	54.2	17.3	74	52.1	4.2	13.2
Fresno	132	100.0	6.3	132	100.0	7.2	132	100.0	4.9	6.9
Kansas City	92	80.7	8.2	103	90.4	9.2	103	90.4	5.1	8.0
Los Angeles	23	39.7	27.9	24	41.4	11.0	24	41.4	6.2	16.5
Pensacola	138	91.4	12.5	138	91.4	12.6	138	91.4	7.0	9.4
Providence	112	94.1	17.4	112	94.1	50.7	112	94.1	7.7	2.1
San Francisco	119	76.8	11.8	127	81.9	11.6	79	51.0	4.7	7.1
Total	832	71.3%	10.6	855	73.3%	15.7	780	66.8%	5.5	6.2

¹ These and other percentages represent the percent of clients at a site or in the entire replication.

² Average number of weeks is time between case action date and IISP staffing date. Averages are based on clients with valid staffing dates (all Boston dates were missing). Records of staffings more than four weeks before or a year after the case action date were removed from these computations.

The IISP staffing, at which this plan was developed, took place on an average of a month and a half after intake.

Staff members were to monitor, on a regular basis, clients' progress in meeting their objectives. The model recommended that this monitoring take place monthly for each client, at which time treatment objectives could be revised and the plan of services could be adjusted.

A second IISP was to be filled out for each client at the start of the follow-up phase and was to be used as a plan for the follow-up treatment phase in much the same way as the original IISP served as a plan for the intensive phase. At the beginning of the follow-up phase, objectives were to be reevaluated in light of the clients' progress during the intensive phase, and a new, less intensive service plan created.

Most New Pride sites failed to utilize fully the IISP as a treatment tool. As late as 1982, the computer files which stored this information had no IISP data for clients from three of the remaining seven sites, and little data from two other sites. This can partially be explained because of problems with the MIS files themselves. These files were very difficult to construct, and were not fully available to sites until April, 198 . Even then, they were relatively complex to use.

The major reason for the lack of IISP data, however, was that most sites had difficulty developing and using the individualized plans. At almost every New Pride project, staff had trouble writing treatment objectives which were measurable. They tended to use either vague goals or repeat the same set of objectives over and over. It was often the case that IISPs were written and then never referred to again.

At some projects, all clients were placed in predetermined service tracks. The primary focus of staff was on providing those services which they were trained to provide, not on developing and implementing individualized treatment plans.

One site, Providence, had difficulties with the IISP because they over-individualized the plans. They set so many objectives for each client (an average of 50.7) that the sheer number of objectives made it impossible to utilize the plans effectively and keep them updated.

At some sites, IISPs were not formalized until long after clients had entered the program and begun to receive services. At Los Angeles, clients were staffed for the IISP on an average of 16.5 weeks, or close to 4 months, after intake. They had finished two-thirds of the intensive treatment phase by that time. The overall average time from intake to IISP staffing was 6.2 weeks, or one and one-half months.

Only at Fresno was the IISP fully utilized as the core of the New Pride treatment program. Here, plans were actually individualized and updated monthly for each client. Staff used the plans as treatment tools, and saw the IISP as the key element of the holistic treatment approach that was the basis of the New Pride model.

The first element of the IISP was the identification of each client's needs. Initially, the MIS contained an extensive list of possible needs, separated into the eight areas listed above. When the needs list was later made optional, the basic eight areas of need were retained on the IISP and in the analysis.

Table 34 presents the number and proportion of clients at each site who have objectives addressing the various areas of need. This table draws a picture of those need areas focused upon by the different New Pride projects. At Boston, Los Angeles and San Francisco, more clients had objectives addressing their educational needs than any other type of need. At Providence, the highest proportion had objectives which addressed employment needs. Over all the sites, the highest proportion of clients, 62.8 percent, had objectives which addressed emotional development needs. Most projects focused on this problem area of clients. The second most common type of need addressed across the replication sites was educational, followed by employment needs.

Table 34
Clients with Objectives by Area of Need Addressed¹

Site	Family		Emotional Development		Social		Physical		Education		Employment		Legal		Transportation	
	N	% ²	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Boston	8	17.0	19	40.4	18	38.3	5	10.6	21	44.7	14	29.8	7	14.9	0	—
Camden	40	22.9	91	52.0	26	14.9	13	7.4	80	45.7	69	39.4	1	0.6	1	0.6
Chicago	36	25.4	69	48.6	38	26.8	43	30.3	62	43.7	28	19.7	39	27.5	1	0.7
Fresno	37	28.0	115	87.1	43	32.6	33	25.0	94	71.2	73	55.3	68	51.5	4	3.0
Kansas City	84	73.7	86	75.4	71	62.3	50	43.9	74	64.9	79	69.3	64	56.1	47	41.2
Los Angeles	10	17.2	16	27.6	15	25.9	14	24.1	23	39.7	16	27.6	16	27.6	0	—
Pensacola	99	65.6	138	91.4	91	60.3	98	64.9	118	78.1	127	84.1	48	31.8	3	2.0
Providence	57	47.9	100	84.0	56	47.1	44	37.0	102	85.7	110	92.4	64	53.8	11	9.2
San Francisco	78	50.3	99	63.9	38	24.5	57	36.8	104	67.1	61	39.4	42	27.1	0	—
Total	449	38.5%	733	62.8%	396	33.9%	357	30.6%	678	58.1%	577	49.4%	349	29.9%	67	5.7%

¹ This table presents only those objectives which correspond to a particular need. As Table 43 shows, some sites entered objectives for a larger proportion of clients than are presented here.

² These and other percentages represent the percent of clients at a site or in the replication.

A similar picture is drawn on Table 35, which shows the types of services planned for clients. Again there is a large variation among individual sites as to areas of emphasis. At Kansas City, casework activities (which include supervision) were the services planned most often. At Providence more clients had employment services planned than any other type of service and at Los Angeles more educational services. These areas of emphasis are consistent with the need areas emphasized at these two sites.

The service type planned for the greatest proportion of clients over all the sites is counseling services. Sixty percent of all clients have counseling services in their treatment plans; this represents 90 percent of all clients who had any services planned at all. The next most frequently planned type was educational services, followed closely by employment services.

While the New Pride model called for a second IISP to be developed for the follow-up phase of treatment, few sites did so. Fresno was the only site to write and record follow-up IISPs for a substantial proportion of their clients. Follow-up IISPs were entered in the MIS files for 68 percent of the Fresno clients. San Francisco was the only other site with more than just a few follow-up IISPs; there, 14 percent of the clients had follow-up IISPs.

As described above, client objectives were to be updated monthly. This process was designed to help staff reassess clients' treatment objectives on a regular basis, so that the services clients were receiving would relate to current and relevant objectives.

Table 36 presents data on the objective updates, showing the number of objectives updated by site, the average number of objectives updated per client (ranging from 4 at Camden to 48.2 at Providence), and the number and proportion of clients with updated objectives. This latter figure reflects the degree to which projects actually used the IISP as a treatment tool. Here again Fresno had the highest proportion of clients - 97 percent - whose objectives were updated during the program. Pensacola and Kansas City updated objectives for 75.5 and 69.3 percent respectively. Other sites updated objectives for fewer

Table 35
Clients with Services Planned to Meet Objectives
by Type of Service

Site ¹	Intake Activities		Casework Activities		Counseling		Education		Learning Disabilities		Employment		Other Services	
	N	% ²	N	%	N	%	N	%	N	%	N	%	N	%
Camden	4	2.3	12	6.9	100	57.1	65	37.1	22	12.6	57	32.6	33	18.9
Chicago	19	13.4	6	4.2	72	50.7	56	39.4	4	2.8	14	9.9	33	23.2
Fresno	14	10.6	99	75.0	127	96.2	57	43.2	27	20.5	53	40.2	31	23.5
Kansas City	3	2.6	93	81.6	70	61.4	37	32.5	20	17.5	70	61.4	68	59.6
Los Angeles	3	5.2	4	6.9	17	29.3	23	39.7	6	10.3	13	22.4	19	32.8
Pensacola	6	4.0	11	7.3	138	91.4	117	77.5	32	21.2	122	80.8	55	36.4
Providence	7	5.9	1	0.8	98	82.4	86	72.3	41	34.5	104	87.4	24	20.2
San Francisco	22	14.2	12	7.7	78	50.3	54	34.8	17	11.0	51	32.9	51	32.9
Total	78	6.7%	238	20.4%	700	60.0%	495	42.4%	169	14.5%	484	41.5%	314	26.9%

¹ Neither Boston nor Georgetown entered any planned service data into the MIS files.

² These and other percentages represent the percent of clients at a site or in the replication.

Table 36
Objectives Updated by Site

Site	Objectives Updated	Average Objectives Updated per Client	Clients with Objectives Updated	
			N	% ¹
Camden	91	4.0	23	13.1
Chicago	752	13.4	56	39.4
Fresno	1,206	9.4	128	97.0
Kansas City	510	6.5	79	69.3
Pensacola	1,372	12.0	114	75.5
Providence	2,602	48.2	54	45.4
San Francisco	850	11.3	75	48.4
Total	7,383	14.0	529	45.3%

¹ These figures represent the percent of clients at a site or in the entire replication.

than half of their clients. The lowest proportion was 13.1 percent at Camden, where they admittedly made little use of the IISP.

Each time an objective was updated one of eight assessments or decisions could be made. The objective could be deleted or revised, or assessed as: not yet addressed, no progress, behind schedule, on schedule, ahead of schedule, or achieved. Of all objectives ever updated, 46 percent were assessed eventually as having been achieved.

When the progress made toward meeting an objective was evaluated as being unsatisfactory, a reason was to be indicated. The most common reason for unsatisfactory progress, given in 43 percent of the cases, was that the client had been uncooperative. In 16 percent of the cases, staff felt that more services were needed before the objective could be achieved.

In summary, the IISP was a critical element of the Replication model which, by systematically bringing staff together to focus on a particular client, promoted proactive planning of services, individualized treatment, and an integration of service interventions. It was clear that, for most project staff and managers, this proactive approach was a new one. They needed time and a great deal of technical assistance to make it an effective part of their program. Yet almost all the replication sites attempted to use the IISP, though to widely varying degrees of thoroughness. They chiefly used it in its initial phase, integrating information from diagnostic process into a blueprint for subsequent treatment in the intensive phase. Far less use of this instrument was made on an ongoing basis through evaluating and updating clients' needs and objectives, or as a plan for follow-up treatment. Despite its limited use, however, it appears that the IISP did impact on most sites' treatment of clients, and did promote an increased awareness of the value of fitting services to clients' actual needs and objectives.

EMPLOYMENT

With information from all 10 sites, 602, or 51.6 percent of all clients had job information in the data base (see Table 37). This represents over half of all clients, including those who were full-time students. Of the 602 youth for whom jobs were recorded, 243 (25.1 percent) had two jobs, and 122 (12.7 percent) had three or more jobs. A total of 969 jobs were recorded. Of these, 967 were analyzable.

Twenty-two percent of all jobs were designated as permanent and 30 percent as temporary. An additional 26 percent were considered work-experience situations, 13 percent as on-the-job training, and 3 percent as seasonal employment. Seven percent were included in more than one of the placement status categories listed above.

Forty-three percent of the jobs were in private business. Not-for-profit corporations were the employers in 42 percent of the cases. This was often the New Pride program itself or its parent agency. For 15 percent of the jobs, a governmental agency was the employer.

New Pride paid all the wages in 40.7 percent of the employment instances (see Table 38). The employer paid all the wages in 32.7 percent and CETA in 17.8 percent of the cases. There was some other wage source for 5 percent and a combination of wage sources for 3.7 percent of the jobs.

As Table 38 indicates, there were definite site differences in the source of wages. For example, the Camden New Pride program paid the wages for only one job, while the San Francisco, Pensacola, and Chicago New Pride programs were the sole source of wages for half or more of their clients' jobs. Camden was uniquely successful in that 73.8 percent of the jobs held by clients at that site were funded solely by the employer. This finding reflects the emphasis at that site on clients finding their own jobs.

Table 37
Jobs by Site

Site	Number of Jobs	Clients Ever Employed	
		N	%
Boston	50	27	57.4
Camden	123	90	51.4
Chicago	44	41	28.9
Fresno	140	90	68.2
Georgetown	24	13	17.6
Kansas City	117	64	56.1
Los Angeles	13	12	20.7
Pensacola	152	85	56.3
Providence	137	80	67.2
San Francisco	169	100	64.5
Total	969	602	51.6%

Table 38
Source of Wages by Site

Site	Employer		New Pride		CEIA		Other		Combination	
	N	% ¹	N	%	N	%	N	%	N	%
Boston	4	8.0	23	46.0	1	2.0	10	20.0	12	24.0
Camden	90	73.8	1	0.8	29	23.8	2	1.6	0	—
Chicago	12	27.3	22	50.0	10	22.7	0	—	0	—
Fresno	27	19.3	18	12.9	87	62.1	6	4.3	2	1.4
Georgetown	12	50.0	11	45.8	0	—	0	—	1	4.2
Kansas City	35	31.0	50	44.2	25	22.1	3	2.7	0	—
Los Angeles	6	50.0	2	16.7	2	16.7	2	16.7	0	—
Pensacola	45	29.8	90	59.6	7	4.6	7	4.6	2	1.3
Providence	46	33.6	65	47.4	9	6.6	17	12.4	0	—
San Francisco	38	22.5	110	65.1	1	0.6	0	—	20	11.8
Total	315	32.7%	392	40.7%	171	17.8%	47	4.9%	37	3.8%

¹ These and the following represent the number and percent of jobs at a site or over the entire replication.

Most jobs, 84.4 percent of them, brought clients a salary of minimum wage, that is, between \$2.50 and \$3.50 an hour. Only 1.3 percent of the jobs earned less than \$2.50 per hour, and 14.3 percent earned more than \$3.50 per hour. The average number of hours worked per week was 22.4 hours.

Job completion data were recorded for 731 of the 967 jobs held by clients. Some of the jobs for which these data were missing were continuing at the time projects closed or lost contact with the clients. In some other cases, the project failed to record this information. Of the jobs for which we have completion data, 9.6 percent lasted one week or less. Seventy-three percent of these jobs lasted between one week and three months, and 17.5 percent lasted longer than three months.

Of the jobs for which completion data are available, 268 or 37.3 percent ended because the position ended. In 22.6 percent of the cases, the client quit and in 10.9 percent he or she left to take a better job. In 16.2 percent of the jobs, the client was fired. Other reasons for ending jobs were indicated in 13.1 percent of the cases.

New Pride projects were asked to document as much employment data as possible for clients, tracking their employment histories before they came to the project, during their participation in New Pride, and afterward. Job information for clients before and after their involvement in New Pride was often difficult to acquire. Only 21 jobs begun prior to New Pride admission and 78 jobs begun after termination were recorded.

Ninety percent of the jobs for which we have data were acquired by clients while they were participating in New Pride. Six hundred thirteen of these jobs (70.6 percent) were started during the clients' intensive phase, or within the first six months of their treatment. The remaining 255 jobs were started during the clients' follow-up phase.

Table 39 presents certain job characteristics broken out by the time the job started. From the intensive phase to the follow-up phase to the post-New Pride

Table 39

Job Characteristics by Time Job Started¹

Time Job Started	Number of Jobs	Number of Clients Employed	Percent ² Permanent Positions	Percent Employed by Private Employer	Percent Paid Solely by Employer	Percent Paid Solely by New Pride	Length of Job in Weeks	Hours Worked Per Week	Percent Salaries Above Minimum Wage ³
Intensive Phase	613	475	18.6%	40.1%	28.8%	49.4%	8.8	20.8	11.8%
Follow-up Phase	255	203	24.3%	45.8%	36.5%	30.2%	8.7	24.7	18.4%
After New Pride	78	66	32.1%	52.6%	44.9%	14.1%	8.0	26.7	19.2%

- ¹ Jobs are included in "Intensive Phase" if they began on or between the case action date and six months after that date. "Follow-up Phase" includes jobs begun between the case action date plus 6 months and the termination date. "After New Pride" includes jobs begun on or after termination date. Where the termination date is missing, case action date plus 6 months is used in place of the termination date. Hence, when a job was begun more than 6 months after case action date and there is no termination date, this is considered an "After New Pride" record.
- ² These and the following percentages are based on the total number of jobs per phase.
- ³ Above minimum wage is \$3.50 and above per hour.

employment situation, the proportion of jobs which were permanent (as opposed to temporary, on the job training, work experience, or seasonal) rises. Through this time sequence, the proportion of youth employed by the private sector also increases, as does the proportion of salaries paid entirely by the employer. Jobs held during both phases of the program lasted, on the average, close to the same amount of time: 8.8 weeks for the intensive phase and 8.7 weeks for the follow-up phase. After leaving New Pride, youth held jobs for a slightly shorter period of time: 8 weeks. Thus, as clients progressed through the program phases and left New Pride, youth worked more hours each week and earned somewhat higher wages. This does not appear to be an artifact of aging, for each time period contains a cross-section of youth of all ages. Rather, it appears that the program provided clients with a degree of stability which was reflected in slightly more stable job situations.

New Pride programs faced a real challenge in trying to find jobs for youth under 16 years of age. They could and did provide job preparedness training to these younger clients and these services were quite appropriate for this group, but sites had a difficult time finding job placements for these youth. Despite these difficulties, sites were relatively successful at employing these younger clients (see Table 40). Of the under-16 group, 43.7 percent held jobs while in the 16 and older group, 56.5 percent held jobs. Those who were employed in each age group held almost the same number of jobs: an average of 1.5 jobs for the younger clients and an average of 1.6 jobs for the older ones. In the older group, more of the jobs were permanent positions and more were private sector employment. Twice as many of the older clients had their wages paid entirely by their employer. While this would appear to mean that the jobs held by older youth were more stable, they lasted close to the same length of time as the jobs held by the younger group (8.7 weeks as compared to 8.6 weeks).

As well as finding jobs for younger, in addition to older clients, sites were able to place youth in a wide range of employment situations. Appendix B consists of a list of the various duties or positions held by the youth. Most of these are entry level positions, but they span many different fields of endeavor.

Table 40
Job Characteristics by Age of Clients

Age of Clients	Number of All Clients	Clients Employed		N of Jobs	Average N of Jobs Per Client	Percent ² Permanent Positions	Percent Employed by Private Employer	Percent Paid Solely by Employer	Percent Paid Solely by New Pride	Length of Job in Weeks	Hours Worked per Week	Percent Salaries Above Minimum Wage ³
		N	% ¹									
Under 16	449	196	43.7%	299	1.5	16.8%	27.3%	19.2%	47.5%	8.6	20.7	10.4%
16 and Older	718	406	56.5%	668	1.6	27.0%	50.1%	38.8%	37.7%	8.7	23.2	16.0%

¹ Percent of clients within the age group who were employed.

² These and the following percentages are based on the number of jobs within each age group.

³ Above minimum wage is \$3.50 and above per hour.

SCHOOL STATUS

Projects were asked to record information about clients' school experiences just prior to admission to New Pride, during their participation in the program, and if possible, following termination. Sites found it very difficult to collect pre and post-New Pride school data due to limits in access to public school records, poor recordkeeping at many schools, and a shortage of staff time to track clients after they left the program. Consequently, the most complete data are recorded for clients' school status during their participation in New Pride. Seventy-five percent of all clients have school records which document their school status while they attended New Pride. Thirty-nine percent of all clients have information recorded for schools attended prior to entering New Pride, and only 7 percent have such information for schools attended after leaving the program.

Table 41 presents a breakdown of school status data for four time periods: before New Pride, in the intensive treatment phase (within six months of intake), in the follow-up phase, and after termination from New Pride. As noted on this table, a school program listed as "Before New Pride" was begun before intake but may have continued after the youth came to New Pride. Relatively little data are recorded for schools having been entered during the follow-up phase. In many cases, youth entered school programs just after intake during the intensive phase and remained in them throughout the follow-up phase as well.

Overall, 1,921 school status records (here a record is the information concerning one school program attended) were entered into the MIS, 1,786 of which had crucial dates and could therefore be analyzed. These records represent 967 clients, or 82.9 percent of all New Pride clients. Four sites, Fresno, Providence, Pensacola, and San Francisco, recorded school data for more than 95 percent of their clients. Fresno recorded the highest proportion of pre and post-New Pride school data.

Eighty-four percent of all school records have both beginning and ending information for that school experience. In 16 percent of the cases, the school record was incomplete, with no ending date, attendance data, or reason for

Table 41

School Status Data by Time School Program Started

Site	Before New Pride				During New Pride								After New Pride				Total		
	Records ¹		Clients		Intensive				Follow-up				Records ¹		Clients		Records ¹		Clients
	N	% ²	N	% ³	N	% ²	N	% ³	N	% ²	N	% ³	N	% ²	N	% ³	N	N	% ⁴
Boston	23	37.1	23	62.2	37	59.7	34	91.9	0	-	0	-	2	3.2	2	5.4	62	37	78.7
Camden	79	35.0	76	48.7	135	59.7	132	84.6	7	3.1	7	4.5	5	2.2	5	3.2	226	156	89.1
Chicago	13	13.3	13	14.1	84	85.7	80	87.0	1	1.0	1	1.1	0	-	0	-	98	92	67.8
Fresno	207	43.7	126	96.9	186	39.2	115	88.5	47	9.9	40	30.8	34	7.2	27	20.8	474	130	98.5
Georgetown	0	-	0	-	25	100.0	24	100.0	0	-	0	-	0	-	0	-	25	24	32.4
Kansas City	66	58.4	66	88.0	44	38.9	42	56.0	0	-	0	-	3	2.7	3	4.0	113	75	65.8
Los Angeles	15	27.8	15	36.6	32	59.3	32	78.0	7	13.0	7	17.1	0	-	0	-	54	41	70.7
Pensacola	54	21.9	54	36.7	190	76.9	146	99.3	2	0.8	2	1.4	1	0.4	1	0.7	247	147	97.4
Providence	84	42.4	84	71.8	110	55.6	108	92.3	1	0.5	1	0.9	3	1.5	3	2.6	198	117	98.3
San Francisco	0	-	0	-	210	72.7	147	99.3	41	14.2	36	24.3	38	13.1	31	20.9	289	148	95.5
Total	541	30.3%	457	47.3%	1,053	59.0%	860	88.9%	106	5.9%	94	9.7%	86	4.8%	72	7.4%	1,786	967	82.9%

¹ A school status record is the information concerning one school program attended. While records listed as "before New Pride" reflect school experiences begun prior to program admission, the client may have remained at that school throughout his/her participation in New Pride. Records are included in "intensive phase" if they began on or between the case action date and the case action date plus six months. "Follow-up phase" includes school programs begun between the case action date plus six months and the termination date. "After New Pride" includes school programs begun on or after the termination date. When the termination date is missing (123 records), case action date plus six months is used in place of the termination date.

² These percentages represent the percent of school status records at a site or, in the total row, for the entire replication.

³ These figures represent the percent of clients with school status records whose records fall into the given time period.

⁴ These figures represent the percent of all clients at a site or in the replication who have school status records.

change. In these cases, either the youth was still attending that school program when the site lost contact with him or her, or the closure data were never collected or entered into the MIS file.

Prior to coming to New Pride, most of the schools documented in the MIS (77.7 percent) were regular public schools (see Table 42). Schools recorded for clients during their intensive phase of treatment were primarily New Pride alternative schools (770 records, or 73.3 percent of all school programs begun during the intensive phase). An additional 77 records listed the school type as the New Pride Alternative School, but this was indicated in combination with another school type. Both during the follow-up phase and after leaving New Pride, the most common type of school attended was a regular public school.

Altogether, 819 or 70.2 percent of all clients attended the New Pride Alternative School (see Table 43). Some sites, such as Fresno, preferred to leave youth in the school they had been attending, if at all possible. Thus, at Fresno only 57.6 percent of the clients attended the New Pride school, a relatively small proportion. Other sites, such as Pensacola, Providence, and San Francisco, felt that the New Pride treatment would be more effective if clients attended the New Pride school, leaving behind their previous school situation. At these sites, more than 90 percent of the clients attended the New Pride school.

Information was also gathered on the various types of school programs clients attended (see Table 44). In a number of instances, a client participated in two or even three different types of programs within one school setting. The client may have had regular as well as vocational classes, or some other combination of program types.

A regular school program was the most common type of program attended during all the start-up phases. A special education program for behavioral problems was the next most frequently attended type. Over 19 percent of the clients entered such a program during their intensive treatment phase at New Pride.

Table 42
Type of School by Time School Program Started

Time of Start-up	New Pride Alternative School ¹		Regular Public School		Alternative Public School		Private School		Parochial School		Technical School		Junior College		Other School		More Than One Type Indicated	
	N	% ²	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Before New Pride	0	—	407	77.5	84	16.0	5	1.0	0	—	4	0.8	0	—	16	3.0	9	1.7
Intensive Phase	770	73.3	134	12.7	42	4.0	0	—	1	0.1	5	0.5	4	0.4	14	1.3	81	7.7
Follow-up Phase	22	20.8	51	48.1	14	13.2	0	—	0	—	1	0.9	4	3.8	12	11.3	2	1.9
After New Pride	0	—	39	45.9	17	20.0	1	1.2	0	—	2	2.4	2	2.4	23	27.1	1	1.2
Total	792	44.8%	631	35.7%	157	8.9%	6	0.3%	1	0.1%	12	0.7%	10	0.6%	65	3.7%	93	5.3%

¹ All New Pride Alternative School experiences were considered to have started during the program, either in the intensive phase or the follow-up phase, as the Alternative School was a primary component of New Pride and constituted in itself services received from the program.

² These and the following percentages represent the percent of school status records within a given category.

Table 43
Clients Attending the New Pride
Alternative School

Site	Clients	%
Boston	32	68.1
Camden	131	74.9
Chicago	79	55.6
Fresno	76	57.6
Georgetown	24	32.4
Kansas City	38	33.3
Los Angeles	39	67.2
Pensacola	146	96.7
Providence	108	90.8
San Francisco	146	94.2
Total	819	70.2%

Table 44
Types of School Program by Time School Program Started¹

Time of Start-up	Special-Ed/LD		Special-Ed/Behavioral		Vocational Reha-bilitation		Other Special-Ed		Vocational Education		Regular Program	
	N	%	N	%	N	%	N	%	N	%	N	%
Before New Pride	40	7.4	56	10.4	2	0.4	28	5.2	27	5.0	410	75.8
Intensive Phase	173	16.4	204	19.4	1	0.1	71	6.7	63	6.0	661	62.8
Follow-up Phase	20	18.9	5	4.7	0	-	1	0.9	11	10.4	78	73.6
After New Pride	12	14.0	3	3.5	0	-	1	1.2	4	4.7	65	75.6
Total	245	13.7%	268	15.0%	3	0.2%	101	5.7%	105	5.9%	1,214	68.0%

¹ Some programs are listed under more than one type or their type is missing altogether, so the total number of all types of programs may differ from the total number of school records and the percentages may add up to more or less than 100 percent.

Although few clients were given all the tests recommended by the Diagnostic Testing Battery, the New Pride programs were apparently successful at identifying learning disabilities, which had not been previously diagnosed or treated. While only 7.4 percent of the programs attended prior to New Pride involved the remediation of learning disabilities, 16.4 percent of the school programs begun during the intensive phase addressed these problems. An even higher proportion of programs starting during the follow-up phase (18.9 percent) included learning disability remediation. The proportion of programs with such remediation which were begun after leaving New Pride remained high, almost twice of what it was prior to New Pride.

Attendance data, including the number of days clients were enrolled in a school program and the number of days with excused or unexcused absences, were very difficult data for sites to collect. Table 45 presents these data by the time the school program started. The first two columns show the number and proportion of records which have data for the different attendance variables. Attendance data for students of the New Pride Alternative school is far more complete than for other schools, as would be expected.

The final column, which shows the percent of days enrolled of excused absences and unexcused absences, presents a positive picture of change. Before coming to New Pride, youth were out of school 6.1 percent of the time with excused absences and 39 percent of the time with unexcused absences. After being admitted into New Pride, those clients who attended the New Pride school were out of school with excused absences 9.4 percent of the time, an increase of over 3 percent over their prior histories. The proportion of time out and unexcused, however, fell more than 10 percent. Those who attended schools other than New Pride while in the program had an even better attendance record. They had slightly fewer excused absences than they had prior to New Pride, and 21.3 percent less time out unexcused.

The fact that those going to outside schools while in the program had better attendance records than those going to the New Pride school should be put into perspective. In most cases, those clients who remained in non-New Pride

Table 45

School Attendance by Time School Program Started

	Records with Attendance Data ¹		Average Days Enrolled	Average Days Absent Per Client	Percent of Days Enrolled Which Are Absences
	N	%			
Before New Pride (N = 541)					
Excused Absences	219	40.5	75.1	4.6	6.1
Unexcused Absences	291	53.8	83.9	32.7	39.0
During New Pride					
New Pride Alternative School (N = 869)					
Excused Absences	712	81.9	74.2	7.0	9.4
Unexcused Absences	722	83.1	74.9	21.2	28.3
Other Schools (N = 290)					
Excused Absences	138	45.1	57.6	4.7	8.2
Unexcused Absences	153	50.0	59.9	10.6	17.7
After New Pride (N = 86)					
Excused Absences	25	35.7	58.6	9.0	15.4
Unexcused Absences	26	37.1	60.4	8.9	14.7

¹ School status records are included if they have data for days enrolled and either days with excused absences or unexcused absences.

school settings were youth who had been able to adjust to school despite their delinquent activities. This was not the case with many of those who came to the program's school. Because of the differences in these two groups, the higher rate of unexcused absences for the New Pride students does not mean that those schools were less effective at keeping students in school, for even this more difficult group showed a marked reduction in unexcused absences.

The improvements in attendance continued to increase even after youth left New Pride. In their post-New Pride school experiences, youth reduced their unexcused absences to 14.7 percent of the days they were enrolled.

The percent of days tardy also decreased during New Pride, and decreased even more after New Pride. Before admission into New Pride, youth were tardy 10.3 percent of the days they were present. While in the program, this proportion dropped to 8.9 percent for both New Pride school students and for clients attending other schools. After New Pride records show the proportion of tardies dropping further, to 8.1 percent of the days present.

Table 46 shows the reasons for change of school programs by the time the program began. As with the attendance data, these figures indicate that New Pride had an impact on clients' educations. Before coming to New Pride, only 1.2 percent of the school programs ended positively, that is, because the student completed the program (0.6 percent), completed a GED (0.0 percent), or graduated (0.6 percent). On the other hand, 44.5 percent of the school situations ended negatively, by the student dropping out (32.4 percent), being expelled (7.5 percent), or committing a new offense (4.6 percent). During the intensive phase, the positive completion increased from 1.2 percent to 36.2 percent (completed = 28.7 percent, GED = 3.5 percent, graduated = 4 percent), while the negative ones decreased to 25 percent (dropped out = 10.3 percent, expelled = 2.8 percent, new offense = 11.9 percent). In the follow-up phase, positive completions fell off to 14 percent, and to 11.5 percent after termination. It appears that the intensive involvement of the client in the treatment program had a strong impact on a successful school experience. The negative completions, however, continued to decrease in the follow-up phase, falling to

Table 46

Reason for Change of School Program by Time Program Started

Reason for Change	Before New Pride		During New Pride				After New Pride		Total	
	N ¹	% ¹	Intensive Phase		Follow-up Phase		N	%	N	%
			N	%	N	%				
Completed Program	3	0.6	263	28.7	12	12.9	4	6.6	282	18.1
Completed GED	0	-	32	3.5	0	-	2	3.3	34	2.2
Graduated	3	0.6	37	4.0	1	1.1	1	1.6	42	2.7
Transferred	99	20.5	77	8.4	13	14.0	8	13.1	197	12.7
Dropped Out	156	32.4	95	10.3	6	6.5	9	14.8	266	17.1
Expelled	36	7.5	26	2.8	0	-	2	3.3	64	4.1
New Offense	22	4.6	109	11.9	14	15.1	3	4.9	148	9.5
Other	163	33.8	279	30.4	47	50.5	32	52.5	521	33.5
Missing Data	(59)		(135)		(13)		(25)		(232)	
Total	541	30.3%	1,053	59.0%	106	5.9%	86	4.8%	1,786	100.0%

¹ The numbers and percents refer to school programs in a given category. Percentages are based on those programs which have data for the variable "reason for change."

21.6 percent, and then only slightly rose again in the post-New Pride period to 23 percent.

When recording completion data about each school program, staff were asked to indicate whether or not students had withdrawn from school when they ended that program. Where these data were collected, records of schools entered prior to New Pride showed that the student withdrew from school in 61.9 percent of the cases, for the intensive phase, 53 percent, for the follow-up phase, 39.5 percent and for post-New Pride schools, 25.9 percent.

It is clear from these data that many New Pride clients had a history of difficulties in dealing with school. Many had dropped out altogether before being admitted into New Pride. Those clients for whom we have complete records of their school experience just prior to entering New Pride had been out of school for an average of 16 weeks. Given this fact, it is very impressive that the program was able to bring so many back into school, improve their attendance, and increase the rate of their successful completions.

SERVICES

All New Pride service staff were asked to fill out a service delivery report for each discrete service they provided to clients. On this report they were to document the type and duration of service, who was served, who provided the service, and a few other pieces of information. Staff could also record activities not related to a specific client, such as staff meetings or administration tasks. By recording these, as well as client-directed services, the MIS provided sites with a tool to track staff activities as well as client services. No site, however, took full advantage of this staff tracking potential. All but one did use the MIS to varying degrees of thoroughness to track client services.

The recording of educational services presented a special problem. While tutoring services were not difficult to document individually, recording each type of service provided to each student in the alternative school classroom, and its duration, would have placed an impossible burden on both teachers and data coders. Because of this, educational services provided in the classroom setting were not documented discretely, but rather in terms of attendance figures, that is, days present, absent, or tardy. Here educational services include learning disability remediation, which was provided in the classroom setting as well. Since these services were recorded differently than the other services, that is, their individual service types and durations were not specified, they cannot be presented in the following tables in the same way as the other services.

For any New Pride site to document fully all of the services which were provided to clients, all service staff had to maintain a strong and continued commitment to this task. It required sustained support from project administrators as well. Of all the sites, Fresno maintained the most complete documentation of services. While Fresno clients comprised only 12.1 percent of all clients (excluding Georgetown clients, for whom no service delivery data were entered), Fresno service delivery records comprised 28.7 of all such records. Other sites (except Georgetown) documented services in varying degrees of completeness. San Francisco did not record services during its first year of operation, but did record them for the later cohorts. Pensacola staff

recorded almost no educational/learning disability remediation services, although many were provided. Camden staff recorded only a portion of the many services they provided throughout the project's operation.

Table 47 presents the services delivered to clients by service type by site. It shows the number and proportion of each sites' clients who received the various kinds of services. While the data for educational and learning disability services are presented, these data are incomplete because they do not include regular classroom services. All educational and learning disability services, the discrete service delivery records plus the attendance records, are presented later in Table 51.

As can be seen from Table 47, service delivery information was entered into the data base for 94.7 percent of all clients from the 9 sites that documented services. Despite the fact that this table does not include classroom attendance data, the service type with the highest proportion of records (24.9 percent) is educational services. Counseling services were the second most frequently recorded (22.5 percent), and this type was provided to the highest proportion of clients, 85.5 percent. At two sites, Fresno and Providence, counseling was provided to all clients. Intake and case work activities were also recorded for high proportions of clients: 83.9 and 83.7 percent respectively.

The amount of services received by clients varies by service type and site. These figures are broken-out in Table 48 and presented in the average number of hours per client for those clients who received services.

Clients who received services in the category labeled "other client services" received an average of 43.5 hours of service, the highest amount for any type (excluding educational and learning disability services, which were primarily recorded in the attendance data in days). Fresno clients were engaged in these activities for the greatest amount of time: 120.2 hours per client who received any of these services. Services in the "other" category include recreation, court and health services, cultural enrichment, life skills, drivers'

Table 47
Services Delivered by Type of Service

Type of Service	Sites									Total2
	Boston	Camden	Chicago	Fresno	Kansas City	Los Angeles	Pensacola	Providence	San Francisco	
Intake Activities										
N of Records	216	1,323	363	1,423	637	351	2,202	1,098	3,782	11,395
% of Site's Records	2.2	12.1	1.5	3.2	4.0	8.9	12.0	8.8	23.6	7.3
N of Clients	33	162	84	129	67	44	147	119	131	917
% of Site's Clients	70.2	92.6	59.2	97.7	58.8	75.9	97.4	100.0	84.5	83.9
Case Work Activities										
N of Records	112	1,781	2,248	6,082	2,153	714	6,681	3,081	1,860	24,712
% of Site's Records	1.2	16.3	9.3	13.6	13.6	18.1	36.3	24.8	11.6	15.8
N of Clients	25	142	107	132	73	47	140	119	128	915
% of Site's Clients	53.2	81.1	75.4	100.0	64.0	81.0	92.7	100.0	82.6	83.7
Counseling										
N of Records	1,685	4,755	3,728	9,053	541	489	6,528	5,364	3,070	35,213
% of Site's Records	17.4	43.5	15.4	20.2	3.4	12.4	35.4	43.1	19.2	22.5
N of Clients	39	149	105	132	63	44	146	119	137	934
% of Site's Clients	83.0	85.1	73.9	100.0	55.3	75.9	96.7	100.0	88.4	85.5
Education¹										
N of Records	4,114	407	14,794	14,467	1,710	1,498	324	236	1,348	38,898
% of Site's Records	42.4	3.7	61.2	32.3	10.8	38.1	1.8	1.9	8.4	24.9
N of Clients	40	66	121	109	37	38	40	62	78	591
% of Site's Clients	85.1	37.7	85.2	82.6	32.5	65.5	26.5	52.1	50.3	54.1
Learning Disabilities¹										
N of Records	1,807	321	1,445	3,540	7,114	37	1	121	282	14,668
% of Site's Records	18.6	2.9	6.0	7.9	45.0	0.9	0.0	1.0	1.8	9.4
N of Clients	37	22	70	36	32	2	1	12	31	243
% of Site's Clients	78.7	12.6	49.3	27.3	28.1	3.4	0.7	10.1	20.0	22.2
Employment										
N of Records	834	1,237	266	3,192	361	238	1,694	1,616	3,026	12,464
% of Site's Records	8.6	11.3	1.1	7.1	2.3	6.0	9.2	13.0	18.9	8.0
N of Clients	33	132	53	112	18	28	104	105	134	719
% of Site's Clients	70.2	75.4	37.3	84.8	15.8	48.3	68.9	88.2	86.5	65.8
Other Client Services										
N of Records	928	1,099	1,342	7,002	3,304	608	993	924	2,647	18,847
% of Site's Records	9.6	10.1	5.5	15.6	20.9	15.5	5.4	7.4	16.5	12.1
N of Clients	36	131	110	129	40	39	129	108	131	853
% of Site's Clients	76.6	71.9	77.5	97.7	35.1	67.2	85.4	90.8	84.5	78.0
Total										
N of Records	9,696	10,923	24,186	44,759	15,820	3,935	18,423	12,440	16,015	156,197
N of Clients	43	168	135	132	97	49	149	119	143	1,035
% of Total Clients	91.5	96.0	95.1	100.0	85.1	84.5	98.7	100.0	92.3	94.7

¹ As explained in the text, figures for these services are incomplete as they do not contain records of classroom services.

² The total client percentile figures are based on a total client population of 1,093, which excludes Georgetown clients who have no service delivery records.

Table 48
Amount of Services Delivered
by Service Type¹

Site	Average Number of Hours Per Client				Other Client Services
	Intake Activities	Case Work Activities	Counseling	Employment	
Boston	6.3	2.6	25.7	24.9	45.7
Camden	5.9	4.2	24.7	10.9	31.3
Chicago	5.8	21.4	34.7	7.1	29.8
Fresno	12.9	19.6	54.4	26.7	120.2
Kansas City	5.8	10.5	6.1	17.4	55.0
Los Angeles	11.6	45.2	8.8	7.7	25.7
Pensacola	9.7	13.7	32.8	9.5	8.0
Providence	7.2	14.2	21.2	12.4	26.1
San Francisco	81.2	23.8	15.6	26.8	42.2
Total	18.7	16.5	27.5	16.7	43.5

¹ Educational and learning disabilities have been omitted because most of these services were recorded in classroom attendance data where they were not distinguished by service type or duration.

education, and school advocacy and reintegration services (see Appendix A, List of Services).

Next to these "other" services, clients spent the most time engaged in counseling: 27.5 hours per client who received any counseling service. Again, the Fresno clients had the most counseling: an average of 54.4 hours. Since all Fresno clients received counseling services, this figure is the mean for all clients at that site.

For each service delivery record, staff were asked to indicate with whom the service contact was made: the client, his/her family, the court or probation, the client's case records, or some 'other' contact. For those records which had these data, 79.9 percent of service contacts were with the client. The proportion of the other types were as follows: family - 4.7 percent; court/probation - 3.2 percent; case records - 7.2 percent; 'other' - 5 percent.

The service delivery record also contained data on the mode of service delivery, that is, if the service was conducted in person, via telephone, or by letter or some other means. For all records with these data, 83 percent of the services were "in person," 8.2 percent by telephone, and 8.8 percent by letter or some "other" mode.

As we discussed earlier in the chapter on the IISP, sites developed service plans designed to meet clients' objectives. The eight sites which recorded IISP data in the computer files (Boston and Georgetown did not) did so for differing proportions of their clients, and many clients had incomplete plans. Not infrequently, staff identified needs and set objectives, but planned no services to meet those objectives (see IISP, Table 35). For the service plan data that are recorded, we have examined the service delivery data to see which planned services were actually delivered. This was done by matching planned services with delivered services by client ID and service code (by specific rather than generic service type, such as individual planned counseling rather than counseling or vocational skills training rather than employment). These figures are presented in Table 49.

Table 49

Planned Services Actually Delivered¹ by Service Type² by Site

Site	Intake Activities		Case Work Activities		Counseling		Employment		Other Client Services	
	N	%	N	%	N	%	N	%	N	%
Camden	3	75.0	8	66.7	107	79.9	29	39.2	19	48.7
Chicago	1	5.3	5	83.8	47	53.4	8	50.0	15	37.5
Fresno	14	100.0	102	98.1	174	90.6	56	74.7	17	45.9
Kansas City	1	33.3	66	48.9	55	50.9	6	6.3	29	26.9
Los Angeles	3	100.0	4	100.0	15	53.6	16	61.5	12	54.5
Pensacola	4	57.1	8	72.7	248	87.0	130	52.8	20	27.0
Providence	1	14.3	1	100.0	110	90.9	84	27.8	13	43.3
San Francisco	23	85.2	8	61.5	85	83.3	87	88.8	44	59.5
Total	50	59.2%	202	70.6%	841	79.5%	416	44.6%	169	39.9%

¹ These figures represent the number and percent of planned services that actually matched by client ID and discrete service type code with delivered services.

² Education and learning disability services are presented in Table 51.

A higher proportion of planned counseling services were delivered than any other type of service, with 841 or 79.5 percent of all planned counseling services having matching service delivery records. Planned services that fall into the "other" category were least often delivered (only 39.9 percent had matching service delivery records). Since these were services not directly related to any of New Pride's components, programs may have been unable to free the resources required to provide these services. The next lowest category is employment services, of which only 44.6 percent were delivered.

At Fresno and San Francisco, relatively high proportions of planned services were actually delivered. At Fresno, over 90 percent of the intake, case work, and counseling services that were planned were subsequently delivered. At Kansas City, the proportions of planned services which were delivered were relatively low. At that site, only 6.3 percent of all planned employment services were recorded as having been delivered. Of course, in many of these cases, planned services actually may have been delivered but not recorded by staff or entered into computer files. Others may be explained because the program failed to provide the services that had been planned.

Table 50 looks at these same data from another perspective. It presents the proportion of delivered services that were planned on the IISP, once again matching services by discrete service code and client ID. Among the service types, the lowest proportion of delivered services that were planned in advance is for intake activities: 4.0 percent. This low figure is understandable, for most intake activities occurred prior to the development of the IISP, and were used in the development of that plan. Thus, the plan did not need to include services which had already taken place.

The other types of services were provided, for the most part, after the IISP had been created. Yet overall figures show that most of the services that were delivered were not planned. This is quite appropriate for certain types of services, such as unplanned counseling or crisis intervention, which by their nature cannot be planned in advance. Most other types of services, however, can

Table 50

Percent of Delivered Services That Were Planned
by Service Type

Site	Intake Activities %	Case Work Activities %	Counseling %	Employment %	Other Client Services %
Camden	1.1	0.8	20.7	7.3	6.6
Chicago	4.4	2.3	16.0	6.4	2.2
Fresno	4.3	31.6	34.6	47.3	5.3
Kansas City	0.5	77.9	46.8	51.2	41.6
Los Angeles	4.0	8.0	15.7	27.7	5.9
Pensacola	0.7	1.6	76.1	39.3	8.2
Providence	0.5	-	46.4	16.8	6.0
San Francisco	8.6	1.5	25.9	25.0	5.4
Total	4.0%	15.6%	37.8%	28.6%	11.5%

be planned. These data would indicate that projects used the IISP in a limited way to plan the treatment of clients.

The service type which has the highest proportion of delivered services which were planned in advance is counseling. Even here, close to two-thirds of all the counseling services provided to clients were not planned (as mentioned above, some of these are necessarily unplanned).

"Other" client services was the service type second to intake activities in the lowest proportion of delivered services having been planned. As Table 49 shows, this type had the lowest proportion of planned services which were actually delivered. It appears that these services were more spontaneous than the other types, yet clients received, on an average, more hours of these services than of any other type of service (excluding educational services which, as was explained, were primarily documented in days).

As discussed above, educational services were recorded in two ways. Some were recorded in the same way as the other service types, by discrete records identifying the specific service code and the duration of the service. Classroom activities were recorded in days and not differentiated into specific service types. Table 51 presents data on all educational services, combining the two different kinds of records.

The first part of Table 51 shows the educational services, both regular and learning disability remediation, which were planned for clients. Over the eight sites which entered IISP data, educational services were planned for 52.6 percent of the clients. Providence had the highest proportion of clients for whom these services were planned, 89.1 percent, followed by Pensacola, with 78.8 percent.

The next section of this table presents data on those educational services which were actually delivered. At the nine sites which recorded these data, educational services were provided to and recorded for 71.6 percent of the clients. All but two sites, Pensacola and Kansas City, provided these services to more clients than they had planned. The difference at Pensacola is a large one,

Table 51
Educational Services

Site	Educational Services ¹ Planned			Educational Services ¹ Delivered			Clients with Planned Educational Services Who Received Educational Services ²	
	N Services Planned	Clients with Planned Services N	% ³	N Services Delivered ⁴	Clients Served N	% ⁵	N	%
Boston ⁶				5,921	41	87.2		
Camden	165	69	39.4	14,513	142	81.1	64	92.8
Chicago	140	56	39.4	16,239	121	85.2	48	85.7
Fresno	252	62	47.0	28,000	120	90.9	61	98.4
Kansas City	76	55	48.2	8,824	52	45.6	39	70.9
Los Angeles	63	23	39.7	3,001	42	72.4	22	95.7
Pensacola	350	119	78.8	325	41	27.2	37	31.1
Providence	406	106	89.1	18,162	116	97.5	105	99.1
San Francisco	93	60	38.7	6,680	108	69.7	59	98.3
Total	1,545	550	52.6%	101,665	783	71.6%	435	79.1%

- 1 These include both regular and learning disability educational services.
- 2 Records of planned services and delivered services were only matched by client ID, as attendance records did not specify individual service codes.
- 3 These percentages are based on the number of clients per site and, for the total, on the total number of clients at the eight sites (N= 1,046).
- 4 This includes discrete service delivery records and attendance records (one for each day of school).
- 5 These percentages are based on the number of clients per site and, for the total, on the total number of clients at the nine sites (N = 1,093).
- 6 Boston had service delivery data but no IISP data in the computer files.

and can be explained by the fact that many services actually delivered there were not recorded in the MIS computer files. It is unclear whether this was the case at Kansas City as well, or whether the services themselves were not delivered.

The third section of this table presents the number and percent of clients with planned educational services who actually received some educational services. The total figure for the eight sites with IISP data shows that 79.1 percent of those clients with educational services in their IISPs actually received some type of educational service. Except for Pensacola, which recorded few delivered educational services, sites served a high proportion of the clients for whom they planned these services. At 5 of the 8 sites, over 90 percent of the clients who had educational services in their plans received some of these services.

PROGRAM TERMINATIONS

In the New Pride data base, there are termination data for 1,035 or 89 percent of the 1,167 clients admitted prior to January 1, 1983 (see Table 52). Three sites collected termination data on all clients in the target population. All the other sites but one collected these data on a majority of their clients. Georgetown is the exception, and they entered no termination data into the MIS data base.

Table 53 shows a breakdown of the reasons for terminating clients by site. Sites varied in how they defined these reasons. At some sites, a client was considered to have completed the program if he or she received a year of services. At other sites, when a youth was terminated from probation and subsequently stopped participating in the program before a year, this termination was also categorized as a program completion. In some of these cases, clients may have received far less than 12 months of services. Sometimes it was difficult to distinguish between a client and a program decision to terminate, especially in cases where a client refused to attend regularly or to abide by program rules. A judicial or probation decision to terminate usually came as a result of a rearrest, but occasionally was the result of a client's good conduct, which led to his or her probation being ended. The category "other" includes such cases as the client being referred to a more appropriate program or the youth's family moving from the area.

Overall, the most frequent reason for termination was program completion, which applied to 45 percent of the clients for whom we have data. The second largest category (26 percent) was a judicial or probation decision to terminate. As can be seen in Table 53, there is a wide variation among sites in the frequency of these and of the other reasons for termination.

After the New Pride programs had been in operation for some time, it became clear that they needed some way to measure clients' terminations in terms of whether they were successful or unsuccessful. The National Evaluators also realized the value of such a measure in permitting a finer analysis of the

Table 52

Clients with Termination Data by Site

Site	Clients	Percent of Total Clients
Boston	36	76.6
Camden	175	100.0
Chicago	138	97.2
Fresno	131	99.2
Georgetown	0	-
Kansas City	113	99.1
Los Angeles	58	100.0
Pensacola	151	100.0
Providence	114	95.8
San Francisco	119	76.8
Total	1,035	88.7%

Table 53

Reason for Termination by Site

Site	Program Completion		Client Decision		Judicial/ Probation Decision		Program Decision		Other		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Boston	3	11.5	1	3.8	11	42.3	11	42.3	0	—	26	2.5
Camden	68	38.9	42	24.0	27	15.4	31	17.7	7	4.0	175	17.1
Chicago	42	30.4	19	13.8	39	28.3	26	18.8	12	8.7	138	13.5
Fresno	59	45.0	1	0.8	41	31.3	8	6.1	22	16.8	131	12.8
Kansas City	65	57.5	11	9.7	21	18.6	16	14.2	0	—	113	11.0
Los Angeles	8	13.8	0	—	8	13.8	40	69.0	2	3.4	58	5.7
Pensacola	84	55.6	1	0.7	52	34.4	10	6.6	4	2.6	151	14.7
Providence	66	57.9	1	0.9	36	31.6	7	6.1	4	3.5	114	11.1
San Francisco	62	52.1	3	2.5	33	27.7	11	9.2	10	8.4	119	11.6
Total	457	44.6%	79	7.7%	268	26.1%	160	15.6%	61	6.0%	1,025 ¹	100.0%

¹ This is the total for whom we have data on termination reason. This information was missing from 10 termination records.

data. Originally the "reason for termination" variable had been designed solely for informational purposes, and not as a measure of program success. Although clients who completed the program could be considered successful terminations, the other reasons listed included successful and unsuccessful, as well as neutral reasons.

A decision was made to add a new set of codes to the termination information which would evaluate the termination status of clients. These new codes divided terminations into the following three categories:

1. **Failure:** Unacceptable reasons which included new offenses, AWOLs, program decisions based on inappropriate student conduct, or client decision (with one exception – see "2.");
2. **Neutral:** Reasons such as moved or was transferred to a more appropriate program, or client-decision when client had a full-time job with a dependent family situation and no reoffense; or
3. **Success:** Completed the program with no reoffense or probation termination with no reoffense.

It was also decided that if the neutral category had the same relationship to post-program recidivism as the successful or failure categories, it could be combined with one or the other for analytic purposes.

Each termination was classified into one of these three categories based on data already in the files and new information forwarded from the sites. All the available sites checked the new codes to insure their accuracy. Boston, Georgetown, and Los Angeles could not provide this information so the majority of their clients are missing termination status data and these sites are excluded from the tables which present these data.

Table 54 shows clients' termination status by site for the seven sites where these data were recorded for a majority of the clients. Overall, 49.7 percent of these clients were considered successful terminations, 46 percent unsuccessful, and 8.2 percent neutral. While the overall figures show a slight preponderance of

Table 54
Termination Status by Site

Site	Successful		Neutral		Failure		Missing Data
	N	%	N	%	N	%	N
Camden	65	39.2	5	3.0	96	57.8	(9)
Chicago	40	29.0	14	10.1	84	60.9	(4)
Fresno	60	45.5	9	6.8	63	47.7	(0)
Kansas City	64	56.6	13	11.5	36	31.9	(1)
Pensacola	87	57.6	4	2.6	60	39.7	(0)
Providence	66	60.6	4	3.7	39	35.8	(10)
San Francisco	78	51.0	27	17.6	48	31.4	(2)
Total	460	49.7%	76	8.2%	426	46.0%	(26)

successful terminations, at three sites (Camden, Chicago, and Fresno) there were more terminations for unacceptable reasons.

Neutral terminations accounted for 8.2 percent of the cases. The three sites with the highest proportion of neutral terminations, all over 10 percent, are those that closed at the end of their third year of operation. The clients who had not finished the program at the time of the sites' closures were included in the neutral category, thereby inflating this category.

All sites reported that the beginning phases of their operations were filled with the difficulties inherent in starting a new program. Inevitably the process of setting up the components, training new staff, establishing procedures, and forming linkages with the local justice system was chaotic. The first year of the New Pride projects was a time of learning.

In Table 55, we have attempted to see whether clients admitted to New Pride in different years differed in termination status. If programs did become more effective over time at treating clients, one might expect to see an increase in the proportion of successful terminations. In the overall figures, however, this does not hold true. While the proportion of successful completions increases from year one to year two, it falls in year three to a level below that of year one. The large increase in neutral terminations in year three (an increase of 14 percent over year two) reflects those clients whose services were interrupted by the closure of three sites.

These data also show, however, that the proportion of unsuccessful terminations falls over the three years. Thus, while the data show no clear evidence to support our hypothesis that as sites gained experience in operating a New Pride program, the proportion of clients successfully terminated would increase, they do indicate that programs had fewer failures over time.

The termination data can also be examined in relation to the amount of time clients spent in New Pride (see Table 56). Clients who terminated successfully spent an average of one year in New Pride and those who terminated

Table 55

Clients by Termination Status by Site by Year

Site		Successful		Neutral		Failure	
		N	%	N	%	N	%
Camden	Year 1	9	23.1	2	5.1	28	71.8
	Year 2	38	39.2	1	1.0	58	59.8
	Year 3	18	60.0	2	6.7	10	33.3
Chicago	Year 1	7	53.8	0	—	6	46.2
	Year 2	24	33.8	0	—	47	66.2
	Year 3	9	16.7	14	25.9	31	57.4
Fresno	Year 1	12	37.5	2	6.3	18	56.3
	Year 2	26	51.0	3	5.9	22	43.1
	Year 3	22	44.9	4	8.2	23	46.9
Kansas City	Year 1	8	42.1	2	10.5	9	47.4
	Year 2	48	62.3	5	6.5	24	31.2
	Year 3	8	47.1	6	35.3	3	17.6
Pensacola	Year 1	24	77.4	2	6.5	15	48.4
	Year 2	48	61.5	1	1.3	29	37.2
	Year 3	15	46.7	1	3.1	16	50.0
Providence	Year 1	13	68.4	0	—	6	31.6
	Year 2	37	69.8	1	1.9	15	28.3
	Year 3	16	43.2	3	8.1	18	48.6
San Francisco	Year 1	28	54.9	4	7.8	19	37.3
	Year 2	28	53.8	6	11.5	18	34.6
	Year 3	22	44.0	17	34.0	11	22.0
Total	Year 1	101	47.2	12	5.6	101	47.2
	Year 2	249	52.0	17	3.5	213	44.5
	Year 3	110	40.9	47	17.5	112	41.6

¹ Year one includes data for those clients who were admitted into the program in 1980, year two includes those admitted in 1981, and year three those admitted in 1982.

Table 56
Time in New Pride by Termination Status

Site	Average Weeks in Program ¹ by Termination Status		
	Successful	Neutral	Failure
Camden	51.3	34.0	27.3
Chicago	52.4	30.1	18.2
Fresno	50.4	22.0	30.4
Kansas City	47.0	34.5	24.6
Pensacola	54.4	21.8	20.9
Providence	52.7	38.8	24.0
San Francisco	53.6	17.5	17.5
Total	51.8	27.7	23.5

¹ Average time is calculated in weeks and based on the number of clients for whom we have both termination dates and termination status information (N = 956).

unsuccessfully spent less than half that long, 23.2 weeks. The group of neutral terminations were in the program an average of 27.7 weeks, or close to a month longer than the group of failures; this is still far shorter than the time spent by those classified as successes.

The figures for the successful and neutral terminations are consistent with what could be expected concerning time in the program. It is not surprising that clients considered to have terminated successfully completed the entire New Pride program. Many of the neutral terminations were caused by events external to the clients' behavior, that is, the family moving, sickness, or site closures. Thus, it makes sense that the average of these occurrences falls about half-way through the program.

The time spent in New Pride by unsuccessful terminations, however, is harder to disentangle, for it was affected by recordkeeping procedures at sites. When clients failed to show up for services, some projects kept them "on the rolls" for one or two months, in case they might return. In many instances, the recorded termination date for clients who chose to leave or whom the project decided to terminate was much later than the cessation of services. Consequently, the average time actually spent in New Pride by unsuccessful terminations may have been even less than 23 weeks.

In Table 57 we see the number and proportion of youth, by site, terminated during the intensive phase and the follow-up phase, and the average amount of time they spent in New Pride. Across the sites, one-third of all clients were terminated during their intensive phase of treatment. In this as with most variables, there is a wide range among the sites: 64 percent of the Boston clients terminated during the intensive phase, while only 19 percent of the youth at Providence did so. Clients terminated in this phase spent an average of 13.4 weeks at New Pride. The other two-thirds of our target population, who terminated during their follow-up phase, spent an average of 47.6 weeks in New Pride.

Table 57

Time in the Program by Phase of Termination

Site	Clients Terminated in Intensive Phase ¹			Clients Terminated in Follow-Up Phase ²		
	Average Weeks	Clients	%	Average Weeks	Clients	%
Boston	10.9	23	63.9	42.2	13	36.1
Camden	13.2	54	30.9	48.5	121	69.1
Chicago	12.9	64	46.4	43.5	74	53.6
Fresno	17.2	27	20.6	44.4	104	79.4
Kansas City	12.5	30	26.6	47.8	83	73.4
Los Angeles	15.4	36	62.1	41.4	22	37.9
Pensacola	13.6	45	29.8	51.6	106	70.2
Providence	12.5	22	19.3	48.9	92	80.7
San Francisco	12.5	43	36.1	49.8	76	63.9
Total By Phase	13.4	344	33.2%	47.6	691	66.8%

1 Clients were considered to be in this category if they were in the program 25 weeks or less.

2 Clients were considered to be in this category if they were in the program longer than 25 weeks.

CLIENT ASSESSMENT OF NEW PRIDE IMPACT

Information about a broad range of topics was solicited at program entry and termination from the clients themselves. Using an Intake and Exit Survey, clients were asked about their experiences with and attitudes toward work and school. These survey data provide comparative data about the two areas. In addition, client assessments of New Pride services and staff were gathered via the Exit Survey. These give a picture of what clients considered important about New Pride and how much they felt they had gained from the program.

The Intake Survey was to be completed by the client during the intake phase and the Exit Survey was to be completed immediately before or after termination from the program. Seventy-five percent of all clients completed an Intake Survey, while only 43 percent completed an Exit Survey. The reason for the low proportion of Exit Surveys is that many clients left the program unexpectedly due to rearrests or going AWOL, and thus were unable or unwilling to complete the survey. (See Appendix C for more details about the types of clients who completed the two surveys.)

Some of the questions on the Intake Survey were repeated on the Exit Survey, giving a pre and post-measure for these items. These provide information about the impact of the New Pride program on certain client attitudes and perceptions.

Work

According to the Intake Survey, 86 percent of all clients were unemployed when they entered New Pride (see Table 58). Of those who had jobs, most were working part-time. Only 4 percent of the clients had a full-time job at the time of intake.

Youth who were employed at intake or within the previous six months were asked how they had found their jobs. The majority, 56 percent, had located

employment through the help of friends or relatives. Twenty-two percent found their jobs through their own efforts, by applying directly to the employer, following a lead from a newspaper or a sign in a window, or using the services of an employment agency. Ten percent found jobs with the help of New Pride staff, a figure which represents staff outreach to youth who were not yet officially clients. Another 12 percent were helped by staff of other programs to find jobs.

As could be expected, most youth earned a minimum wage. Thirteen percent earned below minimum wage (less than \$2.50 per hour) and thirty percent earned more (\$3.50 and more per hour). For many of the employed youth, this early job experience seems to have been a positive one; only 10 percent reported they didn't like their jobs much, while 45 percent said they liked it very much.

At the time of intake into New Pride, 81 percent of all clients specified that having a job was important or very important to them. Only 4 percent said that having a job now was unimportant. When clients were asked what their actual chances were of getting the kind of jobs they wanted, their responses varied a great deal. Only 46 percent of the youth said they thought their chances were pretty or very good. Thirty-nine percent rated their chances as fair, and 15 percent as not good.

Exit Survey data show that 30 percent of the clients who were surveyed were employed at the time they were terminated from New Pride, as compared to 13 percent at the time of intake (see Table 58). Forty-six percent of those employed at termination had found their jobs with the help of New Pride staff.

Employed youth were earning higher salaries when they left New Pride than they had earned when they entered the program. Less than five percent were earning below \$2.50 per hour (as compared to 13 percent at intake) and 44 percent were earning more than the minimum wage (as compared to 30 percent).

Table 58

Intake and Exit Survey Employment Comparisons

		Intake Survey		Exit Survey	
		N	%	N	%
Do you have a job now, not counting work around the house?	No Job	735	86.1	347	69.5
	Part-time	87	10.2	99	19.8
	Full-time	<u>32</u>	<u>3.7</u>	<u>53</u>	<u>10.6</u>
	Total	854	100.0%	499	100.0%
What is (or was) your hourly wage?	\$2.49 or less	43	12.7	7	4.5
	\$2.50-\$3.49	193	57.1	80	51.9
	\$3.50 or more	<u>102</u>	<u>30.2</u>	<u>67</u>	<u>43.5</u>
	Total	338	100.0%	154	100.0%
How well do you (or did you) like this job?	Not much	36	10.3	12	7.9
	So-so	155	44.3	63	41.4
	Very much	<u>159</u>	<u>45.4</u>	<u>77</u>	<u>50.7</u>
	Total	350	100.0%	152	100.0%

Clients were more satisfied with their jobs at termination than at intake. Over half of the clients surveyed at termination who had jobs said they liked their jobs very much. Most youth felt more positive about their future employment picture due to the help they received from the program, for 69 percent thought that their chances of getting the kind of jobs they wanted had improved after having been in New Pride.

Education

At intake, New Pride clients were asked how much they liked school. Their attitudes were relatively neutral: half of those surveyed said they liked school somewhat, one-quarter said they didn't like it, and one-quarter said they liked it a lot or very much (see Table 59).

Despite their lukewarm attitudes towards school, most clients hoped to continue their formal education. Thirty-five percent said they wanted to graduate from high school and an additional 41 percent said they wanted to continue their education past high school. When asked on the Intake Survey how much education they expected to get, responses were less optimistic. While the same proportion of youth expected to graduate from high school, only 32 percent expected to continue their schooling past that point. Five percent more youth expected to drop out of high school than wanted to, and 3 percent more expected to finish their education with a GED. Overall there were significant differences between clients' desires for education and their expectations for further education¹.

Sixty percent of those who took the Exit Survey reported that their feelings about school had changed since coming to New Pride. Yet when asked how well they like school now, at termination from the program, only 4 percent more than at intake said they liked it a lot or very much.

¹ Pairwise $t = 9.71$, $df = 847$, $p < .0001$

Table 59
Intake and Exit Survey Education Comparisons

		<u>Intake Survey</u>		<u>Exit Survey</u>	
		N	%	N	%
How do you feel about going school now? I like school..	Not at all, not very much	217	25.1	110	22.0
	Some	435	50.4	250	49.9
	Quite a lot; very much	<u>211</u>	<u>24.5</u>	<u>141</u>	<u>28.1</u>
	Total	863	100.0%	501	100.0%
<u>How much education would you like to get?</u>	Drop out before high school graduation	31	3.6	26	5.2
	Drop out but get GED	176	20.5	125	25.2
	Graduate from high school	301	35.1	127	25.6
	Vocational or business school	101	11.8	86	17.3
	Some college or junior college	91	10.6	47	9.5
	Graduate from 4-year college	89	10.4	55	11.1
	Advanced or professional degree	<u>68</u>	<u>7.9</u>	<u>31</u>	<u>6.2</u>
	Total	857	100.0%	497	100.0%

Basically, program participation appeared to promote a rearrangement in the educational goals of clients. On the Exit Survey, 10 percent fewer clients indicated they wanted to finish high school, and 2 percent fewer wanted to go to college or get professional degrees. On the other hand, 5 percent more wanted GEDs and 6 percent more wanted to pursue some line of vocational training or go to business school instead. These changes may reflect more realistic goals for the clients involved, and be an effect of the counseling they received at New Pride. Seventy-nine percent of the young people leaving the program (from whom Exit Surveys were collected), a significant number of these youth, indicated that they believed their chances of getting the kind of education they wanted had improved as a result of being in New Pride¹.

Clients were asked on both the Intake and the Exit Surveys how many teachers or counselors had taken a real interest in their lives and how they felt about the help their teachers and counselors had given them. On the Intake Survey, 21 percent replied that no teachers or counselors had taken any real interest, while this proportion had dropped to 3 percent at termination. At intake, 27 percent replied that 4 or more teachers or counselors had been interested in their lives, while this rose to 56 percent at the time of leaving New Pride. Besides feeling that more teachers and counselors had been interested in them, more clients perceived that the help of these adults had been beneficial. On coming to New Pride, 40 percent of the clients reported that such help usually made things better. After New Pride, 59 percent felt this way.

Client Satisfaction

When they came into the program, youth were asked what they expected to receive from it. Forty-seven percent listed instrumental gains (tangibles such as jobs, school credit, etc.). Thirteen percent listed affective gains such as insight into themselves or friendship. Thirty-four percent expected both types of

¹ Pairwise $t = 42.93$, $df = 495$, $p < .0001$

benefits. When administered the Exit Survey, clients were asked what they actually received by participating in the program. Only 19 percent indicated instrumental gains alone, while 2.5 percent replied "affective gains" and 41 percent "both."

The Exit Survey polled clients on the amount of help they had received from the different types of services at New Pride (see Table 60), and on whether these services had met their specific needs (see Table 61). Counseling services were rated the highest in terms of having helped clients a lot, followed by educational and recreational services. In Table 61, the largest proportion of clients indicated that New Pride staff had helped them to feel better about themselves, which reinforces the value they placed on the program's counseling services.

Three-fourths of all clients surveyed at termination said that New Pride had been able to help them with all of their needs and problems. Those who indicated they had needs or problems that New Pride was unable to address were asked what these were. These clients cited personal and family problems, and in particular, finding a place to live independently and getting a job.

Youth were also asked to indicate how satisfied they were with the efforts of the New pride staff to help them and the quality of interaction they had with the staff (see Table 62). Their responses were overwhelmingly positive.

When asked how helpful the program had been to them generally, less than 3 percent thought it had not been helpful. Twenty-eight percent felt it had been of some help. Another 26 percent said it had been moderately helpful, while 44 percent felt it had been very helpful. Altogether, 90 percent of all clients who were administered the Exit Survey said they were glad that they had come to New Pride, and 91 percent said they would recommend the program to a friend in trouble.

To put this degree of satisfaction into perspective, it must be borne in mind that a large proportion of youth (46 percent) saw themselves as having been

Table 60

Client Satisfaction with New Pride Services

Type of Services	Degree of Help by Percent ¹				
	Helped A Lot	Some Help	No Help	More Harm than Good	Services Not Received
Counseling	51.5%	42.9%	3.8%	0.9%	0.9%
Educational	41.0	47.3	6.3	0.9	4.5
Special Ed/Learning Remediation	24.5	31.7	11.0	0.2	32.6
Employment	34.0	34.2	17.5	0.9	13.4
Cultural Activities	26.4	42.3	13.5	0.7	17.1
Health Services	18.9	31.2	13.9	0.5	35.5
Recreation	37.6	41.5	10.1	0.9	9.9
Other	17.5	20.0	6.2	2.5	53.8

¹ All figures represent percentages rather than numbers of clients, as a different number of clients rated each type of service. These numbers differed because of a varying amount of missing data for each service type. Percent figures for each type of service are based on the total number of responses for that type.

Table 61
Client Assessment of Needs Addressed
by New Pride Staff

Need	Need Addressed by Percent ¹	
	Yes	No
Get class credit	66.7%	33.3%
Get into vocational training	35.2	64.8
Learn how to get a job	77.3	22.7
Get job training	51.2	48.8
Find out about job openings	74.2	25.8
Get a job	57.0	43.0
Discover career goals	54.5	45.5
Help at juvenile court	75.1	24.9
Accompany to see lawyer	37.1	62.9
Accompany to court hearings	70.6	29.4
Deal with money problems	46.9	53.1
Deal with transportation problems	77.8	22.2
Find hobbies	51.3	48.7
Physical health problems	43.7	56.3
Family problems	64.2	35.8
Other personal problems	62.4	37.6
Feel better about self	79.1	20.9
Leave home	12.8	87.2
Find a place to stay	15.9	84.1

¹ All figures represent percentages rather than numbers of clients, as a different number of clients rated each need. These numbers differed because of a varying amount of missing data for each need. Percent figures for each type of need are based on the total number of responses for that need.

Table 62
Client Satisfaction with New Pride Staff

Staff Performance and Interaction	Degree of Satisfaction by Percent ¹		
	Not at All Satisfied	Somewhat Satisfied	Satisfied or Very Satisfied
Courtesy staff showed you	2.4%	14.3%	83.3%
How well staff did jobs	4.8	11.7	83.5
Amount of time you and your counselor spent together	4.3	15.5	80.2
Amount of time you and other staff spent together	7.6	22.0	70.4
How much you could trust your counselor	4.3	11.5	84.1
How much you could trust other staff	8.6	25.5	65.9
How much staff supported you in your goals	8.6	19.8	71.6
Concern staff had for you	5.7	11.7	82.6
Your counselor's efforts to follow through on plans	3.8	11.7	84.4
Efforts of other staff to follow through on plans	6.9	22.6	70.5

¹ All figures represent percentages rather than numbers of clients, as a different number of clients rated each item. These numbers differed because of a varying amount of missing data for each item. Percent figures for each item are based on the total number of responses for that item.

sent to New Pride under court order, through family pressure, or both, that is, as not having any choice in the matter themselves. Only 24 percent indicated that they had any part at all in the decision to participate. In this context, the clients of New Pride have judged its contributions very favorably.

APPENDIX A: LIST OF NEEDS, SERVICES, AND OFFENSES

List of Needs

Code	Description
<u>1000</u>	<u>Family</u>
1010	Relationship with Mother
1020	Relationship with Father
1030	Relationship with Siblings
1040	Relationship with Other Family/Guardians
1050	Relationship within Family Unit
<u>2000</u>	<u>Emotional Development</u>
2010	Need for Psychological Assessment
2020	Individual Mental Health Needs
2030	Family Mental Health Needs
2040	Low Self-esteem
2050	Exaggerated Self-confidence
2060	Other View of Self
2070	Fear of Involvement or Success in School
2080	Fear of Involvement or Success in Job
2090	Fear of Involvement or Success in Social Situations
2100	Has Difficulty Accepting Compliments
2110	Has Difficulty Accepting Criticism
2120	Unaware of Own Emotions
2130	Problems with Impulse Control
2140	Afraid to Express Emotions
2150	Appears Overly Anxious
2160	Denies any Dependence on Others
2170	Shows Excessive Dependence on Others
2180	Demands Excessive Amount of Attention
2190	Appears Shy or Withdrawn
2200	Appears Fearful
2210	Appears Depressed
2220	Appears Excessively Angry
2230	Behaves Aggressively
2240	Acts Destructively
2250	Sets Self Up to Fail
2260	Inflicts or Threatens Self-injury
2270	Has Attempted or Threatened Suicide
2280	Exhibits Bizarre, Unrealistic, or Delusional Behavior
2290	Rejects Responsibility
2300	Is Not Fully Aware of Responsibilities
2310	Exhibits Manipulative Behavior
2320	Cannot Foresee Consequences of Particular Behaviors
2330	Deliberately Gives Inaccurate Information
2340	Needs Help Adjusting to Death of Relative or Friend
2350	Needs Help Adjusting to Divorce
2360	Needs Help Adjusting to Separation
2370	Needs Help Adjusting to Major Move
2380	Needs Help Adjusting to Out of Home Placement

Code	Description
<u>3000</u>	<u>Social</u>
3010	Lacks Basic Survival Skills
3020	Lacks Basic English Skills
3030	Lacks Skills in Managing Personal Finances
3040	Lacks Socializing Skills
3050	Has Trouble Working Cooperatively With Others
3060	Has Difficulty Relating to Authority Figures
3070	Has Difficulty Developing Positive Sexual Relationships
3080	Does Not Hear Verbal Cues
3090	Does Not Understand Non-Verbal Cues
3100	Has Problems With Substance Abuse
<u>4000</u>	<u>Physical</u>
4010	Vision Examination
4020	Auditory Examination
4030	Physical Examination
4040	Dental Evaluation and Treatment
4050	Dermatology
4060	Drug/Alcohol Assessment
4070	Contraception/Abortion
4080	Pre-/Post-natal Care
4090	Has Needs Relating to Use and/or Care of Glasses or Other Physical Aids
4100	Needs Information About Physiology of Sex, Birth Control, or VD
4110	Needs Help with Personal Hygiene
4120	Has Dietary Problems
<u>5000</u>	<u>Education</u>
5010	School Program is Inappropriate
5020	Has Difficulty Coping With Academic Failure
5030	Has Difficulty Coping With Academic Success
5040	Is not Aware of Teacher Expectations
5050	Is not Aware of Academic Deficiencies
5060	Is not Aware of Academic Strengths
5070	Acts Inappropriately With School Personnel
5080	Has Behavioral Problems in School Setting
5090	Has Problems with School Attendance
	<u>Education - Specific Academic Needs</u>
5500	Attention: Audio
5510	Attention: Visual
5520	Attention: Haptic
5530	Attention: Social

Code	Description
<u>5000</u>	<u>Education - Specific Academic Needs</u> Continued
5540	Discrimination: Audio
5550	Discrimination: Visual
5560	Discrimination: Social
5570	Figure Ground: Audio
5580	Figure Ground: Visual
5590	Closure: Audio
5600	Closure: Visual
5610	Perception: Audio
5620	Perception: Visual
5630	Perception: Haptic
5640	Perception: Social
5650	Visualization
5660	Memory: Audio
5670	Memory: Visual
5680	Memory: Haptic
5690	Cognition: Academic
5700	Cognition: Language
5710	Cognition: Social
5720	Cognition: Informational
5730	Cognition: Developmental
5740	Reading: Decoding Skills
5750	Reading: Comprehension
5760	Spelling
5770	Math: Computational
5780	Math: Numeral Measurement
5790	Math: Geometric
5800	Math: Time
5810	Language: Morphology
5820	Language: Semantics
5830	Language: Comprehension
5840	Language: Expressive
5850	Adaptive Physical Education: Gross
5860	Adaptive Physical Education: Fine Motor
5870	Social Studies
5880	Science
<u>6000</u>	<u>Employment</u>
6010	Lacks Motivation to Work
6020	Needs Pre-Vocational Skills
6030	Vocational Training Needs
6040	Exploration of Career Interests
6050	Career Planning
6060	Job Placement

<u>Code</u>	<u>Description</u>
<u>7000</u>	<u>Legal</u>
7010	Needs Help Interpreting Court Objectives
7020	Needs Help Adjusting to Probation Responsibilities
7030	Needs Support in Making Scheduled Court Appearances
7040	Needs Defense Attorney, Advocacy Resources
7050	Needs Agency Advocacy in Court
<u>8000</u>	<u>Transportation</u>
8010	Needs Transportation to and from Court
8020	Needs Transportation to and from Program
8030	Needs Transportation to and from Work
8040	Needs Transportation to and from Clinic

List of Services

Code	Description
<u>1000</u>	<u>Intake Activities</u>
1100	Court Liaison
1200	Home Visits
1300	School History Documentation
1400	Diagnostics
1500	Intake Assessment and Planning
1600	Orientation
<u>2000</u>	<u>Case Work Activities</u>
2100	Supervision
2200	Case Staffing
2300	Case Notes/Case Management
2400	Transportation
<u>3000</u>	<u>Counseling</u>
3100	Individual Counseling (Unplanned)
3200	Individual Counseling (Planned)
3300	Individual Counseling (Crisis Intervention)
3400	Group Counseling (Unplanned)
3500	Group Counseling (Planned)
3600	Group Counseling (Crisis Intervention)
3700	Family Counseling (Unplanned)
3800	Family Counseling (Planned)
3900	Family Counseling (Crisis Intervention)
<u>4000</u>	<u>Education</u>
4050	General Thinking Skills
4100	Language/Reading Skills
4200	Mathematical Skills
4300	Physical Education
4400	Health Education
4500	Physical and Biological Sciences
4600	Social Sciences
4700	History
4800	Creative Arts
4900	Academic Subject Tutoring
4950	GED/Proficiency Instruction

Code	Description
<u>5000</u>	<u>Learning Disabilities</u>
5100	Language/Reading Remediation
5200	Mathematics Remediation
5300	Motor Remediation
5400	Process Remediation (auditory, visual, haptic)
<u>6000</u>	<u>Employment</u>
6100	Prevocational Skills
6200	Vocational Skills Training
6300	Job Placement Services
6400	Career Awareness Services
6500	Job Counseling and Advocacy
<u>7000</u>	<u>Other Client Services</u>
7100	Court Services
7200	Health Services
7300	Recreation
7400	Cultural Enrichment
7500	Life Skills training
7600	Drivers Education
7700	Referral: Education
7800	School Advocacy
7900	School Reintegration
<u>8000</u>	<u>General/Administrative</u>
8100	Job Development
8200	Volunteer Recruitment/Screening
8300	Volunteer Orientation/Training
8400	Staff Development
8500	Staff Meeting/General Planning
8600	Program Liaison
8700	Community Relations
8800	Policy Board Activities

List of Offenses

Code	Literal Description
<u>1000</u>	<u>Homicide</u>
1100	Murder I (Premeditated)
1200	Murder II (Intention, No Premeditation)
1300	Murder II
1400	Criminal Negligence (resulting in death to another)
1500	Manslaughter (all degrees)
<u>2000</u>	<u>Assault</u>
2100	Aggravated Assault – Attempted Homicide
2200	Assault with a Deadly Weapon
2300	Battery
2310	Aggravated Battery
2400	Other Assault
2500	Assault and Battery
2600	Assault on a Police Officer
<u>3000</u>	<u>Rape</u>
3100	Forcible Rape
3200	Statutory Rape
3300	Sex Offenses other than Rape (Attempted Rape, Sodomy, Carnal Knowledge, Indecent Liberties, Enticement for Indecent Liberties, Incest)
3400	Commercial Sex Offenders
<u>4000</u>	<u>Kidnapping</u>
4100	Kidnapping for Ransom
4200	Hijacking Public Transport
4300	Other Kidnapping
<u>5000</u>	<u>Robbery</u>
5100	Armed Robbery
5200	Other Robbery
<u>6000</u>	<u>Arson</u>
6100	Willful Arson
6200	Other Arson

Code	Literal Description
<u>7000</u>	<u>Property Crimes</u>
7100	Motor Vehicle Theft
7110	Unauthorized Use of a Motor Vehicle
7200	Burglary
7220	Breaking and Entering
7222	Breaking and Entering – Day
7224	Breaking and Entering – Night
7230	Possession of Burglary Tools
7300	Counterfeiting
7310	Aggravated Forgery
7320	Forgery (Other Theft by Check, Uttering a Forged Instrument, Credit Card Fraud)
7400	Aggravated Larceny, Felony Theft (which carries a penalty exceeding one year)
7410	Other Larceny, Shoplifting, Petty Theft (theft which carries a penalty of less than one year)
7420	Larceny, Unspecified Amount
7500	Possession of Stolen Property
7600	Vandalism
7700	Trespassing
<u>8000</u>	<u>Drug Offenses</u>
8100	Heroin (smuggle, sell)
8200	Opium, Cocaine, and other "hard" drugs (smuggle, sell)
8300	Heroin (possession, use)
8400	Other "hard" drugs (possession, use)
8500	Marijuana (smuggle, sell)
8600	Marijuana (possession, use)
8700	Inhalants (possession, use)
8800	Other Drug Offenses
<u>9000</u>	<u>Other Offenses</u>
9010	Resisting Arrest
9020	Interfering with a Police Officer or an Investigation
9030	Perjury
9100	Riot
9200	Weapons Offenses (other)
9300	Other Misdemeanor Offenses (Criminal Mischief, Disorderly Conduct, Harassment, Verbal Assault, Loitering, Trespassing, etc.)
9400	Drunkenness
9500	Gambling
9600	Reckless Driving

Code	Literal Description
9610	Driving While Intoxicated
9620	Other Driving Offenses (Driving without a License, Insurance, Helmet, etc.)
9800	Violation of Probation
9810	Violation of Parole
9820	Violation of Court Order/Contempt of Court
9850	AWOL
9860	Escape/Attempted Escape
9900	Status Offenses

APPENDIX B: JOBS HELD BY NEW PRIDE CLIENTS

NEW PRIDE SITE	JOB DESCRIPTION	NUMBER OF JOBS
Boston	Auto Mechanic Trainee	1
	Bike & Ski Repair Trainee	1
	Clear Land for Park	12
	Cook Fast Foods/Cashier	1
	Counter Helper	1
	General Daycare	1
	General Factory Help	1
	General Helper	12
	Maintenance Work	7
	Office Assistant	1
	Office Work	1
	Refinishing Furniture Trainee	3
	Trainee	2
	Trainee - Ski & Bike Repair	1
	Unskilled Office	1
	Washer of Cars	1
	Camden	Animal Caretaker
Assistant Manager		1
Attendant		1
Bookkeeper		3
Brick Layer		1
Busboy		3
Caretaker		1
Carpenter's Helper		1
Carwasher		1
Cashier		2
Clerk		6
Cook		2
Counselor Aide		1
Counter Person		1
Counter Service		3
Dietary Aide		1
Dishwasher		5
Fencer		1
File Clerk		1
Fish Keeper		1
Food Preparation	6	
Gardener	1	

NEW PRIDE SITE	JOB DESCRIPTION	NUMBER OF JOBS
Camden	Continued	
	Gas Station Attendant	1
	Hotdog Vendor	1
	Janitor	3
	Kennel Worker	1
	Kitchen Aide	13
	Kitchen Clerk	1
	Kitchen Help	5
	Laborer	8
	Landscaper	1
	Landscaping	1
	Loader	1
	Log Splitter	1
	Maid	1
	Maintenance Engineer	14
	Packer	1
	Painter	2
	Painter's Helper	1
	Pipfitter	1
	Pizza Maker	1
	Porter	2
	Press Mechanic	1
	Presser	1
	Recreation Supervisor	1
	Recreation Aide	3
	Roofer's Helper	1
	Salad Boy	1
	Sandwich Maker	1
	Sandwich Maker-Luncheonette	1
	Short Order Cook	2
	Spooler	1
	Stockboy	1
	Vendor	1
	Waiter	1
	Waiter/Kitchen Help	1
	Waitress	1
	Warehouse	1
	Waterproofer	1
Chicago		
	Auto Mechanic	1
	Clerk	2
	Clerk Assistant	8
	Construction Helper	1
	Cook	1
	Cook Restaurant	1

NEW PRIDE SITE	JOB DESCRIPTION	NUMBER OF JOBS
Chicago	Continued	
	Food Service	5
	Janitorial	1
	Library Clerk	1
	Maintenance	15
	Maintenance Assistance	1
	Mechanic Helper	1
	Packer	2
	Records Department Assistant	1
	Retail Assistant	1
	Security Maintenance	1
	Service Technician	1
	Stock Clerk	1
	Student Aide	1
	Tutor	1
Fresno		
	Auto Detailer	3
	Auto Maintenance Assistant	2
	Auto Mechanic	1
	Body & Fender	1
	Box Maker	1
	Busboy	1
	Car Washer	1
	Career Awareness	1
	Cashier, Cook	1
	Cashier, Cook, Clean-Up	1
	Cashier, Food Worker	1
	Clerical	1
	Clerical Aide	1
	Clerical Assistant	1
	Construction	1
	Cook, Cashier, Clean-Up	1
	Cook, Wash, Clean Tables	1
	Cook's Assistant	1
	Delivery	1
	Demolition Team	1
	Dish Washer	2
	Dog Trainer	1
	Energy Aide	2
	File Clerk	1
	File Room Aide	1
	Gardener's Aide	1

NEW PRIDE SITE	JOB DESCRIPTION	NUMBER OF JOBS
Fresno	Continued	
	Groundskeeper's Aide	1
	GED & Mechanic Training	1
	Illustrator	1
	Janitor	8
	Janitor/Warehouse Man	1
	Janitorial Aide	2
	Janitorial Training	1
	Kitchen Aide	15
	Lab Aide	3
	Laborer	2
	Landscape Assistant	2
	Landscaping	3
	Lawn Care	1
	Loader	1
	Maintenance Aide	7
	Maintenance Assistant	2
	Mechanic's Aide	5
	Medical Supply Technician	1
	Nutritional Aide	3
	Office Aide	3
	Office Assistant	1
	Office Clerk	1
	Pet Shop Attendant	1
	Picketer	1
	Printer's Trainee	2
	Printing Assistant	2
	Receptionist	1
	Recreational Aide	3
	Restaurant Helper	7
	Station Attendant	1
	Sterilizer	1
	Stock Boy	1
	Teacher's Aide	2
	Trainee	4
	Upholsterer	1
	Upholstery Trainee	1
	Warehouse Man/Janitor	1
	Yard Maintenance	15
	Yardwork	1

NEW PRIDE SITE	JOB DESCRIPTION	NUMBER OF JOBS
Georgetown		
	Academic	16
	Cashier/Checker	1
	Clerical/General Maintenance	2
	Construction/Maintenance/Trainee	1
	General Maintenance	10
	Maintenance Training	3
	New Home Finishing	1
	Paint/Plasterer	2
	Solar Energy Trainee	4
	Stock Clerk	1
Kansas-City		
	Army Recruiter	1
	Busboy/Cleaner	1
	Busboy	3
	Busboy/Cook	1
	Busgirl	1
	Car Cleaning Technician	1
	Cleaning Technician	1
	Clerk	2
	Construction	13
	Construction/YCCIP	1
	Construction/SYEP	3
	Construction/YCCIP	9
	Cook	5
	Cook/Busboy	1
	Dairy Queen	1
	General Labor	4
	Household Moving	1
	Ice Cream Vendor	1
	Job Corps	1
	Job Search	1
	Job Search/Shop Labor	1
	Kitchen Supervisor	1
	Laborer	9
	Lineman	1
	Maintenance	22
	Maintenance/Soccer Field Lining	1
	Maintenance/Soccer Fields	8
	Mechanic	1

NEW PRIDE SITE	JOB DESCRIPTION	NUMBER OF JOBS
Kansas City	Continued	
	National Guard/Supply	1
	Newspaper Delivery	1
	Photo Processor	1
	Plant Helper	1
	Receiving Clerk	1
	Sales Clerk	1
	Screw Machine Operator	1
	Shop Labor/Job Search	1
	Shop Labor/Job Skills Class	6
	Shop Laborer	1
	Steward	1
	Stocking/Maintenance	1
	Stockman	1
	Teacher Aide	1
	Weed Cutter/SYEP	1
Work Crew	1	
Youth Supervision	1	
Los Angeles	Assembler	1
	Assembler and Clerical	1
	Carpenter Apprentice	1
	Firefighter	1
	Janitorial	2
	Laborer	3
	Painter	1
	Press Trainee	1
	Trainee	1
Pensacola	Busboy	1
	Busboy/Dishwasher	1
	Carpenter's Helper	2
	Cashier/Cleanup	1
	Cemetery Cleanup	1
	Cleanup	3
	Cleanup/Construction Worker	1
	Cleanup Helper	1
	Cleanup/Construction	1
	Cleanup/Painting	1
	Cleanup/Pottery	1

NEW PRIDE SITE	JOB DESCRIPTION	NUMBER OF JOBS
Pensacola	Continued	
	Cleanup/Light Work	1
	Clerical	4
	Construction Work	8
	Cook	1
	Cook/Counter Helper	1
	Cook/Maintenance	1
	Counter Helper	1
	Counter/Cook	1
	Custodial Worker	2
	Delivery	2
	Delivery/Custodial	1
	Delivery/Kitchen Help	1
	Dishwashing	1
	Distributes Mail/Filing	1
	Docks Worker	2
	Fish Market Helper	3
	Fork Lift Operator	1
	Gas Station Attendant	1
	General Construction	1
	General Maintenance	2
	Greenhouse Worker	5
	Helper	1
	Housekeeping	1
	Janitorial	7
	Janitorial Cleanup	1
	Janitorial Helper	1
	Janitorial/General Maintenance	1
	Janitorial/Lawn care	1
	Janitorial/Mechanic Helper	2
	Jewelry	1
	Kitchen Help	1
	Kitchen Worker	1
	Laborer	1
	Lawn Care	21
	Lawn Care Worker	1
	Lawn Care/Janitorial	1
	Lawn/Maintenance	1
	Laying Flooring	1
	Leather Working/Shoe Repair	1
	Maintenance	10
	Maintenance Worker	2
	Maintenance/Carpentry	1
	Maintenance/Child Care Helper	1

NEW PRIDE SITE	JOB DESCRIPTION	NUMBER OF JOBS
Pensacola	Continued	
	Maintenance/Grounds	1
	Mechanic Helper	5
	Mechanics/Painting	1
	Mover	2
	Paint and Body Worker	1
	Paint/Maintenance	1
	Painting	4
	Painting/Carpenter Helper	1
	Potter's Helper	2
	Receptionist	1
	Recreation Helper	1
	Roofing	1
	Shoe Repair	1
	Stock Clerk	1
	Unloading Trucks	1
	Warehouse	2
	Warehouse Labor	1
	Yard Maintenance	2
	Yard Worker	8
Providence		
	Assembler	1
	Auto Mechanic Helper	7
	Autobody Helper	1
	Baker's Helper	1
	Bench Worker	1
	Building Maintenance	1
	Busboy	2
	Carpenter's Helper	2
	Child Care Aide	1
	Child Care Worker	2
	Clerical Training	1
	Cook's Helper	1
	Counter Clerk	1
	Electrician's Helper	2
	File Clerk	1
	Food Service Worker	6
	Fundraiser/Canvasser	1
	Furniture Refinisher	1
	Gas Attendant	1
	General Laborer	3

NEW PRIDE SITE	JOB DESCRIPTION	NUMBER OF JOBS
Providence	Continued	
	Greenhouse Worker	1
	Ground Maintenance Helper	2
	Grounds Keeper	6
	Janitor	2
	Kitchen Helper	23
	Laborer	2
	Laundry Worker	1
	Library Aide	1
	Machine Operator	2
	Machine Operator/Grinder	1
	Maintenance Helper	34
	Maintenance Worker	1
	Mechanic's Helper	1
	Nursing Assistant	1
	Office Worker	3
	Painter's Helper	4
	Plumber's Helper	1
	Receptionist-Hairdresser's Helper	1
	Recreation Aide	4
	Roofer's Helper	1
	Shipper & Plater's Helper	1
	Special Project Worker	1
	Stock Clerk	10
	Storekeeper	1
	Teacher's Aide	1
	Transport/Delivery	1
	Transporter	1
	Welding Training	1
San Francisco		
	Aide/Assistant Office Worker	1
	Art Teacher's Aide	1
	Audio Technician	1
	Building Float	1
	Camera Person	3
	Camera Technician	1
	Car Wash	1
	Car Wash, Detailed Cleaning	1
	Child Care	1
	Child Care Aide	7
	Child Care Worker	1
	Clerical	4

NEW PRIDE SITE	JOB DESCRIPTION	NUMBER OF JOBS
San Francisco	Continued	
	Clerical Aide	1
	Clerical Assistant	3
	Clerical & Maintenance	1
	Clerical & Managerial	1
	Clerical & Program Aide	1
	Clerical/Computer Trainee	1
	Clerical: Filing, Phones	1
	Clerk	1
	Computer Assembly	1
	Computer Training	1
	Construction	1
	Construction Assistant	4
	Control Worker	1
	Cook	1
	Cook's Assistant	1
	Counselor	1
	Curatorial Aide	1
	Delivery Boy	1
	Film Development	1
	Float Construction	3
	Florist's Assistant	1
	Gas Attendant	1
	General Maintenance Assistant	1
	Gym Assistant	1
	House Manager Aide	1
	Infant Care Center	1
	Janitor	3
	Junior Life Guard	1
	Kitchen Aide	2
	Layout Assistant	1
	Legal Clerk	1
	Light Construction	2
	Locker Room Attendant	1
	Light Construction, Maintenance	3
	Maintenance	13
	Maintenance Assistant	1
	Maintenance Work in Recreation Room	1
	Mechanic's Assistant	1
	Medical Technical Aide	1
	Mover/Household Goods & Office Supplies	1
	Mover	1
	Museum Aide	1
	Nurse's Aide	1
	Office Assistant	1

NEW PRIDE SITE	JOB DESCRIPTION	NUMBER OF JOBS
San Francisco	Continued	
	Phone/Counter	1
	Production Assistant	2
	Program Completion Leader	1
	Receptionist	1
	Receptionist/Trainee	1
	Recreation	1
	Recreation Aide	9
	Repair Shoes	1
	Sales	1
	Set-Up Crew Member	1
	Shipping Clerk	1
	Stage Assistant	5
	Stage Hand	5
	Stock Clerk	1
	Stockroom Clerk	1
	Student Leader	1
	Supervisor's Aide	1
	Teaching Assistant	1
	Teaching Assistant, Art	1
	Technical Aide	1
	Technical Assistant	7
	Technical Trainee	2
	Technician	1
	Telephone Sales	1
	Theatrical Assistant	1
	Tickets/Guard	1
	Trainee	1
	Tutor	2
	Video Technician	2
	Warehouse Worker	1
	Workshop Assistant	3

APPENDIX C: SAMPLE COMPARABILITY AND THE RESULTS OF DIAGNOSTIC TESTING

Some of the data presented in the Chapter "Client Profiles" were drawn from a data file called "client demographics" which represents all clients admitted into the program by January 1, 1983. Some were drawn from a "client characteristics" file which represented only 937 of the 1,167 clients (80.3 percent). Still other data came from the Intake and Exit Surveys. The data base contains Intake Surveys for 870 clients (74.6 percent), and Exit Surveys for 503 (43.1 percent). Therefore, in order to assess sample comparability (whether the cases for whom we have these data are representative of all clients), we compared clients for whom there is information in these files to the total group of all clients on three key background variables: age, sex, and ethnicity.

For clients with data in the "client characteristic" file, the average age at intake was 16.3 years, the same as that of the total group. Forty-nine percent were black (compared to 53 percent of the total group), 31 percent were white (compared to 28 percent of the total group), and 16 percent were Hispanic (compared to 15 percent of the total group). Ninety-two percent were male and eight percent female, the same proportion as that of the total client population.

For clients with Intake Survey data, the average age at intake was 16.2 years. Forty-nine percent were black (again, compared to 53 percent), 30 percent were white (compared to 28 percent), and 17 percent were Hispanic (compared to 15 percent). Ninety-two percent were male and eight percent female, the same proportion as the entire set of opened cases.

While Exit Survey data were entered for only 43 percent of our target population, the sample was only slightly different from the other groups on the index variables. The average age at intake for clients with Exit Survey data was 16.2 years and there was a slightly larger proportion of males (93 percent as compared to 92 percent). Exit Surveys were collected and analyzed from five percent more whites, seven percent fewer blacks, and three percent more Hispanics than in the total group.

Table 63

Clients with Client Characteristics, Intake Survey
and Exit Survey Data

Site	Client Characteristics		Intake Survey		Exit Survey	
	N	%	N	%	N	%
Boston	19	40.4	19	40.4	5	10.6
Camden	146	83.4	142	81.1	108	61.7
Chicago	106	74.6	120	84.5	70	49.3
Fresno	132	100.0	130	98.5	98	74.2
Georgetown	2	2.7	0	-	0	-
Kansas City	99	86.8	82	71.9	40	35.1
Los Angeles	46	79.3	46	79.3	9	15.5
Pensacola	151	100.0	123	81.5	53	35.1
Providence	108	90.8	97	91.5	80	67.2
San Francisco	128	82.6	111	71.6	40	25.8
Total	937	80.3%	870	74.6%	503	43.1%

Original Replication Diagnostic Battery

Level I: Mandatory for All Clients

According to the "Training Manual Volume III, Diagnostic Services," 1/6/80, the Level I battery consisted of:

- Auditory and Vision Acuity Screening
- Miskimins Self-Goal-Other Discrepancy Scale
- Wide Range Achievement Test (all subtests)
- Informal Learning Disabilities Screening Battery (This consists of a shortened version of the Malcomesius and the Clinical Evaluation of Language Functions (CELF) Screening Test - Advanced Level)
- Diagnostic Questionnaire

Level II: Level II testing was mandatory for all clients in these tests:

- WAIS or WISC-R
- Woodcock Reading Mastery Test

In addition, the remainder of Level II is recommended for those clients who score below the 25th percentile on the WRAT and/or exhibit significant processing problems on the LD Screening Battery:

- Bender Visual-Motor Gestalt Test

Level III: Required for all clients in this level:

- Key Math Diagnostic Math Test

The remaining Level III tests are recommended according to the following criteria:

- If "classified as LD" then "needs Level III for programming purposes"
- If "classified as possible LD" then "needs Level III for verification of processing problems as well as for programming purposes."

The remainder of this battery consists of:

- Detroit Test of Learning Aptitude (DTLA)
- Lindamood Auditory Conceptualization Test (LAC)
- Beery Test of Visual Motor Integration (VMI)
- Wepman Auditory Discrimination Test (Wepman)

Level IV: The Indepth Language Battery (Level IV) consists of:

- CELF (Indepth Battery)
- PPVT
- DTLA Subtests
- Boston Diagnostic Aphasia Examination (optional)
- Speech Fluency Battery (optional)
- Informal Voice Battery (optional)
- Oral Peripheral Exam (optional)
- Hunt Sentence Combining Test (optional)
- Reading Miscue Inventory (optional)

The Projective Psychological Assessment (Level IV) consists of:

- TAT
- Boston College Guess Why Questionnaire
- Sentence Completion
- Figure Drawing
- Rorschach (optional)

While clients with Client Characteristic, Intake Survey, and Exit Survey data are quite similar to the total target population on the key variables of age and sex, there are some ethnic differences among these groups. These ethnic differences are due primarily to ethnic variations among sites. As Table 63 indicates, those sites with the highest proportion of black clients (Boston and Georgetown) are underrepresented in these three files.

Diagnostic Testing

As discussed in the chapter on Diagnostic Testing, the Diagnostic Testing Battery included in the Replication model was revised in 1981. The original battery is presented in Table 64 , and the revised version in Table 65 .

Also noted in that chapter was the fact that some clients were not given all the required tests. Table 66 shows the number of clients ever tested and the number of test scores entered into the data base. Over all replication sites, 87.4 percent of the clients had at least one test score recorded. At Fresno, every client had some test scores recorded. Georgetown was the only site where a minority of the clients were tested; only 25.7 percent of the Georgetown clients had any test scores entered into the MIS. Of all the sites which continued to operate past their second year, Chicago had the lowest proportion of clients with recorded test scores (76.8 percent). At this site they experienced problems with their MIS computer file, having lost all their scores records in 1981. Their evaluator was able to retrieve or reenter only a portion of the lost records.

Tables 67 and 68 show the number and proportion of clients ever given the specific diagnostic tests, broken down by New Pride site. The first six tests, presented on Table 67 were required by the model to be administered to all New Pride clients. All of these tests fell far short of having been given to all clients, yet at some individual sites, particularly Fresno, Pensacola, and San Francisco, a large proportion of clients were given all the mandatory tests. Table 68 presents tests which were optional except in the case of clients either suspected of or identified as having learning disabilities.

Table 65

Revised Replication Diagnostic Battery

Testing Battery: Effective immediately all sites shall administer all tests according to the agreed level and sequence as follows:

Level I:

1. Diagnostic Questionnaire (Core questions No. 13-22). Diagnosticians may rephrase questions to the degree that they feel comfortable, however, core questions 13-22 are mandatory. The rest of this questionnaire should be used as a guide. Further development of this questionnaire will be an ongoing project for the National Committee. (Not required to report to National Evaluator.)
2. Acuity Tests
3. Weschler Intelligence Scales
WISC-R (under 16 years) or WAIS (16 years and older)
4. WRAT
5. Conclusions Based on Approach to Testing Checklist and Diagnostic Observations

Level II:

1. Woodcock Reading (required for all clients, pre and post)
2. Key Math (required for all clients, pre and post)
3. LD Screening Battery: Malcomesius or Slingerland selection determined by reading level and CELF Screening Test.
4. Bender Visual Motor using Watkins system.
5. Conclusions Based on Approach to Testing Checklist and Diagnostic Observations.

Level III:

1. Detroit Tests of LD (10 subtests)
2. VMI (optional)
3. Wepman (optional)
4. Lindamood (optional)
5. Conclusions Based on Approach to Testing Checklist and Diagnostic Observations.

Level IV:

As stated in the original manual.

Table 66
Scores Records and Clients Tested

Site	Test Scores ¹	Clients with at Least One Test Score	
		N	%
Boston	1,871	38	80.9
Camden	12,489	156	89.1
Chicago	7,151	109	76.8
Fresno	13,359	132	100.0
Georgetown	201	19	25.7
Kansas City	8,429	108	94.7
Los Angeles	3,174	42	72.4
Pensacola	16,184	150	99.3
Providence	8,117	114	95.8
San Francisco	16,612	152	98.1
Total	87,587	1,020	87.4%

¹ These are the total number of test scores that were entered into the SCORES file. They include some redundant, out-of-bounds, and invalid scores, all of which were removed before analyzing scores of individual tests.

Table 67
Clients Ever Tested¹ by Required Test

Site	Visual Acuity		Auditory Acuity		IQ ²		WRAT		Woodcock				Keymath			
	N	%	N	%	N	%	N	%	Pre	Pre	Post ³	Post ³	Pre	Pre	Post ³	Post ³
Boston	12	25.5	12	25.5	27	57.4	32	68.1	13	27.7	0	-	22	46.8	0	-
Camden	34	19.4	40	22.9	59	33.7	121	69.1	132	75.4	66	37.7	134	76.6	64	36.6
Chicago	9	6.3	9	6.3	60	42.3	62	43.7	85	59.9	19	13.4	93	65.5	22	15.5
Fresno	112	84.8	78	59.1	127	96.2	111	84.1	124	93.9	83	62.9	125	94.7	83	62.9
Georgetown	0	-	0	-	0	-	0	-	19	25.7	1	1.4	0	-	0	-
Kansas City	78	68.4	78	68.4	99	86.8	104	91.2	90	78.9	57	50.0	86	75.4	57	50.0
Los Angeles	32	55.2	32	55.2	37	63.8	42	72.4	37	63.8	2	3.4	37	63.8	1	1.7
Pensacola	138	91.4	133	88.1	131	86.8	140	92.7	142	94.0	90	59.6	140	92.7	92	60.9
Providence	64	53.8	44	37.0	80	67.2	79	66.4	88	73.9	40	33.6	84	70.6	45	37.8
San Francisco	133	85.8	138	89.0	140	90.3	149	96.1	148	95.5	101	65.2	121	78.1	71	44.5
Total	612	52.4%	564	48.3%	760	65.1%	840	72.0%	878	75.2%	459	39.3%	842	72.2%	435	37.3%

¹ The number of clients ever tested includes those with a valid or an invalid score. The percent of clients by test type is calculated in relation to the total number of clients by site or over the entire replication.

² IQ tests include both WISC-R and WAIS.

³ Some of these were administered less than three months apart, and so could not be analyzed.

The identification and remediation of learning disabilities was an important part of the New Pride model. While all but one site did diagnose a proportion of their clients as learning disabled, it is revealing to examine the testing data on which they based their diagnoses. Table 26 shows the number and percent of learning disabled clients who received any testing. Tables 69 and 70 show the number and percent of learning disabled clients given the various tests in the battery. While Table 69 includes those tests mandated for all clients, Table 70 includes tests particularly targeted to clients suspected of having learning disabilities. As this table indicates, very few clients identified by sites as being learning disabled were ever fully tested. For the great majority, their diagnoses must have been based primarily on the results of the mandatory tests and on previous school records.

Table 68
 Clients Ever Tested¹ by Test

Site	Malcomesius		Slinger-land		Bender		Detroit				Beery		Wepman		Lindamood	
	N	%	N	%	N	%	Pre	Pre/Post	Pre	Post	N	%	N	%	N	%
Boston	10	21.3	0	-	0	-	1	2.1	0	-	1	2.1	1	2.1	0	-
Camden	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Chicago	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Fresno	30	22.7	0	-	29	22.0	4	3.0	0	-	0	-	1	0.8	0	-
Georgetown	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Kansas City	0	-	0	-	0	-	5	4.4	2	1.8	1	0.9	1	0.9	0	-
Los Angeles	8	13.8	0	-	31	53.4	1	1.7	0	-	0	-	0	-	0	-
Pensacola	18	11.9	7	4.6	31	20.5	25	16.6	10	6.6	5	3.3	9	6.0	5	3.3
Providence	5	4.2	0	-	5	4.2	0	-	0	-	5	4.2	0	-	0	-
San Francisco	12	7.7	24	15.5	36	23.2	34	21.9	10	6.5	0	-	0	-	0	-
Total	83	7.1%	31	2.7%	132	11.3%	70	6.0%	22	1.9%	12	1.0%	12	1.0%	5	0.4%

¹ The number of clients ever tested includes those with a valid or an invalid score. The percent of clients by test type is calculated in relation to the total number of clients by site or over the entire replication.

Table 69
LD Clients Ever Tested¹ by Required Test

Site ²	Visual Acuity		Auditory Acuity		IQ ³		WRAT		Woodcock				Keymath			
	N	%	N	%	N	%	N	%	Pre	Pre/Post ⁴	N	%	Pre	Pre/Post ⁴	N	%
Boston	2	22.2	2	22.2	8	88.9	8	88.9	2	22.2	0	—	2	22.2	0	—
Camden	2	6.1	3	9.1	5	15.2	21	63.6	27	79.4	21	61.8	27	79.4	20	58.8
Chicago	0	—	0	—	1	8.3	1	8.3	11	91.7	4	33.3	12	100.0	4	33.3
Fresno	54	88.5	35	57.4	57	93.4	51	83.6	59	96.7	39	63.6	59	96.7	39	63.9
Georgetown	0	—	0	—	0	—	0	—	1	25.0	0	—	0	—	0	—
Kansas City	23	67.6	22	64.7	29	85.3	31	91.2	32	94.1	22	64.7	22	64.7	16	47.1
Pensacola	24	82.8	23	79.3	25	86.2	25	86.2	29	100.0	22	75.9	29	100.0	20	69.0
Providence	24	55.8	16	37.2	30	69.8	26	60.5	37	82.2	18	40.0	33	73.3	18	40.0
San Francisco	54	94.7	55	96.5	54	94.7	57	100.0	56	98.2	33	57.9	42	73.7	24	42.1
Total	183	65.8%	156	56.1%	209	75.2%	220	79.1%	254	89.1%	159	55.8%	226	79.3%	141	50.7%

¹ The number of LD clients ever tested includes those with a valid or an invalid score. The percent of LD clients by test type is calculated in relation to the total number of LD clients by site or over the entire replication (see Table 26).

² Los Angeles is not listed because they did not diagnose any clients as LD.

³ IQ tests include both WISC-R and WAIS.

⁴ Some of these were administered less than three months apart, and so could not be analyzed.

Table 70
LD Clients Ever Tested¹ by Test

Site ²	Malcomesius		Slinger-land		Bender		Detroit				Beery		Wepman		Lindamood	
	N	%	N	%	N	%	Pre	Pre/Post	N	%	N	%	N	%	N	%
Boston	5	55.6	0	-	0	-	1	11.1	0	-	1	11.1	1	11.1	0	-
Camden	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Chicago	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Fresno	27	44.3	0	-	26	42.6	4	6.6	0	-	0	-	1	1.6	0	-
Georgetown	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Kansas City	0	-	0	-	0	-	5	14.7	2	5.9	1	2.9	1	2.9	0	-
Pensacola	14	48.3	6	20.7	21	72.4	22	75.9	10	34.5	3	10.3	8	27.6	4	13.8
Providence	3	7.0	0	-	0	-	0	-	0	-	2	4.7	0	-	0	-
San Francisco	6	10.5	18	31.6	24	42.1	29	50.9	9	15.8	0	-	0	-	0	-
Total	55	19.8%	24	8.6%	71	25.5%	61	21.9%	21	7.4%	7	2.5%	11	4.0%	4	1.4%

¹ The number of clients ever tested includes those with a valid or an invalid score. The percent of clients by test type is calculated in relation to the total number of clients by site or over the entire replication (see Table 26).

² Los Angeles is not listed because they did not diagnose any clients as LD.

CHAPTER SEVEN:

**THE COMPARATIVE
ANALYSIS OF RECIDIVISM**

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THE COMPARATIVE ANALYSIS OF RECIDIVISM

A primary criterion for measurement of success of New Pride programs is whether or not they reduce the amount of expected recidivism in the sample of clients below that of some untreated control group. Or, in the absence of such a finding, whether the "seriousness" of the offenses committed has changed for the better. A reduction of violent assaults among serious offenders would be considered a successful outcome. The previous presentations have introduced the New Pride program, described its implementation, explained the data acquisition process with the management information system, and presented the basic descriptive data gathered on New Pride clients. This chapter presents the measures of recidivism used as the primary outcomes by which to determine the success of the New Pride programs. Toward this end, the first part of this chapter presents descriptions of the measures with rationales for their selection. An outline of the analytic tools and their measurement needs is portrayed. The development of an adequate control or comparison group is outlined, and a study of possible biases and problems of analysis is thoroughly depicted. In Part II of this chapter the actual analyses themselves are presented, fully informed by the considerations in Part I.

Part I. Issues in the Measurement of Recidivism

A Choice of Measures

The New Pride data base is uniquely suited to answering a variety of questions about the criminal histories and subsequent recidivism of New Pride clients. Comprehensive criminal history data are available in the Juvenile Justice file (see Chapter 6, pp. 121-122) on 99 percent of the treated subjects, from the seven sites that remained in operation past their second year. These data represent filed petitions and adjudicated offenses from the time of each subject's first encounter with the court system to the last point of follow-up, December 31, 1983. Additional offenses for which petitions may not have been filed or which did not result in adjudication are also available for most of these

subjects. Each recorded offense includes the charge, the date of the offense, the arrest date, whether or not a petition was filed, the petition filing date, whether the charge was adjudicated, the adjudication date, the disposition, whether the charge was adjusted, and a number of other items. The breadth of these data allows consideration of the effects of selecting different measures of recidivism on the computation of recidivism rates and other measures of recidivism.

It is possible to consider as measures of recidivism all offenses reported on court records, all petitions filed, all adjudications, or all adjudications leading to incarceration. Each measure progressively indicates greater system penetration. In selecting which measure to use, we wanted one at a minimum level of system penetration. We wanted to measure, as easily as possible, the criminal behavior of youths rather than the charging behavior of the courts. To this end, the basic measure of recidivism which was selected is the petitions filed, that is, rearrests that are referred by police to the courts for action and which have resulted in new charges.

There are two reasons why we chose to use offenses for which petitions were filed rather than all reported offenses as our measure. The first is that the decision by the prosecutor to charge an individual with a new offense was likely to screen out the more trivial arrests and other arrests for which there was insufficient evidence to convict (or to find a "determination of guilt" in a juvenile court). This was considered a worthwhile screening of the population under study because multiple offenders are often watched more closely and arrested more often than others of their age group who do not have records. The second reason involved the difficulty of obtaining permission to access police files directly, particularly in those cities in which there are multiple police and sheriff's departments, along with the concomitant strategic problems of accessing such reports when they are located in many offices spread over wide geographic areas. Generally speaking, measures involving earlier decision points are superior to other types of recidivism measures (Lerman, 1975:59). For these reasons, arrests which result in new petitions in juvenile courts or indictments in adult courts are considered to be the primary measure of recidivism.

As well as using all petitions filed as our primary measure of recidivism, consideration will be given to offenses which lead to adjudications. These two offense measures may, depending on the analysis procedure selected, be regarded as dichotomous indices, e.g., whether or not a subject had a filed petition or subsequently adjudicated offense after leaving the New Pride program; as counts, e.g., the number of filed petitions or adjudications a subject had after leaving New Pride; or as latency measures, e.g., the time to the first filed petition or adjudication for the individual. In addition, two other related measures can be briefly considered: offense seriousness and incarcerations. The former measure helps characterize the most serious charge that led to the filed petition or adjudication. The latter measure is determined by whether or not a disposition involving some form of long-term incarceration is recommended.

Seriousness Scores

In addition to the number of offenses committed, information was obtained on the types of offenses that were committed. Assume for the moment that the experimental and comparison subjects committed equal numbers of offenses during the follow-up. Assume further, however, that the offenses committed by the experimental subjects were all status offenses while those committed by the comparison group members were all serious violent offenses. Given this possibility one may desire to measure the impact of the program in terms of the quality of the new offenses.

The use of mean or cluster scoring allows an estimate of the seriousness of the offenses committed by the subjects of this research in a relatively simple fashion. A variant of the seriousness scoring system originally created by Sellin and Wolfgang (1964) has been applied to juvenile justice history data. The index itself measures the amount of harm done in a criminal event as a function of modifiers such as the number of victims of minor or major injury, the number of victims of forced sex, the number of victims of intimidation, etc.

In cluster scoring, each type of crime has a certain seriousness score and this score is applied to all offenses of that type. Mean seriousness scores are based on scores from previous research on similar subjects. The most appropriate source of such information is the series of cohort studies conducted in Philadelphia by Wolfgang and his colleagues. These studies have generated a data base in which well over 40,000 juvenile offenses have been scored for their seriousness, each of which captures the variation in seriousness that surrounds specific offenses. The availability of seriousness scores allows measurement of the impact of the program in terms of the quality as well as the quantity of delinquency.

Incarcerations

It is possible to consider the measurement of incarcerations as an index of recidivism in the analyses to be presented, although it is a measure fraught with difficulties for reasons given above: The less system penetration involved with a measure of recidivism, the more reliable that measure is likely to be (see Lerman, 1975:59). Department of Corrections commitments and other forms of long-term incarceration both follow upon and indicate a great deal of system penetration. However, their measurement is useful because of the potentially confounding influence of such commitments upon other measures of recidivism. It is quite possible, for example, that an increase in incarceration rates for a group of subjects could give the impression of a decrease in recidivism, when in fact the decrease is actually due to the withholding of opportunities to recidivate from this group.

The need to control for incarceration is outweighed by the fact that the New Pride programs were conceived as alternatives to other community-based programs for juvenile delinquents, as well as to incarceration in both local and state institutions. With such a purpose, controlling for rates of incarceration would defeat the comparison originally intended. For the analyses to be presented, incarcerations will not be controlled. We will adhere to the definition of New Pride as an alternative to all other forms of disposition for serious and

chronic juvenile offenders, and test for the effectiveness of the program in this context. Some ancillary analyses will be presented which describe the effects of incarceration on recidivism.

A Choice of Analysis Procedures

One of the difficulties in analyzing recidivism is the variety of ways in which such analyses may be performed, each one answering a slightly different question. This difficulty is aggravated by the somewhat vague form the definition of recidivism takes, the "repeated or habitual relapse into crime (Barnhart and Stein, 1963)." The multiple definitions of officially recorded crime used in various studies, ranging in system penetration from re-arrests to parole violations, can be mistakenly viewed as equivalent. What a "crime" is in terms of the New Pride replication study has been discussed. The methodological challenge in measuring recidivism lies in determining how to measure the "repeated habitual relapse" back into criminal activity.

New Pride clients are known habitual offenders, at least insofar as they enter the program with an overall average of 15.1 prior offenses appearing in their court records, 8.8 of which have been sustained in court.* Given the New Pride data base on juvenile justice histories, "relapse into crime" is measured in four ways:

* These figures are based on data in the Offenses file, which includes a complete offense history for each client. For purposes of the analyses which follow, only the most serious charge in a single criminal event, which might have incurred several charges, is counted. These data are contained in the Juvenile History file. When a petition is filed or adjudicated, it may have several charges alleging past crimes. Only the most serious charge is counted. For purposes of determining New Pride eligibility, generally, three adjudications meant three separate court actions on different dates, though they might have disposed of many more offenses. The same conservative measures are used in these analyses.

1. Whether or not the client recidivates after entering or completing the program,
2. How many times each client recidivates after entering or completing the program,
3. Latency to the first offense after entering or completing the program,
4. Number of clients recidivating over time after entering or completing the program.

Each of these approaches has its own unique problems and benefits for analysis. These will be discussed after a consideration of censoring in the New Pride data base.

A sample is censored if data on subjects are restricted to limited periods of time either by being tracked **from** different start times (left censoring) or to different end times (right censoring). The New Pride data is right censored (see Lawless, 1982, for a discussion of censoring patterns). Youth are tracked from their case action date, which gives them all the same effective start time, to December 31, 1983, the last date of follow-up. Since the actual start dates vary relatively uniformly from June, 1980 to December 31, 1982, the time to the last date of update (the time of follow-up) varies between one and four years. A client entering in December of 1981 would be followed for two years, after which data on his/her subsequent recidivism would be unavailable. A client entering in December of 1982 would be followed for only one year. All other things being equal, the subject followed for two years will be more likely to recidivate than the subject followed for one year.

The problem of censoring is particularly salient when different groups of subjects are being compared. If one group has substantially less follow-up time, this group will have a lower recidivism rate than the other, even if the groups are otherwise completely equivalent. So time to follow-up must be accounted for in every analysis of recidivism after New Pride.

Analysis One: Whether or Not The Subject Recidivates

In this analysis a simple head count is taken of subjects who did or did not recidivate after the New Pride program. Differences between groups are determined by finding what proportion of subjects recidivated at least once in each group. In principle a simple Chi-Square test can be used to test group differences. Differentials between groups in censoring patterns (time to follow-up), however, require that a more complex analysis procedure be applied to the data. Additionally, the dichotomous nature of the dependent measure requires the selection of an analysis procedure capable of dealing with the heterogeneous variances of probability distributions. It also allows inclusion in the analysis of many other interval scale independent measures (such as time to follow-up). For these reasons a linear-logistics model is used to analyze these data.*

Analysis Two: How Many Times Each Subject Recidivates

This measure would again appear to be straightforward. One should be able simply to calculate a t-test between groups based on the average number of new offenses. However, a major problem with this approach is that the distribution of counts is very highly skewed, with most subjects having no new offenses or only one. For the first year after program entry, only 17.2 percent of New Pride clients had more than one new petition filed, while 11.0 percent had more than one new adjudication. The lack of variability in the number of reoffenses, above the simple dichotomy dealt with in Analysis One, suggests that this approach to analyzing recidivism may not be very fruitful. Nevertheless, some brief analyses of these data are informative and will be retained as part of the analysis of recidivism.

* The maximum likelihood estimation procedure for fitting logistic functions to data provides unbiased efficient estimates of model parameters.

Analysis Three: Latency to the First Offense

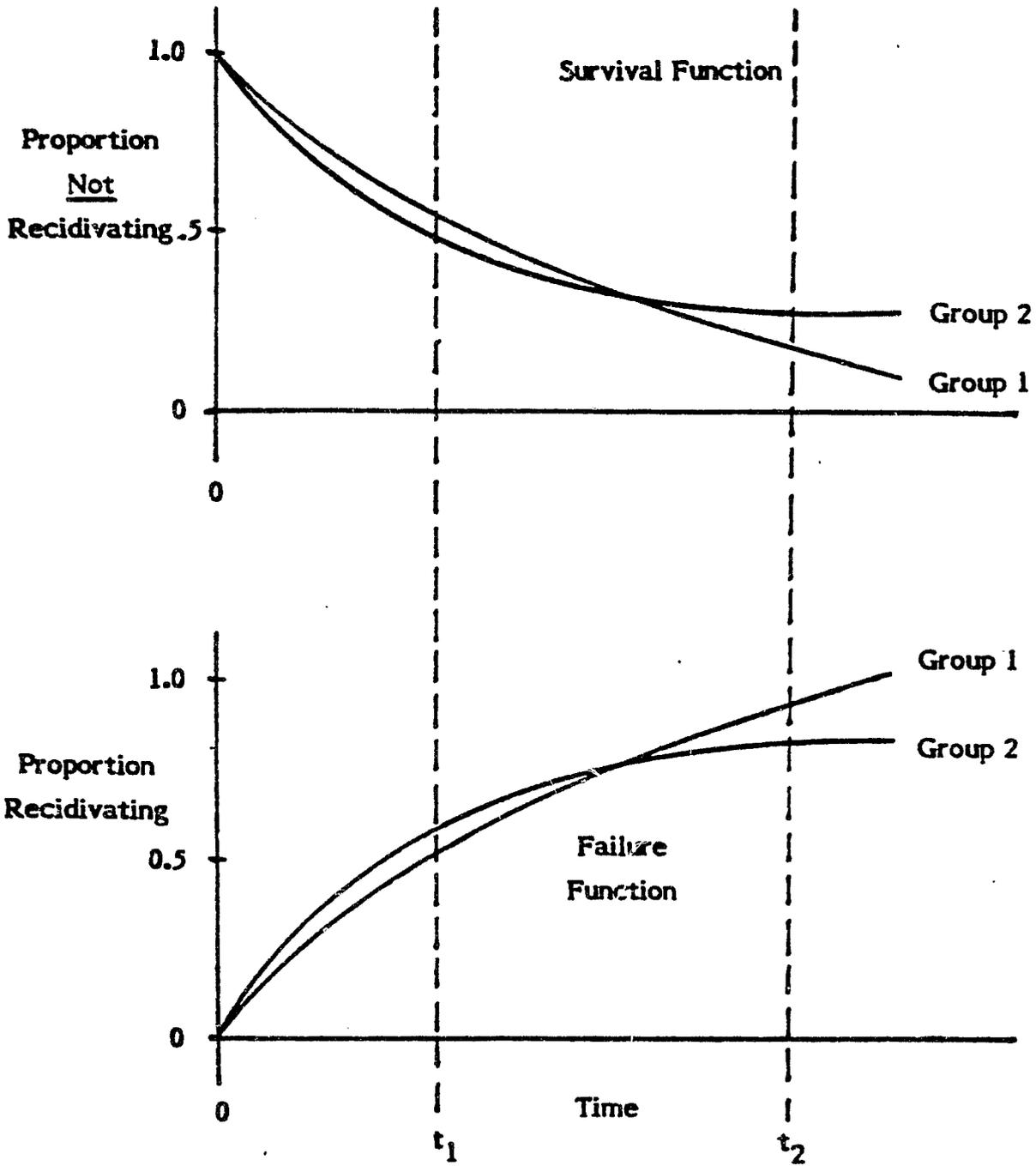
This analysis bears some resemblance to Analysis One in that the proportion of individuals recidivating in any group is one concern. In addition, for each recidivating event, the latency, or time to the event, is of importance. The concern of this analysis is to obtain a projection of recidivism over time after New Pride. In survival function analysis, "survivors" are defined as those clients who do not recidivate after their New Pride experience. As time goes on it is expected that there will be fewer "survivors" or, conversely, cumulatively more recidivators.

To clarify the relationships addressed by this analysis, refer to Figure 1. These graphs depict a hypothetical survival function based on recidivism after the New Pride program (top graph) and its corresponding failure function representing cumulative failures (recidivations) over time (bottom graph). The two graphs show on the ordinate the proportion surviving or failing out of the whole sample for two theoretical groups (Group 1 and Group 2) over time. Time is described from the zero point on the graph through time t_1 and t_2 , and on to infinity.

The two hypothetical functions are complementary. The proportion surviving, $p(s)$, is the complement of the proportion failing, $p(f)$, such that $p(s) = 1 - p(f)$. The functions for the two groups are different and, of course, cumulative over time. The two points in time crossing both functions show what would happen if the number of recidivators (Analysis One), a cross section, was calculated at either point in time. At time t_1 , Group 2 has recidivated more than Group 1, while Group 1 has more survivors than Group 2. At time t_2 , Group 1 has recidivated more than Group 2, with Group 2 having more survivors than Group 1. Thus, if applied at different points in time, Analysis One can provide contradictory results. Analysis Three, the analysis of survival functions

Figure 1

Survival Function and Failure Function
for Recidivism After New Pride



(or failure functions), obviates this problem by describing the situation over time rather than concentrating on any arbitrary cross section.*

Analysis Four: The Number of Subjects Recidivating Over Time

Analysis Four examines the number of subjects recidivating in intervals over time using a discrete time series design. Analysis Four overcomes the distributional problems of Analysis Two by looking at the number of subjects recidivating in any given time interval (e.g., months) at successive discrete points in time. The expectation is that these rates will decline over time differentially for the groups being compared. Differences in time to follow-up for subjects is not a problem with this analysis because month-to-month variations in sample sizes can be controlled statistically.

The advantage of the time series design is that a representation of recidivism rates from month-to-month can be presented for groups over a long period of time. The groups can be compared on the basis of their relative rates of observed recidivism, as well as on the basis of recidivism rates projected for the future. As for any time series design, an underlying model of some sort must be assumed for the data. The underlying model for the time series data will be presented later on.

* The pattern of censoring in the data is not a problem in survival function analysis as long as product limit estimates are used in constructing the functions (see Lawless, 1982; Kalbfleisch and Prentice, 1982; Dixon, 1981; Maltz and McCleary, 1977). These estimates take into account the decline in sample size over time. The only problem with this approach is that the estimates of the functions increase in error as the sample size decreases. This problem can be dealt with statistically. Differences between groups can be evaluated over the whole time period rather than at only one cross-sectional point. And the functions can be evaluated parametrically by any one of a variety of procedures.

Problems of Experimental Control

No matter how defined, the most difficult problem in using recidivism as a primary outcome measure is finding an equivalent group with which to compare the performance of the treatment group. The ideal solution is always a true control group. This solution, however, requires a random assignment of individuals to the comparison and treatment groups at the point of program entry. Although satisfying methodologically, such a process is usually very unsatisfactory to members of the judicial system responsible for the disposition of juvenile offenders. Furthermore, clients in the New Pride program were such serious offenders that every eligible referral was needed by the projects if they were going to operate at full capacity.

The New Pride programs were established to deal with serious and chronic juvenile offenders, delinquents with three or more adjudicated offenses. Courts that referred subjects to New Pride did not do so to have them end up in a no treatment control group. Rather, projects accepted the subjects referred to them in an unconstrained manner as long as the subjects met the intake criterion. This meant that a randomly assigned control group was impossible to define.

In lieu of a true experiment, the next best alternative is to construct a matched comparison group from contemporaneous, though eligible youth who are not referred to the New Pride projects. This requires that there be a large enough population of delinquents at each location, such that not all of the most serious offenders are absorbed into the program. It also requires that some consideration be given to certain crucial dimensions of the treatment group that are to be matched in the comparison group.

The features given primary consideration in the New Pride evaluation were two variables thought to be closely related to recidivism rates: age and number of prior offenses. The age of each subject at entry to the New Pride program is an important variable because of the very strong maturation effect observed for offense rates among juvenile offenders (Halatyn, 1979; Bureau of Justice

Statistics, 1983). Rates of property crime activity increase dramatically to about age 16 and drop in half by age 20. Since there is much more property crime than violent crime, if a treatment group with an average age of 16 years is tested against a comparison group with an average age of 17, the comparison group is quite likely to have a lower recidivism rate. Similarly, the ability of number of prior offenses to predict subsequent recidivism has been suggested in a number of studies (Monahan, 1984; Wolfgang, 1972; Petersilia et.al., 1977). Assuming that the number of prior offenses does predict subsequent recidivism, if the treatment group has a greater number of priors on average than the comparison group, the comparison group can be expected to have a lower recidivism rate.

Number of offenses and age are obviously closely related variables. The maturation effect predicts this. Nevertheless, given the New Pride intake criterion of three prior adjudications, the number of priors for each subject is relatively fixed while the age at program entry is relatively free to vary. The two variables may be decorrelated in these analyses providing independent predictions from each. Both measures, however, raise an additional complex measurement problem in program evaluation discussed by McCleary, Gordon, McDowall and Maltz (1979). These authors have demonstrated that selecting subjects during their peak offending period, or even at the time of any offense, will inevitably lead to a decline in recidivism rates (regression to the mean) subsequent to intake. The problem is aggravated when, as in this study, subject intake is the reference point from which subsequent recidivism is measured. All of the subjects in this case are aligned at periods of offense activity, so that dramatic declines in recidivism can be expected due to simple regression to the mean.

Let us briefly summarize the situation. First, the maturation effect predicts increases and decreases in recidivism rates which must be accounted for in the match. Second, the prediction from number of prior offenses, although age-related, will also require control in the match. Third, there is a problem encountered whenever subjects are selected or lined up at a time of offense activity, caused by regression to the mean. This third problem will be assumed

accounted for by the construction of a comparison group along the same parameters used to originally select the treatment group. If each comparison subject is selected to represent matched clients of a certain age and a given number of priors, the comparison group will also show the expected decline in recidivism rate. Then the effect of regression to the mean will be equally troublesome in both groups, and the comparison between the groups will remain unbiased by this statistical artifact.

The Dilemmas of Sampling

The New Pride clients are juvenile offenders referred by the local court system from each locale's population of juvenile delinquents. Therefore, comparison groups must be constructed from either the remaining offenders not sent to the projects, or from an historically older sample of subjects, e.g., subjects passing through the court system earlier. The use of historically drawn comparison subjects is fraught with difficulties, not the least of which is the possibility that the court system has changed over the intervening years in its processing of juvenile offenders. A shift toward tougher enforcement of penalties for delinquent behavior may lead to an increase in filed petitions and sustained adjudications over time. The historical comparison group would thus have an artificially reduced probability of recidivism due to shifts in system practices.

To avoid the problems of historically drawn comparison groups, an effort was made to draw contemporaneous comparison groups from all the sites. In this way the processing of both treatment and comparison groups would be roughly the same in the court systems. This procedure is itself, however, not free from other sampling problems. First, the selection of the most serious chronic offenders for the New Pride group naturally tends to lower the seriousness and chronicity of the remaining sample available for the comparison group. Second, given the natural correlation of age with number of offenses, the older an offender is, the more likely he will meet the New Pride criterion for entry. This means that as time passes, subjects in the comparison group may be absorbed

into the treatment group. This tendency renders the available pool of comparison subjects younger and less chronic offenders. If a project is particularly efficient at identifying and obtaining serious offenders for its program, it does so at the risk of creating a less serious contemporaneous comparison subject pool. Thus, it is more difficult to obtain an adequate match between the comparison and treatment groups.

The New Pride Experience

In application, the construction of the comparison group required only one site to draw an historical comparison group: Kansas City. At that site the treatment group was absorbing nearly all of the serious offenders from the court. Consequently, there were few serious offenders to comprise a comparison group. The Kansas City comparison group was drawn from a sample of subjects available two years before.

In constructing the matched comparison group a large pool of comparable subjects should be available. The sample needs to be approximately 150 percent of the size of the treatment group. Most sites were unable to generate a comparison group large enough to meet this goal. Only one site, Fresno, managed a comparison group of this size. At Fresno the comparison group was so similar to the treatment group that a complete match was easily obtained. At the other sites discrepancies between the treatment and comparison groups and too few comparison subjects reduced the probability of obtaining a completely adequate match. Descriptions of the matching procedure and its effectiveness appear in the next section.

MATCHING PROCEDURE

As noted by several researchers (McCleary, Gordon, McDowall and Maltz, 1979; Burton, 1980), a number of problems confront the analysis of the impact of program participation in a simple before-after time series design that studies

only the behavior of a treatment group. In order to control for some of these problems, a comparison group was developed at each site where New Pride was replicated. This approach enabled us to analyze the recidivism data within the framework of a simple experimental design. By controlling for site-to-site differences in juvenile justice decision-making, we can more safely assume that whatever problems occur in the analysis of the New Pride subjects will also occur in the analysis of comparison group subjects. Hence, differences between the two will more likely be due to differences in program impact rather than either methodological artifact or procedures of the administration of justice unique to each jurisdiction.

On June 5, 1984, a complete pull of data from the Client Demographic and Juvenile Justice History files at all sites was made. Treatment group subjects selected for analysis had to have begun their participation in the New Pride program by December 31, 1982 in order to assure at least a year of time to follow-up the official records of each youth. It had been requested of local evaluators that all client and comparison group offense data be brought up-to-date as of December 31, 1983. This represented the last point at which all records in the Juvenile History file were to be completely updated.

Evaluators tracking youth in six cities were able to provide exhaustive updates of all petitions/indictments and adjudications/convictions recorded to that date for every member of both groups. The files of many youth were updated through later months. In Pensacola, the last date of comprehensive update was November 30, 1984, a difference of only a month. New Pride projects in Boston, Los Angeles, and Georgetown were closed earlier in the replication initiative, before any meaningful comparison group information could be collected.

For all subjects' records, dates were used as follows: (1) Case action date was taken as the date of program entry. In its absence, the date of referral to the program was used. (2) The offense date was used as the date of offense. In the absence of this date, the arrest date was used, and in the absence of both of these, the petition-filed date was used. Screening the juvenile justice history

data in this way resulted in the loss of 134 records (0.6 percent of 22,135 total records), 12 subjects (0.5 percent of the 2,579 total) from the analysis, and required the use of the "back-up" date in less than 4.6 percent of the records. In this respect the data on comparison and treatment subjects was remarkably clean. The 12 subjects removed from the set had missing offense dates for more than 25 percent of their records.

After merging the cleaned juvenile history data with the client demographic data, the result set contained a total of 976 New Pride clients and 1,128 comparison subjects from the seven sites. Although the number of subjects per site changes in subsequent analyses as further restrictions on the data are assumed, the initial, "clean," site-by-site breakdown appears in Table 1. Note that the Pensacola comparison group subjects now fulfill the basic requirements for similarity between comparison and treatment samples despite their earlier failure to do so. After great delays, Pensacola finally managed to come up with a comparison group contemporaneous in age with the New Pride group. Prior to November of 1983, Pensacola had identified only 40 comparison subjects, all of whom had been rejected by the project, so there were sampling biases not correctable through any matching procedure. These subjects are not included in the current available comparison group sample.

Development of the Comparison Group Match

Although comparison subjects are drawn, at the site level, from the same court jurisdictions as the treatment subjects, the two groups may not adequately match on two variables of considerable importance. The first of these variables is the number of adjudicated offenses. The number of adjudicated offenses in the criminal histories of comparison subjects must correspond to the number for treatment subjects so that we are examining the histories of equally chronic offenders. The second variable crucial to the match is the age of the treatment subject at their last adjudicated offense prior to program entry and the age of the comparison subject at his or her corresponding offense. For example, if a treatment subject has three adjudicated offenses prior to entering New Pride and

Table 1

Initial Available Treatment and Comparison Subjects
for Matching Procedure

Site	Treatment N	Comparison N
Camden	172	141
Chicago	142	88
Fresno	130	302
Kansas City	113	118
Pensacola	150	170
Providence	118	180
San Francisco	151	129
Total	976	1,123

was 16 at the time of the last offense, a matching comparison subject must be selected who was 16 at the time of his or her third adjudicated offense. These offenses, the last adjudicated offense for the client and the prior to entry corresponding offense of the comparison subject represent for each subject the matched offense.* The key to this match is to establish for each selected comparison subject a hypothetical date of entry (or case action date) after the matched offense (the one corresponding in terms of number of priors and age at offense matched to subjects in the treatment group).

The procedure is best explained by presenting an example of its application to one site's data. Table 2 presents the data from the treatment group to be matched by selections from the comparison group at the Fresno site. The table is a representation of the distribution of the number of adjudications immediately prior to the case action date and the age of subjects at the last prior (the matched offenses). The column labeled Priors is the number of prior adjudications presented by subjects in the treatment group at Fresno. Thus, one subject had two prior adjudications before the case action date and 41 subjects had three. The row labeled Age at Last Prior Offense presents the integer age of clients at the last adjudication before the case action date. In Fresno, one subject had two priors, the last of which was at the age of 15; 18 subjects had three priors, the last at the age of 16; and three subjects had six priors the last at the age of 16. Fresno's full complement of 130 subjects are represented here.

When selecting subjects for the comparison group there are two steps corresponding to the two variables to be matched. First, comparison group candidates must be found having **at least** the number of adjudicated offenses corresponding to the number of priors for a treatment subject. If we were trying to match a subject with three priors at the integer age of 16, we would look at only comparison subjects with three or more available adjudications. Second,

* Note that the prior number of offenses are measured before program entry, not before the offense that resulted in referral to the project (the presenting offenses). Between the presenting offense and case-action dates additional offenses may have been committed. They count as priors.

Table 2

Age at Last Prior Offense by Number of Priors Distribution
Fresno Treatment Group

Number of Priors	Age at Last Prior Offense						Sum
	12	13	14	15	16	17	
1						1	1
2				1			1
3		2	6	9	18	6	41
4		3	8	9	11	7	38
5			4	8	6	4	22
6			2	7	3	1	13
7	1		2	4	2	1	10
8						1	1
9				2			2
10				1			1
Sum	1	5	22	41	40	21	130

once this set of comparison subjects is found, we would find the comparison subjects who had their third adjudication at age 16. Out of this set, then, we would randomly select the comparison subject to be matched to the treatment subject at the third offense.

The procedure used to perform the matching is basically the two steps described above repeated until all possible matches have been made. The procedure as described, however, only works if there is a large comparison group available which bears some similarity to the treatment group in terms of age and number of adjudications. At some sites the comparison groups are smaller than the treatment groups and/or display markedly dissimilar values on the matching variables. At Chicago, for example, the comparison group overall is about half the size of the treatment group (88 as opposed to 142 subjects) and presents fewer total adjudications per subject (average of 3.96) than the treatment group (average of 4.37 overall). These differences are largely due to the referral of the most serious offenders to the New Pride program.

In order to deal best with these problems, the procedure for matching incorporates three modifications. First, more flexibility was introduced to the match. Age at matched offenses were considered acceptable (after exact matches became impossible) with ages in the comparison group of plus-or-minus one year. Second, the matches were performed proportionately: if 30 percent of the treatment group had three adjudications by the age of 16, then the comparison group was matched successively to preserve 30 percent of its subjects for this age/offense match. This change allowed the comparison group to be smaller than the treatment group while still retaining the same form of the number of priors and age at matched offense matrix.

In practice with these data, 25 percent of the comparison group is matched proportionately to the treatment group in four separate cycles.* Each cycle involved the sequential matching of subjects from the younger to the older ones and from those with fewer to those with greater numbers of prior adjudications. Each procedure was terminated on the cycle in which three or more failures to match occurred. Because of the order in which the samples were matched, match failures tended to occur in finding comparison subjects with more priors and greater age. The random sampling of comparison subjects with lower numbers of priors was equally likely to eliminate subjects with many as well as with few previous adjudications. Thus a comparison subject with ten offenses could have been matched at his third offense, eliminating him as a candidate for matching at any of his later offenses (the fourth, fifth, sixth, etc., ones). For this reason the comparison group matches still tended to be biased toward younger subjects with fewer priors. Overall, the matches were so good, however, that it was expected that this bias would have a negligible impact on the findings.

Two other points should be noted before going on. First, by this procedure it was impossible to create a match for treatment group subjects with no prior adjudications. For this reason, Pensacola (four subjects), San Francisco (one subject), and Providence (one subject) have slightly smaller treatment samples than the numbers reported in Table 1. The corrected sample sizes appear in Table 3. Second, whether or not comparison subjects were incarcerated at any time during their offense histories was not considered in constructing the match.

* By trying to match 25 percent of the comparison group on each cycle, the best fit of the comparison to treatment group matrix could be assured. Thus, if the comparison group was composed of 200 subjects, on the first cycle only 50 comparison subjects would be randomly selected proportionately matching the cells in the treatment matrix. Invariably the first cycle provided a perfect match between groups. The second cycle would provide an additional 50 subjects randomly selected to proportionately match the cells in the treatment matrix again. This procedure would be repeated on the third and fourth cycle. This cyclic matching procedure was found to optimize the match between groups in the most efficient way possible.

Table 3

Results of Treatment/Comparison Matches on the
Measure of Number of Prior Sustained Adjudications

Site	Treatment Group			Comparison Group		
	N	Mean	Median	N	Mean	Median
Camden	172	5.3	5	132	5.3	4
Chicago	142	3.7	3	55	3.5	3
Fresno	130	4.4	4	216	4.3	4
Kansas City	113	4.3	3	64	3.9	3
Pensacola	146	6.2	5	72	5.0	4
Providence	117	6.2	5	92	5.6	5
San Francisco	150	3.0	3	93	2.8	3

This allowed the comparison to be between New Pride clients and comparison subjects undergoing any other kind of alternative treatment, including incarceration in long term correctional facilities.

At Fresno, a site with a large available comparison group pool (N = 302) bearing much similarity to its treatment group, the matching procedure ran through three cycles. The 130 treatment group subjects were matched with 216 comparison group subjects. In this match, seven comparison group clients did not exactly match at age at matched offense, but have ages off by plus or minus one year. Additionally, seven failures to match were encountered. This explains why the distributions for ages and priors differ slightly between the two groups (see Tables 3 and 4).

The results of the matching procedure applied to individual sites appear in Tables 3 and 4. In general, the parameters of the match (age at matched offense and number of priors) closely correspond between comparison and treatment groups. At Camden there are a few differences. Here the median number of priors for the treatment group is 5. For the comparison group the median is only 4. Having fewer total adjudicated offenses than the treatment group, it was difficult to develop a balanced match in the comparison group. The smaller sizes of comparison group matches at other sites occur for similar reasons.

Once a match has been obtained at each site, one additional step is required to bring the comparison group in line with the treatment group. After the last prior offense occurs for a treatment subject there is some period of time before he or she enters the program. This lag in time between the last adjudicated offense and case action date is called the intake-lag. At every project the intake-lag distribution for clients was positively skewed. The median intake-lag from each site's treatment group was assigned to the comparison subjects at the same site and these lags were used to calculate "effective" case action dates for the comparison groups. The median intake-lags appear in Table 5. The point in time of each comparison group subject's matched offense plus the intake-lag assigned provides the point in time of his or her hypothetical case action date.

Table 4

Results of Treatment/Comparison Matches on the
Measure of Age at Matched Offense

Site	Treatment Group			Comparison Group		
	N	Mean	Median	N	Mean	Median
Chicago	142	14.9	15	55	15.0	15
Fresno	130	15.4	15	216	15.3	15
Camden	172	15.5	16	132	15.4	15
Kansas City	113	15.7	16	64	15.6	16
Pensacola	146	15.4	16	72	15.3	15
Providence	117	15.7	16	92	15.7	16
San Francisco	150	15.3	15	93	15.4	15

Table 5

Median Intake-Lag in Weeks for Each Site

Site	Median Lag
Camden	20
Chicago	13
Fresno	6
Kansas City	12
Pensacola	8
Providence	10
San Francisco	12

Results of the Match

Tables 3 and 4 present the mean values for age at matched offense and number of priors data on the matches between comparison and treatment groups at each site. The match parameters appear comparable between the groups. Note, however, that the number of priors and age at matched offense are defined at the actual point in time of the matched offense selected by the matching algorithm. As mentioned in the preceding section, the effective case action date of each comparison subject is this point in time plus the median intake-lag of the treatment group at the corresponding site. Thus, the numbers of priors and ages to be concerned with are those before the "effective" case action date, a later point in time. At this later point comparison subjects will inevitably be older and may have committed other offenses to be counted in the number of their priors.

Table 6 presents the data on the correspondence of number of priors (sustained offenses) between comparison and treatment groups measured at case action date. The reader should note that as the number of priors forms a positively skewed distribution for each group at every site, the t-tests were computed on the logged values of this parameter. For this reason the geometric mean (GM) of each distribution is also presented. The geometric mean may be considered as an approximation of the median of each distribution examined. One statistically significant difference between groups is found at the Camden site, where the comparison group has fewer priors than the treatment group. Differences at the other sites are not only non-significant, but relatively small as well. Table 7 presents the data on the correspondence of ages at case action date between comparison and treatment groups. In this case there is one significant difference between sites, again at Camden where the comparison group is significantly younger than the treatment group. This difference is very small, however (0.3 years).

In addition to the match parameters relating comparison to treatment groups, four other important variables should be reviewed:

Table 6

Number of Sustained Priors at Case Action Date

Site	Treatment Mean	Comparison Mean	Treatment GM	Comparison GM	t	df	P
Chicago	3.7	4.0	3.5	3.8	-1.41	195	.1606
Fresno	2.3	2.3	4.2	4.3	-0.72	344	.4743
Camden	5.3	6.3	4.8	5.7	-3.51	302	.0005
Kansas City	4.3	4.8	3.9	4.4	-1.95	175	.0531
Pensacola	6.2	6.1	5.3	5.4	-0.28	216	.7809
Providence	6.2	6.5	5.1	5.6	-1.11	207	.2682
San Francisco	3.0	2.9	2.7	2.7	0.13	241	.9002

Table 7
Ages at Case-Action-Date

Site	Treatment Mean	Comparison Mean	t	df	P
Camden	16.5	16.2	2.18	302	.0301
Chicago	15.9	15.7	1.05	195	.2959
Fresno	16.0	15.9	1.06	344	.2873
Kansas City	16.5	16.3	0.95	175	.3421
Pensacola	16.1	16.0	0.77	216	.4393
Providence	16.6	16.4	1.27	207	.2057
San Francisco	16.2	16.1	0.65	241	.5161

1. Average seriousness of charges prior to the case action date may differ between groups. As more serious offenses are likely to occur less frequently, differences in average seriousness scores may indicate potential biases in recidivism rates (BJS, 1981:7).
2. Differences in ethnicity between groups may also indicate important biases in expected recidivism rates as these groups may differ in likelihood of arrest (BJS, 1983:36).
3. Sex biases for very similar reasons may influence expected rates (Monahan, 1981:73). For example, an all male treatment group matched to an all female comparison group would present a most problematic circumstance. A sex bias suggesting that females ultimately recidivate less than males would force the treatment group to appear much worse than the 'matched' comparison group.
4. Differentials in follow-up time may occur between comparison and treatment groups. In this case the group followed for the longest time may appear to recidivate more than the alternative group, simply because there had been more time in which to count new offenses.

Although none of these four variables are controlled directly in the matching algorithm, their status should be reviewed in a consideration of the adequacy of the match.

Average seriousness of prior offenses was defined through the utilization of the cluster scoring method based on the Sellin-Wolfgang index. Seriousness was examined for both prior adjudicated offenses and all prior offenses for which petitions were filed. The data for adjudicated offenses appear in Table 8 and the data for all petition-filed offenses appear in Table 9. The forms of the distributions underlying the tests are quite varied; some are skewed and some are not skewed, with the variances between groups often differing. All these problems could not be solved through one convenient transformation of the data, so the analyses presented are for the untransformed original data. It should be noted that the t-tests will remain relatively robust given these large sample sizes. It appears evident from the tables that there are significant differences between comparison and treatment groups on average seriousness only at the Kansas City site where the comparison group has, on average, greater offense seriousness.

Table 8

Average Seriousness Scores Before Case Action Date
for Adjudicated Offenses

Site	Treatment Mean	Comparison Mean	t	df	P
Camden	7.8	7.8	-0.04	302	.9638
Chicago	9.0	9.5	-1.49	195	.1388
Fresno	7.8	7.9	-0.70	344	.4831
Kansas City	8.6	9.9	-4.04	175	.0001
Pensacola	8.4	8.4	0.13	216	.8976
Providence	7.6	7.5	0.45	207	.6512
San Francisco	8.4	8.9	-1.46	241	.1453

Table 9

Average Seriousness Scores Before Case Action Date
for Petition-Filed Offenses

Site	Treatment Mean	Comparison Mean	t	df	P
Camden	7.6	7.8	-0.74	302	.4626
Chicago	9.1	9.2	-0.56	195	.5695
Fresno	7.9	8.0	-0.19	344	.8533
Kansas City	8.6	9.9	-4.01	175	.0001
Pensacola	8.4	8.3	0.39	216	.6966
Providence	7.7	7.3	1.64	207	.1031
San Francisco	8.7	8.9	-0.64	241	.1453

The results of looking at ethnic biases between groups are not as felicitous as those for average seriousness (see Table 10). At five sites there are significant differences in the compositions of the two groups: Fresno, Kansas City, Pensacola, Providence, and San Francisco. Data in Table 10 are presented in four blocks. First, the site and group (T-treatment, C-comparison) are defined. Second, the ethnic distributions are presented as percents (WH-white, BL-black, HISP-Hispanic, AI-American Indian, AS-Asian, OTH-other). Third, the sample sizes (N) and the number of youth missing data are noted. For example, four clients in Chicago were not coded for ethnic group. Fourth, the Pearson Chi-square statistic is presented (X^2) with its degrees of freedom (df) and probability level (p).* At Kansas City a bias appears in that there are more blacks in the comparison group. In the remaining four sites the biases are toward having fewer blacks in the comparison group. This is particularly acute at Providence where the treatment group is composed of 48 percent whites and the comparison group is composed of 88 percent whites.

Significant sex biases are present at two of the sites, Providence and San Francisco (see Table 11). At both sites there are proportionately more males in the comparison than in the treatment group. The exact probability for the relationship observed between groups of the sex distributions is presented using Fisher's exact test.

Table 12 presents the data on average follow-up time for subjects in the comparison and treatment groups. Follow-up time is measured in weeks from case action date to December 31, 1983 for both groups. The shortest average follow-up time is found in the Fresno comparison group (99.0 weeks or 1.9 years) and the longest in the Kansas City comparison group (251.1 weeks or 4.8 years). This particularly long time for the Kansas City comparison group is due to the site drawing from a comparison pool available in Kansas City two years before the implementation of New Pride.

* The appropriateness of the Pearson chi-square statistic for tables with zero cells is discussed in Larntz, 1978.

Table 10
Ethnic Distributions by Site in Percent
(Percent of N)

Site	Group	Race						N	Missing	X ²	df	P
		WH	BL	HISP	AI	AS	OTH					
Camden	T	42	45	12				172	0	2.78	2	.2490
	C	52	36	12				132	0			
Chicago	T	24	62	11	1	1	2	142	0	3.39	5	.6400
	C	33	59	8	0	0	0	51	4			
Fresno	T	19	42	39	2			130	0	12.65	3	.0055
	C	26	26	48	0			216	0			
Kansas City	T	52	42	6				113	0	6.43	2	.50401
	C	44	56	0				64	0			
Pensacola	T	39	61					146	0	18.82	1	.0001
	C	70	30					71	1			
Providence	T	48	37	6	1		9	117	0	38.17	4	.0001
	C	88	11	1	0		0	92	0			
San Francisco	T	5	65	17	2	1	9	150	0	23.85	5	.0001
	C	15	50	17	1	13	4	93	0			

Table 11
Sex Distributions by Site in Percent
(Percent of N)

Site	Group	Male	Female	N	Missing	Fisher's P
Camden	T	92	8	172	0	.2930
	C	95	5	132	0	
Chicago	T	100		142	0	-
	C	100		55	0	
Fresno	T	91	9	130	0	.2266
	C	88	13	216	0	
Kansas City	T	95	5	113	0	.5805
	C	95	5	64	0	
Pensacola	T	90	10	146	0	.0556
	C	97	3	72	0	
Providence	T	86	15	117	0	.0045
	C	97	3	92	0	
San Francisco	T	86	14	150	0	.0011
	C	98	2	93	0	

Table 12

Time to Follow-up by Site in Weeks

Site	Treatment Mean	Comparison Mean	t	df	P
Chicago	115.5	130.8	2.12	195	.0351
Fresno	119.1	99.0	-3.57	344	.0004
Camden	134.2	152.1	3.25	302	.0013
Kansas City	123.5	251.1	14.87	175	.0001
Pensacola	131.8	126.1	-0.70	216	.4856
Providence	119.3	129.0	1.38	207	.1688
San Francisco	129.6	118.5	-1.88	241	.0614

To get a clearer notion of the distribution of follow-up times, Table 13 presents the overall distributions for the comparison and treatment groups across the seven sites. Note that one or more years of follow-up are available on 100.0 percent of the treatment and 85.7 percent of the comparison group. Further, 74.1 percent of the treatment and 64.1 percent of the comparison group are followed for two years or longer. Thus, considerable follow-up time is available on large proportions of both groups. The 14.3 percent of the comparison group followed for less than one year includes six subjects with no follow-up at all (0.8 percent). This occurred because the matching procedure selected matching offenses in 1983 for these six subjects and, adding on the intake-lag to the offense-date, the resulting effective case action date turned out to be on or about the date of last follow-up, December 31, 1983. Because of the random selection procedures of the matching process, these six subjects can be considered an unbiased and unbiased random selection from the comparison groups. Of course, these subjects cannot be used in any recidivism analyses.

In summary, the match appears generally adequate. For the match parameters themselves, only the Camden site shows significant differences on number of priors and age at case action date between the comparison and treatment groups. The difference in priors is 1.0 with the comparison group having fewer priors, and the difference in age is 0.3 years with the comparison group being younger. Differences at the remaining sites are all non-significant.

Among the four unmatched and possibly biasing parameters which were considered, seriousness appears the least problematic. Kansas City is the only site at which significant differences appear. Here the comparison group commits significantly more serious offenses than the treatment group. There are, however, more substantive differences between groups in ethnic distributions (five sites), sex distributions (three sites), and time to follow-up (four sites). All of these differences are potential sources of bias in the measurement of recidivism between groups.

Table 13

Distribution of Times to Follow-up in Years

Years of Follow-up	Treatment Percent	Comparison Percent
1 or more	100.0	85.7
2 or more	74.1	64.1
3 or more	31.5	40.4
4 or more	0.4	20.0
5 or more	0.0	8.8
6 or more	0.0	2.9

The variation observed argues both for and against increased recidivism in the treatment group. The greater overall number of priors observed for the treatment group in Camden suggests that the comparison group may be less likely to recidivate than the treatment group (Table 6). Differences in age at case action date and seriousness seem negligible. The ethnic biases argue both ways depending on which site is considered. The higher proportion of white subjects in the comparison groups at Fresno, Pensacola, Providence, and San Francisco (see Table 10) suggests that the comparison groups would be less likely to recidivate at these sites*. At Kansas City, where there are more whites in the treatment group, the treatment group may be less likely to recidivate. The sex biases uniformly suggest that the treatment group would be more likely to recidivate because there are more females in the comparison groups at three sites, Pensacola, Providence, and San Francisco (Table 11)*. And finally, longer follow-up times on the comparison groups at three sites, Chicago, Camden, and Kansas City, suggests that the treatment group would appear less likely to recidivate (Table 12). At Fresno the reverse is the case. This confusing array of biases will be systematically investigated in Part II.

* Differences in re-offense rates are estimated from known statistical biases. (BJS, 1983:35-6)

Part II: Comparative Analyses of Recidivism

The dependent measures used in the analysis of recidivism include both filed petitions and sustained adjudications. (See the discussion of system penetration in Part I of this chapter.) These measures are constrained in two additional ways for the following analyses. First, four minor charges were excluded from consideration as recidivating offenses: drunkenness, status offenses, parole violations, and probation violations. At some sites these charges appeared frequently relative to other charges, for example at Fresno, whereas at other sites these charges were relatively absent, e.g., Camden. These differentials, which often resulted from the high visibility of clients at some projects, were best dealt with by the elimination of such minor offenses from consideration.

Second, recidivism as measured by filed petitions and sustained adjudications was partitioned in two ways. Recidivating offenses were examined from the date of program entry to the last date of follow-up and from the date of entry plus 12 months until the last date of follow-up. The former measure may well be contaminated by the continued recidivism of subjects as they first enter the programs and before any substantial contact with the program has taken place. The latter measure begins the measurement of recidivism after all the treatment subjects have had extensive contact with the programs. Rates of recidivism after this point should clearly show the influence of treatment. The subjects used in these analyses are the matched groups described in Part I of this chapter (970 treatment and 724 comparison subjects).

Initial Constraints

Before entering into the analysis of the New Pride impact data, three overriding constraints on the analyses should be discussed. First, there are substantial and analytically perilous aggregation effects in the data caused by grouping all New Pride sites in one analysis. These effects must be controlled in each analysis. Second, maturation effects, the effects of increasing age on

recidivism, are pervasive in the recidivism data. A control on the form of this maturation effect should be implemented. Third, the distributional peculiarities of the measure of number of prior offenses should be delineated and corrected for the analyses.

The analyses presented below are purely exemplary. Their purpose is to outline the forms of effects found in the New Pride data in a simple way. For this reason some of the analyses employing ordinary least squares (OLS) regression are, strictly speaking, improper. OLS should not be used to predict dichotomous outcome measures such as whether-or-not subjects recidivate after New Pride; the intrinsic heterogeneity of variance and nonlinearity of this measure produces biased estimates of effects (see Hanushek and Jackson, pp. 179-215, 1977). However, it should be noted that all the effects tested in this way are verified later on using appropriate linear-logistic analyses. Also, as these analyses are exemplary, they include an examination of treatment group data and the measure of filed petitions only.

New Pride Sites and the Effects of Aggregation

The effects of aggregating large bodies of data from jurisdictions around the country on the measurement of outcomes are too infrequently considered by program evaluators. As there is a tendency to make the simplifying assumption that a particular program implemented at one site is implemented in the same way at other sites, there is a tendency to assume that the jurisdictions in which the programs are placed are equally similar. Nothing could be further from the truth. Both programs and their environments vary, and both need to be measured in the context of each other. An example of the importance of this observation can be presented here.

At each New Pride site there is substantial variation in the number of filed petitions the treatment subjects have before program entry, as well as in the

number of prior adjudications. This data is presented in Table 14. Both means and geometric means are presented (see discussion in Part I). The differences between sites are significant ($F = 55.70$, $df = 6,963$, $MS(e) = .225$, $p < .0001$), using the logarithm of number of priors as the dependent measure. There are also significant differences between sites in the observed proportions of subjects subsequently recidivating ($F = 10.25$, $df = 6,963$, $MS(e) = .202$, $p < .0001$). And, felicitously, for those who believe that the number of prior offenses predicts subsequent recidivism, there is a significant positive correlation between the logarithm of number of priors and recidivism ($r = .0731$, $t = 2.28$, $df = 968$, $p < .0300$). However after covarying the effects due to differences in New Pride sites on recidivism, the logarithm of number of priors does not significantly predict the outcome ($F = .81$, $df = 1,962$, $MS(e) = .202$, $p > .05$).

Table 14 would seem to indicate a relationship between number of priors and proportions recidivating. Providence has a large number of priors and the highest proportion recidivating. Kansas City has the second lowest number of priors and the lowest proportion recidivating. However, the above analysis shows that this relationship may be fully explained by site differences in both variables. The appearance of prediction is the result of aggregating the data without regard to these site differences.

The explanation of the source of these site differences resides in recognizing that different sites will have different rates of petition filing on subjects depending on the standardized procedures of local court jurisdictions. The National Center for State Courts in their two-year study of 150 juvenile courts in 39 states, found that "the type of court affects the outcome of cases and that the intake structure is the critical variable (SNI 178:15)." In one New Pride city no screening of complaints at intake occurred, which resulted in a very high average number of petitions.

Other problems with the prediction of subsequent recidivism from number of prior offenses will be discussed later. The purpose here has been to exemplify how simple aggregation of data over New Pride sites can easily lead one astray. Such effects are pervasive in all the New Pride data. For this reason, in all

Table 14

Average Number of Filed Petitions Prior to New Pride, Geometric Means,
Age at Program Entry, and Subsequent Probability of Recidivism

Site	N of Clients	Number of Priors		Age at Entry	P(Recidivism)
		Mean	Geometric Mean		
Camden	172	7.54	6.82	16.5	0.73
Chicago	142	7.70	6.96	15.9	0.68
Fresno	130	6.99	6.49	16.0	0.72
Kansas City	113	4.67	4.18	16.5	0.52
Pensacola	146	6.87	5.99	16.1	0.54
Providence	117	10.24	8.50	16.6	0.90
San Francisco	150	3.98	3.56	16.2	0.75

subsequent analyses either the effects of aggregation by sites will be statistically controlled or analyses will be performed on an individual site-by-site basis.

Maturation Effects: Age at Program Entry

One of the strongest predictors of recidivism in the New Pride data is the age of subjects at entry to the New Pride program. As noted in Part I, failure to control for differential ages between groups can lead to a mis-estimation of group differences. Age at entry should be positively related to the probability of subjects' recidivism up to about the age of 16 and negatively related to the probability of recidivism thereafter, as a consequence of the maturation effect. Statistically accounting for age at program entry will insure the appropriateness of analyses under conditions where the groups being compared (e.g., different genders or races) differ in age.

When looking at recidivism immediately after program entry, the maturation effect should be observed in the New Pride treatment group. The average age of matched treatment subjects at entry is 16.25 years, with a minimum of 12.55 years and a maximum of 18.93 years. The site-by-site averages are presented in Table 14.

Ages at program entry are normally distributed for the treatment group with significant differences between sites ($F = 9.19$, $df = 6,963$, $MS_{(e)} = 1.091$, $p < .0001$). As expected, age is both positively and negatively related to recidivism for youth with different ages at case action date. These effects are statistically significant.*

* The curvilinear effect of age on recidivism after New Pride entry, measured by filed petitions, is shown in a significant linear effect for age ($F = 52.99$, $df = 1,962$, $MS_{(e)} = .192$, $p < .0001$) and a subsequent significant quadratic effect ($F = 4.74$, $df = 1,961$, $MS_{(e)} = .191$, $p < .0500$) for age-squared in a hierarchical analysis, controlling for baseline differences from site-to-site.

Number of Priors

The section on the effects of aggregation pointed out the rather weak relation between number of priors and subsequent recidivism in the New Pride data. The assumed strength of this relation is not supported in these data. Rather, maturation effects appear the stronger predictor of recidivism. Above the variance in the dependent measure (filed petitions after entry to New Pride) predicted by differences in New Pride sites ($R^2 = .0600$), number of priors contributes little (improvement in $R^2 = .0008$), while the curvilinear effect of age at program entry contributes much (improvement in $R^2 = .0534$), to account for a combined total of 11.3 percent of the variance in the dependent measure.

The relationship between age at program entry and priors is an unusual one in the New Pride Replication. Normally one would expect that older subjects at program entry would have more sustained priors. The older a subject at entry, the more time he/she has had to commit offenses. The intake criterion of three or more prior sustained adjudications, however, forced a decorrelation of these two variables. While age at program entry was relatively free to vary at intake, number of sustained priors was minimally fixed at three, causing the priors' distribution to be truncated at about this lower bound for each site. Additionally, the sites only rarely found subjects with greater than three or four sustained adjudications before program entry. This combination of circumstances constrained the priors' distributions, making them positively skewed and leptokurtic. In a sense, then, age was free to vary but number of priors was fixed by the intake criterion of the New Pride programs.

The constraints of the intake criteria for the New Pride programs resulted in the observed decorrelation of age and priors in the data. Measuring priors by the number of sustained counts or number of filed petitions, neither measure is significantly correlated with age at program entry ($r = .0538$ and $r = .0359$ respectively). Measured by all available offenses counted as priors, there is a significant although small relationship between number of priors and age at entry ($r = .0702$, $t = 2.18$, $df = 968$, $p < .0300$). This relationship is not significant in the context of controlling for New Pride site differences ($t = 1.63$, $df = 962$, $p > .0500$).

One reasonable objection to these null findings relating age at entry and number of prior offenses is that the priors' distribution is highly skewed and leptokurtic. The logarithmic transformation of these data produces normal distributions for priors. Measured by the natural logarithm of all prior offenses, all prior adjudications, or all prior petitions filed, no significant correlations between the measures of priors and age at entry are found ($r = .0373$, $r = .0279$, and $r = .0176$ respectively).

A similar objection may be leveled against the original analysis of the prediction of recidivism from number of priors presented above. However, none of the three measures of priors, when natural logarithms are taken, significantly predicts filed petitions after entry to New Pride above the variance accounted for in the dependent measure by New Pride site differences in the treatment group.*

An examination of the three initial constraints on the data shows first, that it is essential to control for the effects of aggregating data from multiple jurisdictions. Second, a substantial curvilinear maturation effect can be identified in the prediction of recidivism. Third, the expected predictions from priors may not obtain, due to the selection of clients and comparison subjects with high numbers of priors. Although these inquiries are based on somewhat inappropriate OLS regression procedures and reflect only the predictions of petition-filed offenses after entry to New Pride, the same effects appear when properly tested using linear-logistic procedures on all measures of recidivism. These tests appear in analyses below.

* All prior offenses account for an additional 0.1 percent of the variance ($F = 1.00$, $df = 1,962$, $MS(e) = .202$, $p > .05$), all prior petitions filed account for an additional 0.1 percent of the variance ($F = .81$, $df = 1,962$, $MS(e) = .202$, $p > .05$), and all prior adjudications account for an additional 0.03 percent of the variance in the dependent measure ($F = .31$, $df = 1,962$, $MS(e) = .202$, $p > .05$). In all cases additional tests of the site-by-priors' interactions were also not significant.

THE ANALYSIS OF RECIDIVISM

The two measures of recidivism, filed petitions and sustained adjudications, may be examined in the four ways discussed in Part I :

1. Whether or not the client recidivates,
2. How many times the client recidivates,
3. Latency to the first offense,
4. Number of clients recidivating over time.

These four ways of examining recidivism can be collected into the four basic approaches to analysis introduced in Part I and discussed below:

1. Linear-logistic analyses of which subjects do and do not recidivate address point 1 above.
2. Analyses of counts of recidivism address point 2 above.
3. Time-to-recidivate survival analyses address points 1 and 3 above.
4. Time series analyses address points 2 and 4.

Issues regarding offense seriousness and the impact of the program on the incarceration of youth served will be addressed both in conjunction with these analyses and separately in a concluding section.

Analysis One: Linear-Logistic Models of Recidivism

In its most basic representation, the task of evaluating the New Pride Replication Program is a simple one: A count of who does and does not recidivate can be used to determine program success. If a lesser proportion of the treatment group recidivates than the comparison group, the program may be considered a success. This naive approach offers much in simplicity but little in accuracy because of a number of biases in the estimation of proportions recidivating.

Part I presented brief descriptions of the biases with which to be concerned in the measurement of recidivism. For example, significant differences were demonstrated between comparison and treatment groups on gender and ethnic compositions and times of follow-up. Simply presenting the number of subjects recidivating in each group does not account for these biases. Linear-logistic analysis applied to these data will provide statistical controls for such differences (see Appendix E).

Linear-logistic models are designed to account for the observed differences between groups in dichotomous dependent measures. They assume that the logistic distribution of each dependent variable is a linear function of each independent variable, the logistic distribution of each dependent variable simply being the log of the odds ratio for the measure. If N_r represents the number of subjects recidivating and N_s represents the number of subjects not recidivating, the natural logarithm of N_r/N_s is the log of the odds ratio predicting recidivism after New Pride.* While regression procedures are available to analyze

* The log of the odds ratio (logits) distribution for a dichotomous dependent measure is a simple monotonic function of its probabilities. For example, if 50 percent of a group of 100 subjects recidivate, the odds ratio is $50/50 = 1.00$ and the natural logarithm of this value is 0.00. A logit value of 0.00 always represents a 50/50 split on the dichotomous dependent measure. On the other hand, if 75 percent of the group of 100 recidivate, the odds ratio will be $75/25 = 3.00$ and the logit value will be 1.10. The probability of recidivism this logit value represents can be recovered by the formula $P(r) = 1/(1 + e^{-L})$ where L is the logit value and $P(r)$ is the probability of recidivism. If $L = 1.09$, $p(r) = .75$. If a logit value is less than 0.00, then the probability of recidivism will be less than 50 percent.

aggregate data of this sort, maximum likelihood estimates of linear-logistic functions are preferable for their handling of the data on a case-by-case basis (Hanushek and Jackson, pp. 179-215, 1977; Dixon, 1981). This approach will be taken here.

A number of linear-logistic analyses will be used to evaluate recidivism rates between treatment and comparison groups against the background of a variety of covariates. In order to insure a fair comparison of the groups, the evaluations will be made from two points in time, recidivism immediately after program entry and recidivism after program entry plus 12 months. This latter point of comparison was chosen to provide a test of program effectiveness after most of the treatment subjects had fully completed their programs.

A Stepwise Introduction to the Covariates

In the first part of this chapter descriptions of the most important covariates were presented. In this section a stepwise analysis of these variables is presented to outline the strength of their effects in predicting recidivism after New Pride. In order to simplify the process for the maximum likelihood procedure, all interval measures (age, the natural logarithm of priors, and time to follow-up) were coded as integer values. For this analysis three priors' measures were examined: the logarithms of all prior offenses, prior filed petitions, and prior sustained adjudications. Additionally, the distribution of ethnic groups at the sites was coded into three groups: whites, blacks, and others. The latter group contains primarily hispanic subjects (see Table 10).

Tables 15 and 16 present the results of the stepwise fits of the linear-logistic models to the data. Terms are entered in a forward stepwise manner analogous to the forward stepwise procedures found in some regression packages. In the tables the terms are ordered by their entry. In Table 15 for filed petitions, age at entry is ordered first, then time to follow-up is added to the model, and so on. The test statistic is G^2 , related to Rao's likelihood ratio

Table 15

Stepwise Contribution of Covariates to the Prediction of
Recidivism After Case Action Date
(Ordered by Effect Size)

Variable Added	Change in G2	df	P
Filed Petitions			
Age at Entry	87.220	1	<.001
Time to Follow-up	79.146	1	<.001
New Pride Sites	137.899	6	<.001
Ethnicity	26.767	2	<.001
Gender	16.206	1	<.001
Sustained Counts			
Time to Follow-up	114.504	1	<.001
Age at Entry	41.612	1	<.001
New Pride Sites	113.159	6	<.001
Gender	16.729	1	<.001
Ethnicity	19.314	2	<.001
Seriousness (CS)	5.964	1	<.020

Table 16

Stepwise Contribution of Covariates to the Prediction of
 Recidivism 12 Months After Case Action Date
 (Ordered by Effect Size)

Variable Added	Change in G ²	df	P
Filed Petitions			
Time to Follow-up	144.328	1	<.001
Age at Entry	52.984	1	<.001
New Pride Sites	117.425	6	<.001
Ethnicity	21.818	2	<.001
Gender	8.803	1	<.001
Sustained Counts			
Time to Follow-up	159.729	1	<.001
Age at Entry	31.215	1	<.001
New Pride Sites	112.218	6	<.001
Gender	10.082	1	<.002
Ethnicity	13.717	2	<.002

statistic (Rao, 1973), and is treated as a Chi-square statistic with the degrees of freedom of each term as entered in the table.

Each of the four dependent measures considered is significantly related to time to follow-up, age at entry, New Pride site differences (six degrees of freedom for the six dummy variables necessary to characterize the seven sites), gender, and ethnic differences (two degrees of freedom for the two dummy variables characterizing three ethnic groups). Note that in no case was the number of priors (all three measures) found to significantly predict any measure of recidivism. In only one case was the seriousness of prior offenses significantly related to the outcome measure. The seriousness of adjudicated offenses before New Pride is significantly related to the probability of recidivism after program entry as measured by the occurrence of another adjudication.

The Form of Maturation Effects

In the introduction to the second part of this chapter a thorough discussion of the maturation effect was presented. The form of its effect on the four dependent measures was examined by the use of a second order polynomial, age-squared.* In addition to the following variables -- gender, ethnicity, seriousness, time to follow-up, the logarithm of number of priors, New Pride site, and the first order (linear effect) of age at program entry--the second order effect for age-squared is significant in predicting filed petitions and adjudications after case action date, ($G^2 = 13.861$, $df = 1$, $p < .001$, and $G^2 = 4.159$, $df = 1$, $p < .05$ respectively). The curvilinear effect is not significant for the measures of filed petitions and adjudications 12 months after case action date ($G^2 = 1.198$, $df = 1$, $p > .05$, and $G^2 = .288$, $df = 1$, $p > .05$ respectively).

* It has been observed that the relationship between age and crime is not linear. It increases to a certain age and falls dramatically thereafter (BJS: 32). The presence of the expected curve is confirmed if the second-order polynomial accounts for additional variance in the dependent measure.

The presence of the curved effect of age at case action date on the probability of subsequent recidivism, but not on the probability of recidivism 12 months later, is sensible. The average age of comparison and treatment subjects at case action was 16.18 years, making their average age 17.18 years one year later. This difference could well be enough to move the group of subjects from the peak of the maturation function to its downside.

Differences Between Comparison and Treatment Groups

Now that the form of maturation effects and the most relevant variables have been established, it is possible to ascertain differences in recidivism between the matched groups. The simple question to be asked is whether treatment and comparison group differences contribute significantly to the prediction of recidivism in the New Pride data, over and above the variance accounted for by other known correlates.

Analyses of the four outcome measures were performed in two ways. In analyzing new offenses after case action date, the curvilinear age effect was included as a control variable. In analyzing new offenses beginning 12 months after case action date, only the linear effect of age at entry was included. The additional fixed covariates were gender, ethnicity, prior seriousness, time to follow-up, the logarithm of number of priors, and New Pride sites*. Only one significant relationship between groups was found: Filed petitions after case action date were less frequent in the comparison group than the treatment group overall ($G^2 = 5.214$, $df = 1$, $p < .025$). Group membership was not significantly related to the occurrence of adjudications after case action date ($G^2 = 3.675$,

* With this number of covariates a natural concern in these analyses is the possible multicollinearity of independent measures producing inefficient estimates of their effects. This is fortunately not a great problem here. Overall the correlations are quite low. Appendix A reviews the correlation of parameter estimates for the covariates in the linear-logistic models.

df = 1, $p > .05$), or to the occurrence of filed petitions 12 months after case action date ($G^2 = 1.030$, df = 1, $p > .05$), or to adjudications 12 months after case action date ($G^2 = .708$, df = 1, $p > .05$).

All other things being equal, predicting filed petitions after case action date, the expected proportion of females recidivating is 76 percent and for males it is 89 percent. Differences in ethnicity are reflected in these different proportions of expected recidivism: whites - 79 percent, blacks - 88 percent, other ethnic groups (in this study mainly hispanics) 82 percent. The average seriousness of petition filed offenses prior to case action, although not a significant predictor, is inversely related to the probability of subsequent recidivism. Time to follow-up is directly related to recidivism as expected.

The logarithm of prior petition-filed offenses, although not a significant predictor, is directly related to the probability of subsequent recidivism. The proportions expected to recidivate are also different between groups such that the expected proportion for the treatment group is 0.86 and for the comparison is 0.77. The effects for age at case action date and for different New pride sites have been discussed above. An example of the different expected proportions of subjects recidivating by sites appears in the Tables below.

The one finding of a significant difference in recidivism rates between the comparison and treatment groups is not all that can be said about the impacts of the treatment programs on recidivism. Indeed, overall there may be little effect on recidivism if some sites show the treatment group doing better than the comparison group and other sites show the reverse effect. This possibility can be tested by examining the site-by-group interaction. The interaction is significant

for the measures of recidivism beginning 12 months after case action, but not for the measures of recidivism immediately after case action.*

Tables 17 and 18 present the expected proportions recidivating in each group by site ordered from the site with the greatest margin in favor of the treatment group (Providence) to the site with the greatest margin in favor of the comparison group (Chicago in Table 17 and Kansas City in Table 18). The recidivism rates presented are the expected proportions recidivating two years after case action assuming a subject age of 16 years at case action. At only two sites does it appear that the treatment group does better than the comparison group (Providence and Fresno).

Since the site-by-group interaction is significant when predicting filed petitions and sustained counts beginning 12 months after case action, it is reasonable to look at individual tests of group differences at each site. These tests are presented in Tables 19 and 20 for filed petitions and sustained counts 12 months after case action. The accompanying probabilities of recidivism are again calculated two years after case action assuming a subject age of 16 years. Note that the probabilities of recidivism presented in Tables 19 and 20 do not necessarily correspond with those presented in Tables 17 and 18.**

* Recidivism beginning 12 months after case action date: $G^2 = 24.185$, $df = 6$, $p < .0005$ for filed petitions and $G^2 = 21.87$, $df = 6$, and $p < .005$ for adjudications. Recidivism immediately after case action date: $G^2 = 4.712$, $df = 6$, $p > .05$ for filed petitions and $G^2 = 7.526$, $df = 6$, $p > .05$ for adjudications.

** The individual site analyses are conditioned by the particular parameters for the covariates at each site and, hence, vary according to the differences in these other parameters from site-to-site. For this reason the overall ordering of successful sites only remains roughly the same.

Table 17

Expected Probabilities of Recidivism of Groups
by Site: Filed Petitions After Case Action Date
Plus 12 Months,
Overall Analyses

Site*	Treatment	Comparison
Providence	.540	.621
Fresno	.161	.221
Camden	.302	.271
San Francisco	.330	.255
Pensacola	.160	.055
Kansas City	.178	.043
Chicago	.333	.153

* Ordered by the relative success of the treatment group.

Table 18

Expected Probabilities of Recidivism of Groups
by Site: Adjudications After Case
Action Date Plus 12 Months,
Overall Analyses

Site*	Treatment	Comparison
Providence	.386	.462
Fresno	.134	.210
Camden	.257	.257
Pensacola	.090	.035
Chicago	.183	.107
San Francisco	.319	.237
Kansas City	.150	.034

* Ordered by the relative success of the treatment group.

Table 19

Expected Probabilities of Recidivism of Groups by Site:
 Filed Petitions After Case Action Date Plus
 12 Months, Individual Site Analyses

Site*	Group		G ²	df	P
	Treatment	Comparison			
Providence	.581	.679	1.202	1	> .050
Chicago	.096	.139	.981	1	> .050
Fresno	.068	.091	1.044	1	> .050
Kansas City	.062	.028	1.578	1	> .050
Camden	.265	.218	.811	1	> .050
San Francisco	.228	.161	1.908	1	> .050
Pensacola	.352	.098	8.465	1	< .005

* Ordered by the relative success of the treatment group.

Table 20

Expected Probabilities of Recidivism of Groups by Site:
 Adjudications After Case Action Date Plus
 12 Months, Individual Site Analyses

Site**	Group		G2	df	P
	Treatment	Comparison			
Providence	.582	.678	1.296	1	>.050
Fresno	.084	.121	1.551	1	>.050
Chicago	.261	.285	.065	1	>.050
Kansas City*	.000	.000	2.314	1	>.050
Camden	.228	.210	.131	1	>.050
Pensacola	.082	.019	5.287	1	<.005
San Francisco	.204	.134	2.613	1	>.050

* At Kansas City P(recidivism) = .0001 for the comparison group and P(recidivism) = .0003 for the treatment group.

** Ordered by the relative success of the treatment group.

Tables 19 and 20 show that analyses of individual sites reveal no significant differences in the probability of recidivism between the comparison and treatment groups except at Pensacola. At Pensacola the comparison group is expected to recidivate less than the treatment group. Once again, Providence and Fresno show a greater success for the treatment group (fewer recidivists than the comparison group), but these differences are not significant. In addition, Chicago shows a greater success for the treatment group.

"Successful" Completion of the New Pride Program and Recidivism

One objection to the previous analysis comparing recidivism between the treatment group and matched comparison group is that the treatment group includes all clients, regardless of their point of termination from the New Pride programs. That is, treatment subjects terminated early from the programs, having little program contact, and probably labeled as "failures" by the program staff, are included in the treatment group for analytic purposes. The result is that treatment failures are being compared to the comparison group as well as treatment successes.

The natural question to ask is whether the group of treatment successes do better than the comparison groups in terms of recidivism after completion of the New Pride program. Program "success" was defined by project staff on termination forms for each client (see Chapter 6 for a more thorough discussion of this variable). Because the average time in program for youth who successfully complete it is almost exactly one year, the measures of recidivism are restricted in the comparison and treatment success groups to filed petitions and adjudications beginning 12 months after case action date.

When the "successful" treatment subjects are tested against the comparison group, the results are the same as for the previous analyses. There

are no significant relationships between overall group differences and recidivism ($G^2 = 2.594$, $df = 1$, $p > .05$ for filed petitions, $G^2 = 2.622$, $df = 1$, $p > .05$ for adjudications). But there remains a significant relationship between recidivism and the interaction of groups by site ($G^2 = 16.658$, $df = 6$, $p < .020$ for filed petitions, $G^2 = 13.407$, $df = 6$, $p < .040$ for adjudications). The coefficients of all variables in these models are virtually identical to those of the previous models.

A similar set of questions can be asked regarding whether program 'failures' are more or less likely to recidivate than comparison subjects. Once again there are no significant relationships between group differences and recidivism 12 months after case action date ($G^2 = .047$, $df = 1$, $p > .05$ for filed petitions, $G^2 = .009$, $df = 1$, $p > .050$ for adjudications). There remain significant relationships between recidivism and the interaction of groups by site ($G^2 = 19.240$, $df = 6$, $p < .005$ for filed petitions, $G^2 = 16.725$, $df = 6$, $p < .030$ for adjudications).

The Effects of Incarceration Interventions on Recidivism

One ancillary consideration is the possible impact of differential incarcerations on measures of recidivism between comparison and treatment groups. If the comparison subjects are incarcerated more often than treatment subjects, they may in general be less at risk to recidivate. It is assumed that the institutionalization of offenders results in a forced decline in the probability of recidivism, at least temporarily.

Table 21 presents the proportion of subjects in each group incarcerated in the first 12 months after case action date, by site. Incarcerations are defined by dispositions indicating, "department of corrections commitments." At Fresno, in addition to this disposition, "other" dispositions are included. (These "other" dispositions at Fresno were indicated only when youth were remanded to Wakefield School, a county-run high security correctional facility.) Included in the table are the probability values from Fisher's Exact Test of Association

Table 21

Proportion of Subjects Incarcerated in each Group by Site:
First 12 Months After Case Action Date

Site	Group		Fisher's P
	P(Treatment)	P(Comparison)	
Camden	.227	.246	.4001
Chicago	.261	.136	.0625
Fresno	.108	.048	.0411
Kansas City	.062	.222	.0022
Pensacola	.068	.167	.0379
Providence	.376	.358	.4576
San Francisco	.140	.083	.1414
Overall	.177	.168	.3368

between group membership and whether or not subjects were incarcerated. At three sites this association is significant. At Fresno more treatment subjects are incarcerated than comparison subjects. At Kansas City and Pensacola more comparison subjects are incarcerated than treatment subjects. Overall there is no association between group membership and incarcerations.

Since incarcerations are measured in the first 12 months after case action date, the dependent measures are restricted to recidivism 12 months after case action date and beyond. This allows us to measure the effect of incarceration during the 12 months after case action date on recidivism after these first 12 months. Above the standard list of covariates already extensively reviewed in this text, incarcerations as measured are not significantly related to reductions or increases in recidivism after the date of case action plus 12 months ($G^2 = 3.183$, $df = 1$, $p > .050$ for filed petitions, $G^2 = 2.625$, $df = 1$, $p > .050$ for sustained petitions).

Analysis Two: Counts of Recidivism

In addition to determining who does or does not recidivate after entry to New Pride, it is also possible to count the number of times each subject recidivates. The problems with using such counts as dependent measures have been fully discussed in Part 1. These highly skewed distributions are very difficult to use in any analysis. For this reason, the analysis presented here will be somewhat abbreviated.

Tables 22 and 23 present the average number of recidivating offenses per subject at each site in the comparison and treatment groups. Remember that differential follow-up times and other biases go uncorrected in these figures. They indicate that, measured from time of case action, differences in the number of offenses between groups sometimes favor the treatment group (Chicago, Camden, Kansas City, Providence) and sometimes favor the comparison group (Fresno, Pensacola, San Francisco), as in Table 22.

The picture becomes more interesting in Table 23. Looking at recidivism measured from 12 months after case action, the treatment group recidivates less than the comparison group at all sites except Pensacola and San Francisco. Unfortunately, regression analyses nevertheless indicate no significant differences between groups when New Pride site differences, the effects of age and time to follow-up are covaried.* However, there are significant site by group interactions in each case.**

* For filed petitions $F = .084$, $df = 1, 1580$, $MS(e) = 7.867$, $p > .05$ after case action and $F = .229$, $df = 1, 1580$, $MS(e) = 3.662$, $p > .05$ 12 months after case action date; for adjudications $F = .032$, $df = 1, 1580$, $MS(e) = 3.468$, $p > .05$ after case action date and $F = .794$, $df = 1, 1580$, $MS(e) = 1.531$, $p > .05$ 12 months after case action date.

** For filed petitions $F = 5.022$, $df = 6, 1574$, $MS(e) = 7.749$, $p < .005$ after case action date and $F = 5.475$, $df = 6, 1574$, $MS(e) = 3.601$, $p < .005$ 12 months after case action date. For adjudications $F = 3.726$, $df = 6, 1574$, $MS(e) = 3.433$, $p < .005$ after case action date and $F = 3.775$, $df = 6, 1574$, $MS(e) = 3.601$, $p < .005$ 12 months after case action date.

Table 22

Average Number of Offenses in Each Group by Site
After Case Action Date

Site	Filed Petitions		Adjudications	
	Treatment	Comparison	Treatment	Comparison
Camden	2.63	3.44	1.66	2.34
Chicago	1.76	2.09	0.81	0.94
Fresno	1.62	1.39	0.93	0.89
Kansas City	1.30	2.53	1.00	1.78
Pensacola	1.72	1.24	1.17	0.96
Providence	5.09	6.58	2.68	3.36
San Francisco	1.83	1.30	1.33	0.91

Table 23

Average Number of Offenses in Each Group by Site
12 Months After Case Action Date

Site	Filed Petitions		Adjudications	
	Treatment	Comparison	Treatment	Comparison
Camden	1.19	1.96	0.74	1.36
Chicago	0.70	1.23	0.35	0.66
Fresno	0.57	0.76	0.32	0.51
Kansas City	0.50	1.78	0.34	1.27
Pensacola	0.52	0.37	0.27	0.28
Providence	2.05	3.67	1.09	1.90
San Francisco	0.85	0.63	0.63	0.48

The significant site by group interactions show that the relative success or failure of the comparison and treatment groups is different from site to site. Individual site analyses, however, indicate that at only two sites do the differences between groups appear significant, Pensacola and San Francisco for filed petitions only. In both these cases the comparison groups recidivate less than the treatment groups ($B = -.354$, $F = 6.371$, $df = 1,196$, $MS(e) = .726$, $p < .020$ and $B = -.548$, $F = 6.804$, $df = 1,230$, $MS(e) = 2.367$, $p < .001$ respectively). The reader should note that these significant results could well be due to chance alone as the overall effect for group differences is not significant.

An alternative way to analyze these data is to consider only those subjects who recidivate. The question to be asked is whether the rates of recidivism among those subjects who do recidivate are different between the comparison and treatment groups. Since only subjects who do recidivate are to be considered, a simple rate calculation may be used to provide a normally distributed dependent measure (the natural logarithm of the ratio of number of offenses to available time to recidivate). The number of offenses is simply the counts of number of new offenses per subject discussed above. The time available to recidivate is the time to follow-up in weeks. Since the ratio of number of offenses to time to follow-up is positively skewed, the logarithm of the ratio is taken, successfully normalizing the distribution. The means of these logarithmic functions can be transformed to the geometric means of these offense rate distributions. Note that time to follow-up need not be controlled in the following analyses as it composes part of the dependent measure of rates of recidivism.

Tables 24 and 25 present the geometric means of recidivism rates in offenses per week for comparison and treatment subjects measured by filed petitions and adjudications from case action date (Table 24) and 12 months afterwards (Table 25). According to Table 24, three sites show the treatment group recidivating less than the comparison group (Fresno, Camden and Providence) and four sites show the treatment group recidivating more (Chicago, Kansas City, Pensacola and San Francisco). Measuring recidivism 12 months after case action, the pattern of results is virtually identical. Once again regression analyses, however, indicate no significant differences between groups

Table 24

Rates of Recidivism in Each Group by Site
After Case Action Date
(Geometric Mean)

Site	Filed Petitions		Adjudications	
	Treatment	Comparison	Treatment	Comparison
Camden	0.020	0.022	0.015	0.016
Chicago	0.018	0.016	0.013	0.012
Fresno	0.016	0.018	0.013	0.014
Kansas City	0.016	0.010	0.014	0.008
Pensacola	0.018	0.016	0.015	0.014
Providence	0.035	0.042	0.022	0.026
San Francisco	0.016	0.015	0.013	0.012

Table 25

Rates of Recidivism in Each Group by Site
 12 Months After Case Action Date
 (Geometric Mean)

Site	Filed Petitions		Adjudications	
	Treatment	Comparison	Treatment	Comparison
Camden	0.015	0.016	0.012	0.012
Chicago	0.014	0.010	0.011	0.009
Fresno	0.013	0.014	0.010	0.011
Kansas City	0.012	0.011	0.010	0.009
Pensacola	0.011	0.006	0.009	0.006
Providence	0.020	0.027	0.016	0.017
San Francisco	0.011	0.011	0.009	0.009

when New Pride site differences and the effects of age are controlled. There are once again significant site by group interactions.*

The significant site by group interactions show that the relative success or failure of the comparison and treatment groups is different from site to site. And, although the overall effect for groups is not significant, a number of sites show significant differences between groups when tested on a site by site basis. Only at one site, Providence, for one measure, filed petitions 12 months after case action, does the treatment group recidivate significantly less than the comparison group ($B = .288$, $F = 4.256$, $df = 1,117$, $MS(e) = .555$, $p < .050$). At the remaining sites the comparison groups recidivate less than the treatment groups. At Kansas City for both filed petitions and sustained counts measured immediately after case action, the treatment group recidivates more than the comparison group ($B = -.517$, $F = 11.832$, $df = 1,99$, $MS(e) = .555$, $p < .0010$ and $B = -.566$, $F = 13.796$, $df = 1,88$, $MS(e) = .493$, $p < .0005$). At Pensacola for both filed petitions and sustained counts measured 12 months after case action, the treatment group recidivates more than the comparison group ($B = -.552$, $F = 10.287$, $df = 1,52$, $MS(e) = .258$, $p = .0030$ and $B = -.449$, $F = 5.502$, $df = 1,31$, $MS(e) = .223$, $p < .0300$). At Chicago for filed petitions measured 12 months after case action, the treatment group recidivates more than the comparison group ($B = -.347$, $F = 4.938$, $df = 1,69$, $MS(e) = .396$, $p < .0300$).

In summary, it appears that these measures of recidivism show that overall there are no differences in recidivism rates between groups. The consistent site by group interactions do, however, show that the relative success of the

* For filed petitions $F = .543$, $df = 1, 1140$, $MS(e) = .531$, $p > .050$ after case action date and $F = .479$, $df = 1, 632$, $MS(e) = .436$, $p > .050$ 12 months after case action date. For adjudications $F = .496$, $df = 1, 969$, $MS(e) = .434$, $p > .050$ after case action and $F = .790$, $df = 1, 506$, $MS(e) = .330$, $p > .050$ 12 months after case action. There are significant site-by-group interactions except in the case of adjudications measured 12 months after case action (for filed petitions $F = 3.196$, $df = 6, 1134$, $MS(e) = .525$, $p = .010$ after case action date and $F = 2.757$, $df = 6, 626$, $MS(e) = .429$, $p < .025$ 12 months after case action; for sustained counts $F = 3.507$, $df = 6, 963$, $MS(e) = .427$, $p < .005$ after case action date; and $F = 1.028$, $df = 6, 500$, $MS(e) = .330$, $p > .050$ 12 months after case action date).

treatment and comparison groups varies from site to site. At some sites the comparison group recidivates more than the treatment group; at other sites the treatment group recidivates more. But these differences do not demonstrate any significant impact for the treatment in general. The significant differences found in the site by site analyses are based on tests of relatively little power and suggest for the majority of sites that the comparison groups recidivate less than the treatment groups.

To conclude this section an additional set of analyses were run to test whether incarcerations in the first 12 months after case action significantly affect recidivism rates beyond 12 months after case action. In no case did incarcerations significantly affect recidivism when measured by simple counts ($F = 1.338$, $df = 1, 1580$, $MS(e) = 3.660$, $p > .050$ for filed petitions and $F = .436$, $df = 1, 1580$, $MS(e) = 1.531$, $p > .050$ for adjudications) nor when measured by the auxilliary recidivism rate measure ($F = .445$, $df = 1, 632$, $MS(e) = .436$, $p > .050$ for filed petitions and $F = .474$, $df = 1, 506$, $MS(e) = .331$, $p > .050$).

Analysis Three: Survival Analyses

The basic reasons to apply survival analysis techniques to the measurement of recidivism after New Pride were explained in Part 1 of this chapter. In this section the development of these analyses will be presented. Survival models require that the matched samples of treatment and comparison subjects present only relatively small biases between groups: Differential times to follow-up, are in general controlled in the development of the survival analysis techniques. Ages at case action correspond between groups quite accurately, despite the significant difference between groups at Camden (see Table 7). Biases due to differences in numbers of priors and seriousness of prior offenses are negligible given the evidence found by the linear-logistic analyses. This leaves gender and ethnic distribution biases as uncontrolled covariates in such analyses. These biases will be discussed where necessary.

The Basic Survival Analysis of Recidivism

The basic analysis of survival functions for each individual involves measuring the time from the case action date to the date of his or her first recidivating offense. If a subject does not recidivate, a measure of follow-up time is used in place of time-to-recidivate to provide an idea of how long he/she has gone without a new offense. So, for example, if a client entered the program June 6, 1981 and recidivated August 21, 1981, his/her time-to-recidivate is roughly one and one-half months. If, on the other hand, a different client entered also on June 6, 1981, but was found not to have recidivated by the date of follow-up, say December 6, 1981; then his/her time to follow up would be about six months. That is, this client went six months without a new offense.

The point of this presentation is to outline that 1) at any given point in time, it is known who has and has not offended; and 2) it is known how much time has elapsed since the case action date to either the new offense or the follow-up date. This means that the number of youngsters who reoffend may be analyzed as they accumulate over time. In the two subject example just provided, at one

month after program entry no one has offended. At two months after program entry, one subject has offended (50 percent of this sample). At three months after program entry still only one subject, has offended. And even at the maximum follow-up time, six months, this 50 percent recidivism proportion is maintained, because the second client does not commit a new offense.

This discussion has considered the basic issues in the survival analyses of recidivism: Simply put, we wish to describe the proportion of the sample seen to "survive", i.e., not recidivate, at any point in time after case action, based on the appearance of each subject's next offense, if any. Conversely one can look at the cumulative proportion of subjects seen to recidivate, or "fail", at any point in time after case action. This latter form of presentation of the data appears in Tables 26 and 27 for filed petitions and sustained adjudications respectively. Note that the time base is in months. Each month corresponds to a four week interval.* At 18 months after case action in Fresno, for example, 67 percent of the treatment group and 64 percent of the comparison group have recidivated, based on the appearance of a filed petition (Table 26). At the bottom of the tables are given the sample sizes on which the functions are based. Below the sample sizes, the median times to recidivating offenses for each group is indicated. At Fresno this median time is 8.5 weeks for the treatment group and 11.5 weeks for the comparison group, based on filed petitions again (Table 26). As a group the comparison subjects commit their next offense later than the treatment subjects. Note, finally, that where the columns of cumulative recidivism rates end in Tables 26 and 27 depends upon total follow-up available for each group and the last point at which a recidivating offense appears in the data.

Each survival analysis is based on product limit estimates of the recidivism functions designed to optimize use of the available data given failures (recidivations) and censoring (limited time to follow-up). A useful discussion of

* The data is presented in this way for simplicity. The actual time base for the analyses is in half-week intervals to provide considerably more accuracy.

Table 26

**Cumulative Recidivism Data by Site in Proportions Recidivating for
Filed Petitions; Product Limit Estimates**

Months	Camden		Chicago		Fresno		Kansas City		Pensacola		Providence		San Francisco	
	Treat- ment	Com- parison												
0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.43	.37	.42	.32	.35	.35	.27	.34	.33	.25	.68	.62	.34	.28
12	.58	.58	.54	.45	.55	.51	.42	.42	.43	.40	.80	.81	.53	.44
18	.68	.65	.63	.60	.67	.64	.45	.50	.48	.44	.86	.90	.61	.58
24	.72	.69	.66	.66	.71	.73	.47	.57	.51	.46	.87	.94	.64	.66
30	.74	.69	.70	.76	.72	.73	.51	.60	.54	.49	.88	.97	.73	.69
36		.69	.72	.76	.74		.58	.65	.58		.95	.97	.76	.72
42		.72		.82				.65					.79	.72
48				.88				.67					.88	.79
N	172	131	142	54	130	213	113	64	146	72	117	92	150	92
Median	8.3	9.0	10.0	15.5	8.5	11.5	28.5	16.5	20.3	—*	3.8	3.5	10.3	14.0
Breslow P	.3699		.3351		.9662		.2515		.5335		.9655		.2489	
Mantel-Cox	.3915		.7884		.7835		.2757		.4431		.5799		.3406	

* Less than 50 percent of the sample recidivated.

Table 27

Cumulative Recidivism Data by Site in Proportions Recidivating
for Adjudications; Product Limit Estimates

Months	Camden		Chicago		Fresno		Kansas City		Pensacola		Providence		San Francisco	
	Treat- ment	Com- parison												
0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.31	.32	.23	.11	.23	.28	.23	.25	.31	.25	.46	.47	.32	.22
12	.46	.52	.34	.21	.43	.41	.35	.33	.38	.37	.66	.67	.45	.38
18	.56	.60	.39	.33	.52	.54	.40	.42	.42	.39	.70	.72	.55	.53
24	.64	.65	.44	.40	.56	.62	.43	.49	.42	.43	.74	.81	.57	.61
30	.68	.67	.49	.53	.58	.63	.48	.52	.44		.77	.83	.67	.63
36		.67	.52	.56	.60		.52	.56	.46		.87	.88	.71	.65
42		.70		.56				.56					.74	.65
48				.64				.58					.85	.74
N	172	131	142	54	130	213	113	64	146	72	117	92	150	92
Median	14.3	10.5	30.5	29.0	17.8	17.0	32.0	24.5	-	-	6.8	7.0	15.0	16.0
Breslow P	.6159		.2447		.5702		.6118		.8623		.8420		.1821	
Mantel-Cox	.7909		.6377		.5555		.6070		.8314		.6522		.3099	

this procedure is to be found in Kaplan and Meier (1958). In addition to the other information in Tables 26 and 27 are two statistics testing the equality of the functions. The first, referred to as "Breslow P," is the significance level of a statistic based on a generalized form of the Wilcoxon test (Breslow, 1970). The second, referred to as "Mantel-Cox," is the significance level of a statistic based on an exponential scores test proposed by Mantel (1966). The important distinction between these tests is that the Breslow test gives greater weight to early observations and is less sensitive to later events that occur when few subjects remain available to recidivate.

The most notable features of Tables 26 and 27 are the remarkable similarity of the data for comparison and treatment groups. In no case are either the Breslow or Mantel-Cox statistics significant. In every case the proportions recidivating are very similar between groups. Evidently there are no differences between the rates at which treatment and comparison subjects commit their next offenses after program entry.

This analysis of the empirical recidivism functions describing the latencies of subjects to their next offenses can be reproduced by examining the survival functions of subjects 12 months after case action. To repeat, at this point the treatment program should have had some impact on recidivism. Table 28 presents the basic data from comparisons of the recidivism functions of both groups. In this case there is little difference in the results except at one site, Fresno. At Fresno there are significant differences in the survival functions between the comparison and treatment groups, as tested by the Breslow and Mantel-Cox statistics. For both filed petitions and adjudications the empirical survival and recidivism functions show the comparison groups recidivating, or "failing", more than the treatment group.

Final Notes on the Survival Analysis of Recidivism

The survival analyses presented here basically confirm the results of those previously discussed in this chapter. Few differences in recidivism rate can

Table 28

Results of Survival Function Analyses of Recidivism
Measured 12 Months After Case Action Date

Site	Sample Size		Filed Petitions		Adjudications	
	Treat- ment	Com- parison	Breslow P	Mantel-Cox P	Breslow P	Mantel-Cox P
Camden	172	126	.3662	.3342	.1400	.1326
Chicago	142	44	.2513	.1587	.5108	.6006
Fresno	130	168	.0407*	.0730	.0124*	.0301*
Kansas City	113	63	.4593	.6438	.3776	.4062
Pensacola	146	54	.7554	.4599	.7721	.9410
Providence	117	81	.0767	.1076	.1540	.0966
San Francisco	150	84	.8038	.5031	.9853	.4556

* p < .05

presently be found between groups. In this case, however, there is the interesting exception of the Fresno site where the treatment group ultimately appears to recidivate less than the comparison group. One should note that there are proportionately more whites and hispanics in the Fresno comparison group than the treatment group (Table 10) and proportionately more females in the comparison group (Table 11). These biases cannot be controlled in this kind of analysis and they argue that the comparison group should recidivate less than the treatment group. The suggestion that fewer treatment subjects may ultimately recidivate than comparison subjects is, thus, **not** undermined by the gender and racial biases at the Fresno site.

Additional parametric analyses of these data were performed fitting an exponential decay model to the cumulative recidivism data. The results of these analyses appear in Appendix C. These analyses once again verify the results of this section and contribute little new information. Appendix D discusses various problems in the applicability of parametric models to these recidivism data.

variable measuring the weeks from program entry to program termination for each client. This variable represents the length of time each client was retained in the program and indirectly indicates his or her success in the program, insofar as length of stay insures continued receipt of program services. Even if a client is terminated from the program for other than positive reasons, the length of time spent in the program may be important to the reduction of recidivism. Recidivism measured during New Pride is separated from recidivism measured after New Pride because of the suspected relationship of recidivism during the New Pride program to each client's success in the program. It is hypothesized that clients recidivating during the program will be less likely to complete the program.

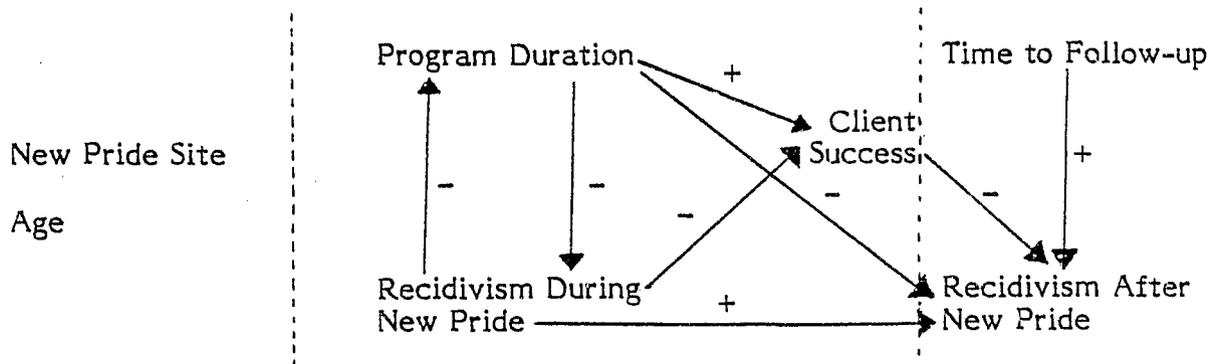
The relationship between program duration and recidivism during New Pride should be further explicated at this point. These two variables form the central simultaneous component of the basic outcome model. That is, the two variables cannot be temporally ordered with respect to each other. Time in the New Pride program co-occurs with recidivism during the program. Theoretically, increased program duration may lead to the reduction in the probability of recidivism during New Pride through the continued provision of services to the client, while recidivism during the New Pride program may lead to early termination from the program. The two variables are thus interdependent. This interdependency must be specifically evaluated through special techniques designed for the evaluation of simultaneous relationships (see Duncan, 1975).

The last variable measured at the end of the New pride program is the kind of termination as defined by project staff (the client success measure). This variable represents their decision as to whether or not an individual successfully completed the New Pride program. The evaluation of this measure was thoroughly discussed in Clients, Services, and Program Outcomes. Essentially, if the New Pride program is effective, this client success measure should lead to a reduction in recidivism after New Pride.

Finally, two other variables are measured for each client after termination from the program. These are whether or not a new petition alleging a criminal offense has been filed in either juvenile or adult court, and the time in weeks to the date of the last data collection on the client (called, "time to follow-up"). Recidivism after the New Pride program is measured from each client's termination from New Pride to December 31, 1983, the last date of follow-up. Since clients entered the programs at different points in time prior to this date each client's time to follow-up will be different. Thus, a control for time to follow-up is required in the measurement of recidivism after New Pride termination. It is assumed (and confirmed by the data) that with longer follow-up times the detection of recidivating events will be more likely.

For purposes of the remaining discussions the two control covariates that occur prior to the program (the New Pride site and age variables) will be referred to as the exogenous terms of the model. The remaining four measures (program duration, recidivism during New Pride, client success, and recidivism after New Pride) will be referred to as endogenous terms of the model. The two exogenous terms will always be independent measures in the analyses of the four endogenous terms. The four endogenous terms will each be dependent measures in four separate analyses.

From this discussion it is obvious that certain relationships among the variables are to be expected if the New Pride programs are successful in reducing recidivism among clients. These relationships are described in the following diagram.¹



¹ The relationships of New Pride site and age effects are not diagrammed in order to keep the representation as simple as possible.

The arrows represent the causal direction of each relationship and the sign represents the ideal form of the relationship. For example, the arrow leading from "Recidivism During" to "Recidivism After" indicates that the former is thought to increase the likelihood of the latter, and the positive sign indicates that recidivism during the program is positively related to recidivism after the program. Thus, if recidivism occurs during the program, it is also more likely to occur afterward.

This diagram describing the paths presents the expected relationships among all the variables in the basic outcome model. Continued follow-up is expected to increase the likelihood of detecting recidivism after New Pride, while longer program duration and successful termination from the program are expected to decrease the likelihood of recidivism after New Pride. The importance of separately measuring recidivism during New Pride can be more clearly seen in a further examination of this diagram. Committing a criminal act during New Pride is expected to lead to shorter program durations, a lesser likelihood of client success, and a greater likelihood of recidivism after New Pride. Naturally, longer program durations are expected to increase the likelihood of client success and, as discussed above, decrease the likelihood of recidivism during New Pride. The simultaneous relationship between program duration and recidivism during New Pride is indicated by the two arrows pointing between them.

As mentioned in the introduction to this chapter, one of the benefits of the basic outcome model is that both direct and indirect effects of the variables relevant to primary outcomes can be detected. For example, conditions that may increase program duration, such as having a job at the beginning of New Pride, can be related to recidivism both during and after the program. Directly, increased program duration is expected to reduce the likelihood of recidivism both during and after New Pride. Indirectly, increased program duration leads to an increased likelihood of successful termination and through this, to a decreased likelihood of recidivism after New Pride. Thus, variables not directly related to recidivism may be indirectly related.

Analysis Strategy

The observant reader may have noticed by now that all but one of the variables which appear as endogenous measures in the basic outcome model are dichotomous. Program duration is the only dependent measure that is in an interval scale suitable for analysis using regression techniques. The remaining variables, recidivism during and after New Pride and client success, must be analyzed using linear logistic procedures (discussed in "The Comparative Analysis of Recidivism").

Since the analyses techniques used for the basic outcome factors are both parametric and non-parametric, a true path analysis of the basic outcome model is not possible. No calculus of path coefficients exists for models constructed on the basis of linear-logistic procedures (Fienberg, 1980). For this reason the diagrams presented are referred to as "path analytic" diagrams, not path diagrams, and no coefficients are presented. The signs of the relationships are sufficient for an interpretation of these relationships.

One other problem in the analysis of the basic outcome model is the presence of the simultaneous variables program duration and recidivism during New Pride. First of all it should be noted that the presence of these simultaneous elements do not affect the analyses of the variables in the model that occur subsequent to them, successful termination and recidivism after New Pride. The analyses of recidivism during New Pride and program duration are affected by simultaneity because they occur at the same place in the model. In these cases the usual estimates of the coefficients relating the terms will be biased. This problem necessitates special techniques to obtain unbiased estimates of the coefficients.

The analysis of simultaneous components in path models requires establishing instruments which predict the simultaneous components themselves. These instruments are simply independent variables which uniquely predict one or the other of the two simultaneous variables. In the case of the basic outcome

model, variables must be identified which independently predict either program duration or recidivism during New Pride. Once the independent factors are identified, a two-stage least squares (2SLS) or a limited information maximum likelihood (LIML) estimation procedure may be used to provide unbiased estimates of the coefficients relating the two simultaneous variables in the model (see Wonnacott and Wonnacott, 1979). Unfortunately, these procedures require that both simultaneous variables be measured on an interval scale. Program duration is so measured, but recidivism during New Pride is a dichotomous measure.

For purposes of the present investigation the relationship between the two simultaneous variables of the model will be evaluated assuming both are interval measures. This will expedite the evaluation and provide a rough first estimate of the relationship between program duration and recidivism during New Pride. However, this analysis cannot be performed unless independently related variables (proper instruments) for program duration and recidivism during New Pride are found. Until that point, the simultaneity of these components of the basic outcome model will be assumed, and each will be used as a covariate in the analysis of the other.

The sample of clients on which the analyses of client outcomes are based include subjects from the Fresno, Chicago, Camden, Pensacola, Kansas City, Providence, and San Francisco treatment programs only. Information on client backgrounds, program process, and client outcomes was largely unavailable or poorly collected at the Los Angeles, Boston, and Georgetown sites. Within the seven impact sites, the sample is restricted to subjects having complete information on age, gender, and ethnicity. And, for each analysis, complete information on the variables from the part of the basic outcome model being analyzed was required. Actual sample sizes are reported on the tables presenting the results.

Analysis of the Basic Outcome Model

The basic outcome model, then, will be evaluated by analyzing separately all of the relationships to each of the four endogenous terms of the model: program

duration, recidivism during New Pride, client success, and recidivism after New Pride. Each endogenous variable will be analyzed in the context of all prior variables in the basic model. The results of these four procedures will be integrated to present a path analytic-like diagram similar to the one presented above.

Table 1 presents the results of the linear-logistic analysis of recidivism after New Pride termination. The first half of the table presents the order in which variables were entered in the model and tested using the G^2 statistic (see discussion in the last chapter). A constant is assumed in the models and not tested. The dummy variables representing differences between New Pride sites (see coding in Table 2) account for a significant amount of the outcome data, as does the measured effect for age. The age effect has two degrees of freedom: the first represents the linear effect of age and the second represents the curvilinear (quadratic) effect of age. Time to follow-up and recidivism during New Pride are also significantly related to recidivism after New Pride termination. Importantly, neither program duration nor client success is significantly related to recidivism after New Pride.

The second half of Table 1 presents the coefficients of the independent variables used to predict recidivism after termination from New Pride. The first column presents the independent variable names. Note that New Pride sites are coded by six dummy variables (see coding in Table 2) and the effect of age is decomposed into its linear and curvilinear (quadratic) components. The second column presents the coefficients relating the independent variables to the primary outcome measured in logits. The third column presents the asymptotic standard errors of the coefficients. The fourth column presents the Z-values of the coefficients (the coefficient divided by its standard error). The Z-values can be used as indices of the approximate statistical strengths of the relationships of the independent variables to the outcome measure.

The second half of the table supports the information presented in the first half of the table. The coefficients for the constant of the model and the New Pride site variables are not directly interpretable without considering the effects coding of the dummy variables presented in Table 2. Interpreted in this way, the

Table 1
Basic Outcome Model
Filed Petitions After Program Termination
(N = 917)

Variable	G ²	Improvement	df	P
Constant	1261.68	-	-	-
New Pride Site	1187.04	74.64	6	< .001
Age	1158.07	28.97	2	< .001
Time to Follow-up	1071.98	86.09	1	< .001
Recidivism During	1066.36	5.62	1	< .025
Program Duration	1065.77	.59	1	n.s.
Client Success	1065.18	.60	1	n.s.

Variable	Coefficient	S.E.	Z
Constant	-.226	1.190	-.19
New Pride Site (1)	.468	.194	2.41
(2)	1.390	.214	6.46
(3)	-.844	.183	-4.60
(4)	-.568	.202	-2.81
(5)	.079	.166	.48
(6)	-.424	.185	-2.30
Age (linear)	.186	.073	2.56
(quadratic)	-.017	1.700	.01
Time to Follow-up	.018	.002	7.23
Recidivism During	.171	.079	2.18
Program Duration	-.001	.006	-.21
Client Success	-.082	.106	-.77

Table 2
Coding of Independent Variables
Linear Logistic Analyses

New Pride Site	Coding Levels					
	(1)	(2)	(3)	(4)	(5)	(6)
Chicago	-1	-1	-1	-1	-1	-1
Fresno	0	0	0	0	0	1
Camden	0	0	0	0	1	0
Kansas City	0	0	0	1	0	0
Pensacola	0	0	1	0	0	0
Providence	0	1	0	0	0	0
San Francisco	1	0	0	0	0	0

Client Success: (1)
Failure -1
Success 1

Recidivism During (1)
No -1
Yes 1

Recidivism After (1)
No -1
Yes 1

Gender (1)
Male -1
Female 1

baseline proportions expected to recidivate at each site are: Chicago, .67; Fresno, .60; Camden, .71; Kansas City, .56; Pensacola, .49; Providence, .90; and San Francisco, .78 (assuming an age of 16 years at entry and 134 weeks of follow-up). These probabilities do not represent the effects of treatment, but rather, of discretionary decision-making among juvenile justice officials. These effects occur from site to site in comparison group data also.

The age effect is presented in its linear and curvilinear (quadratic) components in Table 1. The linear component is relatively strongly related to recidivism after New Pride with $Z = 2.56$.¹ The curvilinear (quadratic) component is relatively weakly related to recidivism after New Pride, with $Z = .01$. As expected time to follow-up is positively related to recidivism after termination from New Pride and recidivism during the program is positively related to recidivism after New Pride. The two non-significant terms of the model, program duration and client success, are both negatively related to recidivism after New Pride termination, but these effects are very weak (Z -values of $-.21$ and $-.77$ respectively).

Table 3 presents the results of the linear-logistic analysis of a client's successful termination from the program at the end of his or her New Pride experience. The upper portion of the table shows that all prior terms in the model are significantly related to client success. The lower portion of the table shows that the relationships between prior variables of the model are as expected in the introduction. Increased program durations lead to greater chances of success, and recidivism during the New Pride program leads to lesser chances of success. Additionally, there are significant differences from site to site in the baseline rates of client success. The proportion of clients expected to succeed at each site are: Chicago, .55; Fresno, .45; Camden, .32; Kansas City, .74; Pensacola, .55; Providence, .62; and San Francisco, .77 (assuming the

¹ These Z -values may be interpreted similarly to t -statistics in regression analyses. Z -values are not, however, asymptotically consistent statistics and may present biased estimates of the strength of the observed relationships. In general, however, the Z -values may be relied upon as adequate indicators of the strength of the observed relationships (see Fienberg, 1980).

Table 3
Basic Outcome Model
Client Success at End of New Pride Program
(N = 917)

Variable	G ²	Improvement	df	P
Constant	1263.92	-	-	-
New Pride Site	1220.52	43.40	6	< .001
Age	1206.90	13.63	2	< .001
Program Duration	711.04	495.82	1	< .001
Recidivism During	661.80	49.22	1	< .001

Variable	Coefficient	S.E.	Z
Constant	.370	1.590	.23
New Pride Site (1)	.900	.292	3.08
(2)	.138	.268	.70
(3)	-.118	.247	-.48
(4)	.726	.278	2.61
(5)	-1.080	.221	-4.90
(6)	-.505	.227	-2.22
Age (linear)	-.740	.096	-7.75
(quadratic)	.028	2.800	.01
Program Duration	.125	.008	16.00
Recidivism During	-.735	.111	-6.60

average age of 16 years at entry and the average program duration of 37 weeks). Once again, the linear component of the age effect is dominant in predicting client success (Z-value = -7.75) while the curvilinear component is weak (Z-value = 0.01).

Table 4 presents the results of the linear-logistic analysis of recidivism during New Pride. The upper portion of the table shows that the effects for differences between New Pride site and age are significant, but the effect for program duration is not. Program duration was included as a covariate despite its simultaneous relationship with recidivism during New Pride. Comparing the coefficients of the dummy variables for New Pride sites in this table with those in Table 1, it can be seen that the basic recidivism rates observed at the sites during New Pride and afterward are very similar. Importantly, the effect for age decomposes into two strong effects, one linear (Z-value = 6.15) and one curvilinear (Z-value = -5.19). This verifies the effect observed in earlier analyses, in which age at entry was both positively and negatively related to recidivism after program entry. Younger subjects are more likely to recidivate as they age and older subjects are less likely to recidivate as they age.

Table 5 presents the results of the regression analysis of program duration (an interval measure). This table is set up in a parallel manner to those presented for the linear-logistic analyses. At the top of the table the variables are listed in the order in which they were entered in the analysis. Both the variables describing differences between New Pride sites and the effect for age account for significant proportions of variance in the dependent measure. Whether or not a client recidivates during New Pride is not significantly related to program duration. Recidivism during New Pride was included as a covariate despite its simultaneous relationship with program duration. Looking at the lower portion of the table, the coefficients for the dummy variables controlling for differences between New Pride sites show that average program durations vary between projects, from 28 to 39 weeks. In Chicago the average program duration was 28 weeks; Fresno, 35 weeks; Camden, 39; Kansas City, 39; Pensacola, 36; Providence, 35; and San Francisco, 37 (assuming the average age at entry of 16 years). Further, although the age effect overall accounts for a

Table 4
Basic Outcome Model
Filed Petitions During New Pride Program
(N = 940)

Variable	G ²	Improvement	df	P
Constant	940.74	-	-	-
New Pride Site	893.73	47.01	6	< .001
Age	876.76	16.97	2	< .001
Program Duration	874.78	1.98	1	n.s.

Variable	Coefficient	S.E.	Z
Constant	-1.340	134.000	.01
New Pride Site (1)	-.307	.175	-1.75
(2)	1.260	.204	6.18
(3)	-.357	.158	-2.26
(4)	-.372	.180	-2.07
(5)	.134	.149	.89
(6)	-.024	.167	-.14
Age (linear)	.425	.069	6.15
(quadratic)	-.022	.004	-5.19
Program Duration	.005	.004	1.32

Table 5
Basic Outcome Model
Program Duration
(N = 940)

Variable	R ²	Improvement	df	MS _e	F	P
Constant	.00000	-	-	-	-	-
New Pride Site	.04041	.04041	6,932	331.56	6.55	<.001
Age	.04974	.00933	2,930	329.04	4.48	<.025
Recidivism During	.05228	.00254	1,929	325.73	1.95	n.s.

Variable	Coefficient	S.E.	t	P
Constant	164.400	107.100	1.54	n.s.
New Pride Site (1)	1.720	1.476	1.16	n.s.
(2)	-.753	1.317	-.57	n.s.
(3)	.479	1.575	.30	n.s.
(4)	3.112	1.388	2.24	<.025
(5)	3.295	1.597	2.06	<.050
(6)	-.473	1.546	-.31	n.s.
Age (linear)	-17.626	13.402	-1.32	n.s.
(quadratic)	.599	.418	1.43	n.s.
Recidivism During	1.714	1.227	1.40	n.s.

significant proportion of the variance in program duration, the individual coefficients of the linear and curvilinear (quadratic) effects are not significant overall.

The overall age effect in the outcome model is significantly related to each of the four endogenous terms of the model: program duration, recidivism during New Pride, client success, and recidivism after New Pride. However, as Tables 1 through 5 indicate, both parts of this effect are strongly related only to the measure of recidivism during New Pride (Table 4). For the other three variables, either the linear component appears as the strongest predictor (recidivism after New Pride and client success) or neither component significantly predicts the outcome measure (program duration): When entered individually into these analyses, age shows significant linear effects¹ but no significant curvilinear effects.² These results are similar to those presented on maturation effects in Chapter Seven. The coefficients from the linear age effect models show that with increasing age at program entry, the likelihood of recidivism after New Pride is reduced, the likelihood of client success is increased, and the length of program duration is increased.³

Summary of the Basic Outcome Model

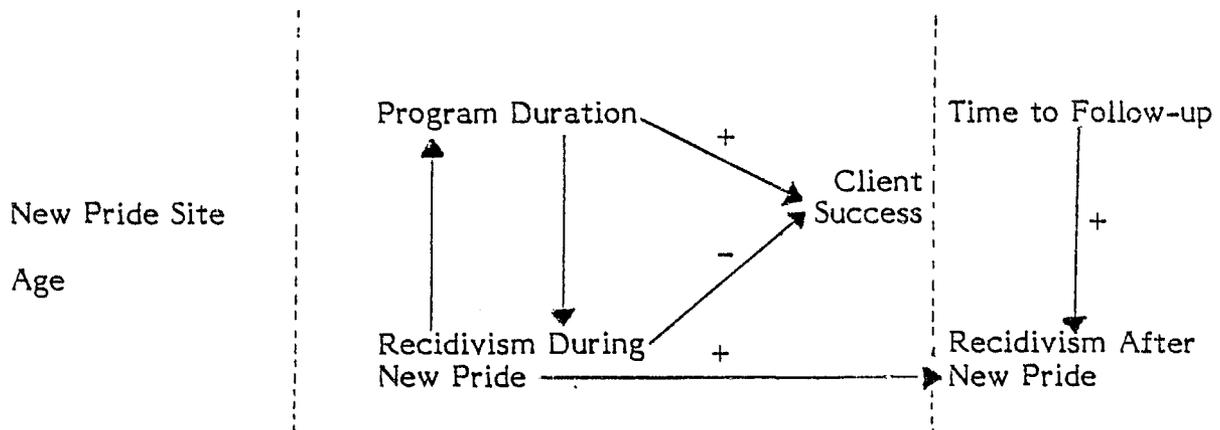
The empirical evaluation of the New Pride data essentially supports the expected outcomes proposed in the introduction to this section. As expected, there are significant effects for differences between New Pride sites and age on each of the four endogenous terms of the model: program duration, recidivism

1 Recidivism after New Pride: $G^2 = 27.65$, $df = 1$, $p < .001$
Client success: $G^2 = 12.37$, $df = 1$, $p < .001$
Program duration: improvement in $R^2 = .00723$, $F = 7.08$, $df = 1,932$,
 $MS_e = 329.41$, $p < .010$.

2 Recidivism after New Pride: $G^2 = 1.32$, $df = 1$, $p > .05$
Client success: $G^2 = 1.26$, $df = 1$, $p > .05$
Program duration: improvement in $R^2 = .00210$, $F = 2.06$, $df = 1,931$,
 $MS_e = 329.04$, $p > .05$.

3 $B = -.361$, $B = .133$, $B = 1.553$ respectively.

during New Pride, client success, and recidivism after New Pride. Furthermore, recidivism during New Pride is significantly related to client success and recidivism after New Pride, while time to follow-up is significantly related to recidivism after New Pride. However, neither increased time in the program (program duration) nor client success is significantly related to recidivism after New Pride. This has the effect on the basic outcome model of suggesting two separate types of outcomes, one for client success and one for recidivism. The following path analytic diagram portrays the situation:



The signed arrows indicate only the significant relationships found from the analysis of the data. The effects for differences in New Pride sites and age are not drawn in order to simplify the diagram. The unsigned arrows, indicating the simultaneous relationship between program duration and recidivism during New Pride, are included but cannot be evaluated at this point.

This diagram graphically portrays the separation of measures of client success from the measures of recidivism. While recidivism during the New Pride program influences the likelihood of client success, client success is unrelated to recidivism after the New Pride program. The only path by which a measure of program success may influence recidivism is through the relationship of program duration and recidivism during New Pride. This relationship, however, cannot be precisely defined until further explorations of the New Pride data have been made.

The separation of the measures of program success from the measures of recidivism appears to deny the possibility of relating performance in the New Pride program to a reduction in recidivism. However, this is not necessarily the case. The two measures of program duration and client success are the most general means of describing what happens to clients as they pass through the New Pride program. While conceptually convenient, these measures may not be sufficiently specific to detect particular program experiences that might be associated with reductions of recidivism. Whether or not the program labels the client as a success, other components of the model, for example client employment, may subsequently reduce the likelihood of reoffense. This possibility will be investigated in the next section.

Client Backgrounds and Program Components

As indicated in the introduction, five types of data were related to the endogenous terms of the basic outcome model. These five comprise much of the information collected by the New Pride evaluation on all clients passing through the programs. There are a total of 342 variables in these five blocks. As a complete description of all these items is infeasible, the reader is referred to Appendix A for a comprehensive listing of the variables that were analyzed. Here we will only provide a general outline of them.

Client Background Information. This block of data contains all demographic variables and additional background information that was collected on clients at the time they came into New Pride (50 variables). It includes, for example, gender, ethnicity, and living arrangements at entry to New Pride (coded as both natural parents, a single parent, or other). Additional measures of clients' attitudes are also available such as their overall life satisfaction, the quality of their relationships with their mother and father, their satisfaction with living arrangements, and so on. A block of variables related to socio-economic status is included, with items such as mother and father's employment and education, family income, whether or not the family receives welfare, etc.

School History Information. This block contains data on schooling before, during, and after New Pride, along with all achievement testing results (44 variables). The set includes, for example, variables indicating whether or not the client attended the New Pride school, his or her performance in school measured on a three-point scale, the number and proportion of days absent from school, client grade level, whether or not he or she completed the school program, and so on. Attitudinal variables in this block include measures of desires and expectancies for future schooling and the degree of appreciation for the current school program. Another important variable measures the disparity between desires and expectancies for further education. In theory, it is expected that the greater this disparity, the more likely the client will recidivate.¹ Achievement test scores include the Keymath and Woodcock raw scores for clients tested at program entry and, where available, six or more months thereafter.

Employment History Information. This block of data contains information on employment experience before, during, and after New Pride (39 variables). This set describes whether or not subjects had jobs before, during, and after the program, their performance on the job, wages, attendance, the duration of their jobs, and so on. Attitudinal variables include perceived job chances at entry to New Pride and whether or not clients believed their chances for getting the kinds of jobs they wanted had improved by the end of the program.

¹ In the theory of differential opportunity, when a person is faced with a discrepancy between his aspirations and his achievements, or expectations for achievement, he can attribute his failure either to the social order or to his own faults. If he attributes failure to the social order, his mode of adjustment to the condition of stress produced by this discrepancy is likely to be delinquent.

In the provision of an education and work experience component in the program, New Pride projects are designed to forge a path (bridge some of the distance) between clients and the legitimate opportunity structure. It represents a positive attempt to bring client expectations in terms of schooling and work more in line with their aspirations, not by lowering their aspirations, but by improving their expectations.

Program Information. This block of data contains a wide range of information on the New Pride program treatment process as it is experienced by each client (158 variables). The range of data includes variables specifying identified needs, objectives, services planned for each client, and services delivered. It should be noted that the 158 items used in this analysis represent a substantial reduction of all variables potentially available in this area of the New Pride data. For example, the 127 kinds of possible client needs at intake are reduced to eight groups: those related to family, emotional development, social, physical, educational, specific academic, employment, legal, and transportation needs. The 72 identifiable service areas are reduced to another eight groups: intake activities, case work activities, counseling, education, learning disabilities, employment, other client services, and administrative services. (Services planned and delivered were also further categorized into specific types of counseling and employment services; see Appendix A).¹

Process information related to client treatment includes variables specifying the number of needs and objectives identified, the number of objectives successfully met by the client, the breadth of needs indicated, the breadth and number of services planned and delivered, and codes specifying whether or not planned services were actually delivered. Additional information on the duration of services (a measure of service intensity), and the number of unplanned services which were nevertheless delivered, are also included.

Information at Client Termination. This block of data contains information collected at termination by the New Pride programs on client attitudes and opinions about the program and themselves (51 variables). The variables in this dataset indicate how helpful the different components of the program were to the clients, and specify the goals of the clients that were met by the program. They generally show the satisfaction of the clients with their New Pride experience. Additionally, information is available on the types of benefits that

¹ A list of service codes and need codes used in the New Pride Replication Program can be found in the Chapter Six, Appendix A.

clients felt they received the program (e.g., no gains, instrumental gains, affective gains, both), and their current living situation and life satisfaction.

Analytic Procedures

Considering the 342 variables to be examined with respect to the four outcome measures in the model, there are many relationships between variables to be considered. Fortunately, this large number is somewhat reduced by certain constraints on the data.

First of all, not all of the variables are based on a sufficient sample to justify inclusion in later analyses. Of the 987 clients in the seven site sample, some items were available for as few as eight individuals (e.g., average duration of jobs before New Pride). Obviously, these variables could not be included. For analytic purposes, a criterion of 300 cases (30.4 percent) was set as the minimum sample allowed for any variable. This eliminated 32 variables from the analysis, and reduced the total number of relationships to be examined to 1,240.

An additional reduction in the number of relationships to be examined took place with the elimination of nonsensical relationships among the variables. Remembering that the goal of this analysis is to relate client background and program process variables to the basic outcomes of the program, certain relationships need not be explored. For example, whether or not a subject is employed after New Pride is irrelevant to the client's success in the program. This is not to say that success in the program is unimportant to subsequent employment, but rather that subsequent employment does not in any way effect whether clients were terminated successfully. Program termination occurs at a previous point in time. While the effect of client success upon employment thereafter is an interesting question, it will not be analyzed in this section. Rather, the present question is, what client background and program process variables effect the success of clients in the program?

The elimination of nonsensical relationships reduced the number of relationships to be examined to 1,199. Further, the pattern of missing values between pairs of variables occasionally reduced the sample sizes to less than 300 cases. This eliminated 26 relationships, lowering the total to 1,173. Finally, in the program treatment process data, it was found that the total duration variables were essentially collinear with other items representing the number of services delivered. Eliminating the total duration variables reduced the number of relationships to be examined to 1,113.

This large number of relationships to be analyzed required simplification of an otherwise complicated analytic procedure. Exploring all of the relationships to the three nominal variables in the model, recidivism during and after New Pride and client success, would ideally involve using linear-logistic procedures throughout. However, since these procedures were too expensive and time consuming for exploratory analyses, the relationships were first screened by using multiple regression procedures and, only after the base of variables was substantially reduced were linear-logistic procedures employed.

The data analysis proceeded in three waves. First, every relevant variable was regressed on each of the four dependent measures, controlling for the effects of all variables occurring prior to them in the outcome model. The partial correlation and its significance level were used to determine if the relationship warranted further exploration. Variables were retained in the analysis if the significance of the partial correlation was less than or equal to .10.¹ These data appear in Appendix B. Second, forward stepwise regressions were used to reduce further this set of predictors to a manageable size. The acceptance criterion of these coefficients was again established at a probability value less than or equal

¹ This rather liberal significance level was used at this point of the analysis in order to avoid rejecting potential predictors early on. A more conservative significance level was used in the final analysis of these data.

to .10¹. These analyses appear in Appendix C. Third, an analysis for each endogenous variable in the basic outcome model was performed using either regression or linear-logistic forward stepwise procedures, as appropriate, with an acceptance criterion of less than or equal to $p = .05$.

A full report on the results of the first step of the analytic procedure appears in Appendix B. In this appendix are presented all significant ($p < .10$) partial correlations between client background and program process variables and the endogenous terms of the basic outcome model: program duration, recidivism during New Pride, client success, and recidivism after New Pride. As already noted, these partial correlations were tested covarying all prior terms of the model. For the dependent measure program duration, the covariates were the New Pride site dummy variables, the age variables (linear and curvilinear; quadratic), and the dichotomous measure of recidivism during New Pride. For the dependent measure of recidivism during New Pride, the covariates were the New Pride site dummy variables, the age variables, and the measure of program duration. For the dependent measure of client success, the covariates were the New Pride site dummy variables, the age variables, and both the measures of program duration and recidivism during New Pride. For the dependent measure of recidivism after New Pride, the covariates were the New Pride site dummy variables, the age variables, both the measures of program duration and recidivism during New Pride, and the measure of client success and time to follow-up.

One hundred sixty-six variables and their significant partial correlations appear in Appendix B. The major predictors from each set were selected in the second phase of the analysis through forward stepwise regression procedures. These regressions were performed under a number of additional constraints. In particular, every candidate independent variable was provided with a parallel

¹ This rather liberal significance level was used at this point of the analysis in order to avoid rejecting potential predictors early on. A more conservative significance level was used in the final analysis of these data.

missing values variable. The missing values variables were all coded zero in instances where the value of the independent variable was not missing, or one when the value was missing for each case. With these variables the effects of the pattern of missing values on the outcome measures could be tested. Further, substituting means of the candidate independent variables for their missing values, and using their corresponding missing value variables as covariates, exact tests of both the effect of the pattern of missing values and the effect of the independent variable on the outcome measures could be made (see Cohen and Cohen, 1975). In the stepwise regressions, first the independent variables were determined by a forward stepwise procedure to select the most powerful predictors of the outcome measures. Then, the corresponding missing value covariates were entered into the analyses and the independent variables tested again.¹ Significant predictors at this phase of the analysis were passed on to the final analyses of the data.

Simultaneous relationships, as noted before, are pervasive throughout the New Pride data, and these relationships had also to be considered. Thus, almost all of the treatment process variables were considered as potential simultaneous covariates with the two simultaneous basic outcome model variables program duration and recidivism during New Pride. Tests of these elements were restricted to calculating the partial correlations between simultaneous terms. No further analyses of them were performed. A detailed presentation of the results of these preliminary analyses can be found in Appendix C.

Overall Analysis

The variables passing the initial screenings of the data (see Appendices B and C) were used to obtain an overall perspective. Figures 1 through 7 present

¹ Of course, a large number of the missing data variable codes were redundant with one another, making the production and use of these codes considerably easier. Frequently, whole blocks of variables were missing for clients, such as all questions on the exit survey for subjects to whom it was not administered.

outlines of the variables found to be significantly ($p < .05$) related to the endogenous variables of the basic outcome model. Linear-logistic procedures were used to perform the final analyses of the dependent measures recidivism during New Pride, client success, and recidivism after New Pride. Regression procedures were used to perform the final analyses of the dependent measure program duration. The more stringent conventional probability level ($p < .05$) was used in these final steps.

Complete information on the stepwise analyses of the data and the coefficients, standard errors, and Z-values (t-statistics) of the final linear-logistic and regression models are presented in Appendix E. The interested reader is referred there for further details of the analyses. Here, the results are described for each of the four dependent measures of the outcome model.

Recidivism After New Pride

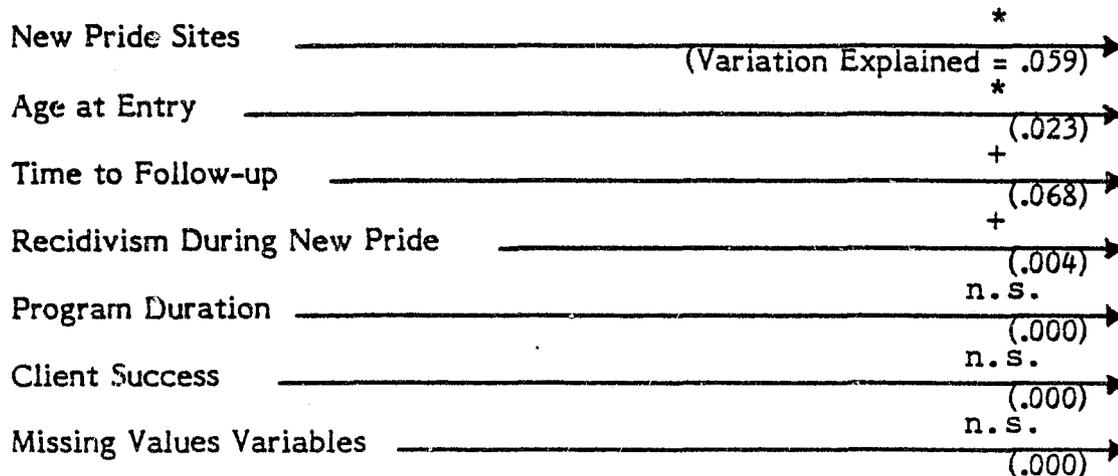
Figure 1 presents an outline of the results of the stepwise analysis of recidivism after New Pride. Only statistically significant ($p < .05$) relationships are displayed. The table is partitioned into six sections, each corresponding to one of six groups of variables found as predictors of the primary outcome of the study. Information from each section will be discussed separately.

At the top of the figure the relations of the basic outcome model variables to recidivism after New Pride are listed. Differences between New Pride sites and the effect of age significantly predict recidivism after New Pride, as do time to follow-up and recidivism during New Pride. The forms of these relationships are expressed where possible in the figure. Time to follow-up and recidivism during New Pride are both significantly related to recidivism after New Pride. Longer follow-up times increase chances of observing recidivism after New Pride, and recidivism during New Pride is associated with an increased probability of recidivism afterwards. Neither client success (successful termination) nor program duration are significantly related to recidivism after New Pride.

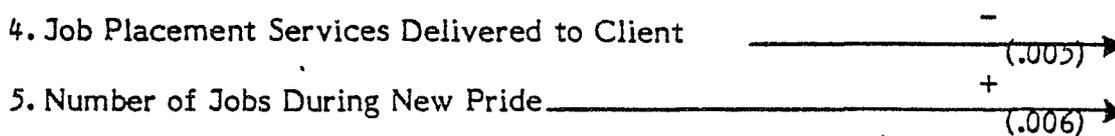
Figure 1

Variables Related to Recidivism After New Pride

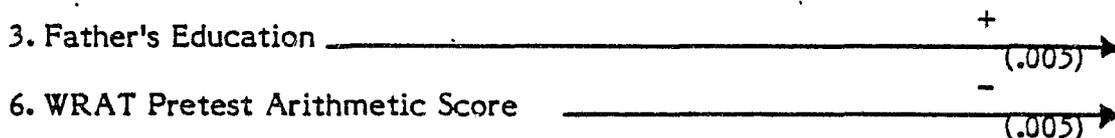
Basic Outcome Model



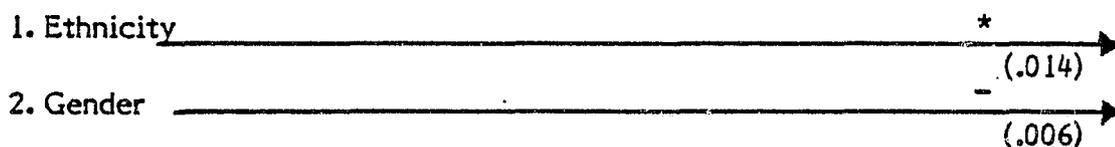
Employment Variables



Schooling Variables



Background Variables



Attitude Variables

None

Needs and Services Variables



* Categorical Variables and Composite Variables:
 New Pride Sites – see discussion in text
 Age at Entry – see discussion in text
 Ethnicity – White clients least likely to recidivate. Black clients most likely to recidivate.
 Gender – Females less likely to recidivate

Included among the independent variables of the basic outcome model is a test for the prediction of recidivism after New Pride from the pattern of missing values from the independent variables yet to be entered.¹ Figure 1 indicates that overall these variables are not significantly related to recidivism after New Pride. That is, the recidivism of clients on whom data was available does not significantly differ from clients on whom data was not available.

Included in Figure 1 are estimates of "variation explained" by each independent variable as it is added to recidivism after New Pride.² The reader may think of "variation explained" as analogous to R-squared. It represents the proportion of total variation explained by each newly introduced independent variable in a linear-logistic analysis. Thus, adding the dummy variables representing New Pride site differences accounts for .059 (or 5.9 percent) of the variation in recidivism after New Pride. Adding the age effects variables (linear and curvilinear; quadratic) accounts for an additional .023 (2.3 percent) of the variation in recidivism. Note that all the terms of the outcome model (including missing values variables) were entered into the analysis of recidivism after New Pride in the order presented. Together, they account for a total of .160 (16.0 percent) of the variation in recidivism. The numbers prefixing the remaining independent variables indicate the order in which they were added to the model for testing.

The remaining sections of Figure 1 show that two employment variables, two schooling variables, two additional background variables and one Needs and Services variable are significantly related to recidivism after New Pride. Above

1 There are six missing values variables representing six patterns of missing data found among the seven additional independent variables associated with recidivism after the program.

2 "Variation explained" in the linear-logistic analyses represents that proportion of the total G^2 for the model explained by adding the new independent variable. Total G^2 is derived from the fit of a constant to the data using linear-logistic procedures. "Variation explained" is equal to the added G^2 explained by an independent variable divided by the total G^2 . This proportion may range from 0.00 (no variation explained) to 1.00 (total variation explained). When the variation explained is 1.00 the linear-logistic model perfectly fits the data.

each horizontal arrow in the figure, the sign of the relationship of the independent variable is indicated. Below each arrow the amount of variation explained by the factor is noted.

Employment. Two employment variables are significantly related to recidivism after New Pride, each in a different way. Receiving job placement services during New Pride decreases the likelihood of recidivism afterward. This finding supports one of the contentions of the theory underlying New Pride: Enabling clients to seek and obtain jobs should help provide them with legitimate opportunities and encourage them to give up anti-social activities. Unfortunately, clients who obtained jobs during New Pride did not recidivate significantly less overall than those who did not. Rather, the effects of employment were mixed. The greater the number of jobs that were held by clients during New Pride, the more likely they were to recidivate afterwards. This suggests that job instability tended to increase recidivism. Most clients having jobs during New Pride had only one. Those who had more than one job typically had less stable, short term employment experiences that were not helpful to them.

Schooling. Higher WRAT pretest Arithmetic scores are significantly associated with lesser likelihoods of recidivism after New Pride. It should be noted that this variable is but one of a number of diagnostic tests related to recidivism after New Pride. For example, higher scores on the WRAT subtest and higher IQ scores from the WISC-R or WAIS are also associated with lower rates of recidivism afterward. The relationship seems to be one between measures of test performance in general and long-term recidivism rates. Table 6 shows the first-order correlation matrix between the pretest scores available on New Pride clients. All of the intercorrelations are positive ranging from $r = .4360$ (Woodcock raw score and WRAT Arithmetic score) to $r = .7833$ (Keymath raw score and Woodcock raw score), and all are significant ($p < .01$). Thus, clients scoring high on the WRAT Arithmetic subtest also scored highly on all other tests.

Table 6

Correlation Matrix of Pretest Diagnostic Scores

	WRAT Arithmetic Score	WRAT Reading Score	WRAT Spelling Score	WISC-R or WAIS IQs	Woodcock Raw Score	Keymath Raw Score
WRAT Arithmetic Score: Correlation Coefficient	1.0000 ¹					
N	987					
WRAT Reading Score Correlation Coefficient	.5596	1.0000				
N	987	987				
WRAT Spelling Score Correlation Coefficient	.5884	.7676	1.0000			
N	720	720	720			
WISC-R or WAIS IQs Correlation Coefficient	.4780	.4920	.4924	1.0000		
N	987	987	720	987		
Woodcock Raw Score Correlation Coefficient	.4360	.6768	.7330	.5533	1.0000	
N	746	746	613	401	746	
Keymath Raw Score Correlation Coefficient	.5711	.5577	.6384	.6542	.7833	1.0000
N	735	735	598	735	704	735

8-30

¹ All correlations significant $p < .05$.

One might wonder why gain scores, which do differ significantly from pretests to posttests (see Chapter Six), do not significantly reduce recidivism after New Pride. Theoretically they should because such gains are presumed to enhance youngsters' abilities to participate in regular school settings and the choice of opportunities which follow. The gains in academic achievement made during New Pride are unlikely to reduce recidivism, however, unless these gains are substantial. The gains observed in the New Pride program average around one-half year, whereas the average academic achievement level of clients on the WRAT test upon entry to New Pride is four and one-half years below grade level in math and three years below in reading. Relative to these initial deficits, the gains observed are not sufficient to make up these enormous deficits.

Background Variables. Three background variables are significantly related to recidivism after New Pride, father's education and the gender and ethnic group membership of clients. The higher the client's father's education, the greater the likelihood of recidivism after New Pride. This finding cannot be explained without a more in-depth analysis of the New Pride family history data. Females are less likely to recidivate after New Pride than males. Black clients are more likely to recidivate afterwards than white clients or clients from other ethnic groups. Both of these findings are more common in delinquency studies.

Needs and Services. Just one Needs and Services variable is significantly related to recidivism after New Pride. The greater the number of cultural enrichment services delivered to clients during New Pride, the more likely they are to recidivate after New Pride. This peculiar finding may suggest that the provision of many of these services might actually take the place of other services New Pride was organized to provide. It is also possible that the provision of cultural services reflects a difficulty in providing other services to clients with more behavior problems.

The reader should finally note that the last variables entered in the model do not account for much variation in the dependent measure. A total of .205 (20.5 percent) of the variation in the dependent measure is accounted for by all the variables entered in the final model. These employment, schooling,

background, and needs and services variables together added only four percent more to the predicted variation in recidivism after New Pride, whereas items in the basic outcome model accounted for 16 percent of the variation.

Client Success

Figure 2 presents the variables found significantly to relate to the likelihood of client success, or successful termination from New Pride. At the top of the figure is a description of the basic outcome model covariates used in the analysis. Both the New pride site dummy variables and age at entry variables (linear and curvilinear, quadratic) are significantly related to client success. Longer program durations increase the likelihood of client success. Recidivating during New Pride reduces the likelihood that clients will terminate the program successfully. Finally, the pattern of missing values is significantly related to the likelihood of client success. This is because characteristically, clients who fail in the program are missing various data collected during the program.

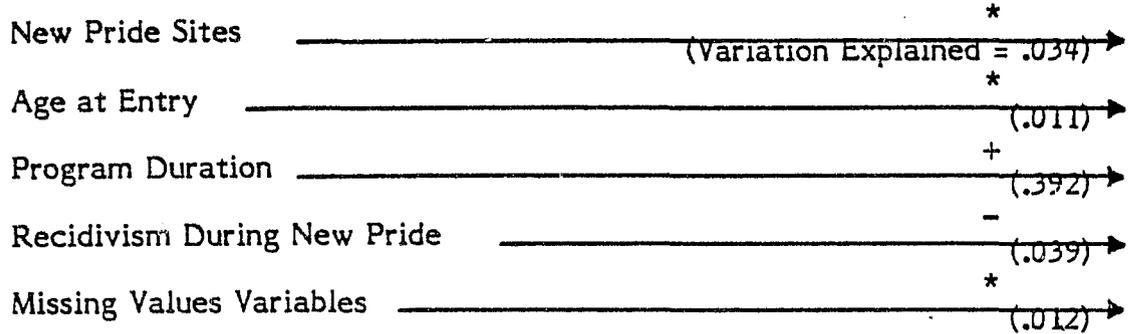
Employment. Two employment variables are significantly related to successful termination. First, the more frequently a subject was fired from jobs during New Pride, the more likely he or she was to be terminated unsuccessfully from the program. Like the number of jobs held during New Pride, the number of time clients were fired from jobs during the program is an index of job instability. In fact, these two variables are significantly intercorrelated ($r = .1771$, $t = 3.7004$, $N = 425$, $p < .0005$). Second, if clients perceived their chances of getting the kinds of jobs and education they wanted as being good at program entry, the more likely they were to succeed.

Schooling. Two additional variables concerning education are associated with successful termination from New Pride. First, higher scores on the Keymath pretest are related to a greater likelihood of client success. Again, the Keymath scores should not be considered in isolation. The pretest diagnostic scores are all highly intercorrelated. Thus, some general ability to perform on

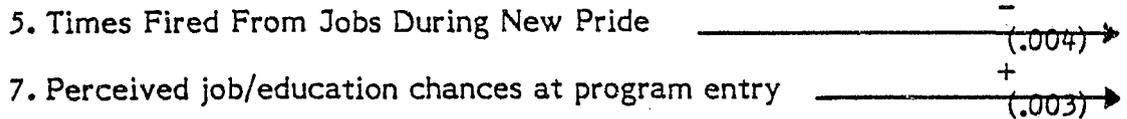
Figure 2

Variables Related to Client Success
(Successful Termination)

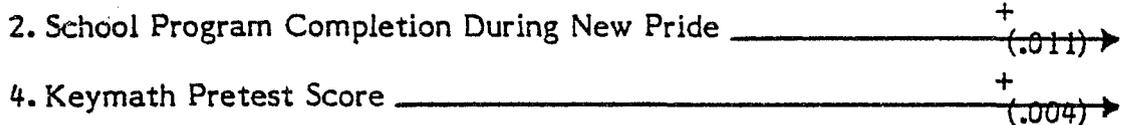
Basic Outcome Model



Employment Variables



Schooling Variables



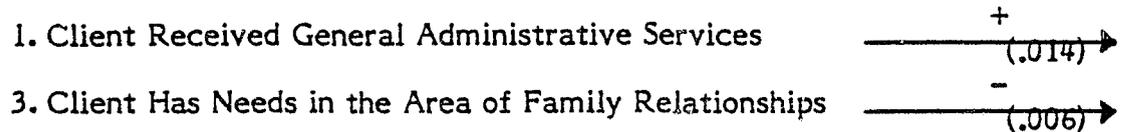
Background Variables



Attitude Variables

None

Needs and Services Variables



* Categorical Variables and Composite Variables:
New Pride Sites – see discussion in text
Age at Entry – see discussion in text
Gender – Females more likely to succeed
Missing Values Variables – see discussion in text

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tests is related to client success. Second, completing a school program during New Pride increases the likelihood of successful termination.

In general, finishing a school program indicates success in school. Theoretically, success in school should be associated with lowered recidivism rates, and to a greater likelihood of successful termination from the program. In fact, completing a school program during New Pride is a visible achievement which does lead to a higher probability of successful termination (40.1 percent of the subjects completed a school program during New Pride.). But it is unrelated to recidivism during and after New Pride.

Background Variables. The only client background variable related to successful termination from the program is gender: Females are more likely to succeed than males, in addition to being less likely to recidivate after the program than males.

Needs and Services. Two more independent variables are related to client success in the program. First, if family relationship needs are identified at entry to New Pride, the clients have reduced chances of success.¹ Needs in the family category include observed relationship problems between the client and his mother, father, siblings, or other family members. Apparently, identifiable problems in the area of family relationships reduce the chances of clients being terminated from the program successfully.

Second, the provision of general administrative services to clients is related to a greater likelihood of his or her success. These services include job development, staff meetings, and staff development concerning a particular client. Apparently, insofar as these services are client specific, they significantly improve the likelihood of in-program success. Documenting the provision of these services indicates a high level of client involvement or visibility in the program.

¹ Note that the dichotomous variable flagging this identification of needs has a separate level for missing values.

Figure 3 presents the simultaneous variables found to be related to the measure of client success. For each variable the partial correlation of the independent measure with client success is presented. All prior basic outcome model variables and the variables from Figure 2 were partialled for these regression analyses. A less conservative level of significance ($p < .10$) was used here to screen for the simultaneous factors.

The third figure shows that the clients who succeeded were more likely to say that their chances for getting the kinds of jobs they wanted had improved as a result of program participation. Viewed conversely, if clients perceived that their future job chances had improved by the end of the program, they were also more likely to be terminated successfully. Further, if clients ever actually obtained a job (either before, during, or after the program) they were more likely to be identified as successful in the program.

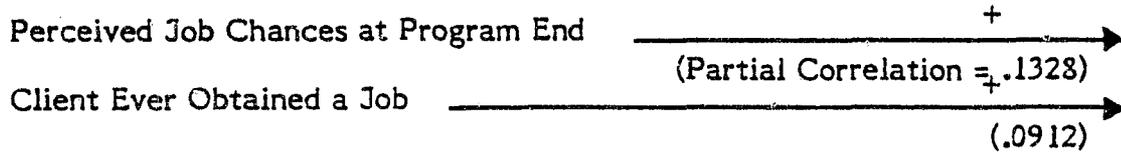
Interestingly, there are no simultaneous schooling, background, or needs and services variables that are strongly related to client success, but there are attitudinal factors. If the clients felt they received staff support, were generally satisfied with the program, or were helped to leave home by the program, then they were more likely to be successfully terminated. Interpretations of the first and second observation are obvious. The third requires a bit more discussion.

New Pride clients often come into the projects from difficult family situations. This being the case, one of the benefits the programs may bring to clients is a means by which they may remove themselves from unsatisfactory home environments. That client success is made more likely by leaving home cannot be interpreted from this observation, however. As these two variables are considered simultaneously, the causal relationship between them cannot be evaluated without further information.

Figure 3

Partial Correlations of Simultaneous Variables with
Client Success (Successful Termination)

Employment Variables



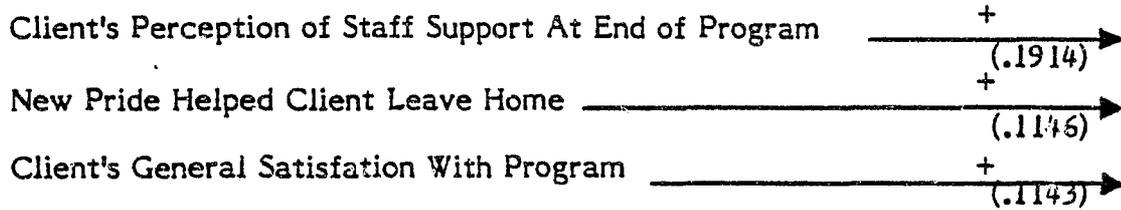
Schooling Variables

None

Background Variables

None

Attitude Variables



Needs and Services Variables

None

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Recidivism During New Pride

Figure 4 lists the variables which are associated with the probability of recidivism during New Pride.¹ At the top of the figure is a description of the basic outcome model covariates used in the analysis. Both the New Pride site dummy variables and age at entry variables (linear and curvilinear, quadratic) are significantly related to recidivism during the program. Program duration is not significantly related to recidivism during New Pride, although this relationship needs further evaluation before interpretation. Finally, the pattern of missing values is not significant.

No employment variables are related to recidivism during New Pride, and only one schooling variable is significant: the disparity between wants and expectancies for further education at entry to New Pride. This independent variable represents the difference between each client's scaled desire for education and scaled expectancy for obtaining further education. According to theory, the larger this disparity becomes, the greater the likelihood of continued delinquency. The relationship between disparities and recidivism observed in the data is just the opposite. The greater the disparity between clients' educational desires and expectancies, the less their likelihood of recidivism.²

In the New Pride sample higher probabilities of recidivism are related to unrealistically high educational expectancies relative to educational desires. This finding may simply reflect a dislike for school: Youth may expect by force of law to stay in school until they are sixteen, but not desire to do so. Thus, the

1 The reader is referred to Appendix D for further explication.

2 This finding is not confounded by the distributional nature of the data. Measures of desires and expectancies for education are normally distributed, centered on a mode of 'high school graduation.' Thus, the disparity measure is also normally distributed. Controlling the level of desired education, the disparity measure still significantly predicts less recidivism during New Pride. Further, covarying the level of desired education, the measure of expectancy also directly predicts recidivism, verifying the observed relationship.

Figure 4

Variables Related to Recidivism During New Pride

Basic Outcome Model

New Pride Sites	_____*	(Variation Explained = .036)	→
Age at Entry	_____*	(.013)	→
Program Duration	_____n.s.	(.002)	→
Missing Values Variables	_____n.s.	(.001)	→

Employment Variables

Simultaneous

Schooling Variables

5. Disparity Between Wants and Expectancies for Further Education at New Pride Entry	_____ -	(.004)	→
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Background Variables

1. Ethnicity	_____*	(.013)	→
6. Gender	_____ -	(.007)	→
4. How Often Client Punished by Parents Before New Pride	_____ +	(.004)	→
6. Client's Family Receives Welfare Payments	_____ +	(.006)	→

Attitude Variables

7. Client's Life Satisfaction at Entry	_____ +	(.003)	→
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Needs and Services Variables

7. Number of Identified Needs at Program Entry	_____ +	(.006)	→
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- * Categorical Variables and Composite Variables:
New Pride Sites – see discussion in text
Age at Entry – see discussion in text
Ethnicity – White clients least likely to recidivate. Black clients most likely to recidivate.
Gender – Females less likely to recidivate
Missing Values Variables – see discussion in text

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disparity variable may be identifying subjects whose educational experiences have become truly aversive.

Background Variables. Several important background variables are associated with recidivism during New Pride. Ethnicity is significantly related to recidivism during as it was to recidivism after New Pride. In both cases black clients are more likely to recidivate than other ethnic groups. The gender of clients is significantly related to recidivism during the program, with females less likely to recidivate than males. Another important background variable related to in-program recidivism is whether or not the client's family receives welfare payments. The receipt of welfare identifies families with incomes below the national poverty level. As expected, clients from extremely poor families are more likely to recidivate than other clients. Finally, the clients who indicated they were punished by their parents more frequently were more likely to recidivate during New Pride. Taken at face value, this finding suggests that greater punishment at home could actually serve to accelerate recidivism rates.

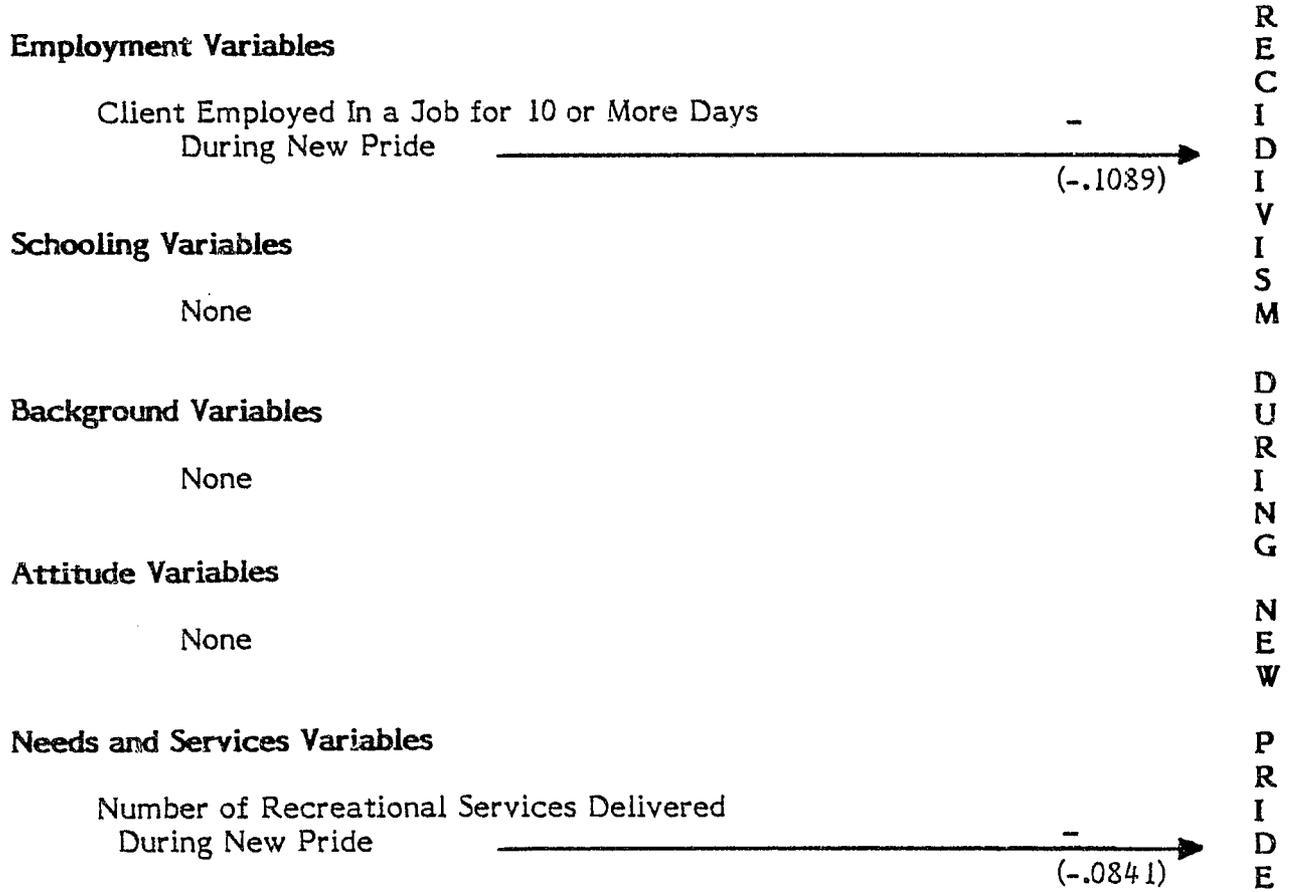
Attitudinal Variables. One attitude variable was found to be significantly related to recidivism during the program. The more satisfied clients were with their lives at entry to New Pride, the more likely they were to recidivate. It appears that this measure indicates satisfaction with a delinquent life style.

Needs and Services Variables. One last, quite important, variable was found to be significantly related to recidivism during New Pride. The number of needs identified at program entry is directly related to client recidivism during the program. This finding suggests that the needs identification process distinguished between those clients more and less likely to recidivate.

Figure 5 presents the two simultaneous variables related to recidivism during New Pride. The first indicates that employment during the program for 10 or more working days is related to reduced recidivism rates. This simultaneous relationship can be interpreted in either of two ways. One is that recidivism during the program reduces the duration of employment. The second way is that longer employment experiences reduce the chances of recidivism.

Figure 5

Partial Correlations of Simultaneous Variables with
Recidivism During New Pride



The other simultaneous relationship between the number of recreational services delivered during New Pride and recidivism shows that more services are related to less recidivism. Again, this does not necessarily mean that recreational services reduce recidivism. It is possible that absence of recidivism leads to the prospect of having more recreational services. Such simultaneous relationships need further investigation.

Program Duration

Figure 6 presents the variables found to relate to program duration. At the top of the figure is a description of the basic outcome model covariates used in the analysis. Both the New Pride site dummy and age at entry variables (linear and curvilinear; quadratic) are significantly related to program duration. Recidivism during New Pride is not significantly related to program duration, suggesting that the projects really made efforts to keep youth in the program. Finally, the pattern of missing values is significant. Characteristically, clients missing more data were in the program for shorter periods of time.

Employment. Two employment variables are associated with program duration. If clients had job experience lasting longer than two weeks before entering New Pride, they had significantly shorter periods of participation in the program. If they still had jobs at entry to New Pride, their program participation was significantly longer than that of other clients. Perhaps job experiences before New Pride are not as rewarding as those which are concurrent with the New Pride experience. Or perhaps, having demonstrated abilities to obtain work outside of New Pride, clients that had jobs before the program were not as interested in it as those subjects who viewed participation as a means to future employment.

Attitudinal Variables. Two attitudinal variables are related to program duration. First, if clients perceived that they were disciplined in the family in the same manner as their siblings, they were more likely to stay in the program a shorter time. Conversely, if they believed that the treatment they received was different from their siblings, they were more likely to have longer program durations. Perhaps the latter perception indicates a family relationship problem

Figure 6

Variables Related to Program Duration

Basic Outcome Model

New Pride Sites	_____	*	→
	(Variation Explained = .040)		
Age at Entry	_____	(.009)	→
Recidivism During New Pride	_____	n.s.	→
		(.003)	
Missing Values Variables	_____	*	→
		(.281)	

Employment Variables

2. Client Had Job Before New Pride	_____	-	→
		(.006)	
3. Client Had Job at Program Entry	_____	+	→
		(.005)	

Schooling Variables

None

Background Variables

None

Attitude Variables

4. Client Disciplined in the Same Way as Siblings	_____	-	→
		(.004)	
5. Number of Teacher/Counselors Who Took Interest in Client Before New Pride	_____	+	→
		(.003)	

Needs and Services Variables

1. Number of Objectives Specified at Program Entry	_____	+	→
		(.009)	

- * Categorical Variables and Composite Variables:
 New Pride Sites – see discussion in text
 Age at Entry – see discussion in text
 Missing Values Variables – see discussion in text

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which takes a longer time to work on and involves the client more in the program itself.

Second, the more teachers or counselors the client believes took an interest in his or her life before New Pride, the longer their program duration is likely to be, and indirectly, the greater his or her chances of successful termination from the project. Perhaps those clients who stay in the program longer are the ones who have received the most reinforcement from teachers and counselors in the past.

Complementary to the finding that a multiplicity of client needs is significantly related to recidivism, is the finding that greater numbers of treatment objectives are related to longer program experience. The Individualized Integrated Service Plans of the New Pride projects identified client needs that were to be met by one or more behavioral objectives. The numbers of needs and objectives are therefore highly correlated across subjects ($r = .7117$), and together represent those client problems which were to be dealt with in the context of the program. The significant relationship between number of specified objectives and program duration shows that, although a large number of needs indicates that clients are more likely to recidivate again, nevertheless trying to cope with them takes a longer time in the program.¹

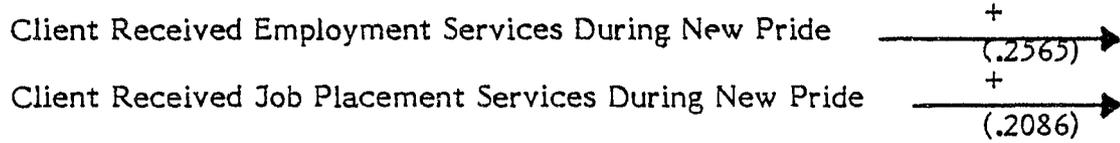
Figure 7 presents the simultaneous variables related to the dependent measure program duration. Here, two employment variables are both related to longer program duration. If clients received employment or job placement services during New Pride, they tended to stay in the program longer than clients not receiving these services. The opposite assertion, of course, may also be the case. Being in the program longer may increase the probability that employment or job placement services will be delivered. Considering all the

¹ The substantial correlation between number of needs identified and number of objectives specified means that either term may be used in the regression analysis of program duration. When number of needs is used in place of number of objectives, this independent variable is also significantly related to program duration ($B = .364$, $S.E. = .116$, $t = 3.125$, $p < .0025$).

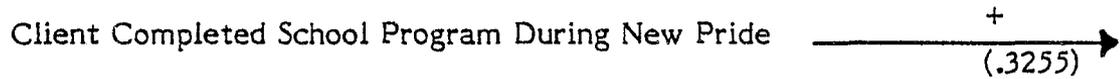
Figure 7

Partial Correlations of Simultaneous Variables with
Program Duration

Employment Variables



Schooling Variables



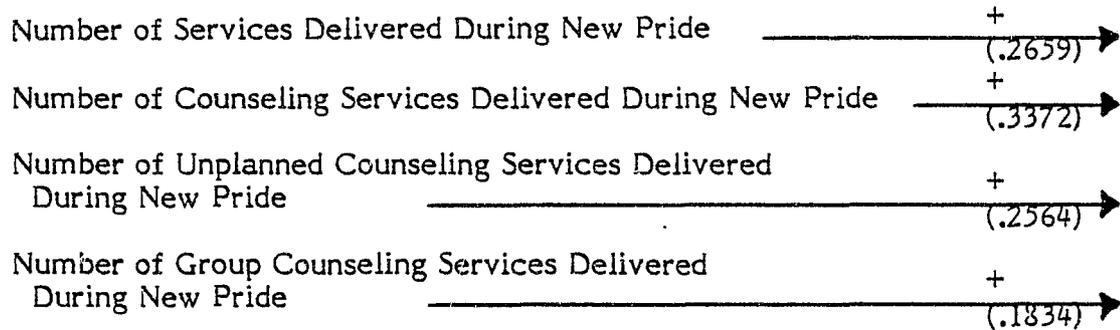
Background Variables

None

Attitude Variables

None

Needs and Services Variables



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services significantly related to program duration, the latter interpretation seems more likely. Particularly, under the Needs and Services category of variables, the total number of services delivered is also associated with longer program duration, as are the total number of counseling, unplanned counseling, and group counseling services. Likewise, completing a school program during New Pride becomes more likely as clients stay longer.

The Simultaneity of Program Duration and Recidivism During New Pride

Several significant independent measures have been identified which separately relate to the variables program duration and recidivism during New Pride. Therefore, these measures may be used as instruments in evaluating the simultaneous relationship between them.¹ As noted in the introduction, the method used here to evaluate this relationship assumes both dependent variables to be interval measures. While this condition is not met, the assumption of interval metrics for both measures was waived so that an approximation of the true relationship could be obtained.

The results of this analysis show that recidivism during New Pride is not significantly related to program duration ($B = .826$, $S.E. = 6.155$, $t = .13$), nor is program duration related to recidivism during New Pride ($B = .001$, $S.E. = .007$, $t = .14$). In general, the overall lack of any reliable relationship between these variables suggests that 1) programs do not react to recidivism during New Pride by removing the offending clients, and 2) simply being in the programs longer does not mean that clients increase their chances of manifesting more delinquent behavior.²

1 This technical term simply means that the variables predictive of each measure can be used in lieu of the measures themselves to evaluate the form of the simultaneous relationships between them in an unbiased manner. The procedure selected is briefly discussed on an introductory level by Wonnacott and Wonnacott (1980) and Duncan (1975).

2 A detailed review of all analyses can be found in Appendix D.

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APPENDIX A

DICTIONARIES FOR THE ANALYSIS OF NEW PRIDE DATA ON CLIENTS

On the following pages the dictionaries of all client background and program process variables are listed. Each dictionary presents the abbreviation for each variable, the variable name, and a brief description of the variable coding. In addition, there are comments regarding missing values and their coding in the database. The reader may best use these dictionaries to get an overview of the breadth of data collected and analyzed on New Pride clients.

DICTIONARY FOR THE CLIENTBACKS ARCHIVE DATASET

The following dictionary explains the contents of the CLIENTBACKS archive dataset in abbreviated form. This dictionary should be adequate for most purposes for understanding the contents of CLIENTBACKS.

The purpose of the CLIENTBACKS dataset is to organize all client background variables from the intake-svs, cl-demos form, and the client-characteristics form. This rectangular file can be run directly against the OUTCOME dataset and is restricted to only those subjects contained in OUTCOME (See the OUTCOME-DICT for a discussion of the contents of that dataset.)

ABBR:	VARIABLE-NAME:	DESCRIPTION:
-----	-----	-----
CLID	CLIENT-ID	Client identifier.

RACE	ETHNICITY	Racial groups split by whites, blacks and others.
RAC1	RAC1	Effects coding for ethnicity.
RAC2	RAC2	Effects coding for ethnicity.

LARR	LIVING-ARRANGEMT	Client living arrangements coded as both natural parents, single parent families, and others.
CLA1	CLA1	Effects coding for LARR (missing = 999).
CLA1	CLA1	Effects coding for LARR (missing = 999).

WHRA	WHO-RAISED	Who raised client until age 12 coded as both parents, mother only, or other.
WH1	WH1	Effects coding for WHRA (missing = 999).
WH2	WH2	Effects coding for WHRA (missing = 999).

ADDI	ADULT-DISC	Primary disciplinarian coded as father, both and mother.
AD1	AD1	Effects coding for ADDI (missing = 999)
AD2	AD2	Effects coding for ADDI (missing = 999)

TYDI	TYPE-DISC	Primary type of discipline coded as physical, verbal or other.
TD1	TD1	Effects coding for TYDI (missing = 999)
TD2	TD2	Effects coding for TYDI (missing = 999)

CTNP	CAME-TO-NP	Basis of coming to New Pride coded as court order, family, my choice or all.
CTN1	CTN1	Effects coding for CTNP (missing = 999)
CTN2	CTN2	Effects coding for CTNP (missing = 999)
CTN3	CTN3	Effects coding for CTNP (missing = 999)

PRPA	PROG-PART	Codings of expected gains from program into the categories 'not-much', instrumental gains, effective gains and both.
PP1	PP1	Effects coding for PRPA (missings = 999)
PP2	PP2	Effects coding for PRPA (missings = 999)
PP3	PP3	Effects coding for PRPA (missings = 999)

LNRS	LENGTH-RES	Scaled length of current residence from under six months to over 10 years.
TMMV	TIMES-MOVED	Number of times moved from 0 to . . .
SLVS	SAT-LVNG-SIT	Scaled satisfaction with living situation from not-satisfied to very-satisfied.
RELM	REL-WITH-MOM	Scaled quality of relationship with mother from bad to good.
MNOW	REL-MOM-NOW	Scaled quality of relationship with mother now from bad to good.
MOAD	MOM-ADVICE	How often do you get advice from your mother from never to always.
MMOD	MOM-MODEL	To what extent is mother a model scaled from not at all to very much.
RDAD	REL-W-DAD	Scaled quality of relationship with father in the past from bad to good.
DREL	REL-DAD-NOW	Scaled quality of relationship with father now from bad to good.
DADV	DAD-ADVICE	How often do you get advice from your father from never to always.
DADM	DAD-MODEL	To what extent is father a model scaled from not at all to very much.
HOFF	HOW-OFT-FUN	How often is the client punished REVERSE CODED from daily to less than monthly scaled.
OTSB	OTHR-SIBS	Do other siblings get the same treatment No or yes.

DRAL	DRUG-ALCOHL	Has anyone in the family had a drug or alcohol problem? No or yes.
CDUD	CD-U-DRUGS	Do you think you might develop drug or alcohol problems? No or yes.
TACA	TAKE-CARE	Does someone take care of you when you are sick? No or yes.
CLFR	CLOSE-FRND	Number of close friends scaled.
TRLW	TROUBLE-LAW	Have any of your friends been in trouble with the law? None through more than five, scaled.
EFAR	EFFECT-ARRS	How does going to court affect others opinions of you? From bad-mostly to to good-ways, scaled.
JEDC	JOB-ED-CHNCE	Do you think your job chances are better or worse than others in trouble with law? Scaled from worse to some to better.
TRCN	TCHR-CNSL	Number of teacher-counselors taking an active interest in subject.
FEHE	FEEL-HELP	Do you feel that teacher-counselor interest helped? Scaled, from create more problems to made things usually better.
SALI	SAT-LIFE	How satisfied are you with your life now? Scaled from not-at-all to very-satisfied.

FRES	FAMILY-RES	Where does client's family live? Coded as private rental and public housing vs. own-home.
EM	EMPLOY-MOM	Is mother employed? No vs. Yes.

SCHM	SCHOOL-MOM	Scaled level of mother's schooling from 8 or less to graduate degree.
ED	EMPLOY-DAD	Is father employed? No vs. Yes.
SCHD	SCHOOL-DAD	Scaled level of father's schooling from 8 or less to graduate degree.
YRIN	YRLY-INCOME	Scaled family income 5000 or less to 35000 or more.
AFDC	AFDC/WLFARE	Does family get income from welfare? No vs. yes.
NIH	NO-IN-HOUSE	Number of people in client's household.
LVST	LIVING-STATS	Was client living with same people 2 months ago? No vs. yes.
OUTP	OUT-PLCMT	How many out-of-home placements?
DET	DETENTION	How many times detained?

SEX	SEX	Male vs. Female.
MARI	CLIENT-MARITAL	Single vs. Married.
DDET	DAYS-DETAINED	Days detained.
REST	RESTITUTION	Whether or not restitution required. REVERSE CODING yes vs. no.
RAMT	RESTITUTION-AMT	Amount of restitution in dollars.
ASUP	ASGD-SUPERVISN	Coded yes vs no (missing = no). REVERSE CODED.
ALD	ASGD-LD	Coded yes vs. no (missing = no). REVERSE CODED.
AAE	ASG-ALT-ED	Coded yes vs. no (missing = no). REVERSE CODED.
AVOC	ASGD-VOCATIONAL	Coded yes vs. no (missing = no). REVERSE CODED.

NOTE ON MISSING VALUES:

Missing values are usually categorically coded as missing by MICRO-MID interface. Where indicated MISSING = 999 for all dummy codes. Otherwise they are most frequently coded 0.

NOTE ON SOURCES OF INFORMATION:

The variables in this file are drawn from three sources: the client-characteristics form, the intake survey and the client demographics form.

DICTIONARY FOR THE CLIENTEXIT ARCHIVE DATASET

The following dictionary explains the contents of the CLIENTEXIT archive dataset in abbreviated form. This dictionary should be adequate for most purposes for understanding the contents of CLIENTEXIT.

The purpose of the CLIENTEXIT dataset is to hold all variables from the exit survey not captured on the rectangular files for schooling (SCHOOLRECT) or employment (EMPLOYRECT). CLIENTEXIT is a rectangular file including a large number of measures on client satisfaction with the program at program termination. It can be directly run with OUTCOME to relate these factors to the basic outcome measures of the New Pride model.

ABBR:	VARIABLE-NAME:	DESCRIPTION:
-----	-----	-----
CLID	CLIENT-ID	Client identifier.

CRES	CHNG-RESDNS	Change residence since beginning program? No/yes (1,2).
NLUG	NOW-LIVING	Who living with now: Both parents (1), single parent (2), other (8).
NL1	NL1	Effects coding for NOW-LIVING.
NL2	NL2	Effects coding for NOW-LIVING.

SLVS	SAT-LVNG-ST	Current satisfaction with living situation; scaled.
SGAN	SAT-GAIN	Gain in satisfaction from intake to exit survey; scaled.
TCIN	TCHR-COUNS	How many teachers/counselors have taken interest in your life; scaled.
HEQU	HELP-QUAL	Overall quality of help; scaled.
PEGA	PERS-GAIN	Personal gain; Not much (1); instrument (2); affective (3); both (4).
PG1	PG1	Effects code for PERS-GAIN.
PG2	PG2	Effects code for PERS-GAIN.
PG3	PG3	Effects code for PERS-GAIN.
NFHP	NF-HELP	How helpful NF; scaled.

CNSL	COUNSELING	Has counseling service helped; scaled.
EDUC	EDUCA	Has education service helped; scaled.
SPED	SPEC-ED	Has special ed. service helped; scaled.
EMPL	EMPLOYMENT	Has employment service helped; scaled.
CUAC	CULT-ACTIV	Has cultural activity helped; scaled.
HESE	HEALTH-SERV	Has health services helped; scaled.
RECR	RECREATION	Has recreation services helped; scaled.
OTHE	OTHER-HELP	Has other services helped; scaled.

The following variables indicate whether or not New Pride assisted the subjects in meeting the specified goal:

CLCR	CLASS-CRDT	Credit for classes at New Pride.
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VTRH	VOC-TR-HELP	Get vocational trainings.
JOPR	JOB-PREP	Learn how to get Job.
JBTR	JOB-TRANG	Get Job trainings.
EXJO	EXP-JOB-OPN	Find Job openings.
GEJO	GET-JOB	Obtain Job.
CACH	CAREER-CHS	Determine career goals.
HECT	HELP-IN-CT	Aid client in court.
GOLW	GO-LAWYER	Accompany client to lawyer.
GOCT	GO-COURT	Go with client to court hearings.
DEBU	DEAL-BUCKS	Deal with money problems.
DLTR	DL-TRANSPRT	Deal with transportation problems.
FIHO	FIND-HOBBIE	Find a hobbie.
PHPR	PHYS-PROBS	Take care of physical problems.
FAPR	FAM-PROBS	Deal with family problems.
PEPR	PERS-PROBL	Deal with other personal problems.
FBRS	FEEL-BTR-SLF	Feel better about self.
LVHM	LEAVE-HOME	Leave home.
PLST	PL-TO-STAY	Find a place to stay.
GHEL	GHELP	Sum of values on all above helping code Provides scaled index of help provided

The following variables all indicate the client's satisfaction with the performance of various aspects of the New Pride programs. Satisfaction is scaled from 1 to 4.

STCR	STF-CRTSY	Staff courtesy.
STPE	STAF-PERF	How well staff did jobs.
TMCO	TM-COUNS	Amount of time spent with counselor.
ATMO	AMT-TM-DSTF	Amount of time with other staff.
TRCO	TRUST-COUN	Trust of client for counselor.
TROS	TRUST-OT-ST	Trust of client of other staff.
STSU	STAF-SUPPORT	How much staff supported client to goal.
STCO	STAF-CONCEN	Concern staff had for client.
COFT	COUNS-FO-TH	Counselors efforts to follow through.
DTFO	OTHSTF-FOTH	Other staff efforts to follow through.
GSAT	GSAT	Sum of satisfaction indices. Provides scaled index of satisfaction.

REPR	REM-PROBLMS	Any remaining problems NP did not deal with? (1,2;no,yes)
CONO	COMPR-NP-OT	How compare NP with other progs; scaled
GCAN	GLAD-CAM-NP	Glad you came to NP? (1,2;no,yes)
RENF	RECOM-NP	Would you recommend NP to others? (1,2 no,yes)

NOTE ON MISSING VALUES:

Missing values for all variables except NL1, NL2, SGAN, TCIN, PG1, PG2, and PG3 are coded with zeros. All rest are coded 999 except TCIN which is coded 99.

DICTIONARY FOR THE EMPLOYRECT ARCHIVE DATASET

The following dictionary explains the contents of the EMPLOYRECT archive dataset in abbreviated form. This dictionary should be adequate for most purposes for understanding the contents of EMPLOYRECT.

The purpose of the EMPLOYRECT dataset is to establish a rectangular analysis file of ALL employment variables available from ALL original data files. The file is restricted to only those subjects entered into the OUTCOME dataset. (See the OUTCOME-DICT for a discussion of the contents of that dataset.) In this way all subjects' data in EMPLOYRECT may be directly related to the available OUTCOME data on treatment subjects.

ABBR:	VARIABLE-NAME:	DESCRIPTION:
-----	-----	-----
CLID	CLIENT-ID	Client identifier.

NJOB	NOW-JOB	Whether(2-9) or not(1) the subject had a Job on exit from New Pride. 2-9 are ordered values of Job length from 5 hou to 36 plus hours.
NPHJ	NP-HELP-JOB	Whether(2) or not(1) New Pride helped client get Job.
XWAG	EXIT-WAGE	Scaled wage of client on exit Job.
LIJO	LIKE-JOB	Scaled likins of exit Job by subject.
JBCC	JOB-CHANCE	Whether(2) or not(1) client sees chances for a Job improved on exit.

JBNW	JOB-NOW	Whether(2-9) or not(1) the subject had a Job at entry to New Pride (intake svy. 2-9 are ordered values of Job length.
XJOB	EX-JOB	Whether(2-9) or not(1) the subject had a Job before entry to New Pride as reported on the intake survey.
HRWG	HOURLY-WAGE	Scaled wage on Job before or at entry.
LNWK	LENGTH-WORK	Number of years worked on Job reported intake survey.
LIWK	LIKED-WORK	Scaled likings of entry Job by subject.
JOCC	JOB-CHANCES	Perceived chances of employment, scaled.
JIMN	JOB-IMP-NOW	Perceived importance of Job, scaled.

NFAF	NFAF	Number of times fired after New Pride.
NFDU	NFDU	Number of times fired during New Pride.
NFBE	NFBE	Number of times fired before New Pride.

AWOT	AWOT	Wage source 'other' after New Pride. Variable coded (0=no, 1=yes).
AWCT	AWCT	Wage source 'CETA' after New Pride.
AWNP	AWNP	Wage source 'New Pride' after New Pride.
AWEM	AWEM	Wage source 'employer' after New Pride.

This set of variables repeated for during New Pride (DWOT, DWCT, DWNP and DWEM) and before New Pride conditions (BWOT, BWCT, BWNP, and BWEM). Note that, as in chapter 3 of the final report, before New Pride Jobs started before New Pride entry, during New Pride Jobs started on the day of entry or later, and after New Pride Jobs started on the day of termination or later.

STIL	STILLEMPI	Whether (1) or not (0) the subject is still employed at the end of New Pride regardless of when he/she obtained Job.
APER	APER	Averaged performance index of all Jobs after New Pride.
DPER	DPER	Averaged performance index of all Jobs during New Pride.
BPER	BPER	Averaged performance index of all Jobs before New Pride.
AATT	AATT	Averaged attendance index of all Jobs after New Pride.
DATT	DATT	Averaged attendance index of all Jobs during New Pride.
BATT	BATT	Averaged attendance index of all Jobs before New Pride.
ADUR	ADUR	Averaged duration of all Jobs after NP.
DDUR	DDUR	Averaged duration of all Jobs during NP.
BDUR	BDUR	Averaged duration of all Jobs before NP.
ASTB	ASTB	$ADUR / NAFT$. \leftarrow Job Stability Index.
DSTB	DSTB	$DDUR / NDUR$. \leftarrow Job Stability Index.
BSTB	BSTB	$BDUR / NBEF$. \leftarrow Job Stability Index.
JAFT	JAFT	Whether(1) or not(0) subject had a Job after New Pride.
NAFT	NAFT	Number of Jobs after New Pride.
JDUR	JDUR	Whether(1) or not(0) subject had a Job during New Pride.

NDUR NDUR Number of Jobs during New Pride.
JBEF JBEF Whether(1) or not(0) subject had a Job
 before New Pride.
NBEF NBEF Number of Jobs before New Pride.

JOBE JOBEVER From ALL sources of information, did the
 subject (1=yes) EVER have a Job?

NOTE ON MISSING VALUES:

Missing values for the first two blocks of variables above (the exit and intake surveys) are all coded with zeros (0). All remaining missing values are coded 999.

NOTE ON SOURCES OF INFORMATION:

The information for this file is drawn from three sources: 1. The exit survey provided information on Jobs as the subjects left the programs. This data was drawn from the cleaned file EXIT-FINAL. 2. The intake survey provided information on Jobs as the subjects entered the programs. This data was drawn from the cleaned file INTK-CLEANED. 3. All other variables were drawn from the cleaned employment history forms in EMPLOY-ANAL.

DICTIONARY FOR THE MATCH ARCHIVE DATASET

The following dictionary explains the contents of the MATCH archive dataset in abbreviated form. This dictionary should be adequate for most purposes for understanding the contents of MATCH.

The purpose of the MATCH dataset is to be a collecting point for ALL variables involved in comparison vs. treatment group tests. ALL analyses for the final report involving such comparisons can be based on the MATCH dataset variables. The one exception here is that the time series analyses will require resort to the CLEANJH dataset for time-line based data.

The MATCH dataset is restricted to treatment subjects available with JUV-HIST records (from CLEANJH) and matched comparison subjects with JUV-HIST records (from CLEANJH). Subjects with no prior offenses could not be matched and so are not represented in the dataset. And subjects from the sites GEORGETOWN, LOS-ANGELES and BOSTON have been completely excluded. Note, very importantly, this set of treatment subjects CANNOT be used for evaluation of any outcomes outside of comparisons between treatment and comparison groups. IT MUST NEVER BE USED TO EVALUATE OUTCOME MODELS!

ABBR:	VARIABLE-NAME:	DESCRIPTION:
CLID	CLIENT-ID	Client identifier: C = Comparison Subject

PFE2	PF-RECID-EQCT2	Recidivism counts; Petitions Filed; from the 12th to 24th month after entry; for subjects equated on follow-up time at 24 months (730 days).
CSE2	CS-RECID-EQCT2	Recidivism counts; Counts Sustained; equate on follow-up as for PFE2.
PFEC	PF-RECID-EQCT	Recidivism counts; Petitions Filed; from the 1st to 12th month after entry; for subjects equated on follow-up time at 12 months (365 days).
CSEC	CS-RECID-EQCT	Recidivism counts; Counts Sustained; equate on follow-up as for PFEC.

FNS	FNS	FAILURE vs. SUCCESS as determined by the individual sites (Three levels: Fail; neutral; success). Note missing value coded with 99.
FNS2	FNS2	FAILURE vs. SUCCESS coded from FNS with neutrals classified with successes.

CSS2	CS-AFTER2-SER	Average seriousness of offenses for subject offending after 12 months after entry. Excluding charges STAT, DRNK, PROL, PROB and adjusted charges (original charges preserved).
PFS2	PF-AFTER2-SER	Average seriousness of petition filed offenses. As for CSS2.
CSAS	CS-AFTER-SER	Average seriousness of sustained offenses for subjects offending after program entry. Excluding charges, etc. as for CSS2.
PFAS	PF-AFTER-SER	Average seriousness of petition filed offenses. As for CSAS.
CSPS	CS-PRIOR-SER	Average seriousness of prior sustained offenses. Restricted to offenses as for CSS2 for comparability of indices.
PFPS	PF-PRIOR-SER	Average seriousness of petition filed offenses prior to program. Restricted to offenses as for CSS2.

CS12	CS-RECID-12	Whether (1) or not (0) a sustained offense occurred after entry plus 12 months.
PF12	PF-RECID-12	Whether or not a petition-filed offense occurred after entry plus 12 months.

CSE2	CS-RECID-EQFT2	Whether or not a sustained offense occurred for executed follow-up subject at 24 months for period from 12 to 24 months.
PFE2	PF-RECID-EQFT2	Whether or not a petition filed offense occurred under conditions as for CSE2
CSEQ	CS-RECID-EQFT	Whether or not a sustained offense occurred for executed follow-up subject at 12 months for period from 1 to 12 months.
PFEQ	PF-RECID-EQFT	Whether or not a petition filed offense occurred under conditions as for PFE2

CSFL	CS-FAIL	I
CSHW	CS-HALF-WKS	I
CSFD	CS-FUDATE	I
PFPL	PF-FAIL	I
PFHW	PF-HALF-WKS	I
PFSD	PF-FUDATE	I

This special block of variables is designed to run directly into analysis programs for analyzing survival functions of time-to-recidivism. Special FAILURE codes (0/99), HALF-WKS to failure or the update date, and the actual failure or update date (FUDATE) are presented for counts sustained and petitions filed.

CSAL	CS-RECID-ALL	Whether or not a sustained count occurred for a subject after entry to New Prid
PFAL	PF-RECID-ALL	Whether or not a petition was filed for a subject after entry to New Prid.

PRAL	PRIOR-ALL	Number of priors per subject measured from all offenses.
PRPF	PRIOR-PFS	Number of priors per subject measured from petitions filed.
PRS	PRIOR-SUSTS	Number of priors per subject measured from sustained petitions.

INLG	INTAKE-LAG	Weeks from sustained prior to program entry Obtained weeks for treatment subjects. Derived weeks for comparison subjects.
NNPS	NEW-NPS	New Pride Site codes.
BDT	BIRTH-DATE	Date of birth.
CDT	CASE-ACTION-DT	Date of New Pride entry.
SEX	SEX	Sex (1=male; 2=female).
RACE	ETHNICITY	Race of subject (white; black; hispanic; asian; american indian; other).
EXCL	EXPTL-CTRL	Experimental vs. Control subject code.
AGEC	AGE-AT-CDT	Age at case-action-dt for each subject.
AGES	AGE-SQUARED	AGEC squared for test of linearity of age effects.
UPDA	UPDATE	Final update date of criminal history follow-ups (831231).
TTF	TIME-FOLLOW-UP	Weeks from program entry (CDT) to final update (UPDA).

INCD	INCDUR	Whether or not client was incarcerated in first twelve months after New Pride entry (DISP = DEP-COR-COM, or OTHER at Fresno only).
INCA	INCAFT	Whether or not client was incarcerated after 12 months from entry to the program.
INCB	INCBEF	Whether or not client was incarcerated before entry to the program.

NP12	NUM-PF-12	Number of petition-filed offenses per subject 12 months after program entry.
NC12	NUM-CS-12	Number of counts sustained per subject 12 months after program entry.
NPF	NUM-PF	Number of petition-filed offenses per subject after program entry.
NCS	NUM-CS	Number of counts sustained per subject after program entry.

NOTE ON MISSING VALUES:

All missing values for all variables, except FNS, are coded 999. FNS has a missing values code of 99.

NOTE ON EXCLUDED OFFENSES:

EXCEPT IN THE CALCULATION OF PRIORS some offenses of minor note were excluded in calculating ALL measures of recidivism including offense seriousness. The offenses excluded were DRNK, PROL, PROB, and STAT. Also excluded from consideration were adjusted charges DISP=10. These latter are redundant with the original charge records.

This course of action was taken in discovering that some sites reported many many minor infractions (e.g., Fresno) whereas others reported very few (e.g., Haddonfield). Worse, there appears to be a differential reportage bias between comparison and treatment groups on these minor offenses. Excluding them from all recidivism measures provides us with a more balanced look at recidivism within and between treatment and comparison groups.

DICTIONARY FOR THE OUTCOME ARCHIVE DATASET

The following dictionary explains the contents of the OUTCOME archive dataset in abbreviated form. This dictionary should be adequate for most purposes for understanding the contents of OUTCOME.

The purpose of the OUTCOME dataset is to be the collecting point for ALL variables relevant to the analysis of the primary outcome measure, recidivism after New Pride, in the New Pride treatment group. No comparison subjects are included in this set. Note that the variables DO NOT include measures of client demographics and program processes, employment or schooling data. The variables will be attached to the OUTCOME set as needed for analysis of the primary outcome measure. Rather OUTCOME is reserved for those variables necessary to the initial development and control of program outcome analyses. Refer to the initial sections of the New Pride final report Chapter V for further explanations.

The OUTCOME dataset is restricted to those treatment subjects from the seven sites with follow-up data (CHI, FRS, HAD, KC, PEN, PROV and SF), having a defined birth-date for the calculation of age at program entry (1 subject did not). NOTE: THIS DATASET IS(!) TO BE USED IN THE EVALUATION OF THE FINAL NEW PRIDE OUTCOME MODEL! (This as opposed to the MATCH dataset for testing differences between the matched comparison and treatment groups.)

ABBR:	VARIABLE-NAME:	DESCRIPTION:
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CLID	CLIENT-ID	Client identifier.

CSAF	AFTR-CS	Whether(1) or not(0) the subject recidivated after termination from the New Pride program. Measured by sustained counts.
CSDU	DURR-CS	Whether or not the subject recidivated during his/her New Pride experience. Sustained counts. Time measured between case-action-date and termination date.
CSAL	ALLR-CS	Whether or not the subject recidivated after entry to New Pride. Counts sustained. Time measured from case-action-date.

RECD	RECORD	Whether(1) or not(0) criminal histories are available on the subject.

PFAL	ALLR-PF	Whether(1) or not(0) a petition-filed offense occurred after case-action-dt
PFAF	AFTR-PF	Whether or not a petition-filed offense occurred after termination from New Pride.
PFDU	DURR-PF	Whether(1) or not(0) a petition-filed offense occurred between case-action-date and termination from New Pride.

NNFS	NEW-NFS	New Pride site labels.
CDT	CASE-ACTION-DT	Date of subject entry to New Pride.
TDT	TERMINATION-DATE	Date of subject termination from New Pride
UPDA	UPDATE	Last date of subject follow-up (831231).

AGEC	AGEC	Subject age at program entry.
AGES	AGES	AGEC squared for polynomial tests.

FNS	FNS	Failure vs. Success of subjects determined by each program at termination.
FNS2	FNS2	FNS variable with 'neutral' categorized subjects coded with successes.

PDUR	PDUR	Program duration in weeks from case-action date to termination-date.
TTF	TIME--FOLLOW-UP	Time in weeks from case-action-date to the follow-up date (831231).
T-F	TTF-PDUR	The difference between TTF and PDUR representing follow-up time after the subjects termination from New Pride.

PHAT	PHAT	I
PRCS	PRCS	I
PRPF	PRPF	I

This special block of variables represent INSTRUMENTS of the variables PDUR, DURR-CS and DURR-PF, respectively, above. They are defined ONLY on the basis of the predictors NNFS, AGECS and AGES. They are unbiased estimates of the PDUR and during program recidivism variables, to be used in evaluating the central simultaneous component of the New Pride OUTCOME model.

NOTE ON MISSING VALUES:

All missing values for all variables are coded 999. Except FNS and FNS2 (coded 99) and all date variables (coded 0).

NOTE ON EXCLUDED OFFENSES:

All measures of recidivism exclude the offense charges of drunkenness, status offenses, parole violations and probation violations. Further all adjusted offenses (DISP = 10) are not considered as they are redundant with the offenses they were adjusted to.

This course of action was taken in discovering that some sites reported many many minor infractions, whereas others did not. See further documentation on this in the MATCH-DICT dictionary.

DICTIONARY FOR THE PROCESS ARCHIVE DATASET

The following dictionary explains the contents of the PROCESS archive dataset in abbreviated form. This dictionary should be adequate for most purposes for understanding the contents of PROCESS.

The purpose of the PROCESS dataset is to hold all variables measuring the process of objective specification (the IISP) through service delivery (the SERVICE-DEL). The variables measure needs specified, objectives set-up to meet those needs, service-plans and service-deliveries as well as objective updates where available. For this reason there are a large number of codes established to measure the incidence of these specifications and their concurrences with each other. The data was assembled from the IISP-FIRST, ORIG-ORJUPDATES and ORIG-SD files in the archive. The MICRO macros ASSEMBLE-SERV, ASSEMBLE-IISP and SMASH-ISD were used to develop the PROCESS rectangular dataset. This rectangular set can be run directly with the OUTCOME dataset to determine the impact of PROCESS variables on OUTCOMES.

ABBR:	VARIABLE-NAME:	DESCRIPTION:
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CLID	CLIENT-ID	Client identifier.

This first set of variables relates to data from the IISP and the updates to the IISP held in the archive.

NONY	#OBJ-NOYETADR	Number of objectives not yet addressed as of last objective update.
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NONP	#OBJ-NOPROG	Number of objectives no progress as of last objective update.
NORD	#OBJ-REV/DEL	Number of objectives revised/deleted as of last objective update.
NOSU	#OBJ-SUCCESS	Number of objectives successfully completed as of last objective update.
REC	REC	Total number times recreation services planned.
CLTN	CULTEN	Total number times cultural services planned.
JBPL	JOBPLAC	Total number Job placement services planned.
DGSV	DIAGSERV	Total number of diagnostics services planned.
IDCN	INDCOUN	Total number individual counseling services planned.
GPCN	GRPCOUN	Total number group counseling services planned.
FMCN	FAMCOUN	Total number family counseling services planned.
SPG8	SPG8	Total number general/administrative services planned.
SPG7	SPG7	Total number other client services planned.
SPG6	SPG6	Total number employment services planned.
SPG5	SPG5	Total number learning disability services planned.
SPG4	SPG4	Total number educational services planned.
SPG3	SPG3	Total number counseling services planned.

SPG2	SPG2	Total number casework services planned.
SPG1	SPG1	Total number intake services planned.
NGP8	NGP8	Total number of transportation needs identified.
NGP7	NGP7	Total number of legal needs identified.
NGP6	NGP6	Total number of employment needs identified.
NGP5	NGP5	Total number of education needs identified.
NGP4	NGP4	Total number of physical needs identified.
NGP3	NGP3	Total number of social needs identified.
NGP2	NGP2	Total number of emotional development needs identified.
NGP1	NGP1	Total number of family needs identified.
TSCD	TSCD	Total number of services planned.
NSCD	#SCODES	Total number of TYPES of services planned.
TNDS	TNDS	Total number of needs identified.
NNDS	#NEEDS	Total number TYPES of needs identified.
NORJ	#OBJECTIVES	Total number of objectives specified.
NGC1	NGC1	i
NGC2	NGC2	i
NGC3	NGC3	i
NGC4	NGC4	i-----> 0/1 codes for NGP1
NGC5	NGC5	i-----> through NGP8
NGC6	NGC6	i
NGC7	NGC7	i
NGC8	NGC8	i
SPC1	SPC1	i
SPC2	SPC2	i
SPC3	SPC3	i
SPC4	SPC4	i-----> 0/1 codes for SPG1
SPC5	SPC5	i-----> through SPG8
SPC6	SPC6	i
SPC7	SPC7	i
SPC8	SPC8	i

FMCC	FMCC	Family Counseling (0/1) Notues.
GPCC	GPCC	Group Counseling (0/1) Notues.
IDCC	IDCC	Individual Counseling (0/1) Notues.
DGSC	DGSC	Diagnostics Planned (0/1) Notues.
JBPC	JBPC	Job Placement Planned (0/1) Notues.
CLTC	CLTC	Cultural enrichment planned (0/1) Notues.
RECC	RECC	Recreation planned (0/1) Notues.
TIME	TIME-S-L	Time in weeks from first staffing to last evaluation date.
SUCR	SUCRAT	Ratio of number successful to number of total objectives planned.
SUCO	SUCODE	Partitioned ratios of success where 1: 0.0 to 0.333 2: 0.334 to 0.666 3: 0.667 to 1.000
IVER	IISPEVER	Whether (1) or not (0) an IISP is available on each subject.

This second set of variables are from the service delivery data extracted from ORIG-SD.

SREC	SREC	Number recreational services delivered.
SCUL	SCUL	Number cultural enrichment services delivered.
SJPC	SJOBPLAC	Number of Job placement services delivered.
SDIA	SDIAG	Number of diagnostic services delivered.
SIC	SIC	Number individual counseling services delivered.

SGC	SGC	Number group counseling services delivered.
SFC	SFC	Number family counseling services delivered.
NCIC	NCIC	Number crisis intervention services delivered.
NUFC	NUFC	Number unplanned counseling services delivered.
NFLC	NPLC	Number planned counseling services delivered.
SDG8	SDG8	i
SDG7	SDG7	i
SDG6	SDG6	i
SDG5	SDG5	i-----> Number of services within TYPES
SDG4	SDG4	i-----> (See defs. for TYPES above.)
SDG3	SDG3	i
SDG2	SDG2	i
SDG1	SDG1	i
TDRC	TOTREC	Total duration recreation services delivered.
TDCL	TOTCULTEN	Total duration cultural services delivered.
TDJP	TOTJOBPLAC	Total duration Job placement services delivered.
TDIA	TOTDIAG	Total duration diagnostic services delivered.
TTIC	TOTIC	Total duration individual counseling services delivered.
TTGC	TOTGC	Total duration group counseling services delivered.
TDFC	TOTFC	Total duration family counseling services delivered.
TDCC	TDRIC	Total duration crisis intervention services delivered.

TDUC	TDRUPC	Total duration unplanned counseling services delivered.
TDFC	TDRFLC	Total duration planned counseling services delivered.
TDR8	TDR8	i
TDR7	TDR7	i
TDR6	TDR6	i
TDR5	TDR5	i-----> Total Duration of service TYPES
TDR4	TDR4	i-----> (See defs. for TYPES above.)
TDR3	TDR3	i
TDR2	TDR2	i
TDR1	TDR1	i
NIAT	NINPRATT	Number of all services attended in person.
INPR	INPR	Number of all in person services offered.
NATT	NATT	Number of all services attended.
NSRV	NSRV	Number of all services tendered.
NNAT	NNAT	Number of all services not attended.
NIPR	NIPR	Number of all services not in person.
OTRS	OTRS	Number of all services with mode other.
SDC1	SDC1	i
SDC2	SDC2	i
SDC3	SDC3	i
SDC4	SDC4	i-----> Service deliveries coded 0/1.
SDC5	SDC5	i-----> (TYPES explained above.)
SDC6	SDC6	i
SDC7	SDC7	i
SDC8	SDC8	i
SFCC	SFCC	Family counseling 0/1; No/yes.
SGCC	SGCC	Group counseling 0/1; No/yes.
SICC	SICC	Individual counseling 0/1; No/yes.
SDIC	SDIC	Diagnostics 0/1; No/yes.
SJCC	SJCC	Job placement 0/1; No/yes.

SCLC	SCLC	Cultural enrichment 0/1; No/yes.
SRCC	SRCC	Recreation 0/1; No/yes.
CFPC	CFPC	Planned counselings 0/1; No/yes.
CUPC	CUPC	Unplanned counselings 0/1; No/yes.
CCIC	CCIC	Crisis intervention counselings 0/1; No/yes.
SVER	SDELEVER	Whether (1) or not (0) service delivery records appear for the subject.

NOTE: The recreation and cultural services are considered erroneous confounders to the TYPES of services in which they appear (Group 7: Other client services). So they are subtracted from the counts and codes for that type (i.e., SF07, SPC7, SDG7, SDC7).

The following codes measure the concurrence between services planned on the IISP and services reported as delivered on the SERVICE-DEL forms. Two types of codes are of major concern: 1. Concurrence codes measure whether a service planned was actually delivered. 2. Unplanned-Delivered codes measure whether services were delivered which were unplanned.

C1	C1	0/1 Concurrence code TYPE 1: Intake activities.
C2	C2	0/1 Concurrence code TYPE 2: Case work activities.
C3	C3	0/1 Concurrence code TYPE 3: Counseling activities.
C4	C4	0/1 Concurrence code TYPE 4: Education activities.
C5	C5	0/1 Concurrence code TYPE 5: Learning disabled education activities.
C6	C6	0/1 Concurrence code TYPE 6: Employment activities.
C7	C7	0/1 Concurrence code TYPE 7: Other client services.

C8	C8	0/1 Concurrence code TYPE 8: Administrative services.
GCOR	GCOR	General correspondence code: Sum of C1 through C8.
UPD1	UPD1	i
UPD2	UPD2	i
UPD3	UPD3	i
UPD4	UPD4	i-----> 0/1 Unplanned-delivered codes.
UPD5	UPD5	i-----> (TYPES as listed for C1->C8.)
UPD6	UPD6	i
UPD7	UPD7	I
UPD8	UPD8	i
GUPD	GUPD	General unplanned-delivered code: Sum of UPD1 through UPD8.
GDS	GDS	Breadth of delivered services: Number of different types of services delivered.
GPS	GPS	Breadth of planned services: Number of different types of services planned.
DBRE	DBREADTH	GPS - GDS.
CFMC	CFMC	0/1 concurrence family counseling.
UPDF	UPDF	0/1 unplanned-delivered family counseling.
CGPC	CGPC	0/1 concurrence group counseling.
UPDG	UPDG	0/1 unplanned-delivered group counseling.
CIDC	CIDC	0/1 concurrence individual counseling.
UPDI	UPDI	0/1 unplanned-delivered individual counseling.
CDGC	CDGC	0/1 concurrence diagnostics.
UPDS	UPDS	0/1 unplanned-delivered diagnostics.
CDJB	CDJB	0/1 concurrence Job placement.
UPJB	UPJB	0/1 unplanned-delivered Job placement.

CCOR	CCOR	General counseling correspondence code: Sum of CFMC,CGPC,CIDC.
CUPD	CUPD	General counseling unplanned-delivered code: Sum of UPDF,UPDG,UPDI.
CGDS	CGDS	Breadth of delivered counseling services.
CGPS	CGPS	Breadth of planned counseling services.
CDBR	CDBREADTH	CGPS - CGDS.
ISBO	ISBOTH	Whether (1) or not (0) subject has BOTH IISP and service deliver information.

NOTE ON MISSING VALUES:

All missing values are coded 999 EXCEPT for these few exceptions:
 All duration variables are missing coded 99999. The variables
 NCIC, NUPC, and NFLC are missing coded 99999.

DICTIONARY FOR THE SCHOOLRECT ARCHIVE DATASET

The following dictionary explains the contents of the SCHOOLRECT archive dataset in abbreviated form. This dictionary should be adequate for most purposes for understanding the contents of SCHOOLRECT.

The purpose of the SCHOOLRECT dataset is to accommodate ALL relevant schooling variables, drawn from ALL sources, to be used in the analysis of OUTCOMES among New Pride treatment programs. The dataset is purely rectangular and is restricted to those subjects with schooling information matched to the OUTCOME dataset's subjects. (See the OUTCOME-DICT for more information on the strictures applying to this analysis.) SCHOOLRECT may be directly run against the variables presented in OUTCOME.

ABBR:	VARIABLE-NAME:	DESCRIPTION:
-----	-----	-----
CLID	CLIENT-ID	Client identifier.

SCHA	SCHAFT	Whether(2) or not(1) schooling was continued after New Pride.
ATTN	ATTNPS	Whether(2) or not(1) the New Pride school was attended.

AAFT	AAFT	Number of days absent in program after New Pride.
ADUR	ADUR	Number of days absent in program during New Pride.
ABEF	ABEF	Number of days absent in program before New Pride.
DAFT	DAYSFT	Number of total days in school in program after New Pride.
DDUR	DAYS DUR	Number of total days in school in program during New Pride.
DBEF	DAYSBEF	Number of total days in school in program before New Pride.
PABB	PABBEF	Proportion absences in program before.
PABD	PABDUR	Proportion absences in program during.
PABA	PABAFT	Proportion absences in program after.

GPAF	GPAAFT	GPA in program after New Pride.
GPDR	GPADUR	GPA in program during New Pride.
GPBF	GPABEF	GPA in program before New Pride.
RAFT	RSNAFT	Reason for program termination after NP.
RDUR	RSNDUR	Reason for program termination during NP.
RBEF	RSNBEF	Reason for program termination before NP.
RBCD	RBEFCODE	Whether subject completed (1) or did not complete (0) program before NP. (Completion defined as obtaining GED, completing program, graduation, etc.)
RDCD	RDURCODE	Whether subject completed (1) or did not complete program during NP.
RACD	RAFTCODE	Whether subject completed (1) or did not complete program after NP.

NOTE: The completion codes are simple codings for the three preceding reason for program termination codes.

PAFT	PRGAFT	Scaled progress code for school performance in program after NP.
PDUR	PRGDUR	Scaled progress code for school performance in program during NP.
PBEF	PRGBEF	Scaled progress code for school performance in program before NP.
GAFT	GRADEAFT	Grade of subject in program after NP.
GDUR	GRADEDUR	Grade of subject in program during NP.
GBEF	GRADEBEF	Grade of subject in program before NP.
<hr/>		
SLIK	SCHOOL-LIKE	Scaled liking for school at entry to NP. 1=Don't like. 5=Like very much.
WAED	WANT-EDUC	Scaled desire for schooling at NP entry. 1=Drop out. 7=Professional degree.
EXED	EXPECT-EDUC	Scaled schooling expectancies at NP entry. (Codes as for WAED.)
<hr/>		
FESC	FEELS-SCH	Have feelings about school changed at exit from program? (1=no, 2=yes)
LISC	LIKE-SCHOOL	Scaled liking for school at exit from NP. Coded as for SLIK above.
EDWA	EDUC-WANTS	Scaled desire for schooling at NP exit. Coded as for WAED above.
CHEN	CHNC-ED-NOW	Perceived chances for schooling at exit from NP. (2=improved; 1=No improved)
<hr/>		
KPST	KEYMPOST	Keymath Post-test raw scores.
KPRE	KEYMPRE	Keymath Pre-test raw scores.

KGAN	KEYMGAIN	Keymath Gain raw scores.
PTWD	POSTWD	Woodcock Post-test raw scores.
PRWD	PREWD	Woodcock Pre-test raw scores.
WDGN	WDGAIN	Woodcock Gain raw scores.
IQS	IQSCORES	WAIS/WISC-R Full Scale IQ scores residualized by test differences.
WTAS	WRTARSCR	WRAT Arithmetic raw sub-score.
WTRS	WRTRDSCR	WRAT Reading raw sub-score.
WTSS	WRTSPLSCR	WRAT Spelling raw sub-score.

DISP	DISPARITY	Difference WAED - EXED. Larger values indicates greater disparity between wants and exrectancies for education.
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NOTE ON MISSING VALUES:

All missing values are generally coded 999. However, zeros are used for missing values on the variables GRADEBEF, GRADEDUR, GRADEAFT and 99s are used for the variables PRGAFT, PRGDUR, PRGBEF, RSNBEF, RSNBUR, RSNBFT, DAYSBEF, GPAFT, DAYSBEF, GPADUR, DAYSBEF, and GPABEF. Additionally, zeros are used for the variables SLIK, WAED, EXED, FESC, LISC, EDWA, and CHEN.

APPENDIX B

FIRST ORDER RELATIONS BETWEEN CLIENT BACKGROUND AND PROGRAM PROCESS VARIABLES AND TERMS OF THE BASIC OUTCOME MODEL

On the following pages are tabled the partial correlations of the client background and program process variables with the four endogenous terms of the basic outcome model, program duration, recidivism during New Pride, client success, and recidivism after New Pride. For each partial correlation with each dependent measure prior terms of the basic outcome model are covaried. The endogenous terms of the basic outcome model with their respective covariates are listed here:

<u>Term</u>	<u>Covariates</u>
Program Duration	New Pride site dummy variables Age variables (linear and quadratic) Recidivism During New Pride
Recidivism During New Pride	New Pride site dummy variables Age variables (linear and quadratic) Program Duration
Client Success	New Pride site dummy variables Age variables (linear and quadratic) Recidivism During New Pride Program Duration

Recidivism After New Pride

New Pride site dummy
variables

Age variables (linear and
quadratic)

Recidivism during New Pride

Program Duration

Client Success

Time to Follow-up

The reader should be aware that for three of the four dependent measures these procedures are not clearly appropriate. For the measure of program duration the procedures are appropriate. The dependent measures of client success, recidivism during New Pride, and recidivism after New Pride are all dichotomous, and should be analyzed using linear-logistic procedures. However, for efficiency these measures were treated in the way described in this appendix. For this reason all the reported partial correlations below are significant to $p < .10$, a rather liberal significance level. Knowing that ultimately the significant terms will be appropriately tested with conservative significance tests, it was decided to err toward allowing more variables into the analysis at this point. Where no partial correlation is reported the correlation was non-significant ($p > .10$).

Table 7
 First Order Partial Correlations of Client Background and
 Program Process Variables with Variables of
 the Outcome Model

Variable (Abbreviation)	Program Duration		Recidivism During		Client Success		Recidivism After	
	beta	N	beta	N	beta	N	beta	N
Client Backgrounds								
Ethnicity (RACE)*			.1325	929			.1263	916
Father's Education (SCHD)							.0843	536
Mother's Employment (EM)	.0880	801					.0759	793
Gender (SEX)	-.0606	930	-.0891	930	.0753	917	-.0740	917
Job/Education Chances (JEDC)					.0885	685		
Restitution (REST)					.0846	797		
Treatment of Other Siblings (OTSB)	-.0815	620						
Drug/Alcohol Problems (CDUD)	-.0614	729						
Friends in Trouble with Law (TRLW)	-.0678	712						
Number of Teachers Interested (TRCN)	.0751	562						
Detention (DET)	-.0608	609						
Assigned Supervision (ASUP)	-.0972	930						
Assigned Vocational Training (AVOC)	-.0940	930						
How Often Punished (HOFPP)			.0852	668				
Family Drug/Alcohol Problems (DRAL)			-.0660	737				
Life Satisfaction (SALI)			.0792	717				
Family Residence (FRES)*			.0943	815				
Receiving AFDC (AFDC)			.1190	804				
Number in House (NIH)			.0846	815				

Employment								
Job at Entry (JBNW)	.0973	947					-.0622	738
Wage Before New Pride (BWNP)							-.0858	508
Wage During New Pride (DWNP)							.0761	508
Job Performance During (DPER)	.1433	326					-.1170	319
Number Jobs During (NDUR)							.0898	508
Had Job Before New Pride (JBEF)	-.1104	517					-.0781	508
Number Jobs Before New Pride (NBEF)	-.1104	517					-.0781	508
Job Before More Than 10 Days Long (JB10)	-.1104	517					-.0781	508
Job During More Than 10 Days Long (JD10)			-.1197	517			.0783	508
Job Type on Exit From New Pride (NJOB)					.1055	468		
Job Chances at Exit (JBCC)					.1095	452		
Times Fired During New Pride (NFDU)					-.1180	386		
Other Wage Source During (DWOT)	-.0880	517			.0838	508		
Job at Exit (Whether or not) (STIL)					.1388	523		
Job During (Whether or Not) (JDUR)			-.0898	517	-.0845	508		
Job Ever (JOB E)					.1014	824		
Before Wage Source CETA (BWCT)	-.0925	517						
Before Wage Source Employer (BWEM)	-.0909	517						
During Job Attendance (DATT)	.1270	326						
During Wage Source CETA (DWCT)			-.0927	517				

* These variables are categorical. Reported coefficients are multiple correlation coefficients.

Variable (Abbreviation)	Program Duration		Recidivism During		Client Success		Recidivism After	
	beta	N	beta	N	beta	N	beta	N
Schooling								
Attend New Pride School (ATTN)					-.0886	719	.0671	719
Like School (LISC)							.0825	470
Intelligence Quotient (IQS)					.0975	627	-.0854	627
WRAT Arithmetic Subscore (WTAS)					.0918	514	-.1166	574
WRAT Reading Subscore (WTRS)					.0765	577	.0900	577
Like School (After-Before) (DLIK)							.0859	434
Days School Attended During (DDUR)	.4016	592	.0693	592	.0744	584		
School Program Completed Before (RBCD)	.1081	727			.0906	719		
School Program Completed During (RDGD)	.4519	727			.1303	719		
Keymath Post Test Score (KPST)					.0896	352		
Keymath Pre Test Score (KPRE)	.0646	690			.0945	683		
Woodcock Pre Test Score (PRWD)					.0692	694		
WRAT Spelling Subtest (WTSS)					.0798	666		
Proportion Absences Before (PTB)					-.0841	406		
Proportion Absences During (PTD)	.0729	728						
School Progress During (PGDR)			-.1162	621				
Expected Education Level (EXED)			.0666	749				
Wanted - Expected Level Education (DISP)			-.0725	743				
Program Process								
Emotional Needs (NGP2)	.0702	759					.0638	749
Number Cultural Services (SCUL)	.1613	886					.0568	749
Job Placement Services (SJPC)	.2294	886					-.0629	749
Unplanned:Delivered Intake Services (UPDI)							-.0685	749
Planned:Delivered Job Placements (CDJB)	.0769	738					-.0621	749
Diagnostic Services (DGSV)					.0910	749		
Family Counseling Services (FMCN)					-.0898	749		
Legal Needs (number) (NGP7)					.0620	749		
Family Relationship Needs (Yes/No) (NGC1)					-.0916	749		
Intake Services Delivered (Yes/No) (SPC1)					.0845	749		
Family Counseling Services Delivered (Yes/No) (FMCC)			.0704	759	-.0826	749		
Diagnostic Services Delivered (Yes/No) (DGSC)					.1084	749		
Planned Counseling Services Delivered (Yes/No) (NPLC)	.3404	886			.0649	875		
Individual Counseling Services Delivered (Yes/No) (SIC)	.3217	886			.0708	875		
General Services (Number) (SDG8)	.0679	886			.1431	875		
Counseling Services (Number) (SDG3)	.3725	886			.0676	875		
Case Work Services (Number) (SDG2)	.1776	886			.0899	875		
Case Work Services (Yes/No) (SDC2)	.1291	886			.0565	875		
General Services (Yes, No) (SDC3)					.0799	875		
Unplanned: Delivered Other Services (Number) (UPD7)					.0666	728		
Unplanned: Delivered General Services (Number) (UPD8)					.0853	728		
Correspondence of Unplanned:Delivered Services (GUPD)	.1269	738			.0776	728		
Planned:Delivered Family Counseling Services (Yes/No) (CFMC)			.0636	738	-.0759	728		
Planned:Delivered Individual Counseling Services (Yes/No) (CIDC)	.0695	738			.0663	728		
Difference Planned-Delivered Services (DBRE)	-.1612	738			-.0664	728		
Number Successful Objectives (NOSU)	.1042	414						
Individual Counseling Planned Services (IDCN)	.0825	759						

Variable (Abbreviation)	Program Duration		Recidivism During		Client Success		Recidivism After	
	beta	N	beta	N	beta	N	beta	N
Program Progress (continued)								
Planned Counseling Services (Number) (SPG3)	.0981	759						
Transportation Needs (Number) (NGP8)	.0631	759						
Legal Needs (Number) (NGP7)	.0676	759						
Physical (Health) Needs (Number) (NGP4)	.0695	759						
Total Planned Services (TSCD)	.0693	759						
Number of Types Planned Services (NSCD)	.0797	759	.0743	759				
Total Needs Planned (TNDS)	.0698	759						
Number of Types Planned Needs (NNDS)	.0736	759	.0797	759				
Number of Objectives Specified (NOBJ)	.0737	759						
Employment Needs (Yes/No) (NGC6)	.0991	759						
Legal Needs (Yes/No) (NGC7)	.0822	759						
Transportation Needs (Yes/No) (NGC8)	.0782	759						
Planned Counseling Services (Yes/No) (SPC3)	.0658	759						
Planned Employment Services (Yes/No) (SPC6)	.1008	759						
Planned Other Services (Yes/No) (SPC7)	.0722	759						
Job Placement Services Planned (Yes/No) (JBPC)	.0636	759						
Number Delivered Crisis Intervention Services (NCIC)	.1371	886						
Number Delivered Unplanned Counseling Services (NUPC)	.2294	886						
Recreational Services Delivered (Number) (SREC)	.1612	886						
Diagnostic Services Delivered (Number) (SDIA)	.1541	886						
Group Counseling Services Delivered (Number) (SGC)	.2298	886						
Family Counseling Services (Number) (SFC)	.1104	886						
Legal Services Delivered (Number) (SDG7)	.0755	886						
Employment Services Delivered (Number) (SDG6)	.2822	886						
Learning Disabilities Services Delivered (Number) (SDG5)	.0853	886						
Education Services (Number) (SDG4)	.1562	886						
Intake Services (Number) (SDG1)	.1528	886						
Total Number In-Person Services Attended (NIAT)	.2912	886						
Total Number Services (NSRV)	.3188	886						
Counseling Services Delivered (Yes/No) (SDC3)	.1291	886						
Education Services Delivered (Yes/No) (SDC4)	.3109	886						
Learning Disabilities Services Delivered (SDC5)	.1670	886						
Employment Services Delivered (Yes/No) (SDC6)	.1204	886						
Other Client Services Delivered (Yes/No) (SDC7)	.3331	886						
General Services Delivered (Yes/No) (SDC8)	.1033	886						
Family Counseling Services Delivered (Yes/No) (SFCC)	.1147	886						
Group Counseling Services Delivered (Yes/No) (GCC)	.2003	886						
Individual Counseling Services Delivered (Yes/No) (SICC)	.2962	886						

Variable (Abbreviation)	Program Duration		Recidivism During		Client Success		Recidivism After	
	beta	N	beta	N	beta	N	beta	N
Program Progress (continued)								
Job Placement Services Delivered (Yes/No) (SJCC)	.3073	886						
Cultural Services Delivered (Yes/No) (SCLC)	.2066	886						
Recreational Services Delivered (Yes/No) (SRCC)	.2255	886						
Planned Counseling Sessions (Yes/No) (CPLC)	.3169	886						
Unplanned Counseling Sessions (Yes/No) (CUPC)	.2796	886						
Crisis Interventions (Yes/No) (CCIC)	.1153	886						
Planned:Delivered Counseling (Yes/No) (C3)	.0819	738						
Planned:Delivered Education Services (Yes/No) (C4)	.0663	738						
Planned:Delivered Employment Services (Yes/No) (C6)	.1872	738						
Planned:Delivered Other Services (Yes/No) (C7)	.0895	738						
General Correspondence Planned:Delivered Services (GCOR)	.1530	738						
Unplanned:Delivered Case Work Services (Yes/No) (UPD2)	.0676	738						
Unplanned:Delivered Education Services (Yes/No) (UPD4)	.0828	738						
Unplanned:Delivered Learning Disabled Services (Yes/No) (UPD5)	.0764	738						
Unplanned:Delivered Employment Services (Yes/No) (UPD6)	.0646	738	-.0666	738				
Unplanned:Delivered General Services (Yes/No) (UPD8)	.0997	738						
General Correspondence Unplanned:Delivered Services (GDS)	.2386	738						
Unplanned:Delivered Group Counseling Services (Number) (UPDG)	.1032	738						
Unplanned Delivered Job Placement Services (Number) (UPJB)	.2356	738						
General Correspondence Unplanned:Delivered Services(GDS)	.1072	738						
Breadth of Delivered Counseling Services (CGDS)	.1350	738						
Ratio of # Successful/# Objectives (SUCR)	.1906	759	-.0949	759				
Coding SUCR Ratio (.33, .66, .00) (SUCO)	.2009	759	-.1009	759				
Breadth of Planned-Delivered Services (CDBR)	-.1260	738						
Number Recreational Services (SREC)			-.0675	886				
Breadth of Planned Services (GPS)			.0703	738				
<hr/>								
Client Exit								
How Helpful New Pride (NPHP)							-.0846	422
Place Now Living (NLVG)*							.1007	459
Personal Gains from New Pride (PEGA)*							.1315	419
Program Helped Find Place to Stay (PLST)							.0954	401
Glad Came to New Pride (GCAN)					.0876	411	-.1098	411
Number Teachers Interested in Client (TCIN)					.0855	419		
Overall Quality of New Pride Help (HEQU)					.1024	422		
Did Counseling Services Help? (CNSL)					.1050	402		
Did New Pride Provide Job Preparation? (JOPR)					.1038	402		
Did New Pride Provide Job Placement? (JBTR)					.0861	403		
Did New Pride Help You Feel Better? (FBRS)					.1137	404		
Did New Pride Help You Leave Home? (LVHM)					.1008	401		
General Helpfulness of New Pride (GHEL)					.1054	403		
How Much Staff Support? (STSU)					.1828	399		
General Satisfaction With New Pride (GSAT)					.0929	399		
Do You Have Remaining Problems? (REPR)					-.1144	413		

* These variables are categorical. Reported coefficients are multiple correlation coefficients.

APPENDIX C

STEPWISE REGRESSION ANALYSES OF FOUR ENDOGENOUS TERMS OF THE BASIC OUTCOME MODEL

The following four tables present the results of the stepwise regressions of each of the four dependent measures from the basic outcome model. All potential predictors from the table presented in Appendix B are entered into these regressions. The entry criterion on each step of the regression procedure allowed variables into the regression model when their partial correlation with the dependent measure was significant at $p < .10$. Each regression model was endowed with a fixed set of covariates, the prior terms of the basic outcome model. These fixed terms are listed in Appendix B and not shown in the following tables.

Each table presents three sets of information from the stepwise regressions. First, the top portion of each table presents the terms entered into each analysis, their B-coefficients, t-statistics, degrees of freedom and probability levels. Note that each of the entered terms is a significant predictor independent of every other. Second, the middle portion of the table presents the missing value variables necessary to control for the pattern of missing values found in the entered independent variables (top of table). Where the number of missing value variables is less than the number of independent variables tested, the patterns of missing values in two or more variables are completely identical. Note that the coefficients for all the variables presented include the controls for missing value patterns. Third, at the bottom of each table, where they occur in the data, each potential simultaneous variable is examined. For each potential simultaneous factor, its partial correlation with the dependent measure, given all previously identified covariates in the table, is presented with its significance level.

Once again it should be noted that these procedures are applicable only to the endogenous measure of program duration. For the other measures, recidivism during New Pride, client success and recidivism after New Pride, linear-logistic procedures are more appropriate. The final analyses of the data will be performed using these more appropriate procedures.

Table 8
Recidivism After New Pride
(N = 917)

Variable (Abbreviation)	B	t	df	P
Place to Stay (PLST)	.118	1.91	1	< .10
Cultural Services Delivered (SCUL)	.009	2.46	1	< .05
Job Placement Services Delivered (SJPC)	-.013	-2.28	1	< .05
Unplanned Intake Services Delivered (UPDI)	-.082	-1.81	1	< .10
Planned:Delivered Job Placements (CDJB)	-.153	-1.93	1	< .10
Attend New Pride School (ATTN)	.088	1.84	1	< .10
WRAT Arithmetic Score (WTAS)	-.009	-2.52	1	< .05
Wage on Job Before New Pride (BWNP)	-.611	-1.91	1	< .10
Number Jobs During New Pride (NDUR)	.068	2.35	1	< .05
Mother's Employment (EM)	.071	2.16	1	< .05
Father's Education (SCHD)	.041	2.47	1	< .05
Place Living at Program Exit (NLVG)	.034	1.92	2	< .05
	(NL1)			
	(NL2)	-.068		
Gender (SEX)	-.129	-2.33	1	< .05
Ethnicity (RACE)	.078	2.93	2	< .05
	(RAC1)			
	(RAC2)	-.008		
<hr/>				
Missing Value Covariates:				
(MPLS)	-.038	-.64	1	n.s.
(MATT)	.062	1.30	1	n.s.
(MWTA)	-.018	-.51	1	n.s.
(MEM)	-.029	-.59	1	n.s.
(MSCD)	-.041	-1.17	1	n.s.
(MNLI)	.077	1.33	1	n.s.

Table 9

Client Success
(N = 917)

Variable (Abbreviation)	B	t	df	P
Number Legal Needs (NGP7)	.010	2.19	1	<.05
Family Needs (Yes/No) (NGC1)	-.075	-2.73	1	<.05
Diagnostic Services (Yes/No) (DGSC)	.159	2.50	1	<.05
Number General Services (SDG8)	.043	3.16	1	<.05
Completion School Program Before (RBCD)	-.312	-2.00	1	<.05
Completion School Program During (RDCD)	.131	3.91	1	<.05
Keymath Pretest Score (KPRE)	.001	2.52	1	<.05
Times Fired From Employment During (NFDU)	-.085	-2.02	1	<.05
Other Source of Wage During (DWOT)	.152	2.05	1	<.05
Job/Education Chances Perceived at Entry (JEDC)	.042	2.25	1	<.05
Restitution Ordered at Entry (Yes/No) (REST)	-.062	-2.16	1	<.05
Gender (SEX)	.089	2.11	1	<.05
Missing Value Covariates				
(MKPR)	.062	2.00	1	<.05
(MNFD)	.074	2.02	1	<.05
(MDWO)	-.119	-3.07	1	<.05
(MJDC)	-.063	-2.05	1	<.05
(MRST)	-.024	-.60	1	n.s.

Simultaneous Variables¹

Variable (Abbreviation)	Partial Correlation	P
Perceived Job Chances at Exit (JBCC)	.1328	<.05
Still Employed at End of New Pride (STIL)	.0524	n.s.
Job Ever (JOBE)	.0912	<.05
Perceived Staff Support (STSU)	.1914	<.05
Client has Remining Problems at End (REPR)	-.0743	n.s.
Program Helped Client Leave Home (LVHM)	.1146	<.05
Perceived General Satisfaction with Program (GSAT)	.1143	<.05

¹ Independently tested against background of above model.

Table 10
Program Duration
(N = 930)

Variable (Abbreviation)	B	t	df	P
School Program Completion Before Program (RBCD)	22.475	3.25	1	< .05
Job at Program Entry (Yes/No) (JBNW)	.774	2.38	1	< .05
Job Before New Pride (Yes/No) (JBEF)	-16.282	-3.93	1	< .05
Other Siblings Treated Same in Family (Yes/No) (OTSB)	-3.252	-2.32	1	< .05
Number Teachers Interested in Client (TRCN)	.352	2.04	1	< .05
Number Objectives Specified at Entry (NOBJ)	.214	3.66	1	< .05
Missing Value Covariates:				
(MRBC)	3.318	2.17	1	< .05
(MJBN)	-2.814	-1.54	1	n.s.
(MJBE)	-15.921	-14.97	1	< .05
(MOTS)	-1.782	-1.21	1	n.s.
(MTRC)	1.154	.95	1	n.s.
(MNOB)	-11.668	-7.85	1	< .05

Simultaneous Variables¹

Variable (Abbreviation)	Partial Correlation	P
School Program Completion During Program (RDCD)	.3255	< .05
Days Attended School During Program (DDUR)	.0335	n.s.
Progress in School Program During (PDUR)	.0000	n.s.
Number of Services Delivered (NSRU)	.2659	< .05
Number of Counseling Services Delivered (SDG3)	.3372	< .05
Unplanned Counseling Services (Yes/No) (CUPC)	.2564	< .05
Number Unplanned Counseling Services (NUPC)	.1769	< .05
Planned:Delivered Education Services (Yes/No) (C4)	.0000	n.s.
Number Group Counseling Services Delivered (SGC)	.1834	< .05
Planned:Delivered Employment Services (C6)	.0000	n.s.
Delivered Counseling Services (Yes/No) (SDC3)	.2505	< .05
Breadth of Delivered Counseling Services (CGDS)	.0000	n.s.
Delivered Employment Services (Yes/No) (SDC6)	.2565	< .05
Coded Proportion Successful Objectives (SUCCO)	.0000	n.s.
Job Placement Services Delivered (Yes/No) (SJCC)	.2086	< .05

¹ Independently tested against background of above model.

Table 11
Recidivism During New Pride
(N = 930)

Variable (Abbreviation)	B	t	df	P
Number Needs Specified at Entry (NNDS)	.009	2.35	1	< .05
Disparity of Desires – Expectancies Education (DISP)	-.027	-1.96	1	< .10
Gender (SEX)	-.189	-3.29	1	< .05
How Often Client Punished at Home Before (HOFP)	.045	2.51	1	< .05
Life Satisfaction (SALI)	.038	1.93	1	< .10
Family Receives AFDC (AFDC)	.096	2.69	1	< .05
Ethnicity (RACE)				
	RAC1	.073	2.43	2 < .05
	RAC2	-.029		
<hr/>				
Missing Value Covariates:				
(MNND)	.001	.02	1	n.s.
(MDIS)	-.017	-.19	1	n.s.
(MHOF)	.050	.78	1	n.s.
(MSAL)	-.009	-.10	1	n.s.
(MAFD)	-.021	-.40	1	n.s.
<hr/>				
Simultaneous Variables¹				
Variable (Abbreviation)	Partial Correlation		P	
Jobs Longer Than 10 Days During (Yes/No) (JD10)	-.1089		< .05	
Coded Ratio Successful Objectives (SUCO)	.0000		n.s.	
Number Recreational Services (SREC)	-.0841		< .05	

¹ Independently tested against background of above model.

Following the four tables are summaries of the predictors for each of the four dependent measures. A brief discussion is presented for each measure with additional summary tables.

Recidivism After New Pride. The controlling covariates in this analysis were the New Pride site dummy variables, the age variables (linear and curvilinear; quadratic), program duration, the measures of client success and recidivism during New Pride, and the measure of time to follow-up. Table 12 presents the list of independent variables which appear significantly ($p < .10$) related to recidivism after New Pride. Note that these independent variables are significantly related to the outcome measure when covarying the effects due to the pattern of missing values in the variables.

Client Success. The controlling covariates in this analysis were New Pride site, the age variables (linear and curvilinear; quadratic), program duration, and recidivism during New Pride. Table 13 presents the list of independent variables which appear to be ($p < .10$) related to client success. Note that these independent variables are significantly related to the outcome measure when the covariates for the patterns of missing values are included in the analysis.

At the bottom of the table is a list of simultaneous variables which appear related to the outcome measure. These variables are considered simultaneous with the outcome measure in that they are measured at the same point in time as the determination of client success, the end of the client's participation in the New Pride program. All of the five variables listed are positively related to client success in the program. Thus, subjects who are successful believe that they have better chances for obtaining a job at the end of New Pride and are generally satisfied with the program.

Program Duration. For the dependent measure program duration, the covariates were the New Pride site dummy variables, the age variables (linear and curvilinear; quadratic), and the dichotomous measure of recidivism during New Pride. Table 14 presents the list of independent variables which appear to be

Table 12

Preliminary Analysis of Recidivism After New Pride

Significant ($p < .10$) Predictors:

1. New Pride found client a place to stay (yes or no).
2. Number of cultural services delivered during New Pride.
3. Job placement services delivered to client.
4. Number of unplanned and delivered intake services.
5. Planned job services were actually delivered.
6. Client attended the New Pride school.
7. Score on the WRAT pre-test arithmetic subtest.
8. New Pride employed subject before entering the program.
9. Number of jobs held during New Pride.
10. Mother is employed.
11. Education of father.
12. Current living situation at end of New Pride.
13. Gender of client.
14. Race of client.

Table 13
Preliminary Analysis of Client Success

Significant ($p < .10$) Predictors:

1. Client demonstrates need for legal assistance at New Pride entry.
2. Client demonstrates problems in family relationships at New Pride entry.
3. Client demonstrates need for diagnostic services at New Pride entry.
4. Client receives general/administrative services.
5. Client completed school program before New Pride.
6. Client completed school program during New Pride.
7. Client scores on Keymath pre-test diagnostic test at program entry.
8. Number of times client was fired from jobs during New Pride.
9. Whether source of wage for employment during New Pride was other than CETA or New Pride, or business itself.
10. Client's perceived job chances relative to others in trouble with the law.
11. Restitution was ordered on client's presenting offense.
12. Gender of client.

Simultaneous Variables:

<u>Variable</u>	<u>Partial Correlation</u>
Job chances at program end	.1328
Client obtained employment	.0912
Perceived staff support of client at program end	.1914
Did New Pride help client leave home?	.1146
General client satisfaction with the program	.1143

Table 14

Preliminary Analysis of Program Duration

Significant ($p < .10$) Predictors:

1. Client completed the school program before entry to New Pride
2. Client had a job at entry to New Pride.
3. Client had a job before New Pride.
4. Other siblings of client are punished in the family in the same way.
5. Number of teachers or counselors the client believes took an interest in his/her activities.
6. Number of objectives specified on intake to New Pride.

Simultaneous Variables:

<u>Variable</u>	<u>Partial Correlation</u>
School program completed during New Pride	.3255
Number of services delivered during New Pride.	.2659
Number of counseling services delivered during New Pride.	.3372
Number unplanned counseling services delivered during New Pride.	.2564
Number of group counseling services delivered during New Pride.	.1834
Employment services were delivered during New Pride.	.2565
Job placement services were delivered during New Pride.	.2086

associated with program duration. These independent variables are significantly related to the outcome measure when the covariates for the patterns of missing values are included in the analysis.

At the bottom of the table is a list of seven simultaneous variables which appear to be positively related to the outcome measure. They are measured at the same point in time as program duration. Of course, some of them are tautological; that is, true by virtue of their logical form alone. For instance, the number of services delivered during New Pride depends on the amount of time youth remain in the program. Longer program durations increase the likelihood that a school program will be completed, or that employment services will be delivered. Receiving these services is directly related to longer program duration and indirectly related to successful termination.

Recidivism During New Pride. The controlling covariates in this analysis were the New Pride site dummy variables, the age variables (linear and curvilinear, quadratic), and the measure of program duration. Table 15 presents the list of independent variables which appear significantly ($p < .10$) related to recidivism during New Pride. Note that these independent variables are significantly related to the outcome measure when the covariates for the patterns of missing values are included in the analysis.

At the bottom of the table is a list of simultaneous variables which appear related to the outcome measure. These variables are considered simultaneous with the outcome measure in that they are measured over the same period of time as recidivism during New Pride. Both of the variables are inversely related to recidivism during New Pride. For example, obtaining a stable employment situation (one lasting more than 10 days) during New Pride is associated with a reduction in recidivism during New Pride. Further, these reductions in recidivism during New Pride are related to greater likelihoods of successful termination from the program and to reductions in recidivism after New Pride.

Table 15

Preliminary Analysis of Recidivism During New Pride

Significant ($p < .10$) Predictors:

1. Number of needs specified for each client at program entry.
2. Disparity between desired and expected amount of schooling at entry.
3. Gender of client.
4. How often the client was punished by parents before program.
5. Satisfaction with life at entry to the program.
6. The family of the client received welfare payments at program entry.
7. Ethnicity of client.

Simultaneous Variables:

<u>Variable</u>	<u>Partial Correlation</u>
Client employed in a job 10 or more days during New Pride	-.1089
Number of recreational services delivered during New Pride	-.0841

APPENDIX D

THE SIMULTANEITY OF PROGRAM DURATIONS AND RECIDIVISM DURING NEW PRIDE

The relationships between the variables program duration and recidivism during New Pride were evaluated using Limited Information Maximum Likelihood (LIML) techniques. The LIML procedures assume both dependent measures are in an interval metric (program duration is, recidivism during New Pride is not) and that the variables are in equilibrium (see Heise, 1975). This latter assumption is not evaluated here. Both assumptions were accepted in order to obtain a first approximation to the forms of these relationships in the data.

The included exogenous terms in both simultaneous equations were the New Pride site dummy variables, the age variables, and the number of needs identified at program entry. (Note the discussion in the text of the high correlation of this variable with number of objectives specified, and the significance of both in predicting program duration.) The endogenous terms of each equation are obvious; program duration for the recidivism during New Pride equation and recidivism during New Pride for the program duration equation. The excluded exogenous terms for the program duration equation were ethnicity, gender, life satisfaction, how often punished, disparity between desired and expected education, and whether or not the family receives AFDC payments (welfare). These variables and the included exogenous terms above acted as instruments for the recidivism during New Pride variable (see discussion in text of this dependent measure). The excluded exogenous terms for the recidivism during New Pride equation were whether or not the client had a job before New Pride, whether or not the client had a job at entry to New Pride, whether or not siblings were treated in the family like the client, and the number of teachers and counselors who took an interest in the client before New Pride. These variables and the included exogenous terms above acted as instruments for the program duration (PDUR) variable (see discussion in text of this dependent measure).

The coefficients of the models for each equation appear in Tables 16 and 17. Tests of overidentification restrictions for each model were non-significant (for the program duration model $F = 1.658$, $df = 6,909$, $p > .05$; for the recidivism during New Pride model $F = 1.0431$, $df = 3,909$, $p > .05$) so there is some stability in the LIML estimates of the endogenous variable coefficients (see Basmann, 1960).

The first thing to note about the coefficients for the two models is that in neither case do the endogenous simultaneous variables, program duration and recidivism during New Pride, efficiently predict one another. The small t-values presented ($t = .14$ and $t = .13$ respectively) indicate this. Second, the exogenous variables remain efficient predictors of the dependent measures. Number of needs identified, for example, remains strongly related to program duration ($B = .008$, $S.E. = .004$, $t = 2.00$) and recidivism during New Pride ($B = .314$, $S.E. = .153$, $t = 2.05$). The models analyzing recidivism and program duration in the main body of the text stand essentially unchanged.

As a result of these analyses, however, the basic outcome model stands in need of revision. The presumed simultaneous relationship between program duration and recidivism during New Pride simply does not appear to hold reliably. Whether or not a subject recidivates, he or she is apparently retained in the programs as long as possible. Further, the time spent in the programs is not appreciably related to the chances of observing criminal behavior during New Pride. The lack of reliable relationships between recidivism during New Pride and program duration serves to further dissociate the two outcome measures of recidivism after New Pride and client success.

Table 16

Program Duration Model from LIML Analysis

Variable	B	S.E.	t
Constant	158.750	110.030	1.44
Recidivism During New Pride	.826	6.155	.13
New Pride Site			
(1)	2.993	1.571	1.91
(2)	.412	1.477	.28
(3)	.842	1.639	.51
(4)	1.938	1.545	1.25
(5)	1.530	2.233	.69
(6)	-.527	1.608	-.33
Age			
(linear)	-16.669	13.971	-1.19
(quadratic)	.563	.439	1.28
Number of Needs Identified	.314	.153	2.05
Job Before New Pride	-12.262	4.887	-2.51
Job at Entry to New Pride	1.252	.386	3.24
Treatment of Other Siblings in Family	-3.336	1.726	-1.93
Number of Teachers or Counselors Taking Interest in Client Before New Pride	.302	.208	1.45

Table 17

Recidivism During New Pride Model from LIML Analysis

Variable		B	S.E.	t
Constant		-5.403	2.953	1.83
Program Duration		.001	.007	.14
New Pride Site	(1)	.018	.049	.37
	(2)	-.070	.038	1.84
	(3)	-.051	.043	-1.19
	(4)	-.088	.040	-2.20
	(5)	.237	.050	4.74
	(6)	-.076	.042	-1.81
Age	(linear)	.791	.364	2.17
	(quadratic)	-.026	.114	.23
Number of Needs Identified		.008	.004	2.00
Ethnicity	(1)	.073	.022	3.32
	(2)	-.028	.031	-.90
Gender		-.189	.064	-2.95
Life Satisfaction at Program Entry		.038	.021	1.81
How Often Punished Before New Pride		-.046	.019	-2.42
Disparity Between Desires and Expectancies for Further Education		-.027	.014	-1.93
Family Receives AFDC		.097	.037	2.62

APPENDIX E

TABLES OF THE FINAL ANALYSES OF THE NEW PRIDE OUTCOME MODEL

On the following pages are presented the tables from the final analyses of the New Pride Outcome Model. For each of the four outcome measures (program duration, recidivism during New Pride, client success, and recidivism after New Pride), the tables depict the tests of each variable's contribution to the outcome model and their coefficients. Included is relevant information on the coding of categorical variables. Excluded is the redundant information on the forms of relationships among the basic outcome variables themselves. This information is completely described in the text.

Table 18

**Final Model of Recidivism After New Pride
(N = 917)**

Variable Added	df	G ²	P
Basic Model	12	196.50	<.001
Missing Variables	6	7.47	n.s.
Ethnicity	2	17.72	<.001
Gender	1	7.21	<.010
Father's education	1	6.59	<.010
Job placement services delivered to client	1	6.28	<.025
Number of jobs during New Pride	1	7.51	<.010
WRAT arithmetic score	1	6.36	<.025
Number of cultural services	1	4.82	<.050

Table 19

Coefficients of the Final Model of Recidivism After New Pride
(N = 917)

Variable		Coefficient	S.E.	Z
Ethnicity	(1)	-.085	.148	-.58
	(2)	.442	.112	3.94
Gender		-.413	.153	-2.69
Level of father's schooling		.257	.090	2.86
Delivery of job placement services		-.099	.033	-3.02
Number of jobs held during New Pride		.436	.155	2.82
WRAT pretest arithmetic score		-.053	.021	-2.50
Number of cultural services		.040	.018	2.20

Variable Dummy Coding

Variable	Levels	(1)	(2)
Ethnicity	White	-1	-1
	Black	0	1
	Other	1	0

Table 20

Final Model of Client Success
(Successful Termination)
(N = 917)

Variable Added	df	G ²	P
Basic Model	9	602.12	< .001
Missing Variables	5	15.10	< .010
Client received general administrative services	1	18.28	< .001
School program completion during New Pride	2	14.48	< .001
Number of family relationship needs	2	7.66	< .025
Keymath pretest score	1	5.17	< .025
Times fired from jobs during New Pride	1	5.52	< .025
Gender	1	4.19	< .025
Perceived job/education chances at program entry	1	4.36	< .050
School program completion before New Pride	1	4.65	< .050

Table 21

**Coefficients of the Final Model of Client Success
(N = 917)**

Variable		Coefficient	S.E.	Z
Client received general administrative services		.537	.245	2.19
School program completion during New Pride	(1)	.340	.234	1.45
	(2)	.278	.213	1.30
Family relationship needs	(1)	-.284	.236	-1.20
	(2)	-.220	.175	-1.26
Keymath pretest score		.010	.004	2.34
Time fired from job during New Pride		-.787	.346	-2.28
Gender		.398	.214	1.86
Perceived job/education chances at program entry		.384	.170	2.26
School program completion before New Pride		-1.170	.615	-1.90

Variable Dummy Coding

Variable	Levels	(1)	(2)
Program Completion	No	-1	-1
	Yes	0	1
	Missing	1	0
Family Relationship	No	-1	-1
	Yes	0	1
	Missing	1	0

Table 22

Final Model of Recidivism During the New Pride Program
(N = 930)

Variable Added	df	G ²	P
Basic Model	9	66.95	< .001
Missing Variables	6	1.06	n.s.
Ethnicity	2	17.02	< .001
Gender	1	8.63	< .005
Number of identified needs at program entry	1	7.12	< .010
How often client punished by parents before New Pride	1	5.12	< .025
Disparity between wants and expectancies for further education at New Pride entry	1	5.04	< .025
Client's family receives welfare payments	2	7.26	< .050
Client's life satisfaction at entry	1	4.14	< .050

Table 23
Coefficients of the Final Model of Recidivism
During New Pride
(N = 930)

Variable	Coefficient	S.E.	Z
Ethnicity (1)	-.109	.137	-.79
(2)	.318	.101	3.14
Gender	-.427	.137	-3.11
Number of identified needs at program entry	.040	.017	2.31
How often client punished by parents before New Pride	.204	.081	-2.51
Disparity between wants and expectancies for further education at New Pride entry	-.129	.064	-2.03
Client's family receives welfare payments (1)	-.086	.161	-.54
(2)	.254	.001	2.54
Client's life satisfaction at entry	.179	.090	1.99

Variable Dummy Coding

Variable	Levels	(1)	(2)
Ethnicity	White	-1	-1
	Black	0	1
	Other	1	0
Welfare	No	-1	-1
	Yes	0	1
	Missing	1	0

Table 24

**Final Model of Program Duration
(N = 930)**

Variable Added	df	R ²	F	MSe	P
Basic Model	9,920	.05228	5.639	325.73	<.0001
Missing Variables	7,913	.28144	55.092	230.76	<.0001
Number of objectives specified at program entry	1,912	.00888	12.326	227.93	<.0005
Client had job before New Pride	1,911	.00573	8.010	226.19	<.0050
Client had job at program entry	1,910	.00467	6.566	224.82	<.0250
Other siblings are treated in family like client	1,909	.00415	5.867	223.62	<.0250
Number of teachers/counselors who took interest in client before New Pride	1,908	.00289	4.099	222.86	<.0500

Table 25

Coefficients of the Final Model of Program Duration
(N = 930)

Variable	Coefficient	S.E.	t
Number of objectives specified at program entry	.206	.059	3.512
Client had job before New Pride	-13.777	4.094	-3.366
Client had job at program entry	.878	.325	2.700
Siblings are treated in family like the client	-3.272	1.408	-2.325
Number of teacher/counselors who took interest in client before New Pride	.351	.174	2.025

CHAPTER NINE:
DISCUSSIONS AND RECOMMENDATIONS
FOR FUTURE RESEARCH

DISCUSSION AND RECOMMENDATIONS FOR FUTURE RESEARCH

Comparative Analysis Summary

The New Pride Replication projects were based on a model which embodies some of the best thinking in the field of community-based corrections. In concept and implementation the projects were often excellent, successfully working with many of society's hardest core juvenile offenders in a community setting. Staff really cared about youth and provided many of them with personally welcomed individual concern and attention. They delivered effective assistance in educational areas and job experience.

There was much national interest and involvement which facilitated the replication effort overall. The projects were carefully monitored. They had great community and juvenile justice system support, and excellent MIS, outstanding evaluation information, and adequate follow-up time on project youth.

Yet with all this, the projects had no overall impact on these key measures of delinquency: the rates at which youth were adjudicated for new offenses, and on their rates of incarceration. During the time they were in the program, more project youth were petitioned to court for new offenses than those in the comparison group, and were 10 percent more likely to be petitioned to court on technical violations of probation as well. Importantly, these findings can be attributed to the higher visibility of clients, to intensive supervision, and to the excellent record of accountability of the projects to the courts. There were no significant differences found between groups in rates of adjudication at any time, nor in petitions filed after the program.

An often overlooked issue in the implementation of high-profile treatment programs mandated for specific types of offenders is the impact the programs have on other parts of the system. Of particular interest is whether participation in New Pride resulted in an increase in adjudications as a

proportion of petitions filed prior to the program; that is, whether or not the program had a net-widening effect. This question was answered by comparing the percentage of sustained adjudications per total number of petitions filed, both prior and subsequent to case action date within each jurisdiction.

The results indicated that, for both the comparison and treatment groups, there was a sharp overall decline in the ratio of adjudications to petitions filed from before to after case action date ($t = -18.423$, $N = 1,149$, and $p < .0001$) and to 12 months afterwards ($t = 14.634$, $N = 641$, and $p < .0001$). There were large differences between sites in these effects, with the smallest drop observed at Chicago and the largest drop at Pensacola. Within every site except Chicago, these changes were statistically significant.

Other results confirmed that jurisdictions adjudicate at substantially different rates ($F = 99.048$, $df = 6, 1,687$, $MS(e) = .72$, and $p < .0001$), depending on their own juvenile court procedures. Before case action date, comparison group members had higher rates of adjudication overall than clients. This fact contradicts the net-widening hypothesis that clients would be adjudicated more prior to program entry in order to make them eligible for New Pride. Before the program, older youth had lower adjudication ratios than younger ones. There were no significant effects for differences in gender or ethnicity.

Next, changes in the ratios of adjudication from before to after case action date were evaluated using an analysis of covariance. Greater follow-up time was related to an increase in the adjudication ratio. Females were adjudicated less frequently than males, but there were no differences between comparison and treatment groups. Significant differences between sites were found. The same held true in an analysis comparing adjudication ratios before case action date with the adjudication ratios of offenses incurred 12 months afterwards. No effects were found for age, ethnicity, number of prior filed petitions, or number of petitions filed after case action date. Longer follow-up periods were associated with a slightly greater chance of observing sustained adjudications for petitions that were filed.

The essential point in this discussion is that the implementation of these large-scale Federally-funded projects aimed at serious and chronic offenders had no measurable system impact on the processes or procedures of the juvenile courts. Participation in New Pride was not associated with either an increase or a decrease in rates of adjudication or in commitment rates of youth to state correctional institutions. In only one analysis can the treatment groups be shown to ultimately recidivate less than the comparison groups at five of the seven sites (time-series analysis). But lacking a test formulated for this mode of analysis and an adequate sample over this time frame, no significant differences between groups can be found in the data.

Profile of the Type of Youth Served by the Projects

1,161 youth participated in New Pride between June of 1980 and January of 1984 in the seven impact cities. In general terms, the following profile emerges:

- The typical New Pride client is a black male, 16 years old, with an average of 11.3 officially recorded offenses, 6.7 of which have resulted in judicial determinations of guilt by the time he is admitted to the program.
- He is most likely to come from a family of five headed by a single parent, having a family income of \$9,999 or less. (Forty-four percent of all client families receive AFDC.)
- His parents never graduated from high school. Fifty percent of them were unemployed entirely.
- He is performing from three to four years below his assigned grade level in school in reading and mathematics, respectively, and is often a dropout.
- He has never been employed prior to his participation in the program.

Client Impact Evaluation Summary

MIS data suggest that the projects were highly successful in providing the services that were prescribed by the New pride model to the intended target population of serious and chronic offenders. These services had a number of positive impacts. The clients, on average, gained significantly on the academic achievement tests administered both before and after their participation in the program. Their participation in school improved during and afterwards. Sixty percent of them got jobs while in New Pride.

Client impact data suggest that while many services were delivered and gains were made by most of the youth, they were not enough to make up for the enormous deficits that the average clients had when they entered the program. Evidence was found to support the theory upon which the New Pride program is

based, that of differential opportunity. The youth who had the highest test scores generally when they entered the program recidivated less after the program. They had more skills to take advantage of the legitimate structures of opportunity provided by the society of which they are a part. The amount of academic gain made by youth while in the intensive phase was seven months in mathematics and more than a year in reading. Given the population of youth served by the projects, these gains are large. However, given the three to four year deficit in academic achievement, they were not large enough to strongly enhance the abilities of the average client to return to school or to otherwise join the mainstream of adolescent life. Therefore, it is not surprising that gain scores had no relationship to recidivism after the program.

Being employed for more than 10 days was negatively associated with recidivism during the program. Also associated with reduced probabilities of reoffense during the program was the number of recreational services delivered to clients. Interestingly, greater numbers of cultural activities were associated with increased recidivism afterwards. Perhaps this is due to a trade-off, with participants in cultural activities having less time for other more central services of the New Pride program.

There was no relationship between program duration and recidivism, either during or after New Pride. This suggests that projects did not terminate clients because they were petitioned to court for new offenses. If they did recidivate, they were more likely to be terminated unsuccessfully, however.

Generally over all clients, there was no relationship between successful termination from the program and recidivism afterwards. Though it was hoped that the projects would show overall average reductions, this was not expected given the findings of previous evaluation studies.

Employment variables were related to the probability of successful termination from the program, as well as to recidivism. If clients ever were employed during New Pride, they were more likely to succeed. Also, if they had

positive views about their chances of getting the kinds of jobs they wanted at program entry and exit, they were more likely to be seen as successes. Conversely, the number of times fired from jobs was associated with unsuccessful termination from the program.

In this context it may be quite important to review some of the large number of variables which did not have a significant impact on recidivism. In considering them, it should be kept in mind that the study attempted to predict who would and would not recidivate again among those who were already chronic delinquents. It did not compare more serious and less serious offenders, nor did it compare delinquents with non-delinquent controls. In the context of the New Pride evaluation, serious multiple offenders were compared only with other serious multiple offenders. Therefore, many variables which distinguish the probability of recidivism in other studies do not do so here.

For instance, in this inquiry the number of friends in trouble with the law has no relationship to recidivism. The number of prior offenses is unrelated to recidivism, when controlling for jurisdictional differences (discretionary decision-making) between the New Pride sites. All of the items related to social bonds and to stigma have no relationship to recidivism in this study, nor do any of the factors concerned with differential treatment by social agencies or by the juvenile justice system. Neither out-of-home placement nor short-term detention experience, nor the number of such experiences, have any significant association with recidivism. Neither does restitution, long-term commitments to state correctional institutions, nor overall participation in New Pride.

One of the most important pieces of information to emerge from the New Pride evaluation is that, controlling for skewness in offense histories and jurisdictional differences, there is no relationship between number of priors and subsequent recidivism. Rather, there is a statistically significant, but weak association between recidivism during the program and recidivism afterwards. This suggests that among chronic juvenile offenders, there may be no increase in the probability of recidivism due to the accumulation of criminal events.

Rather, the commission of a criminal act temporarily elevates the probability of subsequent recidivism. In this view, the greater the amount of time since the last criminal event, the less likely there will be a future one.

Significant differences emerged within the client groups. Black youth come into the program about two months younger than whites, with fewer, but slightly more serious offenses. Youth from all ethnic groups are equally likely to complete the program successfully, but Anglos and Hispanics are less likely to recidivate, both during and after participation in New Pride. This parallels what happens in the comparison groups after their assigned "case action" dates and 12 months beyond. Similarly, female clients are more likely to complete the program successfully and are less likely to reoffend. Comparison group females are also less likely to recidivate than males. The findings in the treatment groups parallel those in the comparison groups with regard to age as well, with older subjects less likely to recidivate.

Clients least likely to recidivate are white (Anglo) females older than 16 years, who come from non-welfare families in which they were not punished excessively, who don't have needs in many areas of life, and who are not satisfied with their lives when they arrive. They have generally high pre-test scores on tests of academic achievement, especially mathematics, and have fathers who are not highly educated, so that the cultural value placed on education is not undermined because of a highly educated, but possibly negative role model. When assessed in terms of recidivism alone, New Pride is best able to treat young offenders with this profile.

Alternatively, clients most likely to recidivate include younger black males who come from families on welfare, with serious academic deficiencies, who are happy with themselves as they are despite having needs in many areas of life, and who have highly educated fathers and a history of being punished frequently by their parents or guardians.

In summary, program participation did not alter known patterns of generalized levels of risk in the treatment groups. The study identified specific variables and the relative importance of these variables to the probability that a recidivating event would be detected after the program. The three most important ones are the length of the follow-up period (6.8 percent of the variation), the jurisdiction in which the youth resides (5.9 percent of the variation), and maturity (2.3 percent of the variation). Together, these account for 15 percent of the variation in recidivism. All other background, attitudinal, environmental, and program process variables add only 5 percent more to the known variation in recidivism after the program.

A Theoretical Interpretation of the Findings

Elliott (1979) demonstrated that in the area of delinquency prevention and treatment evaluation research, there is a critical need for the clear translation of sociological concepts and processes into specific change objectives and activities. Without an explicit theoretical rationale, it is not possible to distinguish program failure from theory failure, and it is equally difficult to establish causal influence in those instances where favorable outcomes are observed for treatment groups.

Even if the immediate treatment objectives are, in fact, achieved, it is still problematic to interpret findings without the ability to specify a series of intervening variables linking those treatment objectives to a theory which hypothesizes some reduction in delinquency.

The theory of differential opportunity is the theoretical framework most appropriate to the New Pride program and its data on client outcomes. The major components of the New Pride model are designed to better equip clients to compete in the legitimate opportunity structures of society. In providing severely disadvantaged young people with remedial education, job placement services, counseling, and employment experience, the project is designed to improve their chances for success in legitimate pursuits.

As youth experience success in areas where they have previously failed, and as they are exposed to broader areas of life than they have known in environments of financial and cultural deprivation, it is postulated that their anti-social behavior will decrease. The New Pride model was designed to address two of the scourges of mankind exemplified by the backgrounds of clients: ignorance and want.

Considering the findings of the study overall, there is evidence in support of the theory of differential opportunity. In the area of education, the hypothesis is that improved academic achievement (the immediate treatment objective) will result in the improvement of regular school performance, which will, in turn, increase a youngster's stake in the system of existing legitimate opportunities (in which he or she is now equipped to operate more successfully). The consequence of all this is presumed to be a reduced involvement in delinquent behavior and a lower risk of being petitioned to court for new offenses.

The projects did, in fact, attain their treatment objective of improving academic achievement among clients, who gained substantially. However, the improvement was not enough to make up for the initial average three-to-four-and-a-half-year deficiencies.

In confirmation of the theory of differential opportunity, it was shown that clients who had high pre-test scores were less likely to recidivate after the program. They were better able to take advantage of the legitimate opportunities around them, including those provided by the program. Clients with better academic skills were more likely to be terminated from New Pride successfully than other clients.

New Pride projects were also quite successful in increasing the school attendance of clients, and in reducing their rates of unexcused absences, both during and after the program. Taken together, these data imply that more remedial education may be needed if it is a reasonable goal of treatment to

provide the average client with the means to succeed in school and to better succeed in life.

An interesting finding related to father's education bears indirectly on the theory of differential opportunity. More highly educated fathers were more likely to have children who recidivated after the program. In this instance, an aversive role model may have turned youth away from education. This could have increased their probability of recidivism by effectively reducing their legitimate options.

The impact of employment on recidivism was mixed, but generally supports the theory. Employment services and single jobs lasting for more than 10 days tended to depress recidivism rates, whereas a greater number of short-term employment experiences increased them. Being employed for more than 10 days was negatively associated with recidivism during the program, but not afterwards.

Two employment variables are significantly related to recidivism after New Pride, each in a different way. Receiving job placement services during New Pride decreases the likelihood of recidivism afterward. This finding supports one of the contentions of the theory underlying New Pride: Enabling clients to seek and obtain jobs should help provide them with legitimate opportunities and encourage them to give up anti-social activities. Unfortunately, clients who obtained jobs during New Pride did not recidivate significantly less overall than those who did not. Rather, the effects of employment were mixed. The greater the number of jobs that were held by clients during New Pride, the more likely they were to recidivate afterwards. This suggests that job instability tended to increase recidivism. Most clients having jobs during New Pride had only one. Those who had more than one job typically had less stable, short-term employment experiences that were not helpful to them.

This finding points out that it is essential to optimize successful experiences for this group of young people. If every attempt to join the mainstream of society results in failure, the alternatives for these youth are very limited indeed. This is particularly true in the area of employment where most still do not have a reinforced sense that they cannot succeed.

The theory of differential opportunity hypothesizes that stress resulting from a disparity between aspirations and expectations may contribute to delinquency. When comparing delinquents and non-delinquents, previous research has indicated that the delinquent groups could be distinguished by higher aspirations for achievement than they expected to meet. The findings of this study support the proposition that going to school is a frustrating experience for chronic delinquents, and that higher expectations for education are more likely to result in recidivism, at least over the short term. Disparity does not cause recidivism among those who are already delinquents.

Perhaps earlier in delinquent careers young people may aspire to higher education yet negatively assess their chances of obtaining it, given environments of general deprivation, bad schools, and the expectations of significant others around them. This may well be a frustrating experience which could contribute to the likelihood of delinquency, at least initially. However, the data indicate that by the time youth arrive in the New Pride program, they have established records of failure in school. They are so far behind others of their age group and grade level that adequate remediation is unlikely. In addition, school attendance has frequently resulted in demeaning and embarrassing experiences. Even if they try their hardest, failure is likely, given four-year deficiencies. Going to school has become truly aversive.

In the New Pride sample, disparity between educational aspirations and expectations impacted recidivism during the program in a surprising way. It was associated with reduced probabilities of recidivism. Further examination of the data revealed that the higher the clients' expectancies for education, the greater their likelihood of recidivism, whereas aspirations had no relationship to

recidivism at all. The disparity finding was an artificial one, due entirely to the fact that higher expectations were associated with lower discrepancies between aspiration and expectation. Greater discrepancy scores simply meant that expectations were lower, and lower expectations reduced recidivism.

The finding that higher expectations for educational experience are associated with in-program recidivism is an interesting one. It suggests that patterns of school failure coupled with legal requirements to stay in school, at least until the age of 16, are linked with recidivism.

What is also interesting is the lack of any relationship of expectation to recidivism after the program. Several factors account for this finding. First, the New Pride program has provided educational experience in an individualized and supportive context. This could reduce fear of continued failure in school and increase confidence among clients that they can handle school successfully. Second, the average age of the clients has increased beyond the point where they are legally required to stay in school. Finally, educational aspirations went down over the course of the program and became spaced out over different categories, suggesting that clients had indeed been exposed to meaningful alternatives.

Broadly viewed, findings from this study concerning the causes of continued delinquency support a circumstantial approach, rather than a genetic one involving any theory of behavior which is hypothesized to operate over great stretches of time. It is most important to bear in mind that the demographic, environmental, behavioral, attitudinal, familial, and system variables that were examined here together still leave 80 percent of the variation in recidivism unexplained.

Methodological Recommendations

Our experience with New Pride has provided enormous insight into the difficulties of analyzing recidivism data. Every method used to analyze

recidivism characterizes data in a different way. For example, simply counting recidivists assumes that the first instance of recidivism for any individual adequately describes his or her behavior. Unfortunately, this kind of observation uses only a very limited portion of the data, ignoring the amount of time to the first reoffense, the fact that many individuals recidivate more than once, and the time between offenses. Linear-logistic analyses are subject to these criticisms since they are based on simple counts. Survival analyses attempt to overcome one of these shortcomings by measuring the latency to each subject's first reoffense, but again neglect later repeated offenses.

These analyses are, so to speak, numerically nearsighted. From the great wealth of data available on the offense behavior of New Pride clients, a very limited subset is extracted to represent all the recidivism of the analyzed groups (e.g., the first offense after program termination). Upon this limited extraction from the whole data base on offense behavior, the impact of the New Pride program (Chapter 7) and the efficacy of New Pride components in reducing recidivism (Chapter 8) are evaluated. It is unfortunate that the method most useful in statistically controlling bias also makes the most limited use of the data (linear-logistic analysis). This is not a fault of the New Pride evaluation, but a consequence of the current stage of development of statistical techniques appropriate to the analysis of recidivism data.

One other important feature of the types of analyses just considered is a natural constraint on the time base in which recidivism is observed. If a majority of subjects recidivate early in the analysis, only a minority of subjects form the base or the remaining data. For example, in Providence, 50 percent of both the comparison and treatment groups had new petitions by the fourth month after case action date, and 80 percent of both groups had new petitions by the twelfth month. Thus, after the first year only 20 percent of the original subject pool were being considered in the analysis. This natural constraint varies from site to site, depending upon recidivism rates in each jurisdiction. In Camden, 50 percent of both groups had new petitions by the ninth month after case action date.

Two other approaches to the analysis of recidivism taken in this evaluation more fully utilize the data. First, the total number of new petitions and sustained adjudications incurred by each subject was used to represent recidivism; a subject recidivating once would have a count of one, a subject recidivating five times would have a count of five, and so on. This approach attends to the complete data but ignores the time between offenses. Second, the time-series designs evaluate these same offenses over time and include the information regarding time between offenses. The improvement in representation of the data afforded by this approach has been fully discussed in Chapter 7 of the comprehensive report. Here, only two points will be made. First, all of the data on reoffense behavior is used. Second, by examining the time course of recidivism rates in different groups, the relative forms of the increase or decline in recidivism rates can be evaluated.

An important contingency to keep in mind is the natural time base of the analyses considered. The time bases of the analyses may interact with the latency of both background and treatment effects.

Data on variables shown to be significantly related to measures of recidivism and successful termination from the projects were analyzed using linear-logistic and multiple regression techniques. Among other things it was shown that the number of identified need areas for each subject is significantly related to recidivism during the program. The greater the number of need areas identified, the more likely the subject will recidivate during the program. Obviously, the identification of client needs quantifies the breadth of emotional, social, family, educational, and other problems confronting each person. Clients with more extensive needs are more likely to recidivate.

These linear-logistic analyses, however, in essence provide short-term perspectives on the data, as described above. The relationship of needs identified at program entry to recidivism during the program is evaluated in the first months of the program. The effect has not been demonstrated to obtain over longer periods. However, a significant relationship between recidivism

during the program and recidivism after the program leaves open the possibility that there may be an indirect effect of number of need areas identified on recidivism after the program.

If one assumes that the effect of the number of needs on recidivism during New Pride is only a short-term effect, the same results would suggest a different interpretation. If at some point in life needs are extensive, the commission of new offenses might be more likely. But this relationship may only exist coordinate with this temporary pattern of needs. When this pattern of needs changes, the relationship may disappear. Therefore, we would not expect to find the same association of needs identified at program entry with post-program recidivism.

As difficult as it is in these analyses to properly discern short-term effects, the identification of long-term effects may be even more difficult. Rebecca Maynard's study of the impact of supported work on young school dropouts and Irving Piliavin's study of its effects on ex-offenders presented data indicating that the effects of employment on recidivism may take place over a longer, rather than a shorter, period of time. In Maynard's study, favorable impact results did not begin to appear until after 18 months of follow-up in the youth sample (1980: 134). In Piliavin's study with 36 months of follow-up, 12 percent fewer experimentals than controls reported arrests (1981:99). Thus, a job may be related to a reduction in recidivism years later. The linear-logistic and regression procedures used by evaluators may suggest, but do not adequately capture these long-term effects. Each analysis effectively covers best the events within a period of months because of the natural constraints on observation intrinsic to the analysis techniques.

Another example of how the natural time base of an analytic technique may interact with a background variable is provided by the observed relationship between ethnicity and recidivism in both the comparison and treatment groups. When age is controlled in a linear-logistic analysis, observations of the effects of treatment on blacks, whites, and Hispanics begin after age is equalized. Yet it is likely that the timing of offenses with respect to age may be different among

these groups. If ethnic groups have different maturation curves with respect to recidivism and the peak level of offense activity differs between them, the observed variation in recidivism may be accounted for by maturation alone. It may have no real association with differential responsiveness to treatment.

In order to discover whether age and ethnicity interact to influence recidivism differently, the base rates of recidivism for each group at every age must be determined. The effects of an intervention may then be measured, not by comparing blacks, whites, and Hispanics from a single age or point in time, but by comparing the observed rates with the base rates for youth of the same ethnicity. This requires an entirely different analytic approach, one which considers complete offense histories. Yet only after this information is known will it be meaningful to evaluate the impact of services or sanctions on youth from different ethnic backgrounds.

In summary, the major methodological recommendations of this evaluation are: 1) to place an emphasis upon properly identifying long and short-term effects of treatment, and 2) to develop analytic techniques which make optimal use of recidivism data. The New Pride data can be used to develop more sophisticated techniques for analyzing recidivism, and at the same time, improve our understanding of what causes it. Specifically, further research should be conducted using cross-sectional time series designs, which allow for the control of key variables, including time-bound covariates like age-at-offense. A time series framework can be used to analyze all of the data.

Research Recommendations

This report has presented the results of a comprehensive evaluation research effort. During the course of the study, a number of challenging substantive issues surfaced which could not be addressed. Because of the constraints of time, mandate, and resources, additional inquiries which could answer different, but equally important, questions had to be set aside for the

future. Further research based on the New Pride dataset should essentially address three issues related to an overall study of the onset, nature, and continuation of criminal careers. These include:

- The impact of the type and sequencing of juvenile sanctions on recidivism among chronic juvenile offenders.
- The impact of case processing time on recidivism.
- The relationship of offense history to later recidivism among chronic juvenile offenders.

Sanctions

The first set of studies on the impact of juvenile sanctions could provide a better understanding of their crime control dimensions. The most fundamental questions concerning sanctions were partially addressed in the analysis of the data for the New Pride evaluation. These are, "What is the effect of (early) punishment on (later) crime?" and, "How do sanctions imposed by the juvenile court retard or accelerate the subsequent criminal behavior of juvenile offenders as they enter adulthood?" None of the variables measured concerned with differential treatment by social agencies or by the juvenile justice system had any significant impact on subsequent recidivism. These included out-of-home placement, short-term detention experience, and the number of such interventions. They also included restitution, long-term commitments to state correctional institutions, and overall participation in the New Pride program.

Two variables that did reduce recidivism within the New Pride client group were job placement services and a successful employment experience. However, multiple job experiences were associated with unsuccessful exposures to the world of work and increased recidivism. By confirming failure, they were worse than no jobs at all. It appears as if the job placement services provided by the projects increased the likelihood that clients would experience success on what was for most their first jobs.

Yet the lack of any overall relationship between the powerful interventions analyzed in this study and future delinquency among chronic juvenile offenders is a cause of concern. It is impossible to make policy recommendations concerning the specific deterrence effects of various sanctions if nothing has a measurable impact on recidivism.

Therefore, additional investigations should be conducted to explore the relationships between other kinds of sanctions that have been recorded (such as different kinds of probation and non-residential programs, foster and group home placements, ranches or camps, mental health facilities, and adult certifications) and recidivism. In addition, inquiries should be made retrospectively into the sequencing of various sanctions, because there may be certain patterns of sanctions which reduce or increase the probability of recidivism. Log-linear models may be used to explore structures in these data.

Case Processing

New Fride data contain the information necessary to examine, as a second type of study, certain aspects of court operations. The effect of incarceration and other sanctions on youth might be mitigated by delays in adjudication and sentencing which occur as a consequence of backlogs in the juvenile justice system. One suggestion is to explore, through chronologically sequenced causal modeling, the relationship of jurisdiction size to court delays, and the impact of varying delays (i.e. "speedy" trials or "fast justice") on future recidivism. Such an investigation would greatly contribute to an understanding of the operation of the juvenile justice system in multiple jurisdictions.

Offense Histories

There are several issues concerning the offense histories of youth which need to be addressed in order to understand delinquency, recidivism, and the

continuation or discontinuation of careers in crime. Future research should be conducted to explore:

- whether juveniles exhibit specialization or lack of specialization in one or several crime types (experts currently are divided over this),
- the degree to which juveniles appear to "escalate" in their behavior from less serious to more serious offenses,
- how the number of prior offenses (chronicity) is related to recidivism, within a sample exclusively comprised of multiple offenders,
- whether and how duration of involvement with the juvenile justice system affects recidivism, controlling for number of offenses, and
- whether and how age at offense interacts with court processing and juvenile justice sanctions to impact recidivism.

More refined work on empirical datasets is also needed in survival curve analysis. Among juveniles, the probability of recidivism is a function of a curvilinear relationship between age and time. Rates of reoffending do not simply increase or decrease with age, but rather, they increase as a function of age up to a certain point of peak activity and decrease with increasing age thereafter. Because of this, exponential models or exponential decay models such as that proposed by Maltz and McCleary are not appropriate in analyzing time-to-recidivate data on youth samples. The only appropriate models posit curved hazard functions which are non-monotonic (i.e., they don't simply rise or fall). These models offer the possibility of integrating maturation effects into a time-to-recidivate analysis, by providing an appropriate control for hazard differences based on age.

Another fertile area for study is the relationship among age, priors, and recidivism. Prior criminal events may predict subsequent recidivism in two

ways. In the usual notion of chronicity, the probability of subsequent recidivism is proportional to the cumulative number of prior offenses. All other things being equal, the subject with one prior criminal event is less likely to commit a subsequent offense than a subject with three prior offenses. It is the cumulative weight of chronicity that is hypothesized to cause later recidivism. In an alternative autoregression model, the probability of subsequent recidivism is a function of the recency of occurrence of a prior criminal event. This model predicts no increase in the probability of recidivism due to the accumulation of criminal events. It simply says that the commission of a criminal act temporarily elevates the probability of subsequent recidivism. Alternatively, the greater the time since the last criminal event, the less likely there will be one in the future.

In attempting to predict recidivism among juvenile delinquents, the two models yield very similar results. For subjects of equal ages, according to the first model those subjects with more prior offenses will be more likely to recidivate than those with fewer prior offenses. But those subjects with more prior offenses may also be more likely to have had a more recent offense, increasing the probability of recidivism according to the second model also. In this case the two models are not discriminable. A truly effective model for prediction awaits further research and more extensive analysis.

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Analysis Four: Time Series Designs

The time series analysis of recidivism overcomes a number of shortcomings of the previous analyses. Rather than only measuring aspects of the first offense after case action or case action date plus 12 months (linear-logistic and survival analyses), the time series designs examine all later offenses. In addition, beyond counting the number of offenses which occur as does analysis two, the time series designs allow observation of the placement of all offenses in time. The proportion of subjects recidivating in given time intervals after case action or case action date plus 12 months may be examined from interval to interval.

The biases presented in Part 1 of this chapter continue, of course, to be a problem. Biases due to differences between groups in number of prior offenses and prior offense seriousness can be ignored because they appear unrelated to subsequent recidivism in this dataset (linear-logistic analyses). Differences between groups in age at case action date are also negligible, as previously discussed. Time to follow-up is controlled in the analysis of the time series data, while biases between groups due to differences in gender and ethnic distributions are not controlled. They will be discussed as necessary.

Differences between groups in time to follow-up are controlled in the time series designs by censoring the samples when no more follow-up is available on each individual. A subject with one year of follow-up from the time of his/her case action date would be included in the estimates of subjects recidivating only for time intervals in the first year. For intervals in the second year this subject would be excluded from estimates of youth recidivating. The consequence of this progressive censoring over time is that the sample sizes in successive time intervals decrease, and the variance in estimates of subjects recidivating in each interval increases. The increasing variance in estimates over time is controlled statistically.

The data base for the time series design is best explained by example. Table 29 presents the time series data for the Fresno site. The first column

Table 29

Proportion of Subjects Recidivating in Two Month
Intervals After Case Action Date at Fresno

Months	Treatment Group			Comparison Group		
	N	Filed Petitions	Adjudi- cations	N	Filed Petitions	Adjudi- cations
1-2	130	0.423	0.331	213	0.408	0.324
3-4	130	0.253	0.184	203	0.137	0.118
5-6	130	0.284	0.223	199	0.100	0.075
7-8	130	0.130	0.123	187	0.139	0.096
9-10	130	0.169	0.146	182	0.142	0.093
11-12	130	0.130	0.115	170	0.111	0.094
13-14	123	0.065	0.032	160	0.137	0.081
15-16	116	0.094	0.051	149	0.140	0.120
17-18	114	0.087	0.087	136	0.110	0.088
19-20	106	0.075	0.056	123	0.081	0.056
21-22	97	0.072	0.061	117	0.119	0.068
23-24	94	0.106	0.074	106	0.084	0.084
25-26	82	0.024	0.000	97	0.051	0.030
27-28	74	0.054	0.054	79	0.025	0.012
29-30	63	0.015	0.000	71	0.070	0.042
31-32	56	0.035	0.035	67	0.044	0.044
33-34	46	0.021	0.000	57	0.017	0.017
35-36	39	0.000	0.000	48	0.083	0.083
37-38	33	0.000	0.000	40	0.025	0.025
39-40	-	-	-	36	0.055	0.027

presents the months examined after case action date. The months are defined as four weeks in length for these analyses and are grouped in two month blocks. This blocking helped insure the appearance of recidivating events in each interval. Month 1-2 indicates the first two months after case action date, month 3-4 indicates the second two months afterwards, and so on. For the treatment and comparison groups the next column indicates the number of subjects available to recidivate in each interval. In months 1-2, 130 treatment subjects and 213 comparison subjects were available to recidivate. The decline in sample sizes discussed in the previous paragraph appear here. Note that all 130 treatment subjects are followed for one year after program entry. The last two columns for the treatment and comparison groups are the actual proportions of subjects seen to recidivate measured by the appearance of filed petitions and sustained counts. In months 15-16, measured by filed petitions, .094 of the 116 treatment subjects recidivate (11 subjects) and .140 of the 149 comparison subjects recidivate (21 subjects). At the bottom of the table note that for months 39-40, no data are given for the treatment group. Whenever the number of available subjects fell below $N=30$, the estimated proportions recidivating were considered too variable to be used in the analyses.

The data in Table 29 shows decreasing rates of recidivism over the months for both groups and measures at Fresno. This decline is expected from a combination of maturation effects and regression to the mean recidivism rates of the groups (see discussion in Part 1). But note that the treatment group continues to decline, hitting the first zero point at months 25-26 for sustained counts, while the comparison group's recidivism rates remain roughly flat from months 25 to 40. It appears that the treatment group may in the long run recidivate less than the comparison group.

The time series data from all sites was subjected to a fitting procedure common in the econometrics literature (see Wonnacott and Wonnacott, 1979). Essentially, the data are described by fitting a curve to the recidivism data using

Weighted Least Squares regression (WLS)*. This technique provides a best fit to the recidivism data.

Continuing with the analysis of the Fresno data, the WLS fits can be used to describe the progress of recidivism in the comparison and treatment groups after case action date. The regression equations for recidivism measured by filed petitions for the groups are:

$$\begin{aligned} \text{Treatment: } P'(t) &= - .849 - .171 * T \\ \text{Comparison: } P'(t) &= -1.944 - .043 * T \end{aligned}$$

The time base, it should be repeated, is in two month blocks. When $T=1$, months 1-2 are being described. When $T=2$, months 3-4 are being described, and so on. To find the expected recidivism rate one year after program entry, set $T=6$, calculate $P'(t)$ from the equation (the proportion expected to recidivate in the two month interval at time $T*2$) and convert this value from logits to

* The proportions recidivating in each interval were first transformed to logits to linearize the post New Pride entry functions and eliminate the problem of heteroskedasticity (unequal variances) inherent in proportional data. Where zero values for recidivism rates were encountered, they were replaced by a value equal to $1/2N$ (N is sample size of the interval), a value representing the lower limits of measurement in the interval (see Cohen and Cohen, 1975). The linearized data was then regressed over intervals using weighted least squares (WLS) regression techniques. The WLS approach was taken to compensate for the decrease in sample sizes over time, providing less weight for observations from intervals with smaller samples. Finally a test of serial correlation of errors in the fitted time series data was performed to see if a correction for serial correlation was necessary (Durbin-Watson statistic). The WLS fit of the logistic function to the data is the best consistent estimator of recidivism rates over the long run for both comparison and treatment groups. Unfortunately, the nature of the time series data obviates statistical tests between the treatment and comparison groups, so the time series analyses are essentially descriptive.

probabilities.* Note that from these fits the treatment group initially recidivates at a greater rate (-.849 logits) than the comparison group (-1.944 logits). But the treatment group recidivism rate declines four times faster than the comparison group rate (B=-.171 and B=-.043 respectively). All other things being equal the treatment group ends up recidivating far less than the comparison group.

The WLS fits for sustained counts after program entry at Fresno are similar to those for filed petitions:

$$\text{Treatment: } P'(t) = -1.240 - .166 * T$$

$$\text{Comparison: } P'(t) = -2.502 - .021 * T$$

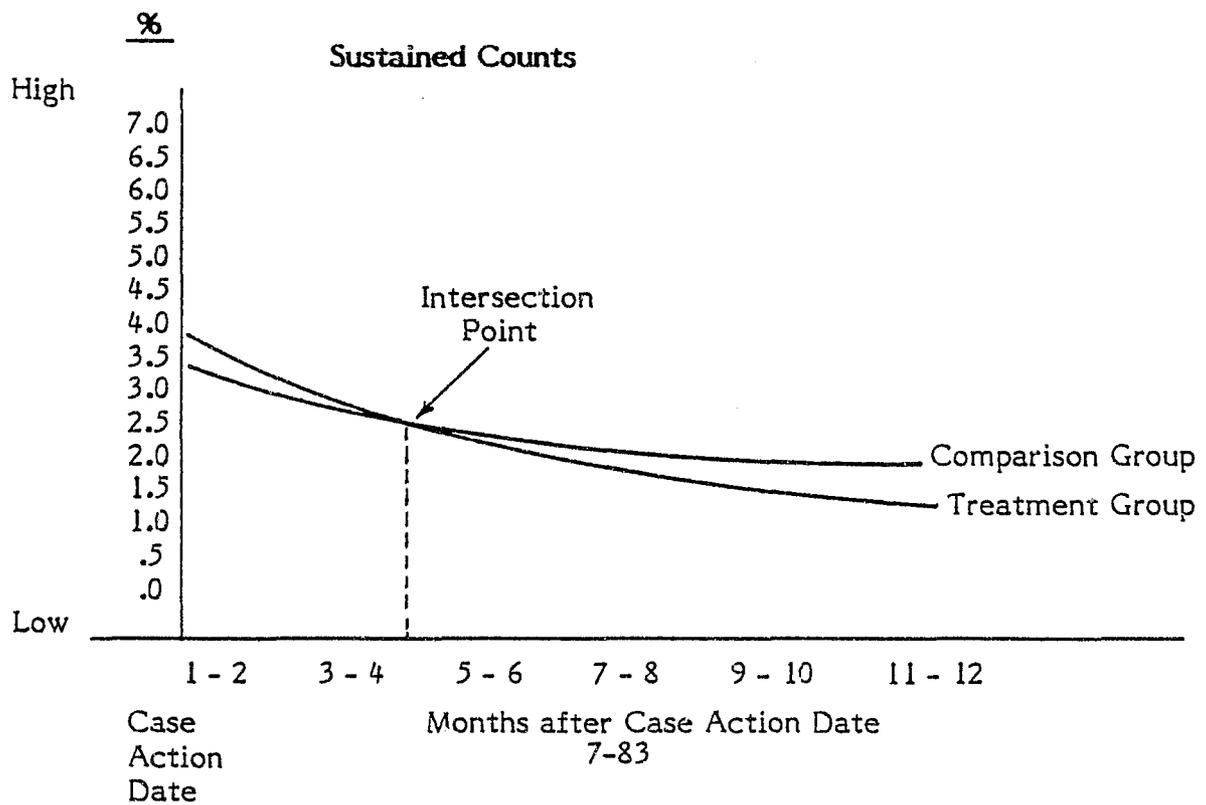
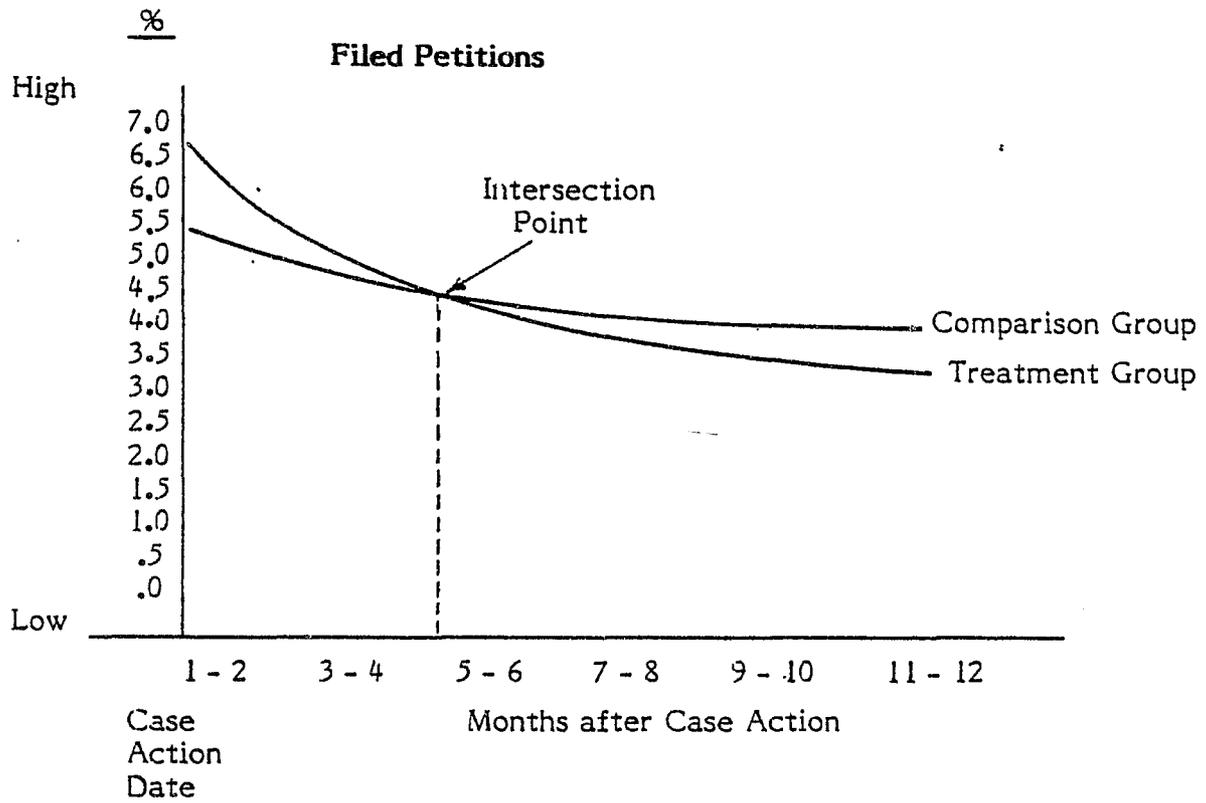
Again the treatment group starts off recidivating proportionately more than the comparison group (-1.240 logits vs. -2.502 logits respectively), but this rate declines eight times more rapidly (B=-.166 vs. B=-.021 respectively).

Figure 2 shows two diagrams portraying recidivism rates for both treatment and comparison groups after case action date for filed petitions (top) and sustained counts (bottom). The figure shows the most typical form of outcome of the WLS fits to the New Pride data site-by-site. (Not all sites exhibit this pattern of declining recidivism rates. Each site will be discussed individually below.) Recidivism rates in the figure are conveniently presented as the percent of subjects available that recidivate in any two month period. Looking at the figure it is clear that the treatment group initially recidivates more than the comparison group and the recidivism rates of both groups decline,

* For example, the expected rate of recidivism in the fifth two month interval after program entry (months 9-10) in the treatment group (measured by filed petitions, WLS fit) is $P'(5) = -.849 - .171 * 5$ or -1.704 logits. This logit value can be transformed into an exact proportion using the equation $P = 1/(1+e^{-\text{logits}})$. Thus -1.704 logits converts to an exact proportion of .154. That is, 15.4 percent of the treatment group is expected to recidivate in months 9-10 after program entry.

Figure 2

Diagrams Representing Recidivism Functions:
After Case Action Date For Comparison and Treatment Groups



with the treatment group rates declining more rapidly than the comparison group rates. The **intersection point** of the two functions, where the treatment group begins to recidivate **less** than the comparison group, is marked in the figure. The dashed line down to the time axis indicates the month at which the treatment group begins to recidivate **less** than the comparison group. Note that the recidivism rates measured by sustained adjudications are always lower than the corresponding measure of filed petitions.

From Figure 2 it is clear that there are three points of comparison between the functions for the comparison and treatment groups:

1. The initial rate of recidivism for each group is indicated by the intercept of each regression equation. This tells us how "serious" (in terms of offense rates) each group is to begin with.
2. The rate of decrease in the rates of recidivism for each group is indicated by the slope of each regression equation. This tells us how quickly the rates of recidivism are reduced over time.
3. The point of intersection of the two recidivism functions indicates the point in time at which one group begins performing better than the other.

These three points of comparison fully characterize the recidivism functions and their relationship over time.

Tables 30 and 31 present the three points of comparison between treatment and comparison groups at each site.* In all but one case (filed petitions in

* The last columns of Tables 30 and 31 present the Durbin-Watson statistics testing for positive serial correlations in errors from the estimated models. Preliminary tests of the fits showed that only positive serial correlations were present. One of the tests proved significant, that for the Camden comparison group using the measure of sustained adjudications. All other serial correlations in errors were non-significant. Given this pattern of results no correction for the biases due to serial correlations in errors were implemented for these analyses.

Table 30

**Weighted Least Square (WLS) Fits of Recidivism Data After
Case Action Date: Filed Petitions**

Site	Group	Initial* Rate	Rate of Decline	Intersec- tion** Point	Durbin-Watson Statistic
Camden	T	-1.012	-0.132	13.70	1.740
	C	-1.519	-0.058		1.316
Chicago	T	-1.989	-0.072	16.42	1.149
	C	-2.260	-0.040		1.494
Fresno	T	-0.849	-0.171	17.10	2.535
	C	-1.944	-0.043		2.346
Kansas City	T	-1.860	-0.130	15.60	1.303
	C	-2.578	-0.038		1.751
Pensacola	T	-1.774	-0.121	6.22	1.655
	C	-1.659	-0.158		1.440
Providence	T	-0.287	-0.116	11.46	1.392
	C	-0.631	-0.056		2.020
San Francisco	T	-1.620	-0.077	-	1.454
	C	-2.008	-0.079		2.237

* In Logits

** In Months After Program Entry

*** P .05 Positive Serial Correlation in Errors

Table 31

**Weighted Least Square (WLS) Fits of Recidivism Data After
Case Action Date: Sustained Adjudications**

Site	Group	Initial* Rate	Rate of Decline	Intersec- tion** Point	Durbin-Watson Statistic
Camden	T	-1.526	-0.118	11.74	1.525
	C	-1.943	-0.047		1.105***
Chicago	T	-3.002	-0.018	112.00	1.305
	C	-3.338	0.018		1.352
Fresno	T	-1.240	-0.166	17.40	2.849
	C	-2.502	-0.021		1.881
Kansas City	T	-1.998	-0.143	18.36	1.463
	C	-3.072	-0.026		1.687
Pensacola	T	-1.901	-0.159	9.34	1.629
	C	-1.971	-0.144		1.407
Providence	T	-1.170	-0.091	4.92	1.524
	C	-1.620	-0.022		2.004
San Francisco	T	-1.865	-0.087	29.20	1.351
	C	-2.493	-0.044		1.862

* In Logits

** In Months After Program Entry

*** $p < .05$ Positive Serial Correlation in Errors

Pensacola), the treatment group shows an initial rate of recidivism greater than that of the comparison group. In all but two cases (filed petitions in Pensacola and San Francisco) the treatment group shows a greater rate of decline in recidivism than the comparison group. The sites Chicago, Fresno, Camden, Providence, and Kansas City, show the typical pattern of recidivism in Figure 3, with intersection points interpretable in the way given with the description of the figure. Thus, in terms of filed petitions, these sites show the treatment group beginning to recidivate less than the comparison group in the months from 11 (Providence) to 17 (Fresno).

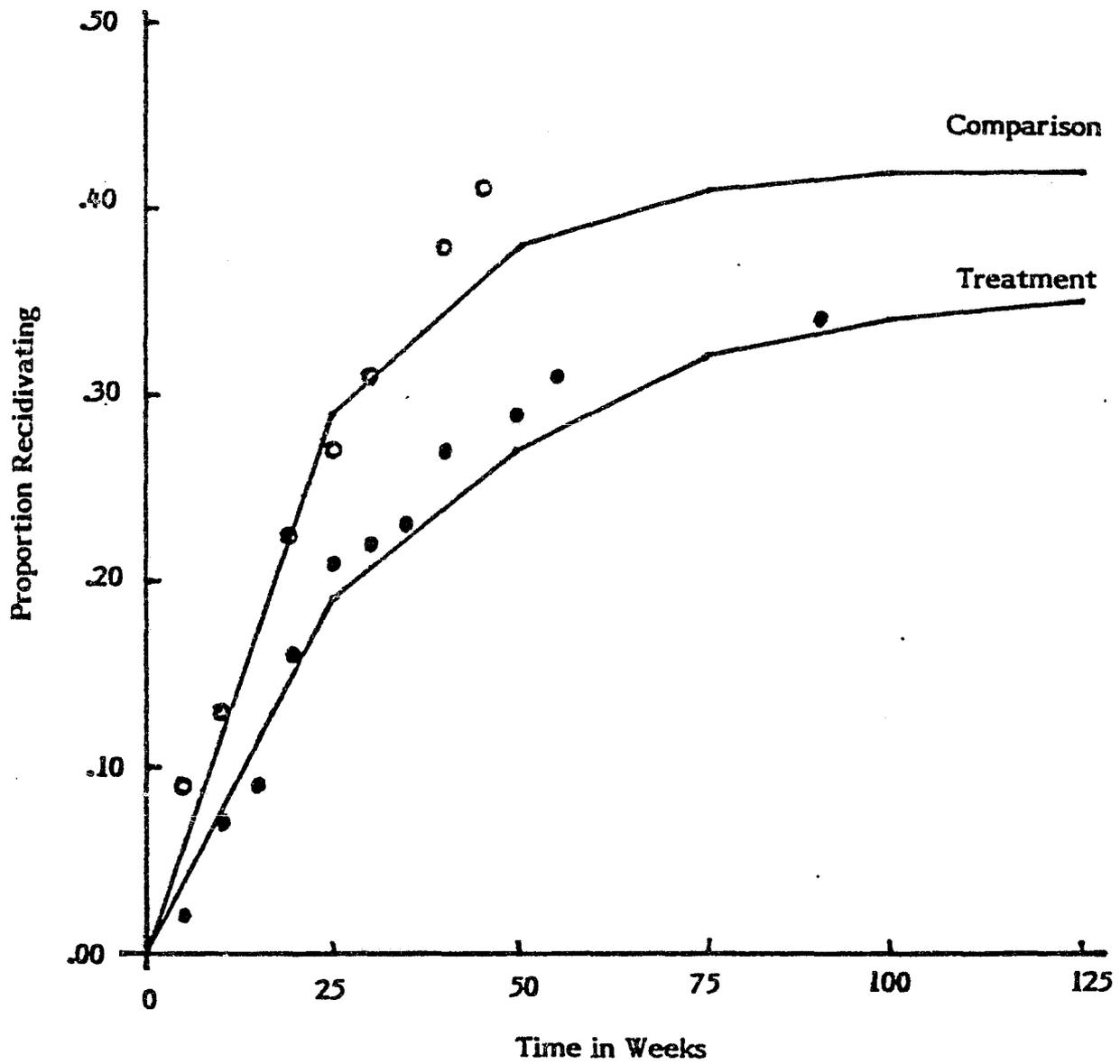
At Pensacola and San Francisco the pattern of results for sustained adjudications is the same as that shown in Figure 2. The intersection point for Pensacola is at 9.34 months and for San Francisco it is at 29.20 months. However, the pattern is not similar at those sites for the measure of filed petitions. Pensacola shows the treatment group initially recidivating less than the comparison group with the comparison group improving more rapidly. This pattern reverses that seen in Figure 2. San Francisco shows the treatment group initially recidivating more in terms of petitions filed than the comparison group as in Figure 2, but the comparison group declines in its rate of recidivism more rapidly than the treatment group. Thus, the functions do not intersect, rather they **diverge**. For that reason no intersection point is reported.

Considering only Table 31 for the moment, using the measure of sustained adjudications, the results of these analyses of the time series data can be used to order the sites by their ability to reduce recidivism. Thus, the Providence treatment program appears to have the greatest impact on recidivism, with the treatment group beginning to recidivate less than the comparison group at 4.92 months after program entry. The Chicago treatment program appears to have the least impact on recidivism, with the treatment group beginning to recidivate less than the comparison group at 112 months (or about 8.6 years).

The ordering of the sites in their ability to reduce adjudications from most to least appears to be Providence, Pensacola, Camden, Fresno, Kansas City, San

Figure 3

Cumulative Proportions Recidivating in the Comparison
and Treatment Groups at the Fresno Site;
Filed Petitions with Exponential Fits
Measured from 12 Months After
Program Entry



Francisco and Chicago. From the previous discussion it should be clear that San Francisco and Pensacola show the worst results when filed petitions are analyzed (Table 30). Using filed petitions as the measure of recidivism, the ordering of the sites in their ability to reduce recidivism from most to least appears to be Providence, Camden, Kansas City, Chicago, Fresno, Pensacola and San Francisco. The orderings using the two dependent measures are substantially different, with the exception being in Providence, where there still appears to be a more rapid reduction in recidivism in the treatment group than at any other site.

The results of the analyses must be considered in light of biases due to gender and ethnic differences between groups. At Fresno, Pensacola, Providence, and San Francisco there are fewer blacks in the comparison groups, suggesting that the comparison subjects should appear to recidivate **less** than the treatment group. At Kansas City the reverse is the case. At Providence, Pensacola, and San Francisco there are fewer females in the comparison groups, suggesting that the comparison subjects should appear to recidivate **more** than the treatment group. These differences are hypothesized to cancel each other out in Providence, Pensacola, and San Francisco. While they undoubtedly alter the baseline differences between treatment and comparison groups, this would change the initial rates of recidivism and intersecting points of the functions, but **not** necessarily change the rates of decline observed in recidivism.

Despite the problems with biases in the data, the fits do suggest greater apparent declines in the rates of recidivism in the treatment group than in the comparison group for at least five of the seven sites (Tables 30 and 31). As time after case action date passes and the effects of the treatment program affect the treatment group, the group as a whole tends to recidivate less. This decrease in the proportions recidivating over time ultimately leads to an improvement in performance in the treatment group over that of the comparison group. Descriptively, over the long run, the treatment programs may have an effect on reducing recidivism rates.

Offense Seriousness

As noted in the introduction to this chapter, one measure of recidivism, largely unexplored in this data, is the seriousness of offenses committed by the subjects in the comparison and treatment groups. The New Pride program may not reduce recidivism in the treatment group, but may reduce the seriousness of offenses committed. The means by which seriousness of offenses is evaluated was discussed in Part 1, in addition to its distributional problems. The average seriousness of offenses before New Pride will be compared with the average seriousness of offenses, for those subjects that did reoffend, after New Pride entry.

The first question to be asked is whether offense seriousness changes from before to after case action date overall. The average seriousness of adjudicated offenses in the treatment and comparison group increases from before case action date (mean cluster score = 8.176) to after case action date (mean cluster score = 8.699), and from before (mean cluster score = 8.229) to 12 months after case action date (mean cluster score = 8.440). The difference in mean cluster scores before case action are due to different matched samples having recidivating offenses after case action vs. 12 months after case action date. Both differences are significant ($t=3.141$, $N=978$, $p<.002$ and $t=2.566$, $N=515$, $p<.011$). Similarly, the average seriousness of filed petition offenses increases from before (mean cluster score = 8.260) to after case action date (mean cluster score = 8.896), and from case action date (mean cluster score = 8.351) to 12 months after case action date (mean cluster score = 9.143). Again both increases are statistically significant ($t=4.033$, $N=1148$, $p<.0002$ and $t=3.568$, $N=641$, $p<.0005$).

The second question to be asked is whether differences in average offense seriousness between the comparison and treatment groups appear in the data. Before case action date, on a site-by-site basis, significant differences in seriousness scores between groups can only be found at Kansas City. There, the comparison group is composed of more serious offenders than the treatment group (see Tables 8 and 9). Overall, however, there are no significant

differences between groups before case action date when measuring average seriousness of filed petitions ($t = -.070$, $N = 1686$, $p > .05$) and sustained adjudications ($t = -.886$, $N = 1686$, $p > .05$).

The final question to be asked is whether these lack of differences persist after case action date; that is, whether the treatment subjects exhibit lower offense seriousness after contact with the program. The answer to this question requires a more complex analysis. An analysis of covariance can be used to assess changes in offense seriousness from before to after New Pride entry. Covarying each subject's level of prior seriousness against each measure of seriousness after case action date, tests can be made of significant changes in offense seriousness from before to after case action.* For example, a significant effect for differences in gender may be due to a decline in offense seriousness for female subjects relative to male subjects. Analyses of four dependent measures, average seriousness scores of filed petitions and sustained adjudications after case action date and case action date plus 12 months, reveal that there are significant correlations of seriousness scores before and after case action, but no differences between comparison and treatment groups. Each analysis will be discussed separately.

Covarying the average seriousness of sustained adjudications before New Pride entry against seriousness of offenses afterwards ($r = .210$, $F = 45.02$, $df = 1,976$, $MS(e) = 25.58$, $p < .001$), there are significant differences between sites in change in seriousness scores ($F = 11.12$, $df = 6,970$, $MS(e) = 24.084$, $p < .001$). No other significant effects could be found in testing the variables of ethnicity, gender, time to follow-up, and age at entry. Differences between the comparison and treatment group are not significant ($F = .33$, $df = 1,969$, $MS(e) = 24.101$, $p > .05$), nor is the New Pride site by group interaction ($F = .347$, $df = 6,963$, $MS(e) = 24.198$, $p > .05$).

* This type of analysis makes a number of assumptions about the error structure of this data. These assumptions may or may not be appropriate. A simple discussion of models for testing change over time, reviewing the assumptions of each, can be found in Kenney (pps. 206-226; 1979). This approach was chosen primarily for its simplicity in this preliminary analysis of the seriousness data.

Covarying the average seriousness of sustained adjudications before case action date against seriousness of offenses 12 months afterwards ($r = .172$, $F = 15.74$, $df = 1, 513$, $MS(e) = 27.33$, $p < .001$), there are significant differences between sites in change in seriousness scores ($F = 5.576$, $df = 6, 507$, $MS(e) = 25.94$, $p < .001$), significant differences by ethnic groups ($F = 3.622$, $df = 2, 503$, $MS(e) = 23.731$, $p < .050$), and a significant effect for age at case action date ($F = 4.022$, $df = 1, 502$, $MS(e) = 23.590$, $p < .05$). The ethnic differences show that the seriousness scores of black youth increase while the seriousness scores of other groups decrease 12 months after case action date. The age effect suggests that older subjects show lowered seriousness scores 12 months after case action date. No significant effects were found for the variables gender and time to follow-up. Differences between the comparison and treatment groups are not significant ($F = .318$, $df = 1, 501$, $MS(e) = 23.622$, $p > .05$), nor is the New Pride site by group interaction ($F = .121$, $df = 6, 495$, $MS(e) = 23.873$, $p > .050$).

Covarying the average seriousness of filed petitions before case action date against the seriousness of offenses subsequently ($r = .130$, $F = 19.804$, $df = 1, 1146$, $MS(e) = 26.221$, $p < .001$), there are significant differences between sites in changes in seriousness scores ($F = 9.719$, $df = 6, 1140$, $MS(e) = 25.076$, $p < .001$), and significant differences for gender ($F = 5.648$, $df = 1, 1139$, $MS(e) = 24.203$, $p < .018$). Seriousness scores for females decrease subsequently relative to males. No significant effects were found for the variables representing ethnicity, age at entry and time to follow-up. Differences between the comparison and treatment groups are not significant ($F = 1.259$, $df = 1, 1138$, $MS(e) = 24.973$, $p > .050$), nor is the New Pride site by group interaction ($F = .205$, $df = 6, 1133$, $MS(e) = 25.056$, $p > .050$).

Covarying the average seriousness of filed petitions before case action date against the seriousness of the petitions incurred 12 months afterwards ($r = .144$, $F = 13.453$, $df = 1, 639$, $MS(e) = 29.516$, $p < .001$), there are significant differences between sites in changes in seriousness scores ($F = 6.814$, $df = 6, 633$, $MS(e) = 27.988$, $p < .001$) and significant differences for gender ($F = 3.976$, $df = 1, 630$, $MS(e) = 26.515$, $p < .047$). Seriousness scores for females

decrease 12 months after case action date relative to males. No significant effects were found for the variables representing ethnicity, age at entry, and time to follow-up. Differences between the comparison and treatment groups are not significant ($F = .067$, $df = 1,631$, $MS(e) = 27.908$, $p > .05$), nor is the New Pride site by group interaction ($F = .211$, $df = 6,625$, $MS(e) = 28.120$, $p > .05$).

In summary, there is no evidence to suggest any differences between treatment and comparison groups in seriousness scores from before to after case action date. Site to site differences appear, as they do in most parts of the New Pride data, and an effect for gender can be found for the measure of average seriousness of filed petitions.

Incarceration

The relationship between the measure of incarceration used in this study and subsequent recidivism was discussed in the section on the linear-logistic analysis of recidivism (pages 60-62). There it was demonstrated that incarcerations in the first 12 months after program entry do **not** significantly impact recidivism 12 months after case action date. The definition of incarceration used in the following analyses is also discussed at that point in the text.

In this section the issue of using incarcerations as a measure of recidivism will briefly be taken up again. Putting aside the reasons discussed in Part 1 of this volume for **not** using incarcerations as a basic measure of recidivism (see the discussion of system penetration), a linear-logistic model will be used to predict incarcerations 12 months after New Pride entry. The independent measures to be used in this analysis are: incarcerations before and during the first 12 months after case action date, whether or not a filed petition or sustained adjudication occurred after case action date, number of prior offenses (all offenses, filed petitions and sustained adjudications), New Pride site, ethnic group, gender, age at entry, and time to follow-up. In addition, of course, tests of the relationship of treatment and comparison group membership to subsequent incarceration will also be made.

Table 32 presents the results of a forward stepwise analysis of the incarceration data. The first column presents the variable name, the second column the value of G^2 representing improvement in fitting the model to the data, the third column the degrees of freedom of each entered variable, the fourth column the probability level at which the variable was found significant, and the fifth column the B coefficients from the last step of the model for predicting incarcerations 12 months after case action date. Note that New Pride sites are coded with six dummy variables and the three ethnic groups (white, black and other) are coded with two dummy variables. Further note that the predicted rates of incarceration are given in logits which can be converted to probabilities.

Table 32

Stepwise Results of Predicting Incarcerations 12 Months
After Case Action Date from Prior Variables

Variable Added		G ²	df	P	Coefficient*
Sustained Adjudication		245.412	1	< .001	1.780
Time to Follow-up		57.604	1	< .001	0.011
Incarcerations Before		21.959	1	< .001	0.219
New Pride Site	(1)	52.048	6	< .001	0.214
	(2)	-	-	-	0.708
	(3)	-	-	-	-1.670
	(4)	-	-	-	-0.452
	(5)	-	-	-	0.892
	(6)	-	-	-	-0.249
Age at Entry		5.345	1	< .022	-0.173
Ethnicity	(1)	6.526	2	< .039	-0.005
	(2)	-	-	-	0.246
Constant		-	-	-	-2.060

* Determined from complete model with all terms entered.

The B coefficients can be used to interpret the relationships of the variables to incarcerations 12 months after case action date:

- Having a sustained adjudication after case action date dramatically increases the chances of being incarcerated.
- Greater follow-up time increases the chances of an incarceration appearing in the data base.
- Having been incarcerated before case action date increases the chances of being incarcerated later.
- New Pride sites, typically, vary considerably in their related probabilities of incarceration.
- Older subjects are less likely to be incarcerated than younger subjects (This it should be noted is an effect independent of that due to having another sustained adjudication).
- Finally, blacks are far more likely to be incarcerated than whites or other ethnic groups.

This basic stepwise model may serve as a background for testing for differences between treatment and comparison groups as to their chances of subsequent incarceration. There is no statistically significant relationship between group membership and subsequent incarceration ($G^2=.034$, $df=1$, $p>.050$). Neither is there a significant relationship of the site by group interaction to subsequent incarceration ($G^2=3.242$, $df=6$, $p>.050$).

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APPENDIX A

MULTICOLINEARITY OF LINEAR-LOGISTIC MODEL COVARIATES

The linear-logistics models presented in Chapter 8 include a large number of covariates to control for a number of biases between groups in the New Pride comparison-treatment group samples. The presence of these covariates in the models may produce inefficient estimates due to multicollinearity of the independent variables. The problem of multicollinearity in these data, however, is minimal. A review of the following asymptotic correlation matrix of parameter estimates from the linear-logistic maximum likelihood estimation procedure reveals this. Data are presented for parameter estimates from the analysis of filed petitions after program entry. The correlation matrices for the other three examined dependent measures are virtually identical.

In Table 33, the matrix of correlation coefficients, the largest values are followed by asterisks. In general the coefficients are quite low. There is a large correlation between the parameter estimates of the two dummy variables for ethnicity, but no other large correlation of these dummies to other terms of the model. Naturally there are substantial correlations between the linear and quadratic effects for age. And there are substantial correlations between the parameter estimates of the variables testing for the curvilinear age effect and the constant of the model. Undoubtedly this is due to the strength of the age effects in setting the basal rates of recidivism for the groups in these analyses. The generally low intercorrelation of parameter estimates shows that the inclusion of the covariates as fixed terms in the linear-logistic models does not result in problems of multicollinearity.

**Matrix for Petitions Filed Offenses
After Entry to New Pride**

	Sex	Race(1)	Race(2)	PFPS	TTF	LPRP	AGEC	NNPS(1)	NNPS(2)	NNPS(3)	NNPS(4)	NNPS(5)	NNPS(6)	AGES	EXCL	Constant
Sex	1.000															
Race(1)	.055	1.000														
Race(2)	-.104	-.584 [*]	1.000													
PFPS	.100	.108	-.159	1.000												
TTF	-.048	-.012	.026	-.016	1.000											
LPRP	.066	-.010	.013	.058	.005	1.000										
AGEC	-.043	.023	.015	.009	-.010	-.002	1.000									
NNPS(1)	-.025	-.193	-.034	-.058	.027	.376	.013	1.000								
NNPS(2)	-.067	.083	.083	.060	.104	-.195	.014	-.329	1.000							
NNPS(3)	.040	.189	-.124	.019	-.068	-.009	.012	-.149	-.243	1.000						
NNPS(4)	.054	.114	-.023	-.077	-.234	.143	.027	-.103	-.264	-.102	1.000					
NNPS(5)	.008	.072	.020	.120	-.109	-.126	-.003	-.180	-.172	-.094	-.109	1.000				
NNPS(6)	-.102	-.341	.156	.053	.192	.005	-.056	.012	-.218	-.159	-.225	-.100	1.000			
AGES	.052	-.012	-.029	.005	.011	.001	-.957 [*]	-.018	-.049	.022	-.051	-.030	.088	1.000		
EXCL	.055	.007	.099	-.049	-.011	-.037	.025	-.047	-.041	.110	.087	-.006	-.237	-.012	1.000	
Constant	.072	-.025	.003	-.154	-.089	.100	-.928 [*]	-.047	.035	-.039	.026	.040	-.033	.796 [*]	-.014	1.000

Variable Definitions

Sex:	Gender (1 = Male, 2 = Female)
Race(1):	Ethnicity dummy variable
Race(2):	Ethnicity dummy variable
PFPS:	Prior seriousness of filed petitions
TTF:	Time to follow-up in weeks
LPRP:	Logarithm of number of prior filed petitions
AGEC:	Linear effect for age at program entry
NNPS(1)-NNPS(6):	New Pride site dummy variables
AGES:	Quadratic effect for age at program entry, age squared
EXCL:	Comparison versus treatment group code
Constant:	Constant of the model

APPENDIX B

COEFFICIENTS OF LINEAR-LOGISTIC ANALYSIS PREDICTING FILED PETITIONS AFTER CASE ACTION DATE

Table 34 presents the coefficients from the linear-logistic model fitting filed petitions after case action date. The variable names are self-explanatory, but note that the dummy variables coding ethnicity and New Pride sites are listed under their respective variable names. The second column presents the coefficients, in logits, for each variable predicting filed petitions after case action date. These coefficients are interpreted in the same way as B-coefficients in regression models. The third column presents Z-values for each coefficient, the coefficient divided by its asymptotic standard error from the maximum likelihood estimate.

The proportions of subjects expected to recidivate may be found by first calculating the expected logit values from the above table, then transforming the logits into proportions using the transformation $P(r) = 1/(1 + e^{-L})$ where $P(r)$ is the proportion and L is the logit value. The dummy variables coding ethnicity are effects coded:

<u>Ethnicity</u>	<u>(1)</u>	<u>(2)</u>
White	-1	-1
Black	0	1
Other	1	0

and the effects codes for sites are:

<u>Site</u>	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>	<u>(6)</u>
Chicago	-1	-1	-1	-1	-1	-1
Fresno	0	0	0	0	0	1
Camden	0	0	0	0	1	0
Kansas City	0	0	0	1	0	0
Pensacola	0	0	1	0	0	0
Providence	0	1	0	0	0	0
San Francisco	1	0	0	0	0	0

Table 34

**Coefficients of Linear-Logistic Analysis Predicting
Filed Petitions After Case Action Date**

Variable	Coefficient	Z
Gender	-.455	-4.220
Ethnicity		
(1)	-.081	-.750
(2)	.389	4.540
Seriousness (PF)	-.022	-.790
Time to Follow-up	.011	9.060
Log Priors (PF)	.070	.584
Age at Entry	.233	1.140
Age-Squared	-.023	-3.650
New Pride Sites		
(1)	.081	.501
(2)	1.940	8.500
(3)	-1.010	-6.830
(4)	-.773	-4.650
(5)	.073	.525
(6)	.044	.317
Groups	-.144	-2.280
Constant	1.650	1.040

APPENDIX C

THE CUMULATIVE RECIDIVISM FUNCTION

Maltz and McCleary (1977) have suggested that a model of the cumulative recidivism functions be fit to the data, segregating estimates of the rate at which recidivism occurs from the predicted maximum proportion of the sample that will ever recidivate. The model they propose is an exponential decay model which relates the number of subjects recidivating from the time of case action:

$$P(t) = P(\max)(1 - e^{*-rt})$$

where $P(t)$ is the proportion recidivating at time t , $P(\max)$ is the maximum predicted proportion that will ever recidivate, and r is the rate parameter. Larger values of r indicate faster rates, i.e., the maximum proportion recidivating, $P(\max)$, is reached more quickly. This model provides separate estimates of a rate parameter and maximum proportion recidivating for any cumulative recidivism function so fit.

Lloyd and Joe (1979) have proposed a procedure for performing the fits of the exponential decay model to the cumulative recidivism data. While there are some problems with statistical validity of the approach (see Miley, 1978; Maltz, McCleary and Pollock, 1979 and Appendix A), it does provide estimates of the differences of model parameters between comparison and treatment groups. The results of fitting the Maltz and McCleary (1977) model to the data at each site appear in Tables 35 through 38. A graphic portrayal of the results of this fitting procedure for the Fresno site's data (recidivism 12 months after program entry measured by filed petitions) appears in Figure 2.

Tables 35 through 38 present the fitted values of the two parameters of the exponential model, $P(\max)$ and r , and an F-test of differences between the forms of the functions overall. As the reader may see, there are no significant differences between the forms of the functions, although differences in the rate parameters, r , and asymptotes, $P(\max)$, may be quite large. Even in the case of Fresno, the proportion recidivating 12 months after case action is not significantly different between groups.

Table 35

**Fitted Parameter Estimates for the Maltz and
McCleary (1977) Exponential Decay Model:
Recidivism After Case Action Date
for Filed Petitions**

Site	Group	P(max)	r	F	df	P
Camden	T	.7565	.0160	0.30	2,300	.7480
	C	.7138	.067			
Chicago	T	.7142	.0154	-	-	-
	C	-	-			
Fresno	T	.7600	.0139	0.02	2,340	.9852
	C	.7526	.0131			
Kansas City	T	.5534	.0123	1.49	2,174	.2261
	C	.6973	.0097			
Pensacola	T	.5665	.0143	0.40	2,215	.6740
	C	.4939	.0166			
Providence	T	.9159	.0220	-	-	-
	C	-	-			
San Francisco	T	.8343	.0092	0.22	2,239	.8045
	C	.7948	.0087			

Table 36

Fitted Parameter Estimates for the Maltz and
McCleary (1977) Exponential Decay Model:
Recidivism After Case Action Date
for Adjudications

Site	Group	P(max)	r	F	df	P
Camden	T	.7173	.0112	0.01	2,300	.9900
	C	.6968	.0140			
Chicago	T	.5394	.0096	-	-	-
	C	-	-			
Fresno	T	.6144	.0119	0.32	2,340	.7285
	C	.6718	.0108			
Kansas City	T	.5179	.0109	0.55	2,174	.5841
	C	.6128	.0084			
Pensacola	T	.4463	.0188	0.01	2,215	.9943
	C	.4383	.0183			
Providence	T	.8302	.0147	0.30	2,206	.7422
	C.	.8770	.0144			
San Francisco	T	.7971	.0081	0.08	2,239	.9263
	C.	.7771	.0070			

Table 37

**Fitted Parameter Estimates for the Maltz and
McCleary (1977) Exponential Decay Model:
Recidivism 12 Months After
Case Action Date for
Filed Petitions**

Site	Group	P(max)	r	F	df	P
Camden	T	.5088	.0160	0.78	2,295	.5365
	C	.5959	.0146			
Chicago	T	.7774	.0046	0.68	2,183	.5125
	C	.9620	.0049			
Fresno	T	.3550	.0149	0.76	2,294	.5251
	C	.4258	.0226			
Kansas City	T	.5117	.0049	0.05	2,173	.9800
	C	.4599	.0075			
Pensacola	T	.4338	.0077	0.73	2,197	.5147
	C	.2646	.0196			
Providence	T	.8498	.0102	0.01	2,195	.9905
	C	.8131	.0182			
San Francisco	T	.7727	.0073	0.93	2,231	.6018
	C	.6049	.0102			

Table 38

**Fitted Parameter Estimates for the Maltz and
McCleary (1977) Exponential Decay Model:
Recidivism 12 Months After
Case Action Date for
Adjudications**

Site	Group	P(max)	r	F	df	P
Camden	T	.4702	.0122	1.82	2,295	.1611
	C	.6098	.0112			
Chicago	T	-	-	-	-	-
	C	-	-			
Fresno	T	.3059	.0108	0.91	2,294	.5929
	C	.3800	.0194			
Kansas City	T	.2759	.0094	1.09	2,173	.3394
	C	.4183	.0067			
Pensacola	T	.2285	.0105	0.02	2,197	.9918
	C	.1978	.0198			
Providence	T	.6773	.0083	0.56	2,195	.5750
	C	.7633	.0108			
San Francisco	T	.7929	.0057	2.16	2,231	.1159
	C	.4911	.0117			

Two additional comments about Tables 35 through 38 should be made. First of all, there are some missing entries in the tables. These missing entries occur because the fitting procedure failed to reach convergence on a solution for the parameters after 1000 iterations. It appears in each case that the asymptotic correlation of the parameter estimates approached unity, making the functions impossible to fit. Second, although there are no significant differences between groups, the parameter estimates are asymptotically consistent and represent best estimates of recidivism rates, \underline{r} , and the total proportion of subjects that will ever recidivate, $P(\max)$. Thus, looking at Table 35 for filed petitions after case action, at Fresno fully 76 percent of the treatment group and 75.26 percent of the comparison group will be expected to recidivate ever.

Figure 3 presents the fit of the Maltz and McCleary (1977) exponential decay model to the Fresno data for filed petitions 12 months after case action. It is apparent from the figure that the functions do adequately approximate the data. 35.5 percent of the treatment group and 42.53 percent of the comparison group are ultimately expected to recidivate if the counting begins a year after case action, and the recidivism rate of the comparison group is 1.5 times as rapid as the treatment group's recidivism rate ($r = .0226$ vs. $r = .0149$ respectively).

There is the additional curiosity in the analyses of the Fresno data that while the empirical functions appear to be of different forms (see text, Table 28), these differences are not detected in fitting the exponential decay models to the data. As noted before the empirical data may be too noisy to detect differences in function forms. However, it may also be the case that the exponential model is simply not appropriate to the data. Fitting inappropriate models to survival data is a guaranteed way not to find differences between groups.

While an extended discussion of this issue is impossible to conduct here, one major point uncovered by these time-to-recidivate analyses must be made. The exponential decay model, or "split group" model as Maltz and McCleary (1977) like to call it, assumes that there are two groups of subjects entered in the analysis, one group never at risk and another at risk constantly throughout the data. The illogic of the "split group" approach has been roundly criticized by Bloom (1979).

Another assumption of this model deserving of discussion is the notion of **constant** risk for the group of subjects who are at risk. This assumption simply states that for equivalent intervals of time, the proportion of subjects that will recidivate of those available to do so will remain a constant. That is, to rephrase the problem, as time goes on and subjects get older, the likelihood of recidivism remains roughly constant. However, according to the data presented earlier on maturation effects, subjects become less likely to recidivate as time passes, which suggests that this function may be non-monotonic.

The formulation of models describing cumulative recidivism will eventually have to be conditioned on the acknowledged effects of maturation. These models will require, at the least, parameters allowing for the decline in risk over time as commonly found in Weibull and other curved hazard functions (Lawless, 1982; Bloom, 1979). If the models are to apply to younger and older juveniles from 13 to 18 years of age, they will require non-monotonic hazard functions to properly characterize maturation effects. Additional notes on some models applicable to the New Pride data appear in the following Appendix.

APPENDIX D

THE ANALYSIS OF TIME-TO-RECIDIVATE FUNCTIONS

Analyses of time-to-recidivate cumulative recidivism functions for comparison and treatment groups in the New Pride data have assumed the Maltz and McCleary (1977) model of recidivism to hold. This exponential decay model is usually expressed in the form:

$$F(t) = A*(1 - \exp(-rt))$$

where $F(t)$ is the number of subjects recidivating (failing) by time, t , A is the asymptote of the function, and r is the rate parameter. The asymptote, A , and rate parameter, r , can be calculated separately for comparison and treatment groups, and estimates of differences between groups on these parameters determined. These tests are outlined by Maltz and McCleary (1977) and procedures for implementing the curve fits and statistical tests developed by Lloyd and Joe (1979).

Choice of a parametric procedure for the analysis of the recidivism data over standard non-parametric procedures for comparing survival functions was premised on several points: First, selection of an appropriate parametric model of the recidivism data enables a more efficient estimation of differences between groups over non-parametric procedures (which make minimal assumptions about the parametric form of the data). Second, Maltz and McCleary (1977) provide a method to directly compare the parameter estimates of asymptotes, A , and recidivism rates, r , between groups, allowing independent tests of these parameters. Third, provision of these parameter estimates informs us not only that the comparison and treatment groups differ, but describes how these differences arise.

Unfortunately, implementation of this analysis procedure using the New Pride data has been difficult. Even with a quite extended period of follow-up (up to four years in the current data), the time-to-recidivate functions cannot be

estimated in all cases using Lloyd and Joe's (1979) program. The substantial colinearity of parameter estimates for \underline{A} and \underline{r} , make convergence to the fit criterion impossible in some cases. A further aggravating point is the observation by Maltz, McCleary and Pollock (1979) that the statistical properties of the Maltz and McCleary (1977) estimators are not well behaved and that the magnitude of error in the estimates of the covariance matrix of model terms is not known.

The immediate concern with such analytic problems is whether they arise from the procedures implemented by Lloyd and Joe (1979) or from attempting to fit the exponential decay model to data inappropriate to this form. This appendix will examine the latter possibility in some detail. Alternatively, one may fall back to basic non-parametric procedures for analyzing this data. Unfortunately this strategy is indeed a step backward. The power of parametric models, as mentioned, when appropriate to the data analyzed, is that they provide more efficient estimates of differences between groups in terms of the form of their respective recidivism functions.

Alternate Models of Time-to-Recidivate Functions

The adequacy of a mathematical model in describing empirical data is determined by comparing empirically derived functions with functions predicted from the model. Discrepancies between the two suggest inadequacies of the model, and may point toward improvements of the model and hence to a better description of the data.

In addition to the exponential decay function, three alternate models will be considered. First, a simple exponential model without an asymptote:

$$F(t) = 1 - \exp(-rt)$$

where r is a rate parameter. This model assumes that all subjects in the sample (N) are at risk to recidivate. Note that the original exponential decay model assumes that only A subjects are at risk to recidivate. Second, a Weibull model without an asymptote:

$$F(t) = 1 - \exp(-(rt)**B)$$

where r is again a rate parameter and B is a shape parameter. Third, a hyperbolic decay model of the form:

$$F(t) = A*t/(t + B)$$

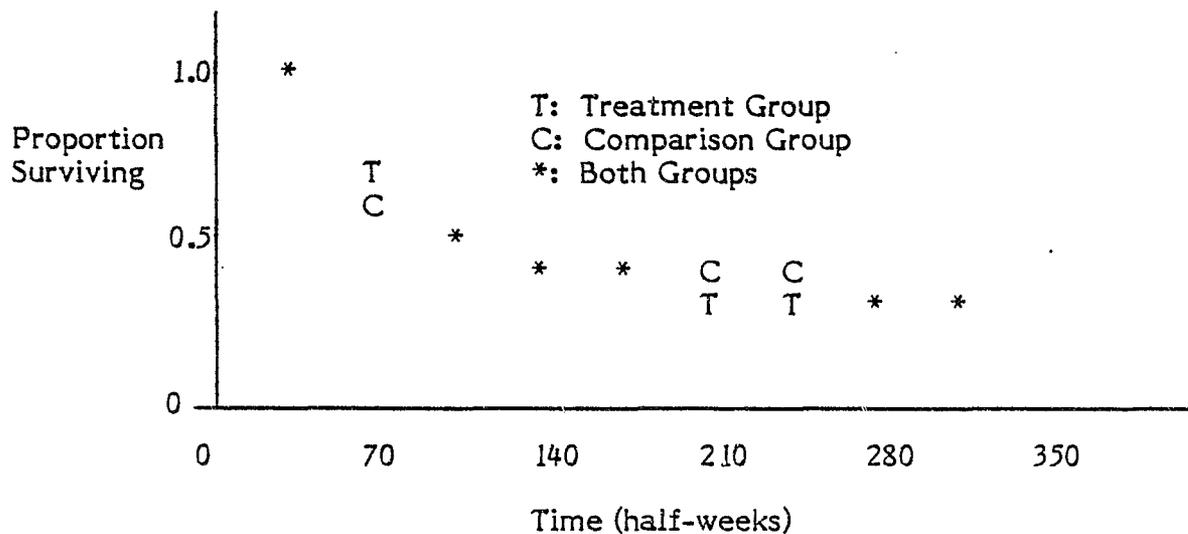
in which A is the asymptote of the function and B is a shape and rate parameter describing the 'half-life' of the function. At point B in time one-half of all the subjects that will ever recidivate have recidivated. The first and second alternative models were selected because of their common use in survival studies (Lawless, 1982; Kalbfleisch and Prentice, 1980) and the availability of analytic procedures for fitting these functions and testing differences between groups (Preston and Clarkson, 1983). The third function was selected for its ease of interpretation and other analytic properties that will become evident below.

Form of the Survival Function

The survival functions for the four models appear below. These functions are simply the obverse of the recidivism functions predicting the number or proportion of subjects not recidivating in the sample over time:

Exponential:	$S(t) = \exp(-rt)$
Exponential Decay:	$S(t) = A*\exp(-rt)$
Weibull:	$S(t) = \exp(-(rt)**B)$
Hyperbolic Decay:	$S(t) = A*(1 - t/(t + B))$

All of the models predict a monotonic decrease in the number of subjects surviving over time, with the decrease gradually decelerating. This form is confirmed in the Fresno data for comparison and treatment groups:



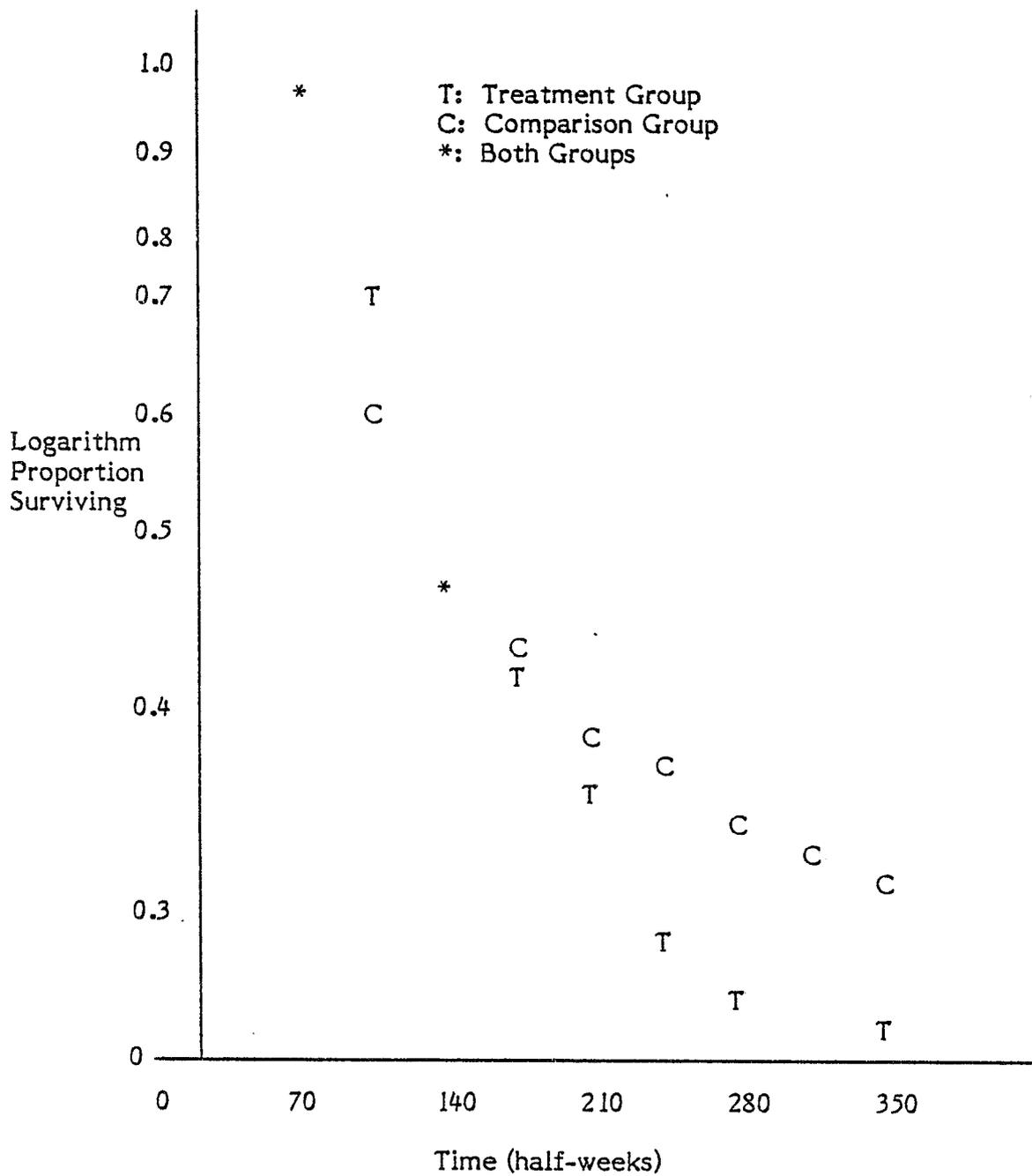
Form of the Log Survival Functions

When logarithms of the survival functions are taken, both exponential models predict linear log survival functions while the Weibull and hyperbolic decay models do not.

Exponential:	$\ln(S(t)) = -rt$
Exponential Decay:	$\ln(S(t)) = \ln(A) - rt$
Weibull:	$\ln(S(t)) = -(rt)**B$
Hyperbolic Decay:	$\ln(S(t)) = (\ln(A) - \ln(B)) - \ln(t + B)$

Significantly, the log survival function empirically derived from the Fresno data is not linear. This suggests rather clearly that neither exponential model adequately predicts the form of the data. The Weibull model is compatible with the observed form of the log survival function, and the hyperbolic decay model predicts the same form in a much more restrictive way. That is, the hyperbolic

decay model requires that the log survival function have only the form observed (decelerating decreasing function over time).



Form of the Hazard and Cumulative Hazard Functions

The hazard function for each model is the ratio of expected recidivators, $f(t)$, to survivors within time intervals over time:

$$h(t) = f(t)/S(t)$$

where: $f(t) = F'(t) dt$

That is, at any given point in time the hazard function represents the probability that the remaining subjects available will recidivate. For exponential models this value is always a constant, representing the commonly known fact for random decay models that at any given point in time the probability of failure (recidivism) or decay is constant. Because estimates of hazards from empirical data are fairly unreliable, cumulative hazard functions are often easier to use for diagnostic purposes. The predicted forms of the cumulative hazard functions are determined by integrating the hazard functions with respect to time.

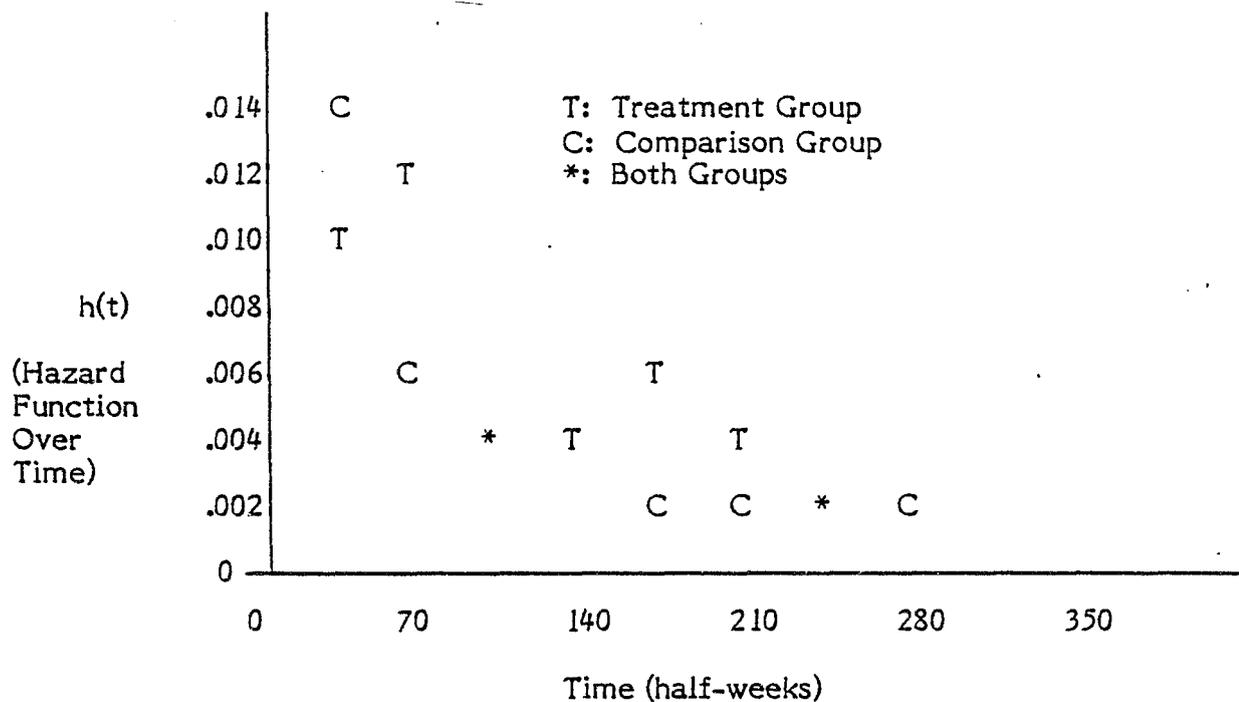
Hazard Functions:

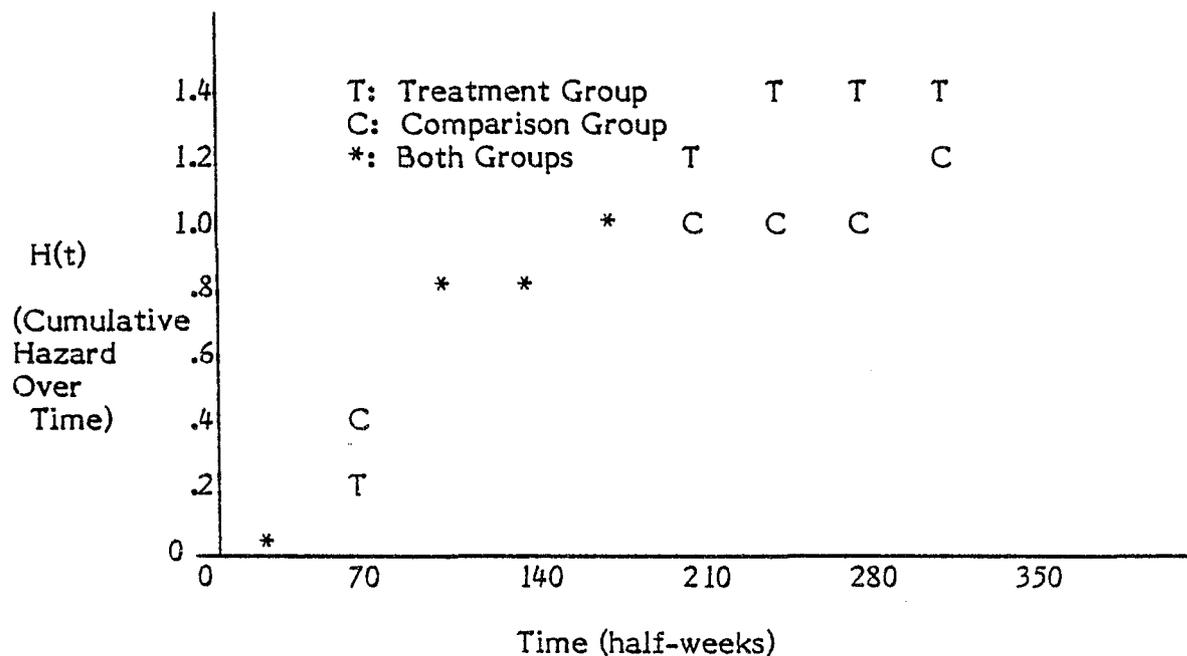
Exponential:	$h(t) = r$
*Exponential Decay:	$h(t) = r$
Weibull:	$h(t) = (rB)^*(rt)**(B-1)$
Hyperbolic Decay:	$h(t) = 1/(t + B)$

Cumulative Hazard Functions:

Exponential:	$H(t) = rt + C$
*Exponential Decay:	$H(t) = rt + C$
Weibull:	$H(t) = ((rt)**B) + C$
Hyperbolic Decay:	$H(t) = \ln(\text{ABS}(t + B)) + C$

The exponential decay models are flagged with asterisks because the hazard function is constant when calculated from the data ONLY when the asymptote of the data is known a priori, a rather unlikely event. When the "true" model of the data is asymptotic but hazards are calculated from the total sample (using N instead of A), the resulting observed hazards appear to decrease monotonically in a decelerated manner, just as observed in the Fresno data. This rather confusing circumstance makes rejection of the exponential decay function based on observed hazards impossible. The only model which can be rejected is the simple exponential which predicts a constant hazard function and a linear cumulative hazard function. The Fresno data appear below:





Summary

The point of these analyses is not to present a conclusive statement about the form of time-to-recidivate functions in the New Pride data. Indeed, based on data from only one site, this would be an impossible task. Rather, the goal is to provide a direction in which to find an answer to the difficulties experienced in fitting the Maltz and McCleary (1977) model to the data. If, as suggested by the Fresno New Pride data, the log survival function departs from the expected linear form at each site, then the reason for the problems will be obvious: The exponential model will be inappropriate to the New Pride time-to-recidivate data. Alternate models, such as those introduced above, must be examined instead.

As a consequence this report suggests testing the log survival function for comparison and treatment groups at each site to determine whether they depart from the linear forms predicted by the exponential model. If so, a simple explanation will be afforded for our difficulties in using the Maltz and McCleary (1977) model. And some effort should be put into using more advanced survival curve analysis techniques such as available through the SURVREG package designed by Preston and Clarkson (1983).

A final note should be made regarding the significance of nonlinear log survival functions in the New Pride data. McCleary and his co-workers have made a great deal out of modelling the underlying recidivism process with the exponential decay model (see particularly Maltz, McCleary and Pollock, 1979). They defend the choice of the model on the grounds that it more clearly depicts the situation commonly found with recidivism. That is, there is a group that will recidivate and a group that will not, justifying their 'split group' model in which A subjects will eventually recidivate and N - A subjects will not. Such models are useful only insofar as it can be shown that the N - A subjects do not EVER recidivate and therefore are never again at risk to do so. This assumption has been called into question by Miley (1978) and Bloom (1979).

The nonlinear log survival functions found at Fresno call into question the assumption that of those that will recidivate (those at risk) the probability of recidivating over time is exponentially distributed with a constant hazard. It does not call into question the split group assumption. Rather, the suggestion drives one to other functional forms, any of which can be formulated with or without asymptotic (split group) limits. But, the demonstration of nonlinear log survival functions would suggest that any asymptotic estimate from an exponential model would be in error and should not be used to predict the limits of recidivism in the subject population analyzed. For this reason the original Maltz and McCleary (1977) model would have to be rejected.

APPENDIX E:
A COMPARISON OF THREE METHODS OF COUNTING RECIDIVISTS

To demonstrate the importance of controlling for the most obvious biasing factors in these analyses it is only necessary to examine recidivism rates with and without the necessary controls. The following table, Table 39, presents data on the proportion of youth in both the comparison and treatment groups who recidivated at each site, derived from three sources:

1. Simple counts of subjects who recidivated.
2. Counts of subjects that recidivated who have been tracked for at least one year.
3. Estimated proportion of subjects who recidivated from a linear-logistic model that controls for differentials in follow-up time, prior seriousness, number of offenses, gender, and race distributions.

The simple counts of recidivism need little explanation. They are simply the total proportion of subjects recidivating at each site regardless of differences in follow-up time, or any other biases. Looking at the table it appears that the sites are quite different in overall recidivism rates, ranging from 50 percent of the subjects at Pensacola to 90 percent of the subjects at Providence. The counts measured with equated follow-up times need more explanation. This proportion is based on a count of the number of subjects recidivating in the first year after case action date who have at least one year of follow-up. It also looks at those who recidivated during one year only. Note that the sample sizes are somewhat smaller than those for the simple count measure. Subjects with less than one year of follow-up time are excluded. Looking at the table again it appears that equating follow-up in this manner changes things a bit. Kansas City now has the fewest recidivators and San Francisco's relative recidivism rate has dropped from second to fifth place.

The expected proportion of subjects recidivating based on the linear-logistic analysis appears in the final column of the table. In this estimate, the

Table 39

Proportions Recidivating by Site Measured by Filed
Petitions Derived from Three Sources*

Site	Simple Counts		Counts with Equated Follow-up		From Linear-Logistic Analysis	
	P(r)	N	P(r)	N	P(r)	N
Camden	.71	303	.59	298	.71	303
Chicago	.70	196	.52	186	.61	196
Fresno	.66	343	.55	298	.70	343
Kansas City	.58	177	.43	176	.51	177
Pensacola	.50	218	.45	200	.45	218
Providence	.90	209	.82	198	.94	209
San Francisco	.71	242	.50	234	.71	242

* Comparison and Treatment subjects have been combined for this demonstration.

proportion recidivating at each site was calculated assuming the average age of 16 years and a time of follow-up of 134 weeks (the average for both groups across all seven sites). Note first of all that the values from the linear-logistic analysis lie roughly in between those in the first and second columns. But the expected probabilities of recidivism are more extreme. Pensacola has the lowest expected rate at 45 percent and Providence has the highest expected rate at 94 percent. More importantly, the ordering of the sites in terms of relative recidivism rates is very different between Column 2 and both Columns 1 and 3. Attempting to equate follow-up time by examining recidivism only in the first year produces expected recidivism rates that vary considerably. Obviously, recidivism beyond the first year is essential to the accurate estimation of recidivism rates. In particular, note again the shift of San Francisco from among the lower rates of recidivism in Column 2 to among the higher rates of recidivism in Column 3.

CHAPTER EIGHT:

**THE IMPACT OF THE NEW PRIDE MODEL
ON CLIENT OUTCOMES**

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THE IMPACT OF THE NEW PRIDE MODEL ON CLIENT OUTCOMES

The last chapter presented an evaluation of the New Pride programs in terms of their ability to reduce recidivism in the treatment groups relative to the performance of matched comparison groups. The preponderance of the evidence indicated no differences between comparison and treatment group recidivism rates overall. At best it could be shown that the success of the treatment groups relative to the comparison groups varied significantly from site to site, with the Providence project showing the greatest reduction in recidivism in the treatment group. This chapter will present the results of an exploration of the impact of client backgrounds and program experiences on measures of successful participation in the program and on recidivism in the treatment groups. These analyses will examine the theoretical foundation of the New Pride model and describe the components most relevant to program success and the reduction of recidivism.

In order to provide a useful conceptual framework for this task, a basic outcome model was developed which includes four essential dependent variables (program duration, recidivism during New Pride, client success, and recidivism after New Pride) and two covariates in order to control for known sources of variation in the outcome measures. These covariates represent jurisdictional differences between New Pride sites and the effects of client age at program entry. Their effects will be controlled in the analyses. The model was developed in a path analytic-like framework relating variables occurring prior to the New Pride experience to later variables measured in the evaluation. For instance, program duration was related to whether the client was successfully terminated at the end of New Pride. In this way, a set of causally-related outcome variables was assembled in which variations in one outcome measure, e.g., program duration, could be related to corresponding variations in others, such as client success.

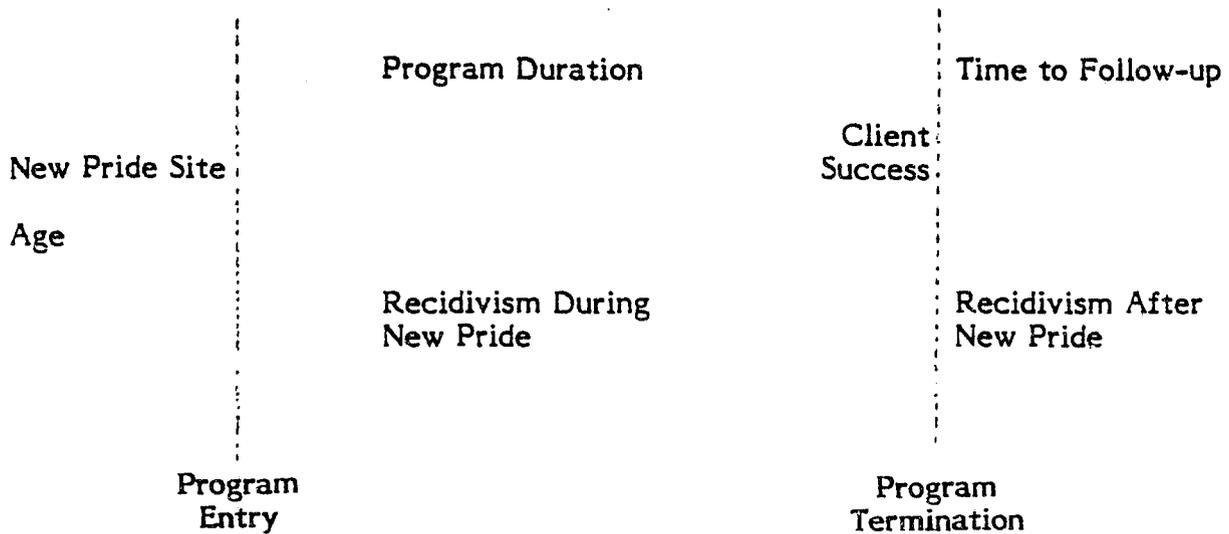
The basic outcome model provides a central core of outcomes to which client background variables and program components can be related. These measures were analyzed in five blocks:

- Client background data - all demographic and intake survey information collected on the clients at New Pride entry.
- School history data - all data on school performance before, during and after New Pride, with education-related diagnostic scores.
- Employment history data - all data on employment before, during, and after New Pride.
- Program process data - all available data on the New Pride program process experienced by each client (needs identification, objective specification, service plans, and deliveries).
- Client exit data - additional information collected at exit from the New Pride program on client attitudes and opinions about the program.

In the final step of the analysis of these data all five sources of information were integrated to form the final outcome model of the New Pride programs, showing how client backgrounds and program process variables are related to outcomes.

The Basic Outcome Model

The variables selected for entry into the basic outcome model comprise those which through preliminary investigations were found of importance to the overall evaluation, or those which represented important program features related to the primary outcome variable, recidivism after New Pride. The variables are displayed in the following diagram:



In this diagram time moves from left to right, with variables defined at or before New Pride entry to the left of the first vertical line and variables defined after New Pride termination to the right of the second vertical line. Program entry (the first line) is the date of case action for each subject; that date on which the decision to admit the client into the program was made. Program termination (the second line) is the date on which the client left the program.

Two variables are defined at or prior to program entry: age and New Pride site. Both of these variables were shown in the last chapter to be essential covariates in the analysis of the recidivism data. Age at program entry was shown to be linearly related to recidivism 12 months after New Pride entry, with older subjects being less likely to recidivate. It was shown to be curvilinearly related to recidivism in the first 12 months after program entry, with the probability of recidivism increasing for younger subjects and decreasing for older subjects. Substantial jurisdictional differences in recidivism rates are controlled by including dummy variables for New Pride sites. Earlier it was shown how failure to control for aggregation effects across sites could lead to the detection of spurious relations in the New Pride data. For example, where differences between New Pride sites were controlled, no effects for number of prior offenses on the probability of subsequent recidivism were detected.

The next two variables in the model are program duration and recidivism during New Pride measured by filed petitions. Program duration is an internal