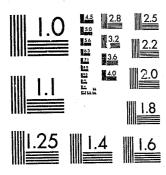
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NATIONAL EVALUATION OF THE NEW PRIDE REPLICATION PROGRAM

FINAL REPORT SUMMARY

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## CHAPTER ONE: INTRODUCTION

THE PROJECT NEW PRIDE MODEL
OVERVIEW OF THE NATIONAL EVALUATION
THEORETICAL FRAMEWORK OF PROJECT NEW PRIDE

THE PROJECT NEW PRIDE MODEL

#### PREFATORY NOTE:

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# HISTORICAL BACKGROUND

The initial support and design of Project New Pride was developed under the sponsorship of the Denver Mile High Chapter of the American Red Cross. The Mile High Chapter was one of a select number of National Red Cross divisions mandated to provide new forms of Red Cross services to inner-city residents. Essentially, Red Cross management viewed the organization's traditional services — disaster aid, assistance to military families, blind and hospitalized persons, and water safety instruction — as not reaching or particularly involving inner-city minority residents. Moreover, the social unrest that characterized many urban areas in the late 1960s convinced the Red Cross that its wealth of resources and volunteers could and should be effectively utilized to serve inner-city needs. A needs assessment, several experimental programs in a juvenile detention center, and continuous consultation with court officials and community leaders were the building blocks for Project New Pride.

The Denver Anti-Crime Council (DACC) then funded Project New Pride from July, 1973 to 1976 under the LEAA Impact Cities Program. In 1976, additional funds were received to further develop the Project New Pride concept and to increase the number of clients served. The Office of Juvenile Justice and Delinquency Prevention (OJJDP) supported New Pride, Inc. in its provision of technical assistance to other agencies funded to replicate New Pride. Currently, the State of Colorado, the Mile High United Way, and private foundations enable Project New Pride, Inc. to serve 120 youth annually.

Apart from the addition of new staff, refinement of treatment strategies in keeping with emergent state-of-the-art techniques, and the diversification of funding, the organization of Project New Pride has remained essentially unchanged. The success and stability of Project New Pride are the results of a strategy of careful planning and development. Over time, the Project New Pride model (holistic, multi-disciplinary, integrated) continues to respond effectively to the needs of the individual and community.

In 1976, Project New Pride was awarded national exemplary status by the Law Enforcement Assistance Administration for its demonstrated effectiveness serving serious offenders. In 1979, the Office of Juvenile Justice and Delinquency Prevention/LEAA began a national initiative to encourage and support replication efforts based on the Project New Pride model. A competitive request for proposals to replicate project New Pride was sent to key actors in juvenile justice systems across the United States, and to private not-for-profit agencies interested in the program. From among the approximately 80 proposals submitted to OJJDP, 10 sites were selected in the following cities: Pensacola, Florida; Washington, D.C.; Camden, New Jersey; Providence, Rhode Island; Boston, Massachusetts; Chicago, Illinois; Kansas City, Kansas; and San Francisco, Fresno, and Los Angeles, California. New Pride, Inc. subsequently became the recipient of a contract to provide technical assistance to these national replication projects.

# THE NEW PRIDE MODEL - PURPOSES, TARGET GROUP, OBJECTIVES, AND PROGRAM DESIGN

Project New Pride is a community-based, comprehensive program of integrated services for serious multiple delinquent offenders.

The Project's specific target group is adjudicated youth from 14 to 17 years of age residing in jurisdictions with high levels of serious juvenile crime. These are juveniles who are under court supervision for a serious offense, with records of at least two prior convictions for serious misdemeanors and/or felonies within the past 24 months, who would otherwise be confined in correctional institutions or placed on probation. These juvenile offenders are generally regarded among the "hard-core" intractable cases for whom incarceration is the only practical answer. The New Pride model is seen as demonstrating a more humane and practical way.

The model's major objectives are:

- Increased school achievement, remediation of learning disabilities, employment, and improved social functioning;
- Reduction in the incarceration of youth adjudicated for criminal offenses;
- Reduction in arrests; and
- Institutionalization of comprehensive and integrated community-based treatment services for serious juvenile offenders through redirection of state and local resources into more cost-effective community-based treatment services.

These objectives are accomplished through provision of a comprehensive, integrated, and individualized system of services. A central concept of the Project New Pride model is its holistic approach to working with delinquent youth. Crime and delinquency literature confirms the conclusion that delinquency is the manifestation of a complex interaction of variables, and that no single factor can be attributed as its cause. In order to impact upon these

problems, the needs of the "total" child must be addressed. Consideration must be given to the social and emotional needs of the youth in their relationships with all the main institutions impacting on his or her life — the family, peer group, school, work, and larger community. The acquisition of basic academic, work, and social skills are the vital steps toward establishing the basis of effective institutional relationships that work for the youth rather than discourage and alienate him or her further. Overall, the holistic approach necessitates that the interaction of all these variables be addressed in relation to the individual needs and abilities of each youngster and in a mutually supportive, integrated fashion.

Project New Pride's major program components are:

- Intensive Supervision: Project New Pride counselors are expected to have contact with clients on a daily basis. Caseloads do not exceed 20 clients and the entire family is to be considered part of the counselor's caseload. The Counselor/Case Manager is also responsible for coordinating the delivery of the Project's entire range of services to each of his or her clients.
- Diagnostic Assessment: Project New Pride uses an interdisciplinary diagnostic team to individually evaluate each client. Test results are combined with comprehensive needs assessments to determine the appropriate treatment strategies. Four levels of testing are utilized and are determined by the client's needs. The diagnostic batteries include basic academic and psychological screening; diagnosis of learning disabilities; precise specification of learning disabilities; and in-depth speech, language, and psychological assessment.
- Alternative Education: Remedial education is designed to decrease general educational lag. Special education to youth with learning disabilities focuses on therapies that remediate or compensate for specific learning disabilities manifested by Project clients. In addition, cultural education is designed to expose youth to the total community and is integrated into both aspects of the Alternative Education Component.
- Employment (Job Preparation and Placement): Introduces clients to the world of work through providing meaningful employment experience where they can earn income for

work actually performed. These placement options are used: direct placement, on-the-job training, and referral to publically funded programs. Additionally, pre-employment training and career counseling emphasize the development of good work habits and marketable skills.

- Volunteer Support: The extensive use of volunteers in all aspects of the program has enabled Project New Pride to provide individualized and special services, and facilitated the development of a wide base of community support.
- Management Information System: Provides a comprehensive and detailed inventory of information that is used to maintain quality control, and conduct intensive, on-going programmatic and individualized monitoring of service delivery and facilitates program modifications and long-range planning.

Critical to the success of Project New Pride is a precise synchronization of these main program elements. This is accomplished by emphasizing three primary integrating functions. They include:

- Comprehensive Needs Assessment-Diagnostic Services: As described above, Project New Pride incorporates a comprehensive body of information as its first step in individual program planning.
- Staffing: During a Placement Staffing, the Diagnostic Team and counselors collectively review all information gathered on the client's placement to the program's components; later a Program Staffing provides the opportunity for the sharing of all information generated during the intake phase with direct service workers in the program component in which the client is placed. Routine subsequent staffings assure that all the expertise of the Project is continuously brought to bear on planning and delivering services to the client.
- Individualized Integrated Service Planning (IISP): A single document which incorporates all of the Project's counseling, education, employment and referral goals, measurable objectives, and service prescriptions provides the basis for actually integrating service. Implementation of this plan is monitored closely by Case Managers through the Intensive Supervision Process and with key tracking capability provided by the Project New Pride MIS.

Project New Pride provides six months of intensive services to each client and six months of follow-up services. The Project operates on the basis of the premise that an individual must learn to confront his or her own problems successfully in the community where the "problems" are. Isolation of the individual from the community may solve one of the community's "problems" temporarily, but can accomplish virtually nothing to help the youngster. Thus, Project New Pride is oriented toward moving each client progressively back into, the community "mainstream" with support and increased competencies.

Project New Pride embraces its title literally. Its efforts are aimed at creating a feeling of "new pride" within its clients, a pride long lost or never before discovered. Although viewed as a "last chance" by some, all aspects of Project New Pride are oriented to overcome the poor self-concept and defeatist attitude characterizing its clients at entry, by helping to instill a new sense of pride and self-worth based upon a better understanding of themselves and others, and the realities of the world and society in which they live.

The main philosophical orientation that guides Project New Pride's entire effort is the holistic concept that focuses on the youth as a total person. His or her problems, strengths, and the world around him or her must be dealt with simultaneously and in a coordinated fashion to make a difference.

Project New Pride has created a series of services that are individualized to meet the specific and unique needs and interests of every client. The focus is to integrate all of these services, providing comprehensive treatment of its clients. Staff believes that intensive individual services and attention are of paramount importance to maintain the client's involvement and interest. The Intensive Supervision process is the key. It implements procedures assuring routine contact with each client and a thorough management process which implements effective planning and delivery of services. As illustrated in Figure One, Intensive Supervision is the cornerstone upon which all the other program components are based.

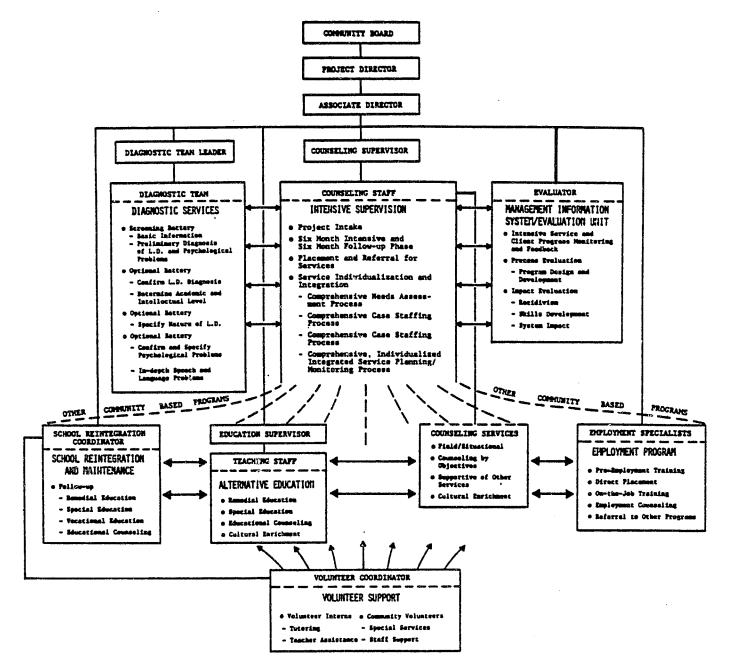
# Intensive Supervision

The process of Intensive Supervision implemented by Project New Pride evolved in response to the multi-faceted needs exhibited by the project's clients. All clients receive "intensive supervision" in the form of close and routine contact which assures that all significant areas of need are identified and systematically addressed through a comprehensive individualized plan of services.

There are two main phases to the Intensive Supervision process: Client Intake, and the Counseling/Case Management Process. All referrals to Project New Pride who are accepted as clients after the eligibility screening are assigned an intake counselor who is responsible for conducting a needs assessment interview with the client and his or her family. This interview covers the following areas:

- Family Environment and Relations;
- School Status;
- Employment Situation and History;
- Peer Relationships;
- Court Status;
- Physical Health;
- Material Needs; and
- Attitudes Toward Authority.

The intake counselor is also responsible for gathering information from any community agencies, schools, or court with which the client has been involved. This information, along with recommendations for component placement and programming needs is presented at staffings with the Diagnostic Team and members of the Alternative Education and Counseling Components.



PROJECT NEW PRIDE

FIGURE ONE

Upon placement in one of Project New Pride's direct service components, the client is assigned a Counselor/Case Manager, thus marking the beginning of the Counseling/Case Management phase. The case manager is responsible for the coordination and integration of all project services throughout the client's one-year involvement with the project. The planning and monitoring of these services is performed utilizing the format of the Individualized Integrated Service Plan (IISP). It is the counselor/case manager's responsibility to prepare, revise, and update each client's IISP, under the supervision of the Counseling/Case Manager Supervisor, and with input and review from other project staff involved with the client.

In addition to these case management functions, the counselors also provide direct counseling services to all clients. These services include individual and family counseling, liaison with community agencies, resource brokerage, court relations, and support and advocacy in the community. The counselor/case manager's involvement continues throughout each client's intensive and follow-up phases, with the expectation that during follow-up the client will demonstrate increasing responsibility and independence in pursuit of his or her goais.

#### Diagnostic Services

Project New Pride's Diagnostic Services are provided by a multi-disciplinary team utilizing a level of testing approach. This approach not only serves to complete each client's diagnostic assessment expeditiously, but also makes efficient use of the diagnosticians' time, as clients proceed from a screening level of assessment to more in-depth test batteries only as needed.

The first three levels of testing present an integrated approach to assessing client functioning in the following areas: Acuity, Self-Esteem, Achievement, Learning Processing, and Self-Report Data. Level I, a screening battery, is administered to all Project New Pride clients. The results provide basic information on client functioning in these areas and lead to preliminary

diagnoses of learning disabilities. Level II testing is administered to confirm the tentative diagnosis of learning disabilities, and Level III specifies the nature of the learning disability.

Level IV, Projective Psychological and In-Depth Speech and Language contains optional batteries administered to clients who demonstrate possible emotional problems or language deficiencies.

The Diagnostic Team is an integral part of the entire Project New Pride process. Their assessments, which include observations of client functioning during testing as well as information from outside agencies who have had contact with the client, are combined with the intake counselor's recommendations and informal assessment results for those clients referred to the Alternative Education Component, to provide an integrated and detailed assessment of each client's needs. The Diagnostic Team routinely participates in formal staffing conferences held initially to assist in the preparation of integrated plans for services to be delivered to each client in Project New Pride, and periodically thereafter to monitor clients' progress and revise plans as needed. Each of the diagnosticians is also available to the staffs of the direct service components and the court to provide additional testing or consultation as needed.

#### Alternative Education

The Alternative Education component of Project New Pride provides three main services: remedial education, special education, and cultural education.

Remedial education is aimed at providing those clients of Project New Pride who have fallen far behind in the public schools, but demonstrate no specific learning problem, with an alternative educational experience tailored more to their individual learning styles and interests than the traditional classroom settings in which they have been chronically unable to perform.

Special education is provided to clients for whom specific learning disabilities are diagnosed. These services are particularly individualized and focus on development of more effective information processing skills.

Cultural education is provided through the use of community volunteers who bring to the alternative school setting a wide array of specialized capabilities. They organize special events, serve as instructors for special subjects, and assist the regular teaching staff to integrate special materials into the educational curriculum.

Volunteer interns are also used extensively in the Alternative School, providing one-on-one and small group tutoring.

Individualized educational services are the hallmark of this component's services. A teacher-to-student ratio of one to five is supplemented by use of the volunteer interns to maintain the capability for one-on-one education at all times.

## School Reintegration

The School Reintegration and Maintenance Program is designed to facilitate and provide continuing support to the client as he or she leaves the Alternative Education Component of Project New Pride and reenters the public school mainstream. When a client is referred to the School Reintegration and Maintenance Program the Coordinator will work closely with the youth, his or her counselor, and school officials in selecting an appropriate placement and closely monitoring the student's progress.

The Coordinator will first identify the student's home school and review his or her school history. A staff meeting is held with the youth's counselor in order to prioritize the youth's needs and identify special program options which will be available. While the programs offered differ in each school, the main ones utilized are Alternative Education, Special Education, and Vocational Training.

The Coordinator will then notify the school of the student's planned reentry and recommend a program placement. Project New Pride provides all of the diagnostic and intake information it has collected on the client to the school during school staffing conferences held to select an appropriate program option.

It is the Coordinator's responsibility to maintain a working relationship with the schools in the community and to be aware of all special programs, as the appropriate placement is crucial for successful reentry of students.

#### **Employment**

The Employment Program is a supportive service of Project New Pride in which the clients are able to receive direct exposure to the job marketplace while earning money, exploring various vocational fields, and learning particular work and job maintenance skills. The three options within the program — On the Job Training (OJT), Direct Placement, and Referral to Outside Employment/Training Programs — are each carefully designed to make the job experience the best possible for the client and the employer.

If the program is appropriate, clients are referred by their counselor and assigned to a Job Placement Specialist. The Job Placement Specialist conducts an Assessment Interview with the client and reviews all information from the needs assessment to assist him or her in determining the employment option.

It is determined, based on interests, level of skill, maturity, etc., that some of the clients are ready for direct job placement. Others will benefit more from an OJT position where the individual may enter a new vocational area and advance at his or her own pace.

The first phase of the Direct Placement and OJT programs is Job Readiness Training, in which activities are designed to assist the client in bettering his or her skills in all areas necessary to obtain and maintain employment.

In order to assure optimum job retention and quality of experience, the client's needs and interests are matched to a particular job. Once a specific kind of job has been identified as appropriate, the Job Placement Specialist surveys the community for available jobs or for an opportunity to create a new job that meets the needs of the client. A Work Place Assessment is conducted at all placement possibilities. The characteristics of the actual placement can be a contributing factor to the client's success or failure there.

The Job Placement Specialist contacts prospective employers to make necessary arrangements prior to the client's interview. The Job Placement Specialist works with the employer and client to finalize all arrangements and insure that all questions have been answered before the client begins work. Job site monitoring visits are conducted at least once per week but may be increased depending upon the client's needs. The Job Placement Specialist works closely with employers to prevent or deal with any placement problems.

Outside Training Programs, an option seldom used, must meet the strict criteria established by Project New Pride in order for an eligible client to be referred. The Job Placement Specialist is responsible for determining if this option is appropriate and for closely monitoring any client who is referred into such a program.

The Project New Pride counselor is informed regularly of the client's successes or problems on the job. The counselor and Job Placement Specialist work as a team to do everything possible to ensure that the client has a positive experience on the job.

#### **Volunteer Support**

Volunteers are regarded as an integral part of Project New Pride. They provide needed services to Project clients and help the Project build a wide base of community support. There are two general types of volunteers in Project New Pride: Volunteer Interns and Community Volunteers. All volunteers are

regarded as extensions of the staff and are carefully recruited, screened, and trained for specific tasks. All volunteer assignments are designed to meet both the needs of the clients and expectations of the volunteers.

Local colleges and universities are the primary source of volunteer interns, who are recruited in correspondence to school semesters. Volunteer interns are used almost exclusively in the Alternative Education Component, assisting with classroom instruction either as small group facilitators or as individual tutors. They are responsible for and encouraged to participate in setting daily client objectives and to make contributions to the overall lesson plan. They are not given actual caseloads, but use their skills to implement individual teaching and counseling objectives and activities while being closely supervised by the teaching and counseling staffs. The interns receive academic credit for their volunteer services.

Voluntary organizations, civic or religious organizations, and businesses are the main sources of community volunteers, who are recruited in accordance with client needs. The major role of community volunteers is to enhance existing staff capabilities to provide a richer, more diversified array of services, such as recreational activities or arts and crafts. Supervision of community volunteers is performed on an individualized basis.

#### Management Information System

Project New Pride's Management Information System is designed to serve three purposes:

- to provide rapid turn-around of information on service delivery and client progress, enabling the Project's overall staff and case managers to take appropriate corrective actions when adequate services are not being delivered or an individual client is not achieving adequate progress in the program;
- to provide routine feedback to the Project's management on the effectiveness of specific service modalities and

program components relative to specified performance standards, enabling a continuous reexamination and "fine tuning" of the Project's design and operational procedures; and

to establish a comprehensive data base, enabling thorough overall evaluation of the Project's effectiveness in terms of impact on clients and on the juvenile justice system.

In 1979 it was determined that automation of the system through remote terminals was necessary to continue its operation at the required high performance level. This strategy greatly increased the system's utility and decreased the clerical demand on direct service staff and supervisors created by manual operation of the MIS.

The first priority of the Management Information System is to provide rapid feedback relating to service delivery and individual client progress. The forms and procedures used to implement this feature of the system have been carefully designed to provide comprehensive information and still minimize paperwork. The three key forms are:

- The Needs Assessment Checklist;
- The Individualized, Integrated Service Plan; and
- The Service Delivery Record.

Only the last of these, the Service Delivery Record, exists solely for purposes of the MIS. Thus the MIS requires only one "extra" piece of paper to be generated per client per week.

Overall, the Management Information System is integral to the design and operation of Project New Pride. The Intensive Supervision Process is the Project's most critical element. It cannot be implemented effectively without the proper interface with the MIS through which service delivery and client progress monitoring is achieved.

Under a grant from the National Institute of Juvenile Justice and Delinquency Prevention, the Pacific Institute for Research and Evaluation was commissioned to deliver technical assistance to project sites replicating Project New Pride. Its plan for the provision of this assistance included translating the Project New Pride MIS model into operational systems compatible with each replication site's needs and capabilities.

## Management of Project New Pride

Project New Pride's stability and success is the result of a strategy of careful planning and development. The project was implemented in 1973 and a critical aspect of its success has been the attention given to a number of management issues during that period.

#### **Board Development**

An Advisory Board performs several functions. It provides input to the program on community perceptions, needs, and concerns. It also assists in the review and evaluation of the program's effectiveness and facilitates the generation of community support. Project New Pride's Board consists of representatives from the academic community, the legal profession, community programs, community-based corrections, the business community, human service agencies, private citizens, public officials, and youth.

While their selection has been based in part on expertise, knowledge, and influence in the community, commitment to the program philosophy and intent has been a paramount consideration. It is essential that the Board's role and responsibility be clearly defined and that an agreement of trust be established.

### Relationships with Juvenile Justice Agencies

Arrangements and relationships developed with local juvenile courts and probation departments have been integral to the Project's success. They control the referral of eligible clients. There are some common practices used which are as follows:

- Managers and staff need to meet frequently with court personnel during the program's design, implementation, and on-going phases;
- Objective input should be honestly requested and openly received; and
- Goals to achieve a supportive and mutually beneficial relationship should be established, followed, and monitored.

#### Management's and Staff's Complex Role

The Project Director serves a complex role in the management of a community-based program. Management is responsible for maintaining the integrity of the project design and relationships with various agencies of the juvenile justice system. Both tasks are equally demanding and require extensive feedback. Consequently, a Management Information System (MIS) is essential for effective project operation. Project management, therefore, must be skilled in the use of a sophisticated MIS, but also should be equally skilled in working with outside agencies that have a direct bearing on daily operations.

The target population served by Project New Pride demands that a highly skilled professional staff is employed. Additionally, the integrated service delivery system utilized by Project New Pride creates overlapping roles in many instances, and this in turn creates the need for a well-coordinated team approach. The need for clear lines of communication and the delegation of specific tasks cannot be overemphasized. To implement these lines of communication effectively, the Project Director must meet on a regular basis with supervisory staff, and the community board.

Project management must also be sensitive to environmental conditions and characteristics of the referral process. The community and the juvenile justice system play a critical role in project implementation. The success or failure of the program is determined by a number of outside events: community acceptance of the Project New Pride concept; fluctuations in the juvenile crime problem; existing resources which treat eligible juvenile offenders; juvenile justice system acceptance of the Project New Pride concept; the organizational ability of the juvenile justice system in making referrals; the number of eligible juvenile offenders; changes in legislation which impact client eligibility; and other factors. All of the factors listed above are external events which can have negative impact on project operation. Obviously, since Project New Pride serves adjudicated delinquents, it must maintain excellent working relationships with the juvenile court and all of its officers, and it is also critical that relationships with prosecutors are well established and project personnel are respected for their ability to work with the target population. The community at large must also be involved, utilized, and brought "on board" with the program to make it work most effectively.

The Project New Pride model is an original concept. It uses a complex and highly integrated service delivery system to meet individual needs. Its holistic approach requires the use of an experienced, professional staff whose expertise must be geared and coordinated to meet the individual needs of each client. This can be accomplished only through the extensive exchange of information between staff and between staff and management. However, the sheer magnitude of data collected on a single client further complicates this task. Therefore, it is essential that the MIS be used to effectively manage delivery of services to clients. This system provides critical information in an easily understandable format and is invaluable in the decision-making process.

Project management must also actively pursue resources to institutionalize the program after OJJDP's seed money is terminated. It is essential that this process be initiated from the very beginning of the project. Most courts are somewhat wary of federally funded efforts that raise expectations and disappear when funding terminates. These concerns can be alleviated if a solid plan for

institutionalization is developed. This is also an area in which the involvement of the Board can be invaluable. Management should define for the Board its role in developing the necessary resources. The Board, assisted by management, should then develop a long-range strategy to achieve this objective.

# Project New Pride's Success

In the final analysis, the basis of Project New Pride's success is directly attributable to the work of its highly professional staff. Job descriptions or procedural explanations are somewhat inadequate to describe how to work with the typical New Pride client. These youth have long histories of failures, opportunities denied, underachievement, disappointments, family problems, and difficulties with the juvenile justice system. Consequently, it is essential for the staff to be extremely committed to working with this target group.

New Pride's management recruits personnel who have the personal and social skills that are necessary to relate both to the clients served and to other professionals. Although the staff has the ability to relate to individual clients, they do not overly identify with the youth, and are quite capable of maintaining the required professional distance. This characteristic is essential because the staff has to face disappointments, for every client cannot succeed. Project New Pride has been fortunate to have an extremely conscientious, organized, and professional staff. The credit for New Pride's exemplary achievement belongs in large part to the staff for their efforts.

#### OVERVIEW OF THE NATIONAL EVALUATION

During 1979, NIJJDP supported a proposal competition to design an evaluation study of the New Pride Replication Program. The design, established by sociologists at PIRE and accepted by NIJJDP, took as its primary study objective the task of ascertaining the effectiveness of the New Pride Replication Program in reducing delinquency. In essence four questions were posed:

- 1. To what extent, and under what conditions of community support could New Pride be replicated, and
- 2. What were the client and service issues which emerged during the replication program that could be used to refine the New Pride model,
- What kinds of services were most effective for what types of youth, and under what conditions, and
- 4. Were the youth accorded program services less prone to persist in delinquent offense behavior than were members of comparable groups of youth subjected to the traditional procedures of secure detention and commitment to correctional institutions?

Additional questions to be addressed included program effects on the academic achievement and employment experience of clients; on the procedures and personnel of the juvenile justice system; on leaders of other community agencies that impacted the lives of youth; and on the community's youth service network. The design called as well for an examination of program implementation, with special attention to site by site variation in environments, facilities, staffing, political support, and programmatic emphases on various components of the New Pride model.

To answer the major question of program effect on the offense behavior of clients, the study design incorporated two principle elements. The first was the use of the strongest, i.e., the most conclusive, comparative design permitted by the structure of a model program designed to treat very chronic and serious

offenders. (An experimental design with a randomly selected control group was not feasible given size limitations of the target population.) OJJDP had made project agreement to provide data for a national evaluation as an absolute requirement for funding eligibility.

The second principle element of the evaluation design was the development of a data base for analysis. This included information respecting socioeconomic, demographic, attitudinal, educational, and family status characteristics of each program client; the source of referral to the program; all formal complaints together with the most serious offense in each criminal event; the entire prior record, including dispositions, of both status and delinquent offenses; and follow-up data on all petitions/indictments and adjudications/convictions subsequent to program admission.

In addition, qualitative data were to be obtained permitting the characterization of each project with reference to elements assumed to facilitate or impede implementation of the New Pride holistic service delivery system. This information was deemed essential in order to specify the conditions under which the program could be replicated, and the degree of success with which various program components of the model were implemented. Thus, the national evaluation effort was designed as a comparative study with a view to specifying the contextual problems that should be taken into account if New Pride was to be successfully launched and institutionalized with non-federal funds.

Information provided in the program guidelines was explicit in presenting the character and thrust of the evaluation study. Local Research objectives included those related to client impact. The study was designed as a comparative examination of the conditions under which the New Pride Program fostered a reduction of the offense behavior and the incarceration of youth, and an increase in their academic achievement, employment experience, and other beneficial outcomes. This required the acquisition of uniform data elements to be obtained through a relatively standardized administration of instruments

across the set of diverse project sites, each varying with respect to data availability and access. As the organization coordinating the evaluation study and conducting the comparative analysis, PIRE was responsible for obtaining from local evaluators an extensive body of data in uniform format and for maintaining quality control of the data.

As a condition of its grant, each project agreed to hire evaluation staff as specified in the New Pride model, and to provide to PIRE the full complement of data as prescribed in the national evaluation design. This was clearly defined as an important task. Local evaluators were encouraged to use the data that they collected for PIRE in local reports, and to obtain whatever further data they wished for use in other studies of specific interest to them. In addition, they were expected to furnish information on case tracking and services that could serve the needs of program managers at their sites.

#### The Data System

Effective management of project information was seen as essential to the success of this evaluation for two reasons. First, it was the mechanism by which critical project data were specified, collected, and retrieved to serve a variety of management and evaluation needs. Second, it would optimize chances that the local evaluation components would be continued beyond the period of Federal support. Therefore, Pacific Institute implemented a computer networking system that was designed to serve the management information and data processing needs of both the evaluation and the individual projects. In this system, data entry and report generation occurred by way of "remote" terminals located at each site. This approach provided both project staff and the evaluator with accurate, complete, and timely information.

The data system was linked to the Michigan Terminal System (MTS) through Wayne State University and provided fingertip access to most of the files in the University of Michigan library. Through a telephone hookup, the

memory of each terminal was virtually unlimited, and operators could obtain fast, complete, and accurate information without leaving the project office. It was capable of sending messages to others, whether they were on the terminal or not at the time, making the process of information gathering on all topics quick, effective, and inexpensive. Because of this feature, it was able to serve as a vehicle for communication between participating projects and the national evaluation team, and between the projects themselves. By using MTS the local evaluators not only had access to extensive software for analysis and report generation purposes, but also benefitted from the extensive security systems already in place to ensure the confidentiality of data sets.

Explicit in the New Pride service delivery system was the assumption that various kinds of services would have different impacts according to the types of youth being served. For this reason, considerable data relative to the development of individualized treatment was generated and subsequently stored in the data system. As of January 1984, the computerized data base contained approximately three and one-half million separate pieces of information on 1,161 clients and 1,164 comparison subjects from the seven cities (out of ten) providing comprehensive impact data. The system worked best as a tool for evaluation purposes, both on the local and the national level.

The National Evaluation of the New Pride Replication Program has been unique because of the comprehensiveness of its data base. In all possible ways of measuring success of a data collection effort for an impact study, this one excelled:

- Detailed records were meticulously kept on clients' backgrounds, services, and outcomes.
- These records were subsequently checked, coded, and entered into a carefully-constructed computerized data system attached to one of the largest main frame computers in the United States.
- There, the records were monitored, cleaned, updated, and the files merged for analysis.

- 4. At the analysis stage, 166 new variables were created for specific kinds of analyses in addition to the 218 that were used from the raw data files. These new variables combined information from two or more files.
- 5. Follow-up of the official records of all project youth and comparison subjects involved uniquely thorough searches of both juvenile and adult court files. These searches were conducted every six months from the beginning of 1981 through 1984.
- 6. All clients whose records were analyzed for the final report had at least one year of follow-up after twelve months estimated in-program experience. Most had two to three years.
- 7. The comprehensiveness of the information collected was assisted and reinforced by a uniquely concerted effort towards that end on the part of both NIJJDP and OJJDP program monitors.

The following table demonstrates the comprehensiveness of the New Pride data base. It describes only the data files used in the analyses presented in the final report. Other files included those designed specifically for client tracking and mangement information. As nearly all of the data files had to be merged to study the impact of the New Pride model on the recidivism of youth served, the evaluation represented a challenge of organization, analysis, and presentation.

#### **Evaluation Records**

Data File .	Total Records in File	Records Analyzed	<b>Variables</b> in File	<b>Variables</b> Analyzed
Client Demographics Cases referred:	1,699	1 1/7	<i>h</i> 1	18
Cases opened: Comparison subjects:	1,355 1,220	1,167 724	41	18
Intake Survey	1,034	870	47	35
Client Characteristics	1,119	937	15	13
Test Scores	96,471	87,587	8	4
IISP Files	19,825	16,602	10	6
Objectivé Updates	16,083	12,578	8	6
Employment	1,105	967	29	27
School Status	2,119	1,786	28	25
Service Delivery ·	250,573	202,090	11	7
Juvenile History Client records: Comparison	13,302	12,283	17	8
subject records:	11,059	9,717		
Offenses Client records: Comparison	15,502	11,589	7	5
subject records:	12,900		•	
Exit Survey	559	503	64	60
Termination Form	1,142	1,035	19	4
Replication Totals	447,067	360,435	304	218

#### Research Design Summary

The evaluation design was organized into the following sections:

Client Impact Evaluation — The first two objectives of the local evaluation—to develop information on the number and types of youths served and to develop the level and types of services provided—were addressed by means of a computerized Management Information System developed by PIRE.

The remaining four objectives concerning the impact of the project on school achievement, the remediation of learning disabilities, and employment; its impact on rates of recidivism, the number of youth incarcerated; and the relative effectiveness of alternative types of services—presented significant challenges to evaluation research.

Although all six objectives were assigned by the solicitation to the local evaluation components, PIRE assisted the local evaluators in addressing those objectives by developing a common research design, by suggesting structured methods of data collection and providing pretested forms and simplified analysis techniques. Furthermore, PIRE continuously integrated the results from individual projects, in order to study interproject variations and provide a program-level perspective on the effectiveness of the initiative.

Process Evaluation - In addition to conducting an impact evaluation, PIRE completed a comprehensive process evaluation, which involved the careful synthesis of documentation and interviews gathered over the course of four years. Whereas in the impact evaluation we studied the influence of the New Pride project model on the pattern of outcomes, clients served, youth employed, crime prevented) that occurred as a consequence of program implementation; in the process analysis, we examined the way in which this pattern of outcomes became established. This type of qualitative research was designed to answer the questions of how such outcomes occurred and what forces or combination of events produced them, how the programs actually developed, and how they

operated and tried to become institutionalized beyond the period of Federal support. In the process evaluation, we observed and reported the similarities and differences which existed in and between replication projects as they responded to different external and internal contingencies unique at each site.

Intensive System Impact Evaluation — This study was organized to answer questions concerning the impact of the projects on the juvenile justice system, other youth agencies, and key decision-makers within New Pride communities. Recognizing that the funds available for the national evaluation were insufficient to provide in-depth assessments at all replication sites, OJJDP selected a three-site set for intensive evaluation. A separate system impact study was conducted on an intensive level at the Providence, Kansas City, and San Francisco sites and on a more summary level at the remaining sites. The goals of this study were:

- to determine the impact of the project on the organization, policies, and administrative procedures of the juvenile justice system;
- to determine the impact of the project on other public and private youth serving agencies in the community; and
- to determine the impact of the project on the attitudes of key decision-makers towards the community treatment of serious offenders, and towards the New Pride program specifically.

The research design called for longitudinal panel data to be collected at two points in time. The first series of interviews was conducted during the spring and summer of 1981 after the projects had been funded one year. The second wave was conducted a year later.

#### THEORETICAL FRAMEWORK OF PROJECT NEW PRIDE

The theoretical idea of differential opportunity originated with Robert Merton (1938) who argued that the social structure itself determines that members of society have differential access to legitimate opportunities, depending upon their socio-economic status. In societies such as our own, there is a great cultural emphasis on monetary success for all and a social structure which unduly limits practical access to approved means for many. This similar cultural emphasis for the wealthy and the poor combined with differential access to opportunities sets up a tension toward innovative practices which depart from accepted social norms.

Ohlin and Cloward (1960), building upon Merton's theme, suggested that efforts to live up to these universal social expectations often entail profound frustration, especially under conditions that preclude the legitimate achievement of socially approved goals. Deviance, including law breaking, ordinarily represents a search for solutions to problems of adjustment. Alienation, which is the withdrawal of attributions of legitimacy from established social norms, is a necessary condition for deviant solutions to also be delinquent.

The particular form that social deviance may take is at least partially the result of the alternatives present in the environment. Whether or not there are legitimate, illegitimate, or no opportunities in a community determines the cultural manifestations of crime. Structured alternatives for delinquent solutions emerge depending on the relative accessibility of illegal means. In turn, this accessibility to illegal means is determined by the degree of integration of age levels of offenders and the degree of integration of conventional and criminal values in the social milieu. If no structured alternatives are present, the frustration is likely to produce aggression.

Because of a lack of legitimate opportunities, persons in the framework of lower socio-economic classes are unable, in terms of either achievement or the disciplining of behavior necessary for achievement, to acquire the symbols of success of the wider society. As a result, young persons are exposed to invidious

judgments of those who represent and exemplify the norms of middle-class culture. Such persons symbolize power and prestige and are usually found in middle-class oriented institutions such as schools.

One of the responses available to youngsters in this situation is to reject the imputation of inferiority and degradation by emphasizing those traits and activities which distinguish them from these carriers of middle-class values. The common response may inaugurate new norms of conduct. A hostile response by the youngster in a high-delinquency area to his devaluation arises because of the fact that the success value, common to the whole culture, has validity for him (Short and Strodtbeck, 1965). Seen in this light, vandalism, arson of schools, and other acts of defiance are dramatic denials of a system of values which the delinquent has internalized, but which for the sake of perserving a tolerable self-image he must reject. The mood of rebellion may be created not only by the negative judgments of the carriers of middle-class culture, but by the negative self judgment as well (Kobrin, 1966).

When a person is faced with a discrepancy between his aspirations and his achievements, failure may be attributed either to elements external to himself or to his own faults. If he attributes failure to the social order (injustice, inequality, "bad breaks"), his mode of adjustment to the condition of stress produced by this discrepancy is likely to be delinquent. If he attributes his failure to personal deficiencies, his mode of adjustment is likely to be solitary: drug addiction, mental illness, etc. Delinquents are persons who have been led to expect opportunities because of their potential ability to meet the formal established criteria of evaluation and to whom multiple social barriers to achievement are highly visible.

Earlier researchers did find a large discrepancy between aspiration and expectation among delinquent populations when compared to non-delinquent controls (Spergel, 1966). Merton suggested that this might be caused by parents' unrealistic success goals which they, having failed, hold out for their children. The high aspirations that have been internalized by these children cause correspondingly higher stress than that found in children who do not have

unrealistically high aspirations, even though both groups may be confronted by failure in the inadequate opportunity structures available to them. A major intention of the New Pride project is to reduce the discrepancy between aspiration and expectation by providing educational and work experiences in which the individual client's successful experiences are maximized.

Spergel (1966), among other researchers, found evidence in support of the theory of differential opportunities in field research. According to Fagan, et.al. (1981), "Empirical tests of strain theory are generally supportive, indicating that these hypotheses explain as much as 30% of delinquent behavior (Elliott and Voss, 1974; Brennan and Huizinga, 1975)." It is logical that if resources are in short supply, the individual would be driven by his aspirations — which, in so far as they reflect basic wants, are fairly inelastic — to accept substitutes. It is difficult to uncover, however, just how differential opportunity acts to produce crime or other symptoms of social disorganization. This factor is interwoven into the fabric of people's lives in a fundamental way, but a way in which it is difficult to isolate from other conditions, such as family disorganization, which may themselves be results of financial difficulties traceable to the social structure.

In the provision of a multiplicity of services including education and work experience, New Pride is designed to forge a path (bridge some of the distance) between clients and the legitimate opportunity structure. New Pride represents an attempt to bring client expectations in terms of career choices and future earning power more in line with their aspirations. If such services are successfully delivered, participation in the program should stimulate a better goal orientation, a greater sense of self-esteem, and a new belief in these young offenders that they can make a better life for themselves using legal means. I

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Delinquent youngsters are consistently characterized by low self-esteem. They are frequently suffering from social and psychological handicaps of considerable magnitude. While advanced technology has made younger workers relatively dispensable as a source of productive labor, it has also rendered the types of occupations in which these younger workers are qualified to perform (unskilled labor) relatively dispensable to society. Changes in the educational and occupational patterns have increased the demands on young people to conform, to attain more formal education over a much longer period of time than any era in the past. It has also proportionately heightened the frustrations of those who feel that they have failed. For this reason one of society's major problems is the question of how to keep the losers playing the game. For this, adequate rewards are needed. The reason for the emphasis on education and work as treatment components in the New Pride program is that achievement in both spheres has been seen as essential to status in mainstream society. The youngsters involved must be taught not only how to read, spell, etc., but more importantly, that they CAN.

To accomplish these aims, certain assumptions are relevant to the New Pride model:

- Most of the youngsters concerned are alienated from a student role and from school.
- Most are not alienated from the idea of education (Spergel, 1966;
   Short and Strodtbeck, 1976).
- Most are positively oriented towards work (ibid).
- The program must produce and maintain substantial education without going to school.
- The program must have an extraordinary capacity for individualization (the youngster's ability level must be determined beforehand and the materials provided at his level).
- Constant encouragement and successful work and educational experiences are necessary.

Educators have argued a similar rationale for the provision of special programs to underprivileged youth. "The importance of producing an environment which increases academic skills is that successful achievement of educational skills will serve to re-instate in the dropout or potential drop-out a promise that he can be 'normal.' 'Normal' in this case means that he can be successful in an area where he has been previously unsuccessful. Furthermore, this success will provide him with a means to re-enter the mainstream of adolescent world the school, and the choices of opportunities to follow (Staats and Staats, 1965:40)."

The theory of differential opportunity provides an explicit rationale on which the major program elements of Project New Pride can be understood to be based. Consider education. Specifically, improving academic skills (the immediate treatment objective) is viewed as a means for improving regular school performance, which is postulated to increase a youngster's chances in the system of existing opportunities in which he or she is now equipped to operate more successfully. In turn, this should reduce involvement in delinquent behavior, thereby lowering the subsequent risk of recidivism.

If the program does in fact achieve its initial objective of improving academic skills, in this sense it is successful. Assume, on the other hand, that improvement in academic skills is followed by a reduction in recidivism only for youths who improved substantially, to within two grades below their assigned grade level in school, but that it does not result in fewer additional offenses for youth whose skill levels represent a deficiency greater than two years. In this case, we have theory support, program support, and we know what to do.

If academic skill improvement is followed by a reduction in recidivism only for youths who do not return to public school, either the theory is wrong or the public school system does not represent a meaningful avenue to existing structures of legitimate opportunity. If work experience during the term of the project is followed by a reduction in recidivism, with those still employed at follow-up showing the greatest reduction, there is support for the theory in the area of work. That is, work can be seen as an effective means by which youth are linked to the existing legitimate opportunity structure.

If neither work experience nor academic improvement are associated with a reduction in recidivism, and if the programs are successful in providing both, we have a case of program success and theory failure. The most global preliminary findings related to theory validation show mixed results at the present time.

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CHAPTER TWO:

**CLIENT IMPACT EVALUATION** 

# CLIENT IMPACT EVALUATION DESIGN

The evaluation examined all of the outcome variables from a dual, yet integrated and complementary, perspective. The first of these approaches examined the differential outcomes of sub-groups and sub-types of the experimental subjects only. This part of the evaluation was an internal analysis of the juveniles who received the services provided by the program. Its results are described in "The Impact of the New Pride Model on Client Outcomes." The second part of the analysis was external in nature and compared the experimental subjects with the members of the comparison groups on various outcome measures. These results are described in "The Comparative Analysis of Recidivism." While these two parts of the study were logically distinct, they were closely related and were designed to provide a complete assessment of program impact. In combination, this dual approach allowed an evaluation of the overall impact of the program as well as the differential impact of the project for youth receiving treatment.

The study was based on three groups of subjects - an experimental group, a qualitative comparison group, and a statistical comparison group. It is important to note that a complete data set was created only for members of the experimental group. Members of both comparison groups had a similar data set, with the exception of the information on diagnosis and treatment. For these groups the only information on treatment concerned the presence of alternative treatments and types of such treatment, if any. It is also important to note that the members of the experimental and comparison groups were treated identically in terms of the collection of data on the primary outcome variables. Both groups were followed for identical periods of time and information on the same recidivism measures were collected on them.

The data set for the comparison groups was considerably more limited. The major reason was that these groups could only be created retrospectively. Federal guidelines on client eligibility (three prior offenses adjudicated in juvenile court) and careful monitoring virtually assured that the projects could not select participants from lists of eligibles sent over by the court. All sites

had difficulty finding enough clients because so few individuals met the criteria. Therefore, the information described that was regularly gathered from interviews and testing could obviously not be collected for comparison subjects.

Client Characteristics. Since the most complete data set was collected for the experimental subjects, this discussion is confined to this group, for the time being. Client characteristics were measured in two general areas – demographic characteristics and criminal histories. In the former, we were interested in the basic information relating to age, sex, ethnicity, educational level, family status, socio-economic status, and kindred variables. Comprehensive and comparable data was collected in this and other areas by means of identical format in forms and files across the replication.

The second component of the client characteristics relates to criminal histories. For each subject data was collected on all arrests that resulted in new petitions and/or indictments, updating all files every six months. Given this information, offenses were grouped into those that occurred before, during, and after the intervention of the program. Since we also had all available data on the number and types of offenses for which these young people were arrested and referred to court, this information allowed us to measure the seriousness of the offenses committed.

<u>Diagnostic Categories.</u> The second major block of information collected was that of diagnostic categories. At the orset of the program a diagnostician tested and interviewed each individual referred to the project. During this phase all clients were to be administered the Woodcock Reading Mastery Test, either the WISC-R or WAIS IQ Test, and the KeyMath Test. On the basis of this testing and an interview procedure, the areas of relative strengths and weaknesses for each person were defined and areas identified in which remediation was required. Over all 10 sites, about 25 percent of the New Pride clients in the replication program were diagnosed learning disabled.

Post-testing occurred after the intensive phase of the program (about six months long) on the Woodcock and the KeyMath Tests, which provided

measurable outcomes in the area of academic achievement. Results indicated that substantial gains were made by the New Pride clients.

Treatment Plans. The next block of information collected concerns the treatment program that was designed for each of the clients. Since the projects provided individualized treatment, the actual plan varied from person to person. A service plan developed at the end of the diagnostic period was collected for each of the participants and made a part of the data set used in the evaluation. In addition, any systematic changes made in the plan during the course of treatment was also recorded and added to the data set.

Services Delivered. Having collected information on the types of treatment plans that were recommended on the basis of the diagnostic phase of the program, the next major data cluster involves the actual treatment provided by the project. It should be clear that an underlying assumption to this part of the analysis was that there might be discrepancies between the plan that was recommended and the one that was implemented. This discrepancy could be in either of two directions — either the addition of treatment elements not recommended or in the deletion of treatment elements originally recommended. One of the reasons for collecting updated information on the recommended treatment plans was to separate planned from unanticipated changes.

To accomplish this part of the data collection, the actual services that the youth received were recorded for each subject on a daily basis covering the actual amount of time clients spent in various activities. Again, these included such things as attendance at the alternative school and the general subjects studied, employment counseling, family counseling, etc. (over 55 categories in all).

In addition to noting the presence of these elements in the actual service plan, their intensity was also of interest. Intensity was measured by such variables as service frequency and duration as well as the number of days in attendance and the distribution of those days across time.

Another dimension along which the clients varied was that of total exposure to the project. For a variety of reasons some clients completed the course while others dropped out at various times and for various reasons. The times and reasons for termination were recorded for all clients and this information built into the assessment of program impact.

Review of Elements in the Model. Thus far this report has described the kind of information that was collected on each of the experimental subjects. This is a good time to recapitulate. For the experimental group members detailed information was collected in each of four general areas of concern: client characteristics, diagnostic categories, recommended treatment plans, and actual treatment experience. Within each of these general areas many discrete variables were measured.

The client characteristics focused on comprehensive demographic characteristics and criminal histories, including the number and type of prior arrests and the seriousness of the offenses. Diagnostic categories included information on the results of the testing and the counselor interviews that were conducted. The recommended treatment plan contained information about the service plans that were recommended by the treatment staff as a result of their diagnostic work. It included information on the elements that were recommended for each client, as well as the recommended intensity of those elements. Finally, the actual treatment given to each client was also measured, using the service delivery records of the project staff. The clients' total exposure and continuity of exposure to the program was measured, along with the treatment components that were received.

The information collected in this part of the evaluation provided a rich background against which to assess and interpret the outcome measures. It also provided detailed information on what happened to these clients in the program, in terms of desired treatment plans and those that were actually implemented.

## **Outcome Measures**

The outcome measures employed in the analysis were divided into two classes: primary measures of outcome and secondary or intermediate measures.

Since one of the main goals of the New Pride project was to reduce the amount of crime committed by the subjects of the project, we took the primary outcome measure to be that of recidivism. According to the conventional view, if the New Pride replication program was to be viewed as successful it should be able to demonstrate a reduction in the amount of crime committed by youths served by the projects. Although this seems like a simple enough goal, it is in reality an exceedingly exclusive one, both in terms of actual achievement and in terms of scientific measurement. Nevertheless, recidivism was taken to be a primary outcome measure.

The other outcome measures were viewed as being of a secondary nature and were seen as intervening variables. They were also analyzed as outcomes. Among the variables included in this class of events are the following: academic achievement (especially for the younger clients), net gains in educational test scores, learning disability remediation, and improved employment status (especially for the older clients).

These outcome measures can be viewed as intermediate in two senses. The first is quite simply that they are not direct measures of the primary goal of any delinquency treatment program, which is the reduction of delinquent behavior. The second is that these variables can be viewed as mechanisms through which the treatment offered by the program effects delinquent behavior. In other words, a reduction in delinquency may be related to improvement in educational attainment or learning disability remediation and it may be only through changes in these intermediate variables that changes in delinquency can be observed. Because of this status, the intermediate outcome variables played a dual role in the impact evaluation. They were treated as true outcome measures and the impact of the program in bringing about changes in these variables was assessed in the same fashion as changes in delinquent behavior were assessed. For

example, the data were examined to see if there was in fact improvement in academic achievement or employment status. By collecting and analyzing the information in this manner, the impact of the program in each of these areas could be evaluated.

In general, the assessment of the impact of the program on these intermediate variables was conducted at two levels. The first was a general or overall evaluation in which the variables were examined for net gains. The second was an internal analysis that linked the outcomes to the treatments imposed so as to test for treatment effects and non-treatment effects.

After the evaluation of the impact of the program on intermediate outcome variables, these variables then became a part of the overall evaluation model in order to assess the impact of the New Pride program on the primary outcome measure. In this case, the amount of change in these intermediate variables was used to interpret and explain observed differences in the rate of recidivism.

#### Recidivism Measures

This brings us to a discussion of the way in which the key variable of recidivism was defined. It was measured in terms of rearrests that resulted in new petitions in juvenile courts or indictments in adult courts, and new adjudications and/or convictions. Offenses were measured after clients were admitted to the program and after comparison subjects were assigned a similar case action date. Offenses were again measured 12 months later for both groups, when it was assumed that clients had the benefit of the treatment experience.

New Petitions. The first basic measure of recidivism consisted of rearrests that were referred by police to the courts for action and which resulted in new charges. There were two reasons why this measure was selected. The first was 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 juvenile courts). 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 in 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 where there are multiple police and sheriff's departments. The concomitant strategic problems of accessing reports when they are located in many offices spread over wide geographic areas was a cost consideration.

Readjudication. When the study got underway, it was successfully argued that from a policy point of view the impact of the program on New Pride clients might be best assessed by using a "harder" measure of recidivism such as new adjudications or convictions in adult court. So while generally speaking measures involving earlier decision points are superior to other types of recidivism measures, these more legally consequential measures of recidivism were also used. Aside from their relevance in assessing system penetration, these variables are generally considered to be key elements in the social definition or labeling process for most offenders.

Incarceration. Evaluating the consequences of program participation on the incarceration rate of clients required comparing observations on a statistical comparison group which was matched to resemble experimental subjects in terms of two criterion variables: the number of prior adjudications and age at offense. Information on new adjudications or convictions and on the dispositions of such cases were routinely gathered by follow-up documentation. Decisions of the court were noted on forms covering each criminal event in the client or comparison group file that was updated every six months.

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#### Comparison Groups

Composition. Two types of comparison groups were generated from the complete court file searches in each of seven cities. Both groups consist of adjudicated youth who meet the individual sites' criteria of eligibility for the program as it was operationalized for purposes of client intake. The first is comprised of the universe of all individuals who meet the eligibility criteria for the program and who have been screened by at least one knowledgeable person originally involved in the selection of clients. The official role of this person has varied from city to city, ranging from the supervisor of probation officers in San Francisco to the counseling supervisor or evaluator elsewhere. This group is called the "qualitative comparison group" because it was designed to control for the discretionary decision-making of projects and courts in the selection of possible candidates for the program.

The second group is a quantitatively derived set of comparison subjects called the "statistical comparison group." It is a subset of the universe of eligibles defined qualitatively. In order to define the matching procedures appropriate for this group, a number of substantial problems were defined, evaluated, and addressed by all core staff and the national advisory panel. These issues and their solutions are discussed in the following section.

Matching Strategy. Matching was done on a site-by-site basis because of wide variations in court procedures between the jurisdictions in which New Pride was replicated. For example, in Chicago, the average number of prior counts adjudicated for the treatment group was 3.7. In Pensacola and Providence, the average was 6.2. The only way these differences could be held constant was to control for them by matching comparison subjects from the same cities. Altogether, 970 treatment subjects were matched to 724 comparison subjects (64 percent of the initial qualitatively defined comparison group).

Because of the well-documented relationship between the number of prior offenses and subject age on the amount of crime committed and the likelihood of new charges, a matching procedure for the statistical comparison group was

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devised that would take them into account. Subjects had to be matched on age in order to insure comparability in the maturity of the groups. The number of adjudications in their criminal histories had to correspond so that we were examining the backgrounds of equally serious offenders. Therefore, for each selected comparison group subject, matching procedures established a hypothetical date of entry (or case action date) after an adjudicated offense corresponding, in terms of number of priors and age at offense, to a subject of the treatment group.

To assure similarity in the age at offense distributions between the treatment and comparison groups, subjects were matched proportionally within categories of numbers of priors. Hence, if five percent of the client group entered the program with only one adjudication, five percent of comparison group members were matched to them at their first adjudication. Likewise, if 10 percent of all clients entered with two adjudications, 10 percent of the comparison group were included to "start" with two adjudications, etc. Comparison subjects for each category were selected on the basis of similarity to the client group in terms of age at their matched offense. This procedure allowed the comparison groups to be smaller while the offense distributions remained the same.

Finally, an adjustment was made to control for the "intake lags" which occurred in the treatment group. After the last prior adjudication occurred for a client, there was some period of time before he or she entered the program. For the treatment groups at each site this lag time was measured and the median lag time was assigned to comparison cases from the same site. The point in time of each comparison group subject's matched prior offense plus the intake lag assigned provided the hypothetical case action date for that person.

Results of the Match. Table I presents a schematic outline of the results of the matching procedure extensively discussed in the full report. The generally successful results of applying the algorithm to the development of the comparison groups appears in the left two columns of the table. All sites, except Camden, show no significant differences between the treatment and comparison

Table 1
Schematic Overview of the Results of the Treatment-Comparison Group Match

Site	Number Prior Sustained Adjudications	at	Prior Serious- ness	Ethni- city	Gender	Time to Follow-Up
Camden	*	*				*
Chicago						*
Fresno				*		*
Kansas City			*	*		*
Pensacola				*	*	
Providence				*	*	
San Francisco				*	*	

<sup>\*</sup> Significant differences between the comparison and treatment groups.

groups on the match parameters. The right four columns of the table show the results of tests between groups for four other sources of bias. Prior seriousness of offenses is the least bothersome source of bias between groups, but differences in ethnic and gender compositions of the groups affect five sites and differences in time to follow-up affect four. No site goes unscatched by one or more sources of bias.

The results of the match indicate that matching procedures can be implemented quite effectively, but they can never account for all of the sources of bias between groups. Statistical controls on biases are an inevitable necessity.

Information Collected. The following pieces of information were collected on all comparison subjects who met program eligibility by local definition, but had not been referred to the program:

- Name and court ID number (if available);
- Probation Officer's name and telephone number;
- Birthdate;
- Sex:
- Ethnicity;
- Complete juvenile justice history forms filled out on all offenses for which the juvenile was adjudicated or for which a site-specific alternative type of determination of guilt was made; and
- A separate listing of dates on which other petitions were filed which did not result in an adjudication or other determination of guilt.

For the most part, this data was collected on eligible cases occurring within the same time frame in which the projects operated. One site with special problems, where all or nearly all eligible cases were referred, collected the information on similar cases processed by the same courts two years prior to the implementation of the project.

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#### Follow-up Data Collection

<u>Timing.</u> All experimental and comparison subjects were followed up every six months through the winter of 1984. Additional records were entered for each individual charged with new offenses that got referred to either juvenile or adult courts for action. Regular updates included all offenses, their accompanying case action, and dispositions that were recorded by June 30 and December 30 of each year.

All youth were followed up through December 31, 1983 and many through the spring of 1984. The evaluation design, particularly the comparative analysis of the distribution of recidivism over time, required that three points of follow-up be available. This goal was met for all but a very few clients. From one to three years of follow-up time after 12 months of program participation was available for nearly everyone. The average was two years, seven months time after program entry. Clients entering the program in or after 1983 were not considered in the impact evaluation because they did not have sufficient follow-up time to be compared with the others.

<u>Sources</u>. Sources of follow-up information included the assigned juvenile probation officers, juvenile court records, and adult court records when indicated by virtue of subject age or waiver. Clerks of court, court administrators, and intake units for adult probation agencies were other sources.

Type. In all instances of recidivism for both client and comparison youths, a juvenile justice history form was filled out. Secondary outcome measures, such as diplomas or GEDs received and school attendance records subsequent to program participation, were usually followed up by school reintegration coordinators for the client group. Such follow-up provided before-and-after profiles as well as indicators of program achievement, the intermediate outcome variables.

# CLIENTS, SERVICES, AND PROGRAM OUTCOMES

# Client Backgrounds

The overwhelming majority, 92 percent, of the New Pride clients were male, ranging from 100 percent in Chicago to 84.5 percent in San Francisco. Twenty-eight percent were white and 72 percept were minority group members. Of all the youth served by the New Pride replication projects, 53 percent were black and 15 percent were Hispanic. Less than one percent of the clients were American Indian or Asian. New Pride's eligible 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. Sixteen was the modal age at intake, including one-third of all clients. The average age for all clients at the time of admission into New Pride was 16.3.

Upon admission to New Pride, the largest proportion of youth with recorded grade-levels, 34.3 percent, were in the ninth grade. 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.

As could be assumed 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. The sustained petition, where the judge finds the youth delinquent as charged, was the most frequent legal status and included 78.5 percent of the clients at intake. In 13.1 percent of the cases, the youth had a petition pending and was still awaiting action on the presenting offense.

Program youth have been the recipients of many other previous attempts to alter their lifestyles. Thirty-eight percent of all clients have been placed out of their own homes by the courts or other social welfare agencies at least once. Sixteen percent have experienced more than one such placement. The vast majority, 77 percent, have been in detention. Fifty-four percent have been in detention two or more times.

#### Social Class

Of those parents for whom there is information on education, a majority of both parents - 58 percent of the mothers and 59 percent of the fathers - did not complete high school. Census statistics report that in 1979, 32 percent of all adults in the country had not completed high school. Our 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 there are employment data (again, this information is missing or inappropriate for a substantial proportion of fathers) just 52 percent of the fathers or male heads of household were employed full-time. Based on the total group for whom we have data (1,598 mothers and fathers), the overall employment rate for parents of New Pride youth is 50 percent. Another eight percent were employed only part-time.

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 \$9,999. Twenty-two percent of client families had an income of less than \$4,999. Given that most of these families had five persons in the household (the mean number of persons per family was 4.9), it is clear that most clients were living in poverty.

#### Family History

The most common living arrangement for New Pride youth, in which 48 percent were living at the time they entered the program, was in a single-parent family with their mother. For most of the young people in the New Pride program, the relationship with their mother has always been their primary tie. Forty-five percent of the clients were raised by their mother alone until they were 12 years old. Only 37 percent of the youth were raised mainly by both parents up to the age of 12.

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 over time. 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.

These families are also marked by some degree of violence and substance use. Close to a third of the clients who responded said that they were disciplined physically by members of their family. Thirty-one percent reported that a member of their family had a drug or alcohol problem. When asked whether they had or might develop such a problem, 10 percent of the youth who responded said they did and an additional 12 percent responded "don't know."

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## Offense History

The New Pride Replication projects were directed to focus on youth who had been adjudicated or found guilty of "serious misdemeanors and/or felonies (preferably robbery, burglary, or assault)."1 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.

By selecting from the offense file all offenses committed prior to clients' admittance into New Pride, we can isolate a picture of their offense histories as they entered the program. The file contains offense histories for 1,090 clients, 93.4 percent of all clients. The average number of prior offenses for all clients

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

with data in this file is staggering; these New Pride clients had an average of 11.3 offenses at the time of intake.

Overall, 64.5 percent of all prior offenses were sustained, and the overall average of sustained prior offenses per client was 6.7. This is well over the basic eligibility requirement of two priors and a presenting offense. These figures leave little doubt that New Pride served a clientele of multiple offenders.

The juvenile history file, which contains data on the most serious charge of each criminal event, holds 11,415 records for 1,097 clients. Unlike the offense file which contains a brief record for every offense committed, the juvenile history file contains dispositional data.

Close to one fourth (23.4 percent) of all charged offenses were dismissed by the court. The most frequent type of disposition overall is formal probation, and this accounts for 26.1 percent of all dispositions. 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.

Second only to formal probation, the most common sanction imposed against New Pride clients is a commitment to a state corrections institution. Eight and nine tenths 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.

### Diagnostics

Over all the replication sites, 87.4 percent of all clients had at least one test score entered into the MIS. Over 24 percent of all clients were identified as learning disabled. Taking only the figures of the seven sites with the most adequate data, 27.5 percent of their clients were identified as LD and assigned to receive remediation services. Almost all youth who were identified as LD (97.5 percent) were tested on at least one test. However, only 21.9 percent of the clients classified as learning disabled received all the recommended tests to screen them, including the Detroit. Four of the nine sites listed never administered the Detroit to any of their clients.

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 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 some, although not all, diagnosticians consider it acceptable to add 15 points to the test scores of culturally different populations. 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 between sites on the level of reported IQs (F = 5.026, df = 8,676, df = 133.73, p < .01). There are also significant differences between the reported IQs of LD clients and other clients (F = 25.162, df = 1,675, df = 129.12, df = 129.12

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The Wide Range Achievement Test (WRAT) has three subtests in the areas of reading, spelling, and arithmetic. Though the spelling subtest was required, only 72 percent of all New Pride clients were given any part of the WRAT. 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 spelling. The third subtest, arithmetic, showed no significant differences between sites (F = 1.652, df = 8,685, MS(e) = 26.558  $\Rightarrow$  > .05).

Controlling for the differences between projects, there are significant differences on all subtests between LD and non-LD clients, with the LD clients having lower scores than the non-LD clients. There are also differences between ethnic groups, with white youth outperforming minority youth generally. Hispanics scored lowest of all.

The average grade equivalent score on the KeyMath pretest was 6.1. Note that this grade equivalent is 1.5 years higher than that achieved on the arithmetic subtest of the WRAT. It is 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 again significant differences between sites. Controlling for the site differences, significant differences are also found between the scores of LD and non-LD clients, with the learning disabled having lower scores. In addition, still controlling for site differences, there are significant differences between ethnic groups, with whites scoring higher, followed by blacks and Hispanics.

When these difference scores between the pre and post-tests are weighted for a 26-week (half year) period, clients show a mean gain of .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 these differences represent significant improvements in raw scores from the pre-tests to the post-tests. Covarying the pre-test scores of all subjects, there are significantly different gains between sites. Covarying the pre-test scores of all subjects and the differences between New Pride sites, non-LD clients gained significantly more than LD clients. With the same covariates, there are also significant differences in gains for different ethnic groups. Whites gain the most, followed by blacks and Hispanics.

The average grade equivalent on the Woodcock, a test of academic achievement in the area of reading mastery, 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.

Measuring on the basis of Woodcock pre-test raw scores, there are significant differences between sites. Controlling for the site differences, significant differences are also found between the scores of LD and non-LD clients, again with the Learning Disabled scoring lower. Still controlling for site differences, there are significant differences between ethnic groups, with whites scoring higher than blacks who, in turn, score higher than Hispanics.

When calculated to a 26 week standard, the overall grade level difference between the pre and post-scores is 1.1 years. 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 scores. New Pride clients made great strides in improving their reading skills while in the program.

Covarying the pre-test scores of all subjects and the differences between New Pride sites, non-LD clients gained more than Learning Disabled clients. With the same covariates, there are no significant differences in gains for different ethnic groups.

#### Treatment Plans

Most New Pride sites failed to utilize fully the Individualized Integrated Service Plan (IISP) as a treatment tool. As late as 1982, the computer files which stored this information had no records for clients from three of the seven sites remaining in the Replication Program, and a low number of records from two other sites. The major reason for the lack of IISP data, 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.

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. Again there is a large variation among individual sites as to areas of emphasis.

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.

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. Over all sites, 62 percent of the clients with objectives recorded had updates entered for at least some of their objectives.

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.

#### Services

Service delivery records were entered into the computer for 94.7 percent of all clients from the 9 sites that documented services. (Dedrge found in Not counting 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. Intake and case work activities were also recorded for high proportions of clients: 83.9 and 83.7 percent respectively.

For the service plan data that are recorded on IISPs, we have examined the service delivery data to see which planned services were actually delivered. 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.

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. At 5 of the 8 sites, over 90 percent of the clients who had educational services in their plans received some of these services.

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#### Education

School attendance data present 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.

Altogether, 819 or 70.2 percent of all clients attended the New Pride Alternative School. 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. 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.

Before coming to New Pride, only 1.2 percent of the school programs ended positively, that is, because the student completed the program, completed a GED, or graduated. On the other hand, 44.5 percent of the school situations ended negatively, by the student dropping out, being expelled, or committing a new offense. During the intensive phase, the positive completion increased from 1.2 percent to 36.2 percent, while the negative ones decreased to 25 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 terminations, however, decreased further, falling to 21.6 percent in programs begun in the follow-up phase, and 23 percent in programs begun after termination.

New Pride was apparently successful at placing youth identified as Learning Disabled in special programs designed to remediate them. While only 7.4 percent of the records for school programs attended prior to New Pride involved LD remediation, 16.4 percent of the school programs begun during the intensive phase addressed LD problems. An even higher proportion of programs starting during the follow-up phase (18.9 percent) included LD remediation. The proportion of programs with LD remediation which were begun after the program remained high, almost twice of what it was prior to New Pride.

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.

#### **Employment**

According to the intake survey, 86 percent of all clients who entered the program were unemployed at the time they were admitted into New Pride. 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. 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.

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 kinds of jobs they wanted had improved after having been in New Pride.

With information from all 10 sites, 602, or 51.6 percent of all clients received the benefit of some type of employment experience while in New Pride, 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.

The most common type of employer, for 43 percent of the jobs, was a private business. Not-for-profit corporations were the employer in 42 percent of the cases. This was often the New Pride program itself or its parent agency. New Pride paid all the wages in 40.7 percent of the jobs. The employer paid all the wages in 32.7 percent and CETA in 17.8 percent of the cases.

Most jobs, 84.4 percent of them, brought clients a salary of minimum wage, that is, between \$2.50 and \$3.50 an hour. Seventy-three percent of these jobs lasted between one week and three months, and 17.5 percent lasted longer than three months.

Clients were evaluated as having performed excellently 20 percent of the time, satisfactorily 44.3 percent and unsatisfactorily 15.1 percent of the time. Attendance ratings were slightly lower: excellent, 21.8 percent, satisfactory, 39.1 percent, unsatisfactory, 18.6 percent.

Perhaps the program provided clients with a degree of stability which was reflected in slightly more stable job situations. As they progressed through the program phases and left New Pride, youth worked more hours each week and earned somewhat higher wages.

New Pride projects faced a real challenge in trying to find jobs for youth under 16 years of age. Despite these difficulties, sites were relatively successful at employing these younger clients. Of the under-16 group, 43.7 percent held jobs while in the 16 and older group, 56.5 percent held jobs. 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).

# Termination

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 probation decision to terminate. 49.7 percent of all clients were considered successful terminations, 46 percent unsuccessful, and 8.2 percent neutral. The three sites with the highest proportion of neutral terminations, all over 10 percent, are sites which closed at the end of their third year of operation.

If programs did become more effective over time at treating clients, one might expect to see an increase in the proportion of youth who completed the program. In the overall figures, however, this doesn't hold true. While the proportion of program completions does increase for clients admitted in year two (1981), it falls in year three to a level below that of year one. Only one site, Camden, showed a steady increase in the proportion of program completions over the three years. These data, then, show no clear evidence to support the hypothesis that as sites gain experience in operating a New Pride Project the proportion of clients completing the program would increase.

The overall figures for successful terminations are similar to those for program completion: the proportion increases from year one to year two, but falls in year three to a level below that of year one. These data also show, however, that the proportion of unsuccessful terminations falls over the three years.

Those clients who completed the New Pride program spent an average of 52 weeks, exactly one year, in the program. Those who were terminated for any other reason spent close to half that time or less at New Pride. These clients were just completing their intensive phase, on the average, at the time of their

termination. The time in New Pride spent by clients who terminated successfully is almost identical to the time spent by those who completed the program (51.8 weeks as compared to 51.7 weeks).

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Considering all the replication sites, youth spent an average of 36 weeks in the program, or close to eight and one-half months. The average time varies by site, from a high at Providence of 41.8 weeks (almost 10 months) to a low of almost half that time: 22.2 weeks at Boston (five months).

### Satisfaction with New Pride

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.

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 liked school now, at termination from the program, only four percent more than at intake said they liked it a lot or very much.

Basically, program participation appeared to promote a rearrangement in the educational goals of clients. 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) indicated that they believed their chances of getting the kind of education they wanted had improved as a result of being in New Pride.

Counseling services were rated the highest in terms of having helped clients a lot, followed by educational and recreational 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.

When asked how helpful the program had been to them generally, less than three 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 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.

#### THE IMPACT OF THE NEW PRIDE MODEL ON CLIENT OUTCOMES

This chapter presents 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. 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 recidivism after the program.

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 educationrelated 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:

	Program Duration		Time to Follow-up
New Pride Site		Client	
Age		Success	
	Recidivism During New Pride	•	Recidivism After New Pride

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 found to be essential covariates in the

analysis of the recidivism data. Age at program entry was linearly related to recidivism 12 months after New Pride entry, with older subjects being less likely to recidivate. It was 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. 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 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.

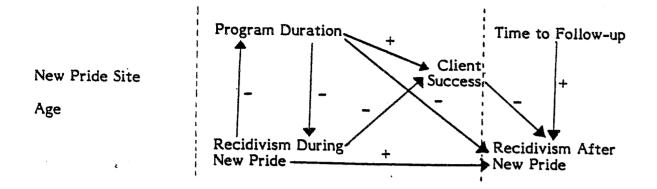
The relationship between program duration and recidivism during New Pride should be further explicated at this point. These two variables form the central simultaneous component of the basic outcome model. That is, the two variables cannot be temporally ordered with respect to each other. Time in the 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 was successfully terminated from the program. 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.

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, although 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 successsful 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.

One of the benefits of this model is that both direct and indirect effects of the variables relevant to the outcomes can be specified. 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

All but one of the variables which appear as outcome measures 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. This problem necessitates special techniques to obtain unbiased estimates of the

coefficients. It requires establishing instruments which predict these components individually. Such instruments are simply independent variables which uniquely predict one or the other of the two simultaneous variables.

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.

#### Results

The 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 differences between juvenile justice systems. These effects occur from site to site in comparison group data also. For example, within the first year after case action date, 58 percent of both groups in Camden, 42 percent of both groups in Kansas City, and 80 percent of both groups in Providence had new petitions. While there are no differences at these sites between the comparison and treatment groups in the percentage of youth with new petitions, these figures demonstrate the substantial jurisdictional differences in the rates at which petitions are filed. They also demonstrate the critical necessity of controlling for such differences in the analysis of recidivism data.

Increased program durations lead to higher probabilities of successful termination, and recidivism during New Pride leads to lower probabilities. 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 average age of 16 years at entry and the average program duration of 37 weeks).

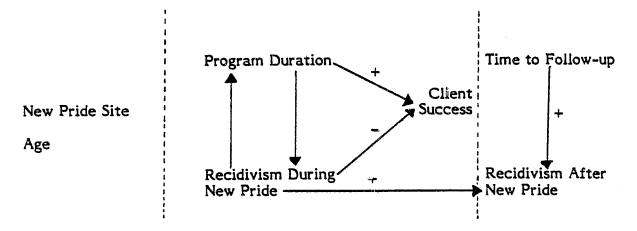
Both the variables describing differences between New Pride sites and the effect for age account for significant proportions of variance in program duration. Whether or not a client recidivates during New Pride is not significantly related. (Recidivism during New Pride was included as a covariate despite its simultaneous relationship with program duration.) 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).

The overall age effect is significantly related to each of the four basic dependent measures: program duration, recidivism during New Pride, successful termination, and recidivism after New Pride. However, both the linear and the curvilinear parts of this effect are strongly related only to the measure of recidivism during New Pride. For the other three variables, either the linear component appears as the strongest predictor (recidivism after New Pride and client success) or neither component alone significantly predicts the outcome measure (program duration). When entered individually into these analyses, age shows significant linear effects but no significant curvilinear effects. The coefficients from the linear age effects 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.

#### Summary of the Basic Outcome Model

The empirical evaluation of the New Pride data essentially supports the expected outcomes. There are significant effects for differences between New Pride sites and age on each of the four basic outcome measures: program

duration, recidivism 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 nature of program duration and recidivism during New Pride, are included but there is no significant relationship between them. While recidivism during the New Pride program reduces the likelihood of client success, client success is unrelated to recidivism after the program.

#### Client Backgrounds and Program Components

As previously indicated in the introduction, five types of data were related to the basic outcome measures. These five comprise much of the information collected by the New Pride evaluation on all clients. There are a total of 342 variables in these five blocks.

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 socioeconomic 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 education 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 it is that clients will recidivate.

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.

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.

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.

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.

## **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. 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. For example, whether or not a subject is employed after New Pride is irrelevant to the client's success 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.

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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. 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 to .10. Third, an analysis for each 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.

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

## Overall Analysis

The variables passing the initial screenings of the data were used to obtain an overall perspective. Figures 1 through 7 present outlines of the variables found to be significantly (p  $\langle$  .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  $\langle$  .05) was used in these final steps.

## 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

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.

#### Variables Related to Recidivism After New Pride

Basic Cutcome Model	
New Pride Sites	*
Age at Entry	(Variation Explained = .059)
	_(.023)
Time to Follow-up	(.068)
Recidivism During New Pride	(.004)
Program Duration	(.000)
Client Success	n.s.
Missing Values Variables	
mployment Variables	
4. Job Placement Services Delivered to Client	
5. Number of Jobs During New Pride	(¿005) ↑
	(.006)
chooling Variables	
3. Father's Education	+
6. WRAT Pretest Arithmetic Score	(.005)
	(.005)
ackground Variables	
1. Ethnicity	*
2. Gender	(.014)
4.5 GCHUCI	(.006)
ttitude Variables	
None	
eeds and Services Variables	
7. Number of Cultural Services	+
	(.004)
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 most likely to recidivate.  Gender — Females less likely to recidivate	ecidivate. Black clients

2-42

termination) nor program duration are significantly related to recidivism after New Pride.

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. 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. 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.

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.

<sup>&</sup>quot;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.

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 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 2 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).

Table 2

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 N	.5596 987	1.0000 987					
WRAT Spelling Score Correlation Coefficient N	•5884 720	.7676 720	1.0000 720				2-45
WISC-R or WAIS IQs Correlation Coefficient N	.4780 987	.4920 987	.4924 720	1.0000 987			
Woodcock Raw Score Correlation Coefficient N	.4360 746	.6768 746	.7330 613	.5533 401	1.0000 746		
Keymath Raw Score Correlation Coefficient N	.5711 735	.5577 735	.6384 598	.6542 735	.7833 704	1.0000 735	

<sup>1</sup> All correlations significant p < .05.

Thus, clients scoring high on the WRAT Arithmetic subtest also scored highly on all other tests.

One might wonder why gain scores, which do differ significantly from pretests to postests, 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 seven months in math and more than a year in reading, 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 from one-half year in the intensive phase of treatment are not sufficient to equip average clients with the skills necessary for a successful return to regular school.

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. In this instance, the cultural value placed on education may have been undermined because of a highly educated, but possibly negative role model. 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 times 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.

Figure 2

# Variables Related to Client Success (Successful Termination)

Basic Outcome Model	
New Pride Sites	*
(Variation I	explained = .034)
Age at Entry	*
	(.011)
Program Duration	(.392) →
	(•372)
Recidivism During New Pride	(.039) ▶
Martin Walana Mariaklas	•
Missing Values Variables	(.012) →
	• • •
Employment Variables	
Employment variables	
5. Times Fired From Jobs During New Pride	-
7. Thines I hee I form dobs Dorang New 111de	(.004) ▶
7. Perceived job/education chances at program entry	+
, ,	(.003) →
Schooling Variables	
	1
2. School Program Completion During New Pride	<del>(.011) →</del>
4. Keymath Pretest Score	(.004) ▶
	(**************************************
m	
Background Variables	
( Candan	+
6. Gender	(.003)
	<b>,</b>
Attitude Variables	
Attitude variables	
None	
1401G	
Needs and Services Variables	
1. Client Received General Administrative Services	+
	(.014)
3. Client Has Needs in the Area of Family Relationships	
•	(300.)
* 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	

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 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.

<u>Background Variables</u>. 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. 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.

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	
Perceived Job Chances at Program End	+
Client Ever Obtained a Job	(Partial Correlation = 1328) C
	(.0912) I
Schooling Variables	(.0912) I E N
None	τ
Background Variables	
None	S U
Attitude Variables	Of Program + S
Client's Perception of Staff Support At End	
New Pride Helped Client Leave Home	(.1914)
Client's General Satisfation With Program	(.1146)
Needs and Services Variables	(.1143)
reces and set alon Agriquica	

None

# CONTINUED 10F2

# Recidivism During New Pride

Figure 4 lists the variables which are associated with the probability of recidivism during 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 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.

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 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 recidiviate 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

Figure 4

Variables Related to Recidivism During New Pride

Basic Outcome Model	
New Pride Sites	
Age at Entry	(Variation Explained = .036) ►
Program Duration	(.013) *
Missing Values Variables	n.s. (.002) →
Employment Variables	n.s. (.001) >
Simultaneous	
Schooling Variables	
5. Disparity Between Wants and Expectancies in New Pride Entry	for Further Education at
Background Variables	(.004) ▶
I. Ethnicity	
6. Gender	
4. How Often Client Punished by Parents Before	(.007) >
6. Client's Family Receives Welfare Payments	(.004)
Attitude Variables	(.006)
7. Client's Life Satisfaction at Entry	
Needs and Services Variables	(.003)
7. Number of Identified Needs at Program Entry	+
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 recidente to recid	(.006)

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 attitudinal 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.

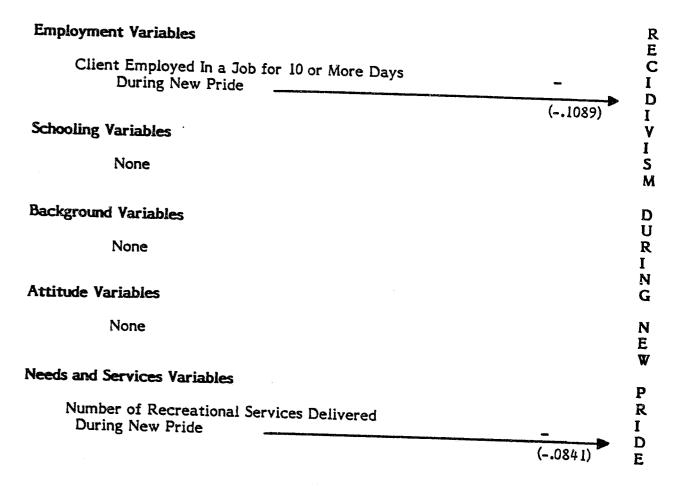
Needs and Services Variables. One last, quite important, variable was found to be significantly related to recidivism during New Pride. The number of needs identified at program entry is directly related to client recidivism during the program. This finding suggests that the needs identification process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

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.

Figure 5

# Partial Correlations of Simultaneous Variables with Recidivism During New Pride



# Program Duration

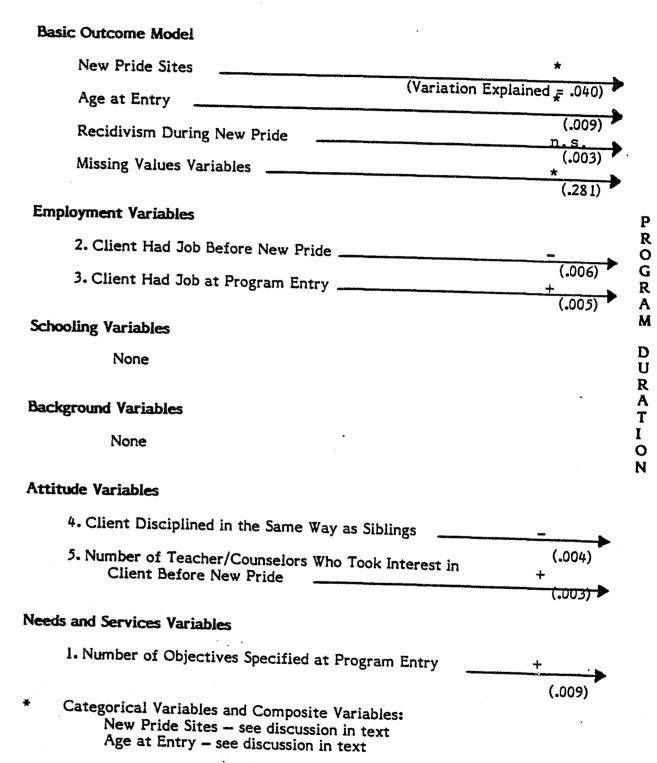
Figure 6 presents the variables found to relate to program duration. At the top of the figure is a description of the basic outcome model covariates used in the analysis. Both the New Pride site dummy and age at entry variables (linear and curvilinear; quadratic) are significantly related to program duration. Recidivism during New Pride is not significantly related to program duration, suggesting that the projects really made efforts to keep youth participating. 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 that 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 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

Figure 6
Variables Related to Program Duration



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 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.

Figure 7

# Partial Correlations of Simultaneous Variables with Program Duration

Employment Variables	
Client Received Employment Services During New Pride  Client Received Job Placement Services During New Pride	+ (.2565) + (.2086)
Schooling Variables	
Client Completed School Program During New Pride	(.3255)
Background Variables	
None	
Attitude Variables None	
Needs and Services Variables	
Number of Services Delivered During New Pride	+
Number of Counseling Services Delivered During New Pride	(.2659) +
Number of Unplanned Counseling Services Delivered During New Pride	(-3372) +
Number of Group Counseling Services Delivered During New Pride	(.2564) +
	(.1834)

0

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).

# 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. 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.

# THE COMPARATIVE ANALYSIS OF RECIDIVISM

Given the central role that recidivism plays in evaluation, it was measured in several ways to arrive at an understanding of the data that was as comprehensive as possible. Among these measures were the following:

- The proportion of subjects petitioned to court on new charges and the proportion adjudicated or convicted;
- The frequency of new offenses as measured by the number of new charges per subject (all petitions and readjudications or convictions);
- The latency to the first offense;
- The proportion of youth recidivating over time;
- The seriousness of the offenses for which youth have again been charged and/or adjudicated; and
- The proportion of subjects incarcerated.

# Proportion of Subjects Recidivating

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 recidivate at least once in each group. In principle a simple chi-square test can be used to test group differences. Differences between groups in the amount of time youth were followed up, and in the gender and ethnic compositions of the groups, however, require that a more complex analysis procedure be applied to the data. One approach to this situation is to use the data collected on the client characteristics of the subjects, to assess the degree of the selection biases that have occurred, and to adjust the data accordingly. Linear-logistic analysis was selected as the most appropriate technique in this respect, since it allowed us to compare the observed differences in the recidivism rates once the composition of the various groups were statistically adjusted for selection biases. Unlike

most other available procedures, it also has the benefit of being designed to account for differences in dichotomous dependent measures.

The implementation of this analysis shows that age at program entry, ethnic differences, gender differences, and time to follow-up are all significantly related to recidivism after New Pride entry. In addition, a sizeable aggregation effect was found across New Pride sites. Once site variation is controlled, no differences are found between number of prior offenses and recidivism. All other things being equal, the probability of receiving a new petition for females is 0.76 and for males it is 0.89. Differences in ethnicity are reflected in different basic probabilities of recidivism for whites of 0.79, for blacks of 0.88, and for other ethnic groups (in this study mainly Hispanics) of 0.82. 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 (time at risk) is positively related to recidivism as expected. Finally, the base recidivism rates for petition filed offenses are different between groups such that the expected base rate for the treatment group is 0.86 and for the comparison group is 0.77.

The task is to determine 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. So for all of the analyses, including those of the individual sites, age, gender, ethnicity, prior seriousness, time to follow-up, and the logarithm of number of priors were controlled. In the overall analyses of the combined replication data, New Pride site was an additional control variable, called a "fixed covariate" in linear-logistic models.

Overall, the results indicated that filed petitions after case action date are less frequent in the comparison group than in the treatment group (p<.025). Though being sent to New Pride increases the probability that new petitions will be filed during the time of participation, it does not increase the likelihood that such petitions will be adjudicated true. Looking at the data from all seven

impact cities, but controlling for site differences, participation in the program has no relationship to any measure of recidivism 12 months after program entry.

The increased probability of new petitions filed on clients during the program should be attributed to the fact that the New Pride projects operated in close coordination with the juvenile courts, to whom they were responsible for providing both intensive supervision and accountability. The intensity of the supervision delivered by the projects was far greater than that possible on the caseload of an average probation officer. Because of visibility alone, there was a greater likelihood that law-breaking would be detected, and that the court would be alerted to the problematic behavior of clients. Early in the study, Project Directors raised this as a concern about using petitions as an impact measure. Subsequently, sustained adjudication was adopted as an additional measure of recidivism. All status offenses and minor offenses were eliminated from the analyses to provide an additional control for the greater visibility of clients.

Findings from the process evaluation confirmed the wisdom of using two different impact measures. The data indicated that in one city petitions were filed automatically with no examination of the evidence until the adjudication hearing. In another, a special probation officer was assigned to and officed at the project, which dramatically increased the likelihood that new petitions would be filed on clients.

If a greater number of petitions had also been adjudicated true in the client group, the data would suggest that the projects had some short-term detrimental effect on clients. But this was not the case. There is no difference between groups on the measure of sustained adjudications, either during or after the program.

In counting the number of clients and comparison subjects as recidivists in the individual site analyses, both groups were compared beginning 12 months after their assigned case action dates. This interval was selected because the New Pride program was designed to treat clients for one year. Indeed, for the 49.7 percent of them that were terminated successfully, an average of 51.8 weeks were spent in the program. (For all clients, the overall average length of participation was 37 weeks.)

Since there are significant differences in the relative performance of groups by site 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 3 and 4 for filed petitions and sustained counts 12 months after case action. The accompanying probabilities of recidivism are calculated two years after case action assuming a subject age of 16 years. The individual site analyses are conditioned by the particular parameters for the covariates at each site.

Tables 3 and 4 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. 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.

One objection to the previous analyses comparing recidivism between the treatment and matched comparison groups is that the treatment groups include 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 groups for analytic purposes. The result is that treatment failures are being compared to the comparison groups as well as treatment successes.

The natural question to ask is whether the 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. Because the average time in program for youth who

Table 3

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

e. ¥		Group			
Site*	Treatment	Comparison	G <sup>2</sup>	df	P
Providence	.581	.679	1.202	i	>.050
Chicago	.096	.139	•981	1	> 050
Fresno	.068	.091	1.044	I	>.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

<sup>\*</sup> Ordered by the relative success of the treatment group.

Table 4

Expected Probabilities of Recidivism of Groups by Site:
Sustained Counts After Case Action Date Plus
12 Months, Individual Site Analysis

		oup	•		.=
Site	Treatment	Comparison	G <sup>2</sup>	df	P
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	i	>.050
Pensacola	.082	.019	5.287	1	< .005
San Francisco	.204	.134	2.613	1	>.050

<sup>\*</sup> At Kansas City P(recidivism) = .0001 for the comparison group and P(recidivism) = .0003 for the treatment group.

successfully complete it is almost exactly one year, for this analysis the measures of recidivism are restricted to filed petitions and adjudications beginning 12 months after case action date.

When the "successful" treatment subjects are tested against the comparison groups, the results are the same as for the previous analyses. There are no significant relationships between overall group differences and recidivism. 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.

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 5 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 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. This means that neither group is less at risk to recidivate.

Table 5

Proportion of Subjects Incarcerated of Groups by Site:
First 12 Months After Case Action Date

	Gr	oup	. , ,
Site	P(Treatment)	P(Comparison)	Fisher's P
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

# Frequency of Recidivism

The number of times each subject recidivates is another kind of information. It is an indicator of the amount of crime that was committed by the members of each group. While this measure is easy to conceptualize, it is fraught with a number of difficulties that must be understood. First, significant covariates like follow-up time remain uncontrolled when one simply counts offenses. Second, the distributions of offenses are highly skewed since most youth who do recidivate do so only once. Yet the amount of recidivism is an important measure of client impact and so it was examined despite these problems.

Tables 6 and 7 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 6. The picture becomes more interesting in Table 7. 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 controlled.

Additional analyses which examined the reoffense rates only of offenders and which controlled for skewness show the same mixed pattern and no overall significant results. 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 effects 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

Table 6

Average Number of Offenses in Each Group by Site

After Case Action Date

	Filed	Petitions	Sustained Counts			
Site	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 7

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

Site	Filed I Treatment	Petitions	Sustained Counts		
	rreatment	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	

than the comparison group. 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. At Pensacola for both filed petitions and sustained counts measured 12 months after case action, the treatment group recidivates more than the comparison group. At Chicago for filed petitions measured 12 months after case action, the treatment group recidivates more than the comparison group.

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 12 months after case action. In no case did incarcerations significantly affect recidivism when measured by simple counts for filed petitions, for adjudications, nor either of them when measured by an auxilliary rate measure.

# Latency To The First Offense

The third measure of recidivism that requires discussion refers to the distribution of new charges across time. It was imperative that this variable be measured as accurately as possible. Prior approaches, in which the proportion of failures as of some cutoff date are compared across groups, were not satisfactory. The basic problem with these approaches is that they rely on the single-point-in-time observation which can be considerably misleading. Therefore, some of the techniques used in this research focused on new offense distributions through time so as to improve the measurement of recidivism.

Here is an example of the inadequacy of past approaches. Suppose that after 12 months of follow-up the experimental and comparison subjects had identical proportions of clients who were rearrested. In a traditional approach the two groups would be considered equal. Yet it is possible that the rate of increase in the rearrest patterns of the comparison group was considerably steeper than the rate for the experimental group. It is also possible that the

distribution across time for the experimental group suggests that their rearrest rate is approaching a saturation point, while the rate for the comparison group is continuing to rise. Either of these outcomes would suggest that the experimental subjects are more successful than the comparison subjects, even though the proportion failing at a single point in time is equal for the two groups.

Since the primary measure of recidivism employed in this study is the distribution of petitions and adjudications over time, it is important to specify in greater detail how this variable was measured and how it was integrated into the overall analysis. As we indicated earlier, the primary problem with earlier studies which used the proportion of subjects who recidivated as the measure of outcome is that they typically compared the two groups at a single point in time. Yet this comparison can be considerably misleading.

The next figure shows the cumulative recidivism rates over time for two hypothetical groups. The initial rate is higher for the treatment group at time  $t_1$ , but the rate becomes steady as time continues. For the comparison group at time  $t_1$  it has a comparatively lower rate of recidivism, but it increases after  $t_1$ . The two programs have the same rate at  $t_2$ . However, the comparison group has the higher rate at  $t_3$ . Thus, the evaluator may draw different conclusions at each different observation time. It is intuitively clear that a short time period is relatively insufficient for the detection of differences between groups.

Basic survival analysis involves measuring how long it took for the members of each group that did recidivate to do so. Since at any point in time data was captured on who did and did not reoffend, and since it was known how much time elapsed from the date of case action to the date of the first offense, the proportion of each sample that survived with no new offenses could be described over time.

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 8 and 9 for filed petitions and

Figure 1

Survival Function and Failure Function for Recidivism After New Pride

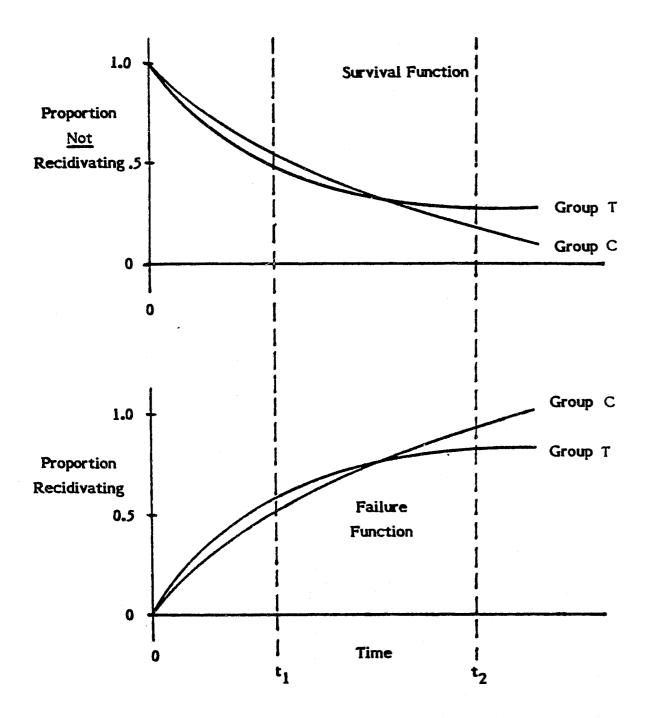


Table 8 Cumulative Recidivism Data by Site in Proportions Recidivating for Filed Petitions; Product Limit Estimates

		Car Treat-	mden Com-	Chi Treat-	cago Com-	Fr Treat-	esno	Kans	as City	Pens	sacola	Provi	dence	San E	<u>.</u>
	ionths	ment	parison	ment	parison	ment	Com- parison	Treat- ment	Com- parison	Treat-	Com- parison	Treat-	Com-	Treat-	rancisco Com-
0		.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	-00	parison		parisor
6		.43	.37	.42	.32	.35	.35	. 27	.34	.33	.25		.00	.00	.00
12		-58	.58	.54	.45	.55	.51	.42	.42	.43	.40	.68	.62.	34	.28
18		.68	.65	.63	.60	.67	.64	.45	.50	.48		.80	.81	.53	.44
24		.72	.69	.66	.66	.71	.73	.47	.57		.44	.86	.90	.61	.58
30		.74	.69	-70	.76	.72	.73	.51	.60	.51	.46	.87	.94	.64	.66
36			.69	.72	.76	.74	***	.58		.54	.49	.88	.97	.73	-69
42			.72		.82	.,,		• • • •	.65	-58	•	.95	.97	.76	.72
48					.88				.65					.79	.72
		<del></del>			•00				•67					-88	.79
N		172	131	142	54	130	213	113	64	146	72	117	92	150	92
Media	in	8.3	9.0	10.0	15.5	8.5	11.5	28.5	16.5	20.3	_*		_		
Bresio	g w	.36	99	.335	1	.966	2	.251	5	.533	F				14.0
Mante	l-Cox	.39	15	.788	4	.783	5	.275		.443		.965	_	.248 .340	

Less than 50 percent of the sample recidivated.

Table 9 Cumulative Recidivism Data by Site in Proportions Recidivating for Sustained Counts; Product Limit Estimates

	Treat	amden - Com-	Chicago Treat- Com		Fresno Treat- Com-		Kansas City		Pensacola		Providence		San Francisco		
Months	ment	parison		parison	ment	Com- parison	Treat- ment	Com- parison	Treat-	Com-	Treat-	Com-	Treat-	Com-	
0	.00	.00	.00	.00	.00	.00				parison	hient	parison	ment	pariso	
6	.31	.32	.23				.00	.00	-00	.00	.00	.00	.00	.00	
12				.11	.23	. 28	.23	.25	.31	.25	.46	. 47	.32	.22	
	. 46	•52	.34	-21	.43	.41	.35	.33	.38	. 37	.66	.67			
18	. 56	.60	.39	.33	.52	.54	.40	.42	.42				.45	.38	
24	.64	.65	.44	.40	.56					.39	.70	.72	.55	.53	
<b>3</b> 0	.68	.67				.62	.43	.49	.42	.43	.74	18.	.57	-61	
36			.49	.53	- 58	.63	.48	.52	.44		.77	.83	.67	.63	
		. 67	.52	.56	.60		.52	.56	.46		.87				
<del>2</del> 2		.70		- 56				.56			•07	-88	.71	.65	
8				.64				• 76					.74	.65	
91				.07				- 58					.85	.74	
N	172	131	142	54	130	213	113	64	146	72		*			
Median	14.3	10.5	30.5	29.0	17.8	17.0			* 70	12	117	92	150	92	
Breslow P	.6	159	. 244				32.0			<u> </u>	6.8	7.0	5.0	16.0	
Mantel-Cox						.5702		.6118		.8623		.8420		.1821	
			.6377		.5555		•6070		.8314		.6522		.3099		

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 8). 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 8). 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 8 and 9 depends upon total follow-up available for each group and the last point at which a recidivating offense appears in the data.

The most notable features of Tables 8 and 9 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 immediately after case action date.

This analysis of the empirical recidivism functions describing the latencies of subjects to their next offenses was 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. 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 (see Figure).

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

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 and proportionately more females in the comparison group. These biases cannot be controlled in this kind of analysis and they argue that the comparison group should recidivate less, not more 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.

# **Proportion Of Youth Recidivating Over Time**

Analyzing the proportion of youth recidivating over time using a time series design incorporates many of the better features of the "time-to-recidivate" analysis described above. In addition, however, it allows all recidivism to be analyzed and not just the first reoffense in what may be a string of others. In the time-to-recidivate analysis, once an offense occurs, the subjects involved drop out of the analysis for all future time beyond their first recidivating event. Time series designs, on the other hand, assume that future events are possible and incorporate this possibility in the analysis procedures.

While much more sophisticated than simply counting crime, these designs still have a number of problems in that the same biases remain uncontrolled. Time series designs as well as survival functions allow projections to be made of future recidivism beyond the time of follow-up data collection. Group curves can be compared to show the length of time it takes before one group starts improving faster than another.

Tables 10 and 11 present the three points of comparison between treatment and comparison groups at each site. In all but one case (filed petitions in 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

Table 10

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 C	-1.012 -1.519	-0.132 -0.058	13.70	1.740 1.316
Chicago	T C	-1.989 -2.260	-0.072 -0.040	16.42	1.149 1.494
Fresno	T C	-0.849 -1.944	-0.171 -0.043	17.10	2.535 2.346
Kansas City	T C	-1.860 -2.578	-0.130 -0.038	15.60	1.303
Pensacola	T C	-1.774 -1.659	-0.121 -0.158	6.22	1.655
Providence	Ť C	-0.287 -0.631	-0.116 -0.056	11.46	1.392 2.020
San Francisco	T C	-1.620 -2.008	-0.077 -0.079	<u> </u>	1.454 2.237

<sup>\*</sup> In Logits

Table 11
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 C	-1.526 -1.943	-0.118 -0.047	11.74	1.525 1.105***
Chicago	T C	-3.002 -3.338	-0.018 0.018	112.00	1.305 1.352
Fresno	T C	-1.240 -2.502	-0.166 -0.021	17.40	2.849 1.881
Kansas City	T C	-1.998 -3.072	-0.143 -0.026	18.36	1.463 1.687
Pensacola	T C	-1.90i -1.971	-0.159 -0.144	9.34	1.629 1.407
Providence	T C	-1.170 -1.620	-0.091 -0.022	4.92	1.524 2.004
San Francisco	T C	-1.865 -2.493	-0.087 -0.044	29.20	1.351 1.862

In Logits

<sup>\*\*</sup> In Months After Program Entry

<sup>\*\*\*</sup> P<.05 Positive Serial Correlation in Errors

<sup>\*\*</sup> In Months After Program Entry

<sup>\*\*\*</sup> p<.05 Positive Serial Correlation in Errors

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, with the treatment group improving more over time. 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 for the other sites. 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. San Francisco shows the treatment group initially recidivating more than the comparison group, 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.

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.

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. 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

In addition to the number of officially recorded offenses, information was captured on their types and quality. Assume for the moment that the experimental and comparison subjects commit 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 it was necessary to measure the impact of the program in terms of the quality as well as the quantity of new offenses.

The use of mean or cluster scoring allowed 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) was 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 crime type 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 done 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. Such scores were applied to the data collected in this project. The availability of seriousness scores for experimental and comparison subjects

allowed measurement of the impact of the program in terms of the quality as well as the quantity of delinquency committed.

In an examination of offense seriousness, the first question to be asked is whether it 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 = 8.229) 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 = 8.351) 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. 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 was 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 were made of significant changes in offense seriousness from before to after case action. For example, a significant effect for differences in gender was found to 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, revealed that there are significant correlations of seriousness scores before and after case action, but no differences between comparison and treatment groups.

#### Incarceration

A linear-logistic analysis was used to predict incarcerations occurring 12 months after case action date. The measures employed in this analysis were 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, tests of the relationship of treatment and comparison group membership to subsequent incarceration were also made.

The following variables are related to an increased probability of receiving a Department of Corrections commitment 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.

Differences between treatment and comparison groups as to their chances of subsequent incarceration were tested. There is no statistically significant relationship between groups on this measure. Neither is there any difference in the relative performance of groups by site.

Because there were no group differences in the number of youth incarcerated either during or after the first year, an additional analysis was conducted to determine the impact of incarceration on recidivism. Youth receiving a Department of Corrections commitment in the first 12 months after case action date were compared with those who did not, measured by their probability of recidivism after these first 12 months. With the standard list of covariates in place, incarceration as measured is not significantly related to reductions or increases in recidivism.

# 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 imporant 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 deliquency 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 of 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 twelth 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 essense 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 Pride 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" trails 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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