

AN EVALUATION OF  
COMMUNITY-BASED SERVICES FOR DELINQUENT YOUTH:  
THE KEY PROGRAM, INC. -- ALTERNATIVES FOR YOUTH

72754

Jonathan Katz,  
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## I. Project Summary and Major Findings

The deinstitutionalization of the Massachusetts juvenile justice system was begun nearly a decade ago. A variety of community-based programs has been created to meet the needs of youth who have been committed to the care of the Commonwealth's Department of Youth Services (D.Y.S.). To date there have been few comprehensive evaluations of the effectiveness of community-based service models. This research was undertaken to assess the effectiveness of the services offered by the Key Program, Inc. (Key), a non-profit agency that provides a wide range of counselling and advocacy services to delinquent youth. The intent of the project was to determine which programs were able to assist different types of clients in various aspects of their lives and to appraise the overall effectiveness of the Key model.

As this study proceeded, a number of research problems developed, forcing revisions in the methodology and restricting the interpretations and inferences that could be made about program effectiveness. Some of the major problems included: an inability to define adequate control groups; a large variance between programs in terms of clientele; inherent limitations in rater reliability; a low number of client post-test responses; and a longer duration of program involvement than anticipated, creating time problems in gathering follow-up data. Despite these problems, the evaluation was continued on the premise that valuable and necessary data could be obtained even with a revised methodology.

In order to assess the impact of the services on different types of youths, the clients were divided into three groups according to the relative difficulty counselors experienced in working with them. The client difficulty breakdown

was based on the average weights assigned by program directors to different criminal justice, school, and family variables. Client difficulty group 1 is the least difficult and can be characterized as having very little criminal justice involvement. Difficulty group 2 has had previous court involvement, primarily for offenses against property, and has had extensive program experience prior to placement in Key. Clients in difficulty group 3, the most difficult, have committed more serious crimes, frequently against persons, and have been in the juvenile justice system for a longer period of time. They have had the most extensive court and program experience prior to placement in Key.

Although ten programs were included in the data collection, only nine programs were used in most of the analyses. To obtain comparable data on both programs and clients, a sample of 175 clients was gathered from seven outreach and tracking (O.T.) and two foster care programs. For different analyses the sample was looked at as a whole, by client difficulty groups, and by individual programs. The major analyses performed were:

- (1) comparisons of frequency and seriousness of offense for a six-month baseline, the service period, and a six-month post-program period (N=85);
- (2) the prediction of recidivism based on various client-specific variables;
- (3) a comparison of the reasons for client termination by program and client difficulty group;
- (4) the prediction of termination results using program and client variables;
- (5) a pre- and post-program comparison of client living situation and school attendance;
- (6) an assessment by counselors of client status and improvement in areas of their lives that Key attempts to address.

### Summary of the Major Findings

- . A recidivism follow-up study of 85 clients with pre-program court involvement found that 49 percent reappeared in court on new charges in the six months following their termination from Key. A study by the Harvard Center for Criminal Justice, using the same recidivism criteria, found recidivism rates of 54 percent in a 1968 sample of youths just released from institutions, and 61 percent in a 1973-74 sample of youths released from community-based programs.
- . Those clients who did recidivate during the six-month follow-up committed offenses more frequently, and of a more serious nature, than they had in the six-month period prior to entering Key.
- . Key is able to reduce client court contact while youths are in programs. The 85 clients in the recidivism follow-up study committed fewer and significantly less serious offenses while receiving Key services than they had in the six-month baseline period.
- . A regression analysis on recidivism found that only 22 percent of the variance in recidivism could be predicted from a combination of client background and program variables.
- . Of the 154 clients who terminated from the nine programs, counselors judged 34 percent to be successful terminations, 41 percent to be unsuccessful terminations, and 25 percent to have terminated under neutral circumstances. The less difficult the client group, the higher the termination success rate.
- . A multiple regression analysis showed that 21 percent of the variance in termination type could be explained by a combination of the following variables: weeks in service, age, client difficulty type, and weeks in placement prior to Key. The number of weeks spent in Key was the strongest predictor variable in the regression equation. An analysis of variance statistical procedure found a significant relationship between weeks in Key

services and circumstances surrounding termination. The average number of weeks in the program was 48 for successful terminations and 28 weeks for unsuccessful terminations.

- . A counselor assessment of the relative improvement of clients in different areas of their lives while participating in Key produced the following results: client group 2, the middle difficulty group, was judged by counselors to show greater overall mean improvement in the outcome categories than the least difficult and most difficult client groups. Counselors reported that group 2 showed higher mean improvement scores in their relationships with their natural families, friends and counselors, and progress in school, court contact and suspected illegal behavior.

## II. Introduction

Over the past seven years there has been a radical change in the system of care for juvenile delinquents in Massachusetts. In 1971 the Massachusetts Department of Youth Services (D.Y.S.), under the direction of Dr. Jerome Miller, closed down the large state-run training schools which had been portrayed as inhumane warehouses where youth were trained in the ways of crime. In place of these institutions a wide network of vendor-run community-based care facilities emerged. These programs included group homes, halfway houses, storefronts, residential schools, foster homes, drug treatment centers, an outward bound program, alternative schools, and advocacy programs.

The variety of program options was intended to insure that youths were placed in a service setting that could provide for their specific needs instead of being placed in a surrounding that was convenient and economical for the system. It was felt that by encouraging a system of privately-operated programs the state could improve and increase the variety and flexibility of services.

For the first few years of its existence, this new network of community programs was evaluated favorably in comparison to the inhumane institutions it replaced. As the community-based system of care approaches a new stage of maturity and legitimacy, it is beginning to be evaluated on its own merits. It is now clear that the new system, despite its numerous and highly publicized problems, has displayed a resilience and flexibility that make it the preferred model of treatment. There is a deeply-felt need to improve, revamp, and strengthen the services offered by individual programs. Fundamental questions have gone unanswered to date. The need for an assessment of what types of programs are most successful in helping youth with different kinds of

problems has yet to be addressed. Research must now direct its attention towards improving the effectiveness and efficiency of the community-based system. Community-based programs have not been assessed against criteria of success other than the traditional test of recidivism.<sup>1</sup>

While strongly advocating the need for a more comprehensive evaluation model, the Department of Youth Services has not had the economic wherewithal to implement this type of information system. They have been forced to operate on a more day-to-day basis with little money left after funding direct services.

This project was designed to begin to provide information about the impact of these new programs on different types of clients. It is an outcome study of the Key Program, Inc.,<sup>2</sup> one of the original and largest non-profit providers of non-residential services under the new community-based system. The study assesses the types of clients that were assisted by Key services in various areas of their lives and examines the overall effectiveness of the Key service model. The field investigation ran from July 1976 to August 1978. Key offered a unique opportunity to conduct an evaluation of a service model that was yet to be evaluated.

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1. A seven-year study by the Harvard Center for Criminal Justice (Coates, Ohlin, Miller) provides a comprehensive depiction of deinstitutionalization in Massachusetts juvenile corrections. Although the study examines client cohorts under the training schools and the community-based model, the observations and recommendations are directed more toward the entire system of care rather than to any individual program within that system.
  2. In March of 1976 the Key Program, Inc. was called the Community Advancement Program, Inc. (C.A.P.) Due to the popularity of the C.A.P. acronym and its use by several other groups, the agency changed its name to the Key Program, Inc. in the fall of 1977. It will be referred to as Key throughout this report.

The Key Program, Inc. has developed a wide range of community-based services for juvenile offenders over the past seven years. The agency was organized initially to provide follow-up support to youth paroled as a result of the closing of the state's training schools in 1971. Working out of a storefront in Worcester, the Key staff provided these youths with counseling, advocacy, and varied recreational activities. The storefront was a popular place to congregate and provided a second home for youth. The agency's staff worked exhausting hours, always making themselves available to the youth to listen to their problems and concerns.

On the basis of the support for and performance at the Worcester storefront, Key expanded geographically, replicating the storefront advocacy model in other cities. The agency also expanded its program model by starting foster care, intake and placement, and work experience programs. Key broadened their client population by taking referrals from the Welfare Department, Office for Children, Department of Mental Health, and school departments, in addition to the Department of Youth Services. As a result of the phenomenal growth pattern of the agency, Key programs can now be found in every one of the state's seven human service regions. At the time the study was undertaken, the agency was operating seven programs modeled on the Worcester storefront, three foster care programs, one intake and placement program, and one work-experience program. These programs, in seven different cities, were managed and coordinated by a central office in Cambridge.

#### Delinquency: A Brief Theoretical and Historical Overview

Before presenting the evaluation methodology and findings, it is necessary to build a contextual framework for analyzing the emergence of the Key program and the development of their

style of intervention. The discussion will also reveal some of the difficulties and limitations in evaluating a program like Key.

The rationales for different types of intervention are a product of social theory, political ideology and experimentation. Although proponents of different theories of delinquency causation have implied or prescribed accompanying modes of intervention, they have not always been able to gain the political support necessary to implement such interventions. However, many treatment interventions are not based on specific theories. Program goals are not connected to etiology and individuals working with delinquents often work more out of intuition than from a predetermined plan of action tied to a theory. Nonetheless, a review of theories of causation and their relationship to targets and modes of intervention will provide a foundation for comprehending the evolution of different delinquency programs.

Most contemporary theories of delinquency causation hold a deterministic view of the nature of the juvenile offender. In this view, juvenile offenses are the effects of various psychosocial factors on the individual. Although the psychological and social aspects of an individual are intricately intertwined, the literature on delinquency consists largely of partisan psychological and sociological theories.

Psychogenic theory focuses on problems in the psychological development of each delinquent youth. Such theories maintain that undesirable conduct is related to problematic personalities, rather than to social and environmental factors. Examples of this reasoning can be seen in explanations of delinquency as a function of a youth's ego deficiencies or of

the youth's responses to problematic family dynamics.<sup>3</sup> These views continue to have widespread support although, as Kassenbaum points out, attempts to show demonstrable differences in the psyches of the offender and nonoffender have not proven fruitful.<sup>4</sup>

The target of intervention that is consistent with psychogenic theory is the individual; the mode of intervention attempts to adjust the youth's psyche so as to alter his behavior. These modes of intervention would include psychoanalysis, behavior modification, chemotherapy, gestalt therapy, and reality therapy.

The sociogenic theories of delinquency are usually categorized as sociological theories but many of them demand a certain degree of support from the realm of psychology. The sociogenic approach emphasizes the importance of social conditions on the behavior of the delinquent.

Sutherland's affiliation theory contends that people tend to take on the characteristics of groups they are most closely associated with. Thus, those associated with a group who favor illegal behavior are likely to participate in that pattern of action. Conversely, association with those who are law-abiding should lead to conformity with pro-social roles.<sup>5</sup>

Cohen's subculture theory views delinquency as a reaction to middle-class values by lower-class youths with blocked

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3. Hyman Grossbard, "Ego Deficiency in Delinquents," Social Casework, April 1962, pp.171-178.

4. Gene Kassenbaum. Delinquency and Social Policy. (Englewood Cliffs, N.J.: Prentice-Hall, 1974), p.52.

5. Edwin H. Sutherland, "Differential Association," Sociology of Crime and Delinquency, edited by Marvin Wolfgang, Leonard Savitz and Norman Johnston. (New York: Wiley, 1970), pp. 208-210.

opportunities and limited avenues for success and achievement.<sup>6</sup> Similarly, Miller's theory attributes delinquency to the essential discontinuity in the values of middle-class and lower-class adolescents.<sup>7</sup> Cloward and Ohlin postulate that delinquency is caused by a differential opportunity structure for socioeconomically deprived youth.<sup>8</sup>

The targets of intervention of the sociogenic theories are the social institutions that have denied youth opportunities for personal success. The intervention might be focused on the youth's school, work situation, peer group, or the court system. The modes of intervention would range from advocacy assistance to secure services and opportunities for a youth to attempts to alter the different social institutions that affect the youth.

A third theory of delinquency causation can be characterized as the political economic theory. This theory attributes delinquency to the broadest level of social organization and political ideology. Delinquency is seen as a response to existing economic arrangements and the response to crime as a coercive means of checking threats to the reigning ideology.<sup>9</sup> The targets of intervention according to this theory are society's political institutions, and intervention would include large-scale social and political reform or revolution.

A fourth theory that attempts to explain the perpetuation of delinquency rather than its origins is the labelling

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6. Albert K. Cohen. Delinquent Boys. (Glencoe, Ill.: The Free Press, 1955.)
  7. Walter B. Miller, "Lower Class Culture as a Generating Milieu of Gang Delinquency," Journal of Social Issues, 1958, Vol.1, No.14, pp.5-19.
  8. Richard A. Cloward and Lloyd E. Ohlin. Delinquency and Opportunity. (Glencoe, Ill.: The Free Press, 1960).
  9. Richard Quinney. Critique of Legal Order: Crime Control in Capitalist Society. (Boston: Little, Brown, 1974), p.22.

theory. The basic contention of this theory is that youth stigmatized as delinquent proceed to live out this definition. Initial deviation occurs rather haphazardly as does apprehension, arrest, and labelling. Once caught and labelled, however, the youth is stigmatized, isolated from interaction with non-delinquents and shunted into interaction with juveniles similarly labelled. Future delinquency as such is a direct result of the initial labelling process.<sup>10</sup> The mode of intervention that accompanies this theory is diversion. Diversion has been defined as "the process whereby problems otherwise dealt with in a context of delinquency and official action will be defined by other means."<sup>11</sup> Application of this concept suggests routing youth away from the official juvenile justice system at an early point.<sup>12</sup> This process is complicated by the need to identify the delinquent youth before he can be diverted. The identification process is very similar to the stigmatization described by labelling theory.

All of these theories appear somewhat valid when applied to some segment of the delinquent population, but none of the theories can account for all causal factors. One might reasonably argue that a place exists for theories that combine aspects of the sociogenic, psychogenic, and political economy theory.

#### The History of Intervention

At the beginning of the nineteenth century, delinquency was perceived to be a youth's willful and conscious act

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10. Kai T. Erikson, "Notes on the Sociology of Deviance," Social Problems, 1962, Vol.9, p.309.
  11. Elaine Duxbury. Youth Service Bureaus in California. (Sacramento, Calif.: Youth Authority Progress Report No. 3, 1972), p.5.
  12. Robert D. Vinter, George Downs and John Hall. Juvenile Corrections in the States: Residential Programs and Deinstitutionalization. (Ann Arbor, Mich.: National Assessment of Juvenile Corrections, 1976), pp.47-48.

against society. American society punished these youths in a retributive manner, placing them in geographically isolated jails where they were indiscriminately grouped with a wide range of social aberrants and frequently subjected to cruel physical punishment.

In the mid-nineteenth century, efforts were made to reform the treatment of delinquents, in reaction to a recognition of the harsh conditions in prisons that made it impossible to reform these youth. The reformers succeeded in separating juveniles from adults and replaced punishment with forced labor. Long hours of heavy labor were prescribed for youth, with the avowed aim of making them too tired to engage in mischief.

Towards the end of the nineteenth century the Freudian revolution gave rise to a new concept of delinquency. The delinquent was perceived as sick instead of wicked; his actions reflected psychological illness rather than a deliberate abuse of free will. This new view of delinquency brought with it a demand for individualized treatment and care, rather than forced labor and punishment. Instead of a generalized impersonal approach, psychogenic advocates proposed a system of professionalism and specialization. These beliefs accompanied political rejection of the old system and led to the creation of correctional institutions for juveniles. These institutions remained isolated from the community but were diversified as to specialization of care and maximum, medium, and minimum security facilities. Specialized treatment required the presence of professional counselors, psychotherapists, and academic and vocational educators.

In the last 25 years the proponents of sociogenic theories have pressured juvenile correction officials to treat delinquent youth in the context of the community. These attempts have been an integral part of a burgeoning movement to deal with all socially-defined deviants in the community, decreasing their

segregation from ordinary social life. The advocates of community-based programs for delinquents have called for participation by parents, schools, employers, and various community organizations. Their arguments for community care are based on a highly critical assessment of institutions and the development of practical alternatives for assisting these youths without stigmatization or segregation. Community care advocates have criticized large juvenile institutions for their lack of effectiveness in deterring crime, the inhumane treatment received by youths, and the high costs of keeping juveniles under lock and key. To replace correctional institutions, these critics offer a commitment to alternative modes of treatment that keep a youth in the community and support his reintegration into a normal life.

In practice, the move toward community-based care for delinquents has had a difficult time supplanting correctional institutions. These institutions and their workers have considerable political strength and perseverance that has been recently bolstered by a change in the national mood that reemphasizes the deterrent and incarcerative role of the juvenile justice system. The growth of community-care programs and their failure to replace correctional institutions (in most instances) have created a diversity of programs which vary in the ways they are defined and the contexts within which they exist.

#### Community-Based Programs

"Community-based" is a label that has come to describe a wide assortment of juvenile correctional programs. Community-based programs are seen by some as efforts to achieve an intended result in a way that differs from that of the institution and other preceding efforts. Critics have argued that many of the assumptions and procedures of prisons and training schools are being manifested in alternative programs as well.<sup>13</sup> Both

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13. Paul Lerman. Community Treatment and Control. (Chicago: University of Chicago Press, 1975).

assessments of community programs are undoubtedly accurate to some degree, since the diversity of programs and situations has made it impossible to generalize about or to precisely define the nature and purpose of community-based care. The community-based care label has been applied to a diverse set of programs which includes group homes, foster care, community counseling programs, schools, drug concept houses, outward bound, and probation programs. In some cases, community-based programs comprise a total network of care. In such instances, community-based programs have been used merely as a supplement to institutional care. One consequence of the simultaneous presence of these two systems has often been the expansion of services to youth who otherwise would not have been incarcerated.

#### Evaluations of Community-Based Programs

The best known evaluations of community-based programs have been those that have successfully developed an experimental design with a control group. The major outcome measure used in these research studies has been recidivism after the program. The different treatment modalities examined were experimental or demonstration projects within a system where institutions and training schools were the dominant form of intervention. By presenting a brief review of these programs, their target groups, and the evaluation design and findings we will be able to put the evaluation of Key, Inc. in perspective.

Two residential programs which have been the subject of in-depth evaluations are the Highfields and the Silverlake projects.

#### Highfields<sup>14</sup>

Highfields was a short-term noncustodial residential facility for boys started in 1950. The program was designed to

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14. H. Ashley Weeks. Youthful Offenders at Highfields. (Ann Arbor, Mich.: University of Michigan Press, 1958).

accommodate youths, most of whom were 16 or 17, whose histories included a wide range of offenses. The residents' daily routines at Highfields included supervised work, with group interaction sessions held each night. The most important treatment tool employed was positive peer pressure, especially during the group sessions. The program's developers hoped to develop a positive peer culture at Highfields, and by using this culture to heighten the youths' self-awareness ultimately affect the boys' attitudes and behavior.

The evaluation of Highfields used a control group of boys sent to Annandale, an institutional juvenile reformatory. A comparison of youths' recidivism rates for one year after release from Highfields and Annandale was made. This comparison showed that 16.5 percent of boys from Highfields as compared to 48.9 percent of the boys from Annandale engaged in new delinquent acts.

However, the validity of these comparative figures is questionable because of the problems encountered in creating two matched groups. Facility administrators at Highfields found that the judges who referred youths to the program had a tendency to send to Highfields younger, better educated, white delinquents who they thought had a better chance for success than those sent to Annandale. As a result, the researchers did not succeed in creating a valid control group.

#### Silverlake<sup>15</sup>

The Silverlake experiment was conducted during the mid-1960's at Boy's Republic, a private institution for delinquents, in Los Angeles County. Silverlake was an experimental program within Boy's Republic, serving boys from 15 to 17 whose

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15. LaMar T. Empey and Steven Lubeck. The Silverlake Experiment: Testing Delinquency Theory and Community Intervention. (Chicago: Aldine, 1971).

delinquent histories included a wide range of offenses. Boys assigned to the Silverlake program lived at the same residential facility as the control group, but attended local high schools and returned to their own homes each weekend. Only 20 boys were assigned to Silverlake at a time. The most essential component of the program was guided group interaction meetings, held five times a week. These group sessions were used to discuss the youths' problems, offer positive alternatives to delinquent behavior patterns, and support and reward youths' efforts to adopt these alternatives.

The evaluation of Silverlake was based on a classic experimental design. Members of experimental and control groups were selected at random from the Boy's Republic population. The evaluators examined recidivism rates for the two groups 12 months after release, assessing the seriousness and frequency of post-release delinquent behavior. In addition, frequency of running away from the programs and in-program "failures" were examined. The results of the evaluation failed to indicate any significant difference between the two groups' behavior, and led the authors to conclude that both the experimental and control programs substantially reduced recidivism.

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Several comprehensive evaluations have also been conducted on nonresidential programs. The most notable of these studies are those done on the following programs: the Provo Experiment, the Community Treatment Project, the Community Delinquency Control Project, and Project New Pride.

#### Provo<sup>16</sup>

The Provo experiment, one of the first attempts to establish community alternatives to incarceration for serious offenders, was started in Provo, Utah in 1959. Boys assigned to Provo

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16. LaMar T. Empey and Maynard L. Erickson. The Provo Experiment: Evaluating Community Control of Delinquency. (Lexington, Mass.: D. C. Heath, 1972).

were frequent offenders, aged 14 to 18. Youths with a record of capital offenses or assaultive sexual behavior were excluded. Youths participating in Provo resided at home, spending part of each day at the program site attending group meetings. On Saturdays, all program participants worked. The program was divided into two phases. Phase I consisted of an intensive group participation experience, with the delinquent peer group as the principal change instrument. Phase II involved an attempt to develop on-going support groups in the community for each boy, as well as finding each youth employment.

The evaluation of Provo compared boys in the Provo project to youths in three other situations. Youths who would be eligible for Provo but were referred to an institutional setting instead were randomly assigned to an incarceration treatment and an incarceration control group. Youths placed on probation were placed in a traditional probation program or in the Provo program. The recidivism of youths in the four groups was considered over a four-year time period after release from their program assignments.

The evaluation findings indicated that the Provo and probation groups had a recidivism rate half that of the two incarcerated groups. In addition, the cost for the Provo program was considerably less than that for incarceration. Unfortunately, these findings were not available until 1972, seven years after Provo closed due to a lack of funds.

#### Community Treatment Project<sup>17</sup>

The Community Treatment Project (CTP) was developed by the California Youth Authority and the National Institute of Mental Health in Sacramento, Stockton-Modesto, and San Francisco,

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17. Ted Palmer, "California's Community Treatment Program for Delinquent Adolescents," Journal of Research in Crime and Delinquency, Jan., 1971, 8, No. , pp.74-92.

and operated from 1961 to 1969. The target group for this community-based, nonresidential program was youths between the ages of 13 and 19 committed to the Youth Authority. Both boys and girls were included in the program, and the delinquent histories of these children included a wide range of offenses. The youths selected for CTP spent approximately four weeks at a residential reception center, then were returned to their home communities and received intensive parole services for two and one-half to three years. Individualized treatment plans were developed to match each youth with a needed service; services ranged from residential placement in a group home in a youth's community to job finding and involvement in recreational programming.

For evaluation purposes, experimental and control group members were randomly selected from the target group. The control group spent an average of eight to nine months in a training school while the experimental group was assigned to CTP. Twenty-four and 48-month follow-up studies of the frequency and seriousness of post-release offenses were conducted. As measured by arrest records, no significant difference between experimental and control groups could be shown.

#### The Community Delinquency Control Project<sup>18</sup>

The Community Delinquency Control Project (CDCP) was an experimental program operated by the California Youth Authority from 1966 to 1969. The youths eligible for the program were boys from 13 to 18, committed to CYA for the first time. The program was designed to serve youths from the Jefferson and Watts sections of Los Angeles, high-delinquency and economically-deprived communities. Youths committed for crimes of violence were excluded from the program.

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18. Esther Pond. The Los Angeles Community Delinquency Control Project Study: An Experiment in the Rehabilitation of Delinquents in an Urban Community. (Sacramento: Department of the Youth Authority, 1970).

The CDCP program was similar to the CTP program in the range of services provided. However, the staff working with referrals from the Watts section stressed weekly confrontive group counseling sessions while the Jefferson youths received more individual counseling from their parole agents.

The CDCP evaluation was based on a random selection of youths in both experimental and control groups. Control group youths received the usual services offered at reception centers and training schools, and by parole agents after release. The follow-up studies, done after 15 months of treatment, revealed no significant differences in arrest figures for the control and the experimental groups.

Project New Pride<sup>19</sup>

Project New Pride, established in 1973 in Denver, is designed to address the needs of older delinquents with backgrounds of multiple offenses and academic failure. Youths referred to the project are 14 to 17 years old with at least two prior convictions and a recent conviction for burglary, robbery, or assault in connection with a burglary. New Pride consists of two phases. During Phase I, youths receive three months of intensive services, including enrollment in an alternative school, individual counseling, and job preparation. Phase II includes a nine-month follow-up period during which the counselor is in daily or weekly contact with the youth.

The participants for the New Pride Program were randomly selected from a pool of referrals. Control subjects participated in many other programs, making it difficult to isolate the impact

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19. Carol Holliday Blew, Daniel McGillis, and Gerald Bryant. Project New Pride: An Exemplary Project. (Washington, D.C.: U.S. Government Printing Office, 1977).

of the control program as compared to the impact of New Pride. Recidivism statistics were examined for a 12-month post-release period. These statistics indicated a slightly lower recidivism rate for youths in the New Pride program. Youths who found employment through the New Pride program had the lowest recidivism rates of any of the experimental or control participants. Also, more than 40 percent of New Pride participants returned to school following program participation.

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The evaluation of the Key programs has a different focus than the studies cited above due to the nature of the services offered by Key and their place in the larger juvenile corrections system in Massachusetts. The Key Program, Inc, services youth of all ages with delinquent and nondelinquent backgrounds. The agency provides a wide range of services which include foster care, individual, group, and family counseling, and advocacy for the youth in court, school, and work. Clients live at home or in a foster home while they participate in the program. The philosophy is to try to devise a specific program of services that meets each individual client's needs. Unlike the other programs reviewed, Key is not an experimental community-based program within a treatment network dominated by institutions. It is one of many established community-based programs that comprise the network of services utilized by the Massachusetts Department of Youth Services.

The fact that Key is an established program within a system where community-based care is the rule means that the traditional comparison with juvenile institutions is neither relevant nor possible. The evaluation addresses such issues as which clients from a diverse groups of participants are best served by Key's flexible treatment model. There is also an attempt to determine how different areas of a youth's life are affected by exposure to the program. Measures of recidivism before, during, and after program participation are included, along with information on circumstances of termination.

However, this evaluation approach cannot link specific client outcomes to particular program components. To do so, it is necessary to identify and describe those intervention activities that contribute to a successful or unsuccessful outcome for each client. Each intervention must be precisely documented for every client in an evaluation sample. In an agency like Key, where intervention occurs on an individual counselor-client level, the documentation necessary for such a "process" evaluation requires a detailed reporting system and precise definitions and understanding of the various interventions. When this evaluation began, Key was unable to either demand or coordinate this type of documentation. Over the last two and one-half years, the agency has created a management and reporting system that would make a process evaluation feasible. This is a natural and desirable next step that would assist the agency in making precise adjustments in their service interventions and strategies.

### III. The Key Service Model

The Key service model is an attempt to stabilize a youth's day-to-day life in the community through supervision and intensive counseling. This intervention model relies on the counselor's acting as an advocate for the client in different aspects of the youth's life and activity in the community. Counselor support is typically offered in connection with a youth's educational progress, vocational plans, court involvement, medical problems, and family or living situation. By helping a youth to establish constructive relationships in the community the model works towards preventing further involvement in the juvenile justice system and enhancing the overall quality of his life.

#### Outreach and Tracking

Six of the programs under evaluation are modeled on the Worcester storefront, which provides intensive advocacy and counseling for a youth living in an open, community setting. The majority of the clients in these programs are referrals from D.Y.S. Before the youth is placed in a Key program a "staffing" is held at the D.Y.S. regional office. The staffing includes an analysis of a youth's service needs and the development of a plan to meet these needs, and is usually attended by the D.Y.S. caseworker, casework manager, the Key supervisor, and a Key caseworker. An essential goal of the staffing is the determination of whether or not the Key program is the most appropriate for a particular client. In reality, however, attainment of this goal is limited by the alternatives available to D.Y.S. Recognizing this fact, Key has repeatedly demonstrated a willingness to accept a diverse group of clients, and has maintained an open admissions policy.<sup>20</sup>

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20. In some instances, D.Y.S. has used Key as a backup placement for clients they have trouble placing. While accepting most troubled youth, Key does have a policy that considers clients having severe drug, alcohol, psychological, or medical problems as inappropriate for the program.

After the staffing, the Key counselor assigned to a case meets the youth, frequently at the youth's home, and introduces him to the program. This introduction includes describing what is expected of each participant and what services the counselor and program can offer. The youth's counselor spends the first few weeks of the program acquainting himself with the case by speaking to the youth, his parents, and people involved with the youth at work, in school, the courts, or the community. In addition, the counselor will read all relevant agency records on the youth.

After becoming familiar with the youth's situation, the counselor will work with the youth to map out a set of program goals. These goals are usually related to home environment, school or job attendance and performance, and reduction of illegal activity. Once these specific service objectives are stated, the counselor attempts to monitor his client's general behavior and to facilitate the achievement of the agreed-upon goals. This is accomplished through daily contact by counselors with clients and intervention by the counselor on the client's behalf when appropriate. (This intervention might include meetings with teachers or parents to aid in the resolution of a problem or helping a client to obtain medical care or a job.)

Clients are successfully terminated from the program when they have demonstrated that they have stabilized their daily lives and are capable of making reasonably mature decisions, managing their affairs, and avoiding illegal activity. A negative termination may result from the client's lack of response to the program, a return to court on new charges, or a failure to cooperate with program staff.

At the time of the evaluation, the Outreach and Tracking programs varied in size from four staff members and 15 clients in the Revere program to 14 counselors and 44 clients in Holyoke.

The average caseload for any individual counselor is five clients. Counselors are given support and guidance in their case management at regular sessions with their supervisors and at group meetings with the entire staff. Meetings between counselors and supervisors occur on the average of once a week, with group meetings specifically to discuss clients occurring somewhat less frequently. The exact schedule of counselor meetings varies from site to site.

During the two years of the evaluation, the outreach and tracking programs have gone through a number of changes, especially in defining the counselor's role. There has been a growing movement to "professionalize" and to expand the services Key offers. The move to professionalize services has created a need for more training sessions in counseling and crisis intervention techniques. Another result has been an increased emphasis on the importance of precise case documentation and service monitoring by individual counselors.

The efforts to expand the services Key offers have created changes in the counselor's role. Previously, counselors focused mainly on supervising a client's activities and advocating for needed changes in a client's environment. With the growing movement to professionalize, the focus of counselors' work has shifted to an emphasis on treatment, especially through determining the roots of problematic behavior and providing counseling to alter a youth's attitudes about himself and those around him. This new emphasis requires counselors to become more proficient in such areas as family counseling and interpreting client behavior.

In addition, the outreach and tracking programs now serve different populations. While Key once accepted D.Y.S. referrals exclusively, it has now opened its programs to clients from Welfare, Mental Health, and School Departments. When Key served only a D.Y.S. population, the clients were, for the most

part, aggressive youths with delinquent behavior patterns. With the broad referral base, Key counselors are now dealing with youths who present a wide range of behavioral, educational, and emotional problems.

#### Foster Care Programs

The goal of the Key foster care program is to provide a client with a safe, caring alternative living situation. The program is similar to the outreach and tracking program in that stabilization of a youth's day-to-day life is emphasized. The major difference is that the stabilization process is not taking place in the youth's parental home, for the youth is living with a surrogate family. Consequently, the counselor must work in conjunction with the foster parents toward achieving a stabilized pattern of school or work for a client. In this setting, the counselor sees the youth less frequently as the foster parents assume some of the responsibility for day-to-day supervision. The counselor/client ratio in the foster care programs is five to one.

Foster parents for the Key programs are approved on the basis of recruitment procedures and standards set by the Massachusetts Office for Children. These procedures include a home study, check of their references, and a medical check. Rather than providing a formal training program, Key offers counselor and casework manager supervision of the foster parents. Foster parents attend monthly meetings run by the director of the foster care program. These meetings provide a structure for group support, and frequently are used to relate relevant information.

Key also provides short-term foster care for the purpose of preparing a client for a program placement. This evaluation dealt only with youths who were in long-term foster care.

To insure that the data gathered on foster care clients was comparable to that on outreach and tracking participants, foster care clients were not admitted into the evaluation sample unless they were expected to remain in the program for at least 15 weeks.

#### Lawrence Work Program

The Lawrence Work Program has a different format and objectives from the other two programs. The program provides C.E.T.A.-sponsored jobs, counseling, and remedial education to youth who are court involved or whose families meet the C.E.T.A. economic guidelines. Youth are referred to the program from the C.E.T.A. office in Lawrence. After Key does an initial assessment, the youth is placed in a job. Clients who are attending school are provided with ten hours a week of work, counseling, and remedial tutoring. Clients not attending school are involved in these activities for 30 hours a week. The goal of the program is to help a client continue in or return to school, give him a positive work experience, or provide training that improves his employability.

Counselors in the work program monitor their clients' attendance and performance on the job. They also supervise the youths' educational progress and provide counseling on work, education, and, to a lesser extent, family problems. Because their responsibilities are more limited than the outreach and tracking and foster care counselors, their average caseloads are ten clients, double that of counselors in other Key programs.

The decision to include the Work Program in the evaluations took into account an important consideration. The program is not as comprehensive as others in terms of involving all aspects of a client's life, nor is the counseling offered as intensive as in other programs. Nevertheless, the educational and

vocational goals of the work program parallel the other programs. In areas where the program is not comparable with the others, it will be excluded from the analysis.

#### IV. Methodology

The evaluation of Key was a cooperative effort of the agency staff and the evaluator. After examining the rate of client termination in the ten programs under study, it was decided to gather a sample through admission cohorts using a trickle sample technique. It was projected that a sample of 160 clients could be assembled over a nine-month period. In actuality, it took 13 months to obtain the sample due to the slow client turnover and new admissions in some sites, and the subsequent inability to establish a significant subsample.

Upon admission into the program and the sample, comprehensive background material was collected on each client by program staff at the different sites. This data provided biographical information on the youth's family, school, job, and criminal justice history. The background data was used to construct a profile of the different types of Key clients. This data was later analyzed to see if any of the characteristics are useful in predicting the impact of the program on a particular client.

Upon entering the program, Key clients were given a Rotter's Locus of Control and Responsibility Questionnaire and a drug and alcohol survey. These two instruments were administered by trained program staff at each site. A tape cassette was made available for clients who could not read the questions. These questionnaires were scheduled to be readministered to each client after they had been in the program four and one-half months. The Rotter's questionnaire was chosen as a way to measure the programs's goal of teaching clients to assume responsibility for their lives and actions. The drug and alcohol survey was chosen as a way to describe the habits of this population and the type of program that might be designed to meet their needs. The administration and readministration of these tests turned out to

be a much more difficult task than anticipated. The failure of Key staff to administer the tests conscientiously and the number of clients who terminated before four and one-half months or without being post-tested resulted in a limited sample on these pre- and post measures.

When clients left the program, two types of termination forms were filled out by their counselors. A general termination form was used to gather information on the reasons for termination, the youth's living situation at the time of the termination, and his involvement in school or a job. A second termination form was used to assess the youth's condition upon termination and progress in the following areas: 1) relationship with parents or foster parents; 2) court contact and suspected illegal behavior; 3) school or job performance; 4) relationship with counselor; 5) relationship with friends. These assessments were used to determine the extent to which these programs are accomplishing their specific community reintegration goals.

The original design of the study called for tracking recidivism for all youth service clients for a one-year baseline and for one year after they left the program. The offices of the State Commissioner of Probation and the Attorney General approved the evaluation's application for access to the Commonwealth's central court records. Recidivism was to be measured not only by frequency of court appearance but by seriousness of offense as well. The failure of clients to enter and terminate from the program in accordance with the study's timetable has forced the evaluation to adopt a scaled-down recidivism follow-up. All clients in the sample with previous court involvement who were terminated from the program by February 1978 were tracked for the frequency and seriousness of offense for a six-month period prior to entering the program, during the program, and for six months after departing from the program. The sample of 85 clients in the recidivism follow-up study was highly representative of the larger

sample of 146 clients with previous court involvement from which they were drawn. There was no significant difference between groups on pre-program criminal justice variables or the amount of time spent in Key services. (Table I.)

A staff questionnaire was administered by the evaluator to the workers at the ten Key programs under study at the beginning, the middle, and the end of the study. This survey gathered background information on the staff, and posed a series of questions about the work environment<sup>21</sup> at each site. The Key workers were also questioned about the philosophy of each program, their opinions of this philosophy, and juvenile justice in general. This instrument was used to give the programs quick feedback on their strengths and weaknesses as perceived by the staff. Since the Key intervention model is centered around the counselor-client relationship, this questionnaire helped to establish whether the workers in these ten programs differed in their interpretations and implementations of the basic program model.

### Description of Instruments

#### A. Background Data

To describe the client sample and to investigate characteristics related to program success, background information was gathered on each client at the time of entry into the program. This information was derived from case file documents and supplemented when necessary by the client's intake interview and questions asked the referring agency. The descriptive data on each client includes information on family history, school or job participation, and criminal justice contact.

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21. A work environment scale developed by Rudolf Moos at Stanford University was utilized.

Table I

Comparison of Recidivism Follow-up Sample and  
All Clients with Prior Court Involvement

	Recidivism Subsample (N = 85)	Court Contact Sample (N = 146)
Age at first court contact ( $\bar{x}$ )	12.7	13.
Number of previous court appearances ( $\bar{x}$ )	5.9	6.0
Seriousness of offense ( $\bar{x}$ )	3.9	4.3
Weeks in prior placement ( $\bar{x}$ )	25.6	25.

1) Family History

- a. Age -- this refers to the client's age at the time of entry into the program.
- b. Sex
- c. Ethnicity
- d. Living Situation -- refers to where and with whom the youth was living immediately prior to program entry.
- e. Parents' Marital Status
- f. Head of Youth's Family
- g. Head of Family's Employment Status
- h. Referring Agency

2) School and Job Variables

- a. Last Grade Completed
- b. Attendance -- this variable refers to the client's attendance in the most recent year he had been in school.
- c. Average Grades
- d. Enrollment -- this refers to whether the client was enrolled in school at the time of admission to the Key program.
- e. Reasons for Termination -- this variable examines the circumstances connected with leaving school for those clients who are no longer enrolled.
- f. Previous Work Experience -- these questions ask whether a client has had a part or full time job in the past and the longest amount of time he has held any one job.

3) Criminal Justice Variables

- a. Age at First Contact with Court
- b. Age at Time of Commitment to the Department of Youth Services
- c. Number of Previous Court Appearances -- this variable refers to the number of times a client returned to court on a new charge, prior to admission to the Key program.
- d. Average Offense Severity -- this figure represents the sum of each offense multiplied by its severity, divided by the total number of offenses committed.

$$\frac{(\sum O_{ij} \times S)}{N} \quad \begin{array}{l} O_{ij} = \text{Each Offense} \\ S = \text{Severity weight} \\ N = \text{Total number of offenses} \end{array}$$

The seriousness of offense weights were derived from the rankings of probation officers at Worcester juvenile court<sup>22</sup> for all juvenile offenses committed over a six-month period. (See Appendix I.)

- e. Type of Offense -- the juvenile offense patterns of each client were categorized into one of six classes. The classes were broad enough to allow for a relatively unambiguous categorization. (See Appendix II.)
- f. Previous Placement History -- the number and type of previous D.Y.S. programs attended and the amount of time spent in each type of placement. The type of placement included treatment detention, custodial detention, nonresidential programs, group homes, forestry camp (Outward Bound), drug treatment and school programs.

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22. A Profile of Caseloads at the Worcester Juvenile Court. Brandeis-Worcester Training Program in Social Research and Psychiatry, unpublished, 1976, p.11, "Delinquency Report."

B. Rotter's Locus of Responsibility and Control Scale

This 20-question scale was chosen for its compatibility with Key service objectives. Key attempts to make clients aware of their responsibilities and the need to take charge of their lives. The Rotter's Scale discriminates between an orientation of "things happen to me" or one of "I make things happen." A high score on the scale indicates that clients feel they have assumed responsibility for and taken control of their lives. The highest score possible is 20. Sample items from this scale are, "Many times I feel that I have little influence over the things that happen to me," and, "When I make plans I'm usually certain I can make them work."

C. Alcohol and Drug Questionnaire

The alcohol and drug questionnaire was developed to examine the frequency and quantity of intake of different alcoholic beverages and drugs. To distinguish problem drinking from social drinking, clients were asked whom they drank with and whether or how many times they had lost control or memory as a result of heavy drinking. In order to further describe the substance abuse habits of the sample, questions were asked about use of alcohol or drugs before getting into trouble with the police or before or during school.

D. The General Termination Form

This form, filled out by a client's counselor upon the youth's termination from the program, attempts to establish the conditions leading to a client's termination. The choices presented under reasons for termination were developed as a result of formal and informal discussions with counselors and program directors. Reasons for termination included: successful completion of the program; return to court; running

away; unsuccessfully leaving the program; moving; joining the service; exceeding the age limit. A blank space was also provided for reasons other than those listed. The general termination form also contained questions about the client's living situation and school or job participation, in order to examine his experience on a pre- and post-program basis.

E. Counselor Assessment of Client Outcome

This two-stage assessment of a client's status and improvement in the various aspects of his life is an attempt to expand the criteria for program success beyond recidivism rates. While having its empirical deficiencies, this scale seeks to examine more closely the different facets of the Key service model and their impact on clients' lives.

It was difficult to devise an easily comparable measure, since Key created individualized service plans to meet the needs of each client. Thus, a job may be appropriate for one client and school for another; in one case the emphasis is on working with the youth's natural family, while in another the counselor works to get the client into a foster home. This problem was dealt with by devising a form that included the eight major areas of a client's life that a service plan might address, since it seemed that, for most clients, at least six of these areas would be addressed by the Key service plan. When clients were not involved in a particular area, a space was provided to indicate the inappropriateness of the corresponding question.

The first part of the assessment asked the counselor to check off the item that best described a youth's condition at the time of termination with respect to relationships with family, foster parents, counselor, and friends, and progress in school and/or work, court contact, and suspected illegal behavior. For example, the question on the client's relationship with his natural parents asked whether:

- 1) The client did not get along with them at all;
- 2) The relationship was marked by frequent arguments;
- 3) The client was non-participating;
- 4) The client got along fairly well with his parents;
- 5) Or, the client had a good relationship marked by open communication and understanding.

To assess the impact of Key services on these areas, counselors were asked to judge a client's improvement from the beginning of the program to the time of termination on a 1 to 5 scale (1 = great deterioration, 2 = some deterioration, 3 = same, 4 = some improvement, 5 = great improvement.) This improvement rating, along with the client status at termination, enabled the researcher to examine the relative impact the program had on particular clients.

#### F. Recidivism Analysis

Using the central court records, frequency and severity ratings were calculated for four time periods.

- 1) Pre-program -- from the client's first recorded offense to the date of entry into the program.
- 2) Baseline -- the six-month period prior to program entry.
- 3) Program -- from date of entry to date of termination in the program.
- 4) Post-program -- the six-month period beginning with the date of termination.

Frequency was measured to reflect any new charge for which the client was brought to court. The severity scale employed has already been described in the explanation of the background data.

## V. Sample Description

### A. Sample Profile

The sample is comprised of 215 clients distributed across ten Key programs as follows:

<u>Program</u>	<u>N in Sample</u>
1. <u>Outreach and Tracking</u>	
a. Fall River	19
b. Lawrence	11
c. Worcester	25
d. Cambridge	16
e. Holyoke	51
f. Fitchburg	14
g. Revere	12
2. <u>Foster Care</u>	
a. Cambridge	12
b. Lawrence	15
3. <u>Work Experience Program</u>	
Lawrence	40
Total	215

Almost 80 percent of the sample is male, with Lawrence foster care being the only program where girls outnumber boys (12 to three). The racial composition of the sample is 86 percent white, 12 percent Hispanic, and two percent Black. (When the Lawrence Work Experience Program is omitted, the sample becomes 90 percent white.) The average age of clients as they entered these ten programs was 15.5 years.

The Department of Youth Services referred 66 percent of the sample to the ten programs. (Seventy-eight percent when the Lawrence W.E.P. is omitted.) Other referrals came from the

Department of Welfare, school departments, the Office for Children, and the Department of Mental Health. Holyoke outreach and tracking, with the largest number of clients in the sample, also had the broadest referral base with clients referred from all of the agencies mentioned above. (Table II.)

More than half the clients in the sample come from families with broken marriages. Only 26 percent of the youth in the sample were living at home with both parents when they came into the program. Mothers are considered the head of the youth's family more often than fathers. Unemployment is disproportionately high for the head of the family regardless of sex. The unemployment rate of the head of household for all clients in the sample is 38 percent. When retirement enters the equation, we find only 57 percent of the heads of families employed.

Immediately prior to their entry into the program, 60 percent of the clients were living in the community with parents or relatives, 13 percent were in detention centers, 13 percent in foster homes, and 8 percent were in D.Y.S. residential programs.<sup>23</sup> (Table III.)

The collective school experiences of the sample are extremely negative. More than half the sample were not enrolled in school when they entered Key. The reasons for leaving school included dropping out (51 percent), D.Y.S. placement or court involvement (20 percent), or suspension or expulsion (18 percent). When clients in the sample were enrolled in school, their involvement and performance were minimal. In their last years of school attendance, 42 percent of the sample received average marks of D or lower. Only 20 percent had an average above C. These grade averages are not surprising in light of the sample's extremely low school attendance record. Only 36 percent of the sample was

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23. These figures exclude Lawrence W.E.P.

Table II  
Referral Agency by Program\*

Referring Agency	F.R.	Law.O.T.	Worc.O.T.	Camb.O.T.	Camb. Foster	Holyoke O.T.	Law. Foster	Fitch. O.T.	Revere	Overall
Department of Youth Services	15	11	25	16	11	29	8	13	9	137 (78%)
Department of Welfare	0	0	0	0	0	6	7	0	0	14 (8%)
Office for Children	0	0	0	0	1	2	0	1	1	5 (3%)
School	0	0	0	0	0	8	0	0	0	8 (4%)
Other	4	0	0	0	0	6	0	0	2	12 (7%)
N	19	11	25	16	12	51	15	14	12	175 (100%)

\*Lawrence Work Experience Program has been omitted

Table III  
Living Situation upon Entry into Key

Living Situation	Law. Work	F.R.	Law.O.T.	Worc.O.T.	Camb.O.T.	Camb. Foster	Holyoke O.T.	Law. Foster	Fitch. O.T.	Revere	Overall (N)
Parents	29	18	5	13	11	4	22	10	10	7	129
Relatives	6	0	1	0	0	1	3	1	0	0	12
Foster Home	3	0	4	3	0	3	8	3	0	2	26
Detention Center	0	1	1	5	2	2	8	1	1	1	22
Residential Programs	0	0	0	3	3	1	6	0	1	0	14
Other	1	0	0	1	0	1	4	0	2	2	11
N	40	19	11	25	16	12	51	15	14	11	215

reported to attend school 60 percent or more of the time. Attendance of one to two days a week was the average for 42 percent of the sample. The combined effects of poor performance and marginal school participation have left many clients in the sample below the normal school grade for their ages. Although the average age of the clients is 15.5 years, the average last grade completed is the eighth. The entire sample is 1.6 years behind the normal grade for their ages. (Table IV.)

Before entering the Key program, 63 percent of the sample had some part-time or full-time work experience. However, only 20 percent of the sample had been at any one job for over three months.

#### Criminal Justice Contact

Out of the sample of 215, 64 percent had some prior contact with juvenile court. This figure jumps to 72 percent when the Lawrence W.E.P. is excluded. The youth in the sample with court experience have their first encounter with the court at an average age of 13. By the time they come to Key, these clients have been to court an average of five times on new charges. This group of clients had an average severity frequency index of 4 (see Appendix I) and an average offense type characterized as offense against a person indirectly.<sup>24</sup> (Table V.)

The average age at the time of commitment to D.Y.S. for this subsample of juvenile offenders was 14.5 years. By the time most youth come to Key, they have already been through a number of different types of service programs. The entire sample (excluding Lawrence W.E.P.) has been in an average of

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24. The types of crimes that the average severity frequency and offense type refer to are exemplified by burglary and larceny.

Table IV  
School Characteristics at Program Entry

	Law. O.T.	F.R. O.T.	Law.Work	Worc.O.T.	Camb.O.T.	Camb. Foster	Holyoke O.T.	Law. Foster	Fitch. O.T.	Revere O.T.	Overall
Age ( $\bar{x}$ )	15.4	15.6	15.4	15.4	15.7	16.4	16.1	15.5	14.9	15.8	15.5
Last Grade Completed ( $\bar{x}$ )	8.0	7.6	8.4	7.4	9.2	8.5	8.1	7.6	8.4	7.8	8.1
Educational Lag ( $\bar{x}$ ) years	1.4	1.9	1.7	2.3	1.4	1.6	1.4	1.2	1.4	1.6	1.6
N	11	18	40	21	15	12	48	15	14	12	206

Table V  
Offense Type by Program\*

	F.R.	Law. O.T.	Worc. O.T.	Camb. O.T.	Camb. Foster	Holyoke O.T.	Law. Foster	Fitch. O.T.	Revere	Overall
1. One non-serious offense	0	0	1	0	0	1	9	0	2	13
2. Offense against self	0	0	0	1	0	0	1	0	0	2
3. Offense against property, not harmful to others	12	2	9	12	6	6	3	3	2	55
4. Offense against a per- son indirectly	6	8	7	2	4	20	0	5	7	59
5. Offense against a per- son directly, but not physically harmful	0	1	1	0	0	0	1	2	0	5
6. Offense against a per- son directly with ac- tual or intended harm	1	0	3	1	1	2	0	4	0	12
( N )	19	11	21	16	11	29	14	14	11	146

\*Lawrence Work Experience Program has been omitted

more than three programs when they come to Key. The programs they have attended include group homes, detention, drug treatment, forestry camp (Outward Bound), foster care, and school programs. The most common program experience is custodial detention, with 42 percent of clients from these nine programs having had this service experience at least once.

#### B. Client Difficulty Scale

Although Key has used a similar treatment model in all of its programs, the background information indicated that the clients they work with are extremely varied in their backgrounds and needs. To ascertain the differential impact of the program experience on various types of youth, it was necessary to describe and group Key clients into some common categories.

A comparative scale of client difficulty was constructed by asking a group of eight Key program directors <sup>25</sup> to rank 12 client characteristics as indicators of the probable difficulty of working with a particular client. The characteristics presented described the youth's school attendance, involvement with the criminal justice system, and living situation. If a director considered a particular characteristic as a relatively strong indicator of a youth's difficulty, the characteristic would receive a high number on a one-to-ten scale.

Once the general characteristics of difficult clients were identified, the directors ranked hypothetical clients within each category on a one-to-ten scale of difficulty. For example, under this ranking system, youths with school attendance records

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25. These directors had an average of five and one-half years working directly with these youths. This is significantly more experience than Key counselors, who have a turnover rate of less than two years.

of 20 percent might receive an eight on the difficulty scale, while clients attending school 50 percent might receive a six. Again, a ranking of ten was reserved for the most difficult clients. The six client characteristics with the highest average ranks were chosen to be included in the difficulty index.

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Table VI

Variables Included in the Client Difficulty Index

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<u>Client Characteristics</u>	<u>Average Rank</u> (scale of 1-10)
Number of court appearances	8.
Category that best describes offense pattern	6.8
Total time in previous programs	5.7
Age at first court appearance	5.7
School attendance	5.4
Youth's present living situation	4.9

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These average ranks for each variable were multiplied by the average weight assigned to the possible variable answers. For example, the variable number of court appearances was given an average rank of 8. The answers to how the number of court appearances affected client difficulty were ranked as follows:

<u>Number of Court Appearnces</u>	<u>Average Weight</u>
None	1.1
1-2	2.0
3-4	3.7
5-6	5.2
7-8	6.0
9-10	7.9
Over 10	9.4

If a client had seven previous court appearances, the individual characteristic weight of 6.0 was multiplied by the variable weight of 8. This was done for each variable and the results were totaled to form an interval index of client difficulty.

$$\text{Client Difficulty Score} = (V_1 \times \text{I.C.}_1) + (V_2 \times \text{I.C.}_2) + (V_6 \times \text{I.C.}_6)$$

$V_1$  = First variables average rank

$\text{I.C.}_1$  = Individual characteristic average weight

After generating an interval client difficulty score for each client, the sample was partitioned into three difficulty groups by dividing the range of scores into equal thirds. The least difficult group had 67 clients, the middle group 104, and the most difficult group 44. (Table VII.) Creating these client difficulty groups enabled us to examine service effectiveness for different types of clients. The three different client groups are briefly described below.

Client Difficulty Group 1 (N = 67) -- The clients in this group have all been referred by agencies other than D.Y.S. They have had no court contact and very limited exposure to different programs. When this group entered Key, 60 percent were enrolled in school and 55 percent were attending school 60 to 100 percent of the time.

Client Difficulty Group 2 (N = 104) -- The clients in this group are for the most part D.Y.S. referrals who have committed offenses against property. When they come to Key they have been to court on the average of 3.3 times and been in 2.5 placements for an average of 15 weeks total time. Only 40 percent of these

Table VII  
Client Difficulty Groups by Program

	Law. O.T.	F.R. O.T.	Law. Work	Worc. O.T.	Camb. O.T.	Camb. Foster	Holyoke O.T.	Law. Foster	Fitch. O.T.	Revere O.T.	Overall
Client Difficulty $\bar{x}$ Score	171	188	---	194	191	211	150	184	195	184	*179 (N=175)
Group 1 (N)	0	2	37	4	0	0	22	1	0	1	67
Group 2 (N)	11	10	3	9	13	8	19	14	9	8	104
Group 3 (N)	0	7	0	12	3	4	10	0	5	3	44
Program (N's)		19	40	25	16	12	51	15	14	12	215

\*For purposes of further analysis the Lawrence Work Experience Program has been excluded from the computation of the overall client difficulty mean.

clients were enrolled in school when they entered Key. In their last full year of attendance at school, 61 percent of client group 2 had an attendance rate of less than 60 percent.

Client Difficulty Group 3 (N = 44) -- These clients have been in the juvenile justice system the longest and have committed the most serious offenses. These youth have gone to court an average of 11.3 times before entering Key. Their previous program experience averages 40 weeks and seven different placements. Only 20 percent of the clients in this group were enrolled in school when they entered Key.

A comparison of the criminal justice experience of the three client difficulty groups is summarized below in Table VIII.

Table VIII

Criminal Justice Variables by Client Difficulty Group

Criminal Justice Variables	Client Difficulty Groups			Total
	1	2	3	
N	67	104	44	215
Previous Court Appearance ( $\bar{x}$ )	0	3.3	11.3	3.9
Seriousness of Offense ( $\bar{x}$ )	.1	3.3	3.9	2.4
Number of Prior Placements ( $\bar{x}$ )	.03	2.6	6.8	3.1
Weeks in Prior Placement ( $\bar{x}$ )	4	15	40	17

## VI. Analytic Overview

Prior to reviewing the findings of the various analyses, it is important to place in perspective the implications that can be drawn from the results. As indicated in the methodology section, there were a number of practical constraints on the evaluation which served to limit the nature of possible interpretations. For example, the unexpectedly long duration of program involvement limited the number of clients for whom follow-up court-recorded data were available. Additionally, the disappointingly low number of clients responding to the Rotter's questionnaire at the time of the post-test made it difficult to formulate comparisons with information gathered directly from clients.<sup>26</sup> These and other more serious impediments must be recognized as limitations on the "internal" and "external" validity of the study.<sup>27</sup>

Internal validity refers to the path of logic which allows an evaluator to infer causality. Strict causality is difficult to establish outside of carefully controlled, laboratory situations. In social science evaluations, the implementation of "pure" experimental designs has been a recurring problem because of the legal and ethical issues involved. To create a control group for an experiment by denying a certain number of clients the services they need is, at best, a morally questionable procedure.

In programs of limited availability, it may be possible to assign clients to the scarce slots by lottery, thereby creating a control group but avoiding serious moral conflicts. How-

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26. Due to the small number of clients pre- and post-tested, the results of the Rotter's Scale and Drug and Alcohol Survey are not discussed in the body of the report. A summation of these results appears in Appendices IV and V.

27. Donald Campbell and Julian Stanley. Experimental and Quasi Experimental Design for Research. (Chicago: Rand McNally, 1963), pp.16-24.

ever, evaluations of ongoing programs present complex problems not susceptible to this solution. It is almost impossible to develop a control group in the course of such an evaluation without denying some clients badly needed services which are available or prematurely terminating clients already in care.

Campbell and Stanley recommend a number of alternative evaluation strategies which partially resolve the problems associated with the difficulty of assessing program impact in an evaluation design lacking a control group. Unfortunately, most of these strategies require substantially more time and resources than were available in the present situation. As a consequence, many of the threats to internal validity, or to attributing causality to the program, could not be controlled for in this study.

Given the absence of a control group for this evaluation, the initial focus of analysis necessarily was a comparison of the relative effectiveness of each of the programs in terms of the various outcome measures (i.e., recidivism, type of termination, and counselor ratings of client improvement across a number of domains of relevant behavior). Although it is not possible to determine what would have happened to clients in the absence of the program, this method was intended to reveal the relative differences in clients over time at each of the ten programs. It was expected to yield findings about whether some programs were more effective than others in terms of attaining desirable outcomes.

Methodologically this strategy was constrained by the fact that the clients admitted into various programs were not similar. If, for instance, the clients admitted to one program have had longer or more serious histories of problematic behavior than those in another program, it is impossible to evaluate program effectiveness on an equal plane. It would not be

possible to determine which part of their outcome score was due to pre-program status as opposed to program effectiveness. Hence, the intended analysis of the differential effectiveness of various programs cannot be carried out because the nature of the program and the clients admitted to it are inextricably intertwined.

The client difficulty measure was developed as a way of distinguishing and grouping different types of clients on the basis of their pre-program histories. Instead of measuring the overall effectiveness of individual programs, the client difficulty measure attempted to analyze the impact that Key services had on different types of clients. An important prerequisite for this analysis is the similarity of services provided in the different Key programs. The Key outreach and tracking programs, and to a great extent the foster care programs, are akin to one another in their service philosophy, objectives, and intervention approach. The use of the central office to oversee these programs has insured a certain consistency in service policy and a sharing of training resources.<sup>28</sup> There are some differences among programs (for example, more weekend coverage or better backup resources) that cannot be controlled for. In a service model like Key's, where the emphasis is on the counselor/client relationship, differences in actual care will exist within programs, for no two counselors are identical in personality. Although these discrepancies do exist, it was decided that they were not substantial enough to deter the pursuit of this line of reasoning and analysis.

As a consequence of both the inequality of programs in terms of client difficulty and the absence of complete data for a large proportion of the clients, the issue of relative effectiveness will be addressed with extreme care. The relative

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28. The three staff questionnaires showed no significant differences in the background of staff, the work environment at each site, or the staff's philosophy and approach to juvenile care. For a summary of results, see Appendix VI.

effectiveness of Key services for different types of clients will also be presented in the context of the aforementioned qualifiers. The three major types of results to be presented are: 1) recidivism findings; 2) analysis of termination, school and Rotter's results; 3) the counselor assessments of client status and improvement in various aspects of their lives at the time of termination from the program. Where possible the findings will be contrasted with the results of related studies. However, in many cases there is no body of literature with which to compare the results. In these cases an attempt will be made to qualify the results in the context of this unique D.Y.S. system.

## VII. Results

### A. Recidivism

Recidivism is commonly defined in two ways: the first states that recidivism includes any reappearance in court by a person with previous court contact, but the second excludes any reappearance in court not resulting in probation or incarceration. This evaluation used the first definition, considering as recidivist any youth who reappeared in adult or juvenile court on a new charge.<sup>29</sup> This broader definition of recidivism reflects decisions made by police officers and court intake officers in arresting and charging a youth, excluding the sentencing determinations made by a judge.

As stated in the Methodology section, the slow client turnover rate at a number of the programs under study meant that a longer period than initially anticipated was necessary to gather a sample. Also contributing to the need for a time extension was the fact that clients stayed in programs longer than originally projected. Out of the sample of 175 clients (excluding the Lawrence W.E.P.), 126 youths had prior court involvement. From this subsample of clients with previous court contact, 85 youths terminated Key in time to allow the researcher to track their recidivism for six months after the program.<sup>30</sup> Court record data was examined for those 85 clients only. These 85 clients did not have significantly different pre-program criminal histories from the entire subsample of 136 clients with previous court contact, nor did the amount of time they spent in Key programs vary significantly from the subsample.

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29. This definition was chosen for its compatibility with prior studies, most notably Ohlin, Miller and Coates.

30. In addition to the six-month period after termination, it was necessary to allow for two additional months to insure that the Office of Probation records were up to date. Therefore, eight months were necessary to track a client's recidivism.

In examining recidivism, two measures, frequency and seriousness of offense, were compared for four time periods. Frequency refers to the number of new offenses. Seriousness of offense is measured on a 1 to 9 scale, with higher numbers indicating the more serious offenses.<sup>31</sup> The seriousness of offense number takes into account both the severity of the offense and the frequency of the different offenses. The four time periods examined were:

- 1) Pre-program -- from first offense to program entry
- 2) Baseline -- the six-month period prior to program entry
- 3) Program -- the time period in Key services
- 4) Post-program -- the six-month period after termination from Key.

The recidivism search relied on the records of the Office of Probation, the state's centralized record-keeping system. While this data source is certainly not free from error or omission, it does provide the best and most comprehensive information on court history available.

The primary finding for the recidivism follow-up sample of 85 clients with prior court contact was that 49 percent, or 42 clients, reappeared in court on new charges in the six months following their termination from the program. This figure of 49 percent is somewhat lower than the six-month figures reported by Coates, Miller, and Ohlin in their comprehensive study on changes in the juvenile corrections system in Massachusetts.<sup>32</sup> Using the

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31. A full description of the category "seriousness of offense" appears in the Methodology section and in Appendix I.

32. For a discussion of their recidivism findings, see Robert B. Coates, Alden D. Miller, Lloyd Ohlin. Diversity in a Youth Correctional System: Handling Delinquents in Massachusetts. (Cambridge, Mass.: Ballinger Publishing Co., 1978).

identical definition of recidivism and the same record source, they looked at a representative sample of 236 youths paroled from D.Y.S. institutions in 1968 and a longitudinal sample of 395 youths who entered community-based programs in 1973 and 1974. The 1968 sample had a recidivism rate of 54 percent six months after their release from institutions. The 1974 sample had a recidivism rate of 61 percent six months after leaving community-based programs.<sup>33</sup> (See Appendix III.)

Frequency of offense and seriousness of offense were compared on a six-month baseline and six-month post-program time period for the 42 clients who recidivated. Tables IX and X below present means, standard deviations, the associated F ratios and the level of significance for repeated measures of analysis of variance for those 42 recidivists.

The tables show that those who recidivated committed offenses more frequently and at a significantly more serious level than they had in the six months prior to program entry.

In order to look at Key's service goal of stabilizing a client's illegal activities, we next compared a client's criminal justice contact while in the program to the six months prior to program entry. This comparison was made by again employing repeated measures of analysis of variance. Tables XI and XII present the summary statistics for both the frequency and seriousness measures.

These figures reveal that, while the client was in the program, the frequency and seriousness of offense for those with prior offenses is lower than it was for the baseline period of six months prior to the program. There is a significant reduction

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33. The six-month findings were made available by Miller and Coates, as they were never published. They appear in Appendix III.

Table IX

Seriousness of Offense: Baseline and Post Comparison

Time Period	N of Cases	Mean	Standard Deviation	Between Measures F-ratio	Probability of F-ratio
Baseline Seriousness	42	3.18	2.23		
				3.928	
Post-program Seriousness	42	4.11	1.44		.054

Table X

Frequency of Offense: Baseline and Post Comparison

Time Period	N of Cases	Mean	Standard Deviation	Between Measures F-ratio	Probability of F-ratio
Baseline Frequency	42	3.59	3.91		
				3.077	
Post-program Frequency	42	6.23		8.53	.086

Table XI

Frequency of Offense: Comparison of Baseline and Program

Time Period	N of Cases	Mean	Standard Deviation	Between Measures F-ratio	Probability of F-ratio
Baseline	85	3.83	6.62		
				2.71	
Program	85	2.41	3.83		.10

Table XII

Seriousness of Offense: Comparison of Baseline and Program

Time Period	N of Cases	Mean	Standard Deviation	Between Measures F-ratio	Probability of F-ratio
Baseline	85	2.83	2.21		
				8.32	.004
Program	85	1.90	2.22		

from the baseline period in the seriousness of offense while in the program. These statistics lead to the conclusion that Key is able to reduce and control a client's court contact while he is in the program. After the program, the controls on criminal behavior are no longer an influence for close to half the sample.

In order to gain further understanding of which variables were the best predictors of recidivism, a multiple regression analysis<sup>34</sup> was performed on data for the 85 clients in the recidivism sample. (Table XIII.) A forced, stepwise regression analysis was undertaken in order to best assess how much of the variability in the level of post-program offense seriousness could be explained by independent variables. The independent variables, preprogram seriousness of offense, client difficulty score, and prior weeks in different D.Y.S. programs only explained 12 percent of the variance in post-program offense seriousness.

Next, program incumbency variables such as the amount of time in the program and the specific program the client was receiving services from were entered into the regression equation. This battery of independent variables only added some 10 percent of additional explanatory power.

The implications of the findings that less than 22 percent of post-program seriousness of offense can be explained by using a wide variety of pre-program and program incumbency variables are that prior behavior and service variables are not powerful predictors of future behavior. Recent studies by the Mitre Corporation and the Denver Anti-Crime Council have also been unable to significantly account for recidivism using

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34. Regression analysis is a procedure for developing an equation which is a linear composite of a series of independent variables in order to best account for or explain the variance in a criterion or dependent variable.

different client and program variables in regression analyses.<sup>35</sup> Post-program criminal activity may be more a function of chance than of some systematic pattern of relationships.

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35. The Denver study could only account for 20 percent of the total variance in recidivism using six variables (J.D. Carr and M.J. Moloff. Juvenile Recivism. Denver, Colo.: Denver Anti-Crime Council, 1974). A study done by Mitre Corporation on five intensive supervision programs for juvenile probationers employed seven variables in explaining only 13 percent of the total variance in recidivism. (Joseph Sasfy. An Examination of Intensive Supervision as a Treatment Strategy for Probationers. Washington: Mitre Corp., 1975).

Table XIII  
Results of Multiple Regression Analyses  
of Post-Program Seriousness of Offense  
(N = 85)

Predictor Variable	R	R <sup>2</sup>	Beta
Weeks in previous placements	.27	.07	.28
Number of previous placements	.13	.07	-.15
Pre-program seriousness of offense	.05	.07	.03
Age	.16	.09	.11
Enrolled in school	.18	.10	.17
Client difficulty score	.24	.13	.15
Weeks in Key	-.10	.13	-.05
Cost of Key	-.04	.13	.01
Participation in Revere O.T.	.13	.16	.27
Participation in Fall River O.T.	.1	.17	.15
Participation in Lawrence O.T.	-.03	.17	.07
Participation in Worcester O.T.	.06	.18	.17
Participation in Cambridge O.T.	-.08	.19	.04
Participation in Cambridge Foster Care	.08	.19	.11
Participation in Holyoke O.T.	-.13	.21	-.02
Participation in Lawrence Foster Care	-.08	.22	.15
Participation in Fitchburg O.T.	.08	.22	.14

## B. Client Termination

Of the 154 clients in the sample<sup>36</sup> who terminated from the program, the counselors reported that clients had successfully completed the program in 34 percent of the cases. A successful completion of the program means that, in a counselor's judgment, a youth's termination from the program was due to a positive response to the services offered. In most cases this meant that under the program's guidance the youth had taken steps to stabilize his life to the point where he was no longer in need of Key's services. One-quarter of the sample terminated under circumstances that could best be described as neutral. The reasons for termination under this category included moving, joining the service, or reaching the age of automatic release from a state agency's custody. The remaining 41 percent of the clients terminated from the nine Key programs under negative circumstances. The most frequent reason for youths leaving the program under this category was a return to court for a new offense. Negative terminations included running away from the program or generally failing to respond to or reacting in a negative way to the services offered. (Table XIV.)

When termination results are examined in light of client difficulty, the results offer few surprises. In client group 1 (N = 25), 44 percent of the youths were judged by counselors to have terminated successfully, 20 percent fell into the neutral category, and 36 percent were reported to have left Key under negative circumstances. In client group 2 (N = 89), 36 percent of the clients were considered to be successful terminations as opposed to 38 percent who left the program under negative circumstances. In client group 3 (N = 40), only 22.5 percent of

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36. For purposes of comparability, the Lawrence Work Experience Program has been omitted from these results. Outcome improvement results for this program are found in Appendix VII.

Table XIV  
Reasons for Client Termination

Termination Outcome	F.R.	Law.O.T.	Worc. O.T.	Camb. O.T.	Camb. Foster	Holyoke O.T.	Law. Foster	Fitch. O.T.	Revere	Overall
SUCCESS: Completes Key or D.Y.S. success- fully	1	5	7	1	1	19	5	4	9	52 33.8%
NEUTRAL: Becomes legal adult; moves out of state; joins the service	6	2	1	7	3	11	1	6	1	38 24.7%
FAILURE: Runaway; returns to court; term- inates due to failure in Key or D.Y.S.	6	3	15	8	7	14	6	4	1	64 41.5%
N	13	10	12	16	11	44	12	14	11	154 100%

Lawrence Work Experience Program has been omitted

the youths completed the program successfully. Over half of the youths from group 3 (52.5 percent) were described as leaving the program under negative circumstances. (Table XV.)

A multiple regression analysis was conducted in order to assess the predictability of termination type and to ascertain the relative contribution of a set of variables to this prediction. For the purpose of this analysis, termination type was broken down into three categories: successful, neutral and unsuccessful. Four variables were used as predictors of termination type:

- 1) Weeks -- the number of weeks in Key services;
- 2) Client difficulty type -- a breakdown of clients into three groups based on a difficulty score derived from weighting and combining the pre-service variables of offense type, age at first court contact, number of previous court appearances, living situation, high school attendance, and previous number of weeks in placement;
- 3) Age -- client age at time of entry into Key;
- 4) Weeks in placement -- number of weeks in program placement prior to Key.

These four variables accounted for only 21 percent of the variance in termination type. The strongest predictor variable was weeks in the Key program, which accounted for 10 percent of the variation in termination type. The difficulty group a client was in only accounted for five percent of the variance in termination type. (Table XVI.)

Since weeks in Key services was the strongest predictor variable ( $R^2 = .10$ ), an analysis of variance was performed with weeks in Key as the independent variable and type of termination the dependent variable. The results ( $F = 9.4$ , significant at

Table XV  
Termination Results by Client Difficulty Group\*

Type of Termination	Client Difficulty Group 1		Client Difficulty Group 2		Client Difficulty Group 3		Total	
	Percent	N	Percent	N	Percent	N	%	N
SUCCESSFUL	44%	11	36%	32	22.5%	9	34%	52
NEUTRAL	20%	5	26%	23	25%	10	25%	38
UN SUCCESSFUL	36%	9	38%	34	52.5%	21	41%	64
TOTAL	100% (N=25)	25	100%	89	100%	40	100%	154

Chi Square = 4.26 with 4 degrees of freedom      Significance = .37

\*Lawrence Work Experience Program Excluded

Table XVI  
Multiple Regression Analyses of Termination Type\*

Predictor Variable	R	R <sup>2</sup>	Beta
Weeks in Key Program	.32	.10	.36
Client Difficulty Type	-.20	.15	-.15
Age	.12	.19	.22
Weeks in Placement Prior to Key	-.20	.21	-.16

\*N = 154

.00), show that there is in fact a significant relationship between the amount of time spent in the program and the type of termination. The more time spent in the program, the more likely a client will achieve a successful or neutral termination. The less time spent in the program, the more likely a client will unsuccessfully terminate from Key. (Table XVII.)

Unfortunately Key often has no control over when a client terminates from the program. Negative terminations are often initiated by a client running away, committing a new crime, or being totally uncooperative with Key staff. The fact that the average number of weeks in service for successful terminations was 48 may

help Key in planning service strategies, but in many cases more information is needed to reverse negative terminations.

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Table XVII

Termination Type by Weeks in Key Services (N = 154)\*

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Weeks in Key	T e r m i n a t i o n   T y p e		
	Successful	Unsuccessful	Neutral
Mean	48	28	46
Standard Deviation	23	29	29
N	64	52	38
Analysis of Variance Results: F = 9.4			Significance .00

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\*Lawrence Work Experience Program excluded

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In order to draw any conclusions from the termination results, one must consider the preceding figures in the light of who the Key clients are and what their experience within the juvenile justice system has been. The D.Y.S. system of providing care and services to delinquents does not always work on an incremental model, progressing from the most to the least restrictive treatment alternative as appropriate placements for youths. Frequently a decision will be made that an older youth, adjudicated delinquent on a serious charge, can best be served in the relatively unstructured setting Key offers. A lack of alternatives in the program models at the disposal of D.Y.S. further complicates the

placement picture. Often the specific type of program needed by a youth will be temporarily unavailable, or even nonexistent. In such a case, D.Y.S. will frequently turn to an agency like Key to develop a service plan for a hard-to-place youth. Finally, D.Y.S. often uses Key's services as an interim rather than ultimate placement. Key programs have increasingly been used to prepare youths for residential or more restrictive care, as well as to supervise delinquents who have temporarily exhausted other service possibilities and are awaiting a new, long-term placement.

Thus, it is a mistake to assume that simply because Key maintains a relatively open, unrestrictive treatment model that the clients referred to Key are younger youths charged with the least serious types of offenses. In fact, most clients who come to Key are almost 16 years old, have been in the juvenile justice system for a number of years, and have been in at least three other D.Y.S. programs. Therefore, when analyzing the Key termination statistics, one must keep in mind the problems and difficulties of providing services for this population.

### C. Outcome Improvement Ratings

At the time of a client's termination from the program, his counselor describes the youth's situation in the different areas of his life which Key services attempted to address, and assesses the client's relative improvement in these areas while in the program. The counselor considers the client's situation when he first entered, and assesses improvement on the basis of the client's development in each area while in the program. By taking into consideration each client's specific situation upon program entry, the evaluation attempts to measure improvement against the individual facts of each case rather than against an absolute service objective for all clients.

Nonetheless, for two reasons, caution must be exercised in interpreting the results of the counselor assessments. First, despite the attempt to gear improvement ratings to individual facts rather than to achievement of hypothetical goals, some bias undoubtedly still remains. The more difficult and problematic a client's behavior at program entry, the less likely that counselors will perceive any satisfactory improvement in the client's situation. Consequently, programs serving more difficult clients would be unlikely to demonstrate a high degree of improvement among a sizeable number of clients.

The second problem is the inability to ascertain rater reliability with precision. The reliability of those making the assessment is critical when using personal judgments to appraise programs. If the raters, in this case the program counselors, are not making comparable judgments the meaning of their assessments is unknown. Because counselors were indirectly rating their own ability to aid troubled youths, the possibility exists that staff in certain programs might have overstated their performance in regard to their rating of the client's improvement.

Despite these qualifiers, the improvement ratings did provide a flexible instrument for evaluating specific service areas that had previously gone unscrutinized. The client improvement ratings were analyzed by program and client difficulty group using an analysis of variance procedure.<sup>37</sup> Analysis of variance is a statistical technique which partitions the variability in the dependent variable, in this case the improvement variable, and attributes it to a set of independent factors, in this case program or client difficulty.

1. Relationship with natural family or foster parents -- One of the major service objectives of Key is to help achieve a viable living arrangement for the program participants. This involves counseling the youth in a family setting and working directly with his family members. As indicated in the description of the sample, Key's clientele is often from troubled families marked by broken marriages and an extremely high rate of unemployment. Although most programs report slight improvement in clients' relationships with families, the progress in this area is extremely relative. At the time of termination from the program, 46 percent of the sample were reported to have very poor relationships with their parents or relationships marked by frequent fights. According to counselor assessment, 43 percent of the youths were getting along with their parents fairly well or had a good relationship with them. A final 11 percent were reported to be non-participating in their relationship with their families. (Table XVIII.)

The improvement ratings for all outcome measures were done on a 1 to 5 scale with the following categories: 1 = great deterioration; 2 = some deterioration; 3 = same; 4 = some improvement; 5 = great improvement. Hence, a program mean of 3.5 would tell us that the improvement was between the same and some

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37. The different types of clients in each program should be considered when interpreting program results or comparisons.

Table XVIII

Client Status in Relationships with Natural Parents and Foster Parents

Client Relationship with:	Client Difficulty Group 1		Client Difficulty Group 2		Client Difficulty Group 3		Total	
	%	(N)	%	(N)	%	(N)	%	(N)
1. Natural Family --								
Does not get along	21%	(6)	10.5%	(10)	12%	(5)	13%	(21)
Marked by frequent fights	32%	(9)	31%	(30)	38%	(16)	33%	(55)
Client non-participating	4%	(1)	10.5%	(10)	17%	(7)	11%	(18)
Gets along fairly well	36%	(10)	40%	(38)	31%	(13)	37%	(61)
Good relationship with parents	7%	(2)	8%	(8)	2%	(1)	6%	(11)
Total	100%	(28)	100%	(96)	100%	(42)	100%	(166)
Chi Square = 7.40 with 8 degrees of freedom					Significance = .49			
1. Foster Parents --								
Does not get along	0	(0)	0	(0)	0	(0)	0	(0)
Marked by frequent fights	33%	(2)	25%	(8)	27%	(3)	26.5%	(13)
Client non-participating	0	(0)	6%	(2)	9%	(1)	6%	(3)
Gets along fairly well	33%	(2)	28%	(9)	9%	(1)	24.5%	(12)
Good relationship with foster parents	33%	(2)	41%	(13)	55%	(6)	43%	(21)
Total	100%	(6)	100%	(32)	100%	(11)	100%	(49)

improvement. For family improvement in relationships with natural parents there was a sample mean of 3.1 ( $N = 164$ ), excluding Lawrence W.E.P. There was a significant difference in client improvement between programs as indicated by an  $F$  of 3.56 significant at the .000 level. The highest  $\bar{x}$  improvement in client relationship with natural parents was reported in Worcester O.T. ( $\bar{x} = 3.9$ ) and Revere ( $\bar{x} = 3.37$ ). The lowest average improvement scores for this category were reported in Holyoke ( $\bar{x} = 2.7$ ) and Fitchburg ( $\bar{x} = 2.9$ ). (Table XIX.)

There is also a significant difference between client difficulty groups and the reported improvement in relationship with parents ( $F = 40$ , significant at .02). Client group 2 ( $\bar{x} = 3.3$ ) was judged to have the highest improvement in relationship with their families, followed by group 1 ( $\bar{x} = 3.1$ ) and group 3 ( $\bar{x} = 2.8$ ).

Foster Parents -- There were 55 clients who received foster care services while in Key's care. At their time of termination from Key, 67 percent of this group were judged by their counselors to get along fairly well or have a good relationship with their foster parents. Counselors found 27 percent of these clients in relationships with foster parents that were marked by frequent fights. The remaining six percent of the clients were reported as non-participating.

The mean improvement score for a client's relationship with foster parents is 3.4. The Key Cambridge Foster Care Program had a mean of 3.7 ( $N = 12$ ), while Lawrence Foster Care had an average of 3.3 ( $N = 14$ ). Although there was no significant difference in improvement in relationship with foster parents by client difficulty group, the means for the different groups present an unusual pattern. An analysis of this information indicates that the more difficult the client group, the higher their average reported improvement in relationships with their foster parents.

Table XIX  
Mean Outcome Improvements\*

Outcome Improvement Areas	Client Difficulty Group 1		Client Difficulty Group 2		Client Difficulty Group 3		Total		Analysis of Variance	
	$\bar{x}$	N	$\bar{x}$	N	$\bar{x}$	N	$\bar{x}$	N	F	Level of Signif.
Natural Family	3.1	28	3.3	96	2.8	40	3.1	164	4.04	.02
Foster Parents	3.0	9	3.4	33	3.8	13	3.4	55	1.14	.33
School	2.8	23	3.3	70	2.8	18	3.1	111	2.01	.14
Job	4.1	14	3.7	64	3.1	29	3.6	107	3.94	.02
Court Contact	3.2	19	3.6	83	3.2	37	3.4	139	2.6	.07
Suspected Illegal Behavior	3.1	19	3.6	92	3.0	40	3.4	151	4.42	.01
Counselor	3.8	29	4.0	100	3.6	41	3.9	170	1.7	.19
Friends	3.1	29	3.3	94	3.1	41	3.2	164	2.4	.09
Overall Average Improvement	3.3	29	3.5	98	3.2	41	3.4	168	3.92	.02

Lawrence Work Experience Program has been omitted from this analysis

\*Improvement means measure the client's improvement from entry to termination in Key. The improvement scale is 1 to 5, with: 1 = great deterioration; 2 = some deterioration; 3 = same; 4 = some improvement; 5 = great improvement.

2. School and Job -- Another important Key service goal is to assist youths in establishing a workable and productive daytime activity in school or in a job. Most clients, upon entry into Key programs, have had a history of negative school experiences. More than half the sample were not enrolled in school when they came to Key. For many, poor grades led to a lack of interest which manifested itself in spotty school attendance and eventual dropping out. For the sample of nine programs (N = 175), 98 youths were involved in school programs while in Key's care. Counselors reported that 39 percent of these clients terminated school unsuccessfully while in Key, with 28 percent leaving due to lack of interest and 11 percent being terminated due to unacceptable behavior. The remaining six percent were reported in school, with 27 percent experiencing some problems and 34 percent doing very well.

When school status is examined by client difficulty group, we find that groups 1 and 2 have an equal percentage of clients in school (63 percent), but group 2 has the largest percentage of clients doing well (41 percent). In client group 3 (N = 14), half of the clients terminated school unsuccessfully while in Key and only two clients were reported to be in school and doing well. The most telling statistic about group 3 is that only one-third of these clients, who were rated the most difficult to work with, had any school contact while in Key. (Table XX.)

For the entire sample that terminated from Key, the average client improvement score in school was 3.1. Fitchburg and Cambridge Foster Care reported the highest improvement averages and Lawrence O.T. and Cambridge O.T. the lowest. There was no significant difference in reported school improvement between programs or between client difficulty groups. It is interesting to note that client group 2 had a higher average improvement than the easiest (group 1) and most difficult (group 3) client groups.

**CONTINUED**

**1 OF 2**

Table XX

Client Status at Time of Termination -- School and Job

Activity	Client Difficulty Group 1		Client Difficulty Group 2		Client Difficulty Group 3		Total	
	%	(N)	%	(N)	%	(N)	%	(N)
1. SCHOOL --								
Terminated due to overt behavior	9.5%	(2)	13%	(8)	7%	(1)	11%	(11)
Terminated due to lack of interest	29%	(6)	24%	(15)	43%	(6)	27.5%	(27)
In school experiencing some problems	38%	(8)	22%	(14)	36%	(5)	27.5%	(27)
In school doing well	24%	(5)	41%	(26)	14%	(2)	34%	(33)
School Total	100%	(21)	100%	(63)	100%	(14)	100%	(98)
Chi Square = 6.98 with 6 degrees of freedom					Significance = .32			
2. JOB --								
Terminated due to overt behavior	0	(0)	4%	(2)	9.5%	(2)	5%	(4)
Terminated due to lack of interest	15%	(2)	31%	(16)	52%	(11)	34%	(29)
In job experiencing some problems	23%	(3)	9%	(5)	9.5%	(2)	14%	(17)
In job doing well	62%	(8)	55%	(28)	29%	(6)	49%	(42)
Job Total	100%	(13)	100%	(51)	100%	(21)	100%	(85)

Chi Square = 9.43 with degrees of freedom

Significance = .15

Eighty-five clients had some work experience while in Key. Of this subsample, 61 percent were reported to still be working at a job when they terminated Key, with 49 percent reported by counselors to be doing well and 12 percent experiencing some apparent problems. The 39 percent of the clients who terminated their jobs unsuccessfully while in Key consisted of 34 percent who left their jobs due to a lack of interest and five percent who were terminated due to unacceptable behavior.

The average job improvement ratings for clients who worked in Key was 3.5. There was no significant difference in mean job improvement ratings among programs or client difficulty groups. The programs that reported the highest average job improvement were Revere and Lawrence O.T. The lowest job improvement, according to counselor assessments, was Cambridge O.T. Client difficulty groups 1 and 2 had identical improvement means of 3.7, while group 3 had an average score of 3.1.

3. Suspected Illegal Behavior and Court Involvement -- The decision was made to include two questions on criminal justice contact, one relating to actual behavior and the other concerning formal contact resulting from being apprehended by police. In so doing, an attempt was made to discern whether clients had less frequent contact with the courts while in Key and whether their suspected illegal behavior was reduced as well. The results show that while Key programs are somewhat successful in reducing court contact, they are less successful in halting illegal behavior.

From the sample of clients from the nine programs, counselors reported that 37 percent did not recidivate while in Key. They also felt that 22 percent of the clients recidivated at a less serious offense level than before the program, and 32 percent recidivated at the same level of offense while in Key. Counselors found that nine percent of the clients recidivated

at more serious offense levels while in the program as compared to their pre-program offense history. Although these figures include a much larger sample than the official recidivism follow-up, the results are very similar. There was not a significant difference between client difficulty groups in terms of recidivism status at the end of the program. (Table XXI.)

The average improvement in the court contact category for the entire sample (excluding Lawrence W.E.P.) was 3.4. There was no significant difference between program means or between client difficulty groups. Once again client difficulty group 2 had the highest average improvement mean of the three groups.

Counselors reported that 29 percent of the clients were not suspected of being involved in illegal behavior while in Key. They also surmised that 55 percent of the clients were involved occasionally in illegal behavior and 14 percent of the sample were frequently involved in illegal behavior while in Key. There was a significant difference among client difficulty groups in terms of suspected illegal behavior, with the most difficult group suspected of participating more frequently in illegal activities (Chi Square = .0119 significance = .01).

The average improvement in the suspected illegal behavior category for the sample was 3.4. Fall River and Holyoke reported the lowest reduction in suspected illegal behavior. Revere and Lawrence Foster Care reported the highest. There was no significant difference among program improvement means. However, there was a significant difference among the average improvement scores for the three client difficulty groups ( $F = 4.2$ , significance = .02). Client difficulty group 2 had the highest average improvement in the category of suspected illegal behavior with a mean of 3.6, compared to 3.5 for group 1. The most difficult client group had an average score of 3.0.

Table XXI

Client Status: Court Contact and Suspected Illegal Behavior

Court Contact	Client Difficulty Group 1 %	(N)	Client Difficulty Group 2 %	(N)	Client Difficulty Group 3 %	(N)	Total %	(N)
Recidivates at more serious offense level	16%	(3)	7%	(2)	11%	(4)	9%	(13)
Recidivates at same offense level	21%	(4)	32%	(28)	38%	(14)	32%	(46)
Recidivates at less serious offense level	16%	(3)	21%	(19)	27%	(10)	22%	(32)
Does not recidivate	47%	(9)	40%	(36)	24%	(3)	37%	(54)
Total	100%	(19)	100%	(89)	100%	(37)	100%	(145)

Chi Square = 5.94 with 6 degrees of freedom

Significance = .43

Suspected Illegal Behavior	%	(N)	%	(N)	%	(N)	%	(N)
Suspect frequent involvement	5%	(1)	12%	(11)	25%	(10)	14%	(22)
Suspect occasional involvement	65%	(13)	50%	(47)	65%	(26)	56%	(86)
Suspect no illegal involvement	30%	(6)	38%	(35)	10%	(4)	30%	(45)
Total	100%	(20)	100%	(93)	100%	(40)	100%	(153)

Chi Square = 13.4 with 6 degrees of freedom

Significance = .01

4. Relationship with Counselors -- The success of the Key service model is dependent on the ability of the counselor to relate successfully to a client and to be an influential force in the youth's decisions and actions. In reviewing the counselor assessment of relationships with individual clients, potential bias must be taken into account, for it is in this realm that the counselor may feel that he is judging his own effectiveness. There is no way to adjust the results to take into account this bias. The reader therefore must be cautious in interpreting the data or drawing conclusions on the basis of these findings.

The results of all O.T. and foster care programs show that 79 percent of the clients got along fairly well with or had a good relationship with their counselors. A greater percentage of clients in client difficulty group 2 were judged to be in this category than the other two client groups. Counselors judged 13 percent of the clients to be non-participating. The remaining eight percent were reported to have bad relationships with their counselors, either simply not getting along or frequently fighting with the counselor. When these results are compared with the termination outcomes, it becomes obvious that the type of relationship a counselor reports to have with a client does not necessarily relate to the client's outcome in the program or reflect the effectiveness of impact of an individual counselor.

The average improvement score for counselor/client relationship was 3.8. There was a significant difference in the average improvement in counselor/client relationships between programs ( $F = 2.03$ , significance = .04). The highest average improvement in this relationship was reported at Revere and Lawrence O.T. The lowest improvement was reported at Fitchburg. There was no significant difference among client diffi-

culty groups; however, group 2 once again had a higher average improvement score than the easiest and most difficult groups.

5. Relationships with Friends -- Counselors reported that 80 percent of the clients (N = 161) got along fairly well or had good relationships with their friends at the time of terminations from Key. Of the remaining 20 percent, 12 percent were described as having relationships where they did not get along or had frequent fights and eight percent were characterized as non-participating in relationships with friends. There was no significant difference in the status of relationships with friends by client difficulty group.

The mean improvement score for relationships with friends was 3.2. Although the means of the different client difficulty groups did not vary significantly, clients in group 2 did have the highest mean.

6. Overall Average Improvement and Conclusions -- When all the improvement scores for the different categories were averaged out, an average improvement mean of 3.4 was calculated for the entire sample (N = 168). There was a significant difference in average improvement by client difficulty group and by program.<sup>38</sup> Perhaps the most interesting finding in the improvement rating results is the fact that client difficulty group 2 had the highest average improvement score of all three groups. In six out of the eight improvement categories, they were judged to have made the greatest progress. The clients in group 2 are more representative of the clientele that Key has worked with over the years. The fact that less difficult and more difficult clients were not seen as making as much improvement in these out-

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38. As stated earlier in the analytic overview, differences in clients coming into the nine programs make it an ambiguous task to separate program effect from the impact of pre-program client histories.

come areas could mean that Key and its services were not as effective for these groups at the time of the evaluation. The clients in group 1 represent to a large extent youths from other agencies Key is attempting to serve in an expansion of their referral base. The clients in difficulty group 3 are more serious and experienced offenders that Key accepts as part of an unwritten policy of not refusing to work with any type of youth. It is important that Key concentrate on improving the level of services to these two groups of clients representing a minority of the clients they serve.

### VIII. Conclusions and Policy Implications

- (1) Key has the most success in dealing with clients from difficulty group 2.
- (2) Key is able to limit and control recidivism while a youth is in its care; however, this influence over client recidivism greatly diminishes once a youth is terminated from Key.
- (3) Key is relatively successful in stabilizing the lives of youths in its care who have been placed in jobs.
- (4) On the other hand, Key is less successful in providing positive educational experiences to youths in its care.

#### (1) Success with Difficulty Group 2

Key has the most success in dealing with clients from difficulty group 2. This should come as no surprise to the agency administrators, as this is the group of clients that Key has traditionally worked with and for whom their service model is designed. This group represents D.Y.S. referrals who have typically committed property offenses, have difficult home situations, and have done poorly or lost interest in school.

Because of the success with group 2, and the relatively poor showing with groups 1 and 3, any expansion of Key's services for the two latter groups should be undertaken in a calculated and deliberate fashion. Expansion of services must include modifications of the basic Key service model to adapt to the needs of these two groups.

Client group 1 is generally a group referred from agencies other than D.Y.S., comprised of youths who exhibit some behavioral, family, and school problems but who have little

criminal history. For these clients, the goal of controlling criminal behavior is not relevant. To serve these clients adequately, Key must concentrate more on providing family therapy and remedial educational services.<sup>39</sup>

Clients from group 3 have more serious criminal histories, often including offenses against persons, and have been in the court system long enough to have been associated with many of the programs D.Y.S. offers. Their admission into Key is a reflection of the agency's commitment to work with any type of youth, and is a further indication of the continuing lack of program alternatives at the disposal of D.Y.S. Key may, in fact, serve these clients as well as any other program. However, Key should still carefully re-evaluate its admission policies for these youths in conjunction with D.Y.S. officials. If D.Y.S. needs Key as a placement for these youths, Key should consider developing a specialized program to handle these difficult youths exclusively.

## (2) Recidivism

The statistics gathered on the recidivism subsample indicate that Key is able to limit and control recidivism while a youth is in its care. This influence over client recidivism diminishes greatly once a client has terminated from the program. Key should examine its present termination patterns to see if clients are adequately prepared to function in an acceptable manner without the controls and supervision that Key provides. There are a number of options that could be considered in terms of follow-up and aftercare, including transforming termination into a phased process, identifying and solidifying community resources to provide backup for newly terminated clients,

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39. This is an area the agency has begun to address through increased training and supervision.

and sponsoring group activities that include past program participants.

It should be noted that Key's specific problems surrounding termination and aftercare are germane to the whole system of juvenile care. Placement agencies must work closely with Key and other programs to develop consistent termination policies that reflect the ongoing needs of the clients they serve.

(3) and (4) School and Work Experience

Key clients in jobs were judged by counselors to be more successful than those in school. The agency may want to concentrate more on job training or work experience programs in the future. Given the age and past school failures of a large percentage of clients, work may be a more feasible and acceptable alternative for program participants.

Nevertheless, Key should also examine its school support services carefully to determine what improvements can be made. Key should also concentrate on expanding the alternative educational experiences it can offer directly to its clients. In many cases, poor school improvement is due in part to the combination of an uncooperative, disinterested participant and a school system that does not have the flexibility or desire to work with this youth. Key can render an invaluable service to its clients by filling in the educational gaps left by an overcrowded or unresponsive school system.

Postscript

In the past two years Key has made some changes that are not reflected in the evaluation.

It should be noted that during the evaluation Key began to address some of the issues contained in the policy recom-

mendations. To provide services specifically designed for more difficult clients, the agency established a secure residential program for girls who are chronic delinquents and added a secure residential component to the Holyoke program. Key has also begun to build a greater in-house educational component. Alternative schools have recently been created in conjunction with the Lawrence and Holyoke programs.

Over the past year and one-half the agency has placed greater emphasis on staff training and increased accountability, management by objectives, and more thorough documentation of actual services delivered by each counselor. The improved reporting system should make it possible to do a more thorough evaluation of the service delivery process. This "process" evaluation was not a feasible alternative two and one-half years ago.

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Appendix I

Offense and Severity Listing

Offense	Severity
Carrying alcohol by a minor Disturbing the peace Possession of marijuana Escaping home Walking the tracks Liquor in the park	1
Motor vehicle violation School offense Drunk Lewd language Disorderly behavior Present where drugs are	2
Stubborn child Larceny under \$100 Runaway Escaping D.Y.S. Transferring plates Entry without burglary Not following police directions Malicious mischief Damaging property Attempted larceny	3
Burglary tools Accessory to a burglary or crime Larceny Attempting a crime Not stopping for police Buying or receiving stolen goods B & E railroad Larceny of person Forgery Trespassing	4

Appendix I (con't.)

Offense	Severity
Aiding escape from police	
Barbituates	
Threatening bodily harm	
Larceny over \$100	
Attempted B & E and larceny	
False bomb report	5
B & E and larceny by day	
Attempt to break a safe	
B & E with intent to commit larceny	
B & E attempt crime	
Unlicensed weapon	
Assault	
Drunk driving	
Use without authority	
Operating motor vehicle to endanger	
Car extortion	
Possession of nitroglycerine	6
Assault and battery on police	
Assault and unarmed robbery	
Molotov cocktail	
Larceny by night	
Heroin	
Assault and armed robbery	7
Rape	
Arson	
Assault with intent to rape	8
Kidnapping	
Assault and battery with dangerous weapon	
Murder	9

## Appendix II

### Offense Class

Offense Class	Type of Offense	Example
Nonaggressive		
1	One nonserious offense	Substance abuse
2	Offenses against self	Drugs, truancy, incorrigibility
3	Offense against property, not harmful to others	Shoplifting, joy riding
Aggressive		
4	Offense against a person indirectly	Car theft, burglary
5	Offense against a person directly, but not physically harmful	Unarmed robbery, purse snatching
6	Offense against a person directly with actual or intended harm	Armed robbery, muggings, assault, rapes

Source: Max, Lawrence and Downs, Thomas. Decentralized Delinquency Services in Michigan (Differential Placement and Its Impact on Program Effectiveness and Cost-Effectiveness.) Michigan: Department of Social Services Quality Control and Program Analysis, Social Services Evaluation and Analysis Division, 1975, p.11.

Appendix III

Harvard Study -- Recidivism Rates for Boys\* (N)

Recidivism Criteria	R e g i o n							Total
	I	II	III	IV	V	VI	VII	
Reappearance in Court								
6 month:								
1968	49% (37)	61% (39)	30% (33)	48% (33)	50% (16)	64% (53)	68% (25)	54% (236)
1974	46% (41)	60% (53)	48% (48)	57% (44)	59% (46)	77% (105)	59% (58)	61% (395)
12 month:								
1968	73% (37)	69% (39)	48% (33)	58% (33)	62% (16)	75% (53)	80% (25)	66% (236)
1974	73% (41)	75% (53)	54% (48)	68% (44)	80% (46)	85% (105)	69% (58)	74% (395)

\*Results provided by Bob Coates and Alden Miller, Harvard Center for Criminal Justice. The 1968 sample represents clients released from institutions. The 1974 sample is comprised of youth released from community-based programs.

## Appendix IV

### Alcohol and Drug Use

A self-report instrument on drug and alcohol use was administered to clients as they entered the program. This survey was completed by 162 clients at the time of program entry. Less than half that number filled out the same questionnaire after four and one-half months of program participation. Unfortunately this follow-up group was not large enough to allow us to do an over-time comparison. Since the purpose of the drug and alcohol survey was more descriptive than analytical, a short synopsis of the pre-program results will be given.

Alcohol usage: Beer drinking dominated all forms of alcohol consumption by frequency and amount. Sixty-six percent of those sampled reported drinking beer at least once a week. Twenty-eight percent reported drinking beer between three and seven days a week. Perhaps the most telling statistic is the amount consumed on each occasion. Sixty percent of the clients surveyed reported drinking five cans or more when they drank. Twenty-five percent reported drinking nine cans or more. Eighty percent of those surveyed drink most often with friends. Over 45 percent report losing control at least once while drinking, with the same percentage also having had trouble remembering at least once. Fifty-two percent of those tested reported that they had been drinking right before they got into trouble with the police.

Drugs: Drug usage is widespread with marijuana smoking being comparable to beer drinking in its popularity. Seventy-one percent of those surveyed said they smoked marijuana at least once a week over the last year. Twenty-six percent said they smoked marijuana every day and 37 percent said they smoked three to four times a week. Only 19 percent of those surveyed use pills every week and 49 clients had tried heroin more than five times.

Twenty-eight percent of the clients used drugs directly before or during school more than ten times. Forty-three percent had been using drugs right before they got into trouble with the police.

There was no significant correlation between criminal justice history or client difficulty score with a youth's reported alcohol and drug usage.

## Appendix V

### Rotter's Locus of Control and Responsibility Survey

Only 78 clients had scores at two points in time on the Rotter's Locus of Control scale. The average score at pretest (N = 145) was 13.1 out of a possible score of 20, where the higher the score the greater the youth's sense of responsibility for his actions and control over his life. At post-test the average score was 13.7 (N = 78). The differences between pre- and post-test results were not significantly different using repeated measures of analysis of variance procedure. There was also no significant difference in the scores of the three different client groups.

Rotter's Locus of Control Results

Program	Pre-Test $\bar{x}$	N	Post-Test $\bar{x}$	N
Fall River	12.6	16	14.2	14
Lawrence Work	13.2	32	12.7	9
Lawrence Store	12.5	10	15.1	8
Worcester Store	13.1	19	14.3	6
Cambridge Store	14.7	11	13.5	10
Cambridge Foster	11.9	10	12.5	2
Holyoke	13.3	34	13.4	20
Fitchburg	12.0	2	15.0	1
Revere	12.7	11	13.4	8
$\bar{x}$ Mean, N Total	13.1	145	13.7	78

Appendix VI  
Staff Questionnaire Results  
1977 and 1978

A. Background Information

The general profile of a Key counselor, abstracted from the results of two staff questionnaires, is a college graduate who is 25 years old and has almost two years of experience in child care or juvenile corrections prior to taking a job at Key. This group is educationally and professionally oriented as almost 40 percent are working on or have completed master's degrees. The Key counselors are very dedicated to their work and find helping a client and staff support and interaction to be the most rewarding aspects of the job. There is a fast turnover rate in Key with counselors staying on for only 12 to 18 months on the average. The major reasons for leaving are a need for more pay or to continue their education.

B. Work Environment Scale

The Moos' work environment scale measures ten different work concepts by posing a series of four true or false questions related to each concept. The work areas examined include involvement, peer cohesion, staff support, autonomy, task orientation clarity, work pressure, control, innovation, and physical environment. A single work score environment is generated from this scale. This survey was administered by the evaluator on three separate occasions spaced 12 months apart. There was no significant difference between the mean work environment scores at the ten programs in the study. The results of the last two surveys are summarized by work concept and individual question below. In addition, there is a list of independent variable questions concerning job, community relations, and clients.\*

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\* Ten short essay questions concerning philosophy of client treatment and strengths and weaknesses of each particular program and the agency as a whole were included in the staff questionnaires. Space does not permit a summary in this document.

Moos' Work Environment Scale

	<u>May 1977:</u>		<u>August 1978:</u>	
	<u>True</u>	<u>False</u>	<u>True</u>	<u>False</u>
1. <u>Involvement</u>				
The work is really challenging	97	5	86	2
There's not much group spirit	17	85	15	74
A lot of people are just putting in time	13	89	13	73
People take pride in the organization	84	16	63	25
2. <u>Peer Cohesion</u>				
People go out of their way to help new staff feel comfortable	91	5	82	8
The atmosphere is somewhat impersonal	14	87	15	74
People take a personal interest in each other	90	11	76	14
Employees rarely do things together after work	34	67	30	54
3. <u>Staff Support</u>				
Directors and assistant directors tend to talk down to staff	8	86	5	79
You usually get complimented for things done well	83	16	72	16
Directors tend to discourage criticism	15	83	13	74
Directors give full credit to ideas offered by staff	83	14	66	13

Moos' Work Environment Scale (con't.)

		<u>May 1977:</u>		<u>August 1978:</u>	
		<u>True</u>	<u>False</u>	<u>True</u>	<u>False</u>
4.	<u>Autonomy</u>				
	Few employees have any important responsibilities	6	94	6	83
	Employees have a great deal of freedom to do what they like	75	25	59	29
	Employees are encouraged to make their own decisions	89	10	77	11
	People can use their own initiative to do things	95	5	82	7
5.	<u>Task Orientation</u>				
	People pay a lot of attention to getting work done	90	10	79	10
	A lot of time is wasted because of inefficiency	40	59	35	50
	Things rarely get put off until tomorrow	57	43	41	45
	This is a highly efficient work-oriented place	62	37	43	35
6.	<u>Clarity</u>				
	Things sometimes are disorganized	63	37	58	32
	Activities are well planned	47	48	36	45
	Rules and regulations are somewhat vague and ambiguous	28	73	21	67
	Employees are often confused about exactly what they are supposed to do	31	69	28	59

Moos' Work Environment Scale (con't.)

	<u>May 1977:</u>		<u>August 1978:</u>	
	<u>True</u>	<u>False</u>	<u>True</u>	<u>False</u>
7. <u>Work Pressure</u>				
There is constant pressure from supervisors to keep working	35	65	18	70
There seems to be an urgency about everything	53	48	40	48
People cannot afford to relax	28	73	28	59
Nobody works too hard	6	96	9	80
8. <u>Control</u>				
Strict emphasis on following rules and regulations	57	45	52	36
Close supervision	54	45	50	37
People are expected to follow set rules	50	51	51	35
Directors do not often give in to employee pressure	25	71	23	55
9. <u>Innovation</u>				
Doing things in a different way is valued	89	11	74	14
New and different ideas are always being tried out	80	20	62	22
New approaches are rarely tried	14	87	15	72
Variety and change are not particularly important	13	86	8	78
10. <u>Physical Environment</u>				
Sometimes it gets too hot	42	59	59	30
The work space is crowded	72	29	37	53
Rooms are well ventilated	47	53	30	58

Moos' Work Environment Scale (con't.)

		<u>May 1977:</u>		<u>August 1978:</u>	
		<u>True</u>	<u>False</u>	<u>True</u>	<u>False</u>
<u>Independent Questions:</u>					
1.	<u>Job Specific</u>				
	This job burns you out quickly	58	40	47	35
	There is good chance for promotion	45	53	31	54
	I feel that I am getting paid fairly for my services	36	66	38	51
	Working at night and on weekends is part of the job	94	5	81	6
2.	<u>Community Relations</u>				
	Key has a good reputation in this community	90	6	59	17
	We have a good relationship with the D.Y.S. regional office	90	5	63	12
	We have a good working relationship with the courts	86	8	55	20
3.	<u>Client Specific</u>				
	In the end, Key really can help a lot of these kids	93	2	77	6
	Many Key kids just need a chance and someone who believes in them	86	11	71	13
	Many kids are beyond helping when they come to Key	27	67	25	56
	Many Key kids need a more controlled environment	96	2	82	1
	There aren't enough job placements for Key kids	81	15	56	20

Appendix VII

Lawrence Work Experience Program Outcome Results

Job and School Status of Clients in Lawrence Work Experience Program

1. School Status --	Percentage	N
Terminated due to overt behavior	4%	1
Terminated due to lack of interest	21%	6
In school experiencing some problems	61%	17
In school doing well	14%	4
Total	100%	28

2. Job Status --

Terminated due to overt behavior	0	0
Terminated due to lack of interest	29%	10
Working but experiencing some problems	21%	7
Presently working doing well	50%	17
Total	100%	34

Outcome Means -- Lawrence Work Experience Program

Improvement Area	$\bar{x}$ Score	N	Standard Deviation
Job	3.4	36	1.2
School	2.9	28	1.0
Parents	3.2	30	.63
Foster Parents	3.8	1	0
Counselor	3.7	37	.83
Friends	3.3	31	.66
Suspected Illegal Behavior	3.7	31	.97

**END**