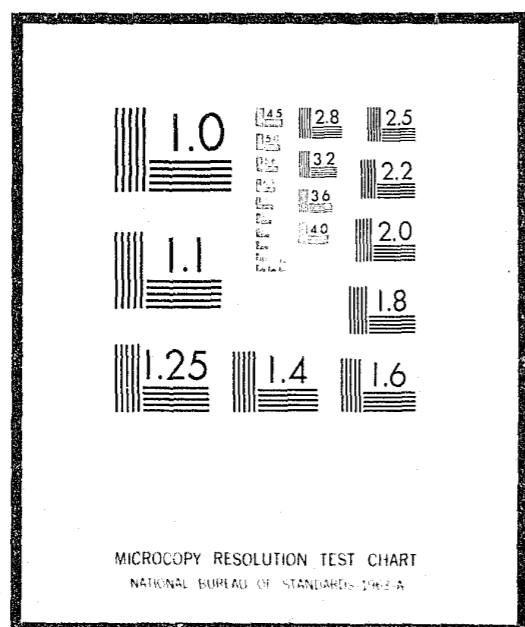


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## National Evaluation Program Phase I

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THE OHIO STATE UNIVERSITY

PROGRAM FOR THE STUDY OF CRIME AND DELINQUENCY

DELINQUENCY  
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COLLEGE OF ADMINISTRATIVE SCIENCE  
SCHOOL OF PUBLIC ADMINISTRATION

THE STUDY OF... AND DE...  
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1971  
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NATIONAL EVALUATION PROGRAM

PHASE I

PHASE II EVALUATION DESIGN

March 1976

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ACQUISITIONS

NATIONAL EVALUATION PROGRAM

PHASE I

RESIDENTIAL INMATE AFTERCARE:  
THE STATE OF THE ART

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PHASE II EVALUATION DESIGN

CONTENTS

	<u>Page</u>
INTRODUCTION . . . . .	1
IDENTIFICATION OF MEASURABLE VARIABLES . . . . .	3
Outcome. . . . .	3
Criminal Behavior Scale . . . . .	4
Acceptable Behavior Scale . . . . .	6
Intermediate Objectives. . . . .	8
House Classification . . . . .	9
RESEARCH DESIGN. . . . .	10
Evaluation Design #1 . . . . .	15
Rationale . . . . .	15
Sample. . . . .	18
Data. . . . .	19
Data Analysis . . . . .	22
Proposed Budget . . . . .	25
Significance of Evaluation. . . . .	26
Costs . . . . .	28
Evaluation Design #2 . . . . .	29
Proposed Budget . . . . .	32
Evaluation Design #3 . . . . .	34
Proposed Budget . . . . .	36
SUMMARY. . . . .	37
FOOTNOTES. . . . .	40

## PHASE II EVALUATION DESIGN

### Introduction

The previous summary of the state of the art of residential inmate aftercare programs includes the history and development, process overview, evaluative framework and known findings regarding such programs. The Phase II Design draws from this material and the apparent gaps in knowledge identified in the previous summary, and provides strategies to fill gaps in knowledge which have aggravated the problems inherent in policy decisions concerning program theory and operations.

From the survey of halfway house programs and review of descriptive and evaluative literature, it appears the theoretical and operational issues are well defined. There is general agreement about the need to ease the transition from institution to community and the types of activities which should be conducted in this effort. Much additional research, however, is needed, not only in the areas of costs and effectiveness of programs for the provision of services, but also on the effects of such programs.

Although literature surveys discovered fifty-six evaluative studies regarding residential inmate aftercare programs, very few valid conclusions can be drawn from the data. Of these fifty-six studies, thirty-five included measures of post-release behavior. However, almost all of these studies focused on behavior defined simply as success/failure measures of recidivism. Very few findings presented significant differences between experimental and comparison groups, and results were contradictory (although more were positive than negative) regarding the effectiveness of different programs.

The evaluative framework presented in Chapter III outlines the importance of measuring accomplishment of intermediate objectives. However, even fewer studies focus on the effectiveness of programs to get residents jobs, increase their level of education, improve family relations, raise self-esteem, provide a secure setting with a minimum of behavior problems and operate with efficient administrative practices. Conclusive evidence regarding these measures is no less important than outcome measurements, because the linking assumption that accomplishment of intermediate objectives will lead to successful post-release adjustment cannot be verified without valid and reliable data.

Therefore, a Phase II design for this topic area must provide access to monitoring program activities, measuring accomplishment of intermediate objectives and relating these to outcome. Various categories of programs should be included to detect differences in effect due to differential handling of clients. Finally, selection of programs and measures of outcome are important to ensure valid assessments of program results and reliably substantiate findings among alternative programs.

## Identification of Measurable Variables

### Outcome

As this study has indicated, the adequacy and usefulness of analysis of the outcome of residential inmate aftercare (halfway house) programs has been limited. This condition is in part due to insensitive and unidimensional indicators of outcome; therefore, a new measure of outcome (founded on the reintegrative correctional philosophy) should be developed and utilized. An example of this type of outcome measure which seems worthy of further development and application was applied by Seiter in a study of halfway houses in Ohio.<sup>1</sup>

This measure, entitled relative adjustment (RA), has two major components. The first component is a continuous outcome index. This index, which includes both positive and negative adjustment factors, is continuous, thus avoiding the forced dichotomous character of "success" and "failure." In addition to a graduated scale of criminal or deviant behavior, the index also includes factors defined as "acceptable adjustment patterns" in order to avoid relying on totally negative or deviant behavior parameters. When combined, these two scales yield an index which is more sensitive to degrees of movement away from deviant behavior and toward acceptable behavior than are dichotomous outcome variables. Scores of positive adjustment and criminal behavior, when combined with the second component of RA (the utilization of a statistical technique such as analysis of co-variance to correct for divergent characteristics in experimental and comparison groups), make up a "relative adjustment" outcome indicator which is widely applicable, particularly when true experimental designs are not feasible.

Criminal Behavior Scale

Although recidivism has been the most frequently used outcome measure, several studies have utilized outcome measures which recognize various degrees of seriousness of criminal behavior. Perhaps the most widely used is the Sellin-Wolfgang Index of Delinquency. This index, developed primarily for weighting the seriousness of juvenile delinquency, classifies specific delinquency events on the bases of the involvement of property damage, theft of property, or personal injury.<sup>2</sup>

A second measure of criminal behavior is the Severity of Offense Scale developed and used by the Division of Research of the Youth Authority of the California Department of Corrections. In classifying offenses of apprehended youth, it scores the offense on a scale from "0" for no classifiable offense to "10" for those most severe offenses.<sup>3</sup>

Other studies have used various degrees of seriousness, basing the severity on the disposition rather than the offense. Gottfredson and Ballard used terms such as "major difficulty" and "minor difficulty" when classifying disposition.<sup>4</sup> Seiter used three dispositional levels of recidivism: arrest without charge; fined or sentenced to less than one year in jail; and sentenced to more than one year in prison.<sup>5</sup>

The recidivism index used in the criminal behavior scale is an ordinal ranking of severity of offenses as prescribed by the Ohio Criminal Code. The Code was developed after consultation with criminal justice experts and passed by the Ohio General Assembly; severity assignments are therefore assumed to be valid. However, there is no reason why these rankings could not be altered to reflect a base with wider applicability than the Ohio Criminal Code.

Recidivism measures are often based on the disposition of the offense; however, dispositions of cases involving the same types of criminal behavior may not be consistent from court to court. Therefore, to maximize the reliability of the scale, only the offender's behavior (the actual offense) is considered. In utilizing the criminal behavior scale, the offender is assigned a score based on the offense for which he has been found guilty or to which he has confessed. Although charges are often reduced from the actual offense in plea negotiation, this is assumed to occur equally between the groups and therefore should have little, if any, biasing effect on the outcome scores.

Since multiple offenses can occur during the period of outcome analysis, the severity score for all offenses are added to yield the total severity score. Therefore, it is theoretically possible for the offender to exceed the highest score on the scale. Also included in the scale are severity scores for technical parole or probation violations, and absconding or being declared a violator at large. Table 1 illustrates the severity categories and assigned scores for offenses.

TABLE 1

CRIMINAL BEHAVIOR SEVERITY INDEX

Offense Category	Assigned Severity Score
Aggravated murder	-11
Murder	-10
1st degree felony	- 9
2nd degree felony	- 8
3rd degree felony	- 7
4th degree felony	- 6
1st degree misdemeanor	- 5
2nd degree misdemeanor	- 4
3rd degree misdemeanor	- 3
4th degree misdemeanor	- 2
Violator at large	- 1
Technical violation	- 0.5

### Acceptable Behavior Scale

A second element in the development of the total outcome measure is the construction of a scale of "acceptable living patterns." The reintegrative correctional model does not assume a sudden change in behavior but instead assumes gradual movement away from criminal behavior and toward socially acceptable behavior. Therefore, a social adjustment scale should be included as well as a modified recidivism scale. Several items generally considered to demonstrate socially acceptable behavior are presented in Table 2. These items do not constitute an exhaustive list of success indicators, but are merely selected factors which represent adjustment within the community.

A major emphasis of the adjustment scale is on work or educational stability, although self-improvement qualities, financial responsibility, parole or probation progress, and absence of critical incidents or illegal activities are also included. The selection of these items is somewhat discretionary, and the list does not include all the qualities which could be defined as adjustment; however, each does suggest stability, responsibility, maturity, and a sense of general order in a life style correlated with socially accepted patterns of behavior.

Each adjustment criterion is weighted equally. Individuals receive a +1 score for each criterion on which they qualify according to the stated standards. The adjustment score is therefore the total number of criteria for which the individual has qualified, and can range from zero to ten.

The actual RA outcome measure is then computed by combining both the criminal and acceptable behavior index scores. With the resultant

TABLE 2  
ACCEPTABLE BEHAVIOR SCALE

Assigned Score	Adjustment Criterion
+1	Employed, enrolled in school, or participating in training program for more than 50 percent of follow-up period.
+1	Held any one job (or continued in educational or vocational program) for more than six-month period during follow-up.
+1	Attained vertical mobility in employment, education, or vocational program. This could be raise in pay, promotion of status, movement to better job, or continuous progression through educational or vocational program.
+1	For last half of follow-up period, individual was self-supporting and supported any immediate family.
+1	Individual shows stability in residency. Either lived in same residence for more than six months or moved at suggestion or with agreement of supervising officer.
+1	Attainment of financial stability. This is indicated by individual living within means, opening bank accounts, or meeting debt payments.
+1	Participation in self-improvement programs. These could be vocational, educational, group counseling, alcohol or drug maintenance programs.
+1	No illegal activities on any available records during follow-up period.
+1	Individual making satisfactory progress through probation or parole periods. This could be movement downward in level of supervision or obtaining final release within reasonable period.

scale, an ex-offender's minor deviant behavior can be balanced with positive adjustment factors. Also, the ex-offender who refrains from illegal behavior but does nothing that otherwise qualifies as adjustment is not classified as a total success, as he would be defined with traditional dichotomous recidivism measures. It is assumed that the RA score will provide a more realistic outcome measure than has previously been available. An extensive evaluation project which utilizes an



adaptation or modification of this measure would serve the dual purposes of generating additional knowledge of halfway house operation, and demonstrating the value of multidimensional measures of program outcome.

However, there are weaknesses in this scale,<sup>6</sup> and it should not be adopted without further refinement. It is recommended that a major effort focusing on the development of appropriate measures of outcome for correctional programs be funded by LEAA.

#### Intermediate Objectives

While the measurement of outcome is extremely important for evaluation of the overall concept of residential inmate aftercare, variables which measure intermediate objectives such as employment, education and house security should not be neglected. If sound theoretical linkages are to be established between intermediate objectives and overall outcomes, or if the efficacy of alternative methods of achieving intermediate objectives is to be evaluated, measurement at the objective level is critical.

The measurement sections of Chapter III of the Phase I State of the Art<sup>7</sup> suggested intermediate objective and activity measures (which might serve as proxies for outcome) for each of the intermediate objectives pursued by halfway houses. These measures should be refined and applied as necessary for within and between house comparisons of alternative service provision methods. The extent to which intermediate objectives are achieved will be critical for research designed to verify assumed linkages between activity and outcome; thus, continuous variables seem to hold the most promise.

Cost efficiency analyses may also be highly relevant to measurement

of intermediate outcomes. Although cost efficiency is frequently utilized as a measure of outcome, it may well find its greatest usefulness in the evaluation of alternative methods of achieving intermediate objectives in a house. For example, assuming that outcomes are equal, should a house provide its own job location services or refer its clients to an existing employment agency? Should educational services be provided in or outside the house, given equal effectiveness? If cost is to be used in this way, however, careful attention will have to be paid to the service areas in which the costs are incurred. A single indicator such as per diem cost will not be adequate. At the very least, costs will have to be attributed either to client support (food, shelter, etc.) or programming and treatment. A much more extensive cost breakdown, possibly by type of service such as employment, counseling or support will eventually be necessary, if the marginal contributions of increased services to client outcome are to be ascertained. This type of cost breakdown will require the use of considerably more sophisticated costing techniques than are now applied in halfway houses.

#### House Classification

Evaluation of halfway houses which is designed to ascertain differences in program effectiveness between houses requires that typologies for differentiating houses be developed and applied. These typologies may be based on a number of variables including treatment types, funding sources, types of physical facilities, or offender types. Currently, one of the most controversial issues in residential inmate aftercare is the question of the most appropriate treatment or program emphasis. On one hand it is argued that the role of inmate aftercare is to offer a

wide variety of services and treatment to the offender to remedy his deficiencies. On the other hand, it is maintained that the house should provide only transitional support in the form of meeting the client's basic needs. Without a method of classifying houses according to the extent or type of treatment, few advances in the evaluation of differential effectiveness are possible.

We suggest that the supportive/interventive continuum offered by Koslin, et al. be further explored and that an attempt be made to develop a scalar index of intervention which will locate a given house on the continuum.<sup>8</sup>

#### Research Design

Because large amounts of resources are being devoted to residential inmate aftercare, it is imperative that the overall concept of halfway house programs, as well as different operational variables, be carefully evaluated. The Phase I inmate aftercare project has attempted to identify and enunciate the goals of aftercare halfway houses; remaining efforts focus on appropriate evaluative designs for assessing the effectiveness of both the concept of residential inmate aftercare and of individual programs. The design should be structured to measure the experimental treatment and test the effect of the treatment. This necessitates operationally defining and examining the experimental variable, while controlling for the effect of extraneous variables.

Control of or for extraneous variables frequently complicates the evaluative design, especially in research on a social program.<sup>9</sup> Laboratory experimentation will generally allow the researcher to hold all other variables constant, changing only the variable to be tested, while

measuring the effect of these changes. However, when examining social programs, it is often unethical and sometimes impossible to hold constant all other variables which affect the outcome. Social scientists must therefore select groups in which they assume the effect of these variables is equally distributed, or control for their occurrence by statistical techniques or methods.

The classic design for evaluations is the true experimental design, a model using both an experimental and control group randomly selected from the target population. Weiss writes, "The essential requirement for the true experiment is the randomized assignment of people to programs."<sup>10</sup> Utilizing random assignment to experimental and control groups assumes any uncontrolled variables will affect both groups equally, and any difference in outcome can therefore be attributed to the experimental variable.

Evaluators in criminal justice programs should attempt to utilize a true experimental design whenever it is possible to do so without altering operational program practices to such an extent that the evaluated program bears little resemblance to the program that will operate after completion of the evaluation.

Even though the true experimental design is acknowledged as being the most powerful in producing valid results, there are several problems inherent in the utilization of these designs for social analysis. Weiss discussed several possible problems in attempting to utilize true experimental designs:

1. There may be absolutely no extra people to serve as controls; the program serves everybody eligible and interested.
2. Practitioners generally want to assign people to treatment based on their need, as judged by the practitioners' professional knowledge and experience.

3. On occasion, control groups become contaminated because the members associate with people in the experimental program and learn what they have been doing. Controls may also be provided the same type of treatment by other agencies.<sup>11</sup>

Guba and Stufflebeam also find fault with the experimental model because:

1. It requires holding the program constant rather than facilitating its continual improvement.
2. It is useful for making decisions only after a project has run a full cycle and not during its planning and implementation.
3. It tries to control too many conditions, making the program so aseptic that it is ungeneralizable to the real world.<sup>12</sup>

Another problem (and a major source of resistance to controlled experimentation in correctional programs) is that "the treatment to be tested, if more lenient than traditional practice, appears to endanger the public or to conflict with governmental goals other than changing those adjudged deviant."<sup>13</sup>

Although problems inherent in the use of true experimental designs do merit consideration, these problems should not totally deter the use of true experimental designs. It would appear that the major dilemma for criminal justice evaluation is the practitioner's emphasis on non-random assignment; assignment to treatment groups is made on the basis of client need.

When conditions prohibit the use of true experimental design, quasi-experimental designs can be utilized. Quasi-experimental designs do not satisfy the strict methodological requirements of the experimental design, but can be quite useful and powerful when the researcher is aware of the specific variables for which the chosen design does not control. Weiss contends:

Quasi-experiments have the advantage of being practical when conditions prevent true experimentation. But they are in no sense just sloppy experiments. They have a form and logic of their own. Recognizing in advance what they do and do not control for, and the misinterpretation of results that are

possible, allows the evaluator to draw conclusions carefully. Quasi-experiments, in their terms, require the same rigor as do experimental designs.<sup>14</sup>

A frequently utilized and practical design for criminal justice evaluations is the non-equivalent control group design. In this design, there is no random assignment to experimental and control groups, but groups with similar characteristics are used as controls. Non-randomized controls are generally referred to as "comparison groups."

Evaluators utilize various procedures in attempting to select comparison groups that are as similar as possible to the experimental group. Quite often, evaluators attempt to develop a comparison group by matching procedures, either pairing individual members of the experimental and comparison groups on selected characteristics, or matching the entire experimental group to a similar group based on the same selected factors or parameters.

However, there are several problems associated with matching groups for evaluative purposes. It is difficult to select the most relevant characteristics on which to match subjects. In correctional philosophy, there is little consensus on the most important factors which relate to outcome. Since matching factors vary in importance from case to case, it is difficult to select the most relevant factors. It may also be difficult to match individuals on several dimensions. Individual cases may perforce be eliminated from the experimental group due to the inability to match when several matching factors are required.

An alternative approach is the use of predictive methods to develop comparable groups. Although prediction methods in criminal justice are generally used in selection and placement, several authors have noted that they may be most useful in the evaluation of treatment programs.<sup>15</sup>

Rather than developing similar comparison groups, the evaluator uses prediction methods to provide a measure of expected performance based on the individual characteristics of the experimental group, and compares "actual" to "expected" outcome.

Prediction models are based on the theory that by studying parameters such as demographic variables, previous offense records, test scores, or previous experiences, an individual's future behavior can be predicted. Comparisons of expected performance with actual performance allow a measure of success of the experimental group. In this sense, the subject's expected performance is his own control.

Some authors argue that a predictive model may not have validity when used to predict a single individual's behavior. Hayner lists five reasons to explain why parole boards lag in the use of prediction tables: (1) sensitivity to public opinion, (2) desire to encourage constructive use of prison time, (3) firm belief in the uniqueness of each case, (4) frustration of intelligent selection for parole because of legal or traditional restrictions, and (5) reactions to the prediction devices themselves.<sup>16</sup>

However, these arguments against the use of prediction do not appear relevant when using predictive methods as evaluative tools. The use of prediction as an evaluative tool is not an attempt to predict a single individual's behavior, but rather to determine a group's expected behavior for comparative purposes.

With these caveats in mind, the following designs are offered for the evaluation of residential inmate aftercare. They range from a complex design which examines the effect of differential treatment and programming on outcome to a simple design of outcome analysis.

#### Evaluation Design #1

This design provides a comprehensive analysis of the activities, accomplishment of objectives, cost, and effect on program outcome of residential aftercare programs. The aims of this design are:

1. To ascertain how residential aftercare treatment and programming alternatives compare to release with no supervision and release on parole in terms of offender behavioral adjustment after release.
2. To ascertain how various treatment and programming alternatives offered in halfway houses compare with regard to offender behavioral adjustment after release.
3. To identify the nature and quantity of services provided to offenders under each major treatment alternative, under traditional parole, and within the non-supervised setting.
4. To compare the services provided and post-release adjustment to identify the relative effectiveness of individual services and constellations of services (programs).
5. To identify offender variables which enhance or detract from the effectiveness of services.
6. To ascertain the degree to which the attainment of intermediate objectives such as employment and increased education are obtained and how they are related to offender behavioral adjustment after release both within and between the alternatives surveyed (Halfway houses, parole, unsupervised release).
7. To identify the relative costs of individual programs and services.
8. To relate the costs of programs and services to offender post release adjustment levels and identify the relative costs and benefits of alternative aftercare models.

#### Rationale

Convicted offenders receive services during their transition from prison to the community in a variety of ways. There is a need for data bearing on the relative effectiveness of such alternatives. The relative effectiveness of such alternatives cannot be determined by a simple comparison of post-release outcomes, because the process of assignment to an alternative is such that some alternatives absorb a disproportionate share of offenders with characteristics unfavorable to

success while other alternatives receive a disproportionate share of offenders with favorable characteristics. In addition, provided services may vary among alternatives, thereby affecting the assumed link with adjustment. Therefore, any analysis of relative effectiveness will require control of offender characteristics commonly found to be associated with recidivism and post-release adjustment, as well as measurement of services provided in each alternative.

In choosing the alternative to be compared with halfway houses, it is critical that they be viable alternatives for aftercare. The most common alternative is traditional supervised parole. The 1967 Task Force Report: Corrections reported that over sixty percent of adult felons were being released on parole.<sup>17</sup> A second alternative which should be considered is non-supervised release. If current trends toward determinant sentencing and the abolition of parole continue, this may well become the major alternative to release through a halfway house. It is important to recognize that offenders on unsupervised release may receive the same services received by parolees and traditional halfway house residents, although unsupervised releasees must arrange for the services themselves. There is very little, if any, information regarding the extent to which the uses of these services vary among alternatives.

Halfway houses, parole and non-supervision differ in the nature and quantity of services which the offender receives. Employment, interpersonal counseling, education and community placement are all examples of services which can be obtained. Are all these services equally effective in promoting post-release adjustment? Are they equally

effective in each of the three settings? Are they equally effective with all offenders, or do certain offender characteristics enhance or detract from the effectiveness of services? These types of questions require data on the nature and quantity of services actually provided to offenders with differing characteristics within alternative settings.

It is also important to determine differences in services provided within an alternative, particularly within various types of halfway houses. Houses vary widely in the emphasis placed on particular services. Houses with differing treatment and programming philosophies and operations should be included to determine if these differences are reflected in actual services provided and if useful typologies based on service provision can be developed.

Finally, it is necessary to ascertain the cost of processing offenders through each alternative, as well as the variations of cost within an alternative of particular services or programs. A treatment-oriented halfway house with a large professional staff may be significantly more expensive than a support-oriented house with a skeleton or para-professional staff. If the alternatives are equally effective, the less expensive one may be preferred. On the other hand, if one alternative or service is more effective than other (or more effective with certain offenders), it is important to determine the marginal cost of the increased effectiveness. It is possible that offenders are currently being assigned to alternatives which are simultaneously least effective and most expensive. Cost analysis will provide additional information relevant to the formulation of public expenditure priorities in this area.

### The Sample

Since the aims of this evaluative design include an assessment of the relative effectiveness of several alternative methods of delivering aftercare services, as well as the effectiveness of these alternatives for particular offender characteristics, the sample requirements are: (a) the inclusion of offenders who have been released unsupervised into the community, offenders on traditional parole and offenders released to halfway houses; (b) the inclusion of offenders from a variety of types of halfway houses and (c) an adequate and representative number of offenders with varying characteristics related to post-release adjustment and recidivism. To meet these requirements, it will be necessary to draw a sample from each of three populations: offenders released from prison to traditional parole; offenders who are unsupervised after release; and offenders released to halfway house facilities. It is important that the samples of offenders released on parole or unsupervised reflect an adequate variety of offender characteristics commonly related to recidivism and post-release adjustment. The sample of offenders released to halfway houses should, in addition, reflect a variety of halfway house types. Some type of quota sampling technique may be required to assure that each type of halfway house and each offender characteristic will be represented in sufficiently large numbers to allow a variety of analytical techniques.

The first step of the sampling process will require that four states be chosen which meet the following criteria: (1) there must be at least four halfway houses within the state which provide residential inmate

aftercare; (2) these halfway houses should include a house which is publicly funded, a privately funded house, a supportive house and an interventive house (not necessarily mutually exclusive); and (3) a sufficient number of persons should be released from state correctional institutions both on parole and unsupervised release to allow a comparison group to be drawn.

Figure 1 illustrates the size of the samples and the population from which they will be selected. The subjects will be selected in the order in which they enter a population until the required numbers are obtained. For example, the first fifty persons who enter House A in State 1 after the experiment begins will be chosen. Only persons who remain in the population at least two weeks will be eligible. A similar technique will be utilized to choose fifty parolees and fifty unsupervised releasees. The total treatment sample will consist of eight hundred halfway house residents representing a total of sixteen houses located in four states. The comparison groups will consist of two hundred parolees and two hundred unsupervised releasees who represent the same states. All three samples will be chosen simultaneously to minimize historical effects.

### The Data

The aims of the study require that data be collected for several areas: (a) a measure of post-release outcome similar to the relative adjustment scale suggested above; (b) individual offender characteristics which are considered to be related to recidivism and post-release outcome; (c) the nature and quantity of services provided to each

Figure 1

States	Treatment Sample Halfway House Residents				Comparison Group I Unsupervised Releases	Comparison Group II Parolees	Total State "N"
	House A	House B	House C	House D			
1	50	50	75	25	50	50	300
2	50	50	75	25	50	50	300
3	50	50	75	25	50	50	300
4	50	50	75	25	50	50	300
<b>Total Sample "N"</b>	<b>200</b>	<b>200</b>	<b>300</b>	<b>100</b>	<b>200</b>	<b>200</b>	<b>1200</b>

offender; (d) the achievement of intermediate objectives for each offender; and (e) costs associated with each treatment and programming service.

Data will be gathered in a longitudinal fashion. Data regarding the characteristics of the individual subject will be gathered as the subject enters the halfway house, is released on parole, or is otherwise released from prison. Data bearing on the nature and quantity of services which the subject receives will then be collected by several methods. Each halfway house will have an observer who will gather service data through direct observation and interviews with house staff and residents. Service data for parolees will be collected from parole administrative records and interviews with parole officers and clients. Service data for unsupervised releasees will be gathered primarily from the client himself, although these data should be verified through service agency records if they are available. Data reflecting the achievement of intermediate objectives will be collected concurrently with the service data and from the same sources. Post-release outcome data will be collected from a variety of sources including the halfway house, clients and records of other criminal justice agencies. Ideally, the follow-up period would be two years, commencing when the subject is either paroled, released from the institution, or released from a halfway house placement. Total cost data will be gleaned from agency records by the observer at the halfway house. Costs will then be assigned to the various services on the basis of time spent on the service as a proportion of total time available and the compensation of the staff member or members providing the service. Overhead costs will be allocated on the

basis of total program effort devoted to a service area. Parole costs will be determined and assigned in a similar manner. Costs for the unsupervised releasees will be obtained, in part, from the costs provided by the agencies which provide the services. Additionally, it will be necessary to apply some cost to the time which the offender uses to obtain these services.

#### Data Analysis

Data analysis, although not simple, should at least be rendered less complex by the provision of a continuous outcome variable. A number of statistical techniques can be applied, although the choice of specific techniques should await a more firm definition of service and offender characteristic variables. There are, however, several considerations which are immediately apparent. The experimental and comparison groups most probably will not be equivalent. One commonly utilized technique to overcome this problem is matching. The authors have rejected this, however, because, at the sampling stage, the characteristics to be matched are not at all clear. A second method would be to develop outcome scores on the basis of some prediction table such as base expectancy tables or salient factor scores as used by many paroling agencies. A third method would be to utilize analysis of co-variance or its non-parametric equivalent which combine the most important factors in both matching and prediction. This technique allows the analyst to choose factors to be matched among groups, then adjusts outcome scores on the basis of these factors. Finally, techniques of multiple regression might possibly be utilized with alternative aftercare processes entered as dummy predictor variables along with offender characteristics and services.

A second consideration in data analysis is the relationship of cost to outcome. An attempt will be made to gather data on specific services received by each member of the sample. These data will then be combined with service cost data to yield cost figures on an individual basis, including both total costs and service costs per individual. This combined cost figure can then be related to the outcome variable. The analysis will require careful consideration, however, because it is highly unlikely that costs will be related to outcome in a simple linear fashion.

Cost data should also be compared both within and between the alternatives of parole, unsupervised release, and halfway house placement. This will necessitate the development of a rationale explaining the effect of the availability of the halfway house placement on the offender's length of incarceration. If halfway houses allow some offenders to be released earlier than would have otherwise occurred, then any cost analysis of halfway houses should recognize this cost saving. This may require an estimate of the number of offenders in the sample who did not make parole earlier because of an inadequate parole plan, lack of a community placement, or similar reasons. These data, in conjunction with the amount of extra time the offenders were incarcerated, will allow an estimate of the cost of extra incarceration.

The sample selection of offender characteristic data, service data and cost data could be accomplished by sixteen full time data gatherers who would be stationed at the halfway houses, during the sample selection and service data phase. These persons would gather data from



house records, interview staff members and clients and observe house operations. They would be responsible for ensuring that clients met sample criteria, and maintaining a log for the programming and treatment services that each client receives. It is anticipated that these persons would be graduate students.

The staff required to collect follow-up data will depend on the data sources available and will vary from state to state. The tasks would involve contact with criminal justice agencies, data collection from agency records, interviews with agency personnel and clients, and development of alternate follow-up data sources if primary sources are not available. For this reason the costs of collecting these data have been estimated on the basis of the suggested sample size with a fixed cost of \$142.50 for each subject. This figure was developed from the experience of the Program for the Study of Crime and Delinquency in the utilization of the relative adjustment outcome measure for a sample of 700 offenders.

Based on these task and personnel requirements, the total direct cost of this design is estimated at approximately \$413,000, as set forth in the following estimated budget.

## Design #1 Proposed Budget

Project Coordinator and Support Staff

A. Project Coordinator Ph.D. full-time	24,000	
B. Two Graduate Students or 1 Graduate Student and 1 Statistical Consultant	10,000	
C. Secretary full-time	8,000	
D. Direct Support Expense	<u>8,000</u>	
	\$50,000	
	x 2.5 years	125,000

Follow-up Data Collection

\$142.50/sample subject, includes supervision and support		
	x 1200	171,000

Collection of in-house Data

Supervision and support (part-time supervisor and part-time secretary for each state, 6 months)	10,000	
	x 4	40,000
Data collectors, graduate students full-time, 6 months	4,800	
	x 16	<u>76,800</u>
Total Direct Cost		412,800

### Significance of Evaluation

Although this design is fairly comprehensive, requires over two years for completion and at first appears expensive, it is the judgement of the authors of this report that such an effort is warranted. With millions of dollars already spent on residential inmate aftercare projects, this amount of money expended to answer important policy-making questions is rather insignificant. The design is focused upon filling gaps in knowledge (which are many) and testing each of the linking assumptions regarding this topic area.

Initially, it is important to determine if additional or higher quality services are actually being provided to a resident who is referred to a halfway house rather than being released without supervision or on parole. Cost comparisons can then be accomplished to determine the benefit of providing these services in a halfway house or other less expensive, non-residential program. Secondly, the ability of house staff to accomplish intermediate objectives must be compared to the abilities of parole agents or the ex-offender on his own initiative. Again, the importance of cost-effectiveness of each alternative in improving post-release adjustment, as well as the most important activities related to adjustment, must be determined. And finally, characteristics of clients which influence success or failure within each alternative setting should be identified.

Only a comprehensive design, such as the one described above, will provide relevant data to answer theoretical and operational questions. It is important to determine if released offenders actually need a residential setting to ease the institution-community transition, which

types of released offenders need such a setting, and whether services received and outcomes justify the costs.

It should be noted that the alternative of the offender remaining in prison has not been included. Since the examination is only of aftercare alternatives, the assumption is that the offender has or will be released. However, this may not be completely accurate. Several halfway houses act as pre-release centers or receive referrals who would not have been paroled had it not been for the referral to the house. In these cases, the alternative is prison, and the cost and benefits received should be compared to institutionalized inmates. When this is the case, an additional analysis must be conducted.

In summary, the design described above provides answers to questions important to the decision-making process. A less comprehensive design will provide some feedback for policy, but will still leave gaps in knowledge that may be critical to making rational decisions.

### Costs

This research design would require approximately 30 months to complete. The time frame would include four time periods: a six month start-up period; a six month sample selection period; a 12 month follow-up period; and six months for data analysis and report writing.

Time Phase Design #1

Month	1	7	13	25
Start-up	XXXXXX			
Select Sample and Service Data		XXXXXX		
Collect Follow-up Data			XXXXXXXXXXXX	
Report Writing				XXXXXX

A project of this size could best be administered through a contractor/coordinator and subcontractors. The coordinating agency would be responsible for developing outcome measures, design of specific methodology, perhaps collecting data in one state, hiring subcontractors, to collect data in other states, coordinating the data collection effort, and final data analysis and report writing.

It is assumed that the project coordinator would be a full time project employee with an extensive research background and a Ph.D. or its equivalent. He would have a support staff which would include a full time secretary and several research associates, possibly graduate students. During the start-up, data analysis and report writing phases this group might be joined by a statistical consultant. The coordinator and his staff would remain with the project for its duration.

### Design #2

This design provides an analysis of cost and outcome of residential inmate aftercare programs by program type and offender characteristics.

The aims of the design are:

1. To ascertain how residential aftercare treatment and programming alternatives compare to release with no supervision and release on parole in terms of offender behavioral adjustment after release.
2. To ascertain how various treatment and programming alternatives offered in halfway houses compare with regard to offender behavioral adjustment after release.
3. To identify offender variables which enhance or detract from the effectiveness of programmatic alternatives.
4. To identify the relative costs of individual programs.
5. To identify the relative costs and benefits of alternative aftercare models.

The rationale for this design is essentially the same as Design #1, except that it does not address the issue of the relative effectiveness of various services within the alternative environments. It still includes an outcome evaluation and comparison with parole and unsupervised release. The design allows cost data to be identified, but not broken down by service. Offender variables are included which can be related to outcome for the various types of houses and aftercare alternatives.

The sample sizes and the sampling technique will be identical to Design #1; however, data collection will be considerably reduced. Data regarding the nature and quantity of services provided to each offender, as well as data indicating the achievement of intermediate objectives

for each offender will not be collected. The elimination of the collection of service and intermediate objective data for each offender would allow several economies in the design.

First, the need for collecting the data in a longitudinal fashion would be reduced. Persons who had entered the halfway house prior to the start-up of the experiment could be included in the sample, assuming that accurate records of offender characteristics and recidivism data exist. The sample selection and follow-up periods could be shortened to reflect the fact that some clients would have entered the follow-up period prior to the beginning of the experiment.

Second, the start-up time could be reduced, since the preliminary data collection design work would be lessened. It would not be necessary to develop variables to measure intermediate objectives, or the level of all services provided.

This research design would require approximately 18 months to complete. The time frame would include a three month start-up period, a three month sample selection period, a six month period to collect follow-up data and six months for data analysis and report writing.

Time Phase Design #2			
Month	1	7	13
Start-up	XXX		
Select Sample Initial Data Collection		XXX	
Collection of Follow-up Data		XXXXXX	
Data Analysis Report Writing			XXXXXX

During the start-up phase, measurement and data collection instruments would be developed, staff to collect data would be selected, houses to be included would be selected, and required contacts and liaisons would be developed. During the next three months, data gatherers would go into the houses, select samples of residents who have been released six months to one year before, and gather demographic and offense data for these individuals.

The collection of follow-up data will take place over the next six months. Official records will be searched regarding individual's adjustment in the community over a twelve-month period following release. During the final six months, analysis of collected data will be completed and reports written.

This design would utilize a full-time project coordinator and sub-contract the collection of data in the selected states. The same coordinator and his support staff would be utilized as in Design #1, although the duration of their employment would only be eighteen months. The workload of the in-house data collectors and their supervisors would be reduced by approximately fifty percent, thus their employment has been reduced to three months. The amount of follow-up data has not been reduced, although the time frame for collecting it has been shortened by half. It is anticipated that the reduction in cost brought about by the shorter collection period will be offset by the increased number of data collection personnel required.

Based on these modified task and personnel requirements, the total direct cost of this design is estimated at approximately \$304,000. Budget costs are detailed below.

## Design #2 Proposed Budget

Project Coordinator and Support Staff

A. Project Co-ordinator Ph.D., full-time	1	24,000	
B. Two Graduate Students, or 1 Graduate student and 1 statistical consultant		10,000	
C. Secretary, full-time		8,000	
D. Direct Support Expense		8,000	
		<u>\$50,000</u>	
	x 1.5 years		75,000

Follow-Up Data Collection

\$142.50/Sample subject, includes supervision and support			
	x 1200		171,000

Collection of in-house data

Supervision and Support (part-time supervisor and part-time secretary for each state 3 months)		5,000	
	x 4		20,000
Data collectors, graduate students, full-time 3 months		2,400	
	x 16		<u>38,400</u>
Total Direct Cost			\$304,400

In terms of significance, this design is essentially an outcome evaluation which compares the post-release adjustment of parolees, unsupervised releasees, and halfway house residents while controlling for some offender characteristics and some broad characteristics of halfway house operation. This design could tentatively provide a policy maker with information about the relative effectiveness of parole, unsupervised release, and residential aftercare, but it could go no farther. If the study indicated that halfway houses were cheaper and more effective than the alternatives, questions of the most effective halfway house services would still remain. Although the study attempts to look at different types of houses, the lack to service-related data prohibits the verification of the typing, which would allow only the most tentative conclusions. This design attempts to fill information gaps at the goal level, but does not address the relationship of activities to intermediate objectives. Therefore, the cost saved by utilizing this design rather than Design #1 does not seem to match the added benefit received by operationalizing the first design.

Design #3

This design is a further scaled-down version of Design #1. Its aim is to compare the post-release adjustment of clients of residential aftercare facilities with their expected post-parole adjustment as determined by a prediction technique such as base expectancy or salient factor scores. The experiment sample serves as its own comparison group by generating predicted outcomes assuming a parole placement rather than a halfway house placement.

The rationale for this technique is that although individual adjustment is difficult to predict, predicted outcomes averaged for a group are useful as a research technique. Mean predicted scores can be compared with mean actual score and tentative conclusions developed.

This design would utilize the sample of 800 halfway house clients and the sample of 200 parolees, but drop the sample of 200 unsupervised releasees. The parolee sample would consist of parolees with no halfway house experience and serve as the data base for developing the prediction model.

This design requires that relative adjustment data be collected for both halfway residents and parolees. Data on the characteristics thought to be related to adjustment will be collected for both samples.

This study consists primarily of a records search. Most, if not all, of the data could be collected on an ex-post facto basis from the records of halfway houses and criminal justice agencies. This would considerably shorten the time necessary to conduct the study.

The relative adjustment data for the parolees would be utilized as the dependent variable in a statistical technique such as multiple

regression or discriminate analysis and the offender characteristic variables would serve as predictors. Once the model is developed, it will be applied to the sample of 800 halfway house residents and selected characteristic variables will be used to produce a predicted adjustment score. This predicted score will be compared with the actual adjustment score to determine if the halfway house experience improved to inhibited adjustment.

This design would require approximately twelve months to complete. It would include a three month start-up period, a six month sample selection and data collection period and a three month data analysis and write-up period.

The project would require a full-time coordinator and his staff for twelve months. The task requirements would be similar to Designs #1 and #2. There would, however, probably be a greater need for a statistical consultant to assist in constructing the prediction model.

Adjustment and offender characteristic data will be collected in a manner similar to Design #2, but the data collection effort will be more concentrated in time. Based on these task and personnel requirements, the total direct cost of this design is estimated at approximately \$211,300. Budget costs are detailed below.

This design is essentially an outcome evaluation comparing post-release adjustment for residential aftercare with post-parole adjustment. The alternative of unsupervised release is not compared. On one hand, this design could be criticized for utilizing predicted scores rather than a control or comparison group; however, this technique does overcome some of the problems of dissimilar comparison groups. This design presents

## Design #3 Proposed Budget

Project Coordinator and Support Staff

A. Project Coordinator Ph.D., full-time	24,000	
B. Two graduate students or one graduate student and one statistical consultant	10,000	
C. Secretary, full-time	8,000	
D. Direct Support Expense	8,000	
	<u>\$50,000</u>	
	x 1	50,000

Follow-Up Data Collection

\$142.50/Sample subject, includes supervision and support		
	x 1000	142,500

Collection of Offender Characteristic Data

Supervision and support (part-time supervisor and part-time secretary, 4 states, 1 month)	1,500	
	x 4	6,000
Data Collectors, graduate students, full-time one month	800	
	x 16	<u>12,800</u>

Total Direct Cost		<u>\$211,300</u>
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an alternative and least costly method of filling information gaps at the goal level, but again it does not address the relationship of activities to immediate objectives. The cost saving over Design #1 is significant, but the level of information generated is so much lower as to raise questions concerning the overall usefulness of Design #3 for policy makers.

## Summary

The survey of halfway house programs and review of descriptive and evaluative literature exposed a number of gaps of knowledge which have contributed to the problems inherent in making policy decisions concerning program theory and operations. There are indications that residential inmate aftercare is at least as effective as alternative methods of returning the ex-offender to community. Unfortunately, most of the previous research is inconclusive because of the use of nonsensitive, dichotomous outcome variables based solely on recidivism. In addition to these information gaps at the goal level, there is also a great lack of knowledge in the area of service provision and the accomplishment of intermediate objectives as well as the conceptual links between intermediate objectives and outcome. Overall, there is currently very little knowledge about residential inmate aftercare which can be asserted with any degree of certainty.

The three designs offered in this section address these gaps to varying degrees. All three designs utilize a continuous outcome variable designed to overcome the difficulties of post-research. A demonstration of the usefulness of this type of outcome measure would in itself constitute a significant contribution to corrections research. All three designs attempt to institute some form of quasi-experimental design through comparison groups or statistical control. All three designs

compare post-release behavior between alternative aftercare models.

The major difference in these designs is the degree to which they address the gaps in the area of intermediate objectives. Design #1 is the only one of the three which addresses these gaps and for this reason, it is recommended. Currently, residential aftercare facilities offer a variety of services to a wide variety of clients. Until there is some information available which relates service provision to the accomplishment of intermediate objectives and relates these objectives to outcome, there is little hope of identifying the client populations most likely to benefit from halfway houses. It is important to know whether halfway houses are more effective than other alternatives, but it is just as important, from a policy point of view, to be able to develop effective halfway houses.

Design #1 would cost approximately \$100,000 more than Design #2 and \$200,000 more than Design #3. This additional cost, however, appears warranted on several bases. First, the total cost of Design #1 is only about 1.5 percent of the total direct support of residential aftercare provided by the Law Enforcement Assistance Administration since 1968. Devoting this small percentage of total effort to evaluation does not seem unreasonable. Second, there are indications that halfway houses are important alternatives for assisting the reintegration of offenders, and the residential aftercare movement is likely to continue even if, on an outcome basis, it is not found to be as outcome effective or cost effective as other alternatives. Given this trend and high sunk costs in this area, it is important that existing programs become as effective as possible. If, on the other hand, halfway houses are found more effective than their alternatives, it will still be necessary to design

research to address service and intermediate objective issues. It is the opinion of the authors that a comprehensive design addressing all the major gaps will be required regardless of whether halfway houses are the most effective aftercare alternative. The high start-up costs for any major research project, plus inflationary boosts in research costs, indicate that the most comprehensive design, such as Design #1, should be initially chosen.





## Footnotes

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- <sup>4</sup>Gottfredson, Don M., and Ballard, Kelly B., The Validity of Two Parole Prediction Scales: An 8-Year Follow-up Study. Vacaville, California: California Department of Corrections, 1965, pp. 17-19
- <sup>5</sup>Seiter, Richard P., (b) A Statistical Model To Test the Effectiveness of the Ohio Halfway House Programs. Columbus, Ohio: The Ohio State University Program for the Study of Crime and Delinquency, 1972, p. 18.
- <sup>6</sup>Seiter (a) *ibid.*
- <sup>7</sup>See: National Evaluation Program, Phase I. Residential Inmate Aftercare: The State of the Art, Chapter III.
- <sup>8</sup>Koslin, E. M.; Kass, W. A.; and Warren, M. Q., "Classification, Evaluation, and Treatment Models in Community Ex-Offender Residency Programs," American Correctional Association Proceedings, 1973.
- <sup>9</sup>For more information on intervening variables, see: Carol Weiss, Evaluative Research: Methods of Assessing Program Effectiveness. Englewood Cliffs, N. J.: Prentice Hall, Inc., 1972, pp. 45-53.
- <sup>10</sup>Weiss, *ibid.*, p. 67.
- <sup>11</sup>Weiss, *ibid.*, p. 63.
- <sup>12</sup>Guba, Egon G., and Stufflebeam, Daniel L., "Evaluation: The Process of Stimulating, Aiding, and Abetting Insightful Action," a paper presented at 2nd National Symposium for Professors of Educational Research, Columbus, Ohio, November 21, 1968.
- <sup>13</sup>Glaser, Daniel, Routinizing Evaluation: Getting Feedback on Effectiveness of Crime and Delinquency Programs. U.S. Department of Health, Education and Welfare, 1973, p. 67.
- <sup>14</sup>Weiss, *ibid.*, pp. 67-68

- <sup>15</sup>See: Herman Mannheim and Leslie T. Wilkins, Prediction Methods in Relation to Borstal Training (London: Her Majesty's Stationery Office, 1955); Don M. Gottfredson, "The Practical Application of Research," Canadian Journal of Corrections 5 (October 1963): 212-228; Don M. Gottfredson, Kelly B. Ballard, and J. A. Bonds, Base Expectancy: California Institution for Women (Sacramento: Institute for the Study of Crime and Delinquency, and California Department of Corrections, 1962); Don M. Gottfredson and J. A. Bonds, A Manual for Intake Base Expectancy Scoring (Sacramento: California Department of Corrections, 1961); Don M. Gottfredson and Kelly B. Ballard, "Testing Prison and Parole Decisions," 1966.
- <sup>16</sup>Hayner, Norman S., "Why Do Parole Boards Lag in the Use of Prediction Scores?" Pacific Sociological Review, Vol. 1 (Fall 1958) pp. 73-76.
- <sup>17</sup>Task Force Report: Corrections. President's Commission on Law Enforcement and Administration of Justice, Washington, D.C.: U. S. Government Printing Office, 1967, p.60.

**END**

7 tables/10000