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**AN EVALUATION OF AN INTERVENTION  
PROGRAM FOR JUVENILE PROBATIONERS**

**by**

**Kevin I. Minor**

**A Dissertation  
Submitted to the  
Faculty of The Graduate College  
in partial fulfillment of the  
requirements for the  
Degree of Doctor of Philosophy  
Department of Sociology**

**Western Michigan University  
Kalamazoo, Michigan  
August 1988**

AN EVALUATION OF AN INTERVENTION  
PROGRAM FOR JUVENILE PROBATIONERS

Kevin I. Minor, Ph.D.

Western Michigan University, 1988

Although the efficacy of correctional rehabilitation was questioned during the early 1970s, recent research has demonstrated that certain intervention programs, when implemented under appropriate conditions, are effective in reducing illegal behavior. The objective of this research was to evaluate the effectiveness of a court-based intervention for juvenile probationers.

The program was developed on the basis of caseworkers' assessments of youths' problems and needs. The theoretical perspective underlying the intervention consisted of a joint combination of critical, social control, and differential association theories. A major implication of theory is that the juvenile court's capacity to facilitate informal social control should be given priority over its role as an agent of formal control. Hence, the goals of the intervention were to augment social integration across conventional social institutions and, therefore, to reduce illegal activity among probationers. The program had three main components including job preparation workshops, an outdoor adventure experience, and family relationship counseling.

Forty-five youths participated in the research, with 22 of them taking part in the program and the remainder serving as controls. Effects were evaluated using a two-factor partially randomized-groups design. Pretest and posttest data were obtained on a variety of self-report measures as well as on several measures of official delinquency. The attendance and participation of the 22 experimental subjects were monitored throughout the intervention.

The data were analyzed using analysis of covariance. Despite prior research support for each of the intervention components, few positive findings were obtained. The self-reports of the experimental and control groups were not substantially different. Likewise, few differences emerged on the official measures, which spanned an 18 month follow-up period. However, significant differences were discovered for the offense activity of those youths with lengthy histories of criminal involvement.

The attendance and participation of experimental subjects were less than satisfactory, and these are described as one explanation for the disappointing outcomes. The methodological adequacy of the research is examined, and the findings are discussed with reference to theory. Implications for further program development and research are presented.



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Kevin I. Minor

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## CHAPTER I

### INTRODUCTION AND STATEMENT OF THE PROBLEM

The field of juvenile corrections must devise community-based sentences that serve as viable alternatives to incarceration. However, if this challenge is going to be met, then more effort will have to be devoted to developing sound intervention programs in juvenile probation agencies.

For approximately the last two decades, debates have flourished in the juvenile justice literature over the efficacy of interventions oriented toward the treatment and rehabilitation of probationers. A major impetus for the continuing debate over rehabilitation is the lack of creditable, well designed studies to assess the effects of correctional programs (Logan, 1972). More specifically, few researchers have evaluated interventions designed on the basis of recent evidence pertaining to the requisite conditions for successful programming (Gendreau & Ross, 1983).

The purpose of this study was to evaluate an intervention program for juvenile probationers. The project, known as the Experimental Program in Life Opportunities and Relationship Enhancement (Project EXPLORE), was designed and implemented on the basis of research demonstrating some of the essential conditions for effective intervention.

## The Need for Effective Juvenile Probation Programs

The most commonly used method of handling youthful offenders has been and remains placing them on probation (Clear & Cole, 1986; McCarthy & McCarthy, 1984). In 1976, for example, there were 251,781 youths under probation supervision across the nation, while only 87,013 juveniles were being held in confinement facilities (Cahalan, 1986).

The preference for using probation sentences more frequently than institutionalization is, in part, a consequence of the widely held view that incarceration has negative effects on youths. Such effects include the possibility of juveniles becoming the victims of violence as well as the prospects of their being exposed to greater socialization to criminal behavior (Bartollas, S. J. Miller, & Dinitz, 1976; Feld, 1981; Poole & Regoli, 1983). Therefore, some writers have expressed a strong reluctance to impose incarceration sentences at the juvenile level, arguing the institutionalization should be avoided whenever possible (A. D. Miller & Ohlin, 1981; Schur, 1973).

At the same time, however, attention has increasingly been directed to the vast amount of serious and violent crime committed by youths. A recent report (Urban gangs: Street sweepers, 1988), for instance, estimated that youthful gang members accounted for over 380 murders in the city of Los Angeles alone during 1987. Similarly, Allen and Simonsen (1986) present data which indicate that violent crime among juveniles (as measured by the number of persons under age 18 arrested for murder and non-negligent

manslaughter, forcible rape, robbery, and aggravated assault) increased by 44.70% between 1978 and 1982. Trends such as these have led to calls to "crack down" on youths who commit serious offenses--to punish these youths as if they were adults. Indeed, Coates (1981) has questioned whether community-based sentences are appropriate for serious juvenile offenders.

If attention continues to be drawn to the upsurge in serious youth crime and if the effectiveness of community sentencing continues to be questioned, it can be expected that institutional populations will rapidly increase in the coming years. The trend for institutionalized juvenile populations to increase is already starting to become apparent. In 1974, the average daily number of residents in public juvenile custodial facilities was 46,753. By 1982, this figure had risen to 50,399 (United States Department of Justice [USDJ], 1984).

However, there is potential for a serious paradox to materialize here (Minor, 1987). As institutional populations grow and facilities become overcrowded, there is an incentive for judges to rely more upon probation sentences for offenders who might have been incarcerated had space been available. Hence, rises in confined populations tend to be accompanied by rises in probation populations (USDJ, 1987). Whether or not the paradox becomes manifest depends partly on the effectiveness of probation. If probation failure rates are high (i.e., many probations fail to desist from crime) and confinement sentences are imposed as a result, overcrowding problems simply become exacerbated. Overcrowding, in turn,



tends to further reinforce the negative impacts of institutionalization (Gaes & McGuire, 1985).

Given the situation just described, there is clearly an immediate need for effective community-based programs. Probation can serve as a viable sentencing alternative only if successful programs are developed. In view of the continuing debate over the efficacy of rehabilitation, moreover, there is an urgent need for research to evaluate probation intervention efforts.

#### A Summary of the Rehabilitation Debate

The efficacy of correctional rehabilitation has been debated for the last two decades. Rehabilitation, as the guiding philosophy of juvenile justice policy, was called into question during the late 1960s and early 1970s by a series of reports that challenged the effectiveness of correctional interventions. The general conclusion resulting from these studies was that rehabilitation should be abandoned as the primary goal of American corrections, including juvenile corrections (Wilks & Martinson, 1976).

On the other hand, recent studies have begun to show that at least some rehabilitative programs are, in fact, effective. As will be shown, the notion that correctional intervention is pointless has been largely disproven. Slowly but steadily, interest in rehabilitative policy is being revived (Gendreau & Ross, 1987; Greenwood & Zimring, 1985). The issue is no longer whether correctional interventions can have positive effects, but the exact conditions and

circumstances that are necessary for successful outcomes.

A major reason for the continuing debate over correctional interventions has to do with the lack of well designed evaluation research. Creditable studies have been conducted, but only for a small minority of the many programs in operation. Hackler (1978) once observed that the more carefully one evaluates an intervention designed to curb delinquency, the more likely one is to find little evidence of positive outcomes. However, a review of the more recent literature led Gendreau and Ross (1983, p. 32) to the opposite conclusion. These writers point out that "most of the recent successful programs we identified, were conducted in methodologically impressive research." If Gendreau and Ross are correct, it is little wonder that some reviewers have found a paucity of evidence favoring correctional rehabilitation. Assertions about rehabilitation, positive and negative alike, have traditionally been based more upon impassioned rhetoric than upon creditable data. As Gendreau and Ross (1979, p. 464) phrase it, "where one would expect to find reasonable and objective analysis and usable interpretation of data, one finds hyperbole."

While the situation has recently improved for the better (Gendreau & Ross, 1987), there is room for much further improvement. This assertion is supported by the findings of A. R. Roberts (1987). In a survey project intended to identify innovative intervention programs for juveniles, A. R. Roberts mailed a short questionnaire to 151 agencies in each of the 50 states and the District of Columbia. Despite follow-up efforts, he received responses from

only 66 agencies. Of these agencies, only five had undertaken evaluative research on the effectiveness of their programs. A. R. Roberts (1987, p. 43) concluded that "this lack of evaluative research on the effectiveness of juvenile correctional programs leads to the conclusion that--with only a few exceptions--the scientific assessment of juvenile corrections is at a primitive level."

It is instructive to examine the history of the rehabilitation issue in light of the above points. Prior to the latter 1960s, the effectiveness of correctional interventions was not seriously questioned by the scholarly community. Despite the discouraging results of the well known Cambridge-Somerville Youth Study (Powers & Witmer, 1951), little effort was devoted to critically assessing rehabilitation. In particular, empirical assessments of corrections were basically uncritical of juvenile probation (e.g., Scarpitti & Stephenson, 1968).

However, it was during the late 1960s and early 1970s that the first major critiques of rehabilitative efforts started to emerge. During this era, a number of studies were published which dealt with delinquency prevention and juvenile probation in particular (Berleman & Steiner, 1967; Craig & Furst, 1965; Webb & Riley, 1970) as well as with correctional treatment in general (Bailey, 1966; Fisher, 1973; J. Robinson & G. Smith, 1971). Each reached the same conclusion: correctional intervention is essentially a futile undertaking. As Bailey (1966, p. 157) observed, "evidence supporting the efficacy of correctional treatment is slight, inconsistent, and of questionable reliability."

The most famous and influential critique of rehabilitation was launched by Martinson and his associates (Lipton, Martinson, & Wilks, 1975; Martinson, 1974). These researchers reviewed the results of 231 research reports published between 1945 and 1967. The review covered diverse types of interventions ranging from educational, vocational, and counseling programs to variations in sentencing lengths. Furthermore, the review included interventions designed for youths and adults of both sexes. Contributors to the rehabilitation debate have become so fond of quoting the main conclusion of this research that it has become something of a correctional aphorism. "With few and isolated exceptions, the rehabilitative efforts that have been reported so far have had no appreciable effect on recidivism" (Martinson, 1974, p. 25). Critics of rehabilitation with a preference for being blunt tend to choose the more pointed assertion that "nothing works." As Wilson (1980) points out, however, this assertion is an overstatement of what Martinson intended. Martinson was careful to note scattered instances of successful programming.

The research of Martinson (1974) was followed by several studies that reached similar conclusions. Works by Amos (1974), Greenberg (1977a), and Riedel and Thornberry (1978) contained few kind remarks about the usefulness of correctional intervention. The subtitle of another author's article, "Requiescat in Pace," leaves little doubt about many views on rehabilitation (MacNamara, 1977).

The critique of correctional intervention did not go unanswered. During the latter 1970s, a number of authors began to make

a case for rehabilitation (Glaser, 1976; Halleck & Witte, 1977; Oldroyd & Stapley, 1976; Palmer, 1975, 1978; Wilson, 1980). Palmer (1975) was among the most vocal proponents of correctional intervention, suggesting that in excess of 40% of the reports reviewed by Martinson (1974) contained at least a modicum of positive support for rehabilitation. Palmer also criticized Martinson for relying upon earlier data, as opposed to more recent and methodologically sophisticated evidence.

The general conclusion drawn by those favoring rehabilitation was that, while no single technique or program is effective for all offenders under all conditions, certain techniques are effective with certain offenders under some circumstances. This is a highly qualified and guarded statement, but the rebuttal by rehabilitation proponents convinced Martinson to reassess his earlier position. After extending his review to include 555 reports, many of which were more recent, Martinson (cited in Cullen & Gilbert, 1982, p. 171) recanted as follows:

Contrary to my previous position, some treatment programs do have an appreciable effect on recidivism. Some programs are indeed beneficial. . . . New evidence from our current study leads one to reject my original conclusion. . . . I have hesitated up to now, but the evidence in our survey is simply too overwhelming to ignore.

Studies conducted during the 1980s have demonstrated that Martinson was correct to change his stance. The evidence leaves little doubt that correctional intervention, including juvenile probation programs, can have favorable impacts under the proper conditions and circumstances (Garrett, 1985; Gendreau & Ross, 1983,

1987; Greenwood & Zimring, 1985; McCord & Sanchez, 1983; Palmer, 1983; Van Horne, 1987; Van Voorhis, 1987).

The impetus for Project EXPLORE was the recognition that there is a pressing need for effective programming efforts in juvenile probation agencies. Since the debate over rehabilitation has traditionally been carried on without the benefit of an adequate number of well designed, creditable evaluation studies, it was deemed essential to evaluate the success of Project EXPLORE. Accordingly, this research was situated within the continuing debate in the literature over the efficacy of interventions meant to achieve offender rehabilitation. Despite the fact that only a relatively small proportion of interventions have been assessed, enough data have accumulated to refute the notion that correctional intervention is pointless. Scholars have recently turned their efforts toward explicating the conditions and circumstances that are necessary for successful outcomes. However, few studies have examined programs that have been developed on the basis of what is currently known about these conditions and circumstances.

Project EXPLORE incorporated the necessary conditions for effecting programming, as demonstrated in past research. In addition, the intervention was formulated by reference to a theoretical conceptualization of probation clients' problems and needs. Through the use of an experimental design, this study evaluated the intervention by comparing the effects of Project EXPLORE with the effects of the standard supervisory probation services offered by a juvenile court agency. The intervention combined job preparation,

outdoor adventure, and family relationships training components with standard probationary services.

### Proper Conditions and Circumstances

It is not very helpful to merely know that programs can yield positive outcomes if the proper conditions and circumstances exist. Therefore, as just mentioned, scholars (Gendreau & Ross, 1983; Palmer, 1983) have recently started to devote more extensive effort to the difficult task of identifying these conditions. This section is organized around a discussion of three of the most fundamental conditions. These conditions include: (1) the manner in which the "success" of an intervention is defined, (2) the procedures employed for matching clients and programs, and (3) the need for sustained programming efforts which are guided by evaluation research findings. Additional conditions (e.g., the need for programs to have viable theoretical foundations, the superiority of multiple over singular modality approaches to intervention, and the tendency for effective programs to utilize the offender's peer group) are introduced at the appropriate points.

### The Meaning of Success

The most basic condition of success is the way that the effectiveness of a program is defined. It is important that the definition be sufficiently comprehensive. As is apparent from Martinson's

(1974) conclusion, recidivism (i.e., the extent to which offenders who participate in a program refrain from illegal behavior following their participation) is the most commonly used criterion for judging success.

However, it is reasonable to argue that recidivism is too stringent as a sole basis for judging the success of interventions. As Wormith (1984) found, a program can have significant positive attitudinal and skill acquisition effects without affecting a substantial reduction in recidivism. The point is that certain, valuable effects of a program may be overlooked if recidivism is the only standard used to judge it. On the other hand, Palmer (1983) makes a good case for the position that recidivism is ultimately the main criterion by which an intervention must be judged. Regardless of what else a program does or does not accomplish, if it fails to reduce illegal behavior, then it has failed to protect the public from offenders. If one expects members of the public to support rehabilitative efforts, then the public is rightly entitled to expect a tangible benefit in return. In this sense, recidivism is a necessary benchmark for assessing intervention efforts.

In addition to being stringent, recidivism is also a nebulous concept. There are numerous unagreed upon ways to define and calculate it, so many in fact that the subject could consume an entire volume. The following succinctly describes the salient issues. Extended discussions of recidivism appear in Maltz (1984), and in Murray and Cox (1979).



A useful, clear, and reasonably comprehensive way to conceptualize the concept of recidivism is to think of it as having four dimensions (USDJ, 1986). These dimensions include: (1) the magnitude or sheer amount of offense activity exhibited during some specified period, (2) the seriousness of that activity, (3) the timing of the activity in relation to the correctional program being assessed, and (4) the degree of system penetration resulting from the activity or the extent to which cases are processed through the various phases of the justice process.

The first dimension, magnitude, is usually what researchers have in mind when they speak of recidivism. Of course, there are various ways to estimate the sheer amount of offense activity. For example, self-report instruments have been devised which ask individuals to admit to the amount and kind of offenses that they have committed in the recent past. In addition, there are various official estimates of recidivism that can be obtained through an examination of the records maintained by criminal justice personnel. Data are available on offenses and arrests recorded by police agencies, charges initiated by prosecutorial agencies, convictions recorded by court agencies, and sentences handed down by judges.

An important point to remember about official data of this nature is that the data are inherently biased by the discretion of justice system personnel. Obviously, the police cannot become aware of all offense activity occurring on the streets, and they sometimes choose to overlook activity which does come to their attention. Likewise, prosecutors subsequently dismiss and alter the charges

furnished them by the police. Additionally, the subsequent conviction and sentencing decisions reflect considerable discretion. In general, the later in the process that data are recorded (i.e., the deeper the penetration into the system), the further those data are divorced from actual behavior. Discretion is a cumulative phenomenon. The greater the number of officials who have acted on a given case, the more discretion the case will reflect. This is why offense and arrest data recorded by police officers are generally considered to be less biased indicators of magnitude than are data on prosecutions, convictions, and sentences (Byles, 1981; Lichtman & Smock, 1981). The latter are, however, important measures. While offense and arrest data provide the best estimate of seriousness and timing as well as magnitude, prosecution, conviction, and sentence data represent good indicators of system penetration.

In the present study, program success was defined in terms of both attitudinal constructs and recidivism. With respect to recidivism, efforts were made to assess the magnitude, seriousness, and timing of officially recorded offense activity, as well as the degree of system penetration resulting from offenses. Throughout, the performance of youths who were randomly assigned to participate in Project EXPLORE was compared with the performance of youths who received standard probationary services. The pre-intervention performance of both groups was statistically controlled when making comparisons on the attitudinal and official outcome measures.

### Matching Clients and Programs

In addition to a reasonably comprehensive definition of success, another fundamental condition for effective programming, as identified by both Gendreau and Ross (1983) and Palmer (1983), concerns the fit between the participants and the intervention. The general point is that an appropriate intervention must be matched with the appropriate group of clients before favorable outcomes can be expected, even if an adequate definition of such outcomes is employed. There are, however, two distinguishable schools of thought on how to achieve a suitable match, including the existing program approach and the program development approach. The program development approach was employed in this research, and the reasons are given below along with a description of the approach.

#### Existing Program Approach

The existing program approach rests upon the assumption that potentially sound correctional interventions (e.g., guided-group-interaction) have already been established and are thus readily available to be adopted by agencies. This approach is characterized by attempts on the part of correctional agencies to channel particular clients into extant programs which are believed to be suitable for those clients. The emphasis is on identifying the clients who fit the program which an agency has already adopted or is planning to adopt.

Palmer (1983) discusses two variants of the existing program approach. Both variants are described here in order to clarify the orientation of the existing program approach and to establish a standard against which to compare the program development approach.

Differential Intervention Variant. The differential intervention variant (Palmer, 1983) proposes that existing programs can be effective when employed with certain subgroups or types of offenders under certain conditions. The objective, therefore, is to identify the proper offenders, programs, and conditions and to see that these are matched. Proponents of this variant include Gendreau and Ross (1983), Gibbons (1962), Palmer (1978), Quay and L. Parsons (1970), and Warren (1977). Gibbons, for example, suggests that offenders who have committed auto theft (or joyriding) can benefit from a guided-group-interaction program if the group is composed of both auto thieves and some offenders who have not committed auto theft. Likewise, Warren believes that, if intervention agents are carefully chosen, youths classified as conflicted or neurotic can benefit most from either individual or group psychotherapy. The agents need to be able to see through defenses and to point out the offender's strengths and positive potentials. Again, the emphasis is on matching existing modalities, offenders, and conditions.

Basic Treatment-Amenability Variant. By contrast, the basic treatment-amenability variant (Palmer, 1983) proposes that offenders with particular, specifiable attributes will be responsive to a wide

variety of existing programs, whereas offenders who lack these attributes will be unresponsive to most, if not all, programs. That is, certain characteristics (e.g., high intelligence, good communication skills, maturity, etc.) make some offenders amenable to intervention. Thus, minimal emphasis is placed on distinguishing offender subgroups, specifying conditions, and differentiating established intervention modalities. Rather, the idea is to select offenders with amenable characteristics and to see that they participate in whatever program that an agency decides to offer. Scholars who have espoused this viewpoint include Glaser (1975) and Wilson (1980).

#### Program Development Approach

This approach rests upon a different assumption (G. D. Gottfredson, 1984). Rather than assuming that existing programs are somehow viable and readily available to be adopted by correctional agencies, the approach emphasizes that each agency must develop an effective program around a theoretical understanding of the common problems and needs of the client group which the agency serves. That is, efforts are made to tailor the components of programming around a theoretical analysis of clients' existing problems and needs, or to structure the program so that it fits the clients instead of finding clients who fit the existing program. Hence, a theoretical understanding of the common problems and needs of a group of offenders (and not necessarily available modalities, types

of offenses, conditions, and amenability considerations) is the fundamental determinant of the form that programming takes. Useful programs, it is assumed, do not simply exist. Such programs must be built and coordinated around an agency's clients. An extant modality may or may not be deemed appropriate, depending upon the problems and needs of the client group. That an existing modality is appropriate cannot be taken for granted in the absence of both an assessment and a theoretical understanding of problems and needs.

It should be realized that while the program development and existing program approaches are conceptually distinguishable from one another (because the approaches have differing assumptions), in reality the two are not completely incompatible. Under the program development model, efforts are made to derive useful insights from existing programs which are believed to be theoretically applicable to clients' problems and needs. Interventions that have been demonstrated to yield benefits are strongly relied upon during the process of devising program components. Furthermore, once an agency has developed, implemented, and evaluated its program, the intervention becomes, for all practical purposes, an existing program. While the intervention may need to be modified on the basis of evaluative research findings, it is an existing program in the sense that its first phase of implementation has been completed. Suppose it is determined from research pertaining to the first phase of implementation that the program seems beneficial only for clients with certain problems and needs. Before the second phase of implementation, attention would have to be given to either:

(a) modifying the program components to accommodate a wider range of problems and needs or (b) selecting only those clients who have problems and needs for which the program seems beneficial. In the event of the latter choice, the program development approach would clearly take on characteristics of the differential intervention variant of the existing program approach. This is true because the task of the agency would be to match specific problems and needs with the extant program.

The more specific details of the program development approach, as they apply to this study, are presented in the remaining chapters. At this point, it is important to present a basic outline of the program development model. It is also important to describe the model's distinct advantages over the existing program approach, as these advantages regard the first phase of program implementation.

Basic Model. The program development model employed for purposes of Project EXPLORE was formulated by Elrod (Elrod & Friday, 1986; Elrod & Minor, 1987) on the basis of G. D. Gottfredson's (1984) prior work. The model constitutes a sequential, iterative process which is comprised of six main stages. These stages are described below.

First, caseworkers identify probationers' problems and needs according to an organizing theoretical framework. (The justifications for making extensive use of caseworkers during program development are described shortly.) An organizing theoretical framework is simply an heuristic means of categorizing problems and

needs by the respective units to which they apply. For example, certain problems and needs are primarily applicable to the family, whereas others are most applicable to the school. The organizing framework is used to gain a coherent and comprehensive understanding of the nature of clients' problems and needs. Selection of the framework is guided by theoretical considerations because theory informs one where to initially look for the source of problems and needs. At the same time, the framework and the delineation of problems and needs resulting from it are prerequisites for devising a more detailed, comprehensive theoretical analysis. Given a delineation of problems and needs one has a guideline for determining which specific theories to apply. This is important because there are many alternative criminological theories from which to choose.

Second, a substantive theoretical perspective is developed to provide a detailed explanation of problems and needs. Since the first stage is simply designed to permit identification of problems and needs rather than to explain them, the second stage is crucial to program development. Needs and problems are unlikely to be understood in enough depth to allow design of a meaningful intervention with measurable objectives unless both their sociological context and their relationship to delinquent behavior are explored. Furthermore, a comprehensive explanation gives important information about which problems and needs can feasibly be addressed through court-based intervention. In short, the substantive perspective derived during stage two serves as the point of reference for all subsequent stages of program development. In addition, however,



the perspective serves as a reverse check on the validity of the problems and needs identified during stage one. Since delineation of problems and needs proceeds on the basis of an organizing theoretical framework and since knowledge of problems and needs guides the search for appropriate explanations, the problems and needs that are identified by caseworkers ought to be consistent with those dictated by the substantive theories of criminologists.

Collectively, stages one and two represent the theoretical foundation of the program. Chapter II of this study is devoted to describing these stages.

The third stage of the sequence is devoted to stipulation of the measurable goals of intervention as per the implications of the theoretical perspective. This simply means determining, on the basis of the implications of theory, what one should expect the intervention to accomplish in order for the program to be judged successful.

During the fourth stage, the components of the intervention meant to achieve goals are selected and designed in view of: (a) the theoretical perspective and (b) prior evaluative research on useful interventions. The theoretical perspective informs one about which types of intervention components may be useful. With this information at hand, one is in a position to examine the research pertaining to those components and to decide, on the basis of the research, whether the components hold any promise. Notice that the choice of which intervention components to consider is not made on the basis of intuition or simply in view of whatever promising

components happen to be available. The choice is made under the direction of theory and on the basis of prior research. Subsequently, program components are designed around the goals stipulated during stage three.

The fifth stage involves implementation of the intervention components. Implementation is conducted according to the principles dictated by theory. The sixth stage, experimental evaluation research, is designed to provide feedback for program modification and further development.

Stages three through five of program development are presented in Chapter III. The remaining chapters are then devoted to the sixth stage, evaluation research.

Caseworker Involvement. Underlying the program development model is the assumption that the participation of line (casework) staff is a key factor for program success. Caseworker involvement is most essential during the first, third, fourth, and fifth stages. This assumption will be justified before proceeding to describe the advantages of the program development model.

A number of writers have stated that the line staff of probation agencies should be encouraged to participate more fully in program development activities (Adams, 1974; Archambeault, 1982; G. D. Gottfredson, 1984; Seng, 1983). These writers have usually justified increased caseworker participation by pointing to the financial gains of avoiding the use of outside consultants to devise and evaluate interventions. Another justification noted by Seng is

that consultant services are likely to be of limited use to the extent that consultants are detached from daily agency operations. Hence, caseworker participation can have pragmatic benefits. For example, line staff participation was crucial in this study during the problems and needs identification process because the caseworkers had maintained more frequent, direct, and intensive contact with probationers than any other representative of the court. Therefore, they were in the most favorable position to accurately identify the needs of probationers.

While cost effectiveness and practicality are legitimate arguments for involving caseworkers more fully in program development, there is a more compelling reason for doing so. Gendreau and Ross (1979, 1983) suggest that programs will fail to produce desired outcomes if the staff responsible for implementation do not closely adhere to theoretical principles. That is, the probability of program success depends upon the quality of program implementation (cf. Quay, 1977). Furthermore, as Gendreau and Ross reason, the quality of implementation is contingent upon the level of staff commitment to the program. Staff commitment, in turn, is contingent upon the degree of staff involvement in program development (Archambeault, 1982; Elrod & Minor, 1987).

Advantages of the Program Development Model. The program development model has several advantages over the existing program approach that justify its selection for use in this research. Obviously, one advantage is that the model allows for extensive

caseworker involvement, thereby helping to ensure greater caseworker commitment to the intervention. Possibly the main advantage, however, is that theory is an inherent aspect of the program development model. Interventions associated with the existing program approach may or may not explicitly incorporate theory; theory is not always included in such programs (Wright & Dixon, 1977). This is an important point, and it deserves further elaboration.

While there are exceptions in the literature (e.g., Empey & Lubeck, 1971), it is fair to say that applied delinquency researchers have traditionally slighted theory when implementing and evaluating correctional intervention programs (Greenberg, 1977a; Wright & Dixon, 1977). Wright and Dixon (1977) reported that less than 10% of the 96 evaluation studies in their review explicitly relied on criminological theory to guide programming and evaluation. Some investigators ignore theory, others leave it implicit in their research, while many others fail to devote enough effort to developing an explicit theoretical perspective.

Neglecting theory is a serious mistake. Theory should be the foundation of applied work, and negative consequences inevitably follow whenever it is ignored or left underdeveloped. As Wright and Dixon (1977) note, intervention programs that are not firmly based on theory tend to proceed without clear and consistent direction, constituting what Greenberg (1977a, p. 41) has termed "hit-or-miss efforts." It is difficult to derive measurable expectations for outcomes without theoretical guidance, let alone formulate a meaningful intervention as must be done under the

program development model. It is not surprising, therefore, that atheoretical programs usually fail to produce desired results.

The program development model circumvents the problems associated with atheoretical intervention by making theory an integral feature of all programming efforts, including goal stipulation, component design, implementation, and evaluation. By contrast, agencies that choose to adopt an existing program for use with their clients have no guarantee that the intervention has been explicitly devised on the basis of theory. If the existing program has been derived from theory, the agency must be concerned with discovering the theoretical principles and ensuring that these principles are adhered to during the implementation and evaluation processes. With the program development model, an agency's search for appropriate intervention components is guided, from the outset, by the theoretical perspective devised to explain the problems and needs of the agency's clients. Therefore, it is impossible for the components that are ultimately selected to lack theoretical justification.

The program development approach has other advantages over the existing program approach. To the extent that the common problems and needs of a group of clients are idiosyncratic to the group and the community in which its members reside, an idiosyncratic program is warranted. As used here, the item "idiosyncratic program" means that, depending upon the implications of theory, the program may have to be comprised of a novel combination of intervention components. Each individual client is obviously different in that

each has a unique set of needs and problem areas. At the same time, a multitude of problems and needs are generally shared by the members of a specific group in a specific community. By organizing various intervention components around those commonalities the program development approach is designed to extend the comprehensiveness of service delivery under the auspices of one probation agency (cf. Singer & Isralowitz, 1983). It is recognized, moreover, that a given intervention component (e.g., family counseling) which addresses the main problem of one client (e.g., poor self-esteem) can simultaneously address the problem of another client (e.g., failure to communicate effectively with parents). This helps ensure more efficient utilization of scarce social services in communities plagued by funding shortages. Hence, another advantage of the program development model is its potential cost-effectiveness.

The program development approach also helps circumvent (but does not eliminate) the need for the uncertain practice of correctional prediction. Therefore, it is potentially a more precise approach to client-program matching. Problems and needs can be empirically identified with reasonable certainty on the basis of caseworker observations. The only things remaining to be predicted are the exact service components that will best address those problems and needs. This task is greatly facilitated by the theoretical perspective, since service components are devised on the basis of prior evaluation research as per the theoretical implications.

Under the amenability variant of the existing services approach, predictions must first be made about the set of characteristics that constitute amenability. Then it is necessary to venture predictions about whether (or, more realistically, the degree to which) particular clients have those characteristics. Given that such predictions can be accomplished, an important question remains. What about clients who, due to their problems and needs, could possibly benefit from service provisions but, because they lack the appropriate qualities, have been excluded from consideration? This issue becomes all the more salient whenever such clients desire services. Likewise, under the differential intervention notion, predictions must be made about: (a) which subgroups or types of offenders can benefit from which programs and (b) the conditions that are necessary for gains to be made. (See Gibbons, 1985, for a discussion of the problems associated with differentiating client subgroups on the basis of offender typologies.) Even if such predictions can be made, the issue is that there may be no existing program for which a particular group is well suited. Again, these offenders may have the need and desire for services. In addition to placing less reliance on uncertain predictive criteria, then, the program development approach is advantageous because it is potentially less likely to result in certain clients being excluded from services.

Finally, the program development model logically has greater potential for making efficient use of the findings of evaluation research. With the differential intervention variant of the

existing program approach, the agency is led to use findings to assess the procedures employed to match client subgroups, conditions, and service modalities. The agency is not necessarily led to consider modification of the extant program. Likewise, with the basic treatment-amenability variant, the agency is led to assess the procedure used to identify amenable client characteristics, rather than to consider program modification. From the standpoint of the program development model, by contrast, findings are employed to assess program goals, components, and implementation. This brings up the third fundamental condition for effective programming.

#### Sustained Effort and Program Development

Program development, as already mentioned, is an ongoing, iterative process instead of something which either is or is not successfully accomplished at one point in time. Problems and needs are identified and conceptualized theoretically, program goals are then devised, and service components are subsequently designed and implemented. Evaluative research is central to the entire process; research is what makes the process iterative. Following the initial implementation, it is assumed that program modification will probably be necessary, and modification is approached on the basis of evaluative findings. Thus, program development requires a strong commitment to continued, long-term development efforts. Long-term effort, then, is seen as a condition for effective programming.

In addition to being developed according to the requisite



conditions for effective programming, Project EXPLORE was comprised of a novel combination of program components (i.e., job preparation, outdoor adventure, and family relations components), as directed by a theoretical analysis of clients' problems and needs. While prior research has provided support for each of these components, the utility of combining them has yet to be investigated. The remainder of this study describes the program development sequence and the evaluation findings associated with the first phase of intervention. The philosophy guiding the study is that effective interventions can be derived if they are founded on sustained program development efforts which are guided by sound evaluations and a theoretical understanding of clients' problems and needs.

## CHAPTER II

### THEORETICAL FOUNDATION

In chapter one it was pointed out that theory is an integral part of the program development model. From the standpoint of the model, the theoretical foundation of an intervention is composed of: (a) a delineation of clients' problems and needs according to an organizing theoretical framework and (b) a comprehensive theoretical perspective for explaining why those problems and needs exist. The goals and components of the intervention are then designed on this foundation. The purpose in this chapter is to explicate the theoretical foundation of Project EXPLORE. In order to accomplish this, some considerations regarding the organizing framework are furnished first. These are followed by a presentation of the problems and needs identified by caseworkers. The remainder of the chapter is then devoted to describing the substantive theoretical perspective as well as the implications of this perspective for correctional intervention.

#### Organizing Theoretical Framework

An appreciation of the organizing framework used for identifying clients' problems and needs requires some familiarity with the

concept of theoretical method (Meier, 1985). A theoretical method is not the same as a research method, nor is it conceptually the same as a substantive theoretical perspective or explanation. The task of a theoretical perspective is to explain the existence of problems and needs in their sociological context and to demonstrate their relationship to delinquent behavior. The theoretical method, on the other hand, informs one about what sources to examine when setting out to develop an explanation. Method guides the approach for constructing a substantive perspective and, in this sense, it is the arch of explanatory theory. Method provides both an organizing framework for isolating and categorizing problems and needs as well as an heuristic means for arriving at a comprehensive explanation of those problems and needs.

The term "comprehensive" is directly tied to theoretical method. The method used dictates how comprehensive the resulting theoretical perspective will be, and it is necessary for the perspective to be comprehensive. As Wright and Dixon (1977, p. 60) observe, a theoretical explanation of delinquency, as well as an intervention derived from that explanation, should be multifaceted. "In short, delinquency prevention and treatment strategies which deal with individuals or any other target for change and which choose a univariate theoretical base or a singular intervention strategy should expect only limited success."

Additional research by Gendreau and Ross (1983) and Palmer (1983) has shown that multiple modality correctional interventions are generally superior to less comprehensive, single modality

approaches. Such an intervention needs to be based upon a relatively comprehensive theoretical orientation. The theoretical method utilized in this study attempts to attain comprehensiveness by: (a) focusing upon different dimensions of delinquent behavior; (b) examining delinquency from different levels of analysis or abstraction; and (c) linking dimensions and linking levels by combining three criminological theories (i.e., critical theory, social control theory, and differential association theory) to form a more complete substantive perspective. Each of these points is considered before turning to a presentation of problems and needs.

A Methodological Note on "Theoretical Elaboration" and "Linkage" Versus "Theoretical Integration"

From a methodological standpoint, there are at least two general ways to go about combining theories to increase the comprehensiveness of explanation. The first method, theoretical integration (Elliott, 1985), is used when the objective of research is to formulate a theory for purposes of directly testing the theory. Theoretical integration is a formidable task. It not only requires that theoretical statements from divergent theories be combined into a meaningful framework, but also that any differences between the fundamental assumptions of these theories be fully reconciled. While some have questioned whether the latter requirement can be achieved (Gibbs, 1987; Hirschi, 1979, 1987), the end result of a "successful" integration is a tightly woven, novel theory which has

greater explanatory power than each of the constituent theories.

The second method, theoretical elaboration (Thornberry, 1987), involves less demanding and perhaps more realistic criteria. There is no requirement that competing assumptions between the theories employed be fully reconciled. All that is necessary is that a given theory be extended or elaborated upon to form a more complete perspective. This is accomplished by demonstrating complementary linkages between existing theories (Kramer, 1984). Emphasis is placed upon the similarities and consistencies among theories instead of the differences between them. The end result of theoretical elaboration need not be a unified, novel theory. The result can be a looser, working perspective or collection of complementary theoretical statements. Such a perspective comprises a more comprehensive, if less rigorous, viewpoint from which the core concept of delinquency can be understood.

The method of theoretical elaboration has been selected for use in this study because the objective is to provide a flexible, working guideline for intervention and evaluation research. Theoretical elaboration has been chosen for the benefit of yielding a loose, working perspective comprised of relatively compatible theoretical statements borrowed from various theories. This approach has the advantage of leaving the body of theoretical literature open as a flexible resource to be drawn upon to guide applied evaluation research. At the same time, it avoids the problems associated with atheoretical evaluation research.

### Advantages of a Multi-Level Method

According to Short (1985, p. 52), the concept of level of analysis "refers to the fact that explanation of any phenomenon may be sought in the operation of a variety of components and processes, no one of which is likely to be complete in its explanatory power." Short's definition of levels of analysis is consistent with Elliott's (1985) assumption that the causes of delinquency are multiple. This assumption has become increasingly popular in the recent theoretical literature (Ferdinand, 1987; Thornberry, 1987), as theorists have come to better appreciate the complexity of delinquency. However, when contemplating the history of delinquency theorizing, it is apparent that theorists have usually restricted their explanations by examining youth crime from a single level of analysis. A methodological tendency on the part of theorists to choose one level of analysis over others has resulted in a proliferation of substantive theories that lack comprehensiveness. Succinctly put, many single theories lack broad scope in that these theories fail to consider a necessary of substantive matters related to youth crime (Turner, 1986).

The paucity of scope is directly related to the observations of both Cernkovich (1978) and Tittle (1985) that theories are too often set apart in isolation from one another due to an insistence on the part of scholars that the differences between theories be emphasized over similarities. Since few theories are sufficiently comprehensive to cut across levels of analysis, the method of theory

construction should allow the similarities among available theories to be linked. As Elliott (1985) points out, the potential of the collective theoretical literature for expanding the scope of explanations has been an under utilized resource. Even though many single theories lack scope, the body of theoretical literature contains impressive scope and, therefore, represents a rich source for constructing more complete explanations.

The value of a multi-level method, from a theoretical point of view, lies in the heuristic basis the method provides for elaborating and linking theories which, in turn, enhances scope and understanding. The method adds parsimony to the elaboration by making the analysis progressively more concrete (Dos Santos, 1970; H. Schwendinger & J. Schwendinger, 1985). This means that the method allows the theoretical analysis to be moved from broader, abstract macrosociological principles to more concrete micro ones. Additionally, the method calls attention to feedback between levels thus avoiding static, unidirectional theoretical statements and oversimplification of complex relationships. Recent empirical data (Agnew, 1985; Liska & Reed, 1985; Poole & Regoli, 1979; Thornberry & Christenson, 1984) strongly supports the need for considering feedback in theory construction.

The method is also advantageous from an applied point of view. First, if a well elaborated theoretical perspective with broad scope is not used as the basis for correctional intervention, it is unlikely that the explanation will be inclusive enough to encompass

the array of factors which need to be addressed by the intervention. The implications for intervention may be apparent from a perspective lacking in scope. At the same time, however, those implications will be too limited if factors essential to the etiology and control of youth crime have been overlooked. Micro level theories which locate the source of delinquency in youths and their significant others frequently confront this problem. Thought guided by small-scale, micro theories leads to intervention implications that are often reasonably clear and specific (e.g., alter youths' self-conceptions or improve their family relationships). Yet, the implications tend to be short sighted and restricted. This results from a failure to examine a sufficient number of large-scale, macro level correlates of delinquency (e.g., unemployment and the structure of social inequality). If such factors are scrutinized for their relationship to the micro level, different or additional implications for intervention are likely to be derived.

Some theoretical explanations (e.g., Greenberg, 1977b; Hagan, Gillis, & Simpson, 1985) are broader in scope and better elaborated precisely because they attempt to link levels of analysis. Most often, these explanations take historically situated macro factors as the starting point and work toward individual behavior. However, such theories tend to yield implications that are restricted to the macro level (e.g., reduce youth unemployment or alter the structure of power relations in society), while failing to provide clear and viable directions for court-based intervention. Court personnel are mandated by their position in the court agency to gear interventions



toward individual youths and the social institutions with which youths have frequent contact, such as the family, school, and peers. Such an explanation, then, is similar to its non-elaborated counterpart lacking in scope. Its weakness, for purposes of court intervention, results from a failure to consider other theories to guide practical applications. The theory is likely to yield vague and uncertain implications for court intervention to the extent that other explanations which are better suited for the micro level are not taken into account.

In summary, the reason for using a multi-level method of theory elaboration in this study is to link various delinquency theories into a working perspective with extended scope and clear, comprehensive implications for intervention, implications that are viable for juvenile court personnel. For purposes of court intervention, the implications of the micro analysis can be examined and modified in view of the macro analysis. If it becomes evident that certain macro factors (e.g., poverty and youth unemployment) are not amenable to being directly addressed through court intervention, those factors can at least be examined for their relationship to micro factors that can be directly addressed (e.g., micro factors like unsatisfactory job seeking skills). The resulting intervention will not be perfect, but it will be more comprehensive than it would have been had a more limited theoretical perspective been used.

### Dimensions of Delinquency and Levels of Analysis

In their quest for a comprehensive theory of delinquency, Taylor, Walton, and Young (1973) were the first criminologists to synthesize the concepts of levels of analysis and dimensions of delinquency. The components of a complete theory identified by Taylor et al. (pp. 270-276) include: (a) the wider, macro origins of delinquent behavior; (b) the wider origins of social reactions to delinquent acts; (c) the immediate, micro origins of delinquent behavior; (d) the immediate origins of social reactions; (e) the delinquent act itself; and (f) the effects of social reactions upon the actor.

Taylor's et al. (1973) discussions has been concisely summarized by Friday (1981) and Kramer (1982). Both Friday and Kramer view delinquency as being a two dimensional phenomenon. On the one hand, there is the etiological or behavioral dimension which refers to the social factors associated with the causation of delinquent activity. On the other hand, there is the definitional or reactional dimension which refers to the way a society defines and reacts to youth crime. These dimensions describe two interacting components that, when combined, constitute the social processes surrounding delinquent acts. Rather than the act being conceived as an isolated and static event, the act is seen as but one element of the etiological and definitional dimensions which encompass it.

Friday (1981, 1983), drawing on Taylor et al. (1973), has shown how the dimensions of delinquency can be juxtaposed with the levels

of analysis concept. According to Friday, each dimension can be studied from three levels, the macro social structural level as well as the micro social institutional and individual levels. The structural level refers to macro factors which vary across societies and over time within a given society. These factors constitute the historically grounded arrangements of a society that are external to and beyond the control of youths. Examples include a society's form of political economic organization (e.g., capitalism and socialism), its structure of norms for defining acceptable and unacceptable conduct, its patterns of industrialization and urbanization, as well as its patterns of stratification. These factors are related to delinquency because they affect social institutions. The social institutional level refers to the traditional groupings of individuals and practices in a society. Examples of major social institutions include work, family, community, school, and peers. These are the primary agents of adolescent socialization, and socialization varies across youths and across institutions. Finally, the individual level refers to the idiosyncrasies of individuals which influence behavior. Examples include the value orientations, self-conceptions, and general learning histories acquired through socialization and experience.

The most recent use of the levels of analysis concept is found in the work of H. Schwendinger and J. Schwendinger (1985). These scholars identify the three levels of analysis as levels of reality. These are the political economic (structural) level, the adolescent subcultural (institutional) level, and the social psychological

(individual) level.

The applications have consistent conceptions of the relationship between levels. Since Taylor et al. (1973) do not employ their method to establish a substantive explanation of youth crime, it is difficult to discern their conception of this relationship. However, it is apparent from the respective explanations provided by both Friday (1981, 1983) and by H. Schwendinger and J. Schwendinger (1985) that the institutional level is seen as mediating the relationship between the structural and individual levels.

H. Schwendinger and J. Schwendinger's (1985) thesis on the relationship between levels is that a variety of adolescent subcultures have historically emerged with the development of Western capitalism. These subcultures mediate the effects of the political economy on delinquent behavior. Political economic conditions are conducive to the creation of particular forms of subcultures which, in turn, act as the source of delinquency.

Our analytic method assumes that causal determinants exist on social psychological and psychological levels of reality that are not distinguished by macroscopic theory. Although political economy should be central to any scientific theory of delinquency, adolescent and delinquent relationships cannot be understood from political economy alone. (p. xiv)

Both the social structure and adolescent subcultures are seen as being stratified on the bases of power, wealth, and status. Furthermore, both are viewed as oriented toward materialistic standards and commodity relationships. Adolescent subcultures are conceptualized as dynamic and active entities that affect individuals in a multitude of ways, as opposed to passively transmitting structural

effects to the individual level.

From a methodological standpoint, Friday's (1981, 1983) conception of the association between levels is similar to that of H. Schwendinger and J. Schwendinger (1985). His thesis can be summarized as follows. Etiological and definitional processes operating at the structural level promote delinquent acts at the individual level by diminishing social integration, and therefore the prospects of effective social control, within and across the conventional institutions of work, community, family, and school. Given less intimate relationships and interactions within each of these institutions and across all of them, the unconventional socialization processes operating in delinquent peer groups are free to exert more influence over the action of individual youths.

The method adapted in this study is consistent with all three of the foregoing conceptualizations but is most closely allied with Friday's (1981, 1983) approach. His approach provides a clear and comprehensive heuristic means for elaborating theories as well as an organizing framework for presenting clients' problems and needs. H. Schwendinger and J. Schwendinger's (1985) approach is primarily geared toward explaining group delinquency, particularly gang behavior, and this is why they place so much emphasis on the role of peer relations as the mediational link between the structural and individual levels. By contrast, Friday is interested in explaining delinquent behavior in general. He therefore assigns other social institutions (i.e., work, community, family, and school) as much mediational weight as the peer group. It is this feature of his

approach that makes it an appropriate organizing framework for understanding clients' problems and needs in the context of court-based intervention. Once needs and problems have been identified and placed within a comprehensive theoretical perspective, the stage is set for designing an intervention, one which targets individual probationers and a variety of influential social institutions in their lives.

#### Identification of Problems and Needs

In previous pages it was suggested that a court-based intervention for juvenile probationers should be part of a carefully planned sequence of program development and evaluation. The theoretical method is a vital prerequisite to program development because it helps provide an organizing framework for ascertaining clients' problems and needs. Problems and needs must be identified before they can be explained and addressed through intervention. Friday's (1981, 1983) work provides an appropriate framework by specifying the five social institutions that mediate the relationship between social structure and individual behavior.

In designing Project EXPLORE, three months were spent on the first four stages of program development (i.e., problems and needs identification, theory specification, goal stipulation, and intervention design). This section describes the first stage.

During staff meetings, caseworkers were first asked to categorize the most common illegal behaviors of their clients.

These five behavioral categories are illustrated below.

1. Violent and aggressive offenses involving interpersonal conflict (e.g., assault of peers)
2. Offenses against property (e.g., theft, breaking and entering, and property destruction)
3. Home incorrigibility (e.g., running away from home and defiance of parental authority)
4. School incorrigibility (e.g., school truancy and defiance of school authority)
5. Use/abuse of illegal substances and alcohol

Caseworkers were then familiarized with the organizing framework and, in view of this framework, were asked to identify those client problems and needs that they perceived as being directly related to illegal behaviors. Recall that an organizing framework allows problems and needs to be categorized according to theoretically dictated units. Such a categorization is useful because it dictates what is to be explained by substantive theory. Recall further that caseworkers' input was essential for identifying problems and needs, since caseworkers had maintained the most frequent, direct, and intensive contact with clients.

Caseworkers were also asked to consider client problems and needs which they thought, if left unabated by the probation experience, would undermine successful performance during and after the probationary period. The problems and needs identified during stage one are presented below according to the five institutions implied by the organizing framework.

1. Problems and Needs Associated With the Family:

- a. Inadequate financial income and assistance
- b. Single parent homes characterized by marital discord
- c. Inadequate parental supervision and support of youth
- d. Lack of effective parenting skills (e.g., disciplinary tactics and stress coping techniques)
- e. Lack of positive family role models
- f. Lack of positive emotional bonding between parents and youths
- g. Poor interpersonal communication and trust patterns
- h. Lack of positive stimulation from conjoint family activities

2. Problems and Needs Associated With the Peer Group:

- a. Tendency for youths displaying similar problems to associate with one another
- b. Desire for autonomy frequently manifested by rebellious behaviors and formation of youthful cliques
- c. Interpersonal pressures to conform to marginal and illegal behaviors
- d. Excessive group attention to activities that are immediately gratifying (e.g., drinking) combined with the absence of long-term conventional goals
- e. Lack of positive outlets for group activities (e.g., planned recreation)

3. Problems and Needs Associated With Work and Youth

Employment:



- a. Unavailability of meaningful work
- b. Absence of previous gainful employment experiences
- c. Inability/unwillingness to perceive a relationship between present behaviors and future employment potentials
- d. Perception of limited future prospects for employment
- e. Lack of job seeking and retention skills
- f. Lack of job retention skills
- g. Excessive exposure to poor work role models in the family and peer group
- h. Preference for making money easily and illegally instead of earning it conventionally

4. Problems and Needs Associated With School:

- a. Disliking for school
- b. Lack of belief in the utility of education
- c. Unsatisfactory degree of school effort
- d. Inadequate preparation for school through family socialization
- e. Inadequate communication between parents and school officials
- f. Negative labeling experiences in school (e.g., "troublemaker")
- g. Unavailability of school resources (e.g., alternative and remedial education programs, classroom management programs, and extra-curricular career programming)

5. Problems and Needs Associated With the Community:

a. Lack of involvement of youths and families in community activities

b. Inadequate knowledge of community activities and resources

c. Lack of assessable resources and activities for youth

d. Inadequate means of communicating resources and activities that are available

e. Poor cohesion among community members in disadvantaged areas

f. Lack of sense of pride in community

g. Lack of insight into effective change strategies

Finally, caseworkers were asked to categorize the common behavioral problems displayed by individual youths which they believed to be related to delinquency. The seven categories identified were:

1. Lack of general social skills (e.g., interpersonal communication and cooperation as well as problem solving skills)

2. Negative self-conceptions and poor self-esteem

3. Avoidance of decision making

4. Lack of willingness to assume personal responsibility for behavior and control over life affairs

5. Confusion over and lack of personal goals

6. Inappropriate expression of frustration and anger

7. Inadequate insight into personal problems and limited awareness of positive personal attributes

It is obvious from the above listing that not all of the problems and needs identified by caseworkers during the first stage of

program development are amenable to resolution through court-based intervention programs. For example, caseworkers have limited ability to change the economically impoverished family backgrounds that many of their clients suffer. On the other hand, some problems (e.g., family conflict) lend themselves to direct intervention by caseworkers, and these problems are frequently related to those that cannot be directly addressed (e.g., poverty). Poor interpersonal relationships and conflict within the family, for instance, can be positively altered through court-based intervention (Alexander & B. V. Parsons, 1973; Geismar & Wood, 1986; B. V. Parsons & Alexander, 1973). Research has shown that family conflict is likely to be exacerbated by the stress associated with poverty (Currie, 1985) and, likewise, that family conflict is associated with delinquency (Norland, Shover, Thornton, & James, 1979).

These considerations lead directly to the second stage of program development (i.e., the specification of a comprehensive substantive theoretical perspective). As will become obvious, the problems and needs identified by caseworkers are consistent with those dictated by criminological theory.

### Substantive Theoretical Perspective

Once caseworkers had identified clients' problems and needs by reference to the organizing framework, the stage was established for a more detailed theoretical analysis. Without a detailed theoretical understanding of the sociological context of problems and

needs, it is impossible to clearly formulate the goals and components of an intervention. One must know why the social institutions implied by the organizing framework are related to problems and needs and how needs, in turn, are related to delinquent behavior. Furthermore, the theoretical perspective should demonstrate which problems and needs can be directly addressed through court-based intervention and should also demonstrate the relationship between these problems and needs and those that cannot be directly addressed.

As in the case of stage one of program development, the second stage is approached with reference to the theoretical method. Method is important to stage one because of the organizing framework it provides for gaining a coherent conception of problems and needs. By contrast, method is important to the second stage because of the heuristic means it provides for making the substantive perspective progressively more concrete, thus ensuring sufficient scope and clear policy directions. Theoretical statements at the structural level of analysis that explain problems and needs in the context of wider society must be linked with statements at the institutional and individual levels that explain the micro level context of delinquent behavior. Insofar as linkages can be established, the scope of explanation will be broadened. The implications for intervention will be more comprehensive as a result.

Earlier in the chapter, it was pointed out that the theoretical perspective used in this study represents a combination of critical theory, social control theory, and differential association theory.

This section of the chapter is meant to introduce these theories and to show how they can be elaborated to form a more complete substantive perspective. The theories are introduced by the levels of analyses to which they apply.

### Structural Level and Critical Theory

The task to be accomplished at the structural level of analysis is to conceptualize youth crime in terms of the macro social arrangements which vary across societies and over time within a given society. Therefore, a viable structural level theory should demonstrate an historically informed account of structural arrangements and the way these arrangements change. Furthermore, as Spitzer (1975) notes, a structural level theory should strive to link the etiological and definitional dimensions of youth crime by accounting for both "delinquency" and "delinquents." Like the criterion that history be taken into consideration, this link is necessary to ensure adequate scope.

Critical theory was chosen for use in this research because it is the only structural level perspective that satisfies the above criteria. It should be pointed out that the term "critical theory", as used in this research, refers to the explanations of delinquency advanced by criminologists, primarily in North America (e.g., Colvin & Pauly, 1983; Greenberg, 1977b; Hagan et al., 1985; Krisberg & Austin, 1978; H. Schwendinger & J. Schwendinger, 1978, 1985). The term is not specifically intended to refer to theories advanced by

members of the so-called "Frankfurt School" in West Germany (e.g., Habermas, 1984). The latter scholars are not specifically concerned with developing theories of crime. The Frankfurt theorists are more concerned with devising general social theories (cf. Groves & Sampson, 1986).

Critical theory represents the most far-reaching and in-depth structural explanation available to criminologists. Unless a structural level explanation attends to broad historical developments, the explanation will encounter a difficult obstacle to attaining scope. The explanation will fail to account for the origins of the very structural conditions that it proposes as the source of delinquency. For instance, if poverty is said to be the source of youth crime, then the reasons for poverty need to be placed in historical perspective.

#### An Overview of Critical Theory

Critical theory posits that both the etiology and the definition of delinquency must be understood in terms of the historical development of a society's political economic organization. Such organization refers to the way a society is set up to produce and distribute the materials needed for human survival and consumption.

The American political economy is based upon private ownership of property and upon the exploitation of human labor for profit. Imbalances of wealth and power permeate this form of organization. Hence, critical theorists pay especially close attention to the

reciprocal link between political power and the economy. According to Page (1983, p. 204), "the power of particular groups is fostered by economic structure while the existence of structure itself . . . can plausibly be attributed to the action of those same groups." In American society, groups that own and control wealth enjoy a position of economic power over groups that do not. It is true that the former groups may be divided into factions on specific political issues. Nevertheless, they share a basic, mutual interest amongst themselves and with the political state in the preservation and expansion of the dominant mode of economic organization. Owing to the added advantage of these groups to pursue their political interests by virtue of their economic assets, the groups enjoy an ultimate position of political power, especially whenever decisions are made which fundamentally affect economic organization (cf. Chambliss & Seidman, 1982). These groups work to preserve the political economic structure and their advantaged position within it through the organized representation of their vested economic and political interests. Social definitions of the position of youth and delinquency, as demonstrated shortly, are part of this larger process.

Social definitions of youth are not entirely stable; these definitions change with transformations in the political economy. Critical theorists posit that social change and historical developments occur dialectically. This is to say that change occurs through fundamental contradictions present in political economic organization. Such contradictions, as Greenberg (1981, p. 16) defines them, represent "antagonisms or conflicts between different

elements in the existing social arrangements that in the long run are incompatible with one another. As long as they are both present, they will tend to destabilize society, leading to social change."

While critical criminologists have shown that historical developments give rise to the way a society defines and reacts to delinquency, they have also demonstrated how such developments are intertwined with the etiology of delinquent behavior. Along these lines, critical theorists have provided a variety of insights regarding the connection between the American political economy and delinquency.

For purposes of this research, three specific focal points of critical theory will be discussed, since each focal point is relevant to the problems and needs presented above. These focal points are: (a) the changing social position of youth in relation to the political economy, as that position is socially defined and affected by changes in political economic organization; (b) the structure of commodity or materialistic standards which reflects private ownership, market exchange, and labor exploitation and serves to govern the social relations between people; and (c) structured social inequality and material deprivation which is a function of class stratification under the American system of private ownership. Later in the chapter, it will be shown how these focal points, which represent historically grounded macro sources of youth crime, are related to delinquency. This will be done by demonstrating how the



political economy affects social institutions and individuals within those institutions.

### Social Position of Youth

Important theoretical works by criminologists on the changing social position of youth in American society include those by Christie (1978), Friday and Hage (1976), Greenberg (1977b), Humphries and Greenberg (1981), Platt (1977), and H. Schwendinger and J. Schwendinger (1978). These theorists have explored both the underlying reasons for the special definitions associated with youth in post-industrial America and the ramifications of changing social definitions. A major ramification, according to these scholars, is that changing definitions have functioned to extend the period of adolescence. The scholars have concluded that delinquent behavior is at least a partial reflection of the manner in which special definitions revolving around the age status have increasingly segregated youth from participation in adult activities for longer periods of time. In so doing, these theorists have linked the definitional and etiological dimensions of youth crime.

Critical theorists examine changing definitions of youth in view of changes in the organization of the American political economy. Definitions of the social position of youth are seen to be consistent with the preservation and expansion of the dominant mode of production. It is contended that there are strong economic and political incentives for assigning a specialized status to youth.

Hence, critical theorists have been particularly interested in explaining the development of both a separately defined category of crime known as "delinquency" and a separate system of juvenile justice in America.

Platt's (1977) widely cited study of the creation of the juvenile justice system and the social construction of the term "delinquency" illustrates the above points in more detail. In addition, Platt's findings are consistent with Spitzer's (1979) general thesis that, as America developed into a more industrialized and urbanized society, formalized impersonal state control became diversified and extended to replace informal personalized mechanisms of social control as part of the progressive rationalization of social relations.

Platt (1977) couches his discussion of changing definitions of the social position of youth in terms of developments in the political economy of the latter 1800s and early 1900s. As the organization of the economy underwent a transition from small-scale, laissez-faire to large-scale, corporate capitalism, government officials and groups of corporate owners recognized heightened potential for industrial expansion and profit. While government and corporate groups supported the transition, a contradictory or antagonistic trend also emerged due to the hardships experienced by the growing urban working class. A variety of factors accompanying the transition to a large-scale industrial economy (e.g., poverty, social inequality, unemployment, as well as inhumane living and working conditions) sparked considerable working class unrest. This discontent is clearly evidenced by the frequency of strikes and the

emergence of organized labor. Moreover, working class discontent threatened to upset the changing organization of the political economy through revolution. Working class disorder was not amenable to being resolved through overt, brute repression alone, since this would have called the very legitimacy of changing structural arrangements into question and merely reinforced the call for revolution. Rather, a more efficient, subtle form of state control was required; one capable of gaining working class compliance in legitimate fashion and sustaining the transformation of the economic order. Youth in general and working class youth in particular were a favorable target of such control because they comprised the coming generation of labor power.

Each of the three major reforms sought by the "child saving" movement of the late 1800s--the creation of the juvenile court, enactment of mandatory education legislation, and passage of child labor laws--can be understood against this backdrop of changing political economic organization. Political economic change served as the impetus for the major objective of the child saving movement. Platt's (1977) research on this movement revealed that the creation of an entirely new system of juvenile justice, although one element of the reform agenda, was not the most basic objective. The fundamental (albeit subtle) goal was to redefine the normative behavior of youth so as to more clearly delineate youth's social position vis-à-vis the changing economy. As Platt (p. 99) notes, "many of the child savers' reforms were aimed at imposing sanctions on conduct unbecoming youth and disqualifying them from the benefit of

adult privileges." A primary goal was to "punish premature independence in children and restrict youthful autonomy" (pp. 135-135).

It should be realized that Platt's (1977) study leaves little doubt that the child savers were genuinely concerned about child welfare. Most of the proponents of the movement were middle and upper class philanthropists who were distressed over the inhumane conditions confronting the youth of the era, especially the plight of working class children in factories. However, while predicating reforms on benevolence, the child savers pursued their main goal by centralizing formal governing authority over youthful conduct through the institution of the juvenile court. Formal state control became diversified and extended to areas of youthful behavior formerly unregulated by the government, namely "status offenses" such as home incorrigibility. The parens patriae philosophy of the court emphasized individual treatment and the paternalistic, deviance prevention role of the state. In so doing, the philosophy allowed for greater assimilation between formal mechanisms of state control and the social institutions of family and community which traditionally were responsible for maintaining informal personalized control. In effect, creation of the juvenile court ensured that whenever traditional institutions failed to control youthful action informally, a formal coercive substitute was available. The creation of the court therefore functioned as part of a means to a larger end. Extended state control was designed to redefine the social position of youth.

Affluent groups of businessmen who had vested interests in the

transition to a corporate economy recognized a need to adjust traditional social institutions to the changing organization of society. Hence, the consonance between the interests of corporate groups and child saving reforms becomes obvious. As Platt (1977, p. xxii) points out, "while urban reformers struggled from a moral perspective to pass legislation. . . , corporate reformers supported such reforms out of economic necessity." Moreover, the financial and political support of corporate business was clearly influential in enabling the child savers to obtain the leverage needed to actualize their agenda. The link between the economy and political power becomes apparent.

Consistent with concerns over economic stability and political acceptability, then, the child savers' reforms sought to foster an impression that youths, especially working class youths who represented the future labor pool, had an interest in (and indeed a responsibility for) living up to middle class standards and promoting the alternation of the economy. Even though the working class youths at whom most of the reforms were directed may have had little immediate concern with middle and upper class interests, reformers sought to mold the behaviors of these youths to make youths' behaviors congruent with such interests. By predicating reforms on the ideal of state benevolence, the coalition of child savers and corporate business sought to co-opt working class discontent and to buttress the responsibility of traditional institutions for socializing a disciplined work force with formal state control. The teaching of discipline was deemed essential to providing a

continual, reliable supply of labor for the emerging corporate economy. Therefore, the child savers "vigorously defended the virtue of traditional family life and emphasized the dependence of the social order on the proper socialization of children" (Platt, 1977, p. 78).

Discipline in the family and community had to be combined with the teaching of new requisite educational skills so as to ensure that both the specialized training requirements and ethos of a corporate political economic order would be instilled in youth (Humphries & Greenberg, 1981; Platt, 1977). Since neither the traditional family nor traditional community were prepared to serve this purpose, reformers pressed for the passage of mandatory education legislation. Corporate owners supported these laws for an additional reason. Mandatory education legislation meant that youths could not enter the labor market and represent a major source of competition over adult jobs until a specified age was reached. This helped preclude the working class unrest associated with wide scale unemployment.

The child savers combined mandatory education laws with child labor legislation, thus effectively excluding youths from the work force. Child labor laws were consistent with the interests of industrial owners who did not rely strongly on inexpensive child labor for profit because the implication was that small-scale competitors who did rely on child labor would be forced from the market (Platt, 1977). Child labor laws drew added support from organized labor, since these laws promised to preserve adult jobs (Humphries &

Greenberg, 1981).

It is clear from the historical research that the reforms sought by the child saving movement went beyond a moral concern over child welfare to support the developing political economy. These structural reforms altered the socially defined position of youth and are, therefore, germane to contemporary delinquency theory by virtue of their long-term impact. As shown later in the chapter, the ramifications at the institutional and individual levels were profound. Changing definitions of youth have diminished the capacity of conventional institutions to maintain effective social control and have increased the potential of the peer group to influence adolescent socialization.

#### Commodity Relationships

Theoretical works in the delinquency literature which examine youth crime in reference to the structure of commodity or market relationships include those by Colvin and Pauly (1983) and H. Schwendinger and J. Schwendinger (1985). From the standpoint of the political economy, these theorists have addressed the issue of why commodity relationships permeate American society.

To begin with, it is important to see how commodity relationships differ from more personalized, intimate communal relationships. Both are social relationships insofar as they involve interpersonal interaction and consist of relationships among individuals and groups. But communal relations are more fully social in the

sense that these relations are characterized by an element of moral, interpersonal obligation and responsibility for the welfare of others. This element is missing from commodity relationships. Commodity relationships are more impersonal and less intimate because they are dominated by an element of competitive individualism, devoid of a sense of moral responsibility for interpersonal welfare. In commodity relationships, social interests are subordinated to possessive personal interests and concerns over personal welfare. By contrast, in communal relations, social and personal interests are ideally one and the same; one set of interests cannot be subordinate to the other (H. Schwendinger & J. Schwendinger, 1985).

It is possible for both types of relations to exist in a society, but one will be predominate. The type that dominates is a function of the political economic organization of society. Specifically, social relationships, whether communal or commodity, arise from the mode of production. As Colvin and Pauly (1983, p. 525) point out, "the fundamental structural relations are those that are entered into at the point of material production. All other human relationships rest on those relationships that revolve around the physical means of life." This is consistent with Marx's observation that "what applies to man's relation to his work, to the product of his labor and to himself, also holds for a man's relation to the other man, and to the other man's labor and object of labor" (cited in Elster, 1986, p. 43).

According to H. Schwendinger and J. Schwendinger (1985), commodity relations necessarily tend to predominate over communal ones



whenever the mode of production is based on private ownership and market exchange, as opposed to communal ownership and mutual (shared) exchange. This is true because, under a system of private ownership and market exchange, that resulting from wage labor is produced not for social use value but for exchange value or profit. Therefore, the work of each member of society can contribute to the welfare of the collective society only indirectly through the median of private market exchange. The median ensures that interpersonal relationships will be individualistic, commodity exchange relationships, and that the structure of normative expectations in the society will stress personal profit and welfare over social welfare. As H. Schwendinger and J. Schwendinger explain:

The labor of each commodity producer is transformed into social labor only through the circulation of goods in commodity markets based on private exchanges. Since market relations intervene between the productive activities of individuals, their contributions to each other's welfare are indirect. Moral obligations. . . largely present themselves to people as exchange relations among independent commodity holders. Consequently, the dominant ethical standards are necessarily individualistic, and each person is expected to provide the things other people need only when profitable or when money is exchanged for labor. . . . Each person provides service to others because it is personally advantageous. Market relations, therefore, provide social connections that limit the scope of moral obligations emerging from the economic structure of society. (p. 120)

Private ownership of the means of production does not, however, preclude the simultaneous existence of commodity and communal relations. It is when the expansion of the private mode of production begins to completely replace communal modes, as in corporate America, that traditional, socially integrated relationships start

to disintegrate (H. Schwendinger & J. Schwendinger, 1985). Likewise, the deleterious effects of the dominance of commodity relations can be partly offset if the government seriously supports wide scale social welfare programs to mitigate the impact of private market relations on social institutions. While such programs are common in Western European societies with a private mode of production, they are comparatively unpopular and rare in America (Currie, 1985).

The predominance of commodity relations in American society is related to the delinquency problem. This is true because of the manner in which the structure of commodity relations affects social institutions. Commodity relations detract from the ability of these institutions to maintain effective social control.

#### Social Inequality and Material Deprivation

During the last two decades, an impressive amount of empirical research has been accumulated on the relationship between economic conditions and crime, a relationship first explicated by Bonger (1916). Data indicate that levels of poverty (i.e., absolute material deprivation) and levels of social inequality or relative deprivation (i.e., material deprivation relative to what others have) are both positively associated with serious forms of criminal and delinquent behavior (Braithwaite, 1979, 1981; Clelland & Carter, 1980; Danziger & Wheeler, 1975; Loftin & Hill, 1974; Loftin & Parker, 1985; Silberman, 1978; Thornberry & Farnsworth, 1982). Recent studies employing nations (Avison & Loring, 1986; Krahn, Hartnagel,

& Gartrell, 1986; Messner, 1980), standard metropolitan statistical areas (P. Blau & J. Blau, 1982; Williams, 1984), counties (Brownfield, 1986), cities (Bailey, 1984; Sampson, 1985), and communities (Fagan, Piper, & Moore, 1986) as the units of analysis have generally confirmed this finding, despite some evidence to the contrary (Messner, 1982; Messner & Tardiff, 1986; Tittle, Villemez, & D. Smith, 1978).

An historically informed theory is necessary to explain why inequality and poverty exist in American society. Critical theory provides a convincing account of American inequality and poverty by focusing upon the structure of class stratification vis-à-vis the mode of production and macro level contradictions. In particular, critical theorists have identified the primary sources of poverty and inequality, including structured unemployment and subemployment as well as the lack of egalitarian tax and welfare programs for redistributing wealth.

The concept of class is central to understanding poverty and inequality. Class, unlike the concept of status, does not denote quantitative attributes of individuals and groups (e.g., income and education levels). While such attributes are commonly used to arrive at an empirical estimate of class, class actually describes the qualitative social relationship of groups to the means of economic production (Greenberg, 1981; Thornberry & Farnsworth, 1982).

From the standpoint of critical theory, the hub of a society's political economic organization is its mode of economic production. The mode of production is composed of two components. The first is

the means or forces of production (e.g., land, machinery, and raw materials). The second is the social relations of production, referring to the patterns of ownership and social distribution surrounding the means of production as well as the manner in which labor power is secured and appropriated (Greenberg, 1981). The social relations of production, as Pfohl (1985) points out, affect all other interpersonal relationships in a society and represent the foundation of commodity relations. Social classes are constituted, according to Greenberg, by the social relations of production. Class refers to a position in a productive relationship such that the existence of one position or class (owner) logically implies the existence of another (nonowner). In their discussion of Marxian theory, Reiman and Headlee (1981) describe the concept of class well.

Class is, for Marx, an objective social relation, independent of people's will. It is not a matter of subjective perceptions or intentions. . . . Marxism looks at human societies as forms of organization of the production of material life. It finds that all historical societies since the agricultural revolution (some 10,000 years ago) have been objectively divided into the group that produces and the group that lives off that production. This--before any consideration of life styles or attitudes--is what is meant by saying that a society is divided into classes. In capitalism, this division takes the form of ownership or nonownership of the means of production, since members of the group that does not own the means of production must sell their labor to those who do in order to have a livelihood at all. Those who own the means of production (once they are of sufficient scale) can live off the work of those who do not, without themselves having to work. (p. 28)

This implies that, historically, any form of economic organization which has produced a surplus of products and labor over the products and labor necessary for subsistence has been characterized

by class stratification and class struggle. As Quinney (1980) notes, class conflict, contradiction, and instability are inherent features of any class society. Classes with direct access to the means of production are in a position of power to exploit classes that lack direct access. For all practical purposes, the latter classes represent a potential part of the surplus labor pool. Furthermore, exploitation always implies the threat of unrest and various forms of rebellion on the part of those who are exploited. This threat, in turn, creates the need for those who benefit most from the social relations of production to legitimate and preserve these relations. This is accomplished through ideology as well as through the institutionalization of politically sponsored redistribution and welfare programs designed to cushion the effects of class exploitation and inequality.

The notion of class stratification is useful for examining structured unemployment and underemployment, an important basis of extreme material deprivation and inequality in modern America. Several criminologists have argued that advanced American capitalism has produced a relative surplus population of unemployed and sub-employed workers (Kramer, 1984; Reiman & Headlee, 1981; Spitzer, 1975). Members of this class are the most obvious victims of poverty and inequality. Moreover, a disproportionate number of them are young and/or members of ethnic minority groups, precisely those persons overrepresented in street crime statistics (Hindelang, 1978, 1981).

Spitzer (1975) has shown how the growing number of unemployed

is attributable to contradictions in the development of the American political economy. During its early stages, the American economy required continual expansion of productivity and profit in order to sustain itself. This requirement gave the business sector a strong incentive to displace workers with more efficient forms of technology. Technological displacement maximized the potential for profit on the competitive price market because it reduced the capital liability required for worker wages, thus lowering overall production costs.

However, as the business sector became more mechanized, the economy grew more monopolized and less competitive in pricing (cf. Baran & Sweezy, 1966) owing to the magnitude of entry level capital necessary for private entrepreneurship. Would-be entrepreneurs under earlier competitive capitalism became more dependent under monopoly capitalism on big business for employment. As Braverman (1974) has suggested, competition for jobs not only increased among blue-collar workers but also among white-collar and service workers. Moreover, due to the specialized demands of increasing technological sophistication, the demand for white-collar and service positions to staff corporate organizations began to outstrip demands for unskilled blue-collar labor. A primary labor market demanding relatively skilled workers and offering relatively attractive work, high wages, and considerable opportunity and autonomy was created alongside a secondary labor market offering low paying, dead-end, demeaning jobs for unskilled workers to compete over.

The effect of these developments, according to Spitzer (1975),

has been to swell the size of the surplus population and to create a permanent underclass. The surplus ranks have grown and are populated with expendable, low skilled individuals who are no longer competitive on the labor market. Furthermore, as Spitzer explains:

The increasingly technological character of production removes more and more laborers from productive activity for longer periods of time. Thus, modern capitalist societies have been required progressively to reduce the number of productive years in a worker's life, defining both young and old as economically superfluous. (p. 646)

Spitzer's (1975) observations are consistent with Platt's (1977) analysis of the development of mandatory education and child labor laws presented earlier in this chapter. Likewise, as shown below, Spitzer's position is consistent with Platt's analysis of the rise of the juvenile court. As the surplus population grows and becomes more permanent, it becomes a more eligible target for formal state control.

To understand this more fully, it is necessary to examine another contradiction identified by Spitzer (1975). The contradiction arises from the fact that the surplus population is both an asset and a liability to the American political economy. It is an asset because its members represent a cheap labor pool to be drawn upon during times of economic expansion. Similarly, the surplus population is valuable because it helps keep worker wages down and profits high. It serves as a reminder to workers who demand higher wages that a multitude of others might be willing to work for less.

The surplus population is a liability in the sense that, as it grows and becomes increasingly permanent and stagnant, it becomes

more impervious to the "invisible hand" of private market controls. Therefore, the underclass becomes more of a threat to the stability of the social relations of production by virtue of the unrest and chaos it perpetrates in civil society. Crime and delinquency constitute prime examples here. It is common under these conditions for control functions to be transferred to the political state, specifically welfare and criminal justice agencies. The drawback, however, is that management of the underclass requires considerable financial resources. In effect, "the resources of the state need to be applied in greater proportion to protect capitalist relations of production and insure the accumulation of capital" (Spitzer, 1975, p. 647).

The transfer of social control functions to the state is itself a measure fraught with the familiar contradictions and problems of the last three decades. The major problem is the potential for fiscal crises in government (O'Conner, 1973). As government spending on social and other programs (e.g., the military) increases beyond realistic levels and as budget deficits rise, an incentive is created to transfer responsibility for management of the underclass back to the private sector. (See Scull's, 1977, analysis of the decarceration movement in mental health and criminal justice for an excellent illustration of this process.)

When state welfare spending is cut to conserve revenue and when tax incentives are created for big business in order to promote private sector investment and growth, inequality becomes exacerbated



because redistribution efforts are undermined (cf. Caringella-MacDonald, 1986; Winnick, 1985). As Page's (1983) study showed, the federal income tax system, which is by far the least regressive aspect of the national tax structure, actually contributes very little to redistribution of wealth due to exclusions and exemptions for elites. Similarly, Page found that even the supposedly liberal welfare expenditures of the 1960s had little egalitarian effect. While these programs did raise the standard of living for millions of disadvantaged people, they failed to promote equality. The primary reason for this failure, according to Page, is that the proportion of funds directed to the underclass through cash assistance and in-kind programs was small in comparison to the proportion directed primarily to the middle class in the form of Social Security and Medicare.

It is clear, therefore, that social inequality and material deprivation have complex roots in the class stratified American social structure. Structured inequality and poverty are related to youth crime because of the negative impact exerted on social institutions and interpersonal relationships. Inequality and poverty function to strain the relationships that are responsible for controlling deviant behavior.

#### Institutional and Individual Levels

Each of the structural factors just discussed (i.e., the social position of youth, the structure of commodity relations, as well as

social inequality and material deprivation) represent historically grounded sources of delinquency. Each structural level factor is related to delinquency by virtue of the impact that each has upon social institutions and upon the socialization of youths within those institutions.

Several writers (Chambliss & Seidman, 1982; Friday, 1977; Humphries & Greenberg, 1981; Kramer, 1984; Melossi, 1985; Pfohl, 1985; H. Schwendinger & J. Schwendinger, 1985; Taylor et al., 1973) have stressed the need to link a critical analysis of social structure with micro analyses of social institutions and individual behavior. Since there are few elaborated perspectives to explain how historically grounded macro sources of delinquency are mediated by smaller-scale processes, it is important to consider micro level theories that are designed to explain youth crime in reference to institutional and individual level variables. As will be shown, these theories can be used to complement the critical orientation.

#### Selective Overview of Theories

Merton's (1938) work (see Merton, 1957, as well) is a significant point of reference in the history of delinquency theorizing because it was one of the first sociological reactions against individualized, reductionistic accounts of youth crime. The central point of his 1938 paper was that an adequate explanation of the etiology of delinquency must give paramount attention to the role of the social structure. Merton explained delinquent behavior by

arguing that the social structure places some persons in an economically and socially disadvantaged position vis-à-vis culturally defined, normative goals. The motive for delinquency results from the frustrations, tensions, and adaptations associated with being disadvantaged. When individuals are socialized to desire conventionally valued goals (e.g., success, prestige, wealth, power, etc.) but lack the conventional means for attaining them (e.g., a well paying job, good educational prospects, or wealthy parents), the likelihood of delinquent behavior increases.

Merton's (1938) thesis stood in sharp contrast to the individual level analyses advanced by his contemporaries (e.g., Healy & Bronner, 1936). While his contemporaries held that delinquency resulted from personal pathologies, Merton argued that delinquency was a social problem that needed to be explained in reference to other social factors. In so doing, he eschewed reductionism and ignited a debate that has yet to be resolved. Is delinquent behavior attributable to macro, structural or to individual, pathological factors?

Influential works in sociology that followed Merton (1938) during the next three decades did not resolve this issue. Instead, delinquency theorists added fire to the debate by demanding that social institutions be considered. Many theorists placed as much (if not more) etiological significance on social institutions as they did on the structural and individual levels per se. Included here are works on the relationship between delinquency and the family (Nye, 1958), the school (Cohen, 1955), the peer group (Short

& Strodbeck, 1965; Sutherland, 1939), and cultural traditions in communities (W. B. Miller, 1958). Two sociologists (Matza & Sykes, 1961; Sykes & Matza, 1957) directed attention away from individual pathologies and toward social variables at the individual level.

During this era, an entire school of theorists emerged from Sutherland's (1939) pioneering differential association theory, the micro level counterpart of Sutherland's (1947) macro level theory of differential social organization. Briefly summarized, differential social organization theory suggests that the social structure of a society becomes permeated by conflicting normative demands for behavior as that society grows larger, more diversified, and more complex. (See Sellin, 1938, for an extended discussion of this point.) Since different social groups are organized according to different (often conflicting) norms, there will be variation in the degree to which delinquent norms exist in any particular group. Where such norms exist, they affect the social interactions and learning process (differential associations) which transpire in the group. Accordingly, theorists who emerged from Sutherland's tradition opted for social learning (Burgess & Akers, 1966) and subcultural transmission (W. B. Miller, 1958) explanations of youth crime. Emphasis was placed upon the deviant learning processes and delinquent traditions found in peer groups and youthful subcultures.

The thinking of another school of theorists is grounded in the social disorganization theory advanced by C. Shaw and McKay (1932). C. Shaw and McKay had argued that delinquency resulted from rapid social change. Rapid alternations in structural arrangements (e.g.,

urbanization) function to deteriorate and disorganize particular communities. This, in turn, upsets the structure of normative values responsible for maintaining social control over behavior. The so-called "control theorists" who emerged from this tradition favored explanations viewing delinquency as the result of a lack of social and personal normative restraints. Nye (1958), for example, emphasized the social control functions of the family. Both Reiss (1951) and Reckless (1961) described the manner in which social/outer and personal/inner controls serve to curtail delinquent behavior. Similarly, Hirschi (1969) stressed the importance of an individual's bond to conventional social institutions.

A final school of micro theorists emerged from the symbolic interactionist tradition in sociology. While differential association and control theorists were focusing on the etiological dimension of youth crime at the micro level, labeling theorists, drawing on the early work of Tannenbaum (1938), directed attention to the definitional dimension at the institutional and individual levels. These theorists (Becker, 1963; Lemert, 1951; Matza, 1969; Piliavin & Briar, 1964; Schur, 1973), rather than trying to explain the etiology of delinquency, stressed the meaning of delinquent acts for both actors and society at large. That is, etiological considerations were seen as less important than the manner in which delinquency is socially constructed through definitions of and reactions to behavior. Labeling theorists attended to the micro interactional processes surrounding delinquency, specifically to the often arbitrary circumstances under which labels are applied and the

stigmatizing effect the labeling process has on youths.

Whereas Merton's (1938) theory had favored the etiological dimension and the structural level of analysis over the definitional dimension and the micro level, subsequent sociological theorists (i.e., learning, control, and labeling) sought to rectify Merton's restrictive focus by addressing both the definitional and etiological dimensions at the micro level.

A Note on Labeling Theory. Before turning to a detailed consideration of social control and differential association theories, some remarks are in order regarding labeling theory. While not explicitly incorporated with the substantive perspective underlying Project EXPLORE, the theory has relevance for this research. Labeling theorists have provided numerous insights that should not be overlooked in research on correctional interventions. To the contrary, the theory should make researchers all the more cognizant of the need for sound program development strategies and carefully conducted evaluation studies, least interventions yield minimal or deleterious effects through exacerbation of the delinquent status. In particular, labeling considerations should serve as a guide for assessing the appropriateness of interventions that have been designed and implemented on the basis of other theories. Likewise, labeling can be used as a framework for interpreting evaluation outcomes, especially if undesirable results are obtained.

At the same time, there are two reasons for not explicitly incorporating labeling theory with the substantive perspective

presented here. First, it is generally agreed that the main implication of labeling theory is nonintervention. "Thus, the basic injunction for public policy becomes: leave kids alone whenever possible" (Schur, 1973, p. 155). This theory, then, cannot logically form the basis for an intervention program of the type evaluated in this study. In rebuttal to the nonintervention implication, the position adapted in this study concurs with that of Travis and Cullen (1984). Travis and Cullen have demonstrated how the nonintervention implication is potentially dangerous. Concisely stated, these authors conclude that nonintervention, as a guideline for correctional policy, represents both a subtle excuse for neglecting corrections and an open invitation for an increase in the use of punitive and repressive measures that are counterproductive.

Second, even if the implication of labeling was something other than nonintervention, the theory would still be inappropriate for purposes of the substantive perspective. Labeling is not designed to explain the etiology of delinquent behavior (Goode, 1975; Plummer, 1979). As Plummer points out, it is a theory for examining the characteristics, sources, and consequences of labels as well as the conditions under which labels are applied. While, as already noted, these considerations are clearly relevant to interpreting the effects of correctional interventions, program development mandates some form of explanation of etiology. Otherwise it is difficult to see what an intervention might target, although an intervention need not always target a putative or even ultimate cause of delinquency to be meaningful (cf. M. R. Gottfredson, 1982).

### Social Control Theory

Social control theory is directly relevant to this study. Despite periodic episodes of illegal activity, most youths (including those involved with the juvenile court) refrain from breaking conventional social norms the majority of the time. Control theory is explicitly designed to explain why individuals conform to conventional norms. As such, it has major implications for correctional interventions designed to promote conformity.

Social control theory states that delinquent behavior is unlikely to occur when youths' ties to conventional society are intact. Delinquency is said to be averted through social integration to conventional norms and activities. While there are several sociological variants of control theory (Friday & Hage, 1976; Hirschi, 1969; Matza, 1964; Nye, 1958; Reiss, 1951; Reckless, 1961), each explains delinquency, or more properly the lack thereof, in reference to the absence/presence of social integration. When youths are part of conventional society and when they display conventional attributes (e.g., positive self-conceptions), delinquent behavior is less likely. When the degree of social integration is low, delinquency increases.

The variants of control theory differ in their use of concepts to describe social integration and in their conceptions of exactly how the control process operates. For example, whereas Hirschi (1969) described integration by reference to the "social bond," Matza (1964) preferred the less mechanical and more phenomenological



concept of "drift." And while Hirschi postulated that the social bond functions to restrain natural impulses to engage in delinquency, Reckless (1961) posited that social pressures (e.g., poverty) and pulls (e.g., delinquent friends) create favorable incentives for delinquency that can be countered by satisfactory outer (e.g., family relationships) and inner (e.g., self-concept) containments. Despite disagreements of this sort, the central thesis is that social integration averts delinquent conduct. This thesis is not the subject of serious dispute among proponents of control theory.

A complete analysis of the similarities and differences between all variants of control theory is irrelevant to this study because the objective is not to compare and contrast the various theories of delinquency. (An excellent source on this topic is Vold and Bernard, 1986.) Here, two variants have been selected for more detailed coverage. The first (Hirschi, 1969) has been selected because it has become perhaps the most influential control model in criminology and has served as the foundation for much subsequent theorizing. The second (Friday, 1981, 1983; Friday & Hage, 1976) has been chosen because it is the main variant of control theory employed in this study. Friday's is one of the only control theories that gives adequate attention to the role of structural factors. An additional bonus is that Friday's theory is highly consistent with the tenets of differential association theory.

Hirschi's Social Bond Theory. According to this theory, youths who are well bonded to social institutions (primarily the family, school, and peer group) are less likely to commit delinquent acts. The social bond responsible for insulating against delinquency is said to be comprised of four elements, each of which is posited to be inversely related to delinquency. After Hirschi (1969, pp. 16-26), these elements can be paraphrased as follows:

1. Attachment refers to the level of sensitivity youths show for the opinions, wishes, and desires of others. Youths are attached to conventional society to the degree that they have internalized conventional norms for conduct so that their acts do not run contrary to the wishes of others, particularly their parents.

2. Commitment is the extent to which youths have developed a stake in conventional society by investing resources (time and energy) in prosocial pursuits such as education. Commitment is the rational element of the bond. It promotes conformity because of the fear associated with predictions of what might be lost by nonconformity. Youths with high levels of commitment risk losing their investments by engaging in delinquent acts.

3. Involvement refers to the quantity of time and energy devoted to conventional pursuits. The notion is that if youths devote more time and energy to conventional activities, there will be less time and energy available for involvement in delinquency.

4. Belief, as a theoretical concept, rests on the assumption that society is characterized by a common set of conventional values. Belief refers to the extent to which youths think they

should abide by that set of values and obey rules.

Hirschi (1969) thought it unnecessary to theorize about the factors which cause bonds to become weak, since he was more interested in explaining conformity than delinquency. From his later writings (Hirschi, 1983), it can be presumed that the cause is attributable to faulty socialization in the family, but this position leaves the explanation of faulty family socialization an open issue. Similarly, he found it unnecessary to identify a source of motivation for delinquency which varies across individuals. Instead, he assumed that motivation for delinquency is constant. The only factors that vary are the elements of the bond, and these are seen as positively related to one another.

Friday's Role Relationships Theory. According to this theory, youths who possess intimate sets and patterns of role relationships are less likely to become involved in delinquency than youths who lack such relationships. When youths lack conventional social relationships in the institutions of work, community, family, and school, the stage is set for unconventional peer relations to assume more salience. Hence, the probability of delinquency increases.

The concept of "role relationship" refers to a set of activities and behavioral expectations associated with a particular relationship between two people (e.g., mother and child or teacher and pupil). When all roles in a given institution are taken collectively, a "role set" is formed for that institution (e.g., family role set or school role set). The concept of role set, then,

describes the totality of role relations within a given institution. When role sets corresponding to various institutions are combined, an individual's "pattern" of role relations is formed. Patterns of role relations exist across institutions.

It is important to realize that the level of intimacy, meaningfulness, and salience of relationships is seen as being more relevant than the sheer number of relationships in controlling delinquent behavior. Similar to the manner in which Hirschi (1969) operationalized his abstract social bond concept, Friday (1983, pp. 66-69) has identified four concepts to measure role relationships.

These can be paraphrased as follows:

1. Scope refers to the quantity and variety of relationships available to an individual. As scope increases, there is heightened potential for normative conflict because there is greater exposure to diverse norms. There is also less reason for the individual to rely exclusively on one particular relationship to satisfy the need for interpersonal interaction.

2. Frequency describes the amount of interaction an individual experiences in each relationship. Frequency is generally conceived as an indicator of salience. As it decreases, so does the potential for a relationship to exert influence over behavior. Likewise, as scope increases, frequency tends to decrease.

3. Choice describes the amount of independence or autonomy available to a person in a relationship. If there are fewer informal regulations in a relationship, choice will be higher. As

choice increases, the likelihood of conformity to the norms of the relationship tends to decrease. Lessened choice, on the other hand, is associated with higher dependency on the relationship for dictating behavior and, thus, a greater probability of conformity.

4. Overlap refers to the amount of interaction between role sets. It describes the cohesiveness of the role pattern as a whole. Overlap is said to be the most important aspect of role relationships because the greater the overlap, the greater the overall degree of social integration. Overlap increases the amount of cross-pressure to conform. The lesser the degree of overlap, the greater the likelihood of divergent normative influences.

According to the theory, a particular pattern of role relations is likely to eventuate in delinquent behavior. That pattern is characterized by: (a) low scope of conventional relationships, (b) high frequency in the peer group coupled with low frequency in conventional institutions, (c) high choice in conventional relationships, and most importantly (d) low overlap between the peer group and other institutions (Friday, 1983).

There are several differences between role relations theory and social bond theory that are worthy of elaboration. First, each of Hirschi's (1969) elements of the bond are, with the exception of involvement, attitudinal rather than behavioral constructs. By contrast, Friday (1983) operationalizes role relationships in behavioral terms. Each of the four measures (scope, frequency, choice, and overlap) revolves around social interactions in institutions. In other words, it is an individual's action and not

necessarily his or her attitudes that determine the level of social integration. However, as Friday makes clear, this difference does not make role relations theory incompatible with social bond theory. Social interaction in relationships can be viewed as the behavioral correlate of attitudes of attachment, commitment, and belief.

Furthermore, by emphasizing behavior, Friday (1983) allows for the possibility that the same individual may be exposed to both value and normative conflict as well as value and normative consensus. As the scope of interactions becomes greater, so do the chances that individuals will encounter divergent and/or conflicting norms. When the scope of interaction remains limited, by contrast, individuals are more likely to encounter value and normative consensus. On the other hand, Hirschi's (1969) theory must assume a much more encompassing social consensus on norms and values by virtue of the attitudinal concepts of belief and attachment.

As a third area of contrast, it will be recalled that Hirschi (1969) found it unnecessary to identify the ultimate source of inadequate bonding. Instead, he simply assumed that the motive for delinquency is constant across individuals and that bonds function to curtail this motive. If bonds are weak, for whatever reason, the motive is free to flourish. Friday's (1983) conception is much different because he does not assume a constant motive for delinquency. This motive is problematic and needs to be explained. Therefore, Friday locates the ultimate source of diminished integration in changing structural level conditions. As structural conditions vary, so does the level of integration within and across

social institutions. This is true because structural conditions affect role sets and role patterns. As societies become more urbanized and populated, for example, the scope of relationships tends to increase. The motive for delinquency, then, cannot be separated from the social structure and the relationships an individual has. When structural conditions change, social relations are affected. When the social relationships a person is exposed to are altered, the individual's motives are also likely to be affected by differential socialization and learning.

A fourth point of difference is that Hirschi (1969) allowed for only one type of social integration, namely conventional integration or bonding. The notion that conventional bonding is the only type possible was initially called into question when Hindelang (1973), in an attempt to replicate Hirschi's research, failed to find an inverse association between bonding to peers and delinquency. Hindelang's finding of a positive relationship between peer bonding and delinquency led him to conclude that it is necessary to allow for unconventional as well as conventional bonding. His conclusion is supported by the more recent findings of Elliott, Huizinga, and Ageton (1985). Friday's (1983) role relations theory recognizes the need to allow for unconventional integration. If youths lack conventional relationships, the chances are greater that unconventional peer relationships will be formed.

In sum, there are some major differences between the two theories just considered. The effect of these differences, as shown later in this chapter, is that role relations theory is much more

compatible than social bond theory with both critical theory and differential association theory. Compatibility of theories is important to ensure greater scope.

### Differential Association Theory

Sutherland first proposed differential association theory in 1939, and he furnished a revision (the contemporary version) in 1947. Differential association has been reformulated in terms of operant learning theory (Burgess & Akers, 1966; Jeffery, 1965), set theory (DeFleur & Quinney, 1966), and differential identification theory (Glaser, 1956). However, Sutherland's (1947) basic thesis remains unchanged in all of these reformulations.

The thesis is that delinquent behavior is acquired or learned through an individual's interactions with the surrounding environment, particularly in social interactions with delinquent peers. Sutherland (1947) was one of the first criminologists to view delinquents as "normal" in the sense that their deviant behaviors are learned just as all other actions are learned. The emphasis on the importance of learning is what makes differential association theory appropriate for use in this research. It is assumed in this study that delinquency is learned behavior.

Sutherland's (1947) theory is couched in the terminology of the symbolic interactionist tradition in sociology. This is why he spoke of the manner in which individuals subjectively ascribe meaning to the situations they encounter on a daily basis. Meaning



gives behavior direction and purpose. The definitions individuals assign to situations are acquired through the process of interpersonal interaction. In turn, subjective meanings serve to define and guide the action that is considered appropriate for situations. To the extent that individuals have learned definitions favorable to violation of the law and have not learned definitions favorable to adherence to the law, illegal behavior is more likely.

A more detailed understanding of these points can be achieved by considering the nine statements Sutherland and Cressey (1978) used to summarize differential association theory:

1. Criminal behavior is learned.
2. Criminal behavior is learned in interaction with other persons in a process of communication.
3. The principle part of the learning of criminal behavior occurs within intimate personal groups.
4. When criminal behavior is learned, the learning includes (a) techniques of committing the crime, which are sometimes very complicated, sometimes very simple; (b) the specific direction of motives, drives, rationalizations, and attitudes.
5. The specific direction of motives and drives is learned from definitions of the legal codes as favorable or unfavorable.
6. A person becomes delinquent because of an excess of definitions favorable to violation of law over definitions unfavorable to violation of law.
7. Differential associations may vary in frequency, duration, priority, and intensity.
8. The process of learning criminal behavior by association with criminal and anticriminal patterns involves all of the mechanisms that are involved in any other learning.

9. While criminal behavior is an expression of general needs and values, it is not explained by those general needs and values since noncriminal behavior is an expression of those same needs and values. (pp. 80-82)

The first through the fourth statements are relatively straightforward. The first simply means that delinquent behavior is acquired rather than caused by innate individual characteristics. The second and third statements imply that the verbal communications and symbolic gestures conducive to the acquisition of delinquent behavior transpire in primary groups, ordinarily the peer group. The fourth statement implies that the communication process in primary groups transmits the technical skills as well as the motivation and justifications for committing delinquent acts. A youth, for example, must acquire the skills to break into a vehicle and remove a stereo and must also learn to justify the acquired motive for doing so.

The fifth and sixth statements are the most important elements of the theory because they summarize the principles of differential social organization and differential association respectively. According to the fifth, in a complex, mixed society like America, some groups will espouse norms that favor law violation, whereas others will propagate norms that favor adherence to the law. While a modicum of normative consensus is possible in American society, consensus is likely to be much less encompassing than in more homogeneous societies. Given the possibility of normative conflict, the definitions for behavior that youths acquire are contingent upon the definitions of the groups they associate with. The sixth

statement describes the principle of differential association and states the conditions under which delinquent behavior is likely to occur. The likelihood of such behavior increases to the degree that a youth has both: (a) excessive associations with groups who espouse definitions favorable to law violation and (b) a lack of association with groups who disdain law violation.

The seventh statement is important because it details the four dimensions along which group associations vary. "Frequency" is the amount of association or number of contacts an individual has with a particular group. Similarly, "duration" is the amount of time spent in a particular association. The greater the frequency and duration of exposure to delinquent associations and the lesser the frequency and duration of exposure to nondelinquent associations, the higher the probability of delinquent behavior. "Priority" refers to the point in life when delinquent associations start to develop. The earlier such associations develop, the higher the level of priority assumed by them. The higher the priority, the greater the chances of sustained delinquent activity throughout life. "Intensity" refers to the status and emotional attachment corresponding to a particular group association. The greater the intensity of delinquent associations and the less the intensity of nondelinquent associations, the better the chances of delinquent behavior.

The eighth statement means that human learning is a symmetrical process in that the mechanisms involved in acquiring delinquent behaviors are also the mechanisms involved in acquiring nondelinquent behaviors. Therefore, the explanation of delinquent behavior

does not require the postulation of separate mechanisms of learning. Nor does it require the postulation of unique needs. The ninth statement constitutes a reaction against explanations (e.g., Merton, 1938) that posit the existence of a unique need to engage in delinquency. The statement means there can be no overriding or unique need which results in a motive for delinquent behavior that is not also a need which motivates human action in general. Since all behavior is a manifestation of similar needs, these needs can explain lawful behavior as well as they explain delinquency. Some youths may commit robbery because they are poor and need money or status. However, other youths may obtain work for the same reasons. No need leads to a motive for delinquent action by its inherent nature. The particular motives that culminate in delinquency must be learned through interaction. But the needs from which such motives are derived will reflect the general needs that propel all motives for action.

Toward an Elaborated Theoretical Perspective: Linking Critical, Social Control, and Differential Association Theories

Most scholars interested in combining theories have not explored the particular combination used in this study. For example, combinations have been proposed using: (a) strain and control theories (Cernkovich, 1978); (b) control and differential association theories (Conger, 1976; Thornberry, 1987); (c) strain, control, and differential association theories (Elliott, Ageton, &

Canter, 1979); and (d) critical and control theories (Colvin & Pauly, 1983; Hagan et al., 1985). While Pearson and Weiner (1985) employed critical, control, and differential association theories, their somewhat cumbersome model also contained over a half-dozen other theories. The result was what A. T. Turk (personal communication, December 1, 1987) has referred to as an "overly complicated taxonomic shopping list." The intent below is to demonstrate why it is useful to combine critical, control, and differential association theories for purposes of this research. The combination has the advantage of expanding scope in a parsimonious fashion.

#### Complementary Nature of Theories

Critical, social control, and differential association theories can be used to complement one another. While critical theory is an exception to the claim made earlier in this chapter that most explanations of delinquency have failed to link the etiological and definitional dimensions, most critical theorizing has been restricted to the structural level of analysis. Even though critical theory possesses broad scope at the structural level, its insights (as well as the policy implications discernable from those insights) remain limited at the institutional and individual levels. To the extent that critical theory can be linked with a micro level analysis that possesses broad scope, it should be possible to derive more viable and comprehensive implications for court-based intervention.

Social control theory and differential association theory both provide relatively clear, viable implications for court intervention. Furthermore, when these theories are combined, the scope of explanation is broader than when each is employed separately. However, these theories have been restricted largely to the etiological dimension at the micro level. To the extent that they can be combined with one another and then linked with critical theory, the scope of explanation will be broadened, and the implications for intervention at the micro level will become more comprehensive.

Social Control Theory and Differential Association Theory. Until fairly recently, it was uncommon for theorists to consider combining control and differential association theories. It was thought that the two constituted opposing theoretical orientations. The "chicken-egg" critique went as follows. Control theory suggests that a natural, constant motive for delinquency is curtailed by conventional social integration. Differential association, on the other hand, states that general human needs may or may not give rise to delinquency. Whether or not they do depends upon the motives and actions youth acquire for satisfying general needs. If a given need results in a motive for delinquency, it is because the youth has learned to fulfill the need by resort to illegal conduct. Motives, therefore, are not natural and constant as suggested by control theory. Instead, from the standpoint of differential association theory, delinquent motives are viewed as learned and variable.

Consider the empirical observation that a delinquent youth is likely to have delinquent friends. Control theorists explained this observation using the adage "birds of a feather flock together". That is, it is to be expected that groups of poorly integrated and thus delinquent youth will choose to associate with one another. Differential association theorists explained the same circumstance by suggesting that the delinquent youth is delinquent because of excessive association with other delinquents.

A strong case can be made that this argument is based upon a misunderstanding of differential association theory and that differential association is, in fact, a partial control theory. The above argument ignores the "differential" aspect of the theory and focuses exclusively on the "association" aspect. However, closer inspection of Sutherland's (1947) fifth and sixth propositions reveals that youths do not become delinquent simply because they associate with the "wrong" group and acquire definitions favorable to law violation. This is only half the story. It is also necessary that there be a deficit of learned definitions favorable to law adherence. Youths learn such definitions by associating with the "right" people in conventional groups, and if they are well integrated into these groups, there should be no deficit. Differential association theory is incomplete without this control theory component.

Even if it is granted that differential association is a partial control theory, it is still possible to argue that social integration is the only important variable in the etiology of

delinquency and that association with delinquent persons is ultimately irrelevant to integration. However, there is considerable evidence against this position. Independent tests of control theory in isolation from association and learning principles have found support for the social integration thesis (e.g., Caplan & LeBlanc, 1985; Hirschi, 1969; Wiatrowski, Griswold, & M. K. Roberts, 1981). Likewise, independent tests of the association principle have produced affirmative results (e.g., Reiss & Rhodes, 1982). Moreover, researchers have consistently reported that models which combine the theories have greater explanatory power than do singular models which test one theory independently of the other (Agnew, 1985; Elliott et al., 1985; Fagan & Wexler, 1987; Hindelang, 1973; LaGrange & H. R. White, 1985; Matsueda, 1982; Matsueda & Heimer, 1987; Patterson & Dishion, 1985; Poole & Regoli, 1979; Simcha-Fagan & J. E. Schwartz, 1986; H. R. White, Pandina, & LaGrange, 1987).

It could still be argued that social control and differential association theories are incompatible, since the former posits a social consensus on norms and values and the latter allows for normative conflict. However, this argument is contingent upon what claims are made about the motivation for delinquency. Considerations of normative consensus are consistent with the claim that the motive for delinquency is natural and constant. By contrast, if learned and variable motives are posited, then the possibility of normative conflict must be assumed. Otherwise the content of learned definitions could not vary. In the final analysis, the question of whether or not control theory and differential



association theory are compatible depends almost completely upon whether the variant of control theory one selects denies the role of human learning in the etiology of delinquency. Whereas Hirschi's (1969) social bond theory downplays learning, Friday's (1983) role relations theory does not. As already shown, the latter is consistent with the position that delinquent motives are learned and variable as well as with the assumption that normative conflict and normative consensus can exist side by side.

In summary, the statements of social control theory and differential association theory can be combined to form a more complete explanation of etiology at the micro level of analysis. The position taken in this research is consistent with Elliott et al's. (1985, p. 38) conclusion "that it is the joint occurrence of weak bonding to conventional groups/norms and strong bonding to deviant persons and groups, that maximizes the probability of [youth crime]." Association with delinquent peers is commonly a necessary but insufficient condition for youth crime. What is frequently required in addition to such association is a lack of conventional integration, since integration can insulate against a learned propensity for delinquency. Further support for this claim comes from recent evidence indicating that adolescent developmental sequences are relevant to the process of becoming delinquent. Specifically, associations in the peer group tend to assume salience above and beyond the salience of conventional integration as youths mature from early to mid adolescence (Agnew, 1985; LaGrange & White, 1985; Patterson & Dishion, 1985; Thornberry, 1987). There is also

mounting evidence to support the contention that delinquent behavior patterns, once initiated, tend to further weaken conventional bonds in addition to promoting assimilation into the delinquent peer group (Agnew, 1985; Elliott et al., 1985; Liska & Reed, 1985; Thornberry, 1987). That is, delinquent behavior exerts reciprocal effects on patterns of social integration. Delinquency tends to perpetuate itself by weakening conventional integration and increasing integration in delinquent groups. In view of the proliferation of such evidence, it should be clear that a comprehensive micro level analysis requires a combination of control and association or learning principles.

Micro Level Theory and Critical Theory. There is a good reason for combining control and differential association theories at the micro level with critical theory at the structural level. Critical theory can be employed to derive explanations of why low levels of conventional integration have developed and why the delinquent peer group has assumed a position of greater salience among youth in modern American society. In turn, this theoretical linkage translates into applied benefits. Linking micro level theory with critical theory helps ensure the development of a more complete and effective intervention program because the problems and needs the intervention is meant to target at the micro level can be understood in the wider socio-historical context. Therefore, it is possible to gain a greater appreciation of the range of issues that need to be considered during the program development process.

In addition to this complementary feature of the critical orientation, there are also some important points of overlap between the three theories being considered here. Consistent with differential association and the role relations variant of social control theory, critical theory proposes that American society is mostly characterized by normative conflict. The main point that critical theory adds with respect to normative conflict is that conflict is not only a reflection of variable social definitions for appropriate behavior. Conflict is viewed as being grounded in the mode of material production as well as the structure of power relations. The materialistic basis of conflict results from fundamental oppositions between groups in a class stratified society. Social classes are defined by their relationship to the ownership and control of the mode of economic production. Correspondingly, ownership and control of the mode of production is seen as a major basis of one group's power over another. This is why critical theorists suggest that any analysis of normative conflict should address the concepts of power, class, and materialism as well as competing ideological definitions of appropriate behavior (Bohm, 1982).

At the same time, critical theory need not be seen as denying that American society is characterized by a modicum of consensus over norms and values amid the ubiquitous structure of normative conflict. (See Eitzen, 1988, pp. 54-70, for a clear discussion of this point.) What critical theory adds to complement the micro level theories is the following. Whenever general instances of consensus are observed (i.e., whenever values and norms that most

all Americans accept are examined), the question to be addressed is whose interests are really being upheld by the consensus. The answer, according to critical theory, is that the interests are those of the groups who possess sufficient monetary and political resources to elevate their norms and values to a position of consensus. Ironically, this means that consensus is not always the result of voluntary agreement. Consensus is frequently the result of either overt or subtle (i.e., ideological) domination. In this sense, consensus can be viewed as a form of false consciousness.

Critical theory is also consistent with the position of the two micro level theories that the motive for youth crime is learned and variable. Critical theory is especially consistent with role relations theory in this respect because both theories posit that the motive for youth crime cannot be separated from changing conditions at the structural level of analysis. Structural conditions influence the content of learning by affecting the normative standards of the social institutions in which learning and socialization occur. Differential association theory also locates the ultimate source of the motive for youth crime in the social structure by virtue of its reference to the concept of differential social organization, but differential association is somewhat less explicit about this linkage than the role relations model.

#### Theoretical Elaboration

The complementary nature of critical, control, and differential

association theories has been noted, and the justifications for combining the theories have been presented. It is now time to see how control and differential association theories can be linked with critical theory for purposes of expanding scope. Linkages will be demonstrated by reference to the three focal points of critical theory which were explicated earlier in the chapter.

Social Position of Youth. The historical research discussed earlier makes it clear that the structural reforms resulting from the child saving movement went beyond a moral concern over child welfare to support the expanding political economy of the late 1800s. As the socially defined position of youth changed with developments in the American political economy, the social institutions traditionally responsible for maintaining informal control over youthful conduct (i.e., work, family, and community) gradually surrendered this function to the juvenile justice system. In effect, a formal externalized, coercive institution was superimposed upon traditional institutions, thereby diminishing the control responsibilities of the latter. The capacity of traditional institutions to exert control was also lessened due to changing definitions of youth. The encroachment of age divisions functioned to curtail youthful participation in "adult" activities (Friday & Hage, 1976). The degree of integration between youths and conventional society was diminished because the roles and responsibilities youths were traditionally expected to fulfill became altered. Traditional, clearly defined roles in the institutions of work, community, and

family were eliminated and replaced by increasingly ambiguous roles in the school and peer group, leaving youths without a sense of immediate purpose and direction. In essence, age divisions precluded youthful participation in conventional institutions and created the necessity for increased youthful participation in the peer group and school.

A number of theorists (Bute, 1981; Christie, 1978; Friday & Hage, 1976; Greenberg, 1977b) have pointed out that the exclusion of youth from the labor market is an especially important factor for explaining delinquency. This is true because youths' choices for the autonomous pursuit of their interests became more limited. Youth, as a social group, became more reliant upon their parents for finance and upon the school and peer group for esteem and status, since these things were no longer obtainable via participation in work.

It is clear that youths from all class levels have been affected by labor market restrictions. All youths are the subject of child labor laws and mandatory education legislation. However, the effects are especially pronounced among lower class youths because of the inability of their parents to serve as a source of finance. It is understandable, therefore, that illicit activities (e.g., theft) have become a viable substitute means for attaining material possessions, as Merton (1938, 1957) suggests. Furthermore, illicit activities also represent a substitute source of status both because status is so commonly measured in terms of material possessions and because a willingness to engage in illicit activities can

be a symbol of status in its own right.

The fact that youths became increasingly reliant upon the school for esteem and status is relevant as well. Not all youths are able to gain status from the educational experience. The school is not only permeated by middle class standards, as Cohen (1955) suggests, but is segmented along competitive lines of talent and ability that parallel those of the labor market (H. Schwendinger & J. Schwendinger, 1978). It is likely that youths who are ill prepared to conform to the demands of school will find the experience alienating and degrading rather than status enhancing. Therefore, it should not be surprising if like-situated peers and unconventional activities come to assume more salience than the school for providing substitute status and esteem.

Changing structural conditions, then, led to an altered definition of the position of youth in American society. The definition was congenial with the demands of the political economy. In turn, the socially defined position of youth led to diminished integration between youths and the conventional institutions of work, community, and family. The socializing role of the peer group and the school became more salient. If the degree of integration between a youth and the school as well as other conventional institutions is low, the peer group becomes the only remaining institution with major socializing potential. It is in the peer group that the principles of differential association described earlier become operative and where motives for delinquency are acquired.

Commodity Relationships. The theorists who have addressed the issue of why commodity relations permeate the structure of American society (Colvin & Pauly, 1983; H. Schwendinger & J. Schwendinger, 1985) have also discussed how such relations are relevant to the micro level of analysis. Colvin and Pauly propose that the basic structure of commodity relations serves to pattern social relationships in the institutions of work, family, school, and peers. Like Friday (1983), these theorists see the social relationships that are formed through socialization as being relevant to delinquency by virtue of the control these relationships exert over deviant action. Furthermore, both Friday and Colvin and Pauly emphasize the quality of relationships over the quantity. According to Colvin and Pauly, the more coercive and less intimate the relationships encountered in various conventional socialization contexts, the more alienated the individual becomes in his or her orientation toward conventional authority. Given a high degree of alienation from conventional authority (i.e., low conventional integration), peer associations become more salient and the probability of delinquent behavior increases.

In Colvin and Pauly's (1983) model, the structure of wider productive relations is said to affect the social control mechanisms operative in the workplace. That is, the various control mechanisms employed to compel adult workers to comply with the demands of their enterprises (e.g., threat of dismissal and layoff, wage levels, technical quotas, advancement opportunities, and manipulation of status) are a reflection of more general exchange relations which



emphasize competition and profit over cooperation and welfare. Furthermore, there is variation in the specific nature of workplace control mechanisms. Whereas some mechanisms are highly coercive and externalized in orientation (e.g., threat of dismissal), others are more subtle and internal in orientation (e.g., manipulation of the status hierarchy). In general, the more divorced a class of workers from ownership and control of the means of production, the more coercive and externalized the mechanisms used to control the workers. The mechanisms used to control assembly line workers, for instance, are more coercive than those used to control plant managers.

The relations of control to which adults are exposed in the workplace affect the control mechanisms they employ as parents in the institution of the family. "Through the process of parental control over children, a parent's bond to the authority of the workplace is reproduced in the child's initial bond to parental authority" (Colvin & Pauly, 1983, p. 535). For example, adults who are exposed to a high degree of coercive, external control at work are likely to practice the same type of control as parents. By contrast, adults who are expected to exercise more autonomy and internal control as workers are likely to orient their children toward internal, noncoercive self-control. The greater the coerciveness of family control practices, the more alienating and negative the parent-child relationship. Therefore, wider commodity relations are linked to family relationships through the median of workplace control (Kohn, 1977).

Consistent with the observations of H. Schwendinger and J.

Schwendinger (1978), Colvin and Pauly (1983) recognize that the school experience is designed to provide for the needs of the labor market. As a result, the structure of wider commodity relations not only affects family socialization but is also the basis of the type of control mechanisms employed in the school. Moreover, the quality of family relationships formed during the earliest years of socialization is likely to affect school relationships. Children who develop alienated relationships with their parents due to overly coercive parental control practices are likely to be perceived as requiring coercive control in the school environment, since these children will tend to display negative orientations toward authority. According to Colvin and Pauly (p. 537), "a child with negative initial bonds is likely to be placed in a control structure at school that parallels the coercive family control structure that produced the child's negative bond." As coercive relations develop between children and school authorities, children are likely to become alienated from school, leaving them poorly integrated with the school as well as the family.

As children approach adolescence and as the scope and frequency of peer associations expand, earlier patterns of social integration become crucial. Colvin and Pauly (1983) suggest that the quality of prior relationships in conventional institutions directs youths' choices for peer group associations. Youths with similar levels of integration tend to be drawn into association with one another. Youths who are alienated from conventional authority by virtue of prior coercive relationships tend to associate with peer groups that

display a similar orientation toward authority. These groups are frequently permeated by delinquent norms and definitions. Given sustained interaction with delinquent peers, differential association thereby predicts an increase in the likelihood of delinquent behavior.

The theoretical position advanced by H. Schwendinger and J. Schwendinger (1985) adds important considerations to Colvin and Pauly's (1983) analysis. According to former writers, the structure of commodity relations at the macro level is related to youth crime because this structure serves to undermine the moral, constraining element of the ethical standards youths adapt in their interpersonal interactions. Wider commodity relations encourage youths to orient their group activities toward individualistic patterns of commodity consumption as propagated, for example, through marketing endeavors in the media. Youth activities are governed by narcissistic, materialistic standards instead of by moral concerns over communal welfare. This observation is supported by the finding of H. Schwendinger and J. Schwendinger that the various adolescent groups in their study commonly identified and distinguished themselves on the basis of material possessions and commodity consumption. Accordingly, the groups became stratified in relation to one another, exacerbating patterns of competition for status.

Ethical standpoints that are governed by an emphasis on competitive individualism and materialistic consumption tend to encourage rather than discourage illicit activities among youth, owing to a lack of regard for the welfare of others. This is especially the

case whenever such activities are reinforced through peer group pressure to conform to materialistic standards. Under these conditions, youths' actions are often self-serving and harmful to other people not because youths have narcissistic drives as Hirschi (1969) suggests, but because their actions are in line with the dominant standard for social relations in American society.

It should be recognized that there is an important linkage between the points made by H. Schwendinger and J. Schwendinger (1985) and the earlier analysis of the changing social position of youth. One of the by-products of child saving reforms which excluded youths from adult activities and traditional responsibilities was an increase in the amount of leisure time afforded youths. Given the gradual influx of reforms that relieved youths of traditional roles in work, community, and family, time that was not explicitly devoted to school became free time. Increased amounts of leisure time created the possibility for heightened exposure to materialistically-based peer group activities.

H. Schwendinger and J. Schwendinger (1985) describe how the negative impact of commodity relations on peer groups can be circumvented. This discussion will be summarized here because it is consistent with the positions of social control and differential association theories. It is possible for some peer groups to develop moral standards that oppose illicit activity on their own. H. Schwendinger and J. Schwendinger found that such standards often developed around specific kinds of group activities and pursuits such as church, athletic, scientific, and artistic pursuits. These

groups are often characterized by strong anti-delinquent norms and, therefore, a decreased likelihood exists that delinquent behavior patterns will be acquired. In addition, youths can refrain from delinquent behavior by virtue of strong social relationships in conventional institutions. That is, a high degree of conventional integration can serve as a buffer to delinquency even if delinquent associations are present. As H. Schwendinger and J. Schwendinger note:

The development of interests that habitually galvanize their lives around family activities or youth service programs can also keep them within the law. Family relations and youth programs may buffer the moral contradictions, the individualistic standpoints, and the status conflicts that arise spontaneously in society at large. Delinquent behavior can be minimized if these institutions encourage alternative values or if their resources are adequate to motivate and capture sufficient numbers of youth in challenging activities. (p. 126)

Social Inequality and Material Deprivation. To understand how structured inequality and poverty affect social institutions in a manner that promotes youth crime, it is helpful to consider the works of Currie (1985), Kramer (1984), and H. Schwendinger and J. Schwendinger (1985). These writers are in agreement with Friday's (1983) role relations model. They contend that unfavorable economic conditions at the structural level upset the integrative relationships at the institutional level which are responsible for the maintenance of informal social control.

Kramer (1984) makes this point explicit in his discussion of how the American capitalist structure affects social institutions. He contends that poverty and inequality function to destroy

cooperative social relationships, replacing them with a spirit of impersonal competition conducive to predatory delinquent victimization. The tensions and stresses associated with being economically disadvantaged join with the competitive ethos fostered by commodity relations to undermine intimate, cooperative relationships in the institutions of family, community, school, and peers. As Kramer (p. 273) notes, "these structural forces, thus, differentially affect the ability of these institutions to effectively socialize the young and develop role relationships conducive to non-criminal behavior."

Currie (1985) provides concrete examples to illustrate how unfavorable economic circumstances affect the family. Consistent with Colvin and Pauly's (1983) position, Currie suggests that family processes cannot be separated from the wider structural forces in which these processes are embedded. Recall that Colvin and Pauly are interested in the way workplace control structures (which are based upon the structure of commodity relations) impact on parental control practices. More coercive, punitive control practices are postulated to be associated with a higher likelihood of delinquency because such practices alienate youth from conventional influences and leave them more susceptible to delinquent peer influences. In the same vein, Currie points to the high positive association between exposure to child abuse and delinquent behavior. He adds that abusive behavior on the part of parents does not occur independently of the social structure. It is encouraged by a structural emphasis on competition and staunch discipline as well as by the

hardship and stress economically disadvantaged families must endure on a daily basis.

Currie (1985) also identifies several other associations between the social structure and the family. For example, he points out that many disadvantaged American families are too large relative to the available economic resources. This promotes tension within the family and leads to competition among family members over scarce resources. Likewise, Currie takes note of the relationship between single-parent (i.e., mother only) homes and delinquency. He attributes this not only to the inadequate pay and poor advancement opportunities afforded working class mothers, but also to the stratified nature of day care services in America. Too often, because of the lack of adequate services available to disadvantaged parents, conventional socializing influences are not substituted in the working mother's absence. Currie also explores the long established relationship between broken homes and delinquency among disadvantaged groups, noting that economic stress is often a major impetus for marital conflict. Frequently, "the broken family has a history of conflict and discord (and sometimes violence) that precedes the break itself, and. . .the break precipitates a decline in the resources necessary to insure a supportive environment for child development" (p. 195). Again, the central point is that the institutional and individual level correlates of delinquency cannot be understood in isolation from the American political economy.

On the other hand, it is worth noting that while a capitalist political economy may be conducive to delinquency, this type of

structure is not sufficient, in itself, to promote high levels of youth crime. Whether or not levels of youth crime will be high under capitalism depends a great deal upon the relationship between the social structure and social institutions. If structural conditions function to destabilize and disintegrate conventional institutional relationships, or if little government action is taken to prevent them from doing so, there is a much greater chance that delinquent peer groups will assume greater salience during adolescent socialization.

These points are supported by the observation that not all capitalist systems have high rates of youth crime. As an example, Japan is a highly developed, affluent, capitalistic nation which has traditionally had little in the way of a delinquency problem (Clifford, 1976). A major reason for this, according to Clifford, is that Japan has been able to preserve a structure of cooperative, integrative relationships in traditional institutions thereby enhancing informal social control. Currie (1985) adds the important observation that Japan is characterized by less inequality than the United States. That is, economic affluence has been shared more evenly by all members of Japanese society. In America, by contrast, high levels of structured inequality and low conventional integration at the institutional level of analysis foster resentment and interpersonal competition at the individual level.

In this context, it is instructive to note a recent study by Fenwick (1983). He observes that as capitalist structure of Japanese society has steadily become more akin to that of American



society, Japan's delinquency rates have increased. Fenwick points out that sustained economic growth and the expanding need for highly skilled labor has functioned to isolate Japanese youth from the institution of work. The emphasis on technological skills has also made Japan's schools more competitive, thus alienating larger numbers of youth. Similarly, the urbanization associated with industrial expansion and economic development has led to a decline in extended family ties. Rapid urbanization, moreover, has functioned to undermine a sense of community. According to Fenwick, the result is that youths, given fewer conventional role relationships, have become more dependent on the peer group for socialization. This, in turn, has led to the rise in delinquency.

H. Schwendinger and J. Schwendinger (1985, pp. 10-17) advance a similar theoretical position. According to these theorists, delinquency rapidly escalates when the development of capitalism begins to annihilate the informal social relationships which serve to prevent youth crime. "The effects of industrial growth depend on how the capitalist mode of production is articulated with other economic relationships" (p. 11). To the extent that the expansion of capitalism destroys older, traditional economic relations and replaces the informal controls corresponding to older relations with formalized state control, the chances of delinquent behavior increase. Furthermore, H. Schwendinger and J. Schwendinger are aware of the negative effects that poverty and economic hardship can have on those insulative relationships that remain under advanced capitalism. They point out that economic insecurity tends to create

internal divisions in working class institutions, making them highly competitive and individualistic. That is, communal relations are replaced with commodity relations. "When economic insecurity increases and supportive communal relationships decrease, families fall apart and crime and delinquency increase rapidly" (p. 23).

Currie (1985) points out that the negative effects of poverty and inequality can generally be forestalled, at least to some degree, by the provision of adequate, long-term welfare measures to cushion the effects of structural forces on social institutions. These measures need to support cooperation and unification in working class institutions in order to offset the effects of structured unemployment, poverty, and inequality. This entails, for example, ensuring that there are enough meaningful jobs (not simply mundane, dead-end jobs) for unemployed individuals at an adequate wage to instill a sense of social purpose and buffer the disintegrative impact of economic insecurity. It also entails ensuring adequate support, in the form of temporary income and services, for families in need. By Currie's assessment, the United States has failed in this regard when compared to Western European nations like Sweden. The low level of integration in traditional American institutions and America's high rate of delinquency reflect this fact.

#### Theoretical Implications

It has been demonstrated how a critical analysis of social structure can be linked with social control and differential

association theories at the micro level to expand explanatory scope. The task in this section is to derive policy implications that are viable for juvenile court workers.

The unifying theme of the foregoing theoretical perspective is that structural conditions (i.e., the socially defined position of youth, the structure of commodity relations, and structured inequality and poverty) function to undermine relationships in a variety of conventional socializing institutions that are responsible for exercising informal control over behavior. Given a low level of social integration within and across conventional institutions, the delinquent peer group is able to assume more salience during the socialization process. In turn, the likelihood of delinquent behavior increases due to excessive associations with delinquent peers. The implication for court intervention, therefore, is that programming efforts, instead of focusing upon formal control or upon addressing an isolated element of clients' problems and needs, should employ multi-faceted interventions to enhance the quality of informal relations in the major conventional socializing institutions. At the same time, attempts should be made to promote positive (as opposed to delinquent) influences in the peer group.

In reference to the etiology of delinquency and its control, Friday (1977) observes:

Crime is a reflection of societal values, not a violation of them. Crimes generate from the inconsistencies between generalized values and individual position. . . . The acceptance of values is in reality a function of the vested interests one has in those values. Are they relevant for an individual's own survival? If they are relevant, they are perceived as legitimate and right; if not,

no form of punishment, penalty, or sanction can deter their violation. . . . Prevention lies in the ability of the society to co-opt, to integrate individuals to the point that their vested interests coincide with the society's. (p. 168)

According to Friday's (1983) logic, such integration can be accomplished by enhancing the quality of informal relationships in social institutions and making divergent interests more congruent so that these relationships can function as effective internal buffers to delinquency. Recent research on criminal deterrence (Bishop, 1984; Paternoster, Saltzman, Waldo, & Chiricos, 1983) strongly supports this logic, demonstrating the efficacy of internalized, informal mechanisms of control over externalized, formal-legal sanctions.

It might seem that the juvenile justice system is irrelevant to this agenda. The juvenile justice system in general and the juvenile court in particular are often thought of as exclusively formal mechanisms of social control. And this is true so long as total reliance is placed upon the capacity of juvenile justice agencies to coerce and punish juvenile offenders. However, there is no good reason why the juvenile court cannot be incorporated as part of an effort to strengthen informal mechanisms of control. In fact, the assumption that juvenile probation can affect offender rehabilitation is based upon this very logic. Court-based interventions can be employed to supplement the informal controls operating in institutions such as the family and community rather than being imposed in lieu of these informal mechanisms of control. Juvenile justice has potential for enhancing informal control to the degree that the

juvenile court can gear its focus to improving social relationships in other social institutions, toward facilitating integration between youths and conventional institutions and transposing the peer group into a positive socializing influence. The juvenile court itself has become an ingrained social institution that shows few real signs of being abolished in the immediate future. The only alternative, therefore, is to allow the court to flourish exclusively as a formal coercive mechanism of control that replaces more than it supplements the control functions of informal institutions. The labeling perspective, it should be noted, attests to the counterproductiveness of pursuing this alternative strategy. The same is true of the philosophy of community corrections in general and of juvenile probation in particular (cf. Smykla, 1981).

#### A Caveat Regarding Critical Theory

A caveat is in order because the implications following from critical theory, while somewhat compatible with those just described, also diverge from the above discussion in important ways. The point of compatibility can be appreciated by realizing that critical theory, differential association theory, and the role relations variant of control theory all imply that informal mechanisms of control have far more potential for preventing youth crime than externalized, formal mechanisms which rest on the assumption that punishment and coercion can be used to ensure compliance. As Michalowski (1983, p. 14) points out, "the more individuals are

integrated into a network of [informal] social relations. . . the less likely is the evolution of elaborate forms of deviation such as criminal predation upon others." This is why Michalowski, as a critical theorist, supports attempts to deformatize social control efforts in American society. "The more bureaucratic, formal, and distant both temporally and socially the form of social control is, the less effective it will be" (p. 14). This observation is partially consistent with the court-based intervention described in the next chapter. The fact that the intervention operates out of a traditionally coercive institution of control (i.e., the juvenile court) should not obscure its potential for enhancing informal control in social institutions. As mentioned before, given the stability of the juvenile court, the counterproductive alternative is to allow the court to function in its formal capacity.

However, there is another side to the issue, and this is where the discrepancy emerges between the implications of critical theory and those following from social control and differential association theories. While both the critical and micro orientations favor informal over formal control, these orientations do not have the same conceptions of how informal control efforts should be pursued. A court-based intervention that seeks to enhance informal control by fostering integration to norms and values in conventional social institutions is not likely to be hailed by all critical theorists. Instead, some critical scholars may inquire about who stands to benefit from the inculcation of such conventional norms and values. The likely answer is that it is the groups that possess the

resources to elevate their norms and values to a position of consensus. The intervention, then, is likely to be construed as an attempt to more thoroughly integrate youths into the very structure of inequality and oppression that is viewed by critical theorists as being the source of delinquency. Rather than preparing youths to question, challenge, and alter the political economic structure, the intervention might be faulted for teaching them to accept and preserve that structure (i.e., for reinforcing false consciousness).

The discrepant implications can be further understood by examining the policy directions outlined by critical theorists. Critical theorists generally maintain that truly effective crime control will ultimately necessitate a radical restructuring of American society so as to drastically reduce inequality and class oppression. Recently, however, an increasing number of these theorists have stated that programs which may help relieve immediate problems within the existing structure should not be forsaken (Currie, 1985; Kramer, 1984; Michalowski, 1983; Pfohl, 1985; Platt, 1984; C. Robinson, 1985). The suggestions of Michalowski are exemplify some of the reforms sought by critical scholars. Michalowski describes two categories of reforms which he believes are necessary to affect better crime control in American society. These categories include: (1) reforms designed to reduce inequality and (2) reforms meant to communalize social control.

A Note on Liberal Reform Efforts in Juvenile Justice

The reforms advocated by critical criminologists, like Michalowski (1983), particularly economic reforms meant to reduce inequality, are badly needed in American society. This much is clearly apparent from the foregoing theoretical analysis of youth crime. It is doubtful whether the nation's delinquency problem can be rectified in the absence of interventions aimed at the structural level. As things now stand in the United States, the lucrative rewards of many illegal behaviors (e.g., selling drugs) simply make a mockery of the benefits of conventional education and work. No amount of punishment and coercion can change this fact. Youths must perceive tangible opportunities in the areas of education and work, and for too many youths, such opportunities are currently not there to be perceived. Hence, economic reform is imperative.

At the same time, irrespective of long-term structural agendas, immediate efforts are needed to aid those youths presently caught up in the juvenile justice system. Here is where the intervention programs advocated by liberal proponents of the rehabilitation model can be dovetailed with the implications of critical theory. Attempts to communalize social control (Michalowski, 1983) can be incorporated as part of the mandate of the juvenile court. As others (Cullen & Gilbert, 1982; Currie, 1985) have noted, failure to recognize this point constitutes a surrender of the responsibility for devising juvenile justice policy to the coercion-minded political right. Such a surrender means more ineffective punishment and



oppression of youth, not less. As Cullen and Gilbert state:

The conclusion that true justice must await the arrival of a wider socioeconomic revolution should not be used to legitimate a profound disinterest in the consequences of the current and ongoing system. . . . In the absence of a vast structural transformation of American society, it is certainly a worthy task to press for. . . policies that will eventuate in less injustice and be less repressive. (p. 21)

The remarks of Currie (1985) are also instructive at this juncture. Commenting about the ideological attack on liberal rehabilitative philosophy described in chapter one of this study, Currie places some of the blame for the attack on liberals themselves:

Liberal criminology often couched its approach to crime prevention (and to the rehabilitation of offenders) in individual terms, when a large part of the problem was the weakening of [social] institutions. . . . Much of the liberal emphasis on rehabilitation. . . meant "individual treatment" without regard for the familial and communal networks from which offenders came. . . . In combination with the inadequate appreciation of political economy, this served to turn liberals' attention. . . away from the larger forces that were busily ripping apart the institutional infrastructure of American communities and the socializing capacity of American families.

An anti-crime strategy that seeks to move beyond these limitations, therefore, must adopt a more coherent and consistent set of premises. . . . It should address itself to maintaining the integrity of communal institutions of socialization, livelihood, and support. (p. 228)

Further on, after recognizing the merits of rehabilitative-oriented interventions, Currie (1985) points out:

Thus it is important to think of rehabilitation not so much as something that takes place only within the minds of individual offenders, but also as a process of strengthening their relationships with the communal and family institutions that most influence their lives. (p. 241)

It should be clear that Currie's (1985) position is directly in line with the type of court-based intervention being proposed in

this research. Even if the policy directions implied by critical criminologists (as well as the philosophical assumptions upon which critical theory is based) diverge from the assumptions and implications associated with social control and differential association theories, the rich theoretical insights of critical theory can (and, as Currie suggests, should) be used to guide interventions derived from the micro level theories. This is the only way to incorporate an adequate understanding of political economy with rehabilitation efforts. Furthermore, to entirely exclude a theory from consideration because its assumptions and implications diverge from the tasks confronting juvenile court workers, is antithetical to the method of theoretical elaboration, given that the theory has features which complement those tasks.

## CHAPTER III

### PROGRAMS GOALS, COMPONENTS, AND IMPLEMENTATION

#### Goals of Intervention

Goal specification, the third stage of the program development sequence, is accomplished by considering problems and needs in light of the implications of the theoretical perspective. On the basis of those implications, it must be determined what an intervention should accomplish in order to successfully address problems and needs. It is also important to retain a clear idea of which level (or levels) of analysis the intervention is going to target.

As alluded to previously, probation caseworkers in a juvenile court setting have limited capacity to address many of the structural level factors explicated by the theoretical perspective because they lack the necessary resources and power. Therefore, Project EXPLORE was designed to focus upon both the institutional and individual levels. Many of the problems and needs identified by caseworkers are applicable to these levels (e.g., poor family communication patterns, lack of job seeking skills, disregard for school, poor community integration, and negative self-conceptions), and caseworkers have the capacity to directly address these. While some problems and needs identified during the first stage of program

development are a direct reflection of the structural forces described by the theoretical perspective (e.g., inadequate family income and assistance as well as unavailability of meaningful work for youths), the theoretical perspective, by making the analysis progressively more concrete, promotes understanding of how these forces are related to micro level problems and needs. An awareness of structural level factors allows for development of a more comprehensive, encompassing program to target both the institutional and individual levels.

#### Institutional Level Goals

As noted in chapter two, research (Gendreau & Ross, 1983; W. E. Wright & Dixon, 1977) has demonstrated that multi-faceted interventions are usually superior to singular modality approaches. This means that interventions need to utilize various techniques which address a variety of informal social institutions in addition to individual level factors (Currie, 1985; Gibbons, 1986; Kennedy, 1984; Sundeen, 1983; VanVoorhis, 1987). As Van Voorhis puts it:

Successful interventions must target social institutions and groups as well as individuals. Exclusive attention to the personality or pathology of the offender is likely to be a waste of time if social systems such as families, peer groups, schools, neighborhoods, etc. continue to exercise negative influences. (p. 56)

This line of thinking is consistent with the delinquency prevention objectives outlined by Hawkins and Weis (1985). According to these authors, strategies to reduce delinquency should focus more

upon the units of socialization than upon individual youths per se. Such strategies need to concentrate on establishing bonds to conventional institutions, thus decreasing association with delinquent peers.

However, Hawkins and Weis (1985) are careful to note that strong conventional integration does not preclude peer group interaction and that the peer group can actually be an important source of conventional integration. Given the isolated social position of youth, extensive peer group interaction is inevitable as youths mature through the teen years. Hawkins and Weis suggest that high quality conventional relationships, including conventional peer relations, can decrease association with delinquent peers, thereby lowering the likelihood that illegal behaviors and motives will be learned. Since youths involved with the juvenile court will usually have already formed delinquent peer associations, it is vital that court interventions concentrate on peer associations, shaping unconventional influences into conventional ones.

Therefore, in formulating the components of Project EXPLORE, a conscious effort was made by caseworkers to ensure that individual probationers would participate in each program component as part of a peer unit, rather than participating individually in isolation from fellow probationers. As just mentioned, peer group participation was desirable in order to counteract deviant peer influences and to positively transform the dynamics of peer group interaction. This strategy has been critiqued by Caplinger (1983) for exposing

individuals to delinquent role models and peer reinforcements for illicit activity. However, the strategy can be defended on practical, ethical, and theoretical grounds.

From a practical point of view, an intervention that targets groups of delinquent youth is, of course, far less costly to implement than the same intervention which targets individuals in a one at a time fashion. To circumvent this, Caplinger (1983) recommends using mixed groups of delinquents and nondelinquents for purposes of intervention. Theoretically, however, there is little reason to suppose that "nondelinquents" are in fact nondelinquents. A wealth of self-report research (Tittle et al., 1978) shows that many supposed nondelinquents are in reality delinquents who have, for whatever reason, avoided apprehension and labeling. Practically speaking, moreover, it is likely to be difficult to secure a sufficient number of nondelinquents who are willing to participate in a court-based intervention. Even if a sufficient number could be secured and even if the youths truly were nondelinquent, ethical issues would still need to be considered. If it is possible, as Caplinger maintains, to transform delinquent youth by exposing them to nondelinquents, there is good theoretical cause for entertaining the converse possibility.

The theoretical perspective described in chapter two clearly dictates that, unless the socializing dynamics of the delinquent peer group are positively transformed, the otherwise beneficial effects of intervention may be undermined or offset by deviant peer influences. Recall that it is the interaction between low levels of

conventional integration and delinquent associations which leads to delinquency (Elliott et al., 1985). This interaction is grounded in and constantly reinforced by structural conditions. If negative peer interactions remain during intervention, deviant socialization forces may continue to prevail despite attempts to promote conventional integration. Evaluative research (Andrews, 1980; Byles, 1981; Ostrom, Steele, Rosenblood, & Mirels, 1971) as well as theoretical tests (Elliott et al., 1985; Matsueda, 1982) have provided support for this logic. One of the main features of unsuccessful programs identified by the Gendreau and Ross (1983, p. 34) review was that such programs "failed to neutralize or utilize in a positive way the offenders' peer group."

In summary, by addressing both conventional institutions and the dynamics of the delinquent peer group and by placing less emphasis on the formalized social control functions of the court, Project EXPLORE sought to achieve one major goal at the institutional level. The goal, as identified by caseworkers, was to promote informal control through the enhancement of social relationships and orientation to conventional life opportunities or pursuits. Therefore, strong emphasis was placed on improving the quality of interpersonal relationships in the family, community, and school as well as on transforming delinquent peer relations into a more positive socializing influence. Since youths were attending school instead of working full-time, it was not tenable to concentrate on enhancing extant work relations. Rather, with respect to

the institution of work, Project EXPLORE sought to prepare youths for participation in the adult labor market by helping them learn requisite job seeking and retention skills. Similarly, the intervention was meant to foster youths' interest in work and to promote occupational aspirations. This latter focus was part of a more general effort to orient youths to conventional life opportunities by affording exposure to and instilling interest in a variety of conventional pursuits including family, community, peer, and school activities.

#### Individual Level Goals

The desired outcome at this level was a substantial reduction in the magnitude of youths' illegal activities. It was particularly desirable to achieve a reduction in criminal or delinquent offenses, since these are the most serious problematic behaviors confronting the court. In corollary fashion, it was desirable to reduce further penetration of individual probationers into the formal juvenile justice process, since such a reduction was deemed to be consistent with the emphasis on making the social control role of the court less coercive and formalized. That is, instead of relying solely upon the court to achieve social control, the intent was to rely upon informal institutions.

Theoretically, these outcomes should be obtainable to the extent that the previously described institutional level goal is achieved. However, in order to facilitate accomplishment of the



institutional level goal, caseworkers identified four additional factors at the individual level which they believed could feasibly be addressed through the theoretically directed intervention efforts targeting social institutions. These individual factors include self-conception, social skills functioning, locus of control, and perceptions of the juvenile court. As shown below, an emphasis on each of these factors is consistent with the theoretical perspective presented in the last chapter.

Research has demonstrated that delinquent behavior is frequently associated with a negative self-conception (Reckless & Dinitz, 1967). While researchers have debated the issue of whether negative self-conceptions represent a cause of delinquency or an effect of social reactions to delinquent behavior (cf. Jensen, 1972), the important consideration for purposes of this study is the effect that a negative self-conception has on an individual's capacity to form and maintain high quality, fulfilling interpersonal relationships in conventional institutions. Theoretically, there is reason to suppose that an individual needs to feel positive and confident about himself or herself in order to form and maintain intimate relationships with other people. Otherwise inferiority feelings and defensive actions can undermine successful interaction. Correspondingly, the way others react to an individual often affects the individual's self-conception. If conventional others consistently provide negative evaluations of the individual, a negative self-conception is likely to be formed. As a result, the individual may turn to delinquent peers in order to secure more

positive self-evaluations (Tangri & M. Schwartz, 1967). In view of these considerations, Project EXPLORE was designed to enhance probationers' self-conceptions by promoting the capacity of conventional work, family, peer, school, and community interactions to provide positive feedback.

Similarly, Altschuler and Armstrong (1983) stress that many young offenders have major deficiencies of the general social skills necessary to establish and maintain meaningful relationships in conventional institutions. The findings of a study by Kaplan and Arbuthnot (1985) lend support to this contention. Kaplan and Arbuthnot reported that delinquent youths, especially males, showed less empathic and cognitive role-taking skills than their non-court-referral counterparts. From a theoretical standpoint, high quality interactions in social institutions can be conceptualized as being contingent upon the repository of social skills that individuals bring to interactional contexts in institutional settings. Furthermore, meaningful interactions in these settings can build and reinforce social skills. Indeed, Gendreau and Ross (1983) found that effective interventions tended to focus upon the quality of interpersonal relations, stressing empathy, open communication, and trust. Project EXPLORE was therefore designed to improve social skills functioning in various institutional contexts.

Research by Parrott and Strongman (1984) at the individual level has demonstrated a relationship between external locus of control and delinquency. To clarify, many youth offenders simply do not sense an ability to exercise effective personal (inner) control

over their environment, believing that the course of their lives is determined by external forces beyond their control. This observation is supported by the conclusions of both W. B. Miller (1958) and H. Schwendinger and J. Schwendinger (1985). To some extent, the perception of external control is entirely warranted. The theoretical perspective dictates that structural level conditions limit the possibilities for personal control by curtailing choices at the individual level. However, to state that structure curtails the choices that are possible is not tantamount to stating that structure eliminates all choice. Individuals operate within the parameters of choice set by social structure (cf. Friday, 1988). To be successful, an intervention obviously requires that individuals recognize that some choice exists and, hence, that they have some potential for exercising control over their lives. Interventions mandate active initiatives on the part of individuals because, if individuals retain an entirely passive role, change is unlikely to be forthcoming. This is why highly formalized, punitive legal control mechanisms so often fail to alter behavior. These mechanisms are external to the individual and only exacerbate an external locus of control at the individual level. Project EXPLORE sought to instill an internal sense of control among probationers by affording them the opportunity to experience the results of positive initiatives in informal institutional activities.

Finally, Project EXPLORE was designed to improve probationers' perceptions of the juvenile court. Based upon a study comparing the social perceptions of incarcerated delinquents with those of high

school students, Minor, Karr, and Davis (1984) have suggested that delinquency interventions are unlikely to produce desired outcomes if the subjects of intervention (probationers) harbor highly unfavorable perceptions of the agents responsible for carrying out the intervention (caseworkers and other court representatives). That is, youths are likely to scoff at and reject the change efforts of those with whom they feel no sense of rapport, trust, or respect. This has long been held basic to the voluntary relationship between clients and counselors (cf. Egan, 1982) and is especially germane to corrections where the participation of clients is mostly nonvoluntary. Therefore, through sustained, informal caseworker-client interaction during the course of Project EXPLORE, an effort was made to improve youths' perceptions of caseworkers in particular and the juvenile court in general. This goal is consistent with the emphasis upon deformatizing the role of the court.

In summary, Project EXPLORE addressed the self-conception, social skills, locus of control, and court perception variables at the individual level in order to facilitate the probability that institutional level objectives would be achieved. These four variables are consistent with the institutional level goal, as dictated by theory. Moreover, these variables were thought to be important prerequisites for sustained intervention effects and were believed to be amenable to change through the main intervention components targeting social institutions.

## Intervention Components and Implementation

The intervention components of Project EXPLORE were formulated on the basis of: (a) the problems and needs identified by caseworkers, (b) theory, and (c) prior evaluation studies. The prior evaluation studies are reviewed in this section. Subsequently, each component of Project EXPLORE is described.

### Previous Research

A review of past studies (cited below) indicated that there are several specific types of interventions which can be usefully employed in a peer group, court-based context. These interventions were believed to be consistent with the implications of theory. The interventions include: (a) family interventions, (b) outdoor experiential programs, (c) job related interventions, (d) school support interventions, and (e) approaches oriented toward involving youths in local community activities. While each of the components is geared toward social institutions, it was believed (as noted above) that these components could also be utilized to alter the individual level variables targeted by the intervention.

Review studies have provided especially strong support for family interventions (Garrett, 1985; Gendreau & Ross, 1979, 1987; Van Voorhis, 1987; Wright & Dixon, 1977). For this reason, and also because of the theoretical salience of family socialization, caseworkers thought it appropriate to make family intervention

the primary component of Project EXPLORE. As Project EXPLORE was originally conceived, its additional components were to include job related, outdoor experiential, school support, and community interventions. Due to the depletion of funds, however, the components meant to promote school and community integration had to be omitted from the intervention schedule. Because of this, such interventions are not reviewed in detail here. The interventions are introduced only to expose the initial planning that went into the fourth stage of program development and to articulate the research literature.

#### Family Intervention

Although interest in the family has varied over the years (cf. Wilkinson, 1974), criminologists have consistently reported correlations between family variables and youth crime (Hirschi, 1969). It is clear that family variables are not the only nor the strongest predictors of delinquency, since these usually explain relatively little variance when compared with other factors such as peer associations (Cernkovich & Giordano, 1987). However, it is equally apparent from the data that the role of the family is too important to be overlooked (Geismar & Wood, 1986).

Criminologist have also debated the issue of whether family structure or family functioning variables are the most salient predictors of youth crime. Early studies concentrated on family structure variables such as birth order, broken homes, and family size. Beginning with the works of S. Glueck and E. Glueck (1950)

and Nye (1958), however, criminologists began to examine family functioning and the quality of family life. Recent research has consistently demonstrated a relationship between unsatisfactory family relationships or interactional processes and youth crime (Cernkovich & Giordano, 1987; Geismar & Wood, 1986; Gove & Crutchfield, 1982; T. F. Johnson, 1975; Kogan, 1980; Norland et al., 1979; Patterson & Dishion, 1985; Peole & Regoli, 1979; Rosen, 1985). Cernkovich and Giordano, for example, reported that families of delinquents tended to display a lack of interpersonal support, a lack of clear communication patterns, and a high degree of dysfunctional conflict. Such variables were stronger predictors of delinquency than family structure. Similarly, Gove and Crutchfield found that the quality of parent-child relationships, as judged by parents, was a stronger predictor of delinquency than family structure. Geismar and Wood reached the same conclusion in their thorough review of the literature. However, these findings should not be taken to mean that structural factors are unimportant because, as Rosen found, functional variables commonly interact with structure. At the same time, it is obvious that court intervention has far greater potential for altering family functioning than family structure.

In view of these findings, it is not surprising that evaluative studies have generally yielded support for interventions which target family interaction and functioning. One of the most acclaimed programs (cf. Geismar & Wood, 1986; Gendreau & Ross, 1987) is that developed by Alexander and B. V. Parsons (Alexander & B. V. Parsons, 1973, 1982; B. V. Parsons & Alexander, 1973). Their intervention is

known as the family function model.

The family function model involves short-term intervention directed at the family unit. The general goal is to modify family interactional processes. Specifically, attempts are made to "develop reciprocity and periods of positive reinforcement; to ensure equality as well as the clarity of both verbal and nonverbal responsiveness; and to accelerate labile, solution-oriented communication patterns" (B. V. Parsons & Alexander, 1973, p. 196). Toward this end, court-referred families receive communication skills instruction in conjunction with training in conflict negotiation. The focus is on teaching family members to clearly identify problematic issues and to negotiate resolutions through assertive but nonthreatening interpersonal exchange. An emphasis is placed on seeing that the opinions of all family members are given equal consideration.

Experimental research on the family function model has provided strong evidence in support of this intervention. The intervention has been shown to significantly improve family interaction patterns (B. V. Parsons & Alexander, 1973). This improvement, in turn, was found to be associated with a significant reduction in official delinquency among randomly assigned program participants (Alexander & Parsons, 1973). Effects were demonstrated for up to 18 months subsequent to intervention.

The findings of Alexander and B. V. Parsons (1973) have been substantiated by others in satisfactorily designed studies (T. F. Johnson, 1975; McPherson, McDonald, & Ryer, 1983). In both McPherson's et al. experimental study and T. F. Johnson's matched groups



study, interventions aimed at improving family relationships and patterns of interpersonal communication were found to be associated with sizable reductions in official delinquency. Youth probationers exposed to family intervention displayed better performance than youths exposed to standard probation supervision.

Although the findings of Spillane-Grieco (1982) and Streit (1981) are not program evaluation results, the findings are relevant in this context because they underscore the importance of establishing reciprocity between parents and youths. Spillane-Grieco demonstrated the need for improving empathic communication between parents and youths in order to prevent runaways. Streit's data imply that interventions which fail to address the family as a collective unit and which focus, instead, exclusively on modifying parental practices are not likely to be as effective as ones that seek to modify youths' actions and perceptions in addition to parental skills. Patterson (1974), however, has claimed some success for an operant conditioning strategy that targets parenting behavior by teaching parents to dispense social reinforcers in appropriate fashion.

The emphasis of researchers on improving communication and interaction skills among families at the institutional level has been matched by a focus on general social skills training at the individual level. Two recent studies indicate that social skills training is a viable intervention strategy for youth probationers (Gross, Brigham, Hooper, & Bologna, 1980; Hazel, Schumaker, & Sherman, 1982). Gross et al. used role playing techniques to

instill a variety of social skills (e.g., appropriate social behavior in different institutional contexts, appropriate responses to criticism, and interpersonal negotiation). The multiple-baseline results demonstrated improvements on a number of measures including parent and teacher evaluations of youths, court records, and school attendance. Hazel et al. also utilized role-playing methods to teach the ability to give positive and negative feedback to others, the ability to accept negative feedback, the ability to resist negative peer pressure, problem solving and negotiation skills, as well as conversation skills. Unlike Gross et al., Hazel et al. did not employ an outcome measure of delinquent behavior. However, Hazel et al.'s results are important because they showed that long-term retention effects are possible with youthful offenders. Social skills, once acquired, were maintained over an eight month period of time. In addition, an earlier experimental study by Sarason and Ganzer (1973) showed that incarcerated youths exposed to social skills training through modeling and group discussion displayed lower rates of offending than a group of control subjects.

The literatures on family intervention and individual social skills training seem to have evolved in relative isolation from one another. However, interventions that concentrate on general social skills functioning at the individual level are theoretically compatible with and can be incorporated with interventions which target family functioning. Effective communication and reciprocity in the family unit are contingent, in part, upon the quality of interpersonal skills that individual members bring to the family context.

Persons with more satisfactory social skills should be better prepared than persons lacking such skills to form meaningful relations with family members.

### Outdoor Experiential Programs

Contemporary outdoor or wilderness experiential programs are derived from earlier Outward Bound models which were designed as alternatives to incarceration (Kelly & Baer, 1968). The Outward Bound concept originated in Wales and was introduced in the United States in the early 1960s. The first European programs were not designed for offenders but for seamen. Since the early 1960s, however, 150 to 200 similar programs for delinquents have been established in this country (B. A. McCarthy & B. J. McCarthy, 1984).

Outdoor experiential programs seek to reduce youth crime by achieving two subsidiary goals. One goal, as discussed by Callahan (1985), is relevant to the institutional level. These programs are designed to transform and improve peer relations by taking the delinquent peer group (usually probationers) out of the street environment and exposing its members to the wilderness. In the wilderness, youths are required to perform a variety of challenging and demanding tasks which mandate the concerted support and cooperation of peers. Attempts are made to gear attention away from deviant interpersonal interactions and toward stimulating, prosocial endeavors requiring collective effort. When negative interpersonal dynamics and peer pressures are detected by staff, these are

identified and confronted. Then, through the provision of challenging interpersonal tasks, opportunities are created for the demonstration of substitute interactions. In short, the idea is to transform deviant peer influences into a prosocial force and to teach youths to resist negative peer pressures by drawing parallels between the peer dynamics operating in the wilderness and those operating in the street environment.

A second goal is relevant to the individual level of analysis. It reflects studies demonstrating that delinquent behavior is frequently associated with both a negative self-conception (Jensen, 1972; Reckless & Dinitz, 1967) and an external locus of control (Parrott & Strongman, 1984). In this vein, outdoor experiential programs are designed to give youths clear evidence of their ability to succeed at challenging tasks (Kelly & Baer, 1971). It is assumed that a demonstration of competence will promote self-confidence and foster a perceived ability to exert effective personal control over a demanding environment. The objective is to make youths aware of their strengths, abilities, and potentials, and to instill a willingness to take positive initiatives.

Several studies have been conducted to determine the effectiveness of these interventions. Using a matched subjects design, Kelly and Baer (1971) compared the merits of an Outward Bound program with a traditional training school program. Recidivism was defined as a return to an incarceration facility following program participation. Findings revealed a 20% rate of recidivism for the Outward Bound group and a 42% rate for subjects released from training school.

Kelly and Baer found that a number of background variables (e.g., age at first court referral and type of offense) also affected the probability of recidivism. However, the questionable outcome measure employed in this study, as well as the lack of random assignment, preclude unambiguous conclusions about program effectiveness. The outcome measure is questionable because, as labeling theory implies, subsequent incarceration is a measure that is biased by a series of official discretionary decisions and is thus not as accurate an indicator of actual offense activity as subsequent arrests or court appearances. There is little doubt that these latter measures are also biased by discretion. However, the magnitude of bias is likely to be less because fewer discretionary decisions are involved.

Callahan (1985) offered descriptive data to support the effectiveness of the Virginia-based Sierra II outdoor experiential program. He reported an 84% decrease in criminal activity among youth probationers who participated in the program. Furthermore, these youths displayed improved self-esteem, a greater internal locus of control, and increased levels of school attendance following program participation. One of the most innovative features of the Sierra II program is that it involved youths' parents. Parents were asked to accompany youths on the outdoor expeditions, and parents also participated in group counseling sessions which preceded and followed expeditions. Callahan observed that parental participation contributes to sustained program effects by improving family relationships, although he offered no data to substantiate this claim.

One of the best designed evaluations of outdoor experiential programs was carried out by Winterdyk and Roesch (1982) in Canada. These researchers randomly assigned 30 juvenile probationers to a traditional probation (control) condition, and another 30 subjects were randomly assigned to an experimental program known as Accepting Challenge through Interaction with Others and Nature (A.C.T.I.O.N.). A battery of self-report instruments was utilized to obtain pretest and posttest performance ratings, and a four to six month follow-up period was employed. Results showed short-term improvements among experimental subjects on measures of peer relationships, self-concept, and relationships with parents and other authority figures. However, both groups displayed a recidivism rate (defined in terms of reconvictions) of about 20%. Despite this disappointing result, the researchers discovered a tendency for experimental subjects to be charged with less serious offenses than controls. It should be pointed out, moreover, that the principle outcome measure (reconvictions) contains considerable discretionary bias and, therefore, constitutes a relatively poor indicator of actual offending. It is unclear why Winterdyk and Roesch did not use their arrest data as the principle outcome measure. Presumably, the arrest data were employed to draw conclusions about offense seriousness.

In view of the finding that gains on the self-report measures dissipated over time, Winterdyk and Roesch (1982) recommend employing some form of community-based follow-up program to help sustain the initial positive effects of outdoor experiential programming. Romig (1978) and Winterdyk and Griffiths (1984) reached the same

conclusions based upon their reviews of outdoor experiential evaluation studies. Hence, the literature supports Callahan's (1985) contention that family intervention might be used as an integral part of and as a follow-up to outdoor programs for probationers.

### Job Related Interventions

A considerable amount of research has recently been conducted on the utility of community-based work programs for adult offenders (e.g., Anderson, 1985; Jacobs, McGahey, & Minion, 1984; Liker, 1982; Rossi, Berk, & Lennihan, 1980; R. R. Smith, 1980). Much of this research has yielded mixed results, but some positive findings have been reported. By comparison, little recent research has been done on the effectiveness of job related interventions at the juvenile level. This stands in sharp contrast to earlier periods when a nation-wide emphasis was placed on delinquency prevention through youth employment programs (cf. Benjamin, Lesh, & Freedman, 1968).

The recent inattentiveness to work interventions at the juvenile level is unfortunate but understandable. It is understandable because, in comparison to adult offenders, relatively few job opportunities are available for youths, and relatively few juvenile offenders are old enough to be considered fully employable. Furthermore, earlier evaluations of work programs for delinquents, particularly a large-scale study by Hackler (1968), failed to yield desirable outcomes. Perhaps these evaluations implied to researchers the futility of such interventions. Nevertheless, the paucity of

emphasis on job interventions over recent decades is unfortunate given the increasingly important role that work plays as adolescents mature into young adults. The theoretical perspective employed in this study clearly dictates that a high level of meaningful integration to the institution of work can serve as a strong buffer against crime among older adolescents and young adults. The perspective also implies that a positive orientation to the prospects of future employment can impede delinquent associations and crime among younger individuals.

Of the recent evaluative studies that have been conducted at the juvenile level, at least one has produced conclusively negative findings. A randomized experiment by B. D. Johnson and Goldberg (1983) tested the combined effects of vocational training and an Outward Bound experience. The results of a three year follow-up yielded no significant program effects, as measured by subsequent incarceration, employment, and school achievement data. B. D. Johnson and Goldberg's findings closely parallel those obtained by Anderson (1985) in a study of the effect of job training on young adult probationers.

Two recent projects have demonstrated more promising outcomes. In ~~the first~~ of these, Rulo and Zemel (1979) evaluated the Youth Opportunities Unlimited (Y.O.U.) ~~program~~, an intervention designed to meet the needs of high school dropouts displaying histories of ~~delinquency~~. The Y.O.U. program is meant to enhance participants' levels of self-esteem and status and to motivate them to succeed at conventional educational and work pursuits. The emphasis of the



program is on furthering educational credentials and on providing career orientations, job skills training, and finally, vocational placement. While not of an experimental nature, Rulo and Zemel's evaluation of 412 probation clients who had completed the program revealed that approximately 70% had no record of future referrals to either juvenile or adult courts. The average referral rate prior to program participation was 4.3 per client. After program involvement, the rate declined to 0.79 per client.

Another probation program with a strong work component is Project New Pride located in Denver, Colorado (USDJ, 1979). The goals of the program are to improve youths' self-conceptions and to promote integration in a variety of conventional institutions, thereby reducing the likelihood of delinquent behavior. A key element of the program is the emphasis on job skills development, career orientation, and eventual part-time job placement. Job skills development is designed to prepare youths to enter the competitive labor market when they reach the appropriate age and is considered a prerequisite to job placement. Youths participate in job skills workshops where they gain experience in completing job applications and interviewing. There is also a focus on developing job retention skills including punctuality, reliability, and interpersonal cooperation. Career counselors work with clients individually to explore career interests and strengths. The work component is combined with an emphasis on academic education and remedial counseling as well as on cultural education (e.g., outdoor adventures, sporting events, and restaurant dinners). Program staff make

efforts to maintain close contact with clients' families and school teachers.

Project New Pride's achievements have been widely cited by community corrections scholars (cf. B. A. McCarthy & B. J. McCarthy, 1984; Smykla, 1981). Research revealed that, over a 12 month period, only 27% of the New Pride clients were rearrested for felony offenses compared to 32% of the matched control subjects. What makes the 27% figure noteworthy is the fact that most of the New Pride clients had lengthy records of serious delinquency upon entering the program. Furthermore, nearly 70% of the program participants were provided with either full- or part-time work placements. The rearrest rate for clients receiving employment placements was one-third the rate for clients not receiving placements. Finally, about 40% of the group chose to return to school to complete their education following program participation.

Outdoor experiential programs and especially family oriented interventions have received somewhat stronger support in the literature than job interventions, despite a strong theoretical rationale for the latter. However, there is cause to believe that job programs can be an effective delinquency reduction strategy when they provide actual employment placements and/or when they are incorporated with additional program components. The unfavorable results obtained by B. D. Johnson and Goldberg (1983) were derived from a program which combined job training with an outdoor experiential intervention, something believed to lack long-term efficacy. By contrast, the Y.O.U. and New Pride programs combined an emphasis on

job skills training and placement with educational components, and the results of these programs were more favorable. Likewise, Sarason and Ganzer (1973) reported favorable outcomes when a job training component was incorporated as part of a larger program meant to enhance youths' social skills. Prior research has not, however, examined the utility of combining job skills training and family interventions.

#### School Support Intervention and Community Involvement Programs

In addition to family, outdoor experiential, and job skills components, Project EXPLORE was initially designed by caseworkers to incorporate interventions targeting social integration in the community and school. Both of these were designed to complement the remaining three components. However, as previously noted, the school and community components were omitted during program implementation due to the exhaustion of resources.

The plan of the community component, supported by research demonstrating an association between a lack of community integration and delinquency (Simcha-Fagan & Schwartz, 1986), was to encourage youthful involvement in a variety of local programs. These included organized recreational and sporting activities, cultural activities (e.g., museum tours and theater), and community betterment or public work projects. The utility of recreational and cultural activities is supported by the evaluation of Project New Pride discussed above. The utility of public service work is

supported by the results of a study by Beger and P. R. White (1981). Since caseworkers had decided to gear the job component exclusively to job skills training and career preparation rather than incorporating actual job placement efforts, the public service aspect of the community component would have complemented the job intervention by providing actual work experience and possibly minimal wage pay.

The school support component is based upon longitudinal research demonstrating a positive relationship between school dropouts and delinquency (Thornberry, Moore, & Christenson, 1985). In addition, the results of past research (Elrod & Friday, 1986; D. C. Gottfredson, 1986) suggest the utility of interventions which seek to promote school integration. Therefore, the plan of the school support component was to improve lines of communication between the court and school authorities and to take additional proactive steps to reduce dropouts by providing various student support services, such as tutorial assistance and discussion groups where common school problems could be addressed.

#### Project EXPLORE and Its Implementation

The institutional level and individual level goals of Project EXPLORE are supported by theoretical rationales, and the tenets of the theoretical perspective are congruent with the problems and needs identified by caseworkers. There is also sufficient evidence from prior evaluative studies to support the combination of intervention components formulated to achieve the intervention's goals.

The intent here is to describe in greater detail each of the particular intervention components that was implemented and to discuss the implementation process.

### Job Preparation Component

This was the first intervention component in the sequence. It was implemented by caseworkers and consisted of 4 two-hour workshops held over a period of two weeks, or two workshops per week. Workshops were held at the court, with the entire group of probationer clients (22 youths, 17 males and 5 females) participating in each workshop. The reason for implementing the jobs component first was to prepare youths for part-time employment as quickly as possible.

Workshop activities were geared toward teaching youths effective job seeking and retention skills, although some attention was directed toward career orientation and aspirations. Youths were first provided with a presentation on effective job seeking skills including how to search out and pursue job openings through initial contacts. Subsequently, youths were instructed on the importance and mechanisms of filling out job applications satisfactorily. Practice job applications were distributed for youths to complete and modify pursuant to staff feedback. Youths were also asked to write mini job resumes consisting of identifying information, experience, strengths, and interests. Resumes were then typed and returned. In addition, practice job interviews were conducted, and video-tape procedures were utilized to give feedback on appropriate

and inappropriate interview behaviors (e.g., dress, grooming, self-confidence, and verbal and nonverbal communication).

Once job seeking skills had been covered, focus shifted to job retention skills so as to convey the message that maintaining a job is as important as obtaining one. The kinds of deficits commonly associated with termination were emphasized (e.g., lack of punctuality, unreliability, doing poor work, and horseplay). Especially strong emphasis was placed on developing the capacities to follow supervisor instructions, deal effectively with employment authority, and cooperate with fellow employees.

Throughout the course of the workshops, continual efforts were made to reiterate a number of themes. One of these was the importance of having youths develop a suitable job history as a stepstone for an adult career. It was pointed out that first jobs represent foundations for future jobs both because of the experience gained and because of the standards that are established against which prospective employers will judge personal character in the future. Linkages were drawn between first jobs and long-range career goals. Similarly, a variety of personal attributes were stressed as they relate to work. These included assuming responsibility, displaying self-confidence, and developing effective interpersonal skills. Attention was directed to these attributes by encouraging youths to participate extensively in workshop sessions. As part of the emphasis on interpersonal skills and relations, a final theme involved using the jobs component as an initial opportunity to establish group cohesion. Cohesion was encouraged as

group members interacted with one another and with the casework staff. Cohesion and a "sense of group" were thought to be important for purposes of ensuring effective group interaction during the remainder of the intervention. However, the intervention component that was most explicitly designed to promote positive group interactions was the outdoor experiential component.

#### Outdoor Experiential Component

The outdoor adventure was the second component of the intervention sequence and was implemented as a prelude to the family relations component. It consisted of outdoor living and intensive program activities at the Pretty Lake Adventure Centre in Kalamazoo, Michigan. In order to allow for greater group manageability and more intensive programming, the group of 22 probationers was divided into three smaller groups of five to nine clients each. Females were assigned to one group, while males comprised the other two groups. (Females and males had to be separated because of the Centre's rules on this.) Each group spent three consecutive days at the Centre, with one group departing before the next arrived. Group members' parents were asked to be present on the third and final day of each group's participation.

Daily program activities were coordinated by caseworkers (four caseworkers per group) and Pretty Lake staff. However, groups were given complete responsibility for coordinating their living arrangements (e.g., preparation of meals and setting up camp sites) in

order to promote cooperation and cohesion. Daily program activities consisted of a variety of physically challenging group tasks requiring interpersonal cooperation, communication, and trust. Activities also consisted of various challenging but incremental and surmountable tasks designed to promote self-confidence and a sense of personal control. Examples of tasks include maze, pine, and oak ropes courses located 15, 25, and 40 feet respectively above ground level, as well as a 50 foot climbing tower which was designed with the assistance of skilled rock climbers to serve as a facsimile of a mountain.

Emphasis was placed on developing rapport between youths and caseworkers by having caseworkers actively participate in group activities. In addition, a main focus of program activities was on encouraging positive peer interaction and collective efforts. Consistent efforts were made by the staff to draw parallels between the interactions required to overcome the collective challenges at hand and negative street interactions. Negative interpersonal dynamics were identified and confronted as they transpired. Daily program activities were video-taped and played back to youths and their parents on the final day, and parallels with street behavior were reiterated. The objective here was to provide an initial assessment of family communication and interaction patterns for purposes of the next intervention component.



### Family Relationships Component

This was originally designed as the middle component of the intervention sequence, with the community and school components meant to follow. Given cancellation of the latter components, however, the family relations sessions actually represented the final component of the sequence. This component was implemented at the court by caseworkers and consisted of 7 two-hour sessions, or one session per week for seven consecutive weeks.

In order to permit favorable client-staff ratios, the group of youths was again divided into three smaller groups of five to nine each. One group was comprised of females and the others of males, with the members being the same ones who had participated together during the outdoor adventure. Parents were also divided into three smaller groups so that the composition of parent groups matched the composition of the respective youth groups. For example, if a given youth had been assigned to youth group one, his or her parent or parents were assigned to parent group one as well. Each of the six groups was assigned two caseworkers to act as group facilitators. All caseworkers followed a standard curriculum that they had devised during stage four of program development (i.e., the component design stage).

The parent and youth groups sometimes participated in separation from one another, but "cooperative groups" were also held, with a youth group participating with its parent counterpart. Whether parents and youths participated separately or together depended on

the content of program activities. While some activities were explicitly designed to encourage parent-youth interaction, others (e.g., parent effectiveness training and social skills instruction for youths) required differential approaches for parents and youths.

Initial cooperative session activities consisted of reviewing the outdoor adventure video-tapes in greater detail. Since new tapes of parent-youth interactions were available, an opportunity was created for families to witness the quality of their existing interaction and communication patterns and to establish goals for change. Initial activities also consisted of caseworker presentations on the definition of "adolescence". These presentations encouraged parents and youths to understand and discuss the uniqueness of adolescence as a life stage. Attention was directed to the common problems and pressures experienced by contemporary teens and their parents. Subsequent cooperative group activities emphasized the development of effective communication, cooperation, and trust patterns among family members. Families were asked to participate in various structured tasks, such as family problem puzzle solving exercises, which required effective interaction patterns.

Separate parent and youth sessions were interspersed among cooperative sessions. Youth sessions were devoted primarily to social skills training of the type discussed earlier in this study. Specifically, youths were instructed on how to develop open and effective communication with parents and on how to overcome barriers to such communication. Trust of parents was emphasized as a prerequisite for effective communication and self-disclosure.

Interruption for clarification and nonthreatening assertiveness were stressed as ways to confront communication barriers. The structure of home rules was assessed, and reasons for rule breaking were explored. The emphasis on home rules was combined with an emphasis on developing effective interpersonal negotiation strategies. Finally, efforts were made to have youths assume greater active responsibility for satisfactory family functioning by helping them appreciate their roles in the family unit.

The content of parent effectiveness training in the parent sessions was designed to complement the content of youth sessions. As in the youth group, communication barriers, effective communication skills, and interpersonal trust and negotiation were stressed. Attention was directed to the importance of negotiating clear and consistent home rules, with the consequences of rule violation known in advance. Rule structuring was combined with a focus on effective family problem solving and conflict resolution. Parents were instructed about their feedback role in helping youths develop positive self-conceptions. Cooperative group sessions afforded families the opportunity to put the content of separate sessions into practice.

#### Additional Considerations

It should be noted that with the exception of efforts to orient caseworkers to the organizing theoretical framework, little explicit effort was devoted to staff training for purposes of Project

EXPLORE. Extensive training would, of course, have represented an additional cost thus reducing the resources available for program activities. Furthermore, training by outside consultants could have undermined the theoretical benefits of staff development by reducing direct staff involvement in program development. That is, the degree of staff commitment to program principles may have been reduced had those principles not have been devised by caseworkers themselves. Rather than providing formalized training, the goal was to capitalize on existing professional resources by utilizing the specialties and prior experiences of caseworkers.

All of the 12 caseworkers who designed and implemented the intervention had a minimum of four years prior experience in juvenile court work. In addition, all held at least Bachelorate degrees, and half held Master's degrees. Caseworkers had been trained in a variety of social science disciplines including education, counseling, social work, political science, sociology, and criminal justice. Three caseworkers had prior training and experience in the area of client job development, and these caseworkers were made responsible for formulating the job preparation component. Likewise, six staff had been trained and certified (through the Pretty Lake Centre) to conduct outdoor adventures. While family relationships represented the most novel area for caseworkers, at least one staff member had specialized training in parent effectiveness training and family counseling. This person played a central role in developing the family relations component.

A final consideration concerns the relatively short length of

the program. The intervention was originally designed to be of six months duration, but with cancellation of the two components, it actually spanned only three months. It is certainly reasonable to question whether three or even six months is sufficient time to affect meaningful and lasting behavioral change. While not much correctional research has been conducted on this specific issue, that which is relevant seems to suggest that the substance, intensity, and integrity (quality of implementation) of an intervention are more important to program effectiveness than duration (Gendreau & Ross, 1983; Murray & Cox, 1979). Perhaps the best evidence supporting the efficacy of short-term intervention is some of the research on the effective programs cited earlier in this chapter. The programs evaluated by B. V. Parsons and Alexander (1973), Gross et al. (1980), McPherson et al. (1983), and Ostrom et al. (1971) were of four weeks, six weeks, three to four months, and two months duration respectively. The question of whether the effectiveness of Project EXPLORE was offset by omitting two of the components can only be addressed by turning to a consideration of evaluative research.

## CHAPTER IV

### RESEARCH METHOD

As the final but iterative stage of the program development sequence, evaluation research is important for determining whether or not an intervention should be retained as an agency service. If the decision is made to retain the program, evaluation results become a useful source of feedback for program modification and further refinement. It is this feature of the sequence that makes program development an iterative sequence.

Recall from the preceding chapter that Project EXPLORE sought to enhance probationers' relationships in social institutions, to orient them toward conventional life opportunities, to improve their self-conceptions and perceptions of the court, and to foster in them a sense of internal control over their lives. Given achievement of these goals, the desired outcome of the intervention was to significantly reduce probationers' illegal behaviors, especially their delinquent activities.

In order to determine whether or not the intervention should be retained as a court service, it was necessary to have a standard against which to compare the performance of program participants. Clients receiving the ordinary probationary services offered by the court served in this capacity. The objective of evaluation

research, therefore, was to make as clear and unambiguous statements as possible about the effects of the intervention in comparison to the effects of the usual probation services.

## Research Design and Subjects

### Research Design

In view of the research question, the decision was made to employ an experimental two-factor partially randomized-groups design. Alternative designs that (realistically) could have been used were not as well suited to the purposes of this research. Any design lacking a separate control group would not, of course, have provided a standard services condition against which to compare intervention effects. Therefore, the central question of the agency (i.e., whether the effects associated with the intervention were substantially more positive than those associated with ordinary court services) could not have been addressed. A nonrandomized design with a control group would have been a great improvement because such a design would have provided a standard against which to compare the performance of youths who participated in Project EXPLORE. Nevertheless, the design would have failed to provide satisfactory control over unwanted sources of variation (e.g., age differences between groups). Owing to the nonequivalence of groups, it would have been impossible to draw confident conclusions about program effects. Even if attempts had been made to match the

intervention and control groups on variables like age, there would have been no way to ensure that all relevant variables had been considered during the matching process. Therefore, the court administration favored random assignment.

It should be recognized that randomization does not solve the problem just described by making groups entirely equivalent. Instead, randomization helps circumvent the problem of nonequivalent groups by creating groups that are probabilistically equivalent from the outset. Analytic steps can then be taken to remove additional unwanted differences.

More specifically, the design employed in this study was a partially randomized 2 X 2 factorial pretest-posttest design, with statistical procedures utilized to control pretest variability. The first factor distinguished the clients randomly assigned to the intervention (experimental) condition from those randomly assigned to the standard probationary services (control) condition. The second, nonrandomized factor (case status) distinguished the clients who had been placed on intensive probation from those placed on moderate probation by the court. Case status was incorporated as a factor in the design in order to control its possible confounding influence and to allow its interaction with the intervention to be studied.

Prior to judicial handling of cases, the court's intake division routinely recommends either a moderate or intensive case status for each youth referral. This is a discretionary decision reflecting factors like the seriousness of the referral offense, the



youth's age at the time of court referral, the youth's legal history, the youth's present and past sociopsychological situation (especially family circumstances), and resource availability. Given adequate resources to support additional intensive cases, intensive status is generally more likely to be recommended for cases exhibiting the following characteristics: (a) more serious referral offense, (b) more extensive legal history, (c) younger at the time of referral, and (d) presence of sociopsychological factors favoring intensive services (e.g., unsatisfactory home environment, drug dependency, etc.). The actual case status assignment is made by the sentencing judge, but it is uncommon for judges' decisions to diverge from intake recommendations.

Case status affects the probation experience. The primary difference is that intensive cases receive at least two contacts per week from caseworkers, whereas moderate cases receive about two contacts per month. In addition, more frequent contacts are made with the parents and school teachers of intensive clients. The behavior of intensive clients, therefore, is more closely monitored than the behavior of moderate clients.

Two limitations of the design are apparent. First, since case status is not a randomized factor, causal statements regarding it are unwarranted. Second, the design does not allow subjects who received the intervention (i.e., intensive and moderate probationers in the experimental group) to be compared with those who received no services whatsoever. Intensive and moderate probationers in the control group received the usual supervision services provided by

the court. While the design fails to allow the effects of the intervention to be compared against a control group that received no services, it does allow a highly meaningful comparison between the intervention and both of the standard probationary services offered by the court (i.e., intensive and moderate services).

### Subjects

Earlier it was noted that the intervention was originally planned to be of six months duration, although it actually lasted only three months. Since it is uncommon for any client, moderate or intensive, to be retained on probation for extended periods of time (one year or less is typical), it was necessary to establish a selection criterion for choosing those members of the court's probation population who were eligible for participation. The criterion needed to: (a) ensure that participants would be under court supervision long enough to receive the entire intervention and (b) ensure a sufficient number of subjects to permit meaningful research comparisons. In order to satisfy these requirements, only probationers with four or more months remaining to be served on their sentences after the start of intervention were made eligible for assignment to the intervention or control condition. Similarly, probationers who were sentenced after the beginning of the intervention were excluded from eligibility because these youths would not have received the complete intervention.

The four month selection criterion was applied to the court's

existing population immediately before pretesting and intervention. A total of 45 probationers were found to be eligible. Of the pool of eligible subjects, 15 had been placed on intensive probation, and the remaining 30 were moderate probationers. Assignment to conditions proceeded as follows. First, the 15 intensive subjects were assigned, with 7 being assigned to the experimental condition and 8 to the control condition. (The decision that the control group would have the extra subject was determined by a coin toss.) Then 15 moderate clients were assigned to the experimental condition, and the remaining 15 were placed in the control group. While experimental subjects were required by the court authorities to participate in the program, it should be pointed out that, for all 45 subjects in the study, participation in the research was a voluntary matter. Agreement to participate was obtained by securing the informed consent of both youths and their parents.

A detailed description of experimental and control subjects' demographic and background characteristics is presented in Table 1 below. These characteristics are important for two reasons. The first reason involves considerations of external validity, or the generalization of findings. While subjects were randomly assigned in this study (thus ensuring a reasonable degree of internal validity), they were not randomly selected from a larger population. This means that findings may be generalized only to a population of youths having characteristics similar to the characteristics of subjects who served in this study. It is important, therefore, to know what those characteristics are. Second, comparison of the

demographic characteristics of experimental and control subjects serves as a check on the presumed equivalence resulting from random assignment.

Table 1  
Subjects' Demographic and Background Characteristics

Variable	Experimental (n = 22)	Control (n = 23)
1. Sex		
Male	17 (77%)	20 (87%)
Female	5 (23%)	3 (13%)
2. Race		
White	16 (73%)	11 (48%)
Black	6 (27%)	10 (43%)
Hispanic	0 (0%)	2 (9%)
3. Age (start of intervention)		
Range	13-17	12-17
Mean	15.36	14.78
Median	16.00	15.00
Standard Deviation	1.26	1.31
4. School Grade (start of intervention)		
Range	6-11	5-11
Mean	9.32	8.74
Median	10.00	9.00
Standard Deviation	1.49	1.48
5. Type of Education		
Public	13 (59%)	13 (57%)
Alternative	9 (41%)	10 (43%)

Table 1--Continued

Variable	Experimental (n = 22)	Control (n = 23)
<b>6. Marital Status (natural parents)</b>		
Married	5 (23%)	3 (13%)
Divorced	12 (55%)	10 (43%)
Separated	1 (4%)	2 (9%)
Widowed	1 (4%)	3 (13%)
Never Married	3 (14%)	5 (22%)
<b>7. Youth's Residence (start of intervention)</b>		
Both Natural Parents	5 (23%)	3 (13%)
Natural Mother Only	15 (68%)	19 (83%)
Natural Father Only	0 (0%)	1 (4%)
Foster Parents	2 (9%)	0 (0%)
<b>8. Number of Siblings</b>		
Range	0-8	0-11
Mean	2.41	2.57
Median	2.00	2.00
Standard Deviation	2.06	2.13
<b>9. Yearly Household Income (dollars)</b>		
Range	6,960-76,371	2,989-50,073
Mean	22,576.09	18,732.57
Median	16,102.00	14,038.00
Standard Deviation	17,909.23	14,037.12
Missing Cases	0	2
<b>10. Public Assistance Household</b>		
Yes	7 (32%)	10 (43%)
No	14 (64%)	11 (48%)
Missing Cases	1 (4%)	2 (9%)

Table 1--Continued

Variable	Experimental (n = 22)	Control (n = 23)
11. Social Security Household		
Yes	1 (4.5%)	4 (17%)
No	20 (91%)	17 (74%)
Missing Cases	1 (4.5%)	2 ( 9%)
12. Mother's Employment Status <sup>a</sup>		
Employed	15 (68%)	14 (61%)
Unemployed	7 (32%)	9 (39%)
13. Mother's Education Status <sup>a</sup>		
Less than 8 Grades	1 (4.5%)	2 ( 9%)
8 Grades	0 ( 0%)	2 ( 9%)
Some High School	5 (23%)	6 (26%)
High School Graduate/GED	10 (45%)	8 (35%)
Some College	3 (14%)	4 (17%)
College Graduate	2 ( 9%)	0 ( 0%)
Missing Cases	1 (4.5%)	1 ( 4%)
14. Prior Court Referrals for Child Abuse/Neglect		
Yes	1 (4.5%)	2 ( 9%)
No	21 (95.5%)	21 (91%)
15. Age at Time of First Court Referral		
Range	7-15	7-15
Mean	12.64	12.39
Median	13.00	13.00
Standard Deviation	2.11	2.17

Table 1--Continued

Variable	Experimental (n = 22)	Control (n = 23)
16. Number Days Served on Probation Prior to Intervention		
Range	1,903-0	954-0
Mean	263.64	215.35
Median	116.50	171.00
Standard Deviation	424.59	209.58

Note. All percentage figures have been rounded.

<sup>a</sup>These data are not reported for fathers because of the high proportions of missing cases--36% of the total for employment and 49% for education.

Referring to Table 1, it is apparent that several differences emerged between the experimental and control groups in spite of randomization. First, the control group contained a higher proportion of ethnic minorities than the experimental group. The control group also contained slightly younger subjects, a difference manifested in the school data as well. While the experimental group contained a slightly higher proportion of dual parent homes, this group also contained a higher proportion of divorce cases. Judging from the data on household income, public assistance, and social security, economic disadvantage was more pronounced in the control condition. This economic difference corresponds to the racial differential.

A final consideration about the groups in this study involves the relatively small number of subjects. The small cell sizes in the design (7 intensives and 15 moderates in the experimental group

and 8 intensives and 15 moderates in the control group) are associated with certain disadvantages. The main disadvantage is a reduction in the power of inferential statistical procedures, or a reduced likelihood that true between-group differences will be detected. As pointed out later, analysis of covariance (ANCOVA) procedures offer a partial solution to this shortcoming because ANCOVA increases power by controlling for pretest differences on outcome measures. However, due to the small sample size, the number of variables that can be utilized as covariates is limited. If pretest measures are employed as covariates, the remaining differences, as outlined above, cannot be corrected due to problems associated with using an excessive number of covariates relative to the number of subjects. (Again, this issue is covered in more detail later.)

On the other hand, it is of course more feasible to collect complete data on a wider range of variables when fewer subjects are involved. Furthermore, increases in sample size should not be seen as necessarily enhancing external validity. In the absence of random selection from a well defined population, external validity is very limited, regardless of sample size. Findings can be safely generalized only to a population with similar characteristics. In research of the type undertaken here where the primary concern is with drawing valid conclusions about intervention effects (i.e., internal validity), the meaningfulness and quality of group comparisons is more important than the actual number of subjects forming the groups being compared. Hence, a larger sample size would have



been desirable for purposes of increasing internal validity (power) but not necessarily for purposes of increasing external validity, given a lack of random selection. However, to the extent that the characteristics of groups are similar to a hypothetical population, there is justification for the use of inferential comparisons.

#### Variables and Data Collection Procedures

A variety of data were collected for purposes of this study including: (a) demographic and background measures (see Table 1), (b) implementation measures, (c) official legal history and self-report pretest measures, and (d) official legal and self-report outcome measures. The purpose of this section is to introduce these measures and to describe the manner in which they were obtained.

#### Implementation Measures

Implementation data were collected to ascertain the extent to which experimental subjects actually participated in and were exposed to the intervention during the fifth stage of program development. Since members of the control group did not participate in the program, the implementation measures were irrelevant for these subjects. The measurement of implementation is an essential aspect of evaluative research (Leithwood & Montgomery, 1980; Quay, 1977), although it is frequently neglected in correctional studies. As Scheirer and Rezmovic (1983) state:

To correctly attribute the observed outcomes of a social program to the intervention, the researcher should have empirical evidence on the extent to which program components were implemented. Without such evidence, researchers may erroneously conclude that an intervention was ineffective when, in fact, treatment implementation was inadequate to afford a valid test of the program. (p. 599)

To address this concern, data were collected on clients' attendance and participation during implementation of each program component. During each of the four job preparation workshops, caseworkers tallied attendance, forming a summative score range of zero to four for each subject. At the conclusion of each workshop, caseworkers subjectively came to an agreement upon a participation rating for each youth. The values and categories associated with the rating were: (a) 0 = very poor, (b) 1 = poor, (c) 2 = good, and (d) 3 = very good. This procedure resulted in a summative range for each subject of 0 to 12 across the four workshops.

In the case of the outdoor experiential component, it was unnecessary to collect data on youth attendance, as all youths were present. However, parental attendance was recorded in dichotomous fashion by indicating whether or not at least one parent was present. The four caseworkers who were present with each group agreed upon overall youth and parental participation scores ranging from zero to three (in a like fashion to the above) at the conclusion of the outdoor adventure. (If both parents were present, a single combined score was assigned. This was done to avoid the confusion of having two parental participation scores available for some subjects and only one available for other subjects.) Youths were also assigned a performance rating by the Pretty Lake staff. The staff

employed an instrument developed by the Centre. Scores ranged from 0 to 24, with higher scores indicating more positive performance. This instrument appears in Appendix A.

The number of family relations sessions attended by each youth was recorded by caseworkers, as was the number attended by at least one parent. Hence, a summative score range of zero to seven was formed for both youth and parental attendance. Participation of youths and parents was scored in a manner analogous to the way participation was recorded for the other components, forming both a youth and a parental summative range of 0 to 21. However, data on parental participation were later found to be incomplete. (Participation was not recorded for two of the parent groups during the fifth, sixth, and seventh sessions.) As a consequence, this variable was discarded for analytic purposes.

#### Pretest Measures, Outcome Measures, and Additional Data

##### Self-Report Measures

A self-report battery was developed before intervention in order to obtain pretest and posttest measures of theoretically relevant variables applicable to the institutional and individual levels of analysis. The self-report instrument used for the statistical comparisons reported in the next chapter contained scales designed to assess each subject on: (a) level of job preparation, (b) attitudes toward school, (c) level of school effort or

involvement, (d) self-conception, (e) locus of control, (f) attitudes toward the juvenile court, (g) attitudes toward probation officers, (h) family relations, (i) peer relations, and (j) level of self-reported delinquency.

The item content and the response format of the various self-report measures that were employed for purposes of statistical comparisons will be presented in the next chapter when the results of factor analysis are introduced. The discussion below concentrates on the sources from which the measures were derived.

The various measures pertaining to school, self-conception, and self-reported delinquency were adapted from instruments formulated and standardized by delinquency researchers at Johns Hopkins University.<sup>1</sup> The locus of control measure appears in Nowicki and Strickland (1973).<sup>2</sup> The remaining measures were developed by the author and the court's Chief Probation Officer. Items appearing in M. E. Shaw and J. M. Wright (1967) were drawn upon in deriving the measures pertaining to family relations, attitudes toward the juvenile court, and attitudes toward probation officers. Likewise, items used in Hindelang's (1973) research were drawn upon in developing the measure of peer relations.

Field Testing. Once assembled, the original version of the self-report instrument was field tested. Field test subjects were 15 male and female youths selected at random from the roster of the Kalamazoo County Juvenile Detention Home. Youth in detention were chosen for field test purposes due to the low likelihood of their

interacting with the probationers to whom the actual pretest was to be administered.

After explaining the purpose of the research, assuring subjects of confidentiality and anonymity, and obtaining informed consent, the field test was verbally administered to the 15 youths at the detention facility by a special education consultant. During testing, test-taking behavior was recorded by two observers. Administration required from 45 to 50 minutes, and subjects were then asked to provide reactions to the instrument.

Subsequently, alpha reliabilities (Cronbach, 1951) were computed on the field test data. This was done in order to estimate the internal consistency of the items comprising the prospective measures. Using the results of these analyses, the test-taking observations, and the feedback from subjects, the original instrument was revised. Based upon test-taking observations and subject feedback, it was desirable to reduce the length of the original instrument. Thus, several items which detracted from the internal reliability of the measures were omitted. A reading level analysis of the revised instrument conducted by the education consultant indicated that its reading difficulty was a 4.3 grade level.

Pretesting and Posttesting. Pretesting was accomplished in two separate sessions on consecutive days at the court. The first session was devoted to pretesting experimental subjects and the second to pretesting control subjects.

At the beginning of each session, the purpose of the research

project was explained, and subjects were assured of the confidentiality and anonymity of their pretest and posttest responses. (Subjects were also informed that, if they agreed to participate in the study, it would be necessary for the author to extract data from their court files at a later date and that these data would be used for research purposes only without disclosing the identity of individual subjects.) Subsequently, informed consent was obtained from each subject and his or her parent(s).

The pretest was verbally administered by the education consultant to the experimental and control groups respectively. Care was taken to ensure that subjects comprehended the items and that they completed the entire instrument. Administration of the pretest instrument required approximately 35 to 40 minutes. All experimental and control subjects provided completed pretests before the intervention was implemented.

Securing posttest outcome data proved to be more problematic than securing pretest data. Under the assumption that the intervention was going to last six months (rather than three months), posttesting was scheduled to occur approximately seven months after pretesting, with a one month lag between the completion of the intervention and posttesting. However, the final determination that resources were insufficient to implement the community relations and school support components was not made until nearly seven months after pretesting. Posttesting was not initiated until this determination had been made, meaning that posttesting was not undertaken until almost the fourth month after the intervention was completed.

This, by itself, was not problematic because the posttest would have provided an indication of whether intervention effects were maintained during the time span between the end of the intervention and the administration of the posttest. However, low subject turn-outs at the scheduled group posttesting sessions meant that subjects had to be followed-up and asked to complete the instrument. The follow-up process consumed an additional eight months, thus creating the problem of differential timing of posttest administration.

Posttests were not verbally administered during the follow-up unless a subject's ability to read and comprehend the instrument was in doubt. A total of 40 subjects provided complete posttest data, and three provided only partially completed instruments. Despite extensive personal, mail, and phone follow-up efforts, two subjects refused to complete the posttest.

#### Official File Data

At a period of 18 months following termination of the intervention, each subject's official court file was examined, and a variety of data were extracted. Included among these were the data pertaining to the various demographic and background variables appearing in Table 1. In addition, a variety of official legal history (pretest) and official legal outcome (posttest) data were obtained in order to make possible the type of before-after comparison procedure employed with the self-report data.

Legal History (Pretest) Measures. Measures were derived to determine the nature and magnitude of each subject's involvement in the crucial phases of the juvenile justice process. The measures employed to assess official outcomes were identical to those employed to assess legal history. The only difference, of course, is that the latter measures pertained to the period before the intervention, whereas the former measures pertained to the period during the intervention and the 18 month follow-up period after termination of the intervention. These measures appear in Table 2 according to the phases of the juvenile justice process that apply.

Table 2  
Official Legal Measures

Phase	Variables
A. Complaint or Referral	1. Number of officially recorded criminal offenses 2. Number of officially recorded status offenses <sup>a</sup>
B. Filing of Petitions	3. Number of criminal petitions filed 4. Number of status petitions filed
C. Adjudication	5. Number of criminal petitions on which adjudicated 6. Number of status petitions on which adjudicated



Table 2--Continued

Phase	Variables
D. Disposition	7. Number of dispositions involving detention 8. Number of dispositions involving institutional placement 9. Number of dispositions involving foster care placement 10. Number of dispositions involving restitution and/or community service

<sup>a</sup>The status offense measures (measures 2, 4, and 6) subsume probation violation offenses, as the latter were invariably redundant with the former in the data set.

For purposes of arriving at the best estimate of the amount and nature of illegal activity, the measures pertaining to the complaint or referral phases (measures 1 and 2) are the most desirable because they are the measures least likely to be biased by the discretionary decisions of system personnel (i.e., they are the most likely to reflect or pick up on actual behaviors). A number of points about these measures need to be clarified.

First, note that the measures refer to the number of separate offenses. It is possible for a single complaint to contain allegations of more than one illegal behavior (e.g., running away from home and larceny). Thus, the measures refer to the sheer number of offenses rather than the number of complaints. Second, notice that the measures refer to officially recorded offenses. This means that the offenses were recorded by justice system officials. A complaint is usually recorded and referred to the court by the police.

However, if a youth is a ward of the court (i.e., on probation) at the time of the offense, complaints may be officially initiated by court personnel, normally probation officers. (This is commonly done when a caseworker becomes aware, independent of the police, that a youth has violated his or her probation conditions by committing a status offense, such as failing to attend school or being unruly in the home.) In rare instances, a complaint may be initiated by someone other than a justice system official (e.g., parents or school authorities). For purposes of consistency in measurement, such offenses were not recorded unless subsequently authorized by court personnel, thus making them official.

Finally, note that the measures distinguish between criminal (i.e., delinquent) offenses and status offenses. This distinction is important because it provides an indication of the seriousness of the illegal act. Criminal offenses are more serious in that they are acts which would be considered criminal if committed by an adult. On the other hand, a status offense, such as school truancy or home incorrigibility, is an act that is considered illegal simply because it is committed by a person under a certain legal age (viz., 17 in the state of Michigan). The distinction between criminal and status offenses was chosen as the indicator of seriousness because it provides the most objective estimate of seriousness. One alternative would have been to divide criminal offenses into felonies (more serious) and misdemeanors (less serious), as is common at the adult level. The problem with this approach is that the measure would be biased by considerable discretion. For example, suppose a

youth is apprehended by a police officer for pocketing items totaling five dollars in value from a store. The officer could charge the youth with larceny under 100 dollars, a misdemeanor. Alternatively, the officer could charge the youth with the felony offense of larceny in a building. The distinction between status and criminal offenses circumvents this problem; the offense in the example would be counted as a criminal offense regardless of the specific charge. This approach is imperfect because it leads to all criminal offenses being lumped together regardless of seriousness. However, it is a very straightforward approach that enhances objectivity and reduces official bias.

In addition to data on the magnitude and seriousness of offense activity, it was also desirable to have data on the timing of offenses. Therefore, the date of each officially recorded offense was also obtained. The remaining measures in Table 2 (measures 3-10) were designed to track the complaints (rather than offenses) referred during phase one through the final three phases of the process. These measures provide information about the degree or extent of system penetration.

Petitions are filed by the court's intake department, the division responsible for screening complaints and determining whether cases merit further processing. As complaints are received by intake, intake personnel work in conjunction with the prosecuting attorney to determine which charges contained in the complaints are legally sufficient to warrant adjudication hearings before a judge. In the majority of cases where a decision is made to proceed with

further processing and a petition is prepared, the petition charges are identical to the charges contained in the complaint. However, a given petition may contain less, more, or different charges than the complaint, depending upon intake and prosecutorial discretion. In addition, charges from more than one complaint can be contained in the same petition, depending largely upon how closely in time the complaints are referred. Likewise, a single petition can contain both criminal and status offense allegations. Note from Table 2 that a distinction has been drawn between "criminal petitions" and "status petitions". In the interest of assigning preference to more serious cases, petitions containing both criminal and status charges (and of course those containing only criminal charges) were counted as criminal petitions. Those containing only status charges were counted as status petitions.

The filing of a petition mandates that an adjudication hearing be held before a judge. Such hearings are sometimes called "fact-finding hearings" because the question to be decided is whether the evidence substantiates the petition charges. If so, an adjudication order is made by the judge. If not, the petition is dismissed. While it is possible for more than one petition to be considered at a single hearing, separate decisions must be rendered for all petitions being considered. This is why Table 2 distinguishes between criminal petitions and status petitions followed by adjudication orders. It is possible, however, for a judge to dismiss certain charges in a particular petition and issue an adjudication order for others. As an example, suppose a petition containing both a

criminal charge and a status charge is brought before a judge.

(Recall that this would be scored as a criminal petition under measure 3 in Table 2.) Suppose further that the judge dismisses the criminal charge and issues an adjudication order on the status allegation. In this case, the decision would be recorded as a status petition adjudication under measure 6 in Table 2.

The disposition is the final stage of the court process and is tantamount to sentencing at the adult level. A separate disposition is assigned for each adjudication order. As noted in chapter one, a ruling of probation, which makes a youth the temporary ward of the juvenile court, is, by far, the most common disposition in juvenile justice. Moreover, if a disposition is being rendered for a youth who is already a ward of the court, continuation of probation is common. The remaining possibilities are presented in Table 2 (measures 7-10). The youth may be ordered to spend a short period in the local detention facility, while having probation continued. On the other hand, the youth may be sent to either a publically or privately operated juvenile institution away from the local area. The youth would remain a ward of the court while in residential placement. Alternatively, the youth may be placed with certified foster parents and remain a ward of the court. A final option involves ordering the youth to make monetary pay-back to a victim (restitution) or to perform a number of hours of community service work.

### Outcome (Posttest) Measures

It was impossible to obtain complete data applicable to the entire 18 follow-up month term for all subjects. This was because 28 subjects (or approximately 62% of the sample) turned age 17 at some point during the follow-up. Once age 17 had been reached, the behavior of these subjects fell under the jurisdiction of the adult rather than juvenile justice system. Hence, data on offenses committed after age 17 were not obtainable from subjects' juvenile files. In order to ensure more complete information on officially recorded criminal offenses, the five largest Kalamazoo County law enforcement agencies were contacted and asked to provide adult arrest and charge data on the 28 subjects. The agencies included: (1) the Kalamazoo City Police Department, (2) the Kalamazoo County Sheriff's Department, (3) the Kalamazoo Township Police Department, (4) the Portage City Police Department, and (5) the Kalamazoo County Prosecutor's Office. (The data from the Prosecutor's Office captures arrest and charge data for all outlying small townships in Kalamazoo County.) These agencies were able to supply the requested data.

## CHAPTER V

### RESULTS

Three concerns about the quality of the self-report data made it necessary to undertake preliminary analytic steps. These concerns were: (1) scaling and the reliability and validity of the measures, (2) the problem of posttest attrition, and (3) the problem of differential timing of posttest administration. These concerns are dealt with in the first section of this chapter. Subsequently, a description is provided of the ANCOVA technique used to make the statistical comparisons relevant to the central research question. The selection of ANCOVA is justified, and several of the main issues surrounding the use of this technique are considered. The bulk of the chapter is devoted to a presentation of the research findings.

#### Preliminary Analyses of Self-Report Data

##### Scaling

Once the data from subjects' pretests had been coded for computer use, the 10 additive scales appearing in Appendix B were derived through the use of principle components factor analysis.<sup>3</sup> Shown in Appendix B are: (a) the items comprising each of the

scales, (b) the response format of the items, (c) the factor(s) and corresponding item loadings associated with each scale, and (d) the eigenvalue and description of each factor.<sup>4</sup>

Two thorough sources on the complex subject of factor analysis include Harman (1960) and Rummel (1970). Factor analysis can be employed for several different purposes (D. Miller, 1983), but the basic concern of the technique, as noted by Harman, is to obtain a parsimonious description of the raw data. This is accomplished by reducing a large number of variables (i.e., items) into a smaller number of factors. Each factor is essentially a subset of related items. These items are more closely interrelated than are the items forming other subsets. By examining the content of a subset of related items vis-à-vis other subsets, it is possible to gain a more precise understanding of what the items are actually measuring.

There were two reasons for selecting factor analysis to derive the self-report measures. First, in the absence of empirical verification, there was no reason to assume that all of the items originally included in the scales were meaningfully related to the theoretical concepts as intended. In fact, when analyzing the various scales, it was fairly common to discover that several items failed to yield meaningful loadings with the factor (or one of the factors) comprising the scale in question. A "loading" may be defined as the correlation between a given item and a given factor, and it is conventional to define loadings of .40 or greater as "meaningful." Items that failed to meet this criterion are not presented in Appendix B because such items are irrelevant to the



statistical comparisons reported later in this chapter.

Another reason for performing factor analysis is that it was desirable to clearly define each of the self-report measures. Since concepts like "family relations" are quite general in nature, it was important to know whether each of the various scales contained more than a single dimension. If so, it was then necessary to determine what the dimensions represented (e.g., alienation from parents, positive guidance from parents, etc.).

For the convenience of the reader, each of the scales and their associated factor(s) have been transferred from Appendix B to Table 3. Table 3 also contains the score ranges for the scales and for the factors. With the exception of the self-reported delinquency scale, all measures were scored such that higher scores are indicative of more favorable responses. On the delinquency scale, lower scores indicate less self-reported delinquency.

Notice from Table 3 that there were a total of 19 separate measures (i.e., 18 factors and the self-reported delinquency scale) after the completion of factor analysis. For purposes of later statistical comparisons, it was necessary to make the group of measures more parsimonious. Given a sample size of 45, it would have been unreasonable to perform 19 separate ANCOVA comparisons. The number of comparisons would have been nearly half the total number of subjects. As discussed later in this chapter, the probability of making a Type I error systematically increases with the number of comparisons. This is why it is important for statistical comparisons to be limited and carefully planned.

**Table 3**  
**Self-Report Scales and Associated Factors**

Scale	Score Range	Factor(s)	Score Range
A. Job Preparation	5 to 25	1. Beliefs conducive to job retention	5 to 25
B. Attitudes Toward School	0 to 7	1. Beliefs in school 2. Attachment and commitment to school	0 to 4 0 to 3
C. School Effort or Involvement	0 to 2	1. School effort or involvement	0 to 2
D. Self-Conception	0 to 4	1. Perception of self being viewed favorably by classmates 2. Assessment of self-worth	0 to 2 0 to 2
E. Locus of Control	0 to 8	1. Arbitrariness of events, primarily negative sanctions 2. Perceived control in interpersonal relationships	0 to 6 0 to 2
F. Attitudes Toward Juvenile Court	9 to 45	1. Belief in court's wisdom and trust in its direction 2. Belief in fairness and justice of court experience	5 to 25 4 to 20
G. Attitudes Toward Probation Officers	13 to 65	1. Admiration and trust for probation officers 2. View of probation officers as overly authoritarian and intrusive	7 to 35 6 to 30

Table 3--continued

Scale	Score Range	Factor(s)	Score Range
H. Family Relations	16 to 80	1. Alienation from parents who are perceived as authoritarian	7 to 35
		2. Positive reliance on and reinforcement from parents	5 to 25
		3. Positive guidance from parents	4 to 20
I. Peer Relations	7 to 35	1. Negative influence of peers	3 to 15
		2. Identification with peers	3 to 15
		3. Negative leadership quality	1 to 5
J. Self-Report Delinquency	0 to 16	(Could not be meaningfully divided)	

Composite scales were formed in an effort to add parsimony to the 19 measures in Table 3. Composites were derived in the following manner. First, the factors of the seven respective multidimensional scales were pooled (i.e., the attitudes toward school, self-conception, locus of control, attitudes toward juvenile court, attitudes toward probation officers, family relations, and peer relations scales in Table 3). For example, the four items comprising Factor 1 of the attitudes toward school scale were added to the three items comprising Factor 2 of that scale (see Appendix B, Scale B). Likewise, the two items making up Factor 1 of the self-conception scale were added to the two items making up Factor 2 (see

Appendix B, Scale D). This procedure was followed for each of the remaining multidimensional scales. The result was 10 scales--the seven composite measures and three unidimensional measures (i.e., job preparation, school effort or involvement, and self-reported delinquency).

Next, the scales applicable to similar theoretical concepts were pooled (i.e., the attitudes toward school and school effort or involvement scales as well as the attitudes toward juvenile court and attitudes toward probation officers scales). To illustrate, the seven items forming the attitudes toward school scale were added to the two items forming the school effort or involvement scale, thereby yielding the school composite scale. Similarly, the nine items comprising the attitudes toward juvenile court scale were added to the 13 items comprising the attitudes toward probation officers scale, thus yielding the attitudes toward juvenile justice composite scale.

Application of the above procedures resulted in a total of six composite scales (i.e., school, self-conception, locus of control, attitudes toward juvenile justice, family relations, and peer relations composites) and two unidimensional or noncomposite scales (i.e., job preparation and self-reported delinquency). Hereafter, the job preparation scale is referred to as the job retention scale in order to be more accurate about what the scale measured.

As a check on the reasonableness of the procedures employed to add parsimony to the measures in Table 3, each of the six composite scales were correlated with their constituent parts. The

correlation results appear in Table 4. The six composite scales appear in the left column of Table 4, while the middle column displays the constituent scales and associated factors from Table 3. The Pearson correlations between the composites and their constituent parts appear in the right column. As can be seen, the correlations were sufficiently high to justify formation of the six composite scales.

Table 4  
Formation of Composite Self-Report Scales

Composite Scale	Constituent Part	Correlation
1. School Composite	Factor 1 of Scale B	.81
	Factor 2 of Scale B	.78
	Factor 1 of Scale C	.64
2. Self-Conception Composite	Factor 1 of Scale D	.85
	Factor 2 of Scale D	.77
3. Locus of Control Composite	Factor 1 of Scale E	.94
	Factor 2 of Scale E	.70
4. Attitudes Toward Juvenile Justice Composite	Factor 1 of Scale F	.87
	Factor 2 of Scale F	.65
	Factor 1 of Scale G	.83
	Factor 2 of Scale G	.84
5. Family Relations Composite	Factor 1 of Scale H	.90
	Factor 2 of Scale H	.87
	Factor 3 of Scale H	.68
6. Peer Relations Composite	Factor 1 of Scale I	.79
	Factor 2 of Scale I	.67
	Factor 3 of Scale I	.54

With the number of self-report measures reduced from 19 to 8 (viz., 6 composites and 2 noncomposites), the basis was established for a manageable number of statistical comparisons. However, there were two other scaling issues to be addressed. These issues include the reliability and validity of the eight measures.

### Reliability

The reliability of a measure is commonly defined as the degree to which the measure is replicable (cf. Mueller, Schuessler, & Costner, 1977). More specifically, a given score derived from a measure can be thought of as representing the sum of true variance and error variance. Reliability is the ratio of true variance to total or obtained variance for a collection of scores (Guilford, 1954; D. Nachmias & C. Nachmias, 1976). Thus, if a measure contains nothing but error, its reliability is zero. If a measure contains no error, its reliability is equal to one. The more reliable a measure (i.e., the less the error variance), the more replicable the measure.

As pointed out in chapter four, Cronbach's (1951) alpha coefficient provides an estimate of the internal consistency of the items comprising a measure. It is important to estimate internal reliability because, if such reliability is low, it is unlikely that items are consistently measuring the same characteristics across subjects. Cronbach's method is beneficial, since alpha can be computed on the basis of one administration of a single instrument.

There is no specific requirement that the investigator break the measure into odd and even items or that the "difficulty" of the items be known, as with a procedure devised by Kuder and Richardson (1937).

Knowledge of internal consistency, while useful, tells one little about the reliability of a measure over time. Internal consistency and stability are different issues (Guilford, 1954). Stability can be estimated by the test-retest procedure, whereby: (a) the measure is administered to the same group of subjects at two different points in time, and (b) the two sets of scores are correlated. Error variance is conceptualized as anything that leads to a discrepancy between time one and time two scores. Test-retest reliability is important because it provides an estimate of the degree to which a measure is dependable over time.

In this study, alpha coefficients were computed on the pretest self-report data. Likewise, pretest scores were correlated with posttest scores in order to estimate the test-retest reliability of each self-report measure. Test-retest coefficients were calculated separately for the experimental and control groups due to the possibility that the posttest data of experimental subjects might have been affected by the intervention. The alpha and test-retest coefficients appear in Table 5, along with data on the standard deviations and score ranges of scales.

Inspection of Table 5 reveals that, in general, the scales displayed a reasonably high degree of internal consistency. The test-retest coefficients, however, were systematically higher for

Table 5  
Self-Report Scale Reliabilities, Standard Deviations, and Score Ranges

Scale	Pretest Alpha	Test-Retest Correlation	Standard Deviations		Score Range
			Pretest	Posttest	
1. Job Retention	.74	E = .73 C = .40	E = 4.06 C = 3.76	E = 2.54 C = 2.62	5 to 25
2. School Composite	.78	E = .40 C = .27	E = 3.05 C = 2.38	E = 2.06 C = 3.01	0 to 9
3. Self-Conception Composite	.71	E = .45 C = .36	E = 1.12 C = 1.38	E = 1.02 C = 1.12	0 to 4
4. Locus of Control Composite	.78	E = .46 C = .61	E = 2.63 C = 2.31	E = 2.42 C = 2.17	0 to 8
5. Attitudes Toward Juvenile Justice Composite	.92	E = .51 C = .40	E = 15.14 C = 17.73	E = 10.89 C = 10.03	22 to 110
6. Family Relations Composite	.91	E = .69 C = .04	E = 14.58 C = 10.76	E = 10.00 C = 9.71	16 to 80
7. Peer Relations Composite	.66	E = .66 C = .02	E = 5.63 C = 4.18	E = 5.10 C = 4.43	7 to 35
8. Self-Report Delinquency	.92	E = .48 C = .22	E = 4.86 C = 2.78	E = 3.03 C = 3.55	0 to 16

NOTE. E (Experimental Group)      C (Control Group)



the experimental group. The only exception was on the locus of control composite, and the coefficient of .46 for the experimental group is still acceptable.

The low control group test-retest coefficients associated with both the family relations composite (.04) and the peer relations composite (.02) call the stability of these measures into question. It is tenable that the lack of variance associated with these measures, as evidenced by the standard deviations in Table 5, contributed to the low coefficients. Nevertheless, the coefficients for the family relations and peer relations composites are sufficiently low to merit the exercise of extreme caution when interpreting statistical comparisons derived from these scales. The most likely consequence of the low reliability is a reduction in the power of ANCOVA procedures (i.e., null hypotheses may be falsely accepted). The control group test-retest coefficients associated with the school composite (.27) and the self-report delinquency scale (.22) are low enough to warrant some caution as well.

### Validity

The validity of a measure can be broadly defined as the extent to which the measure assesses whatever it is intended to assess. Validity is an especially important issue when a measure represents an indirect assessment of some characteristic or phenomenon, as in the case of self-report scales.

To illustrate, suppose that the criterion variable of interest is the number of officially recorded delinquent offenses (during a specified time period) for each member of a group of youths. A direct measurement strategy is to count the separate number of offenses recorded by police and court officials. Given a reliable counting procedure, it is reasonable to believe that the measure is a valid indicator of the criterion variable. The measure is as valid as it is reliable.

On the other hand, suppose that the variable of interest is the number of delinquent behaviors actually committed by the youths. In this situation, the measure just described becomes indirect and is valid only to the extent that: (a) the recorded offenses were actually committed by the youths, (b) there was no undetected delinquent activity, and (c) the officials exercised no discretion when recording offenses. Of course, it is unlikely that these stringent conditions are going to be satisfied.

If one can appreciate the kinds of issues that emerge with relatively concrete measures and variables like those described above, it is apparent that validity is problematic when considering abstractions such as family relations. How does one know that the items in a self-report scale have anything to do with family relations? If the items are thought to be applicable by virtue of their content, what dimensions of this general, abstract concept are being assessed? As Guilford (1954) states, there is no simple, direct relationship between reliability and validity at this point (i.e., it is not wise to base statements about validity exclusively

upon estimates of reliability). A self-report measure can be highly reliable, but yet invalid. On the other hand, the measure may be valid even though its reliability is only moderate (e.g., .40 or .50). Therefore, Guilford reasons that factor loadings constitute one of the best empirical estimates of validity available to investigators. One has reasonable evidence of validity (but not conclusive proof) if: (a) a group of items load well with a given factor; and (b) based upon item content, there is good theoretical justification for believing that the items are applicable to some definable area or dimension of interest. The data in Appendix B were believed to provide such evidence.

Three additional considerations are necessary. First, the control group test-retest coefficients for the family and peer relations composites (see Table 5) are sufficiently low to call the validity of these measures into question. This is unfortunate because, from a theoretical standpoint, the family and peer relations composites were two of the most important measures in the self-report battery. The intervention targeted the family and peer institutions more intensively than other institutions and, for this reason, valid measures of these constructs were highly desirable. Even though reliability is sufficiently high for the experimental group, a satisfactorily valid control standard against which to compare intervention effects is lacking.

Second, in addition to the measure of subjects' job retention beliefs, it would have been desirable to have measures of their job seeking skills and general orientations toward work. The latter

attributes were also stressed during the job preparation workshops. While items meant to assess these attributes were included in the self-report instrument, the results of the factor analysis yielded no valid measures of them.

Third, it should be pointed out that even though the intervention component targeting school relations was not implemented, the school measure could still be important. Theoretically, it is possible that the components which were implemented (job preparation, outdoor adventure, and family relations) had some positive impact on school relations. Thus, the school data have been retained for comparison purposes.

#### Posttest Attrition

As discussed in the previous chapter, only 40 of the 45 subjects provided complete posttest data. The two subjects who declined to take the posttest were members of the experimental-moderate condition. Another experimental-moderate subject failed to complete the self-conception and locus of control composites. Likewise, an experimental-intensive subject did not provide data for the family relations and peer relations composites, while a control-moderate subject failed to complete the self-report delinquency scale.

Notice that the rate of posttest attrition was systematically higher in the experimental-moderate condition than in the other conditions, as 20% of the subjects in this condition did not provide

complete posttest data. According to West (1986), a pattern of this nature is indicative of a possible confounding of attrition with the research. For example, experimental-moderate subjects may have been less likely to remain in the study because they found the intervention less attractive than subjects in the other conditions. In this case, it would not be possible to attribute observed positive effects to the intervention, since the intervention produced differential attrition.

The best test to uncover confounding of the type just described is to compute a 2 X 2 analysis of variance (ANOVA) on pretest scores with one factor distinguishing experimental subjects from controls and the other factor distinguishing the subjects who remained for posttesting from those who did not (Cook & Campbell, 1979). However, it was not possible to follow this procedure because the cell sizes were too small to allow meaningful tests to be conducted. Therefore, a second option suggested by Cook and Campbell was adapted. For each scale, a 2 X 2 ANOVA, incorporating group membership (experimental versus control) and case status (intensive versus moderate), was computed on the pretest scores of only those subjects who also provide posttest data for the scale. The pretest cell means tested by these analyses appear in Table 6 along with the associated number of subjects. None of the eight ANOVAs yielded significant main or interaction effects. (A critical level of .05 was adapted for all tests of significance in this study. Following convention, only statistically significant F values are reported in this research.) Cook and Campbell suggest that such nonsignificant

Table 6  
Self-Report Pretest Cell Means

Scale	Experimental- Intensive	Experimental- Moderate	Control- Intensive	Control- Moderate
1. Job Retention (N = 43)	18.29	18.00	17.13	18.93
2. School Composite (N = 43)	4.29	4.77	5.13	5.13
3. Self-Conception Composite (N = 42)	2.29	2.42	1.88	2.07
4. Locus of Control Composite (N = 42)	4.00	3.75	4.00	3.93
5. Attitudes Toward Juvenile Justice Composite (N = 43)	60.43	58.46	64.25	62.13
6. Family Relations Composite (N = 42)	57.50	52.62	56.50	61.40
7. Peer Relations Composite (N = 42)	20.17	20.00	17.63	17.20
8. Self-Report Delinquency <sup>a</sup> (N = 42)	4.67	3.54	2.75	1.57

<sup>a</sup>Whereas all other measures were scaled in such a way that higher scores are indicative of more favorable attributes, on this measure lower scores indicate less self-reported delinquency.

results are indicative of the absence of confounding.

#### Differential Timing of the Posttest

Subjects completed the posttest at various points within a period of approximately one year after the intervention. This represents a potential confounding influence to the extent that intervention effects were not sustained over the one year period. For example, positive changes in experimental subjects' self-reports that were detectable at four or five months after the intervention may no longer have been detectable at eight or nine months.

Similarly, differential timing of posttesting may have exacerbated two known threats to internal validity, namely maturation and history (Cook & Campbell, 1979). Maturation refers to growth and experiential life processes that occur over any period of time. For instance, subjects posttested 11 or 12 months following intervention may have displayed more positive scores on the family relations measure than subjects tested at earlier points because a greater proportion of the former subjects were older and more mature and, therefore, better able to communicate with their parents. History refers to the possibility that significant life events, which are unrelated to the intervention, may take place prior to posttesting thus affecting posttest performance. It is tenable to suggest that the greater the time interval which precedes posttesting, the higher the probability that some such event will transpire.

Fortunately, data were available on the number of months between the end of the intervention and the time of posttesting. Therefore, in order to gain an estimate of the magnitude of the differential timing problem, correlation and regression analyses were conducted using the timing of posttesting as the predictor variable and posttest scores as the predicted variable. Two analyses were performed for each scale, one using only the data of experimental subjects and the other combining the data of the two groups. The correlation coefficients ( $r$ ), coefficients of determination ( $r^2$ ), and regression coefficients ( $b_1$ ) resulting from these analyses are presented in Table 7.

Inspection of the  $r^2$  values in Table 7 reveals that, with the exception of the locus of control composite, a very low proportion of the variability in posttest scores was associated with differential posttesting. On the locus of control composite, higher scores (indicating an internal vs. external locus of control) were associated with longer monthly intervals between the termination of intervention and posttesting. As the  $b_1$  value in the "all subjects" column indicates, each one month increase was associated with an increase of .47 in locus of control scores. In the case of the experimental subjects, each one month increase was associated with an increase of .61 in locus of control scores. Given a possible score range of 0 to 8 on the locus of control composite (see Table 5), it is possible that the differential timing factor biased the locus of control data, especially the data pertaining to experimental subjects.



Table 7

Relationship Between Timing of Posttesting and Self-Report Posttest Scores

Scale	All Subjects			Experimental Subjects Only		
	r	r <sup>2</sup>	b <sub>1</sub>	r	r <sup>2</sup>	b <sub>1</sub>
1. Job Retention	-.22	.05	-.26	-.16	.02	-.17
2. School Composite	.13	.02	.16	.18	.03	.16
3. Self-Conception Composite	-.14	.02	-.07	.22	.05	.10
4. Locus of Control Composite	.46	.21	.47	.59	.35	.61
5. Attitudes Toward Juvenile Justice Composite	-.01	.00	-.06	.11	.01	.59
6. Family Relations Composite	.21	.04	.94	.20	.04	.85
7. Peer Relations Composite	-.10	.01	-.22	.03	.00	.07
8. Self-Report Delinquency	-.09	.01	-.14	-.21	.04	-.31

### ANCOVA Considerations

Before presenting the research findings, it is important to describe and justify the inferential statistical technique selected to address the central research question. Therefore, this section is devoted to a consideration of several of the main issues surrounding the use of ANCOVA.

The primary reason for employing the ANCOVA technique in this study was to enhance the power of inferential analyses. It has already been mentioned that a reduction in power is an unfortunate consequence of using a design with a relatively low number of subjects and of using measures of questionable reliability. Hence, there was a need to help compensate for the loss of power resulting from design and measurement procedures. A second reason for the choice of ANCOVA concerns the self-report pretest cell means appearing in Table 6. It is apparent that mean differences emerged despite random assignment to the experimental and control conditions. These differences represent nuisance variability which, if left uncorrected, will bias differences observed on the posttest. A final reason for selecting ANCOVA concerns the issue of disproportional cell sizes or nonorthogonality. As originally formulated, the design contained nearly equal cell sizes. Owing to posttest attrition, however, the cell sizes associated with the various self-report measures were neither equal nor proportional. The consequence is that the different sources of variability in the design

are not independent of one another. According to Huitema (1980):

This problem occurs if the conventional procedure for the computation of the sums of squares is followed. An interpretation issue develops if the sum of squares for one factor affects the sum of squares for another factor. If the sums of squares are not independent, it is not possible to unambiguously describe the effects of a particular factor [i.e., the intervention factor]. (p. 198)

Huitema (1980) describes how ANCOVA procedures help rectify the problems just discussed. The ANCOVA model constitutes a synthesis of the ANOVA and the analysis of variance of regression models. As such, ANCOVA can be used to remove the bias in posttest scores which is attributable to differences existing on the pretest. This is accomplished by adjusting posttest means to the level that would be expected had the pretest means of all groups in the study been equal to the grand mean of the pretest or covariate. Similarly, Huitema points out that ANCOVA is generally associated with greater power than ANOVA. If ANOVA is used to test posttest means that have not been adjusted for pretest differences, the within-group error variance will be inflated, thereby lowering power. On the other hand, the ANCOVA error term will usually be smaller because the regression of posttest scores on pretest scores serves to remove within-group variability. The result is an increase in power. In addition, Huitema shows that the two-factor ANCOVA tests the same null hypotheses for a nonorthogonal design that are tested with an orthogonal one. The hypotheses are that the adjusted population posttest means of the levels of the factors are equal, and that the simple effects of one factor are consistent across the levels of the other factor.

The above considerations clearly favor the use of ANCOVA procedures for purposes of this research. Given the choice of ANCOVA, there are three additional issues that need to be mentioned. These include the selection of covariates, considerations pertaining to the Type I error rate associated with multiple inferential comparisons, and the essential assumption of ANCOVA that the population regression slopes of the different groups are homogeneous. Each of these issues is considered in turn.

### Selection of Covariates

Conceptually, it is of course possible to use any variable that constitutes a potential source of nuisance variability as a covariate. That is, one need not limit the choice of covariates to pretest scores which have been derived from measures identical to the measures used to obtain posttest scores. Table 1 of the preceding chapter indicates that the experimental and control groups differed on a number of demographic and background measures (e.g., race, age, and household income). Each such variable, then, represented a potential covariate, as did the self-report and legal history pretest data.

Ideally, it would be desirable to turn as many nuisance variables as can be identified into covariates (so long as the covariates are not highly intercorrelated and therefore redundant) to control their confounding influences. However, as alluded to in the last chapter, the number of covariates that should be used is

dependent on sample size. According to Huitema (1980), it is wise to limit the number of covariates such that the ratio  $C + (J - 1) / N$  (where  $C$  is the number of covariates,  $J$  is the number of groups, and  $N$  is the total number of subjects) does not exceed 0.10.

If this ratio is greater than 0.10, the ANCOVA  $F$  test is valid but the estimates of the adjusted means are likely to be unstable. That is, if a study with a high  $C + (J - 1) / N$  ratio is cross-validated, it can be expected that the equation that is used to estimate the adjusted means in the original study will yield very different estimates for another sample from the same population. (p. 161)

It was deemed unacceptable to risk destabilizing the adjusted means in this study because it is important to be able to estimate (from those means) the size of the effect that might reasonably be anticipated if the intervention were used in the future with a similar group of probationers. In this study, therefore, the number of covariates was limited to one per comparison, since  $1 + (4 - 1) / 45 = .09$ .

The choice of covariates was guided by consideration of which variables were most meaningful from a theoretical standpoint. Since the information derived from the self-report and legal history pretest measures was more directly applicable than other available data to the attitudes and delinquent behaviors that the intervention was designed to alter, it was deemed essential to control for pre-intervention differences in these attitudes and behaviors. Therefore, the self-report and legal history pretest measures were selected for use as covariates. The specific covariate employed in a comparison depended on the corresponding outcome measure. For example, if the outcome measure in an ANCOVA comparison was posttest

scores on the peer relations composite, the covariate was pretest scores on that composite. Given control over differences on the pretest measures, and given random assignment to attain probabilistic equivalence on the demographic and background variables, differences on the posttest measures can be properly attributed to the intervention.

### Type I Error and Multiple Comparisons

Since a variety of outcome measures were used in this research, including both self-report and official outcome measures, it was necessary to conduct multiple statistical comparisons. For example, in the case of the self-report data set, it was necessary to compute eight separate 2 X 2 ANCOVA Fs, or one per scale.

An important problem arises when multiple comparisons are conducted and the resulting F values are evaluated against the conventional critical values of the F distribution. The conventional critical values keep the Type I error rate for each individual F test at the selected alpha level (viz., .05 in this study). However, these values do not keep the probability that one or more of the Fs in the set (or family) of F values will result in a Type I error at the desired alpha level. Given 10 comparisons, for instance, the probability of falsely rejecting a null hypothesis in the set could be as high as .40 in the unlikely event of uncorrelated dependent variables (Huitema, 1980). If the objective is to keep the family error rate at .05, an alternative procedure is

needed.

As an alternative to the use of conventional critical values, Huitema (1980) recommends substituting the critical values of the Bonferroni F statistic. The Bonferroni critical values are much more conservative than conventional critical values because the number of comparisons, as well as the degrees of freedom expended estimating population parameters, are taken into account. In order to maintain the family error rate at .05, the Bonferroni procedure was used in this study for both the self-report and official data sets.

#### Homogeneity of Regression Slopes Assumption

An essential assumption underlying the use of the ANCOVA model is that the population regression slopes corresponding to the different groups are homogeneous. Huitema (1980) succinctly summarizes this assumption.

Briefly, the problem is that the adjusted means are inadequate descriptive measures of the outcome of a study if the size of the treatment effect on [the outcome measure] . . . is not the same at different levels of the [pretest measure or covariate]. If the slopes are heterogeneous, the treatment effects are not the same at different levels of the covariate; consequently, the adjusted means can be misleading because they do not convey this important information. When the slopes are homogeneous, the adjusted means are adequate descriptive measures because the treatment effects are the same at different levels of the covariate. (p. 43)

Huitema (1980) goes on to describe how to perform the homogeneity of regression F test as a check on this assumption. Such a test was included as a standard part of each of the various ANCOVA

computations reported in the next section of this chapter.

### Findings

The intent in this section is to present the findings associated with the various measures and analyses. The findings for the implementation measures are presented first because, prior to making statistical comparisons, it is important to know whether (and to what extent) the experimental subjects were exposed to the intervention. The findings for the self-report data are presented next, followed by a presentation of the findings for the official outcome measures.

#### Implementation Data

As indicated in the previous chapter, the objective of collecting data on program implementation was to determine the extent to which experimental subjects were exposed to the components of the intervention. Remember also that a total of nine measures were derived for this purpose. The various measures associated with each program component are presented in Table 8, along with the medians, means, standard deviations, and score ranges.

Referring to Table 8, recall that the difference between the youth participation measure and the youth performance rating for the outdoor experiential component is that the former data were recorded



Table 8

Medians, Means, Standard Deviations, and Score Ranges of  
Implementation Measures for Intervention Components

Intervention Component and Associated Measures	Median	Mean	Standard Deviation	Score Range
<b>A. Job Preparation Component</b>				
1. Youth Attendance	4.00	3.27	1.08	0 to 4
2. Youth Participation	6.50	6.64	3.26	0 to 12
<b>B. Outdoor Experiential Component</b>				
1. Youth Participation	2.00	2.09	1.02	0 to 3
2. Parental Participation	1.00	2.18	4.23	0 to 3
3. Youth Performance Rating	19.50	16.73	6.36	0 to 24
<b>C. Family Relations Component</b>				
1. Youth Attendance	7.00	5.68	1.94	0 to 7
2. Parental Attendance	5.00	4.68	3.55	0 to 7
3. Youth Participation	10.50	9.86	5.14	0 to 21

by caseworkers while the latter data were recorded by the Pretty Lake staff. Notice also that the parental attendance measure has not been included among the measures associated with the outdoor experiential component. This is because the measure is a dichotomous variable and, therefore, the statistics in Table 8 are inappropriate.

The data in Table 8 indicate that, overall, youth attendance of the job preparation workshops was satisfactory. Additional support for this point comes from the findings that 59.09% of the subjects attended all four workshops and that 81.82% attended at least three workshops. All subjects attended at least one time. However, the median and mean for the participation measure suggest that participation levels, as perceived by caseworkers, were generally less than desirable.

It can be seen from Table 8 that youth participation and performance ratings were both satisfactory for the outdoor experiential component. However, only 11 (50%) of the subjects had at least one parent present during the final day of the outdoor adventure. The participation of several parents, moreover, was judged less than adequate by caseworkers, as indicated by the low median score.

The data show that 50% of the youth attended all seven family relations sessions. By contrast, only 31.82% of the youths had at least one parent present for all of the sessions. Furthermore, 81.82% of the youths attended at least five family sessions, but only 59.09% of them had parents present for at least five sessions. One youth failed to attend any of the sessions. Moreover, the

parents of three of the youths failed to attend any of the sessions, and the parents of two attended only once. This means that 22.73% of the youths had parents present at less than two of the family sessions. While youth attended more frequently than their parents, the data in Table 8 suggest that the average level of youthful participation was less than desirable.

The lack of full parental involvement in the family relations component is unfortunate because this was the primary component of Project EXPLORE. In view of this finding, perhaps it is not surprising that the intervention yielded the results presented next.

#### Self-Report Findings

The unadjusted and ANCOVA adjusted posttest cell means are presented in Table 9 for each of the scales. A comparison of the unadjusted and adjusted posttest means for each cell indicates the difference which results when pretest variability is taken into account on the posttest. Furthermore, a comparison of the adjusted posttest cell means in Table 9 with the pretest cell means in Table 6 indicates that, in general, the cells with the highest pretest means showed the most downward adjustment on the posttest, whereas the cells with the lowest pretest means showed the most upward adjustment. This pattern is typical when ANCOVA adjustment procedures are used. In addition, since the cell sizes are not identical, the pretest grand mean is more heavily weighted by the cells with more subjects (Huitema, 1980). Therefore, cells with

Table 9

## Unadjusted and ANCOVA Adjusted Self-Report Posttest Cell Means

Scale	Experimental- Intensive	Experimental- Moderate	Control- Intensive	Control- Moderate
1. Job Retention				
Unadjusted	20.14	18.85	19.75	18.67
Adjusted	20.50	19.33	20.59	18.76
2. School Composite				
Unadjusted	5.57	5.54	6.38	3.67
Adjusted	5.80	5.62	6.35	3.64
3. Self-Concept Composite				
Unadjusted	1.43	1.92	1.88	2.00
Adjusted	1.31	1.92	1.88	1.95
4. Locus of Control Composite				
Unadjusted	3.29	4.58	5.13	3.27
Adjusted	3.29	4.47	5.13	3.30

Table 9--continued

Scale	Experimental- Intensive	Experimental- Moderate	Control- Intensive	Control- Moderate
5. Attitudes Toward Juvenile Justice Composite				
Unadjusted	72.43	63.85	72.50	65.13
Adjusted	74.39	66.71	73.49	66.81
6. Family Relations Composite				
Unadjusted	56.83	51.46	62.13	57.20
Adjusted	56.46	52.63	62.07	55.60
7. Peer Relations Composite				
Unadjusted	21.67	18.46	17.63	16.60
Adjusted	20.92	17.77	17.93	16.92
8. Self-Report Delinquency				
Unadjusted	4.00	3.38	2.50	2.00
Adjusted	3.41	3.16	2.53	3.96

larger numbers of subjects displayed a lesser degree of adjustment.

Eight separate 2 X 2 ANCOVAs were computed (incorporating the respective pretest scores as covariates) to test the differences between the adjusted posttest means appearing in Table 9. Using the critical values of the Bonferroni F statistic to evaluate ANCOVA F values, no significant main effects nor significant interactions were obtained for the various scales. Eight separate homogeneity of regression F tests were performed to determine whether the homogeneity of slopes assumption of the ANCOVA model had been violated. None of the resulting F values were significant, implying that the assumption was not violated. Therefore, the adjusted means of Table 9 can be unambiguously interpreted.

Since none of the interactions were significant, it was reasonable to average the adjusted cell means associated with each factor to form adjusted marginal means. The adjusted marginal means were then used to calculate effect sizes. To illustrate, consider the adjusted cell means in Table 9 for the experimental group on the job retention scale. The adjusted marginal mean for the experimental group on the job retention scale is 19.915, since  $(20.50 + 19.33) / 2 = 19.915$ . Similarly, the adjusted marginal mean of the control group is 19.675, because  $(20.59 + 18.76) / 2 = 19.675$ . Hence, the marginal mean difference (effect size) for the intervention factor is 0.24, since  $19.915 - 19.675 = 0.24$ . Still referring to the same scale, the adjusted marginal means associated with the intensive and moderate conditions are 20.545 and 19.045 respectively. Thus, the effect size for the case status factor is  $20.545 - 19.045$  or 1.50.

The adjusted marginal mean differences associated with the intervention and case status factors are presented in Table 10 for the various scales.

The 95% confidence intervals corresponding to the adjusted marginal mean differences are also shown in Table 10. By inspecting a 95% confidence interval, one can be 95% certain that the adjusted population marginal mean difference falls somewhere between the lower and upper limits of the interval. For purposes of this research the "adjusted population marginal mean difference" is defined as the difference existing in a hypothetical population of subjects having characteristics that are highly similar to the characteristics of subjects who participated in this study. Thus, if the confidence interval contains zero, there are grounds for accepting the null hypothesis. Alternatively, if the interval does not contain zero, there are grounds for rejecting the null hypothesis. Huitema (1980) expresses a preference for confidence intervals over tests of significance because the intervals provide more precise information regarding the loci of population differences. Confidence interval data are presented here in order to complement the results of tests of statistical significance.

From Table 10 it can be seen that none of the effect sizes associated with the intervention factor are large enough to be of much importance. Notice, however, that, as a group, the performance of experimental subjects was slightly more positive on the job retention, school, attitudes toward juvenile justice, and peer relations measures. By contrast, the performance of control

Table 10

Adjusted Marginal Mean Differences and Associated 95% Confidence Intervals for Self-Report Scale Data

Scale	Intervention Factor		Case Status Factor	
	Mean Difference	Interval	Mean Difference	Interval
1. Job Retention	0.24	(-1.01, 1.49)	1.50	(0.18, 2.82)
2. School Composite	0.71	(-0.76, 2.16)	1.45	(-0.09, 2.99)
3. Self-Conception Composite	-0.30	(-0.93, 0.33)	-0.34	(-0.99, 0.31)
4. Locus of Control Composite	-0.22	(-1.36, 0.92)	0.20	(-0.99, 1.39)
5. Attitudes Toward Juvenile Justice Composite	0.40	(-6.58, 7.38)	7.18	(-0.09, 14.46)
6. Family Relations Composite	-4.29	(-22.41, 13.83)	5.15	(-13.74, 24.04)
7. Peer Relations Composite	1.92	(-0.96, 4.80)	2.08	(-0.85, 5.01)
8. Self-Report Delinquency	0.04	(-2.02, 2.10)	-0.59	(-1.53, 2.71)



subjects, as a group, was slightly more positive on the self-conception, locus of control, and family relations composites as well as on the self-report delinquency scale. (Remember that lower scores on the self-report delinquency scale are indicative of less delinquency.) Notice also that the confidence interval data are consistent with the ANCOVA main effects tests which led to the null hypotheses being accepted for each scale. This is because each confidence interval associated with the intervention factor includes zero between the upper and lower limits.

In regard to the data in Table 10 for the case status factor, it can be seen that the intensive condition was consistently associated with positive (but small) effects across scales. The only exception is found on the self-conception composite. Case status, of course, was not a randomized factor so the positive effects apparent in Table 10 should not be unequivocally attributed to intensive probation. While most of the confidence interval data for the case status factor are consistent with the ANCOVA main effects results, this is not true for the job retention scale, since zero is not contained in the interval. That is, whatever the exact population value of the adjusted mean difference, one can be 95% confident that the exact value falls between 0.18 and 2.82. It might also be pointed out that the main effect of this factor would have been significant had conventional (rather than Bonferroni) critical values been employed to evaluate the obtained ANCOVA F value,  $F(1, 38) = 5.32, p < .05$ .

### Official Data

It was suggested earlier that the offense measures pertaining to the complaint stage of the juvenile justice process (i.e., measures 1 and 2 of Table 2) provide the best official estimate of the magnitude of illegal behavior. In order to keep the Bonferroni F critical value at a reasonably low level, five inferential comparisons were planned for the official data. All of these except one were restricted to the offense measures. The findings pertaining to the offense measures are presented first, and then the data on system penetration (i.e., measures 3 through 10 of Table 2) are examined. Finally, several time related variables are summarized, and an additional inferential comparison involving these variables is presented.

### Officially Recorded Offenses

When analyzing the official offense data, a distinction was maintained between criminal and status offenses so as to provide an indicator of the seriousness of illegal activities. A further distinction was drawn between offenses recorded during the period of the intervention and those recorded after the termination of intervention. As discussed in the final chapter, it is meaningful to know the magnitude of offense activity occurring during the intervention because this information addresses the question of

whether (and to what extent) experimental subjects were involved in illegal activities while they were participating in the program, an issue of theoretical importance. Likewise, it is meaningful to know the magnitude of offense activity occurring after the intervention, since an argument can be made that one should not expect to see a reduction in offense activity among experimental subjects until the period following completion of their exposure to the intervention.

Status Offenses. During the three month period of the intervention, 50% of the 22 experimental subjects had at least one status offense recorded against them, compared to 30.43% of the 23 control subjects. More specifically, 71.43% of the 7 subjects in the experimental-intensive condition and 40% of the 15 experimental-moderate subjects had records of at least one status offense. These figures compare with 50% and 20% of the 8 control-intensive and 15 control-moderate subjects respectively. Considering only the experimental group, the data indicate that 50% of the subjects accounted for all of the status offenses during the intervention. In the control group, by contrast, 17.39% of the subjects accounted for 42.73% of the total status offenses, and 37.5% of the control-intensive subjects accounted for 54.55% of the total offenses. Unlike the situation in the experimental group, then, a relatively low proportion of the control subjects, especially those in the intensive condition, accounted for a disproportionate amount of the total status offenses.

A 2 X 2 ANCOVA was performed on the status offense data for the

period of the intervention, with the number of status offenses recorded prior to the intervention serving as the covariate. The results of the analysis yielded neither significant main nor interaction effects, when evaluated against the Bonferroni critical value for five comparisons. Likewise, the homogeneity of regression slopes test yielded a nonsignificant F value. The adjusted cell means associated with the ANCOVA are presented in Table 11, and are followed by the adjusted marginal mean differences along with the 95% confidence intervals in Table 12.

Table 11

Adjusted Cell Means for  
Status Offenses Recorded During Intervention

Intervention Factor	Case Status Factor	
	Intensive	Moderate
Experimental	0.7418	0.3808
Control	0.6456	0.3286

Table 12

Adjusted Marginal Mean Differences and 95% Confidence  
Intervals for Status Offenses Recorded During Intervention

Factor	Mean Difference	Interval
Intervention	0.07	(-0.34, 0.48)
Case Status	0.34	(-0.06, 0.74)

In contrast to the self-report data which showed a trend for intensive subjects to perform slightly better on most of the outcome measures, the data in Tables 11 and 12 indicate that the performance of moderate subjects, as a group, was somewhat more positive than the performance of intensives (i.e., the moderate group exhibited a slightly lower degree of status offense activity). However, the effect sizes associated with the factors are of trivial magnitude. Notice also that the confidence interval data are consistent with the ANCOVA results, since the intervals contain zero.

The next thing to be considered is the amount of status offenses activity recorded during the 18 month period following the intervention. During this period, 50% of the experimental subjects again had at least one offense recorded against them, compared to 39.13% of the control subjects. For experimental subjects in the intensive and moderate conditions, the percentages are again 71.43% and 40% respectively. For control-intensive and control-moderate subjects, however, the percentages are 25% and 46.67% respectively, a trend nearly opposite to that reported for the control group for the period during the intervention. Moreover, 21.74% of the control subjects accounted for 76.47% of the total status offenses recorded after the intervention. Similarly, 27.27% of the experimental subjects accounted for 76.19% of the total offenses. Hence, in both groups, a relatively low proportion of the subjects accounted for a disproportionate number of offenses. Recollect that when the period during the intervention was considered, this trend appeared only for the control group.

A 2 X 2 ANCOVA performed on the status offense data for the follow-up time frame, with the number of status offenses recorded prior to the intervention serving as the covariate, yielded results similar to those obtained for the period during the intervention. Neither significant main nor interaction effects were obtained, and the homogeneity assumption was found to be valid. The adjusted cell means associated with the ANCOVA appear in Table 13. Likewise, the adjusted marginal mean differences and corresponding confidence intervals are presented in Table 14.

Table 13

Adjusted Cell Means for  
Status Offenses Recorded After Intervention

Intervention Factor	Case Status Factor	
	Intensive	Moderate
Experimental	1.1769	0.6915
Control	0.5447	1.0017

Table 14

Adjusted Marginal Mean Differences and 95% Confidence  
Intervals for Status Offenses Recorded After Intervention

Factor	Mean Difference	Interval
Intervention	0.16	(-0.55, 0.87)
Case Status	0.01	(-0.68, 0.70)

From Table 13, it can be seen that the performance of experimental-intensive and control-moderate subjects was slightly worse than the performance of subjects in the other two groups. However, as is apparent from Table 14, the effect sizes for the factors are again small despite the different time frame. The evidence in Tables 11, 12, 13, and 14 is clearly insufficient to conclude that there were any substantial differences in status offense activity between the four groups in the study. This is true regardless of whether the time period during or after the intervention is considered.

Criminal Offenses. While the intervention was in progress, only three (13.64%) of the experimental subjects and two (8.7%) of the controls were charged with at least one criminal offense. In the experimental condition, two of these subjects were on intensive probation. In the control group, one subject was on moderate probation, and the other was on intensive probation. One of the experimental-intensive subjects was charged with two criminal offenses, as was a control-intensive subject.

A 2 X 2 ANCOVA on these data, with the number of criminal offenses recorded before the start of the intervention held constant, revealed no significant effects. The homogeneity of slopes test significant indicated that the assumption was not violated. Table 15 displays the adjusted cell means, and the adjusted marginal mean differences and confidence intervals appear in Table 16.

Table 15

Adjusted Cell Means for  
Criminal Offenses Recorded During Intervention

Intervention Factor	Case Status Factor	
	Intensive	Moderate
Experimental	0.4488	0.0638
Control	0.2452	0.0626

Table 16

Adjusted Marginal Mean Differences and 95% Confidence  
Intervals for Criminal Offenses Recorded During Intervention

Factor	Mean Difference	Interval
Intervention	0.10	(-0.19, 0.39)
Case Status	0.28	(-0.01, 0.57)

The pattern appearing in Table 15 is no different than the pattern resulting from the status offense data for the same time period (see Table 11). The performance of intensive subjects was slightly less favorable than that of moderate subjects. Consistent with the findings derived for the status offense data, moreover, the effect sizes in Table 16 are of trivial importance.

Turning attention to criminal offenses recorded during the follow-up period, the data indicate that 50% of the experimental subjects (71.43% of the intensives and 46.67% of the moderates) had



at least one offense recorded against them. This compares with 60.87% of the control subjects (62.50% of the intensives and 60% of the moderates). Both the experimental and control groups contained a number of repeat offenders. In the experimental group, 31.82% of the subjects accounted for 79.17% of the crimes. More specifically, in the experimental group, 33.33% of the experimental-moderate subjects accounted for 50% of the total offenses. In the control group, 30.43% of the subjects accounted for 86.63% of the total crimes, and two subjects (both control-moderates) accounted for 49.02% of all the offenses.

A 2 X 2 ANCOVA was performed on these data, incorporating the number of criminal offenses recorded prior to the intervention as the covariate. This analysis produced no significant results. However, the subsequent homogeneity of regression slopes test yielded an F value which exceeded the critical value,  $F(3, 37) = 3.18, p < .05$ . The most likely consequences of heterogeneity of group slopes are that the ANCOVA F tests will be conservatively biased and that the adjusted means will be misleading (Huitema, 1980). Hence, neither the adjusted cell means nor the adjusted marginal mean differences and associated confidence intervals are reported here. Rather, an alternative procedure was employed to ascertain whether significant effects were present.

A plot of the covariate scores against the dependent variable scores of the four groups revealed the problem. The slope of the control-moderate condition (0.9676) was far greater than the slopes of the remaining groups (-0.0530, -0.0362, and 0.4028 for the

experimental-intensive, experimental-moderate, and control-intensive groups respectively). Therefore, it was reasonable to pool the slopes of the remaining three groups and to perform the homogeneity test using only these data. The results of this analysis revealed homogeneity of the slopes of the three groups. As Huitema (1980) points out, under such conditions the standard ANCOVA F test is appropriate for the remaining groups having homogeneous slopes. Accordingly, a one-way ANCOVA was performed on the data of these groups. The resulting F value was not significant. The adjusted means for the experimental-intensive, experimental-moderate, and control-intensive groups were found to be 1.4592, 0.9251, and 1.6136 respectively.

It was of theoretical importance to compare both the experimental-intensive and experimental-moderate groups with the control-moderate group despite heterogeneity of slopes. For this purpose, Huitema (1980) suggests a procedure known as the Johnson-Neyman technique. "The purpose of the Johnson-Neyman procedure is to identify the values of [the covariate] that are associated with significant group differences on [the dependent variable]" (p. 271). To this end, the procedure allows the region of nonsignificance on the covariate to be calculated for each group pair of interest.

A Johnson-Neyman test comparing the experimental-intensive data with the data of the control-moderate group revealed the region of nonsignificance on the covariate to be 0 through 6.9036. Similarly, the region of nonsignificance associated with the comparison between the experimental-moderate and control-moderate groups was found to

be 0 through 4.3963. Taking the latter comparison as an example, the Johnson-Neyman test results should be interpreted as follows. If one considers a specific point on the covariate that falls within the region 0 through 4.3963, it is concluded that the two groups do not differ on the dependent variable. By contrast, if one selects a point on the covariate above 4.3963, it is concluded that the experimental-moderate group exhibited superior performance on the dependent variable. The same interpretation applies to the comparison involving the experimental-intensive and control-moderate groups except, of course, that the region of nonsignificance is 0 through 6.9036.

It should be emphasized that, in this author's opinion, the results of the Johnson-Neyman analyses do not constitute especially strong support for the intervention. The reason for this statement is that the results apply to only a few of the subjects in the study. Five of the experimental-moderate subjects had records of 5 or more offenses prior to the intervention. This compared with seven of the control-moderate subjects. Likewise, two of the experimental-intensive subjects and one control-moderate subject displayed covariate scores of 7 or above. Considering only these subjects, it can be concluded that experimental subjects displayed a statistically significant reduction in official criminal activity during the follow-up period when compared to probationers in the control-moderate condition. (The results of the Johnson-Neyman analyses are followed-up in more depth in the final chapter.)

### System Penetration Data

Recall from the previous chapter that the system penetration measures were designed to track complaints issued during the first phase of the juvenile justice process, namely the complaint or referral phase. Whereas the foregoing official data pertain to offense activity per se, the system penetration data pertain to the subsequent actions that were taken on the complaints in which these offenses were contained.

When analyzing the system penetration data, the criminal versus status distinction was again drawn, as was the distinction between the period during and the period after intervention. The findings for the petition, adjudication, and disposition measures are presented in turn using simple descriptive statistics.

Petitions. The cell means and standard deviations associated with the petition data are presented in Table 17. Notice that Table 17 is divided into eight columns. The columns labeled "Before (Pre)" refer to both status and criminal petitions resulting from complaints filed prior to the start of the intervention. Similarly, the columns labeled "During" and "After (Post)" refer to petitions resulting from complaints issued during and after the intervention respectively. The data in the final two columns are based upon subjects' pre to post change scores. To obtain the means, each subject's pre score was subtracted from his or her post score, and the mean of the differences was calculated for each cell.

Table 17

## Cell Means and Standard Deviations for Petition Data

Group	Before (Pre)		During		After (Post)		Pre to Post Change	
	Status	Criminal	Status	Criminal	Status	Criminal	Status	Criminal
<b>Experimental-Intensive</b>								
Mean	1.2857	2.0000	0.5714	0.2857	1.4286	0.2857	0.1429	-1.7143
Standard Deviation	1.4960	2.0000	0.5345	0.4880	1.2724	0.4880	0.8997	2.2887
<b>Experimental-Moderate</b>								
Mean	1.2000	1.0000	0.3333	0.0667	0.6000	0.4000	-0.6000	-0.6000
Standard Deviation	1.2649	1.0000	0.4880	0.2582	0.9103	0.7368	1.4041	1.1212
<b>Control-Intensive</b>								
Mean	0.8750	1.2500	0.3750	0.1250	0.2500	0.3750	-0.6250	-0.8750
Standard Deviation	0.9910	0.7071	0.5175	0.3536	0.4629	0.5175	1.3025	0.8345
<b>Control-Moderate</b>								
Mean	0.8667	1.3333	0.2000	0.0000	0.6000	0.6000	-0.2667	-0.7333
Standard Deviation	1.2459	1.1751	0.4140	0.0000	0.7368	0.9103	1.3870	1.3345

Taken collectively, the means in Table 17 clearly imply that, when compared against the standard probationary services, participation in the intervention was not associated with a substantial reduction in system penetration, as measured by petitions. Referring to the last two columns, notice that only the experimental-intensive group exhibited a mean increase in status petitions when the pre and post periods were compared. The most pronounced reductions occurred in the control-intensive and experimental-moderate groups. Note, however, that all groups displayed reductions on the criminal petitions measure. The differences for the criminal petition data are, with the exception of the experimental-moderate group, slightly higher than those for the status petition data. Furthermore, the most pronounced decreases in criminal petitions occurred in the two intensive conditions, especially in the experimental-intensive group.

Adjudications. The cell means and standard deviations associated with the adjudication data appear in Table 18. These data describe the number of status and criminal petitions (resulting from complaints issued during the specified time periods) which culminated in adjudication orders. It can be seen that the means in Table 18 are highly similar to those in Table 17, indicating that the petitions were commonly followed by adjudication orders. These means reaffirm the conclusion derived from the petition data. There is no basis for concluding that participation in the intervention was associated with a substantial reduction in system penetration,

Table 18  
Cell Means and Standard Deviations for Adjudication Data

Group	Before (Pre)		During		After (Post)		Pre to Post Change	
	Status	Criminal	Status	Criminal	Status	Criminal	Status	Criminal
<b>Experimental-Intensive</b>								
Mean	1.0000	1.7143	0.1429	0.2857	1.4286	0.2857	0.4286	-1.4286
Standard Deviation	1.1547	1.9760	0.3780	0.4880	1.2724	0.4880	0.9759	2.2254
<b>Experimental-Moderate</b>								
Mean	1.2000	1.0000	0.3333	0.0000	0.5333	0.2667	-0.6667	-0.7333
Standard Deviation	1.2649	1.0000	0.4880	0.0000	0.9155	0.4577	1.3973	1.0328
<b>Control-Intensive</b>								
Mean	0.7500	1.2500	0.3750	0.0000	0.2500	0.2500	-0.5000	-1.0000
Standard Deviation	0.8864	0.7071	0.5175	0.0000	0.4629	0.4629	1.1952	0.9258
<b>Control-Moderate</b>								
Mean	0.6667	1.2000	0.1333	0.0000	0.4667	0.3333	-0.2000	-0.8667
Standard Deviation	0.8165	0.7746	0.3519	0.0000	0.6399	0.6172	1.0823	0.8338

as evidenced by the number of status and criminal adjudications.

Dispositions. In the case of youths who were ultimately adjudicated for complaints issued during and after the intervention, it was common for judges to simply order that probation be continued, with no other disposition involved. If the criminal versus status distinction had been maintained when analyzing the disposition data, the respective distributions would not have contained enough variation to allow meaningful data summaries. For this reason, the criminal versus status distinction was not maintained when analyzing the disposition data. However, the time frame distinction employed was the same as that used for the foregoing system penetration measures.

As pointed out in the previous chapter, dispositions resulting from the adjudication orders were categorized as those involving: (a) detention, (b) institutional placement, (c) foster care placement, and (d) restitution and/or community service orders. Cell means and standard deviations are presented only for the detention data, since this was the only measure with enough variability to make such computations meaningful. The means and standard deviations appear in Table 19.

The overall pattern that emerges from Table 19 is similar to the patterns that emerged from the system penetration measures already described. There is no indication that participation in the intervention was associated with a substantial reduction in the number of dispositions involving detention placements. When the pre



Table 19

## Cell Means and Standard Deviations for Detention Disposition Data

Group	Before (Pre)	During	After (Post)	Pre to Post Change
<b>Experimental-Intensive</b>				
Mean	1.5714	0.1429	0.8571	-0.7143
Standard Deviation	1.5119	0.3780	0.8997	1.8898
<b>Experimental-Moderate</b>				
Mean	0.8667	0.2000	0.6000	-0.2667
Standard Deviation	0.9155	0.4140	0.9103	1.0328
<b>Control-Intensive</b>				
Mean	1.2500	0.2500	0.3750	-0.8750
Standard Deviation	1.0351	0.4629	0.7440	1.4577
<b>Control-Moderate</b>				
Mean	0.6667	0.0000	0.0000	-0.1333
Standard Deviation	0.7237	0.0000	0.0000	0.9155

and post periods were compared, the control-intensive and experimental-intensive groups displayed the greatest mean reductions in detention placements.

Dispositions involving institutional placement were rare compared to those involving detention. One experimental-moderate subject and two control subjects (one moderate and one intensive) had been institutionalized prior to the intervention. A complaint resulting in institutional placement was filed against a control-intensive subject during the period of the intervention. After the termination of intervention, two experimental subjects (one intensive and one moderate) and four control subjects (one intensive and three moderates) had complaints filed against them which resulted in institutionalization. Thus, while 21.74% of the control group was placed in an institutional setting for complaints issued after the start of the intervention, this was true for only 9.09% of the experimental group. The number of subjects involved in this comparison is too small to allow firm conclusions to be drawn about the effectiveness of the intervention in reducing institutional placements. Furthermore, such dispositions were obviously affected by considerable discretion because they came so late in the juvenile justice process. Nevertheless, this is a trend that should not be ignored, given the severity of the disposition being considered.

Dispositions involving foster care placement were more rare than those involving institutionalization. Before the intervention, three experimental subjects (two intensives and one moderate) and three control subjects (one intensive and two moderates) had, at

some point, been placed in foster care settings. (As Table 1 indicates, two subjects from the experimental group were residing with foster parents when the intervention began.) Subsequent to the start of the intervention, only one foster care placement was made. During the time the intervention was in progress, a complaint which resulted in this disposition was filed against an experimental-moderate subject.

Dispositions involving restitution and/or community service orders were less frequent than those involving detention but more common than the other two dispositional categories. Prior to the intervention, four (18.18%) of the subjects from the experimental group (two intensives and two moderates) and five (21.74%) of the control subjects (two intensives and three moderates) had received such orders. A complaint resulting in this disposition was issued against an experimental-intensive subject during the period of the intervention. For complaints filed after the intervention had ended, restitution and/or community service orders were more frequently utilized for experimental subjects. Six (27.27%) of the experimental subjects (one intensive and five moderates) and three members (13.04%) of the control group (one intensive and two moderates) received this disposition.

#### Time Related Variables

From Table 1, it can be recalled that the experimental and control groups had served roughly similar amounts of time on

probation prior to the intervention. Data were collected on a number of additional time related variables. The purpose here is to present the findings associated with these measures.

The data for the number of days served on probation after termination of the intervention are summarized in Table 20. Table 20 also contains data for the total number of days served on probation (i.e., the periods before, during, and after the intervention combined). When examining these data, it should be kept in mind that several subjects had not been discharged from probation by the end of the follow-up period. This was true of 27.27% of the experimental subjects (all moderate probationers) and 30.43% of the control subjects (two intensives and five moderates). For these subjects, the end of the follow-up period was used as the point of reference (i.e., maximum number) when calculating the total number of days served on probation as well as when calculating the number of days served after the intervention.

It can be seen from Table 20 that the average amounts of time served on probation after the end of the intervention were similar across the various groups. There was, however, wide variation across individual subjects, as evidenced by the ranges and standard deviations. With respect to the data for the total days served on probation, it is apparent that the experimental-intensive group served a greater average amount of time than the other groups.

In the ANCOVA tests reported earlier in this section, offenses that were officially recorded during the follow-up period were analyzed without regard for the particular time that they were

Table 20

Days Served on Probation After Termination of Intervention and Total Days Served on Probation

Group	After				Total			
	Range	Mean	Median	Standard Deviation	Range	Mean	Median	Standard Deviation
Experimental	2-546	336.32	340.00	179.41	170-2095	735.64	678.50	439.31
Intensive	111-455	292.29	334.00	132.32	388-2095	979.57	798.00	585.25
Moderate	2-546	356.87	366.00	198.39	170-1296	621.80	622.00	314.73
Control	0-546	350.48	366.00	188.67	265-1125	617.43	649.00	220.80
Intensive	0-546	322.25	393.00	224.26	281-912	594.63	658.50	224.05
Moderate	57-546	365.53	346.00	173.48	265-1125	629.60	649.00	225.96

recorded. Therefore, it is meaningful to inquire whether the intervention yielded beneficial effects which may not have been detected by the previously reported inferential analyses. Stated differently, the question is whether experimental subjects refrained from offense activity for longer periods of time after the intervention than control subjects.

In order to address this question, the number of days between the end of the intervention and the date of the first subsequent officially recorded offense was computed for each subject. (In the case of subjects who displayed no record of subsequent offending, the end of the follow-up period was used as the point of reference for calculational purposes.) This measure was then employed as the dependent variable in a 2 X 2 ANCOVA, with the number of days served on probation after the end of the intervention serving as the covariate. This variable is a useful covariate because it is likely that the behaviors of subjects who remained on probation for longer periods following the intervention were monitored more closely than the behaviors of those who were discharged shortly after the intervention ended.

The results of the ANCOVA yielded neither significant main nor interaction effects. Likewise, the homogeneity of regression slopes test yielded a nonsignificant F value. The adjusted cell means associated with the analysis are presented in Table 21. The adjusted marginal mean differences and 95% confidence intervals appear in Table 22.

Table 21

## Adjusted Cell Means for Timing of Offense Comparison

Intervention Factor	Case Status Factor	
	Intensive	Moderate
Experimental	191.08	339.16
Control	319.60	228.39

Table 22

Adjusted Marginal Mean Differences and 95% Confidence Intervals for  
Timing of Offense Comparison

Factor	Mean Difference	Interval
Intervention	-8.88	(-129.75, 111.99)
Case Status	-28.44	(-150.53, 93.66)

Inspection of Table 21 reveals that subjects in the experimental-intensive group and, to a lesser extent, those in the control-moderate group tended to have offenses recorded against them sooner after the intervention than the other groups. However, as revealed by Table 22, the effect sizes associated with the factors are of trivial magnitude. On the average, experimental subjects had offenses recorded against them 8.88 days sooner than control subjects. Similarly, on average, intensive probationers had offenses recorded against them 28.44 days sooner than moderates.

Notice that the limits of the confidence intervals are consistent with the ANCOVA results demonstrating no significant population effects.

### Synopsis of Findings

Before turning to a discussion and interpretation of the findings just presented, it will be helpful to provide a synopsis of those findings. Therefore, the intent in this section is to recapitulate the findings derived from the implementation, self-report and official data.

The implementation data (see Table 8) indicated that youth attendance was satisfactory for the job preparation workshops and for the outdoor adventure component. The same was found to be true for youth participation and performance during the outdoor adventure. On the other hand, youth participation during the job workshops as well as parental attendance and participation at the outdoor adventure were less than optimal. Most importantly, the data indicated that, while youth attendance of the family relations sessions was adequate, youth participation in and parental attendance of these sessions were inadequate. Since the family relations sessions constituted the single most important component of Project EXPLORE, the low levels of youth participation and parental attendance were deemed most unfortunate.

None of the statistical comparisons involving the adjusted means of the eight self-report scales (see Table 9) yielded



significant main or interaction effects, and the group slopes associated with the various scales were found to be homogeneous. With the exception of the job retention scale, the confidence intervals for the adjusted marginal mean differences associated with the two factors (i.e., intervention and case status) were consistent with the ANCOVA F tests (see Table 10) in showing no significant population effects. Furthermore, none of the effect sizes corresponding to the intervention factor were large enough to be of much importance, although experimental subjects did exhibit slightly more positive performance on certain scales (viz., the job retention scale as well as the school, attitudes toward juvenile justice, and peer relations composites). The most notable pattern in the self-report data was the slightly more favorable performance of intensive probationers, as compared with moderates. The intensive condition, with the exception of the data for the self-conception composite, was consistently associated with small positive effects. However, case status was not a random factor, so cause-effect statements are inappropriate.

Unlike the self-report data set, the data on the number of officially recorded offenses failed to demonstrate a trend for intensive probationers to out-perform moderates. As evidenced by the adjusted marginal mean differences associated with case status (none of which were statistically significant), intensive probationers generally displayed slightly more offense activity than moderates. This pattern was most apparent when considering status (see Tables 11 and 12) and criminal (see Tables 15 and 16) offenses

recorded during the period of the intervention. With reference to the follow-up period, the trend for moderate probationers to exhibit better performance than intensives was evident only for subjects in the experimental group. The adjusted cell means for status offenses recorded after the intervention appear in Table 13. Furthermore, it can be recalled that when considering criminal offenses recorded during the follow-up period, 71.43% of the experimental-intensive subjects had at least one offense filed against them, compared to only 46.67% of the experimental-moderates. By contrast, the same was true for 62.50% of the control-intensive subjects and 60% of the control-moderates. As already noted, however, none of the ANCOVA F tests on the main effects of the case status factor were found to be significant, a result supported by the confidence interval data as well.

Still referring to the data on officially recorded offenses, no significant interactions were detected between the case status and the intervention factors. Comparatively speaking, the effects associated with case status were generally stronger than those associated with the intervention, although this was not true when considering status offenses recorded during follow-up (see Table 14).

Furthermore, with one exception, the intervention factor was not associated with any significant effects. In fact, the data showed a very slight (nonsignificant) tendency for control subjects to out-perform experimental subjects when considering: (a) status offenses recorded during the intervention (see Table 12), (b) status offenses recorded after the intervention (see Table 14), and (c)

criminal offenses recorded during the intervention (see Table 16). The group slopes involved in these comparisons were found to be homogeneous.

However, with respect to the comparison involving criminal offenses recorded during the follow-up period, the slope of the control-moderate group was found to deviate substantially from the slopes of the other three groups. Experimental-intensive subjects (adjusted mean = 1.4592) and particularly experimental-moderate subjects (adjusted mean = 0.9251) exhibited somewhat better performance than control-intensive subjects (adjusted mean = 1.6136), although neither difference was significant. Moreover, (still considering the same variable and time frame), certain intensive and moderate subjects in the experimental group displayed significantly better performance than certain subjects in the control-moderate group. In this context, the term "certain subjects" refers to those with relatively lengthy histories of criminal activity. As derived through Johnson-Neyman analyses, the term "lengthy" was found to mean: (a) seven or more prior criminal offenses for the comparison between the control-moderate and experimental-intensive groups and (b) five or more prior criminal offenses for the comparison between the control-moderate and experimental-moderate groups.

When analyzing the data on officially recorded offenses, it was found that, in general, both the experimental and control groups contained repeat offenders (i.e., in each group, a relatively low number of subjects disproportionately contributed to the total amount of offense activity). Only 15.56% of the subjects in the

study (13.64% of the experimentals and 17.39% of the controls) did not commit any detectable offenses during the time interval from the start of the intervention through the end of the follow-up period. At the same time, however, 55.56% of the sample (59.09% of the experimentals and 52.17% of the controls) did not commit more than two detectable offenses during this interval. The only exception to the generalization regarding repeat offenders was found in the experimental group when comparing status offenses recorded during Project EXPLORE. Such offenses were evenly dispersed across half of the subjects.

The system penetration data, with the possible exception of the institutional placement measure, indicated that experimental probationers were not subjected to less formal processing than probationers in the control group. In reference to status offense petitions (see Table 17), only the experimental-intensive group displayed a mean increase when the period preceding the intervention and the period after the intervention were compared. However, all of the groups exhibited pre to post reductions on the criminal petitions measure, and the most pronounced decrease occurred in the experimental-intensive group. The data on status and criminal adjudications (see Table 18) demonstrated trends that were nearly identical to those obtained for the petition data. Indeed, the trends derived from the petition and adjudication data were found to parallel those derived from the offense data. For instance, the finding that only experimental-intensive subjects exhibited pre to post mean increases in status petitions and status adjudications is

predictable from the finding that members of this group had the most status offenses filed against them after the intervention, with pre-intervention status offense activity controlled.

Still referring to the system penetration data, and to the disposition data in particular, there was no evidence that the intervention was associated with a substantial reduction in the mean number of detention orders issued between the pre- and post-intervention periods (see Table 19). All groups showed a mean reduction on the detention variable, with the control-intensive and experimental-intensive subjects displaying the most pronounced reductions. However, a trend emerged for subjects in the experimental group to be placed in institutional settings less frequently than members of the control group. Considering the time interval running from the start of the intervention through the end of the follow-up period, it was found that 21.74% of the control subjects had complaints filed against them which resulted in institutionalization. On the other hand, the same was true for only 9.09% of the experimental subjects. The higher level of institutionalization in the control group is predictable from the higher level of criminal offending by members of this group during the period after the end of the intervention. By contrast, the less serious nature of the offenses recorded against experimental subjects was accompanied by a greater number of dispositions involving restitution and/or community services orders in the experimental group. While 31.82% of the experimental subjects received such orders for complaints issued after the start of the intervention (and continuing through the end

of the follow-up period), the same was true of only 13.04% of the control subjects.

Finally, it was found that, while the averages for the number of days served on probation after the end of the intervention were similar across the four groups, the average number of total days served on probation was greater for experimental-intensive subjects than for subjects in the other groups (see Table 20). Furthermore, there was no evidence that experimental subjects refrained from offense activity for longer periods of time after the end of the intervention than did control subjects. This was evident from an ANCOVA comparison incorporating: (a) the number of days served on probation after the end of the intervention as the covariate and (b) the number of days between the end of the intervention and the date of the first subsequent officially recorded offense as the dependent variable. In fact, the data indicated that the group of experimental subjects and especially the group of intensive probationers (experimentals and controls combined) tended to have offenses recorded against them slightly sooner after the intervention had ended than did the group of control subjects and the group of moderate probationers (see Tables 21 and 22).

## CHAPTER VI

### DISCUSSION AND CONCLUSION

This chapter opens with a discussion and interpretation of the results contained in the last chapter. Specifically, the findings are discussed and interpreted in view of a number of methodological, pragmatic, and theoretical considerations. The remainder of the chapter is then devoted to expounding the conclusions of this research, including an examination of directions for further program development and research.

#### Discussion and Interpretation of Findings

The data are generally insufficient to conclude that the intervention led to significant differences between the experimental and control groups. Technically, it is more accurate to say that the intervention failed to yield measurable positive outcomes, than it is to say without qualification that the intervention failed. The reason for this is that the intervention may have had desirable, positive effects which were never detected due to methodological considerations. Therefore, before turning to a consideration of pragmatic and theoretical issues, it is important to address some of these methodological considerations.

### Methodological Considerations

A number of methodological concerns have been previously described. The intent here is to examine these concerns as they are germane to the findings, as well as to elaborate several other considerations yet to be addressed. These latter considerations should be seen as operating in conjunction with the methodological issues raised earlier.

In earlier chapters, the benefits of a multi-faceted, comprehensive approach to intervention were discussed. It was noted that there are strong theoretical rationales as well as prior research support (cf. Gendreau & Ross, 1983; Palmer, 1983; W. E. Wright & Dixon, 1977) for the use of a multiple modality intervention. However, in terms of evaluation research design, such an approach is also associated with at least one disadvantage. While the design used in this study allows one to make confident statements about the effects of the intervention components when employed in combination with one another, the design does not allow one to make statements about the independent and unique effects of each of the various components. To make statements of the latter type, it would have been necessary to employ a design wherein some experimental subjects were randomly assigned to participate only in the job preparation component, others only in the outdoor experiential component, and still others only in the family relations component. The three experimental groups could have been compared with one another as well as with the control group. Statements could then have been



made about the differential effects of the intervention components.

Such a design was neither desirable nor possible in this research owing to: (a) the relatively small number of subjects and (b) the theoretical and empirical rationales for a multi-faceted intervention. Nevertheless, the drawback to the design that was employed in this research is that the findings apply only to the three components as implemented in combination with one another. Now suppose, for example, that the outdoor experiential component actually had strong positive effects on the experimental group. Suppose further that the effects of the family relations component were deleterious and that the effects of the job preparation component were not positive but essentially innocuous. Under these conditions, one should not be surprised to obtain the overall pattern of findings discovered in this study. That is, the positive effects associated with one component may have been offset and masked by the negative effects associated with another.

The finding that the interaction terms of the various statistical comparisons were nonsignificant fails to provide any information about the possibility of differential component effects. This is true because the interaction terms refer to the interaction between the intervention factor and the case status factor, rather than to the interaction between the intervention components. Likewise, the information pertaining to the slopes of the various groups provides no help because the slopes depict the relationship between the pretest data and the posttest data, rather than the relationship

between the different components. However, there is one finding that bears, albeit weakly, on the possibility of differential component effects. This is the finding that experimental subjects failed to exhibit a decline in offense activity during the time the intervention was in progress. If one of the components, say the job preparation component, had been highly effective, an immediate decline in offense activity should have been forthcoming and, hence, apparent at least when group differences were analyzed for the period during the intervention. However, when considering the period during which the intervention was in progress, there was little measurable difference between the experimental and control groups in status and criminal offense activity. In fact, the experimental group displayed a slightly higher level of offending. While the possibility of differential component effects cannot be directly disconfirmed by this result, the result does bear on the issue and is certainly better than no evidence at all.

This research also suffers from a methodological weakness similar (but not identical) to a concern apparent in a study by Lichtman and Smock (1981). In a randomized field experiment using adult subjects, Lichtman and Smock compared the effects of a regular probation program offering only supervisory services with the effects of a probation program offering various social services (e.g., employment referrals). The researchers observed no significant differences in outcome, as measured by officially recorded offenses. Lichtman and Smock surmised that probationers in the "control" group frequently undertook the initiative to secure

social services on their own. These services were highly similar to those provided the "experimental" group. Thus, it is unsurprising that no differences were observed.

This and similar concerns have been identified by noted methodologists (Cook & Campbell, 1979; West, 1986), and it should be recognized that these problems represent threats to internal validity which are not ruled out by randomization. Cook and Campbell (pp. 54-55) describe three such concerns. "Diffusion or imitation of treatments" represents a threat to internal validity when there is a possibility that members of the control group were somehow inadvertently exposed to aspects of the intervention intended only for the experimental group. Similarly, "compensatory equalization of treatments" is possible when persons responsible for implementing an intervention believe that the control group is being unfairly deprived of some valuable service. Under such circumstances, implementors may attempt to compensate by providing the control group with some degree of the service intended only for experimental subjects. West (p. 205) refers to both of these problems under a single label, "treatment contamination".

There is one other problem. Cook and Campbell (1979, pp. 54-55) call it "compensatory rivalry by respondents receiving less desirable treatments," and West (1986, pp. 205-206) describes it as "atypical reactions of control subjects." The basic idea is that when control subjects become aware that they are being deprived of a desirable service relative to the experimental group, they may try

unusually hard to improve their performance and reverse their "underdog" status.

It is likely that compensatory rivalry transpired in the Lichtman and Smock (1981) study. Compensatory rivalry may have been a factor in the present research as well, since it was possible for experimental and control subjects to interact with one another outside of the context of the court. While there are no data to bear on this point, it would probably be naive to suggest that subjects found the job preparation and family relations components highly desirable and that, consequently, members of the control group reacted in an atypical manner. It is more reasonable to suppose that, if compensatory rivalry was a confounding factor, it occurred in response to the outdoor experiential component. The author's qualitative observations suggest that at least the experimental subjects found the outdoor adventure to their liking. It is also reasonable to entertain the idea that compensatory rivalry operated in a direction different from that usually anticipated. It is tenable that experimental subjects found the intervention (or certain of its components) undesirable relative to the services provided control subjects. If so, the experimental subjects may have reacted by displaying more negative performance than usual.<sup>5</sup> This would help explain why the level of offense activity was slightly higher in the experimental group than in the control group during the time the intervention was in progress.

Contamination is a very real possibility in this study because the caseworkers responsible for delivering the intervention to

experimental subjects were the same persons responsible for supervising control subjects and providing them with standard probation services. Furthermore, as already mentioned, it was possible for experimental and control subjects to interact with one another outside of the context of the court. While caseworkers were made aware of the possibility of contamination (before the start of the intervention) and instructed to guard against it, there is no guarantee that this precaution was effective. It is impossible to estimate the magnitude of the contamination problem with any certainty from the available data. However, the findings that all groups in the study displayed a reduction in petitions and adjudications for criminal offenses recorded during and after the intervention (relative to pre-intervention levels) imply that the services received by control subjects may have been somewhat helpful. In addition, the finding that intensive probationers generally displayed more favorable responses than moderates on the self-report measures could mean that intensive subjects in both the experimental and control groups benefited from receiving more of the court's services than moderates. This latter possibility is called into question, however, by the trend for moderates to out-perform intensives on the official measures. Unfortunately, there is no pure control group that received no services. Thus, there is no standard upon which to base comparisons relevant to the question of contamination.

Another methodological consideration is what Cook and Campbell

(1979, pp. 43-44) term "the reliability of treatment implementation", which, like the above considerations, represents a threat to the validity of the findings.<sup>6</sup> This is a potential problem when the manner in which an intervention is implemented differs from one subject to another or differs for individual subjects over time (i.e., the problem arises from a lack of standardization both within and between subjects). The effect of unreliable implementation, according to Cook and Campbell, is the same as the effect of: (a) employing a relatively low number of subjects and (b) using measures with a questionable degree of reliability. Remember that the latter effect involves diminished power or a decreased likelihood that true differences between variables will be accurately detected. Unreliable implementation will also inflate the probability of making a Type II error because a lack of standardization functions to introduce more error variance.

In this research, reliability of implementation could have been a problem with respect to the outdoor experiential and family relations components because for purposes of these components: (a) the experimental group was subdivided into smaller groups, and (b) different caseworkers worked with the various groups. One precaution against the effect of unreliable implementation involved the utilization of ANCOVA, since ANCOVA was employed to help compensate for diminished power. Another guard against unreliable implementation was undertaken when the staff devised the intervention during the fourth stage of program development and agreed upon how it was to be implemented consistently by different

caseworkers across the experimental subgroups. Of course, one cannot be sure that this guard was totally effective.

A final methodological consideration has to do with the validity of the official measures. As repeatedly stated, these measures are valid indicators of the recording behavior of police and court officials only. The measures should not necessarily be assumed to represent valid indicators of the illegal behaviors of subjects. This is true insofar as officials failed to detect or record offenses. To appreciate the relevance of this problem for interpreting the findings, suppose that experimental subjects were more likely than control subjects to have their activities closely monitored by virtue of their special status as intervention participants. If this was true, it is tenable that the closer monitoring and increased surveillance of experimental subjects culminated in more of their illegal behaviors being detected and recorded--behaviors that may have gone undetected in the absence of their special status. This would help account for the slightly higher level of offense activity observed among experimental subjects during the time the intervention was in progress. Furthermore, as discussed later in this chapter, this possibility is consistent with the position of labeling theory. Before the above interpretation is accepted, however, it should be kept in mind that the self-reported delinquency data also showed a slightly higher level of offending among experimental subjects, and these data are basically impervious to official discretion. Moreover, the self-reported delinquency scale, at least in the case of experimental subjects, was associated

with respectable levels of alpha and retest reliability.

All of the foregoing methodological considerations are highly relevant for interpreting the findings of this study. It has been illustrated how these considerations can be employed to help account for some of the trends and patterns emerging from the self-report and official data. In addition, the overriding consequence of these problems is that certain beneficial effects of Project EXPLORE may have remained undetected during the data analysis process. If so, it would be wrong to conclude that the intervention failed to yield any positive outcomes whatsoever.

In spite of these methodological concerns, however, it is this author's belief that the intervention generally failed to produce the desired outcomes and that full rectification of the methodological problems would not have changed this conclusion in any fundamental way. There are two reasons for this assertion. First, safeguards were applied to help control most of the salient methodological problems. While it cannot be guaranteed that these safeguards were always effective, it is also doubtful that the precautions were totally ineffective.

Second, even if the intervention had beneficial effects which, due to methodological issues such as contamination, were masked when comparing the experimental and control groups, it is unlikely that these effects were very pronounced. The best evidence for this statement is the simple observation that there was no paucity of offense activity in either group during the entire time period covered by the research (i.e., the pre-intervention period, during



the intervention, and the post-intervention period). If a correct-  
ional intervention is going to be judged effective, it is certainly  
reasonable to expect that the offenders who have been directly  
exposed to it (as well as the controls who have been indirectly  
contaminated by it) will, at some point, begin to exhibit a substan-  
tial reduction in offense activity. Even a cursory examination of  
the self-reported and official delinquency data collected in this  
study, indicates that the subjects in both the experimental group  
and the control group committed plenty of offenses. This holds true  
irrespective of the time period being considered.

#### Pragmatic Considerations

In addition to the methodological considerations, there are a  
number of pragmatic issues that help in making sense of the general-  
ly disappointing findings.<sup>7</sup> These considerations pertain to the way  
the intervention was conducted.

The most salient pragmatic considerations relate to the  
quantity and quality of program implementation. The conclusion  
that must be drawn from the implementation data is that the quantity  
of program implementation was partial at best. Because of funding  
problems, two salient components of the intervention were never  
implemented (i.e., the school support and community relationships  
components). In addition, parental attendance during the family  
relations sessions--the single most important component--was inade-  
quate. Parental attendance of the outdoor adventure was also less

than satisfactory. This is an important finding because of the contention that parental participation is an integral feature of outdoor programming (Callahan, 1985). As discussed later in this chapter, the low quantity of implementation has important implications for theoretical interpretations of the findings.

The fact that the implementation data do not lend a great deal of support for the quality of implementation holds equally important ramifications for theoretical interpretations. The data make it obvious that caseworkers did not generally regard the participation of youths and their parents as salutary. Youth participation was rated as less than optimal during the family relations sessions and during the job preparation workshops. The same applies to parental participation during the outdoor adventure. One is left with the undeniable impression that it was all too common for youths and their parents to be present in body but not in mind, if they were present at all. Taken collectively, the data on client attendance and participation do not indicate that the clients were strongly involved with and committed to the program.

For purposes of assessing the quality of implementation, it is unfortunate that there are not quantitative data on the amount of staff commitment and effort afforded the intervention. The qualitative observations of the author, however, suggest that levels of staff enthusiasm, commitment, and effort were generally very high during the early stages of program development and initial implementation. Thereafter, staff burnout seemed to occur. From a practical standpoint, burnout is understandable given that a dozen

caseworkers were responsible for carrying out three months of intervention with experimental subjects in addition to fulfilling their usual job responsibilities with the other court clients. If burnout occurred, as the author's observations suggest, it probably detracted from the quality of implementation and from the capacity of the staff to elicit participation and interest from youths and their parents. This may help explain why youthful participation was generally given a more positive rating during the outdoor adventure than during the family relations sessions. (Remember that the family relations component was implemented shortly after the outdoor experiential component.)

The issues of staff training and the relatively short time frame of the intervention are also relevant to the quality and quantity of program implementation. As described earlier, there were justifications for not including extensive staff training as part of program development. Staff training would have been costly, and the introduction of outside consultants might have detracted from staff commitment. However, the omission of training also has a potentially serious drawback. The lack of explicit emphasis on formal training may have led to a lack of staff acquaintance with the theoretical principles of the program. Given this, one would expect a lack of close adherence to theoretical principles during the implementation process. In short, the intervention may have lacked what Gendreau and Ross (1979, p. 467) call "therapeutic integrity", defined as the extent to which intervention personnel actually adhere to theoretical principles in practice.

Closely related to therapeutic integrity is the question of the extent to which the three components that were implemented in this research were substantively congruent to the components implemented in past studies on successful interventions. Project EXPLORE was designed on the basis of prior research demonstrating the conditions for successful programming (Gendreau & Ross, 1983) as well as in view of past research on effective program components (e.g., Alexander & B. V. Parsons, 1973; Rulo & Zemel, 1979; Winterdyk & Roesch, 1982). While research reports were carefully read and evaluated, few efforts were made to consult at length with the authors of these reports. Such consultation may have led to a closer duplication of effective components.

Returning to the issue of the quantity of implementation, there is ample evidence to support the usefulness of short-term interventions with youthful offenders (e.g., Gross et al., 1980; McPherson et al., 1983; Ostrom et al., 1971; B. V. Parsons & Alexander, 1973). It makes intuitive sense, moreover, to suppose that program integrity, intensiveness, and substance are more critical than program length. At the same time, these points do not guarantee that length is unimportant. For purposes of this study, it is reasonable to question whether three months was enough time to affect meaningful attitudinal and behavioral change. It is possible that three months was not sufficient, and there are data bearing on this question (see Table 9). Consider the negative effects associated with the intervention factor on some of the self-report measures (e.g., -4.29 on the family relations composite). In this example, it is possible

that the adjusted mean score of the experimental group was lower than that of the control group because the experimental subjects were made more cognizant of extant family problems by virtue of their participation in the family relations component. That is, the intervention may have lasted only long enough to make subjects more perceptive of problems in their home situations. If this is true, the important question is whether continued intervention, building upon the increased awareness fostered by initial efforts, would have led to a measurable improvement in self-reports.

In sum, the implementation data do not lend a great deal of positive support for the quality and quantity of program implementation. Additional evidence for this conclusion is provided by a number of other pragmatic considerations, such as the lack of staff training and the strong likelihood of staff burnout. The relevance of this conclusion to a theoretical interpretation of the discouraging findings is now considered.

### Theoretical Considerations

The methodological and pragmatic considerations just described are useful for interpreting the findings and for helping provide an understanding of the failure of the intervention to yield the desired outcomes. However, these considerations are no substitute for the insights to be gained by considering the results in view of the theoretical perspective. This section opens with a theoretical

analysis of what the author believes are the most salient reasons for the generally disappointing outcomes of the intervention. These reasons include: (a) the less than optimal nature of program implementation and (b) the failure of the program to reduce the formalized social control functions of the court. Attention then shifts to a theoretical interpretation of the trends and patterns found in the self-report and official data.

#### Program Implementation

Project EXPLORE was founded on the premise that the illegal activities of probationers could be curtailed by addressing the specified problems and needs of youths. Theoretically, this premise was translated into the assertion that illegal activities could be curtailed by facilitating the capacity of conventional institutions to maintain informal social control over behavior. Accordingly, the intervention sought to enhance youths' relationships in the family, to positively orient youths toward the institution of work and prepare them for participation in the adult labor market, and to alter unconventional peer relations into a more favorable socializing influence. To complement this institutional level focus, the intervention was designed to improve individual probationers' self-conceptions, levels of social skills functioning, loci of control, and perceptions of the juvenile justice system. Given accomplishment of the objectives dictated by theory and, hence, at least partial rectification of youths' problems and needs, the ultimate

aim of the intervention at the individual level was a substantial reduction in the illegal behaviors of experimental subjects, when compared to control subjects.

In view of the less than satisfactory quantity and quality of program implementation, as evidenced by the implementation data and other pragmatic considerations, one should not be surprised to learn that the intervention failed to exert positive effects on the theoretically relevant institutional and individual level factors that it was designed to alter. The contention that the intervention failed to have such effects is fully supported by the self-report data. When compared with the control group, the experimental group displayed no meaningful differences on the family relations, job retention, peer relations, self-conception, locus of control, and perception of the juvenile justice system measures. If the intervention failed to enhance social relationships at the institutional level and to alter the theoretically salient individual level factors then, from the standpoint of theory, it would clearly be inappropriate to expect a reduction in illegal activities. Of course, both the self-reported delinquency scale and the official delinquency data generally supported this claim. It can be seen, therefore, that the implementation, self-report, and official data are largely consistent. The findings derived from the three data sets point in the same direction, and are consistent with the theoretical perspective, given the quantity and quality of program implementation.

A few illustrations--one using social control theory, one using

differential association theory, and one using critical theory-- will further clarify the point that the outcomes of this study are theoretically interpretable from the nature of program implementation. Consider the role relations variant of social control theory first. Remember that Friday's (1983) concept of "overlap" is seen as the most important aspect of institutional role relationships (see chapter two). Overlap implies that it is the quality of social relationships across all relevant conventional institutions which matters most in the etiology of youth crime. A youth who is well integrated across the institutions of family, work, community, and school is unlikely to be susceptible to the deviant socializing influences of the delinquent peer group. Correspondingly, youths who do not have at least one intimate relationship in each of these institutions are more likely to become delinquent through the process of differential association. This is true because there is less cross-pressure to conform to conventional norms. Therefore, Friday's theory clearly dictates that any intervention effort which fails to adequately target all the important institutions as a collectivity, or one which targets two or three institutions in isolation of the rest, is destined to achieve less than optimal results. This is true because such an intervention is unlikely to foster much, if any, overlap.

Still referring to the role relations model, recall that Friday (1983) emphasizes, above all else, the intimateness of social relationships. Social integration and, thus, effective informal social control over delinquent behavior, is said to result from meaningful,



personally fulfilling, and sustained interactions with conventional others. This is why things like interpersonal trust, open communication, and effective role taking were incorporated as central topics during the family relations component of the intervention. Yet, youths failed to participate to the extent desired, and many parents failed to attend regularly. Under such conditions, does the theory predict the formation of more intimate family relationships? What conclusions were youths likely to draw about the nature of their family relationships upon discovering that their parents were either reluctant or unwilling to attend sessions designed to benefit youths? The answers to these questions are obvious, and parental reluctance to attend probably explains the reticent nature of youth participation. Furthermore, the lack of parental involvement in the family relations sessions as well as in the outdoor adventure may also help explain the slightly lower performance exhibited by experimental subjects on the family relations self-report measure.

Differential association theory (Sutherland & Cressey, 1978) suggests that youths are more likely to commit delinquent acts when they acquire an excess of definitions favorable to law violation over definitions favorable to law adherence. The implication for Project EXPLORE was taken to be that programming efforts should target the peer group, creating a context of peer interaction conducive to the acquisition of definitions favorable to law adherence. The outdoor experiential component was given a central position of importance in this regard. Moreover, youth participation and performance were judged by two groups of observers

(i.e., court caseworkers and Pretty Lake staff) to be relatively positive during implementation of the outdoor component. In addition, all youths attended. Is it not reasonable, then, to expect an improvement in experimental subjects' self-reported peer relations and, consequently, a reduction in their illegal activities?

To fully interpret the virtual absence of desirable findings on the peer relations and official outcome measures, it is necessary to inspect differential association theory more closely. Remember that Sutherland and Cressey (1978) stress both the frequency and duration of associations. Frequency refers to the number of contacts a youth has with a particular group, while duration is the amount of time spent in a given association. Now recollect that experimental subjects interacted, albeit positively, at the Pretty Lake Centre for a total of three days. Obviously, the level of frequency and duration of positive peer interaction associated with the outdoor adventure is likely to be minute when compared to the levels associated with the negative interactions occurring elsewhere. Had peer interactions been judged positive (as evidenced by the participation ratings) during the two weeks of job workshops and during the seven weeks of family relations sessions, it may have been reasonable, on the basis of differential association theory, to expect a positive effect on the peer relations composite (see Table 10). Of course, some positive change was evident on this measure (effect size = 1.92), but the magnitude of change was not substantial. Differential association theory interprets this finding.<sup>8</sup>

Critical theory (Currie, 1985) proposes that one of the factors

related to youth crime is the structure of material deprivation and social inequality in American society. Material deprivation and inequality, according to the elaborated perspective used in this study, function to strain the social institutions of family, community, and work, thereby: (a) destroying cooperative interpersonal relations and (b) alienating individuals from work and undermining their desires to pursue socially desired ends through conventional participation in work. By including the job workshop component, Project EXPLORE was designed to positively orient youths toward work, to prepare them for participation in the adult labor market, and to teach them requisite skills and beliefs. Yet, no positive changes were found on the job retention scale and, predictably, on the various delinquency measures.

These disappointing outcomes are entirely consistent with the position taken by critical theorists, such as Currie (1985) and Michalowski (1983), as well as with the theoretical perspective employed in this research. First, while youths generally attended the job preparation workshops, their participation was judged less than adequate. Second, and much more importantly, no efforts were made during implementation of the job component to provide youths with actual job placements. As stated in chapter three, job related interventions which have been judged successful in the past (e.g., Denver's Project New Pride, see USDJ, 1979) incorporated job placements along with job preparation training. Theoretically, there is no reason to expect that youths will become positively oriented to conventional employment unless they see some tangible

rewards (e.g., meaningful fulfillment accompanied by a sense of purpose, reasonable pay, etc.) resulting from their efforts. While the community relations component of Project EXPLORE could have led to actual paying jobs for youths by providing community service employment, this component was never implemented.

It is likely that the lack of between-group differences associated with the various individual level factors targeted by the intervention (i.e., self-conception, locus of control, social skill functioning, and attitude toward the juvenile justice system) are interpretable from the quantity and quality of program implementation. Likewise, in view of the lack of differences on the job retention, family, and peer measures--social institutions that were directly targeted by the intervention--it is not surprising that no difference was observed on the school composite.

The more detailed illustrations provided above are sufficient to demonstrate the main point. The generally unsatisfactory outcomes of the intervention are consistent with the theoretical perspective, given the nature of program implementation. It is now time to examine what seems to be the single most important reason for the less than optimal findings. The reason is of utmost importance because it provides a convincing explanation of why youths and their parents were reluctant to attend and participate in the program.

A Withering of Formalized Social Control?

Project EXPLORE was based on the theoretical premise that the origins of youth crime must ultimately be traced to the political economy. Developments in the political economic organization of American society have given rise to certain definitions of the social position of youth. These definitions have rendered youths economically superfluous and have functioned to exclude youths from meaningful participation in the traditional institutions of family, work, and community. In the process, youths have become more reliant on the youth-specific institutions of the school and the peer group for social interaction and socialization. The potential for the traditional institutions to exercise informal social control has become less predominant. Social control functions have been surrendered to the state through the formal institution of the juvenile court as part of the progressive rationalization of social relations under advanced American capitalism (Spitzer, 1979). Yet, criminological research consistently indicates that informal, personalized mechanisms of control are more effective in preventing illegal behavior than formal, impersonalized, and punitive mechanisms (Bishop, 1984; Paternoster et al., 1983). Therefore, Project EXPLORE was premised on the notion that the juvenile court can best promote law-abiding behavior by facilitating the forces of informal social control operating in youths' lives, rather than attempting to coerce youngsters into conventional behavior. The guiding theoretical principle was that the formal, coercive role of the court should

be largely replaced by an orientation which emphasizes the court's role in supporting and strengthening the institutions of informal control.

It is evident from the outcome measures that the intervention did not generally enhance the quality of informal social control in any measurable way. Had the informal controls operating in probationers' lives been genuinely improved, one would expect to have observed a substantial improvement on the self-report scales and a significant reduction in disapproved behavior. In the preceding section, it was suggested that the reason why the program generally failed to enhance informal social control has to do with the way the program was conducted. In particular, there is evidence from the implementation data to suggest that the clients were not well committed to the intervention. To interpret why clients lacked commitment, one must examine the flip side of the question of whether the intervention positively affected informal social control. This flip side is whether the intervention was associated with a relinquishment of formalized social control on behalf of the court.

It is exceedingly clear from the qualitative and quantitative evidence that the court did not relinquish formal, coercive control and relegate this punitive function to a distant position of secondary importance. An examination of the program development and implementation process supports this claim. The experimental clients had no direct input during the problems and needs identification process. Nor did these clients have the opportunity to help formulate the program components. Furthermore, they were ordered by the

court to participate in the intervention. In view of these facts, it would hardly be surprising to discover that the formalized, coercive elements surrounding the intervention overshadowed and undermined the theoretically relevant goal of enhancing informal control.

There is also quantitative evidence to support the contention that the intervention was not utilized to replace the court's formalized control function. As alluded to in chapter three, a reasonable estimate of the degree of formal control exercised by the court is the degree of system penetration resulting from the charges that were filed against experimental subjects, with system penetration being defined here in terms of the number of petitions and adjudications. Court officials have considerable discretion when it comes to filing petitions and determining adjudications. If these officials were candid about sacrificing formal control to focus upon mechanisms of informal control, one might expect to see (at least at some point during the time period covered by this study) a reduction in the degree of system penetration experienced by experimental subjects vis-à-vis control subjects. This is especially true as regards system penetration resulting from status offense activity because status offenses are often sufficiently trivial so as not to warrant a great deal of formal attention from the court. Therefore, one might expect to have observed that the court placed more reliance on informal institutions to control status offenders. However, the petition and adjudication data provided no such evidence (see Tables 17 and 18). If anything, in considering the petition and

adjudication data applicable to offenses recorded during the intervention, the evidence suggests that experimental youths were subjected to slightly more system processing than controls. Furthermore, when the pre- and post-intervention periods were compared, few meaningful differences emerged between the experimental and control groups. However, there were a couple of meaningful differences. The experimental-intensive group was the only group to exhibit a mean increase in the number of status petitions and adjudications between the pre- and post-intervention periods.

The possibility of a withering of formal social control cannot be seriously entertained on the basis of the observational and quantitative evidence just reviewed. However, two salient issues still need to be addressed. First, it is important to inquire about the consequences of the failure of the court to relinquish formal control. Second, it is relevant to ask why the court maintained formal control in spite of theoretical implications to the contrary.

The conclusion that the court did not surrender its formalized functions is directly relevant for purposes of interpreting two of the self-report findings. The data (see Table 10) make it clear that participation in the intervention was not associated with a significant improvement in experimental subjects' attitudes toward the juvenile justice system (effect size = 0.40). If experimental subjects continued to perceive the court as a punitive agent of formal control, it is understandable that no meaningful between-group difference was found on this measure. The data also make it



clear that the intervention did not lead to improvements on the locus of control composite (effect size = -0.22).<sup>9</sup> This is an important finding. If an intervention is going to be successful, it is important for subjects to recognize that they have some potential for exercising control over their lives (see chapter three). The outcomes of an intervention are likely to be less than desirable if the participants for whom the intervention is designed retain a passive, detached role. Highly formalized interventions frequently fail to affect positive changes precisely because such interventions tend to exacerbate a sense of external control, thereby fostering detachment and a lack of commitment among subjects. If Project EXPLORE was overly formalized, as the evidence suggests, it is little wonder that positive change was not observed on the locus of control composite.

The most salient consequence of the aura of formal coercion surrounding the intervention is manifested by the implementation data showing less than satisfactory levels of attendance and participation. If the aura of formal control led to detachment, alienation, and a lack of client commitment, it is understandable why client attendance and participation were often less than adequate. Moreover, as already stated, the lack of satisfactory attendance and participation helps explain why favorable results were not observed on the outcome measures. This is why the author considers the formal control issue to be the single most important theoretical explanation of the findings.

These considerations lead directly to a discussion of the

reason why the court failed to relinquish formal control despite a strong theoretical rationale for doing so. An understanding of the reason for this failure requires appreciation of an important dilemma facing correctional workers. This dilemma is explainable by reference to the political economic structure.

It has been suggested that the coercive, formalized elements associated with the intervention help explain the less than adequate levels of client attendance and participation which, in turn, help to explain the disappointing results. On the other hand, the reason that court personnel decided to order youths to take part in the intervention was to preclude a lack of attendance and participation. These personnel acted in a manner consistent with Warren's (1977, p. 358) observation that "it is obviously impossible to run a correctional program without coercion." The dilemma is that it is also exceedingly difficult to run one with formalized control, if the genuine goal is to help clients refrain from crime by addressing their problems and needs.

The dilemma runs much deeper than just described. Frequently, the goal of correctional programming is not merely to help clients avoid further trouble with the law. This may well be one objective. However, there are usually more subtle objectives being pursued when correctional interventions are implemented. To understand these subtle goals more fully, it is instructive to return to critical theory, as the theory applies to the relationship between the structural and institutional levels of analysis.

Several scholars have commented that the bureaucratic dynamics

of the juvenile court tend to render client welfare services subservient to formal agency objectives which must be met to ensure the maintenance and stability of the court bureaucracy (Blomberg, 1984; Hasenfeld & Cheung, 1985; Schur, 1973; Walker & Beaumont, 1981). That is, bureaucratic organizational needs tend to be given priority over clients' needs. Clear and Cole (1986, p. 21) use the concept of "goal displacement" to refer to this process.

Goal displacement occurs when an organization does not pursue its formally stated goals. . .but instead seeks to pursue less visible but perhaps more crucial unstated or latent goals. As in other bureaucracies, the growth and maintenance of a correctional organization and its resources, staff, and domain may become more important than the pursuit of such goals as protecting the public or changing the ways of offenders.

To appreciate more fully how goal displacement operates, it is essential to realize that the labeling and processing of delinquent youth occur within the context of a bureaucratic institution (the juvenile court) which is inextricably linked to the political economic structure of American society. Bureaucracy is a fundamental feature of the political economy because it functions to stabilize and preserve the social structure of inequality (Walker & Beaumont, 1981). The order and predictability arising out of bureaucracy serve to resist rapid, disruptive structural alternations. By the same token, bureaucracy itself is insulated from change due to the fact that it sustains the political economy. The preservation of organizational bureaucracy is congruent with powerful political economic interests because bureaucracy protects those interests from threats associated with social change and wide-scale structural

reforms. This is why bureaucratic organizations are structured to maintain and stabilize themselves in a self-serving manner. These organizations resist uncertainty and seek predictability, and an important source of predictability is the power to exert coercive control.

It can be seen, therefore, that the court bureaucracy has an enormous incentive to exercise coercive control over youths. Control reduces organizational uncertainty, enhances predictability, and ensures maintenance and stability. Concomitantly, however, the organizational needs of the court tend to obscure and be confused with the welfare needs of youth (Blomberg, 1984). The result is goal displacement. As Schur (1973) describes it:

What this bureaucratization most significantly implies is that the needs of the organization often affect and even determine the nature of delinquency processing. This factor frequently has a greater bearing on the outcomes in delinquency cases than either the supposed needs of the processed individuals or the specific details of their law-violating behavior. (p. 131)

This is not to suggest that individual caseworkers or other court officials consciously sacrifice youths' problems and needs for bureaucratic objectives. Indeed, the caseworkers observed in this study were generally a committed group with an authentic desire to help youths. Nevertheless, as Walker and Beaumont (1981) point out, the capacity of individual caseworkers to act on behalf of the welfare of their clients is constrained by their organizational role of state employee subordinate to the demands of governmental bureaucracy. Governmental bureaucracy, in turn, is subordinate to the demands of the political economy.

The above theoretical considerations are of vital importance of interpreting the results of this study for they underscore the difficulty of juxtaposing the coercive functions of the juvenile court with informal, noncoercive, helping functions. These considerations also account for the reluctance of the court to relinquish formal social control; even though the theoretical perspective clearly implies that having done so would have been advantageous to clients. The more general point is that bureaucratic objectives can lead to theoretical principles being skirted, therefore undermining efforts at successful programming.

To summarize, it has been contended that the generally disappointing outcomes of this study are theoretically interpretable from the quantity and quality of program implementation. To substantiate this contention, illustrations were provided using social control, differential association, and critical theories. Most importantly, it has been suggested that the primary reason for the lack of client commitment to the program involves the failure of the court to make its formalized social control function subordinate to its capacity to enhance informal control. The reason for this failure was attributed to the bureaucratic dynamics of the court, as these dynamics are grounded in the social structure.

The discussion now turns to a theoretical analysis of the trends and patterns in the findings associated with the self-report and official data. Such an analysis is particularly relevant for helping explain the few select positive results.

### Self-Report Findings

None of the effect sizes associated with the intervention were large enough to be of any theoretical significance (see Table 10). While the performance of the experimental group was found to be slightly more positive than that of the control group on some measures (i.e., job retention, school attitudes, attitudes toward juvenile justice, and peer relations), experimental subjects performed slightly worse on other scales (i.e., self-conception, locus of control, family relations, and self-reported delinquency).

It would make little sense to propose a detailed theoretical interpretation of the minute differences associated with the intervention factor because there is obviously little variation to be explained. In order to interpret differences using theory, there must, of course, be meaningful differences or trends for which an interpretation is needed. In the case of the self-report measures, the most important finding to interpret is the lack of differences associated with the intervention factor. This is the reason why considerable space has already been devoted to establishing the point that the lack of differences is theoretically interpretable from the nature of program implementation.

The only consistent pattern in the self-report data set was associated with the case status factor. Again referring to Table 10, it can be seen that intensive probationers generally displayed slightly more positive performance than moderates. The only exception was found on the self-conception composite. While the

effect sizes associated with the case status factor were generally larger than those corresponding to the intervention factor, the former effects are still too small to be of any great theoretical relevance.

Nevertheless, the slight trend for intensive probationers to out-perform moderates was clearly the only consistent pattern to emerge from the self-report data set. This trend is something of an anomaly, since the same pattern was not evident in the official data.<sup>10</sup> Moreover, a theoretical interpretation of the trend for intensive probationers to slightly out-perform moderates on the self-report scales is made difficult by the fact that the case status factor was not a randomized factor in the design. Therefore, the observed effect sizes cannot be unambiguously attributed to the impacts of intensive probation.

It is possible, however, to venture a guarded interpretation of the above trend. The primary reason for doing so is to demonstrate the applicability of criminological theory to the self-report findings. Even though none of the interactions between the case status and intervention factors were significant for any of the self-report scales, inspection of the adjusted posttest cell means (see Table 9) revealed that, on most of the scales, control-intensive subjects displayed more positive scores than the other groups. Exceptions to this pattern were found on the self-conception, attitudes toward juvenile justice system, and family relations composites. However, on the latter two measures, the performance of control-intensive

subjects was only slightly lower than that of the experimental-intensive group. Furthermore, the experimental-intensive group did not exhibit relatively positive performance in a consistent fashion across scales, as did the control-intensive group. This pattern could be interpreted to mean that the ordinary intensive services provided for the control group (as distinct from the intensive services combined with the intervention services) led the control-intensive group to exhibit slightly more positive performance on most of the self-report scales.

To illustrate how the interpretation just proposed is consistent with criminological theory, consider Hirschi's (1969) social bond version of control theory (see chapter two). Hirschi suggests that involvement in conventional activities with persons like parents, school teachers, and caseworkers is inversely related to delinquency. Likewise, such involvement should be positively correlated with the remaining self-report scales. This is true because involvement with conventional others is generally believed to be positively correlated with attachment to conventional others. Greater attachment, in turn, should be manifested by more favorable attitudes toward parents, teachers, and the like.

The higher level of supervision associated with ordinary intensive services (i.e., more frequent contacts between caseworkers and subjects as well as between caseworkers and subjects' parents and school teachers) may have encouraged control-intensive youth to become more involved in conventional activities and more attached to conventional authority figures. Perhaps these subjects wished to



impress upon their caseworkers, parents, and teachers that they were sincere about avoiding further trouble. Perhaps the subjects hoped that their parents and teachers would give their caseworkers favorable feedback about their salutary actions. If all this is true, why did experimental intensive subjects not exhibit relatively positive scores across the self-report measures, since they too received ordinary intensive services? As suggested earlier, it is tenable that experimental-intensive subjects "acted out", as evidenced by their higher scores on both the self-reported and official delinquency measures, because they found the added intervention services undesirable relative to the ordinary intensive services provided control-intensive subjects. At the same time, experimental-intensive subjects may still have been involved with and attached to conventional others, possibly wishing to create favorable impressions of themselves. This would explain why experimental-intensive subjects exhibited relatively favorable scores on the school, family relations, and attitudes toward juvenile justice system composites, while also displaying relatively poor performance on the delinquency measures.

Another example will further demonstrate the applicability of criminological theory to both the adjusted posttest cell means in Table 9 and the effect sizes in Table 10. The main exception to the pattern for control-intensive subjects to display the most positive performance on the posttest involves the self-conception measures (see Table 9). Indeed, the effect size (-0.34) associated with this measure represented the only exception to the general trend for

intensive probationers to out-perform moderates on the self-report scales (see Table 10). Why should this be? Labeling theory (Lemert, 1951) predicts that the probationers who were subjected to the most court intervention should have displayed the lowest scores on the self-conception measure. This is true because, according to labeling theory, court processing and intervention tend to exacerbate the stigma associated with the delinquent status. Notice from Table 9 that, of all the groups, the most favorable adjusted post-test cell mean on the self-conception measure (1.95) was exhibited by the control-moderate group. This group was exposed to the least amount of interaction with the court.

#### Official Findings

As with the self-report data, the findings derived from the status and criminal offense data revealed no significant interactions between the case status and intervention factors. In contrast to the self-report findings, however, the offense data revealed a general trend for moderate probationers (as a group) to out-perform intensives by exhibiting slightly fewer officially recorded offenses. This trend was most evident when considering offenses recorded during the period of the intervention (see Tables 11, 12, 15, and 16). The trend was also evident among moderate and intensive probationers in the experimental group when considering the period following the completion of the intervention (see Table 13).

Labeling theory (Becker, 1963; Lemert, 1951; Matza, 1969; Schur, 1973) can be used to provide a tenable interpretation of the trend for moderate probationers to exhibit slightly less offense activity than intensives. The labeling perspective dictates that, in all likelihood, the activities of intensive probationers, especially those in the experimental-intensive group, were monitored more closely than the activities of moderates due to the higher level of supervision associated with intensive services. That is to say, the increased surveillance of intensive probationers may have resulted in higher official counts of offenses for these subjects.

As with the self-report data, the effects associated with the case status factor were generally stronger than those associated with the intervention factor. Nevertheless, the data indicated a weak tendency for control subjects (as a group) to exhibit less officially recorded offense activity than experimental subjects (see Tables 11, 12, 13, 14, 15, and 16). The pattern was most apparent when examining status offenses recorded after Project EXPLORE had ended (see Table 14). As inspection of the specified tables indicates, this trend is largely attributable to the more negative performance of experimental-intensive subjects.

Labeling theory can also be employed to interpret the general tendency for control subjects to exhibit fewer officially recorded offenses than experimental subjects. Two issues pertaining to labeling are relevant in this context. First, experimental youths, particularly those in the intensive condition, may have been subjected to closer surveillance than control youths, especially

control-moderates. If so, it is probable that experimental subjects simply had more of their illegal activities detected. Second, the greater interaction between experimental subjects and the court (resulting from their participation in the intervention) may have set in motion a self-fulfilling prophecy. That is to say, the greater interaction with the court may have functioned to increase the extent to which experimental subjects defined themselves as offenders or troublemakers. Given such self-conceptions, experimental subjects may have increased their associations with delinquent peers who had similar self-conceptions (Tangri & M. Schwartz, 1967). The end result may have been that experimental youths actually engaged in more illegal activities, as opposed to simply having more such activity detected. Added support for the self-fulfilling prophecy notion comes from the finding that experimental-intensive youths were subjected to the highest level of system processing for status offenses (see Table 17 and 18). The higher number of petitions and adjudications could have exacerbated stigma.

It is reasonable to suggest that the detection (surveillance) and self-fulfilling prophecy factors operated in conjunction with one another to yield the trend for experimental subjects to exhibit slightly more officially recorded offenses than the control group. Members of the experimental group may have been: (a) more likely to commit offenses due to the increased stigma arising from greater interaction with the court and (b) more likely to have these offenses detected due to the increased surveillance. This is a tenable explanation, since labeling theory dictates that high

surveillance can function to reinforce a self-fulfilling prophecy once such a prophecy is set in motion.

There was one noteworthy exception to the general trend for control subjects to display slightly fewer officially recorded offenses than subjects in the experimental group. This exception was detected when examining criminal offenses recorded during the follow-up period. With respect to this variable and time frame: (a) control-intensive subjects exhibited slightly (but not significantly) more officially recorded offense activity than members of the experimental-intensive and experimental-moderate groups, and (b) intensive and moderate subjects in the experimental group with relatively lengthy criminal histories exhibited significantly fewer offenses than comparable subjects in the control-moderate group.

The finding that control-intensive subjects displayed slightly more officially recorded criminal offenses during the follow-up period can be interpreted using labeling theory because of the possibility that greater surveillance was associated with intensive services. After all, the adjusted mean of the control-intensive group (1.61) was just barely higher than the adjusted mean of the experimental-intensive group (1.46), and both of these scores were somewhat higher than the adjusted mean of the experimental-moderate group (0.93).

From the standpoint of labeling theory, one might expect to have found that the adjusted mean of the control-moderate condition was the lowest of all the groups, since youths in this condition had the least amount of interaction with the court and were probably

subjected to the lowest degree of surveillance. This finding failed to emerge owing to the high number of officially recorded criminal offenses among control-moderate subjects with relatively lengthy criminal histories. However, a "strict" labeling theorist might argue that control-moderate subjects with lengthy criminal histories were monitored more closely than control-moderate subjects who lacked such histories because of the "criminal reputations" of the former subjects. The strict labeling theorist then has an explanation of the anomaly.

On the other hand, proponents of the method of theoretical elaboration can suggest that labeling theory fails to completely explain the anomaly. Why did experimental subjects with lengthy criminal histories (who were also presumably monitored relatively closely and, by virtue of their "experimental" status, perhaps more closely than control-moderates) exhibit substantially less officially recorded criminal activity?

The strict labeling theorist can offer a possible answer to the above question. Remember that the anomaly under discussion here was observed only for the period following the termination of Project EXPLORE. Aside from simply noting that there was less time for official records to accumulate during the three month period of the intervention (vs. the 18 month follow-up period), the labeling theorist can advance the following argument. Juvenile justice officials --particularly court officials, but also police officers with whom court officials interact--found what they expected or wanted to find. Knowing that experimental subjects with lengthy criminal

histories had recently completed "treatment" (which intuitively implies the notion of a cure), officials may have defined the subsequent illegal behaviors of these subjects in less serious terms. By contrast, knowing that control-moderate subjects with lengthy criminal histories had not been exposed to a treatment program, juvenile justice officials may have defined the subsequent behaviors of these subjects in more serious terms. In short, officials may have "eased up" on experimental youths and "cracked down" on control-moderates, even though the illegal behaviors of both groups were not much different in terms of frequency and seriousness.

A similar argument can also be used to interpret the finding that fewer experimental youths than control youths were placed in institutions as a result of offenses recorded after the start of Project EXPLORE. This is true since labeling is a theory that focuses on the exercise of official discretion. Being aware that experimental subjects had participated (or were participating) in the intervention, judges may have seen little reason to send these subjects to institutions.

The proponent of elaborated theorizing would do well to acknowledge the possibilities suggested by labeling theory, especially since there are no data available to refute those possibilities. At the same time, however, the benefit of the method of theoretical elaboration for purposes of evaluation research is that the method allows more than one theoretical interpretation to be entertained. There is another possible explanation for the anomaly that

experimental subjects with lengthy criminal backgrounds displayed better performance during the follow-up than control-moderate subjects with such backgrounds. The alternative explanation (presented below) rests upon the assumptions that control-moderate subjects with pronounced criminal histories in fact committed more criminal offenses than comparable experimental subjects during the follow-up period and that the reason has to do with the intervention services provided experimental youths.

The alternative explanation involves a combination of social control and differential association theories, and it is not wholly inconsistent with labeling theory. Suppose that members of the experimental and control groups differed systematically in their levels of social integration prior to the beginning of the intervention. In particular, suppose that only youths with more pronounced criminal backgrounds were: (a) poorly integrated to conventional social institutions and (b) well integrated to the delinquent peer group. Perhaps the level of conventional integration was moderate to high among status offenders and youths with limited backgrounds of criminal involvement, while the level of deviant integration was moderate to low. If these things were true, only youths with extensive criminal histories should have been expected to benefit from the intervention. The finding that control-moderate subjects with lengthy past records of crime continued to offend at a higher level during the follow-up period (as compared to experimental subjects with comparable histories) may mean that Project EXPLORE was effective with the clients for which the



intervention was suited. Remember that the majority of the 45 subjects in this study were status offenders and youths with limited criminal histories. The observation that nearly all between-group differences were small may have resulted from the disproportional number of less serious cases--cases for which the intervention was not really well suited.

The above possibilities are consistent with the substantive theoretical perspective outlined in chapter two as well as with the findings of some researchers. According to the theoretical perspective, individuals who display the lowest levels of conventional integration and the highest levels of deviant integration are expected to be the most likely to perpetrate frequent criminal acts against society. Indeed, the informal controls to prevent them from doing so are absent, and the prospects of their learning criminal motives and techniques are high. The theory dictates that youths do not frequently perpetrate predatory and malicious criminal acts against those with whom they have formed intimate social relationships. Furthermore, if youths are going to commit such acts, they must acquire the requisite motives and techniques from others. The theory does not preclude the possibility that youths may engage in trivial acts of rebellion or even isolated criminal acts despite the presence of a moderate level of conventional integration. In addition, the perspective allows for the reciprocal effects of criminal behavior on the degree of social integration (Agnew, 1985; Elliott et al., 1985; Liska & Reed, 1985; Thornberry, 1987). That is to say, an extensive criminal history may well be part of the reason

why a youth exhibits low conventional integration and high deviant integration. Frequent criminal acts are likely to elicit staunch ostracism from conventional institutions, thereby detracting from conventional integration. Notice the congruence here with the labeling perspective's emphasis on the effects of social reactions on subsequent acts. Ostracism from conventional institutions may lead to greater assimilation into the delinquent peer group.

Recent evidence obtained by Lab (1984) supports these contentions. His data call into question the long held assumption that unless provided with court intervention, status offenders will naturally graduate to criminal careers. Lab found that the majority of status offenders in his study desisted from law-breaking after one to four relatively minor offenses, implying that such offenders may have been fairly well integrated into conventional society and not highly assimilated with the delinquent peer group. Hence, Lab's work seems to question the utility of employing an intervention like Project EXPLORE with status offenders. Instead, his data suggest that program efforts might profitably directed toward youths with pronounced criminal records.

By contrast, other investigators have cautioned against separating serious delinquents and status offenders for purposes of intervention (S. P. Fjeld, Newsom, & R. M. Fjeld, 1981). Unfortunately, the evidence from past evaluation studies bearing on this issue is mixed. Some of the more highly acclaimed interventions discussed in chapter three were primarily aimed at youths with extensive criminal backgrounds. For example, Denver's Project New

Pride (USDJ, 1979) as well as the programs evaluated by Rulo and Zemel (1979) and Sarason and Ganzer (1973) targeted youths with such backgrounds. Recall that Project New Pride and the intervention researched by Rulo and Zemel were mainly job related programs, whereas the intervention evaluated by Sarason and Ganzer concentrated upon teaching general social skills. On the other hand, one of the most highly acclaimed programs of all, the family function model (Alexander & B. V. Parsons, 1973; B. V. Parsons & Alexander, 1973) was geared toward less serious cases, such as those involving runaways. Likewise, the outdoor experiential program investigated by Winterdyk and Roesch (1982) was implemented with youths having relatively mild status and criminal offense histories. Others (e.g., Callahan, 1985) did not describe the background characteristics of their clients.

It is possible, using data obtained in this study, to estimate whether subjects with extensive criminal backgrounds displayed systematically lower levels of conventional integration coupled with higher levels of deviant integration, relative to subjects with lesser criminal backgrounds. If the answer is yes, there would be at least some support for the position that the intervention (which was designed to enhance conventional integration and reduce integration to the deviant peer group) was responsible for the select significant differences observed between experimental and control-moderate subjects during the follow-up period.

Consider only the experimental and control subjects with less extensive backgrounds of crime. If these subjects were already

fairly well integrated to conventional institutions (and disintegrated from the delinquent peer group) before the intervention began, it is clear that the intervention could have done the experimental subjects little good. Thus, one would not expect to find a substantial difference between the experimental and control groups on the criminal offense outcome measure. Now consider only experimental and control subjects with more extensive criminal backgrounds. If these subjects were poorly integrated to conventional institutions and well integrated to the delinquent peer group prior to Project EXPLORE, it might be expected that: (a) experimental youths refrained from crime after receiving the intervention services, and (b) youths in the control-moderate group who did not receive such services continued to offend at high levels.

To investigate the issue just raised, a descriptive analysis was performed as a supplement to the Johnson-Neyman analyses presented in the last chapter. The results of the supplemental analysis appear in Appendix C.<sup>11</sup>

As discussed in chapter five, the Johnson-Neyman technique was used to compare both the experimental-intensive and experimental-moderate groups with the control-moderate group. This was necessary because the greater slope of the control-moderate group (associated with the comparison involving criminal offenses recorded during the follow-up period) led to a violation of the homogeneity of slopes assumption underlying the ANCOVA model. Recall further that the Johnson-Neyman test comparing the experimental-intensive and control-moderate groups (Pair 1) indicated that the two subjects in

the experimental-intensive condition with histories (covariate scores) of 7 or more criminal offenses performed significantly better during the follow-up period than the one control-moderate subjects having a similar history. In addition, with respect to Pair 2, the five experimental-moderate subjects with covariate scores of 5 or greater performed significantly better during the follow-up than the seven control-moderate subjects having scores of 5 or greater on the covariate.

For purposes of the supplemental analysis, the two experimental-intensive subjects and one control-moderate subject (Pair 1) as well as the five experimental-moderate and seven control-moderate subjects (Pair 2) were classified as having "greater" criminal histories (i.e., seven or more prior offenses for Pair 1 and five or more for Pair 2). Pair 1 was then expanded to include the remaining five subjects in the experimental-intensive group and the remaining 14 control-moderate subjects; all of these additional subjects were classified as having "lesser" criminal histories (i.e., under seven prior offenses). Likewise, Pair 2 was expanded to include the remaining 10 subjects in the experimental-moderate group and the remaining eight subjects in the control-moderate condition; these subjects were classified as having lesser criminal histories (i.e., under five prior offenses).

Next, subjects' pretest self-report scores were examined for the job retention scale as well as for the school, self-conception, locus of control, attitudes toward juvenile justice, family relations, and peer relations composites.<sup>12</sup> These measures provide

estimates of what subjects' levels of conventional and deviant integration were like prior to the beginning of the intervention. Therefore, it is possible to determine, for each group pair, whether subjects with greater criminal histories had relatively lower levels of conventional integration and higher levels of deviant integration than subjects with lesser criminal histories before the intervention started.

For each of the seven self-report scales listed above, 8 separate mean scores were calculated using the pretest data. Regarding Pair 1, for example, a mean score was calculated for the five experimental-intensive subjects classified as having lesser criminal histories, and a mean was also calculated for the two subjects in this group classified as having greater histories. To illustrate using the job retention scale, the pretest scores of the five experimental-intensive subjects classified as having lesser histories were added, and the sum was divided by 5. As can be seen for the data corresponding to the job retention scale in Appendix C, the mean score in this case was 17.40. Similarly, the pretest scores of the two experimental-intensive subjects classified as having greater histories were added, and the sum was divided by 2. Again referring to Appendix C, it can be seen that the mean in this case for the job retention scale was 20.50. Regarding Pair 1, the same procedure was followed for control-moderate subjects classified as having lesser and greater histories respectively. Likewise, the same procedure was followed for Pair 2. To illustrate using the school composite, the pretest scores of the eight control-moderate

subjects classified as having lesser histories were added, and the sum was divided by 8, thus yielding the mean score of 5.00 shown in Appendix C. (In regard to Pair 1, since only one control-moderate subject was classified as having a greater criminal history, it was of course impossible to calculate a mean. The applicable pretest score of this subjects is provided for each scale in Appendix C.)

The data in Appendix C for Pair 1 have to be read with caution because so few subjects were classified as having greater criminal histories. The data for Pair 2 are more meaningful because the distribution of subjects is more proportional. Therefore, the discussion below will focus primarily upon the data for Pair 2.

In general, the data in Appendix C reveal a pattern that is unexpected from the alternative theoretical interpretation discussed earlier. Consider the data for the family relations composite associated with Pair 2. These data are important because family relations was the primary component of the intervention. The mean scores fail to support the contention that subjects with extensive criminal backgrounds displayed lower levels of family integration (relative to those with lesser criminal backgrounds) prior to the intervention. When comparing the mean of the experimental-moderate subjects classified as having lesser histories (48.70) with the mean of those classified as having greater histories (61.40), it is apparent that youths who displayed greater criminal backgrounds exhibited more positive performance on the pretest. Still referring to Pair 2, notice that the same trend holds for control-moderate subjects having greater and lesser criminal histories respectively.

Furthermore, when comparing the mean of experimental-moderate subjects classified as having lesser criminal histories (48.70) with the mean of control-moderate subjects classified as having greater histories (64.86), it is clear that the subjects in the control-moderate condition displayed more positive performance on the family relations pretest measure.

Notice that the data associated with the job retention scale--another area targeted by the intervention--also fail to support the contention that subjects with extensive criminal backgrounds displayed lower levels of conventional integration, compared to those with less pronounced criminal records. However, there is one scale for which the data show an expected pattern. On the peer relations composite, the means show that subjects with more extensive criminal backgrounds exhibited higher levels of deviant integration than subjects with lesser histories. Nevertheless, the differences between the means are not very large.

The findings of the supplemental analysis fail to support the idea that, when compared to subjects displaying lesser criminal records, subjects with greater backgrounds of crime were more poorly integrated to conventional society before the intervention started. At the same time, however, the findings lend support to the notion that, when compared to subjects displaying lesser criminal backgrounds, subjects with greater criminal histories were slightly more integrated to the delinquent peer group. Therefore, it seems unlikely that the positive effects observed for experimental subjects with pronounced criminal histories could have resulted from



the intervention's focus on enhancing conventional integration in the institutions of work and family. This statement is justified to the extent that the measures used to derive the data in Appendix C were reliable and valid. On the other hand, the possibility that these positive effects resulted from the intervention's emphasis on transforming the negative dynamics of the delinquent peer group cannot be disconfirmed on the basis of the data in Appendix C.

To summarize, there are at least two possible theoretical interpretations of the findings that experimental subjects with serious criminal backgrounds out-performed like control-moderate subjects when considering criminal offenses recorded during the follow-up period. The labeling interpretation dictates that the finding resulted from official discretion. Knowing that experimental subjects had been exposed to the intervention, juvenile justice officials may have essentially "constructed" the finding by easing up on experimental subjects and cracking down on control-moderates. (See McCleary, Nienstedt, & Erven, 1982, for an intricate analysis of the manner in which national level official crime statistics are socially created. See Berger & Luckmann, 1963, for an excellent discussion of the social construction of reality, in general.)

By contrast, differential association theory's emphasis on criminal learning suggests an alternative interpretation. Experimental subjects with long criminal records may have refrained from further crime during the follow-up because the intervention successfully countered the learning processes transpiring in the delinquent peer group.

There is one other piece of evidence that bears on the latter interpretation. If select experimental youths desisted from further criminal acts by virtue of having participated in the intervention, one might expect to find that the attendance and participation levels of these subjects were outstanding, compared to the attendance and participation of the experimental group as a whole. Hence, the implementation data for the two experimental-intensive and five experimental-moderate subjects were examined, and the mean scores were calculated in a manner analogous to that described above. These means appear in Table 23. As in the case of Table 8, it was impossible to calculate means for the dichotomous variable assessing parental attendance during the outdoor experiential component. The data revealed that one of the 2 experimental-intensive subjects had at least one parent in attendance. Likewise, one of the 5 experimental-moderate subjects had at least one parent in attendance.

Table 23

Means and Score Ranges for Implementation Data of Experimental Subjects Classified as Having Greater Criminal Histories

Intervention Component and Associated Measures	Means		Score Range
	Experimental- Intensive n = 2	Experimental- Moderate n = 5	
A. Job Preparation Component			
1. Youth Attendance	1.50	3.20	0 to 4
2. Youth Participation	3.50	8.20	0 to 12

Table 23--Continued

Intervention Component and Associated Measures	Means		Score Range
	Experimental- Intensive n = 2	Experimental- Moderate n = 5	
B. Outdoor Experiential Component			
1. Youth Participation	2.00	2.00	0 to 3
2. Parental Participation	1.50	0.60	0 to 3
3. Youth Performance Rating	21.50	18.20	0 to 24
C. Family Relations Component			
1. Youth Attendance	7.00	5.40	0 to 7
2. Parental Attendance	0.43	2.60	0 to 7
3. Youth Participation	15.00	8.80	0 to 21

It can be seen from Table 23 that, in general, the attendance and participation levels of the select experimental subjects were not substantially better than the attendance and participation of the experimental group as a whole (see Table 8). Consequently, it is difficult to see how the intervention could have benefited these select subjects in any serious way, relative to other experimental subjects. The quantity and quality of the implementation were simply not all that superior.

### Additional Theoretical Considerations

There are two other theoretical considerations that need to be discussed before moving on to a conclusion. The first of these is relevant to the quantity and quality of program implementation and serves to complement the earlier discussion of pragmatic considerations. The second consideration pertains to the finding that both the experimental and control groups contained repeat offenders. As will be shown, these two issues are related to one another.

In regard to the first consideration, it has been suggested that one of the main reasons for the lack of positive outcomes has to do with the quantity and quality of program implementation. Even though other pragmatic considerations (e.g., staff burnout) were alluded to earlier in the chapter, up until this point quantity and quality have been defined primarily in terms of client attendance and participation respectively, as evidenced by the implementation data. Taken in conjunction with theoretical considerations, however, the findings of this study permit one to examine the quantity and quality of program implementation in greater depth.

No substantial differences were observed between the experimental and control groups when examining both status and criminal offenses recorded during the period that the intervention was being implemented. Irrespective of the program's long-term impact, these findings should not have emerged if the quantity and quality of program implementation were adequate. Hirschi's (1969) theoretical

concept of involvement suggests that experimental subjects should have displayed a noticeable reduction in offense activity during the period of the intervention by virtue of the fact that these subjects were devoting considerable time and energy to conventional pursuits (e.g., learning to complete job applications, outdoor camping, interacting with parents, etc.). If the intervention was of sufficient quantity and quality to cause youths to devote considerable time and energy to conventional pursuits, then youths should have had less time and energy available for illegal behavior. The result should have been a clear-cut reduction in the offense activities of experimental subjects during the period the intervention was in progress. Of course, the implementation data (see Tables 8 and 23) question the extent to which youths devoted time and energy to Project EXPLORE. Since the data imply that subjects were often only marginally involved in the program, it is likely that they had enough time and energy left for offense activity. The offense outcome measures support this contention.

It has been suggested that the primary reason for the reluctance of clients to get involved in the program is attributable to the aura of formalized control surrounding the intervention. However, another important issue concerns the effect of a lack of client involvement on caseworker involvement. How did caseworkers react as they began to notice a lack of client involvement? While there are no quantitative data to bear on this point, it was noted earlier that caseworker enthusiasm seemed to diminish over time. It is tenable that the lack of client involvement (stemming from the

formalized nature of the intervention) had a negative impact on caseworkers, possibly contributing to staff burnout and decreasing caseworker commitment to theoretical principles. In reciprocal fashion, the reactions of caseworkers may have reinforced the lack of client involvement. Consistent with this possibility, the implementation data suggest that the lowest levels of client attendance and participation were associated with the family relations sessions, the final program component to be implemented.

If the quantity and quality of program implementation was less than satisfactory, as described above, the intervention should not be expected to have interrupted the offense careers of repeat offenders in the experimental group. In both the experimental and control groups, a relatively low number of subjects disproportionately contributed to the total amount of offense activity. It should be pointed out that this finding has become almost commonplace in delinquency research since first being reported in the seminal work of Wolfgang, Figlio, and Sellin (1972), and the pattern was apparent despite the relatively small sample in this research. The observation that experimental youths on their ways to establishing career patterns of delinquency failed to desist from offending, is consistent with the previously stated assertions about the nature of program implementation.

### Conclusion

The central research question addressed by this investigation was whether probationers who were exposed to the intervention

displayed substantially better performance on the outcome measures than probationers who received the standard services furnished by the court. It is clear that the evidence is insufficient to provide an affirmative answer to this question. There is no justification for concluding that the two factors included in the design were associated with meaningful interactions across the outcome measures. Similarly, there is no basis for concluding that either of the factors led to significant main effects on the outcome measures. The primary conclusion to be drawn from the findings is that there were no meaningful differences between the groups. Hence, the evidence does not support the contention that the institutional and individual level goals of the intervention were satisfactorily achieved.

It has been argued that, given the nature of program implementation, the above conclusion is interpretable from the theoretical perspective underlying the intervention. Furthermore, it has been shown that the labeling perspective can be used to interpret both the patterns of minute differences which were observed as well as the select significant results. There is little basis for attributing the select significant results to the effects of the intervention.

Do these discouraging outcomes mean that: (a) the intervention possesses no potential and should be discontinued without further consideration and/or (b) that the findings obtained in this investigation are of no value? It will be shown below that neither of these statements are justified.

One reason for believing that it might be premature to abandon the intervention (or some version thereof) is that, even though positive findings were few and far between in this study, such findings nevertheless emerged. The two most noteworthy findings were that: (1) experimental subjects with lengthy criminal histories displayed better performance on the official criminal offense measure than comparable subjects in the control-moderate group, and (2) fewer experimental subjects than control subjects were sent to institutional facilities during the interval between the start of the intervention and the end of the follow-up period. Even if these results are more attributable to the exercise of official discretion than they are to the effects of the intervention, it is reasonable to suggest that the results still worked to the benefit of the youths and families involved. Furthermore, as already noted, it is possible that certain positive effects went undetected due to methodological difficulties (e.g., treatment contamination).

Another reason why it might be premature to discontinue the intervention is that the program did not have any measurable, significant negative effects. Had the research conclusively shown the performance of the experimental group to be consistently and substantially worse than that of the control group, it would have been advisable to disband the intervention. Of course, the outcome data do not support this conclusion.

There is a considerable amount of prior research to support the utility of each component of the intervention, and past research has



lent especially strong support for the positive effects of family intervention (Garrett, 1985; Van Voorhis, 1987). This reason alone is sufficient to suggest that there is merit to further program development. Even though Project EXPLORE was designed on the basis of prior research demonstrating both the conditions (cf. Gendreau & Ross, 1983; Van Voorhis, 1987; W. E. Wright & Dixon, 1977) and components (e.g., Alexander & B. V. Parsons, 1973; Rulo & Zemel, 1979; Winterdyk & Roesch, 1982) of successful programing, there is no guarantee that the manner in which the intervention was implemented adhered closely enough to the requisite principles.

Finally, discontinuation of the intervention would defeat the entire purpose of the program development model. The model is an iterative sequence of stages, with the final stage (research) being used to provide feedback for sustained programming efforts and modifications. This brings up the issue of whether the findings derived from this study have any value.

The findings derived in this study are clearly of value. First of all, since the majority of interventions are never evaluated (A. R. Roberts, 1987)--let alone evaluated using an adequate research design--most interventions make little, if any, contribution to the scholarly literature on correctional programming. Therefore, others wishing to develop programs have no access to information regarding such interventions. The fact that the present study represents a resource for others who are interested in program development is evidence enough of the study's utility. Moreover, the study is a resource for those interested in correctional research, since the

study has implications for further investigation.

The findings have added value. In the absence of the data obtained in this research, there would be no basis for ascertaining whether the court should continue or discontinue the intervention. One could only speculate, since there would be no knowledge of whether the effects of the program were positive, harmful, or insignificant. In order to see the value of the present findings, one need only imagine a situation in which: (a) the effects of the intervention were actually harmful; and (b) lacking this information and speculating that the effects were positive, the court blindly thrusts ahead with the decision to repeat the intervention. However, on the basis of this research, it can be stated, with reasonable confidence, that the effects of the program were generally insignificant (i.e., the effects were neither overwhelmingly positive or overwhelmingly negative).

If, on the basis of this research, a decision is made to retain the program, the findings take on additional utility. The data can be used to determine how the program ought to be modified. That is to say, the results have implications for further program development efforts. In the absence of these results, there would be no empirical basis for program modification.

With respect to Project EXPLORE and the program development model upon which it is based, it is important to recognize that only the first cycle of program development has been completed at this point. This study evaluated the first implementation of the intervention and, therefore, the study constitutes an instance of

first-order evaluative research. From the standpoint of the program development model, a first-order evaluation is a good beginning but not an end in itself. One alternative to sustained program development is to simply discontinue programming efforts, thereby endorsing the ill-informed and disproven position that not much works (Martinson, 1974). Another option is to blindly continue with programming without paying any attention to the data with which one has to work. These alternatives have been selected all too frequently in the history of corrections, and this is undoubtedly a major reason why the nothing works mentality continues to persist, despite overwhelming evidence to the contrary (cf. Gendreau & Ross, 1987). As stated in the opening chapter, if one expects to have a program that works, one had better be prepared to engage in program reformulation on the basis of information obtained through sound evaluation research. More often than not, effective programs are those which have been modified and reconceptualized on the basis of research, instead of being discarded after discouraging results were obtained from the first-order evaluation.

#### Further Program Development

In view of the results obtained in this study, it might be questioned whether the program development approach should be replaced with either the differential intervention or the basic treatment-amenability variant of the existing program approach. However, as described in chapter one, the program development model

has clear advantages over the existing program approach. Furthermore, the disappointing results obtained in this study do not mean that the program development approach is fundamentally flawed. Indeed, Elrod and Friday (1986) and D. C. Gottfredson (1986) have reported positive outcomes when evaluating interventions derived from this approach. In addition, as noted in chapter one, the program development model allows for a more efficient utilization of research findings. Under this model, evaluative results (especially disappointing ones) can be employed to reconceptualize program goals as well as to modify the components and the implementation of the program. If discouraging results are obtained with an intervention based upon the differential intervention variant, the investigator is led to question the procedures used to match clients and existing programs but not necessarily to consider program reformulation. The same logic applies to the basic treatment-amenability variant of the existing program approach. The investigator is led to examine the procedure employed to identify amenable client characteristics but is not necessarily led to examine the viability of the program and the way the program was implemented.

Along with the specification of a substantive theoretical perspective, the problems and needs identification process is the most fundamental stage of program development. As will be recalled from chapter one, the program development approach rests upon the notion that an effective intervention must be formulated around a theoretical conceptualization of the problems and needs of the

clients for which the intervention is intended. Therefore, if the problems and needs stage is misguided, the remaining stages are likely to be misguided as well. As an initial step for future program development, then, caseworkers must inquire whether the most salient client problems and needs are being identified.

The findings of this research are instructive in this regard. On the basis of the pretest cell means appearing in Table 6, there is some reason to question the validity of the problems and needs specified during the first stage of the development of Project EXPLORE. To illustrate, caseworkers believed that their clients generally had negative self-conceptions and relatively poor family relationships. These problems may well have been applicable to certain clients and, of course, theory and research dictate that such problems are related to youth crime. Yet, when inspecting the pretest means of the groups, it is questionable whether the majority of subjects had negative self-conceptions and poor family relations, as measured by the self-report scales. Recall from Table 5 that the possible score range of the self-conception composite was zero to four. While the self-conceptions of the control-intensive subjects were relatively negative, it is not clear that the self-conceptions of the remaining groups were negative. Similarly, the score range of the family relations composite was 16 to 80. It is clear that the pretest means associated with this scale were not exceptionally low. If some clients lacked the problems and needs identified by caseworkers, then the intervention should not have been expected to

yield positive effects for those clients.

Clients' problems and needs were identified on the basis of the subjective and intuitive perceptions of caseworkers, rather than on the basis of a more objective measurement strategy. The subjective, intuitive approach provided important information, as evidenced by the congruence between the problems and needs identified by caseworkers and the problems and needs dictated by criminological theory. However, the subjective approach is not the only way to determine problems and needs and, therefore, some alternative or additional procedure should be considered.

For purposes of further program development, caseworker input should remain central to the problems and needs identification process, but extensive client input should also be obtained. Likewise, client input should be actively encouraged during the component design stage of program development. Soliciting the input of clients during both of these stages would help ensure that problems and needs are more precisely specified and that the intervention components are meaningful to clients, rather than alienating. Furthermore, encouraging youth and parental involvement at the beginning of program development might reduce the formalized nature of the intervention and help avoid the tendency for bureaucratic objectives to be given priority over client concerns. As long as clients are provided with a clear impression that they are wholly subordinate in an exchange relationship meant to help them take positive life initiatives, the formal and coercive aura surrounding the program will remain. If clients are ultimately going to be held

personally responsible for displaying positive behavioral change-- and this is a dictum of American jurisprudence--they need to have responsibility for helping design the mechanisms meant to affect that change. If clients are given a hand in program development, they are likely to be less reluctant to participate and may even participate on a voluntary basis, thereby circumventing the need for court orders.

On the basis of caseworker and client input, it should be possible to devise a more reliable and valid measuring instrument to ensure that problems and needs are accurately assessed. Subsequent to devising such an instrument, clients could be pretested, and the pretest data could be analyzed before proceeding with the remaining stages of program development. This procedure would allow for a quantitative check on the validity of problems and needs. The procedure would serve to supplement the verification of problems and needs achieved by applying theory.

Reformulation of the procedure for identifying problems and needs will lead to reconceptualization of other phases of program development, including theory specification. One of the primary advantages of employing a theoretical perspective with broad scope is that diverse problems and needs can be accounted for by the perspective. However, if it is determined during the future program development that problems and needs represent clear anomalies to the program's theoretical foundation, then the perspective itself will have to be modified so as to account for these problems and needs.

With respect to future program development, an important suggestion is that staff who will be responsible for program modification should become more familiar with theoretical principles. It is important to realize that program theory specification is a dynamic process, rather than something to be accomplished once and then forgotten. The theoretical principles are presently more explicit than they were before the program was originally implemented, precisely because the first phase of implementation and evaluation has now been completed. Hence, there is presently greater potential for more thoroughly familiarizing caseworkers with theoretical principles. For example, the results of this study suggest that labeling theory needs to be given more attention, as regards both the theoretical foundation and the implementation process. The same is true of critical perspectives which focus upon the bureaucratic dynamics of juvenile court organizations (e.g., Hasenfeld & Cheung, 1985), since it is important to learn more about how bureaucratic objectives frequently come to override the goal of helping clients. Concerted training efforts would help staff become more thoroughly familiarized with criminological theory so that theory could better serve as a foundation for their work with youths. Theoretical training would help ensure stricter adherence to social control and differential association theories during the component modification and implementation processes. Likewise, training would make staff more conscious of the factors working against successful programming efforts, as dictated by critical theory and by the labeling perspective.



A reconsideration of problems and needs in combination with more precise theoretical elaboration and application of theoretical principles will help guide examination of future program goals and components. Goals should be reassessed as per the implications of theory and on the basis of the revised listing of problems and needs. The results of this study suggest that the objective of reducing the formal social control role of the court should be made explicit, as opposed to left implicit in the set of program goals. Program goals should include precautions to guard against the tendency for coercive functions to be given priority over the objective of enhancing informal control in social institutions.

As already stated, client input is essential during the component design stage of program development in order to ensure client involvement and commitment to the intervention. In turn, client involvement and commitment may help to keep caseworker involvement and commitment at high levels.

There are other issues applicable to the component design stage. The prior empirical support for the various intervention components is sufficient evidence of their potential utility. But more attention must be paid to ensuring that the components which are going to be implemented are substantively congruent with those implemented in past research. This will require more than a careful reading of the published research reports associated with successful programs. Extensive consultation with those who have previously designed and implemented effective programs that appear in the

literature is necessary to allow closer duplication of components. Such consultation could be incorporated as a follow-up to staff training efforts focusing upon theory. Furthermore, when components are being designed, more careful attention should be devoted to resource availability and the possibility of staff burnout. Foresight must be exercised to ensure that not more components are designed than can reasonably be implemented.

On the other hand, it is crucial that all theoretically relevant components be implemented according to the principles upon which these components are based. Otherwise, disappointing results can be expected. Furthermore, if a variety of components are to be employed, as research (W. E. Wright & Dixon, 1977) dictates should be the case, separate workers should be responsible for implementing the components. Likewise, the personnel responsible for delivering services to control subjects should not be the same as those responsible for delivering the intervention. These precautions will guard against treatment contamination and ensure a more reliable and consistent degree of implementation.

Implementation must be monitored more carefully during the evaluation research process. As a supplement to the implementation data collected in this study, additional measures would be useful. Such measures might include data on: (a) subject and caseworker evaluations of and reactions to the intervention, (b) staff commitment to the intervention and the level of adherence to the principles of theory, (c) the reliability of implementation across caseworkers and components, and (d) the progressive degree of skill

acquisition by clients while the program is in progress. These data would greatly facilitate the interpretation of the main outcome findings.

Self-report outcome measures need to be appropriately revised on the basis of the modifications directed at the problem and need identification, theory specification, and goal stipulation phases of program development. More care should be taken to be sure that the self-report measures are reliable and valid indicators of all the major attributes addressed by the intervention. The scales utilized in this research can provide the starting point for instrument revisions, since these scales have already been factor analyzed and subjected to reliability analyses.

In addition, it is advisable to collect data on one other set of outcome measures, namely cost-effectiveness measures. As suggested in chapter one, a primary reason for trying to develop successful probation programs is so that these programs can serve as viable alternatives to institutional placement, thereby helping to relieve facility overcrowding problems. The lack of cost-effectiveness data represents a limitation of this research, and such data would become imperative in the event that the merits of the program are to be compared with the merits of institutional placement.

#### Final Comments

This study was situated against the ongoing debate in the

literature over the effectiveness of correctional interventions (cf. Gendreau & Ross, 1987; Martinson, 1974; Palmer, 1983; Wilson, 1980). This study has added to the literature by demonstrating the important role that a combination of theoretical criminology, previous work on correctional interventions, and evaluation research methods can play in programming efforts.

In addition, this study has added to the literature by highlighting important concerns for future investigations. For example, the study has demonstrated the necessity of examining how the problems and needs of offenders, as stipulated by the staff who work with these offenders, are linked with the academic theories espoused by criminologists. Further investigation is required to more thoroughly explore this linkage. It is essential for applied workers to realize that, in the absence of theoretical guidance, there is a danger for their efforts to be devoid of focus and direction. On the other hand, theorists should continue to emphasize the applicability of their work to correctional settings. (See Elliott et al., 1985, for a good example of such an emphasis.) In specific, more attention could be given to using the method of theoretical elaboration to demonstrate the relationship between the structural, institutional, and individual levels of analysis. There is obviously no requirement that theorists restrict themselves to the theories utilized in this study. Alternative or additional theories can be elaborated in creative ways, so long as linkages and complementary features are demonstrated (Thornberry, 1987). This would help establish more viable theoretical foundations for

applied efforts.

This study also raises issues regarding the requisite conditions for effective programming (Gendreau & Ross, 1983). One issue is how best to avoid alienating clients from interventions. It has been suggested that the social control function of correctional agencies might be made less formal and coercive by soliciting extensive client input during program development. This suggestion needs further investigation.

Another issue involves the question of whether offenders with extensive criminal histories may benefit more from certain interventions than persons lacking such backgrounds. Even though it cannot be concluded on the basis of this study that Project EXPLORE was responsible for the positive effect observed with offenders displaying serious backgrounds, the issue has not been adequately resolved in the literature. Suppose future investigators discover that persons with serious backgrounds tend to benefit most from certain interventions (e.g., job related programs), while status offenders tend to derive the most benefit from other interventions (e.g., family oriented programs). As already mentioned, prior evaluative research has hinted at this possibility, and there is a good theoretical justification for anticipating that such findings may be obtained in future studies. Trivial acts of rebellion and status offenses may be associated with unsatisfactory relationships with parents. On the other hand, more serious criminal acts may be associated with the economic deprivation resulting from being unable

to find meaningful work and seeing only limited prospects for the future. Should future research provide support for this theoretical position, it would be appropriate to start thinking about how the program development and existing program approaches can be more closely juxtaposed with one another. The emphasis on problems and needs identification could be synthesized with the emphasis on matching clients with programs that have been developed to address particular problems and needs.

In closing, it is important to reiterate a statement made at several earlier points in this study. The discouraging findings reported in this research are in no way intended to perpetuate the disproven, rhetorical assertion that all correctional intervention programs are pointless and noneffective. These results are applicable to one intervention program with a small, nonrandom sample of subjects. The findings provide a basis for the long-term program development efforts which are required for building effective intervention programs. In this chapter, the liberty has been taken to freely criticize Project EXPLORE and its evaluation. It is believed that such a critique provides an indispensable source of information for further program development and evaluation.

## **APPENDICES**

## **Appendix A**

### **Performance Rating Instrument Used by Pretty Lake Staff**



Participant's Name \_\_\_\_\_

Check one for each item:	(2) USUALLY	(1) OCCASIONALLY	(0) RARELY
1. Attempts new activities:			
a. when requested	_____	_____	_____
b. voluntary	_____	_____	_____
2. Accepts a variety of role responsibilities within a group	_____	_____	_____
3. Works with others toward a common goal	_____	_____	_____
4. Follows group decisions	_____	_____	_____
5. Expresses feelings or opinions to group:			
a. in situations in which success is perceived as likely	_____	_____	_____
b. in situations in which success is perceived as questionable	_____	_____	_____
6. Accepts or gives constructive criticism within the group	_____	_____	_____
7. Follows the commit- ments of Adventure Centre	_____	_____	_____
8. Gives assistance voluntarily to group members when appropriate	_____	_____	_____
9. Expresses responsi- bilities toward self and group members	_____	_____	_____
10. Generalizes own behavior to other environments and people	_____	_____	_____
SUBTOTALS	_____	_____	_____
TOTAL _____			

## **Appendix B**

### **Items, Response Format, and Factor(s) Associated With Self-Report Scales**

**Scale A: Level of Job Preparation**

**Response Format: Strongly Agree/Agree/Undecided/Disagree/  
Strongly Disagree**

<u>Items</u>	<u>Factor 1</u>
1. It is alright to get upset when you cannot get people to do things your way.	.726
2. It is alright to be late for something you are supposed to be on time for.	.674
3. You really should admit it when you are unsure of how to do something.	.561
4. It is alright to cover up bad work if you get the chance.	.843
5. It is easy for me to work with different kinds of people.	.681

Factor 1

Items: 1-5  
Eigenvalue = 2.471  
Description: Beliefs conducive to job retention

## Scale B: Attitudes Toward School

Response Format: Variable by Item

<u>Items and Response Formats</u>	<u>Factor 1</u>	<u>Factor 2</u>
1. How do you feel about your school? (Like/Don't Like)	.679	.200
2. How do you feel about the classes you are taking? (Like/Don't Like)	.763	-.057
3. How do you feel about the teachers? (Like/Don't Like)	.734	.287
4. I have lots of respect for my teachers. (Agree/Disagree)	.750	.247
5. How important is what teachers think about you? (Very/Fairly/Not)	.279	.641
6. How important is the grade you get at school? (Very/Fairly/Not)	.091	.767
7. This school makes me like to learn. (Agree/Disagree)	.110	.836

Factor 1

Items: 1-4  
 Eigenvalue = 2.910  
 Description: Beliefs in school

Factor 2

Items: 5-7  
 Eigenvalue = 1.216  
 Description: Attachment and commitment to school

**Scale C: School Effort or Involvement****Response Format: Almost Always/Sometimes/Almost Never**

<u>Items</u>	<u>Factor 1</u>
1. I turn my homework in on time.	.919
2. I do not bother with homework or class assignments.	.919

**Factor 1**

Items: 1-2  
Eigenvalue = 1.690  
Description: School effort or involvement

## Scale D: Self-Conception

Response Format: Variable by Item

<u>Items and Response Formats</u>	<u>Factor 1</u>	<u>Factor 2</u>
1. Do most other students in your school see you as a good student? (Very/Somewhat/Not At All)	.910	.190
2. Do most other students in your school see you as successful? (Very/Somewhat/Not At All)	.928	.107
3. Do most other students in your school see you as a loser? (Very/Somewhat/Not At All)	.121	.860
4. Sometimes I think I am no good at all. (True/False)	.152	.851

Factor 1

Items: 1-2  
 Eigenvalue = 2.137  
 Description: Perception of self being viewed favorably by classmates

Factor 2

Items: 3-4  
 Eigenvalue = 1.103  
 Description: Assessment of self-worth

## Scale E: Locus of Control

Response Format: Yes/No

<u>Items</u>	<u>Factor 1</u>	<u>Factor 2</u>
1. Do you believe that most problems will solve themselves if you just do not fool with them?	.474	.210
2. Are you often blamed for things that just are not your fault?	.475	.438
3. Do you feel that most of the time it does not pay to try hard because things never turn out right anyway?	.828	.025
4. When you get punished does it usually seem it is for no good reason at all?	.659	.337
5. Do you feel that when you do something wrong there is very little you can do to make it right?	.610	-.055
6. Most of the time, do you feel that you have little to say about what your family decides to do?	.654	.331
7. Most of the time, do you find it useless to try to get your way at home?	.109	.856
8. Do you feel that when somebody your age wants to be your enemy there is little you can do to change matters?	.116	.892

Factor 1

Items: 1-6

Eigenvalue = 3.145

Description: Arbitrariness of events, primarily negative sanctions

Factor 2

Items: 7-8

Eigenvalue = 1.241

Description: Perceived control in interpersonal relationships

**Scale F: Attitudes Toward Juvenile Court**

**Response Format: Strongly Agree/Agree/Undecided/Disagree/  
Strongly Disagree**

<u>Items</u>	<u>Factor 1</u>	<u>Factor 2</u>
1. Young people would rather do what the juvenile court judge says than what anyone else says.	.731	.070
2. The juvenile court judge gives young people better advice than ministers or priests.	.598	.250
3. If a young person tells the truth, the juvenile court judge will not be too hard on them.	.794	.011
4. The adults who work at the juvenile court are very kind.	.637	.341
5. The juvenile court does a good job of showing a young person the right way to act.	.828	.009
6. The juvenile court is like a good father or mother to young people.	.517	.629
7. There is not much chance for fair treatment in juvenile court unless a young person has pull.	-.001	.900
8. It is hard for a young person to get a square deal in juvenile court.	.072	.791
9. The juvenile court judge has too much power over young people.	.241	.641

**Factor 1**

Items: 1-5  
Eigenvalue = 3.767  
Description: Belief in court's wisdom and trust in its direction

**Factor 2**

Items: 6-9  
Eigenvalue = 1.616  
Description: Belief in fairness and justice of court experience



## Scale G: Attitude Toward Probation Officers

Response Format: Strongly Agree/Agree/Undecided/Disagree/  
Strongly Disagree

<u>Items</u>	<u>Factor 1</u>	<u>Factor 2</u>
1. Probation officers seem to know how young people who are in trouble feel.	.517	.369
2. Probation officers are just like big brothers or sisters to young people.	.827	.161
3. Young people who are in trouble do not mind turning to probation officers for help.	.858	-.116
4. Young people can always trust probation officers.	.719	.275
5. Young people do not mind telling probation officers the truth.	.770	.253
6. Young people will do anything for probation officers.	.674	.211
7. I would like to be a probation officer someday.	.607	.216
8. Probation officers visit young people in their homes too much.	.205	.794
9. Probation officers are just like policemen.	.172	.753
10. Probation officers are too strict about the the kinds of friends a young person can have.	.230	.690
11. Probation officers keep many young people from getting a job.	-.036	.701
12. Probation officers think they are smarter than most people.	.525	.586
13. Young people get little help from probation officers.	.309	.648

## Scale G--(continued)

Factor 1

Items: 1-7  
Eigenvalue = 5.590  
Description: Admiration and trust for probation officers

Factor 2

Items: 8-13  
Eigenvalue = 1.859  
Description: View of probation officers as overly authoritarian  
and intrusive

## Scale H: Family Relations

Response Format: Strongly Agree/Agree/Undecided/Disagree/  
Strongly Disagree

<u>Items</u>	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>
1. My parent(s) do not really understand how I feel about things.	.793	.202	.119
2. My parent(s) really listen to what I have to say.	.689	.157	.458
3. My parent(s) do not trust me.	.734	.387	-.086
4. My parent(s) are too picky about the friends I have.	.823	.186	.034
5. My parent(s) are too nosey.	.673	.417	-.030
6. My parent(s) rarely approve of the things I do.	.653	.130	.270
7. I do not do what my parent(s) tell me.	.566	.494	-.199
8. My family is the most important thing in the world.	.258	.779	.080
9. I can count on my parent(s) when I need them.	.171	.685	.331
10. I like doing things with my family.	.400	.614	.412
11. I have a lot of respect for my parent(s).	.302	.802	-.068
12. My parent(s) let me know when I do something they like.	.193	.770	.295
13. I understand what my parent(s) expect of me.	.250	.352	.598
14. My parent(s) often ask me about my schoolwork.	-.042	.085	.782

## Scale H--(continued)

<u>Items</u>	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>
15. My parent(s) encourage me to try new things.	.026	.076	.847
16. When I mess up, my parent(s) correct me without making me feel stupid.	.234	.582	.419

Factor 1

Items: 1-7  
 Eigenvalue = 7.023  
 Description: Alienation from parents who are perceived as authoritarian.

Factor 2

Items: 8-12  
 Eigenvalue = 2.128  
 Description: Positive reliance on and reinforcement from parents

Factor 3

Items: 13-16  
 Eigenvalue = 1.307  
 Description: Positive guidance from parents

**Scale I: Peer Relations**

**Response Format: Strongly Agree/Agree/Undecided/Disagree/  
Strongly Disagree**

<u>Items</u>	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>
1. My friends can usually get me to go along with them even if I think it is wrong.	.713	.118	.092
2. Most of my friends have been in trouble with the police.	.837	.111	-.054
3. Most of my friends don't mind breaking the law.	.782	-.130	.281
4. I am just like my friends.	.307	.698	-.501
5. Other people think I am just like my friends.	-.081	.774	.446
6. It is important for me to be like my friends.	.046	.859	-.012
7. I can usually get my friends to go along with me even if they think it is wrong.	.302	.089	.862

**Factor 1**

Items: 1-3  
Eigenvalue = 2.315  
Description: Negative influence of peers

**Factor 2**

Items: 4-6  
Eigenvalue = 1.697  
Description: Identification with peers

**Factor 3**

Item: 7  
Eigenvalue = 1.162  
Description: Negative leadership quality

**Scale J: Self-Reported Delinquency****Response Format: Yes/No****Items** -- In the last six months, have you:

1. Purposely damaged or destroyed property belonging to a school?
2. Purposely damaged or destroyed other property that did not belong to you, not counting family or school property?
3. Stolen or tried to steal something worth more than \$50?
4. Carried a hidden weapon other than a plain pocket knife?
5. Been involved in gang fights?
6. Sold marijuana or other drugs?
7. Hit or threatened to hit a teacher or other adult at school?
8. Taken a car for a ride (or drive) without the owner's permission?
9. Used force or strong-arm methods to get money or things from a person?
10. Stolen or tried to steal things worth less than \$50.
11. Stolen or tried to steal something at school, such as someone's coat from a classroom, locker, or cafeteria, or a book from the library?
12. Broken or tried to break into a building or car to steal something or just to look around?
13. Drunk beer, wine, or "hard" liquor?
14. Smoked marijuana (grass, pot)?
15. Taken some other drugs?
16. Gone to school when you were drunk or high on some drugs?

**Note.** This scale could not be divided into theoretically meaningful factors due to a lack of orthogonality across principle components.

## **Appendix C**

### **Supplemental Analysis to Johnson-Neyman Analyses**

## Job Retention (range: 5 to 25)

<u>Group Pair</u>	<u>Criminal History</u>	
	<u>Lesser</u>	<u>Greater</u>
1. Experimental-Intensive	17.40	20.50
Control-Moderate	18.50	25.00
2. Experimental-Moderate	17.60	18.80
Control-Moderate	18.50	19.43

---

## School Composite (range: 0 to 9)

<u>Group Pair</u>	<u>Criminal History</u>	
	<u>Lesser</u>	<u>Greater</u>
1. Experimental-Intensive	3.20	7.00
Control-Moderate	4.86	9.00
2. Experimental-Moderate	4.60	5.60
Control-Moderate	5.00	5.29

---

## Self-Conception Composite (range: 0 to 4)

<u>Group Pair</u>	<u>Criminal History</u>	
	<u>Lesser</u>	<u>Greater</u>
1. Experimental-Intensive	2.20	2.50
Control-Moderate	2.00	3.00
2. Experimental-Moderate	2.00	2.60
Control-Moderate	1.88	2.29

---



## Locus of Control Composite (range: 0 to 8)

<u>Group Pair</u>	<u>Criminal History</u>	
	<u>Lesser</u>	<u>Greater</u>
1. Experimental-Intensive	3.60	5.00
Control-Moderate	3.93	4.00
2. Experimental-Moderate	3.40	5.60
Control-Moderate	4.89	2.88

---

Attitudes Toward Juvenile Justice Composite  
(range: 22 to 110)

<u>Group Pair</u>	<u>Criminal History</u>	
	<u>Lesser</u>	<u>Greater</u>
1. Experimental-Intensive	54.40	75.50
Control-Moderate	64.71	26.00
2. Experimental-Moderate	54.70	64.60
Control-Moderate	67.50	56.00

---

## Family Relations Composite (range: 16 to 80)

<u>Group Pair</u>	<u>Criminal History</u>	
	<u>Lesser</u>	<u>Greater</u>
1. Experimental-Intensive	57.20	57.00
Control-Moderate	60.36	76.00
2. Experimental-Moderate	48.70	61.40
Control-Moderate	58.38	64.86

---

## Peer Relations Composite (range: 7 to 35)

<u>Group Pair</u>	<u>Criminal History</u>	
	<u>Lesser</u>	<u>Greater</u>
1. Experimental-Intensive	20.60	19.00
Control-Moderate	17.86	8.00
2. Experimental-Moderate	20.90	18.20
Control-Moderate	18.25	16.00

---

**APPENDIX D**  
**Human Subjects Confirmation**



Western Michigan University  
Kalamazoo, Michigan 49008-3899

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*Human Subjects  
Institutional Review Board*

TO: Kevin I. Minor  
Susan Caringella-MacDonald

FROM: Ellen Page-Robin, Chair *EP-R*

RE: Research Protocol #86-11-04

DATE: January 14, 1987

This letter will serve as confirmation that your research protocol, "Staff Development of a Probation Facilitation Program for Juveniles: An Evaluation," has been approved by the HSIRB. The Board requests that the following modifications be made to the consent form.

1. Omit "...it is not important who gives what answers." from the youth consent form. The sentence should simply read "Please do not write your name on the poll." "The number on the form will allow two surveys to be matched, but your name will be known only to the researcher." This change is requested since the identification numbers will be used by you to allow pre- and post-test linkage as well as subject identification for use with court record data.
2. After that sentence, begin a new paragraph with "If I agree to participate I understand that it will be necessary for the researcher to look at my official court records." Delete the remainder of that sentence as written. The Board requests this change in wording and forms to assure that subjects know of the use of their records.

Please send a copy of the revised consent form for your file.

If you have any questions, please contact me at 383-4917.

#### FOOTNOTES

<sup>1</sup>Adapted and reproduced from the Effective School Battery by Gary D. Gottfredson, Copyright, 1984, by special permission of the publisher, Psychological Assessment Resources, Inc., Odessa, FL 33556.

<sup>2</sup>The abbreviated locus of control scale for grades 7-12 was used in this study.

<sup>3</sup>The factor analysis results in Appendix B reflect the use of varimax rotation. This is a method of orthogonal rotation meant to transform the original axes so that the axes better represent groups of variables, passing as closely as possible to the groups.

<sup>4</sup>A factor's eigenvalue provides an estimate of the amount of variance in the factor which is accounted for by the items comprising the factor. For example, if a factor is comprised of three items and the eigenvalue is 1.50, roughly half of the variability in the factor has been accounted for by the items.

<sup>5</sup>Cook and Campbell (1979, p. 55) allude to this possibility under the term "resentful demoralization of respondents receiving less desirable treatments." The general idea is that subjects receiving the less desirable type of service (be that the service provided control subjects or the service provided experimental subjects) may "act out" due to resentment.

<sup>6</sup>It should be pointed out that Cook and Campbell (1979, p. 39-59) draw a technical distinction between statistical conclusion validity (i.e., the likelihood of accurately detecting the true nature of relationships between variables) and internal validity (i.e., the reasonableness of attributing the cause of observed effects to the independent variable). Whereas Cook and Campbell discuss the reliability of implementation under the topic of statistical conclusion validity, other concerns presented here (i.e., diffusion or imitation of treatments, compensatory equalization, and compensatory rivalry) are discussed by Cook and Campbell under the topic of internal validity. In this study, statistical conclusion validity is subsumed under the more generic concept of internal validity. This choice is consistent with the approach of Campbell and Stanley (1966) as well as with Cook and Campbell's (p. 80) observation that statistical conclusion validity is actually nothing more than a special case of internal validity.

<sup>7</sup>It is difficult to maintain a consistent separation between the pragmatic considerations discussed here and the theoretical considerations discussed next. The same is true with respect to the methodological concerns just presented. In reality, methodological, practical, and theoretical concerns merge and overlap. The conceptual distinctions simply provide an organizational tool for presentation of material.

<sup>8</sup>When making interpretations based on the peer and family relations composites, it needs to be remembered from chapter five that the retest reliability coefficients associated with the control group on these measures were unsatisfactory (see Table 5). Therefore, it is advisable to exercise caution when considering the interpretations offered here. Unreliable measure cannot be counted upon to register true changes over time. However, other of the self-report scales, with a more satisfactory degree of reliability, yielded findings consistent with the findings derived from the family and peer relations composites.

<sup>9</sup>It is advisable to bear in mind from chapter five that the locus of control data may have been biased by differential timing of post-test administration. As Table 7 shows, higher scores (indicating an internal locus of control) were associated with longer testing intervals.

<sup>10</sup>When the slight trend for intensive probationers to out-perform moderates on the self-report scales is considered in relation to the official data, it must be remembered that the official data were derived from more direct measures of human behavior than were the self-report data. Research by Fishbein and Ajzen (1975) has demonstrated that it is not unusual for self-reports of beliefs, attitudes, perceptions, and intentions to be at odds with more direct behavioral measures. These researchers have shown that it is particularly difficult to predict highly specific acts from self-report data.

<sup>11</sup>It is rather unusual to introduce a new set of statistical results in the discussion and conclusion section of a research report. The reason for doing so here is that the results presented in Appendix C are relevant to a theoretical interpretation of the primary outcome findings given in chapter five. Since theoretical interpretation is one of the most important aspects of a discussion and conclusion section, it was thought best to reserve the data appearing in Appendix C for this chapter. Introducing these data in the results chapter, when theoretical interpretations were not being examined, would have created unnecessary confusion.

<sup>12</sup>While it would have been desirable to perform a similar supplemental analysis using subjects' posttest scores, posttest attrition precluded this. The number of subjects involved in the descriptive pretest comparisons presented in Appendix C is already low. Posttest attrition reduced the number even further, thus leaving it impossible to make meaningful posttest comparisons.

## BIBLIOGRAPHY

- Adams, S. (1974). Evaluative research in corrections: Status and prospects. Federal Probation, 38, 14-21.
- Agnew, R. (1985). Social control theory and delinquency: A longitudinal test. Criminology, 23, 47-61.
- Alexander, J. F., & Parsons, B. V. (1973). Short-term behavioral intervention with delinquent families. Journal of Abnormal Psychology, 81, 219-225.
- Alexander, J. F., & Parsons, B. V. (1982). Functional family therapy. Monterey, CA: Brooks/Cole.
- Allen, H. E., & Simonsen, C. E. (1986). Corrections in America (4th ed.). New York: Macmillan.
- Altschuler, D. M., & Armstrong, T. L. (1983). Four models of community-based interventions with serious juvenile offenders: Therapeutic orientations, educational strategies, and reintegrative techniques. Corrective and Social Psychiatry, 29, 116-130.
- Amos, W. E. (1974). The philosophy of corrections: Revisited. Federal Probation, 38, 43-46.
- Anderson, A. (1985). Impact of job training program on CETA-qualified probationers. Federal Probation, 49, 17-20.
- Andrews, D. A. (1980). Some experimental investigations of the principles of differential association theory through deliberate manipulations of the structure of service systems. American Sociological Review, 45, 448-462.
- Archambeault, W. G. (1982). Management theory Z: Implications for correctional survival management. Federal Probation, 46, 7-11.
- Avison, W. R., & Loring, P. L. (1986). Population diversity and cross-national homicide: The effects of inequality and heterogeneity. Criminology, 24, 733-749.
- Bailey, W. C. (1966). Correctional outcome: An evaluation of 100 reports. Journal of Criminal Law, Criminology, and Police Science, 57, 153-160.

- Bailey, W. C. (1984). Poverty, inequality, and city homicide rates: Some not so unexpected findings. Criminology, 22, 531-550.
- Baran, P., & Sweezy, P. M. (1966). Monopoly capital: An essay on the American economic and social order. New York: Monthly Review Press.
- Bartollas, C., Miller, S. J., & Dinitz, S. (1976). Juvenile victimization: The institutional paradox. New York: Wiley.
- Becker, H. S. (1963). Outsiders: Studies in the sociology of deviance. New York: Free Press.
- Beger, R. R., & White, P. R. (1981). A case for public service work. Juvenile and Family Court Journal, 32, 49-57.
- Benjamin, J. G., Lesh, S., & Freedman, M. K. (1968). Youth employment programs in perspective. In J. R. Stratton & R. M. Terry (Eds.), Prevention of delinquency: Problems and programs (pp. 232-244). New York: Macmillan.
- Berger, P. L., & Luckmann, T. (1963). The social construction of reality. New York: Doubleday.
- Berleman, W. C., & Steiner, T. W. (1967). The execution and evaluation of a delinquency prevention program. Social Problems, 14, 413-423.
- Bishop, D. M. (1984). Legal and Extralegal barriers to delinquency: A panel analysis. Criminology, 22, 403-419.
- Blau, P., & Blau, J. (1982). The cost of inequality: Metropolitan structure and violent crime. American Sociological Review, 47, 114-129.
- Blomberg, T. G. (1984). Juvenile court and community corrections. New York: University Press of America.
- Bohm, R. (1982). Radical criminology: An explication. Criminology, 19, 565-589.
- Bonger, W. A. (1916). Criminality and economic conditions. Boston, MA: Little Brown.
- Braithwaite, J. (1979). Inequality, crime, and public policy. London: Routledge and Kegan Paul.
- Braithwaite, J. (1981). The myth of social class and criminality reconsidered. American Sociological Review, 46, 36-47.



- Braverman, H. (1974). Labor and monopoly capital: The degradation of work in the Twentieth Century. New York: Monthly Review Press.
- Brownfield, D. (1986). Social class and violent behavior. Criminology, 24, 421-438.
- Burgess, R. L., & Alkers, R. L. (1966). A differential association-reinforcement theory of criminal behavior. Social Problems, 14, 128-147.
- Bute, J. (1981). Practicing from theory: Work with youths and reflections radical criminology. Crime and Delinquency, 27, 106-121.
- Byles, J. A. (1981). Evaluation of an attendance center program for male juvenile probationers. Canadian Journal of Criminology, 23, 343-355.
- Cahalan, M. W. (1986). Historical corrections statistics in the United States, 1850-1984. Washington, DC: U.S. Government Printing Office.
- Callahan, R. (1985). Wilderness probation: A decade later. Juvenile and Family Court Journal, 36, 31-35.
- Campbell, D. T., & Stanley, J. C. (1966). Experimental and quasi-experimental designs for research. Chicago, IL: Rand McNally.
- Caplan, A., & LeBlanc, M. (1985). A cross-cultural verification of social control theory. International Journal of Comparative and Applied Criminal Justice, 9, 123-138.
- Caplinger, T. E. (1983). The St. Louis Experiment: Treatment of antisocial youths in prosocial peer groups. In J. R. Kluegel (Ed.), Evaluating juvenile justice (pp. 121-147). Beverly Hills, CA: Sage.
- Caringella-MacDonald, S. (1986, November). State crises and the crackdown on crime. Paper presented at the Annual Meeting of the American Society of Criminology, Atlanta, GA.
- Cernkovich, S. A. (1978). Evaluating two models of delinquency causation: Structural theory and control theory. Criminology, 16, 335-352.
- Cernkovich, S. A., & Giordano, P. C. (1987). Family relationships and delinquency. Criminology, 25, 295-321.
- Chambliss, W., & Seidman, R. (1982). Law, order, and power. Reading, MA: Addison-Wesley.

- Christie, N. (1978). Youth as a crime-generating phenomenon. In B. Krisberg & J. A. Austin (Eds.), The children of Ishmel: Critical perspectives on juvenile delinquency (pp. 221-230). Palo Alto, CA: Mayfield.
- Clear, T. R., Cole, G. F. (1986). American corrections. Monterey, CA: Brooks/Cole.
- Clelland, D., & Carter, T. J. (1980). The new myth of class and crime. Criminology, 18, 319-336.
- Clifford, W. (1976). Crime control in Japan. Lexington, MA: Heath.
- Coates, R. B. (1981). Deinstitutionalization and the serious juvenile offender: Some policy considerations. Crime and Delinquency, 27, 477-486.
- Cohen, A. K. (1955). Delinquent boys: The culture of the gang. New York: Macmillan.
- Colvin, M., & Pauly, J. (1983). A critique of criminology: Toward an integrated structural-Marxist theory of delinquency production. American Journal of Sociology, 89, 513-551.
- Conger, R. D. (1976). Social control and social learning models of delinquent behavior: A synthesis. Criminology, 14, 17-40.
- Cook, T. D., & Campbell, D. T. (1979). Quasi-experimentation: Design and analysis issues for field settings. Boston, MA: Houghton Mifflin.
- Craig, M. M., & Furst, P. W. (1965). What happens after treatment? A study of potentially delinquent boys. Social Service Review, 39, 165-171.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, 297-334.
- Cullen, F. T., & Gilbert, K. E. (1982). Reaffirming rehabilitation. Cincinnati, OH: Anderson.
- Currie, E. (1985). Confronting crime: An American challenge. New York: Pantheon.
- Danziger, W., & Wheeler, D. (1975). The economics of crime: Punishment or income redistribution. Review of Social Economy, 33, 113-131.

- DeFleur, M., & Quinney, R. (1966). A reformulation of Sutherland's differential association theory and a strategy for empirical verification. Journal of Research in Crime and Delinquency, 3, 1-22.
- Dos Santos, T. (1970). The concept of social class. Science and Society, 34, 166-193.
- Egan, G. (1982). The skilled helper: Model, skills, and methods for effective helping (2nd ed.). Monterey, CA: Brooks/Cole.
- Eitzen, D. S. (1988). In conflict and order: Understanding society (4th ed.). Boston, MA: Allyn and Bacon.
- Elliott, D. S. (1985). The assumption that theories can be combined with increased explanatory power: Theoretical integration. In R. F. Meier (Ed.), Theoretical methods in criminology (pp. 123-149). Beverly Hills, CA: Sage.
- Elliott, D. S., Ageton, S. S., & Canter, R. J. (1979). An integrated theoretical perspective on delinquent behavior. Journal of Research in Crime and Delinquency, 16, 3-27.
- Elliott, D. S., Huizinga, D., & Ageton, S. S. (1985). Explaining delinquency and drug use. Beverly Hills, CA: Sage.
- Elrod, H. P., & Friday, P. C. (1986, November). Delinquency reduction through school organizational change: Some thoughts on the relationship between theory, process, and outcomes. Paper presented at the annual meeting of the American Society of Criminology, Atlanta, GA.
- Elrod, H. P., & Minor, K. I. (1987, November). A preliminary study of a staff-developed probation program for juvenile probationers. Paper presented at the annual meeting of the American Society of Criminology, Montreal.
- Elster, J. (Ed.). (1986). Karl Marx: A reader. Cambridge, MA: Cambridge University Press.
- Empey, L. T., & Lubeck, S. G. (1971). The Silverlake Experiment: Testing delinquency theory and community intervention. Chicago, IL: Aldine Press.
- Fagan, J., Piper, E., & Moore, M. (1986). Violent delinquents and urban youths. Criminology, 24, 439-471.
- Fagan, J., & Wexler, S. (1987). Family origins of violent delinquents. Criminology, 25, 643-669.

- Feld, B. C. (1981). A comparative analysis of organizational structure and inmate subcultures in institutions for juvenile offenders. Crime and Delinquency, 27, 336-363.
- Fenwick, C. R. (1983). The juvenile delinquency problem in Japan: Application of a role relationship model. International Journal of Comparative and Applied Criminal Justice, 7, 119-128.
- Ferdinand, T. N. (1987). The methods of delinquency theory. Criminology, 25, 841-862.
- Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behavior: An Introduction to theory and research. Reading, MA: Addison-Wesley.
- Fisher, J. (1973). Is casework effective? A review. Social Work, 18, 5-21.
- Fjeld, S. P., Newsom, L., & Fjeld, R. M. (1981). Delinquents and status offenders: The similarity of differences. Juvenile and Family Court Journal, 32, 3-10.
- Friday, P. C. (1977) Changing theory and research in criminology. International Journal of Criminology and Penology, 5, 159-170.
- Friday, P. C. (1981). Theoretical issues in the study of deviance and social control. In H. Kury (Ed.), Perspektiven und probleme kriminologischer forschung (pp. 187-223). Carl Heymonns Verlag K.G.
- Friday, P. C. (1983). Patterns of role relationships and crime. In S. G. Shoham (Ed.), The many faces of crime and deviance (pp. 61-73). New York: Sheridan House.
- Friday, P. C. (1988). A criminology of criminal justice: An effort toward theoretical integration. Journal of Contemporary Criminal Justice, 4, 37-48.
- Friday, P. C., & Hage, J. (1976). Youth crime in postindustrial societies: An integrated perspective. Criminology, 14, 347-368.
- Gaes, G. G., & McGuire, W. J. (1985). Prison violence: The contribution of crowding versus other detriments of prison assault rates. Journal of Research in Crime and Delinquency, 22, 41-65.
- Garrett, C. J. (1985). Effects of residential treatment on adjudicated delinquents: A meta-analysis. Journal of Research in Crime and Delinquency, 22, 287-308.

- Geismar, L. L., & Wood, K. (1986). Family and delinquency: Resocializing the young offender. New York: Human Sciences Press.
- Gendreau, P., & Ross, R. R. (1979). Effective correctional treatment: Bibliotherapy for cynics. Crime and Delinquency, 25, 463-489.
- Gendreau, P., & Ross, R. R. (1983). Correctional treatment: Some recommendations for effective intervention. Juvenile and Family Court Journal, 34, 31-39.
- Gendreau, P., & Ross, R. R. (1987). Revivification of rehabilitation: Evidence from the 1980s. Justice Quarterly, 4, 349-407.
- Gibbons, D. C. (1962). Some notes on treatment theory in corrections. Social Service Review, 36, 295-305.
- Gibbons, D. C. (1985). The assumption of the efficacy of middle-range explanation: Typologies. In R. F. Meier (Ed.), Theoretical methods in criminology (pp. 151-174). Beverly Hills, CA: Sage.
- Gibbons, D. C. (1986). Correctional treatment and intervention theory: Bringing sociology and criminology back in. International Journal of Offender Therapy and Comparative Criminology, 30, 225-271.
- Gibbs, J. P. (1987). The state of criminological theory. Criminology, 25, 821-840.
- Glaser, D. (1956). Criminality theories and behavioral images. American Journal of Sociology, 61, 433-444.
- Glaser, D. (1975). Achieving better questions: A half century's progress in correctional research. Federal Probation, 39, 3-9.
- Glaser, D. (1976). Review of the effectiveness of correctional treatment. Journal of Research in Crime and Delinquency, 13, 179-182.
- Glueck, S., & Glueck, E. (1950). Unraveling juvenile delinquency. New York: Commonwealth Fund.
- Goode, E. (1975). On behalf of labeling theory. Social Problems, 22, 570-585.
- Gottfredson, D. C. (1986). An empirical test of school-based environmental and individual interventions to reduce the risk of delinquent behavior. Criminology, 24, 705-731.

- Gottfredson, G. D. (1984). A theory-ridden approach to program evaluation: A method for stimulating researcher-implementer collaboration. American Psychologist, 39, 1101-1112.
- Gottfredson, M. R. (1982). The social scientist and rehabilitative crime policy. Criminology, 20, 29-42.
- Gove, W. R., & Crutchfield, R. D. (1982). The family and juvenile delinquency. Sociological Quarterly, 23, 301-319.
- Greenberg, D. F. (1977a). The correctional effects of corrections: A survey of evaluations. In D. F. Greenberg (Ed.), Corrections and punishment (pp. 111-148). Beverly Hills, CA: Sage.
- Greenberg, D. F. (1977b). Delinquency and the age structure of society. Contemporary Crises, 1, 189-222.
- Greenberg, D. F. (Ed.). (1981). Crime and capitalism. Palo Alto, CA: Mayfield.
- Greenwood, P. W., & Zimring, F. E. (1985). One more chance: The pursuit of promising intervention strategies for chronic juvenile offenders. Santa Monica, CA: Rand.
- Gross, A. M., Brigham, T. A., Hopper, C., & Bologna, N. C. (1980). Self-management and social skills training: A study of predelinquent youths. Criminal Justice and Behavior, 7, 161-184.
- Groves, W. B., & Sampson, R. J. (1986). Critical theory and criminology. Social Problems, 33, 58-80.
- Guilford, J. P. (1954). Psychometric methods (2nd ed.). New York: McGraw-Hill.
- Habermas, J. (1984). Reason and rationalization of society. Boston, MA: Beacon Press.
- Hackler, J. C. (1968). Boys, blisters, and behavior: The impact of a work program in an urban central area. In J. R. Stratton & R. M. Terry (Eds.), Prevention of delinquency: Problems and programs (pp. 244-255). New York: Macmillan.
- Hackler, J. C. (1978). The prevention of youthful crime: The great stumble forward. Toronto: Methuen.
- Hagan, J., Gillis, A. R., & Simpson, J. (1985). The class structure of gender and delinquency: Toward a power-control theory of common delinquent behavior. American Journal of Sociology, 90, 1151-1178.

- Halleck, S., & Witte, A. (1977). Is rehabilitation dead? Crime and Delinquency, 23, 372-382.
- Harman, H. H. (1960). Modern factor analysis. Chicago, IL: University of Chicago Press.
- Hasenfeld, Y., & Cheung, P. P. L. (1985). The juvenile court as a people-processing organization: A political-economy perspective. American Journal of Sociology, 90, 801-824.
- Hawkins, J. D., & Weis, J. G. (1985). The social development model: An integrated approach to delinquency prevention. Journal of Primary Prevention, 6, 73-97.
- Hazel, J. S., Schumaker, J. B., & Sherman, J. A. (1982). Group training for social skills: A program for court-adjudicated, probationary youths. Criminal Justice and Behavior, 9, 35-53.
- Healy, W., & Bronner, A. F. (1936). New light on delinquency and its treatment. New Haven, CT: Yale University Press.
- Hindelang, M. J. (1973). Causes of delinquency: A partial replication and extension. Social Problems, 20, 471-487.
- Hindelang, M. J. (1978). Race and involvement in common law personal crimes. American Sociological Review, 43, 93-109.
- Hindelang, M. J. (1981). Variations in sex-race-age-specific rates of offending. American Sociological Review, 46, 461-474.
- Hirschi, T. (1969). Causes of delinquency. Berkeley, CA: University of California Press.
- Hirschi, T. (1979). Separate and unequal is better. Journal of Research in Crime and Delinquency, 16, 34-38.
- Hirschi, T. (1983). Crime and family policy. Journal of Contemporary Studies, 6, 3-16.
- Hirschi, T. (1987). [Explaining delinquency and drug use]. Criminology, 25, 193-201.
- Huitema, B. E. (1980). The analysis of covariance and alternatives. New York: Wiley.
- Humphries, D., & Greenberg, D. F. (1981). The dialectics of crime control. In D. F. Greenberg (Ed.), Crime and capitalism (pp. 209-254). Palo Alto, CA: Mayfield.

- Jacobs, J. B., McGahey, R., & Minion, R. (1984). Ex-offender employment, recidivism, and manpower policy: CETA, TJTC, and future initiatives. Crime and Delinquency, 30, 486-506.
- Jeffery, C. R. (1965). Criminal behavior and learning theory. Journal of Criminal Law, Criminology, and Police Science, 56, 294-300.
- Jensen, G. F. (1972). Delinquency and adolescent self-conceptions: A study of the personal relevance of infraction. Social Problems, 20, 84-101.
- Johnson, B. D., & Goldberg, R. T. (1983). Vocational and social rehabilitation of delinquents: A study of experimentals and controls. Journal of Offender Counseling, Services and Rehabilitation, 6, 43-60.
- Johnson, T. F. (1975). The juvenile offender and his family. Juvenile and Family Court Journal, 26, 31-34.
- Johnson, T. F. (1977). The results of family therapy with juvenile offenders. Juvenile and Family Court Journal, 28, 29-33.
- Kaplan, P., & Arbuthnot, J. (1985). Affective empathy and cognitive role-taking in delinquent and nondelinquent youth. Adolescence, 20, 323-333.
- Kelly, F. J., & Baer, D. J. (1968). Outward bound: An alternative to institutionalization. Boston, MA: Fandel Press.
- Kelly, F. J., & Baer, D. J. (1971). Physical challenge as a treatment for delinquency. Crime and Delinquency, 17, 473-445.
- Kennedy, D. B. (1984). Clinical sociology and correctional counseling. Crime and Delinquency, 30, 269-292.
- Kogan, L. (1980). A family systems perspective on status offenders. Juvenile and Family Court Journal, 31, 49-53.
- Kohn, M. L. (1977). Class and conformity. Chicago, IL: University of Chicago Press.
- Krahn, H., Hartnagel, T., & Gartrell, J. W. (1986). Income inequality and homicide rates: Cross national data and criminological theories. Criminology, 24, 269-295.
- Kramer, R. C. (1982). The debate over the definition of crime: Paradigms, value judgments, and criminological work. In F. Elliston & N. Bowie (Eds.), Ethics, public policy, and criminal justice (pp. 33-58). Cambridge, MA: Oelgeschlager, Guinn, and Hain.



- Kramer, R. C. (1984). Critical criminology, traditional crime, and public policy. Journal of Sociology and Social Welfare, 11, 252-293.
- Krisberg, B., & Austin, J. (Eds.). (1978). The children of Ishmel: Critical perspectives on juvenile delinquency. Palo Alto, CA: Mayfield.
- Kuder, G. F., & Richardson, M. W. (1937). The theory of estimation of test reliability. Psychometrika, 2, 151-160.
- Lab, S. P. (1984). Patterns in juvenile misbehavior. Crime and Delinquency, 30, 293-308.
- LaGrange, R. L., & White, H. R. (1985). Age differences in delinquency: A test of theory. Criminology, 23, 19-45.
- Leithwood, K. A., & Montgomery, D. J. (1980). Evaluating program implementation. Evaluation Review, 4, 193-214.
- Lemert, E. M. (1951). Social pathology. New York: McGraw-Hill.
- Lichtman, C. M., & Smock, S. M. (1981). The effects of social services on probationer recidivism: A field experiment. Journal of Research in Crime and Delinquency, 18, 81-100.
- Liker, J. K. (1982). Wage and status effects of employment on affective well-being among ex-offenders. American Sociological Review, 47, 264-283.
- Lipton, D., Martinson, R., & Wilks, J. (1975). The effectiveness of correctional treatment: A survey of evaluation studies. New York: Praeger.
- Liska, A. E., & Reed, M. D. (1985). Ties to conventional institutions and delinquency: Estimating reciprocal effects. American Sociological Review, 50, 547-560.
- Loftin, C., & Hill, R. H. (1974). Regional subculture and homicide: An examination of the Gastil-Hackney thesis. American Sociological Review, 39, 714-724.
- Loftin, C., & Parker, R. N. (1985). An errors-in-variable model of the effect of poverty on urban homicide rates. Criminology, 23, 269-287.
- Logan, C. H. (1972). Evaluation research in crime and delinquency: A reappraisal. Journal of Criminal Law, Criminology, and Police Science, 63, 378-387.

- MacNamara, D. (1977). The medical model in corrections: Requiescat in pace. Criminology, 14, 439-448.
- Maltz, M. D. (1984). Recidivism. New York: Academic Press.
- Martinson, R. (1974). What works? Questions and answers about prison reform. Public Interest, 35, 22-54.
- Matsueda, R. L. (1982). Testing control theory and differential association: A causal modeling approach. American Sociological Review, 47, 489-504.
- Matsueda, R. L., & Heimer, K. (1987). Race, family structure, and delinquency: A test of differential association and social control theories. American Sociological Review, 52, 826-840.
- Matza, D. (1964). Delinquency and drift. New York: Wiley.
- Matza, D. (1969). Becoming deviant. Englewood Cliffs, NJ: Prentice-Hall.
- Matza, D., & Sykes, G. M. (1961). Juvenile delinquency and subterranean values. American Sociological Review, 26, 712-719.
- McCarthy, B. A., & McCarthy, B. J. (1984). Community-based corrections. Monterey, CA: Brooks/Cole.
- McCleary, R., Nienstedt, B. C., & Erven, J. M. (1982). Uniform crime reports as organizational outcomes: Three time series experiments. Social Problems, 29, 361-372.
- McCord, W., & Sanchez, J. (1983). The treatment of deviant children: A twenty-five year follow-up study. Crime and Delinquency, 29, 238-253.
- McPherson, S. J., McDonald, L. E., & Ryer, C. W. (1983). Intensive counseling with families of juvenile offenders. Juvenile and Family Court Journal, 34, 27-33.
- Meier, R. F. (Ed.). (1985). Theoretical methods in criminology. Beverly Hills, CA: Sage.
- Melossi, D. (1985). Overcoming the crisis in critical criminology: Toward a grounded labeling theory. Criminology, 23, 193-208.
- Merton, R. K. (1938). Social structure and anomie. American Sociological Review, 3, 672-682.
- Merton, R. K. (1957). Social theory and social structure. New York: Free Press.

- Messner, S. F. (1980). Income inequality and murder rates: Some cross-national findings. Comparative Social Research, 3, 185-198.
- Messner, S. F. (1982). Poverty, inequality, and the urban homicide rate: Some unexpected findings. Criminology, 20, 102-114.
- Messner, S. F., & Tardiff, K. (1986). Economic inequality and levels of homicide: An analysis of urban neighborhoods. Criminology, 24, 297-317.
- Michalowski, R. J. (1983). Crime control in the 1980s: A progressive agenda. Crime and Social Justice, 19, 13-23.
- Miller, A. D., & Ohlin, L. E. (1981). The politics of secure care in youth correctional reform. Crime and Delinquency, 27, 449-467.
- Miller, D. C. (1983). Handbook of research design and social measurement (4th ed.). New York: Longman.
- Miller, W. B. (1958). Lower class culture as a generating milieu of gang delinquency. Journal of Social Issues, 14, 5-19.
- Minor, K. I. (1987). Reactance and recidivism: Implications for probation policy and research. Perceptual and Motor Skills, 64, 1047-1050.
- Minor, K. I., Karr, S. K., & Davis, S. F. (1984). Social and self-perceptions of institutionalized and noninstitutionalized juveniles. Bulletin of the Psychonomic Society, 22, 557-559.
- Mueller, J. H., Schuessler, K. F., & Costner, H. L. (1978). Statistical reasoning in sociology (3rd ed.). Boston, MA: Houghton Mifflin.
- Murray, C. A., & Cox, L. A. (1979). Beyond probation: Juvenile corrections and the chronic delinquent. Beverly Hills, CA: Sage.
- Nachmias, D., & Nachmias, C. (1976). Research methods in the social sciences. New York: St. Martin's Press.
- Norland, S., Shover, N., Thornton, W. E., & James, J. (1979). Intrafamily conflict and delinquency. Pacific Sociological Review, 2, 223-240.
- Nowicki, S., & Strickland, B. R. (1973). A locus of control scale for children. Journal of Consulting and Clinical Psychology, 40, 148-154.

- Nye, F. I. (1958). Family relationships and delinquent behavior. New York: Wiley.
- C'Conner, J. (1973). The fiscal crisis of the state. New York: St. Martin's Press.
- Oldroyd, R. J., & Stapley, M. (1976). Some correctional programs do reduce recidivism. Offender rehabilitation, 1, 137-141.
- Ostrom, R. M., Steele, C. M., Rosenblood, L. K., & Mirels, H. L. (1971). Modification of delinquent behavior. Journal of Applied Social Psychology, 1, 118-136.
- Page, B. I. (1983). Who gets what from government. Berkeley, CA: University of California Press.
- Palmer, T. (1975). Martinson revisited. Journal of Research in Crime and Delinquency, 12, 133-152.
- Palmer, T. (1978). Correctional intervention and research: Current issues and future prospects. Lexington, MA: Heath.
- Palmer, T. (1983). The effectiveness issue today: An overview. Federal Probation, 47, 3-10.
- Parrott, C. A., & Strongman, K. T. (1984). Locus of control and delinquency. Adolescence, 19, 459-471.
- Parsons, B. V., & Alexander, J. F. (1973). Family intervention: A therapy outcome study. Journal of Consulting and Clinical Psychology, 41, 195-201.
- Paternoster, R., Saltzman, L. E., Waldo, G. P., & Chiricos, T. G. (1983). Perceived risk and social control: Do sanctions really deter? Law and Society Review, 17, 457-479.
- Patterson, G. R. (1974). Interventions for boys with conduct problems: Multiple settings, treatments and criteria. Journal of Consulting and Clinical Psychology, 42, 471-481.
- Patterson, G. R., & Dishion, T. J. (1985). Contributions of families and peers to delinquency. Criminology, 23, 63-79.
- Pearson, F. S., & Weiner, N. A. (1985). Toward an integration of criminological theories. Journal of Criminal Law and Criminology, 76, 116-150.
- Pfohl, S. J. (1985). Images of deviance and social control: A sociological history. New York: McGraw-Hill.

- Piliavin, I., & Briar, S. (1964). Police encounters with juveniles. American Journal of Sociology, 70, 206-214.
- Platt, T. (1977). The child savers: The invention of delinquency (2nd ed.). Chicago, IL: University of Chicago Press.
- Platt, T. (1984). Criminology in the 1980s: Progressive alternatives to law and order. Crime and Social Justice, 21, 191-199.
- Plummer, K. (1979). Misunderstanding labeling perspectives. In D. Downes & P. Rock (Eds.), Deviant interpretations (pp. 85-121). New York: Barnes and Nobel.
- Poole, E.D., & Regoli, R. M. (1979). Parental support, delinquent friends, and delinquency: A test of interaction effects. Journal of Criminal Law and Criminology, 70, 188-193.
- Poole, E. D., & Regoli, R. M. (1983). Violence in juvenile institutions. Criminology, 21, 213-232.
- Powers, E., & Witmer, H. (1951). An experiment in the prevention of delinquency: The Cambridge-Somerville Youth Study. New York: Columbia University Press.
- Quay, H. C. (1977). The three facets of evaluation: What can be expected to work: Criminal Justice and Behavior, 4, 341-354.
- Quay, H. C., & Parsons, L. (1970). The differential behavior classification of the juvenile offender. Morgantown, WV: Robert F. Kennedy Youth Center.
- Quinney, R. (1980). Class, state, and crime (2nd ed.). New York: Longman.
- Reckless, W. C. (1961). A new theory of delinquency and crime. Federal Probation, 25, 42-46.
- Reckless, W. C., & Dinitz, S. (1967). Pioneering with self-concept as a vulnerability factor in delinquency. Journal of Criminal Law, Criminology, and Police Science, 58, 515-523.
- Reiman, J. H., & Headlee, S. (1981). Marxism and criminal justice policy. Crime and Delinquency, 27, 24-47.
- Reiss, A. J. (1951). Delinquency as the failure of personal and social controls. American Sociological Review, 16, 196-207.
- Reiss, A. J., & Rhodes, A. L. (1982). An empirical test of differential association theory. In R. Giallombardo (Ed.), Juvenile delinquency: A book of readings (pp. 201-214). New York: Wiley.

- Riedel, M., & Thornberry, T. P. (1978). The effectiveness of correctional programs: An assessment of the field. In B. Krisberg & J. Austin (Eds.), The children of Ishmel: Critical perspectives on juvenile delinquency (pp. 418-432). Palo Alto, CA: Mayfield.
- Roberts, A. R. (1987). National survey and assessment of 66 treatment programs for juvenile offenders: Model programs and pseudomodels. Juvenile and Family Court Journal, 38, 39-45.
- Robinson, C. (1985). Criminal justice research: Two competing futures. Crime and Social Justice, 23, 101-128.
- Robinson, J. & Smith, G. (1971). The effectiveness of correctional programs. Crime and Delinquency, 17, 67-80.
- Romig, D. A. (1978). Justice for our children. Lexington, MA: Heath.
- Rosen, L. (1985). Family and delinquency: Structure or function? Criminology, 23, 553-573.
- Rossi, P. H., Berk, R. A., & Lennihan, K. J. (1980). Money, work and crime: Some experimental results. New York: Academic Press.
- Rulo, J. H., & Zemel, D. M. (1979). I am the proud mother of a yesterday kid. Juvenile and Family Court Journal, 30, 3-9.
- Rummel, R. J. (1970). Applied factor analysis. Evanston, IL: Northwestern University Press.
- Sampson, R. J. (1985). Structural sources of variation in race-age-specific rates of offending across major U.S. cities. Criminology, 23, 647-673.
- Sarason, I. G., & Ganzer, V. J. (1973). Modeling and group discussion in the rehabilitation of juvenile delinquents. Journal of Counseling Psychology, 20, 442-449.
- Scarpitti, F. R., & Stephenson, R. M. (1968). A study of probation effectiveness. Journal of Criminal Law, Criminology, and Police Science, 59, 361-369.
- Scheirer, M. A., & Rezmovic, E. L. (1983). Measuring the degree of program implementation: A methodological review. Evaluation Review, 7, 599-633.
- Schur, E. M. (1973). Radical non-intervention: Rethinking the delinquency problem. Englewood Cliffs, NJ: Prentice-Hall.

- Schwendinger, H., & Schwendinger, J. (1978). Marginal youth and social policy. In B. Krisberg & J. Austin (Eds.), The children of Ishmel: Critical perspectives on juvenile delinquency (pp. 279-289). Palo Alto, CA: Mayfield.
- Schwendinger, H., & Schwendinger, J. (1985). Adolescent subcultures and delinquency. New York: Praeger.
- Scully, A. (1977). Decarceration: Community treatment and the deviant-a radical view. Englewood Cliffs, NJ: Prentice-Hall.
- Sellin, T. (1938). Culture conflict and crime. New York: Social Science Research Council.
- Seng, M. J. (1983). Reducing the cost and complexity of probation evaluation. Federal Probation, 47, 16-19.
- Shaw, C., & McKay, H. (1932). Juvenile delinquency in urban areas. Chicago, IL: University of Chicago Press.
- Shaw, M. E., & Wright, J. M. (1967). Scales for the measurement of attitudes. New York: McGraw-Hill.
- Short, J. F. (1985). The level of explanation problem in criminology. In R. F. Meier (Ed.), Theoretical methods in criminology (pp. 51-72). Beverly Hills, CA: Sage.
- Short, J. F., & Strodtbeck, F. (1965). Group processes and gang delinquency. Chicago, IL: University of Chicago Press.
- Silberman, C. E. (1978). Criminal violence, criminal justice. New York: Vintage.
- Simcha-Fagan, O., & Schwartz, J. E. (1986). Neighborhood and delinquency: An assessment of contextual effects. Criminology, 24, 667-703.
- Singer, M., & Isralowitz, R. (1983). Probation: A model for coordinating youth services. Juvenile and Family Court Journal, 34, 35-41.
- Smith, R. R. (1980). Longitudinal behavioral assessment of work release. Journal of Offender Counseling, Services and Rehabilitation, 5, 31-39.
- Smykla, J. O. (1981). Community-based corrections: Principles and practice. New York: Macmillan.
- Spillane-Grieco, E. (1982). Increasing effectiveness in counseling runaways and their families. Juvenile and Family Court Journal, 33, 31-37.

- Spitzer, S. (1975). Toward a Marxian theory of deviance. Social Problems, 22, 638-651.
- Spitzer, S. (1979). The rationalization of crime control in capitalist society. Contemporary Crises, 3, 187-206.
- Streit, F. (1981). Differences among youthful criminal offenders based on their perceptions of parental behavior. Adolescence, 16, 409-413.
- Sundeen, R. A. (1983). The community connection: Locally based juvenile justice programs and their settings. Juvenile and Family Court Journal, 34, 15-21.
- Sutherland, E. H. (1939). Principles of criminology (3rd ed.). Philadelphia, PN: Lippincott.
- Sutherland, E. H. (1947). Principles of criminology (4th ed.). Philadelphia, PN: Lippincott.
- Sutherland, E. H., & Cressey, D. R. (1978). Criminology (10th ed.). Philadelphia, PN: Lippincott.
- Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. American Sociological Review, 22, 644-670.
- Tangri, S. S., & Schwartz, M. (1967). Delinquency research and the self-concept variable. Journal of Criminal Law, Criminology, and Police Science, 58, 182-190.
- Tannenbaum, F. (1938). Crime and the community. New York: Ginn.
- Taylor, I., Walton, P. & Young, J. (1973). The new criminology: Toward a social theory of deviance. New York: Harper and Row.
- Thornberry, T. P. (1987). Toward an interactional theory of delinquency. Criminology, 25, 863-891.
- Thornberry, T. P., & Christenson, R. L. (1984). Unemployment and criminal involvement: An investigation of reciprocal causal structures. American Sociological Review, 49, 398-411.
- Thornberry, T. P., & Farnsworth, M. (1982). Social correlates of criminal involvement: Further evidence on the relationship between social status and criminal behavior. American Sociological Review, 47, 505-517.
- Thornberry, T. P., Moore, M., & Christenson, R. L. (1985). The effect of dropping out of high school on subsequent criminal behavior. Criminology, 23, 3-18.



- Tittle, C. R. (1985). The assumption that general theories are not possible. In R. F. Meier (Ed.), Theoretical methods in criminology (pp. 93-121). Beverly Hills, CA: Sage.
- Tittle, C. R., Villemez, W., & Smith, D. (1978). The myth of social class and criminality: An empirical assessment of the empirical evidence. American Sociological Review, 43, 643-656.
- Travis, L. F., & Cullen, F. T. (1984). Radical nonintervention: The myth of doing no harm. Federal Probation, 48, 29-32.
- Turk, A. T. (1987). Personal communication.
- Turner, J. H. (1986). The structure of sociological theory. Chicago, IL: Dorsey.
- United States Department of Justice. (1979). Project New Pride: Replication. Washington, DC: U.S. Government Printing Office.
- United States Department of Justice. (1984). Children in custody: Advance report on the 1982 census of public juvenile facilities. Washington, DC: U.S. Government Printing Office.
- United States Department of Justice. (1986). Report to the nation on crime and justice: Sentencing and corrections. In K. C. Hass & G. P. Alpert (Eds.), The dilemmas of punishment: Readings in contemporary corrections. Prospect Heights, IL: Waveland Press.
- United States Department of Justice. (1987). Probation and parole, 1985. Washington, DC: U.S. Government Printing Office.
- Urban gangs: Street sweepers. (1988, April 25). U.S. News and World Report, p. 14.
- Van Horne, L. (1987, April). Delinquency prevention success in Virginia. Corrections Today, p. 180.
- Van Voorhis, P. (1987). Correctional effectiveness: The high cost of ignoring success. Federal Probation, 51, 56-62.
- Vold, G. B., & Bernard, T. J. (1986). Theoretical criminology (3rd ed.). New York: Oxford University Press.
- Walker, H., & Beaumont, B. (1981). Probation work: Critical theory and socialist practice. Oxford: Basic Blackwell.
- Warren, M. Q. (1977). Correctional treatment and coercion: The differential effectiveness perspective. Criminal Justice and Behavior, 4, 355-376.

- Webb, A. P., & Riley, P. (1970). Effectiveness of casework with young female probationers. Social Casework, 51, 113-115.
- West, S. G. (1986). Beyond the laboratory experiment: Experimental and quasi-experimental designs for interventions in naturalistic settings. In P. Karoly (Ed.), Measurement strategies in health psychology (pp. 183-230). New York: Wiley.
- White, H. R., Pandina, R. J., & LaGrange, R. L. (1987). Longitudinal predictors of serious substance use and delinquency. Criminology, 25, 715-740.
- Wiatrowski, M. D., Griswold, D. B., & Roberts, M. K. (1981). Social control theory and delinquency. American Sociological Review, 46, 525-541.
- Wilkinson, K. (1974). The broken family and juvenile delinquency: Scientific explanation or ideology. Social Problems, 21, 726-739.
- Wilks, J., & Martinson, R. (1976). Is the treatment of criminal offenders really necessary? Federal Probation, 40, 3-9.
- Williams, K. R. (1984). Economic sources of homicide: Reestimating the effects of poverty and inequality. American Sociological Review, 49, 283-289.
- Wilson, J. Q. (1980). What works? Revisited: New findings on criminal rehabilitation. Public Interest, 61, 3-17.
- Winnick, A. J. (1985). Reagan's economic program and supply side economics: An evaluation. Insurgent Sociologist, 13, 23-38.
- Winterdyk, J., & Griffiths, C. (1984). Wilderness experience programs: Reforming delinquents or beating around the bush? Juvenile and Family Court Journal, 23, 35-44.
- Winterdyk, J., & Roesch, R. (1982). A wilderness experiential program as an alternative for probationers: An evaluation. Canadian Journal of Criminology, 24, 39-49.
- Wolfgang, M. E., Figlio, R. M., & Sellin, T. (1972). Delinquency in a birth cohort. Chicago, IL: University of Chicago Press.
- Wormith, J. S. (1984). Attitude and behavior change of correctional clientele. Criminology, 22, 595-618.
- Wright, W. E., & Dixon, M. C. (1977). Community prevention and treatment of juvenile delinquency: A review of evaluation studies. Journal of Research in Crime and Delinquency, 14, 35-67.