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New Directions in the Rehabilitation of Criminal Offenders

Susan E. Martin, Lee B. Sechrest,
and Robin Redner, Editors

PANEL ON RESEARCH ON
REHABILITATIVE TECHNIQUES

Committee on Research on Law Enforcement
and the Administration of Justice
Assembly of Behavioral and Social Sciences
National Research Council

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Preface

The Panel on Research on Rehabilitative Techniques was established to determine whether the available research warranted the conclusion that criminal offenders could be successfully rehabilitated. The panel approached the end of that task with a sense of incompleteness and frustration stemming from the disarray it had encountered in the research on rehabilitation. Much of the research was methodologically inadequate. Many of the studies were so seriously flawed as to preclude the drawing of any legitimate conclusions at all. Little of the research seemed to report on programs that would have objectively been described as strong and well-reasoned attempts to change criminal behavior that had been well implemented as programs. The field was characterized by weak, usually isolated interventions and by poor implementation. On the other hand, some potentially successful intervention efforts seemed to warrant continued investigation. The ideal of rehabilitation seemed too attractive, even necessary, to abandon until every possibility had been explored. So the panel sought funds and authorization to continue its work into a second phase that would look more prospectively and prescriptively at the problems of offender rehabilitation.

In its initial view of work on the rehabilitation of criminal offenders, the panel had focused on programs carried out within prisons and other institutions. That concentration of interest reflected in part the focus of research efforts, a large proportion of which had dealt with intramural programs. For a variety of reasons the panel came to believe that, for the future, programs and research carried on outside institutional walls held

the most promise for both practical and theoretical reasons. Such programs were for the most part the least tested. Unfortunately, neither the quantity nor the quality of research on extramural rehabilitation programs proved to be impressive, and, again, the panel was left with no more than hints of appropriate directions for future rehabilitation efforts, whether inside or outside of institutions.

The overall aim of the second phase of the panel's work was to be prescriptive, to suggest as specifically as possible directions for both program development and research. Admittedly, the task of prescribing is considerably more difficult than the task of determining where the gaps in the knowledge are. The panel came to believe that with respect to program development it could state only in a general way the avenues that ought to be explored. The panel did, however, reaffirm its earlier conviction that rehabilitative efforts will have to be more extensive, multifaceted, and better integrated if they are to have any reasonable chance of success, particularly if success is defined in terms of a reduction in the rate of recidivism. That does not necessarily mean that there should be intensive and pervasive intrusions into the lives of individual offenders, because at least some of the interventions that ought to be tried, e.g., in the community and school, might not have individual offenders as their targets. What it does mean is that piecemeal, inconsistent efforts, based on what seems desirable or possible at any given time or location, are not likely to be successful and should not be the substance of our efforts to help offenders rehabilitate themselves.

The panel was more satisfied with its prescription for research strategies. To begin with, there is a need for better, more integrative theory that is developed specifically to account for the processes of behavior change that are likely to be involved in rehabilitation. A monolithic theory seems unachievable at this time and perhaps may never be achievable because criminal behavior appears to be so diverse in its origins and in the factors that maintain it. For the time being, partial theories that can be linked together gradually into an evolving nomothetic act will have to be used. Research efforts will have to be more systematic, more oriented toward the development of programs than to summative evaluation, and of more extended duration than past efforts have been.

There is, of course, the unattractive but commanding hypothesis that the problems of crime and offender rehabilitation are intractable, unlikely ever to yield to the methods of scientific inquiry. It will be unfortunate if that is so, but the only way of testing the hypothesis is by the empirical method of science. It is possible that the instances of successful rehabilitation that can be found in the life histories of so many ex-offenders are not reproducible, being the result of so many complex and uncontrollable fac-

tors. If that is so, it is regrettable, but the panel does not believe that the time has yet come to give up on science.

It will be evident to readers that what is offered in this volume is not a set of solutions or precise directions, but rather a crude map of the terrain. When one must, or wants dearly, to reach an objective, a crude map, if it does not mislead, will be better than no map at all. It is in that spirit that the panel offers this part of its report to social scientists, program personnel, and administrators interested in the rehabilitation of criminal offenders.

This volume contains a report representing the panel's work and 10 papers commissioned by the panel to review and assess particular bodies of literature of interest and to speculate about issues that the panel wanted to consider but felt it lacked the necessary expertise for. These papers were presented and critiqued at a conference planned principally to inform panel members. In addition to the writers of the papers, a number of experts in the field participated in the discussion of the papers and related issues. That conference was held at Woods Hole, Massachusetts, in June 1979. A list of those who attended the conference is appended to this report.

In addition to the contributions of conference participants, the panel benefited from discussions with Albert Bandura of Stanford University, John Reid of the Oregon Social Learning Institute, and John Shappard of the Federal Judicial Center. Each attended a panel meeting, presented his recent work, and discussed its implications for further research on rehabilitation with panel members. Sheldon Messinger's willingness to spend many hours discussing early drafts of the report is also gratefully acknowledged.

The panel was formed under the aegis of the Committee on Research on Law Enforcement and the Administration of Justice. The panel thanks the chairs of the committee for their contributions. Samuel Krislov, the former chair of the committee, then named the Committee on Research on Law Enforcement and Criminal Justice, and Alfred Blumstein, the present chair, actively participated in all phases of the panel's work. Although committee members were invited to comment on the final draft, the panel did not formally submit its report to the committee for approval and thus bears full responsibility for its contents.

The editors of the report had major responsibilities for drafting sections of the report and for assembling and integrating the contributions of panel members; the contributions of several of the panel members, however, were substantial and deserve explicit recognition. LaMar Empey wrote the initial discussion of sociological theories of crime, Ann Witte was responsible for the early draft on economic theories of crime and

REPORT OF THE PANEL

1 Introduction and Summary

Criminal justice policy in the United States is in a state of flux: past practices are being challenged, current policy is marked by contradictions and controversy, and future directions are uncertain. In view of the importance of the issues and the confusion about correctional policy, the Panel on Research on Rehabilitative Techniques was created in 1977 to assess the state of knowledge about the effectiveness of rehabilitation. In its first volume, *The Rehabilitation of Criminal Offenders: Problems and Prospects* (Sechrest *et al.* 1979), the panel concluded that although there is little in the reported literature that demonstrably works, the conclusion that "nothing works" is not necessarily justified. It would be more accurate to say instead that nothing yet tried has been demonstrated to work. This is true because many plausible ideas have not been tried and because the research done so far, even when theoretically informed, has not been carried out satisfactorily. The research has been flawed by limitations in the evaluation of programs, the questionable degree to which treatments are actually implemented, and the narrow range of approaches actually attempted. In this report the panel explores more promising directions for the development of a program of research on rehabilitation. Without better research that is oriented toward the characteristics of offenders, including their age and the stage they are at in their criminal career, designed for specific loci of intervention, and developed through an iterative process, one cannot properly conclude that nothing could work.

In this chapter we review the background of this report, summarize its findings, and present its conclusions. The first section includes a brief

review of the history and current debate over rehabilitation and summarizes the panel's first volume. The second section states the goals and explains the scope of this report. In the third section the contents of Chapters 2 through 5 are summarized. The panel's conclusions are presented in the final section.

BACKGROUND

HISTORY OF THE DEBATE OVER REHABILITATION

Rehabilitation is a relatively new goal for the criminal justice system. Since the time of the earliest legal codes, society has sought retribution and deterrence in dealing with criminals; punishments including fines, corporal punishment, banishment, and capital punishment have been dispensed to achieve suffering by the offender and the deterrence of potential offenders from crime. (For a review of the development of criminology and the history of penal policies, see Empey (1978) and Rennie (1978).) Until the eighteenth century in Western countries, imprisonment was rare as a punishment, but other sanctions were harsh or cruel by contemporary standards. From the Middle Ages to the eighteenth century, the treatment of offenders rested on the beliefs that humans are naturally evil and depraved, that crime is a form of sin, that the reform of offenders is not possible, and that drastic measures are the best defense of the social and moral order.

In the eighteenth century the philosophy of the Enlightenment altered thinking in Europe and in the New World. The view of humans as sinful and depraved was replaced by a new optimistic perspective that regarded humans as free and rational. Crime was thought to result from the exercise of free will and reasoned choice in the pursuit of personal self-interest. If a criminal thought that the personal benefits of the crime would outweigh the pain he or she would suffer from committing it, that criminal would commit the crime.

Given these assumptions, classical reformers sought to make punishment more humane, more proportionate to the crime, and more certain. Criminal codes were rewritten early in the nineteenth century; steps were taken to make due process a regular part of the administration of justice; punishments were reduced in severity and graded according to the seriousness of criminal acts; and newly designed prisons, training schools, and orphan asylums were constructed as more humane places for punishing adults and disciplining children. By the middle of the nineteenth century, however, it had become apparent that the penitentiary and orphan asylum were warehousing people rather than saving them.

In the period following the Civil War, a new reform movement gathered momentum. The new philosophy emphasized rehabilitation rather than punishment in the treatment of offenders. Rehabilitation was formally adopted as the goal of penology by the first Prison Congress in 1870 in its Declaration of Principles. Key aspects of the rehabilitation ideology laid out in the Declaration of Principles include the following premises: (1) punishment should be administered according to the needs of the offender rather than the seriousness of the act; (2) sentences should be indeterminate rather than fixed in order to give prisoners an incentive for participating in their own reformation, to permit the extended imprisonment of incorrigibles, and to allow decisions concerning release to be made on the basis of rehabilitative criteria; (3) offenders should be classified and separated in prison on the basis of age, sex, and seriousness of their crimes; (4) education and industrial training should become essential elements in a program of rehabilitation; rewards rather than punishment should be used whenever possible to produce desired behavior change; (5) institutional treatment should be supplemented by assistance for the offender returning to the community; and (6) prevention rather than confinement should be employed whenever possible to reduce crime (Henderson 1910). In sum, this new correctional movement was characterized by optimism about the possibility of rehabilitating individuals, an emphasis on treating the individual offender according to his or her needs, and the reaffirmation of the belief in the institution as the most effective means of reclaiming individuals.

Although by the turn of the century reformatories and industrial training schools had demonstrated little more success in reforming offenders or reducing crime than their predecessors, the belief that rehabilitation rather than punishment should be the goal of correctional policy stood virtually unchallenged for the first half of the twentieth century.

Early twentieth-century criminal justice reformers devised two important innovations to implement their rehabilitative goals: probation, to permit those involved in only minor offenses to remain in the community, and a separate juvenile court, to protect, assist, and control rather than punish children. By the middle of the century, all the states had established probation services and juvenile courts. Between 1920 and 1960, changes in penal institutions were limited; the rhetoric of rehabilitation became widespread.

News reports of skyrocketing crime rates and widespread social unrest in the early 1960s once again led to public concern with crime control and correctional policies. The rehabilitative ideal and the effectiveness of rehabilitation programs both inside penal institutions and in the community were questioned. In the 1970s this criticism multiplied, although critics of rehabilitation now speak in a variety of voices.

The President's Commission on Law Enforcement and Administration of Justice (1967a; henceforth known as the President's Commission), appointed to survey and assess crime and criminal justice in the United States, supported a rehabilitative rather than a punitive approach. It recommended, however, a "new corrections" to focus on the reintegration of the offender into the community. Viewing crime and delinquency as symptoms of the failure and disorganization of the community rather than as simply the result of individual pathology, the President's Commission suggested the necessity of changing both individual offenders and the social environments that foster or fail to prevent crime. It called for a sweeping effort to reform the political, economic, and social structures in American society that produce poverty, inequality, inadequate education, lack of opportunity, and crime.

At the same time, the President's Commission sounded another theme: minimization of the penetration of offenders into the criminal justice system. Focusing on the high costs and negative consequences of institutional treatment of offenders, the President's Commission urged treatment in the community whenever feasible, decriminalization of juvenile "status" offenses, and diversion of minor offenders (particularly juveniles) from formal court processing and criminal justice system treatment.

CURRENT CRITICISMS OF REHABILITATION

While the call for the reintegration of the offender into the community led to new emphasis on community-based corrections, new challenges to the theoretical bases, philosophical rationale, and the programmatic effectiveness of rehabilitation took shape. In the past decade, these new challenges have come to dominate the debate over correctional goals and policies.

Some critics reject rehabilitation because of its apparent failure. "Nothing works," they observe, citing the reviews by Bailey (1966), Lipton *et al.* (1975), and Greenberg (1977). These studies examined several hundred evaluations of treatment programs and concluded that there is little evidence that either institutional programs or noninstitutional efforts to rehabilitate offenders make any appreciable difference.

Other critics have challenged the concept of rehabilitation and the premises underlying the treatment model. The authors of *Struggle for Justice* (American Friends Service Committee 1971), for example, object to coerced therapy to "correct" offenders as degrading, unsuccessful, and potentially repressive. They urge the replacement of the indeterminate sentence and the rehabilitation ideology with a "just deserts" philosophy and fixed sentences based on the nature of the offense. This alternative

conceptual framework has been widely hailed by persons of diverse political ideology. Some (Fogel 1975, Morris 1974, Von Hirsch 1976) advocate replacing the treatment model with a justice model to end coerced treatment and protect offenders' rights; others support the justice model as justification for more severe punishments (Van den Haag 1975) or adopt a neoclassical utilitarian stance emphasizing social defense and incapacitation as the primary goal of criminal justice (Wilson 1975).

But emphasis on deterrence, incapacitation, and retribution instead of rehabilitation as a goal of *sentencing* and efforts to reform sentencing policies and practices do not eliminate the need to search for wider sentencing options and more effective institutional and community rehabilitation programs; the availability of correctional services for sentenced offenders implicitly affects sentencing decisions. Zimring (1978), for example, rejects rehabilitation as a basis for sentencing youthful offenders but maintains that opportunities for rehabilitation must exist in facilities to which juvenile delinquents are referred. Rejecting "compulsory moral rearmament," he holds that sentencing policy for juveniles must leave "room for reform." This requires good facilities with programs that permit offenders to help themselves by taking advantage of self-improvement opportunities. He adds (Zimring 1978, p. 104), "The principles and guidelines for sentencing youthful offenders can only be as good as the facilities to which the offender is sent. In this important sense, reform in dispositional policy is intimately connected to the institutions that deliver that policy." Not only institutions but also the availability of community-based facilities and programs is likely to indirectly affect sentencing disposition and opportunities to find "room for reform."

Our society cannot avoid the perplexing and recurring problems of how to deal with criminal offenders and the consequences of its penal policy. It is crucial therefore in light of the apparent swing of the pendulum of opinion toward skepticism about rehabilitation and a more punitive approach that we avoid new simplistic solutions (particularly since knowledge about the effects of policies aimed at deterrence and incapacitation is quite limited (Blumstein *et al.* 1978)) and that we continue efforts to develop, implement, test, and evaluate a variety of intervention programs systematically in the search for a more humane and effective correctional policy.

THE FIRST REPORT: *The Rehabilitation of Criminal Offenders: Problems and Prospects*

The Panel on Research on Rehabilitative Techniques was created in 1977 in the context of the debate over the efficacy of rehabilitation programs and the challenge to their appropriateness as a goal of the criminal justice

system. The panel's initial task was to review and assess existing research on offender rehabilitation to determine whether the conclusion that "nothing works" is justified. In its initial volume, *The Rehabilitation of Criminal Offenders: Problems and Prospects* (Sechrest *et al.* 1979), the panel reviewed existing evaluations of rehabilitation programs to determine whether they provide a basis for any conclusion about the effectiveness of rehabilitation techniques, clarified the difficulties in implementing treatment programs and measuring their effectiveness, and made preliminary recommendations regarding methodological strategies for evaluating treatment programs.

A preliminary task for the panel was to define "rehabilitation." The definition it finally adopted involves three aspects considered important to specify in any definition of rehabilitation: the desired outcome, the intervening variable(s) to be the assumed target of the rehabilitative treatment, and the intervention itself. It defined rehabilitation as "the result of any planned intervention that reduces an offender's further criminal activity, whether that reduction is mediated by personality, behavior, abilities, attitudes, values, or other factors. The effects of maturation and the effects associated with 'fear' or 'intimidation' are excluded, the result of the latter having traditionally been labeled as 'specific deterrence.'" (Sechrest *et al.* 1979, pp. 20-21).

Certain features of the definition require explanation. The focus is on planned intervention to exclude spontaneous reform, whether due to maturation or other factors in the absence of an organized program. The definition is free of a prior conception of the processes by which rehabilitation may occur, leaving open a wide range of theoretical approaches and intervening variables. The criterion against which rehabilitation must be measured is future criminal activity. While other outcomes, including, for example, offender growth, happiness, or steady employment, are desirable outcomes in themselves, a favorable outcome of rehabilitation must include a reduction in criminal activity. Finally, the panel recognized that in some instances it is virtually impossible to distinguish empirically among the effects of maturation, punishment or special deterrence, and rehabilitation. It maintained these distinctions, nevertheless, to avoid certain conceptual pitfalls. In the current volume the panel generally subscribes to the above definition. At the same time, we encountered both empirical and theoretical difficulties in maintaining the distinction between rehabilitation and special deterrence. These problems arose both because making the distinction between them involves interpretations and motivations often difficult to ascertain and because criminal justice concepts do not accord with those of social science. For example, "punishment" has a much stricter meaning in learning theory than it does in criminal justice usage.

The panel's first task was to review existing literature to assess the state of knowledge. Because of the influence of the Lipton *et al.* (1975; Lipton, Martinson, and Wilks—hereafter LMW) review in provoking discussion of rehabilitation, the panel started with an evaluation of that work, supplemented by an examination of the literature published since 1968 not covered by LMW. It concluded that LMW was reasonably accurate and fair in its appraisal of the rehabilitation literature; its errors generally tended toward an overly lenient assessment of the methodology of a study or the failure to maintain an appropriately critical posture in evaluating statistical analyses. The examination of studies published since 1968 did not appreciably alter the conclusions of LMW, although recent interventions involving work and financial support seemed to hold some promise. The panel, however, did *not* draw the same conclusion as LMW regarding the efficacy of rehabilitation; i.e., that "nothing works." Rather, it concluded that *existing* studies cannot yield useful knowledge about the effects of correctional rehabilitation. These studies are limited by methodological inadequacies including measurement problems, the use of weak programs and weak research designs, and uncertainty about the integrity of the treatments actually delivered. However, the panel noted that scattered throughout the literature were suggestions of successful rehabilitative efforts that qualify the conclusion that "nothing works."

The panel found two principal types of problems limiting our knowledge about rehabilitation: those having to do primarily with maintaining the integrity of treatment and experimental research in institutions dominated by other concerns it termed "problems of implementation," and those stemming from a variety of methodological problems it termed "problems of evaluation."

The translation of knowledge about human behavior into treatment programs is hampered by shortcomings of program design and limitations on our ability to classify varieties of offenders and adequately match them with the most appropriate type of treatment. A review of treatments employed in the rehabilitation of offenders indicates that they tend to lack an articulated theoretical framework, often are narrowly conceived and tested singly (e.g., treatment is concerned with either vocational training or psychological counseling), and involve apparently weak interventions. Why would one expect that one hour per week of group therapy with a poorly trained leader and unwilling participants would produce a major behavior change in incarcerated felons, especially considering the powerful effect of the prison background? Most techniques are used across large portions of the prison population without regard to individual needs or amenability to particular treatments. Although some studies suggest that particular treatments are successful with certain kinds of offenders, efforts at classification remain inadequate and in need of refinement.

Another important problem of implementation is the lack of integrity in the delivery of treatment. The panel discovered many discrepancies between what was supposed to have been tested and what actually was done. The findings of an experiment with an exemplary design will be misleading if treatment is not described, inadequately described, or not delivered as described. Since each of these situations occurs frequently, it is uncertain just what has ever been given a fair trial.

Other problems in assessing the effectiveness of rehabilitative techniques revolve around methodological issues, including those of evaluation and measurement. To determine whether rehabilitation services were effective requires the careful evaluation of programs and their elements. This, in turn, requires systematic planning and testing of various interventions through deliberate experiments. Since program outcomes often have been unanticipated, one cannot be certain of the effect of a program without a true experiment. Because other methods cannot yield findings that provide the degree of certainty of knowledge, the panel strongly recommended the use of true experiments whenever possible. True experiments in offender treatment are currently conspicuously rare. Although financial, legal, and ethical objections to social experimentation are often raised, guidelines regarding voluntary consent and adherence to the principle of avoiding harm to participants can offer protection, whereas the long-term costs of continuing programs without accumulating knowledge about their outcomes doom society to repeating errors and the inability to replicate successes.

In addition to being characterized by inadequate research designs, most studies have sample sizes so small that it is impossible to detect subtle treatment effects and inadequate specification of intervening variables, making the separation of treatment effects from other elements impossible. The outcome measures used to evaluate the effectiveness of a treatment are often unsatisfactory. The traditional measure of effectiveness, recidivism, not only lacks a common definition but is of limited sensitivity when regarded as an all-or-nothing outcome, as is the common practice. Efforts to assess criminal activity as a multicategory or continuous variable, while not perfect, are being developed and should continue to be used, and, in the interim, the use of multiple measures of recidivism is encouraged.

A final set of problems in rehabilitation research examined by the panel involves legal and ethical issues. How much and what type of persuasion to convince offenders to participate in programs is ethically permissible? How much is actually used? Other questions arise out of the special conditions required for successful experimentation. Constraints on evaluations of treatments arise primarily from threats to four basic principles: due

process, equal treatment under the law, voluntary participation, and informed consent. The limitations posed by each of these make experimental research on rehabilitation difficult.

The panel concluded therefore that as a result of the many limitations on the acquisition of knowledge about rehabilitation, the effects of attempts at rehabilitation remain unknown. It noted that the current rehabilitative efforts represent only a fraction of the possible universe of approaches and found glimmers of promise in several ongoing programs, as well as in some that have not been tried but appear to offer promise in theory. These include efforts to test stronger or more massive interventions; efforts aimed at intervening with an offender very early in the development of a criminal career; increased and more varied after-care supports for ex-prisoners; and employment and career development programs in noninstitutional settings.

SCOPE OF THIS REPORT

GOALS AND ORGANIZATION

Finding that few of the many possible rehabilitative efforts have been tried and discovering a number of new issues to be addressed, the panel has undertaken a further examination of the rehabilitation of offenders, this time in extrainstitutional settings. Our current effort is guided by three goals: to explore the contributions that theory can make to program design and implementation; to identify those areas suggested by various theoretical or conceptual frameworks for which further research and funding support are most likely to yield knowledge with a policy-relevant payoff; and to propose a more fruitful strategy of search for increasing knowledge about rehabilitative efforts.

In its first volume, the panel concluded that in addition to problems of implementation and evaluation, the absence of a guiding theory or conceptual framework also greatly hinders the accumulation of knowledge about rehabilitation. In Chapter 2 we examine the uses of theory in rehabilitation research, review the principal theories of crime from several disciplines, and explore the implications of these theories for practitioners and researchers. While these theories of crime are not new, efforts to examine them singly and in combination in light of their implications for programmatic intervention are all too infrequent.

In Chapter 3 we focus on several dimensions of the problem of determining whether a treatment is likely to bring about a desired change in subsequent behavior. Any intervention program must consider the appropriate population for inclusion, the nature and content of the pro-

gram, and limitations on its activities. These "conditioning variables" that we review are offender types, the timing of interventions, the strength and integrity of interventions, and the legal and ethical constraints on intervention.

Good social intervention programs do not spring full blown from the minds of practitioners, researchers, or funding agency personnel; they are the result of collaboration of these groups in a series of developmental efforts to achieve a desired goal. In rehabilitation research, sustained collaborative efforts at program development have been infrequent. In Chapter 4 we focus on elaborating what we believe to be an effective strategy for developing knowledge about what works in rehabilitating criminal offenders.

In Chapter 5 we turn to the content of rehabilitation programs. Given the limitations of existing knowledge, instead of specifying programs we point to five areas for intervention and suggest potentially fruitful avenues for development in each of these loci of intervention.

The scientific approach we recommend requires the commitment of substantial sums of money to the acquisition of knowledge and demands patience from policy makers who must make decisions regarding the crime problem in the interim. Nevertheless, the panel believes that a sustained research effort offers the best hope in the long run for the development of an effective crime control policy. Better research does *not* assure more successful programs, but more programs without such a sustained research effort are likely to lead to continuation of our uncoordinated and noncumulative crime control policies, which have been dictated principally by social fads and political expediency. Without such research, past failures are more likely to be repeated and occasionally successful programs are less likely to be capitalized on because the factors that account for failure and success are insufficiently understood.

FOCUS ON EXTRAINSTITUTIONAL PROGRAMS

Because the panel previously concluded that few of the many possible rehabilitative techniques were being tried in correctional institutions, the emphasis in this volume is on exploring potentially promising extrainstitutional approaches. Extrinstitutional efforts are located in the community, but the term is not synonymous with "community-based corrections." Community-based corrections denotes a wide variety of correctional dispositions administered outside jail, the reformatory, or prison for the accused or convicted offenders; extrinstitutional programs, in addition, may include those designed to reach the individual who is not delinquent but may be at a high risk of becoming so.

Support for the replacement of institutional corrections with a network of community-based programs came initially from the President's Commission (1967). It called for the reintegration of the offender into the community by leaving him or her in the community whenever possible and focusing efforts for change on both the offender and the community. It observed that incarcerative institutions hinder reintegration; they increase stigmatization, are inhumane, and serve as schools for crime. Separation from the community weakens ties to conventional institutions and disrupts families, whereas reintegration requires strengthening of institutions and families. Teaching law-abiding behavior is easier in an environment where conventional associations are possible (i.e., in the community) than in the world of prison, where association with criminals enhances criminal attitudes.

Implementation of offenders' reintegration into the community, however, has been fraught with problems. Much of what is labeled "community-based corrections" continues to be social casework carried out in probation and parole departments. The involvement of educational, welfare, and community action organizations in devising rehabilitation programs has been limited.

Critics of community-based corrections programs (see Greenberg 1975; Scull, forthcoming) have observed that they often increase the amount of punishment, surveillance, and control to which the offender is subjected without being demonstrably superior to institutional treatment programs. Some extrainstitutional programs threaten due process protection by employing extralegal devices to determine program eligibility. In addition, community corrections may be decreasing the deterrent effects of punishment, which could result in higher crime rates. Finally, without larger social structural changes (e.g., more jobs), community programs (e.g., job training) may be futile. Thus, in exploring extrainstitutional programs for offender rehabilitation in this volume, the panel faces the challenge of finding interventions whose benefits to individuals and to the community outweigh the possible negative consequences and social costs.

FURTHER COMMENTS

Several additional remarks regarding the scope of this report are necessary. First, we do not specifically focus on or suggest interventions designed to alter the behavior of white-collar offenders for two reasons: there is a lack of data on white-collar crimes and criminals, and, more importantly, there is an emphasis on those who constitute the bulk of the populace currently handled by the corrections system.

Despite increasing concern about white-collar crime, its definition re-

mains a matter of dispute, and knowledge about it remains limited. The prevailing conventional wisdom holds that white-collar crime fits the economic model and that white-collar offenders differ from street criminals with respect to social class, attitudes, and the rationality of their criminal conduct; that once caught, white-collar offenders are unlikely to need or be responsive to rehabilitation programs; and that their recidivism rate is low because special deterrence, general deterrence, and incapacitation strategies strip them of their capacity to repeat their criminal behavior. Sutherland (1949) challenged the assumptions that white-collar offenders are rational, solitary, and nonrecidivist, but others have not followed up on his suggestions with solid empirical data. It appears that even when rational motives are present, strong irrational elements may take over; that some white-collar crimes, e.g., price fixing, are by definition collusive rather than solitary; and that the loss of social status and of one's livelihood or job through disbarment or other action taken by employer or occupational association does not occur often. Until more data are available regarding the etiology of white-collar crimes, the milieu that produces and sustains them, the long-term behavior of white-collar offenders, and the effectiveness of various sanctioning policies, it is difficult to discuss interventions that might be specifically designed to alter the behavior of the white-collar offender.

The other reason that we do not specifically focus on rehabilitation programs directed at white-collar offenders is because in this report we deal with the offenses and offenders that have thus far constituted the major problem in the corrections system. This does not imply anything about the actual distribution of crime in our society and the possible bias in the system of social control. Rather, it reflects our concern with designing programs geared to those who are in the system rather than those who might be.

Second, we recognize that the distinction between rehabilitation and special deterrence is an arbitrary one, difficult to make in theory and practice (see Wilson (1980) for a critique of the distinction), and we do not attempt to make it in this report. As learning theory has long recognized, people respond differently to the same reinforcer, they respond to different reinforcers, and both reward and punishment are often required to produce desired behavior changes.

An illustration of the ambiguity in the distinction between rehabilitation and special deterrence is the case of financial restitution as a criminal sanction. To what extent does a restitution sentence, if it reduces further criminal activity, represent a "planned intervention" that rests on "the effects of fear or intimidation?" Some regard restitution as a useful form of punishment (see Schafer 1970), and it has, in fact, often been used as an

add-on to a sentence of probation or incarceration (Harland 1980b, Hudson and Galaway 1980b). At the same time, equity theorists (Walster *et al.* 1973) and proponents of "creative restitution" (Egash 1958) view it as offering psychological rewards to the offender and therefore as having a potentially rehabilitative outcome. Various restitution programs may well structure the costs and benefits to the offender differently. Both the nature of the program and the perceptions of the participants will determine the extent to which a restitution program appears to function as rehabilitation or as special deterrence. Our emphasis is on those interventions designed to alter behavior through an emphasis on positive rewards or outcomes, but we recognize that frequently they will also involve elements of coercion and negative sanctions and that offenders may confuse what is intended to be rehabilitative with what is meant as punishment. If they do not make the distinction, many offenders may not respond appropriately to rehabilitative ventures, possibly resisting them or only perfunctorily conforming to minimum requirements; they may perceive sanctions intended by society to punish only as weak signals of disapproval. Rehabilitation might be more successful if it could be clearly differentiated from punishment—spatially, temporally, and conceptually.

Third, we pay relatively little attention to knowledge dissemination and utilization problems, in comparison with knowledge generation issues. There is great pressure to improve knowledge dissemination and utilization in criminal justice and other public service systems, but we view this as putting the cart before the horse (knowledge development). In its first report the panel concluded that (Sechrest *et al.* 1979, p. 102) "The research literature currently provides no basis for positive recommendations about techniques to rehabilitate criminal offenders. The literature does afford occasional hints of interventions that may have promise, but to recommend widespread implementation of those measures would be irresponsible."

Since our knowledge of what works is sorely limited, instead of spending millions of dollars to disseminate an "innovation" before it has been demonstrated to be effective, we suggest starting on a limited scale, with closely controlled experimental "innovations" and focusing on improvement in the long-term knowledge development process. In emphasizing the early stage of program development, we only touch on the problems characteristic of subsequent stages of the transformation of a small pilot project into an ongoing national program: the difficulties of "selling" a program model to a local agency; of maintaining the integrity of the original program model as it is adapted by practitioners to local conditions, agency goals, and funding restrictions; and of bringing about the institutionalization of innovations into routines of the practitioners.

Fourth, serious efforts toward offender rehabilitation are not without risks. Given the limited knowledge about how to bring about dependable behavior change, the well-documented difficulties involved in changing criminal behavior, and limitations on possible interventions in our society, it must be accepted that rehabilitation as a movement may fail. With each failure of a planned, well-intended movement to better society, there is a loss that extends beyond immediate concerns for waste of financial and human resources to a more troublesome loss in credibility, in the faith of the citizenry that society can be deliberately changed for the better. There is also the risk that there may be harmful effects of rehabilitation efforts that cancel out, or even outweigh, any achievable benefits. There are enough instances of well-intended and seemingly benign social interventions that have proved to have unexpected negative outcomes that new interventions should be initiated only with great caution. We note as illustrations: the screening for sickle-cell trait that produced discrimination in employment and other areas; the screening for hypertension that increased employee absenteeism; urban renewal programs that destroyed people's homes, and public housing programs that replaced them with degrading, uninhabitable environments; social services for the elderly that increased their dependency and hastened illness and death; the negative income tax experiments that led to more family breakups; and welfare programs that drove fathers out of their homes. The warning posed by McCord (in this volume) about the possible long-term effects of some attempts to rehabilitate offenders must not be lost.

The panel believes that the strategy for development and testing of rehabilitative efforts that it poses in this volume offers reasonable hope of reducing both of these risks to an acceptable, minimum level. By beginning with modest, limited efforts and building on them with the experience provided by careful testing, the chances of any single, large failure are certainly minimized, and before any truly large-scale programs would be mounted, the opportunity to search for unintended harmful outcomes would have been offered.

Fifth, in systematically exploring ways to match offender and program more effectively, we have often employed the conventional language of intervention and, on occasion, that of behavior modification. We refer to "target populations" and "placements in programs," for example, terms that sometimes carry a tone of coercion. We believe that it is important therefore to state clearly our recognition of the value of voluntary and active participation in programs designed to facilitate behavior change in both principle and practice to the greatest extent possible.

Sixth, we have cited as "potentially promising" a number of nonexperimental, uncontrolled studies and programs that fall short of the stan-

dards of methodological rigor urged in the first report of this panel. We recognize that the evidence in support of some of these avenues of research is neither strong nor clear. Nevertheless, we suggest several general directions for research because we believe the search for ways to rehabilitate offenders should continue and because these studies, despite their limitations, provide the best empirical clues in support of theoretical suggestions that are currently available to indicate future research directions.

Finally, in searching for promising directions for rehabilitation research, the panel points to general areas and research strategies rather than specific research programs or techniques because we believe that improvement in the process of conducting research on rehabilitation is the key to gaining greater knowledge.

The previous report of the panel dealt principally with the shortcomings of experimental work in rehabilitation. They were many and not difficult to find. Yet criticizing is not enough, and the currently fashionable suggestion that society abandon efforts to find more effective programs to rehabilitate offenders is, we believe, irresponsible and premature. In this volume we undertake the difficult task of being prescriptive; we seek to constructively distill from underdeveloped but existing theories of crime, massive but inadequate bodies of empirical findings, and an emerging evaluation methodology literature a more effective and scientifically sound way to rehabilitate criminal offenders.

FINDINGS

LINKING THEORY AND EMPIRICAL RESEARCH

Although the methodological shortcomings of much rehabilitation research have been amply described, an equally important deficiency characterizing research has received less attention: the failure to formulate and test theory. Critics have noted the frequently atheoretical approach to *ad hoc* program development (Glaser 1975a,b), the poor integration of theory with treatment models (Slaiken 1973), the use of treatment techniques without consideration of their applicability to the individuals being treated (Ross and McKay 1978), and the use of theories of crime for largely descriptive purposes rather than as a basis for constructing correctional models (Empey 1969). The result is that the abstract concepts of the social scientist are seldom translated into the concrete theory-guided hypotheses or formulations that are needed as guides to both program development and evaluation research. Program goals often are not clearly specified, and the assumptions underlying action programs go unexplicated.

Theory can contribute to the development of empirical knowledge in several ways. It can serve to eliminate ideas with little or no scientific basis, point to gaps in knowledge about workable intervention strategies, and show how current knowledge can be employed as a basis for programs and experimental research.

In adopting a theory-based approach to rehabilitation programming, the first step is to examine a particular theory to determine what, according to the theory, is the nature of the problem. The statement of the problem in theoretical terms permits the development of an intervention strategy containing propositions derived from that theoretical statement and clarifies the assumptions on which a proposed program is based. These propositions guide the intervention and serve as the basis from which to derive operational guidelines needed to implement the program.

By using a single set of propositions to guide the intervention and the research, the tendency of practitioners and researchers to pursue different objectives can be reduced and data of interest to both can be gathered. These include findings concerning the adequacy of the theoretical propositions and the need for modification in theory, the theoretical adequacy and nature of program operations and processes, and the outcomes of the program—including the capacity of the program to change relevant intervening variables.

Although there are many problems in translating theories into concrete program components, including shortcomings in many of the theories themselves, such an effort provides a sounder basis for planning programs and research than a whim or fad, clarifies underlying assumptions, assures that policy will be guided by our best knowledge, and should eventually result in both improved theories and improved practice.

CONDITIONING VARIABLES

Often rehabilitation programs or particular interventions are viewed as panaceas or in simple all-or-nothing terms in which they "work" or "fail." Social behavior is more complex. Offenders commit a wide variety of offenses and vary with respect to personality, background, motivations, and psychological, economic, and social needs. In developing effective rehabilitation programs, it is necessary to match offender, setting, and intervention. One must consider various "conditioning variables," among them: types of offenders; timing variables, i.e., the stage in the development of a criminal career and the age of the offender; the optimal strength or amount of treatment necessary to produce the desired outcome; the legal and ethical limits on intervention programs; and the organizational and administrative arrangements necessary to assure implementation of the program as designed.

Offender Types

Because offenders vary widely with respect to immediate offense and offense record, personality characteristics, and demographic variables, it is desirable to classify them with respect to the types of interventions that are most appropriate. Yet, despite nearly 40 years of effort, the development of typologies for the classification of offenders into mutually exclusive offender or offense types for the purpose of rehabilitation rather than for ease of institutional control has not progressed very far. This inability to classify offenders limits the efficacy of programs. Although an all-purpose, generalizable treatment typology may be impossible to devise, a more modest approach that seeks to match intervention programs with theoretically suggested target populations might be a step in the right direction. We call this the "template-matching technique." If only those individuals whose personal characteristics match the theoretically suggested criteria for participation are included in the program population, more intervention programs may be found to be measurably successful.

Timing

Two different but related dimensions of timing require consideration in determining the appropriateness of an intervention program. These are the relationship of the intervention to (1) the age of the individual and (2) the stage in the development of a criminal career at which the intervention takes place. The propensity to commit criminal acts varies with age. If the propensity for criminal behavior is related to human development, then susceptibility to correction and the nature of an individual's response are likely to be related to it, too.

In the health fields a distinction between primary, secondary, and tertiary forms of prevention is often made. Primary prevention involves attempts to prevent a disorder from occurring; secondary prevention seeks to identify and treat a disorder at the earliest possible moment; and tertiary prevention tries to limit the degree of disability or impairment. Although in criminal justice a distinction is made between prevention and rehabilitation in practice, a continuum of preventive efforts similar to that in the health field may be more useful for thinking about interventions and treatment strategies.

The question of the timing of interventions leads to a dilemma that needs to be explored: some theories of the causes of crime (e.g., the social learning and control theories) suggest that it may be easier and more effective to "nip in the bud" the undesirable behavior of young and/or first-time offenders. To ignore misbehavior may actually encourage it. But early intervention, in the absence of accurate predictive techniques, may,

according to other theorists, have both harmful and ethically offensive consequences: stigmatization and the creation of a self-fulfilling prophecy, the widening of the net of social control, threats to legal safeguards, and an increase in the cost of corrections or a misdirection of correctional resources. Perhaps this dilemma could be resolved by early interventions carried out outside the criminal justice system.

Strength and Integrity of Treatment

Too often, correctional programs involve weak treatments that are expected to have powerful results. Promising interventions and treatments may well be rejected because they are tried in a form so weak as to fail to achieve a threshold effect. Stronger or more comprehensive interventions may produce more positive outcomes. But how much intervention is necessary to produce change with a given offender or type of offender, and would such intervention be socially acceptable?

Three different types of objections are raised to the implementation of stronger, longer, or more comprehensive interventions. First, they cost more, at least in the short run. Second, while much of the general populace accepts rehabilitation in principle, they almost certainly would object to providing more extensive social benefits to wrongdoers while "good citizens" are denied similar services and opportunities. Third, more intense treatments may be viewed as a form of increased coercive social control that is morally and legally unacceptable in this society.

The gap between the ideal and the real or between the rehabilitation program as designed and the program in action is often substantial, although it is frequently undetected. Institutional pressures and a variety of barriers often lead to the failure to implement a program design with fidelity. An evaluation of the program will then yield spurious findings. The outcomes measured by evaluators will not reflect only the extent to which the program model was a success or failure; rather the outcomes may indicate only how successfully program activities were actually implemented, that is, how closely they represented the original program rationales.

Legal and Ethical Issues

In designing interventions for extrainstitutional programs, what is theoretically desirable must be weighed against certain legal requirements. In addition to the constraints mentioned above, one must consider the requirements of due process, voluntary participation and informed consent, and the ethical obligations on researchers to avoid harm to subjects.

A MORE EFFECTIVE STRATEGY FOR ACCUMULATING KNOWLEDGE

The accumulation and refinement of knowledge of rehabilitation processes and the efficacy of various intervention techniques require a more effective, longer-term strategy of research and development than is currently employed. Although more theory-based programs, closer adherence to true experimental designs, and the employment of better evaluation methodology are desirable, they are insufficient. What is needed is a dynamic system of knowledge acquisition that encompasses both intervention planning and evaluation methodology within a single-process framework. One such continuous process of program development and evaluation is termed "succession evaluation" (Tharp and Gallimore 1979). It involves the careful progression of program design and development through a series of evolutionary steps prior to full-scale evaluation; at each stage the central question changes and the appropriate methodology shifts.

A succession evaluation strategy calls for alternative research support policies rather different from those characteristic of the past: stability of funding and program goals, a long-term development process, and increased program authority in the hands of the research team. Implementing such policies is difficult. Legislatures are reluctant to permit the long-term commitment of funds earmarked for research on politically volatile issues; funding agencies want the flexibility to shift priorities; practitioners resist intrusion into their routine activities by researchers; and the research community's reward structure promotes short-term efforts. Despite these difficulties in implementation, succession evaluation can offer a way of overcoming some of the shortcomings of the current approach to research and thus permit the accumulation of scientific knowledge.

LOCI OF INTERVENTION

Our review of the various theories of crime, empirical tests of these theories, and evaluations of diverse rehabilitation programs suggests that no single theory or programmatic approach is consistently promising. At the same time, several lines of research appear worth pursuing. In seeking to categorize the promising directions for research on rehabilitation, the panel has selected several broad areas or loci of intervention for further examination. Four of these loci—the family, the school, the workplace, and the community—are among the major social and socializing institutions that shape individuals' attitudes and behavior; the fifth locus of intervention is the individual, with a focus on the biosocial bases of criminal behavior.

Reviews of the causes and prevention of crime and delinquency are often organized in terms of the role of these central institutions (see, for example, the President's Crime Commission, Report of the Task Force on Juvenile Delinquency 1967); reviews of offender rehabilitation rarely are. We believe that a broad approach focusing on several loci of intervention holds greater promise for integrating the various theories and intervention approaches than a program- or technique-oriented strategy. It permits the community and its social institutions as well as the offender to be the focus of correctional activity simultaneously; it emphasizes the need to better understand the ways institutions shape the experiences and opportunities of both offender and nonoffender; and it allows examination of the ways institutions can be reshaped to alter the experiences and behavior of offenders. None of the loci of intervention is necessarily more important or more promising than another; each has an important role in the etiology of crime. We employ these loci of intervention as a heuristic device for bringing together the theoretical suggestions, empirical findings, and intervention strategies that appear most promising.

CONCLUSIONS

The search for rehabilitative techniques and programs has borne little fruit; this is discouraging but should not be cause for the abandonment of efforts to find more effective rehabilitation strategies. The panel has found several shortcomings in rehabilitation research. These include inadequacies in program conceptualization and implementation, and flaws in evaluation including numerous methodological problems related to research design, outcome measurement, and statistical tests. Because programs have been poorly conceptualized and/or poorly implemented and research flawed by conceptual and methodological shortcomings, the conclusions that rehabilitation cannot be achieved may well be wrong. Instead of concluding that nothing can work, it is more accurate to state that we do not know what works.

Our current lack of knowledge does not mean that we should abandon efforts to devise and test more effective intervention programs. On the contrary, the promise of the "rehabilitative ideal" (Allen 1959) is so compelling a goal that the strongest possible efforts should be made to determine whether it can be realized and to seek to realize it. The panel firmly rejects the idea that efforts to facilitate the rehabilitation of criminal offenders and their reintegration into the community should be terminated in favor of either radical nonintervention or a purely punitive approach. Rather, the panel suggests the adoption of a different strategy of search.

This position rests on the assumptions that rehabilitation as a form of behavior change is (1) possible, as indicated by evidence in other areas of social intervention; (2) more likely to occur through the adoption of a more systematic approach to the accumulation of knowledge about the change process; (3) morally and socially desirable; and (4) likely, in the long run, to prove to be the most practical and cost-effective option available to the criminal justice system.

It is now time to undertake more systematic, long-term, and focused research that will have a substantial probability of improving techniques and programs that can then be evaluated in ways that will produce more definitive conclusions. This research will be slow and costly and its results uncertain. Nevertheless, it represents the best chance of learning what might work. Our recommended research strategy involves a number of component elements that will affect the practices of researchers, practitioners, and administrators of research programs.

1. Rehabilitation research must be guided by theory.

At present, there is no theory of offender rehabilitation; there are, however, many theories of criminal behavior developed in several disciplines. These have been inadequately tested and infrequently employed as a basis for intervention programs. The systematic use of theory in rehabilitation research to characterize the nature of the problem, weed out programmatic ideas without theoretical rationale, and serve as a basis for developing intervention principles and operational guidelines for implementing programs should be strongly encouraged and supported. Greater efforts should be made to draw propositions from one or several complementary theories of crime into a causal model, employ that model as a guide in designing intervention strategies, and test the assumptions on which the programs are based.

2. Intervention programs and research should be developed jointly as a coordinated activity designed to test detailed theoretical propositions explicitly.

Joint development of program and research elements through a cooperative endeavor involving research and program personnel is likely to lead to both better programs and better research. When practitioners' underlying conceptual premises have been set out and the program's final and intermediate goals made explicit, these can be used to guide the development of program operations and serve as the basis of research that tests both the underlying theoretical propositions and the effects of specific

program components. When program personnel are included in planning the research and when they understand and support its experimental nature, they are more likely to implement it with integrity and maintain the experimental design. At the same time, the research design can be tailored to the design of the program to test the program's underlying assumptions and effects.

3. Intervention programs must be designed for and tested with a theoretically suggested, clearly specified target population.

Too often, intervention programs are implemented with widely diverse, theoretically inappropriate groups of offenders; positive program outcomes for one segment of the test population can be offset by negative effects on other segments, with a net finding of "no effect." Rather than continue to try to develop offender typologies in the abstract, the panel recommends the formulation and adoption of a "template-matching technique" to guide the assignment of offenders to programs. One creates a template of the kind of person that is most likely to succeed in a program according to the theoretical propositions underlying a treatment when supported by empirical findings. Then offenders are selected to fit the template. Thus the program clients are theoretically suggested. In examining program effectiveness, the interaction effects of the characteristics of the offender, the program (including the strength or amount of the treatment), and the organizational setting of the program must be carefully considered.

4. In assessing any intervention program, the strength of the intervention should be systematically varied and evaluated.

Measures of strength that include the frequency of occurrence, duration, and quality of a program or its components must be devised, and actual program implementation must be more closely monitored than heretofore. Only with the development and implementation of such measures will it be possible to shape programs to the particular needs and characteristics of diverse individual offenders, groups, and communities.

5. The integrity with which an intervention program's intended activities or components are implemented must be carefully examined.

The growing number of studies that point to the recurring failure to implement program designs and to the variety of impediments to program implementation indicate the need for a greater emphasis on examination

of the processes by which programs are conceptualized, planned, implemented, and modified. If a program as implemented differs from the program as planned, tests purporting to measure the adequacy of the program rationale in terms of hypothesized outcomes will be invalid. What appears to be a program failure may in fact be a failure to put the program into action as designed. Examination of the process of development and implementation to assure program integrity can provide data about the forces that hinder or facilitate implementation and can provide insight into why seemingly well-intended and carefully designed efforts often fail.

6. The timing of interventions in terms of the age and stage in the criminal career of the program client population requires further study.

The suggestions of several theories regarding the timing of interventions are contradictory; early intervention is hypothesized alternatively to deter crime and to increase the negative effects of labeling. Empirical tests have thus far been equivocal. Further examination of the theoretical basis and empirical evidence of a suppression effect of intervention, of the patterning of criminal careers, and of the long-term effects of various intervention programs is desirable to shed light on timing issues.

7. A new strategy of search is needed to determine what interventions might work.

The panel suggests the adoption of an iterative, long-term research and development approach that has come to be termed "succession evaluation." The succession evaluation model involves a number of overlapping stages in the development of a program and its component elements over a period of several years. The stages include (1) an initial program formulation, development, pilot testing, and modification phase; (2) a fuller test as a field experiment; (3) further modification and replication of the experimental model at the initial test site; and (4) replication under modified conditions at several additional sites. Only if the program model stands up after these steps should it be subjected to larger-scale dissemination, implementation, and formal multisite evaluation. This process will not be easy to implement because it requires conditions that are rarely met and changes on the part of funding agencies, researchers, and practitioners. We are convinced, nevertheless, that it represents the best hope for accumulating knowledge about techniques for rehabilitation and is far less costly than the prevalent large-scale, short-term programs with little prior development.

To supplement the long-term experimental research program, wider

and more imaginative use of available data and emerging opportunities to generate new findings also should be encouraged and supported. This research might include the secondary analysis of criminal career patterns through the use of existing longitudinal data and through cross-sectional studies, studies drawing on natural experiments such as changes in sentencing laws to assess their effects on rehabilitation programs and outcomes, and greater participation in and utilization of experimental and survey data generated by interagency cooperation.

8. Rehabilitation research must test interventions developed at multiple loci of intervention: the family, the school, the workplace, and the community, as well as the individual.

No single theory of crime presents a fully adequate causal model of crime; no intervention technique or program has been found to be effective across offender populations or situational settings, although some theories and intervention techniques appear promising. Instead of suggesting more research designed to test these individual theories or isolated techniques, the panel suggests research drawing together what is promising by focusing broadly on several principal areas or loci of intervention—the family, the school, the workplace, and the community, as well as the individual, with a focus on the biosocial bases of behavior. Our strategy involves examining the institutional complexes that link individuals to key interpersonal and social environments in the larger society. Research making the family a locus of intervention, for example, permits the researcher to bridge the gap between sociological and psychological approaches and to view rehabilitation as a complex process of inducing change in the individual offender by influencing the internal dynamics or interpersonal environment of the family while helping the family address the larger problems it faces in its social environment.

In the end, efforts to prevent crime and alter the behavior of criminal offenders may meet with only modest success; the political, economic, legal, and ethical barriers to creating significant behavioral change are great. Yet the rehabilitative ideal, the knowledge that it is possible to produce desirable behavior changes in other social arenas, and the alternatives—a reliance simply on punishment, deterrence, and incapacitation—make the effort one that is worth undertaking.

2 Theoretical Issues and Approaches to Rehabilitation

The panel's first report (Sechrest *et al.* 1979) focused primarily on the methodological shortcomings of research on rehabilitation; however, as important as methodology is, it cannot stand alone as the criterion for good or useful research. Of at least equal importance is the theoretical basis for the research, a consideration that has generally been neglected in the rehabilitation literature. In this chapter we discuss the general importance of theory, a few of the many theories of the causes of crime, and the implications of those particular theories for rehabilitative goals.

Virtually any of the many rehabilitative interventions that have been tried could find some support in existing theories of crime, usually in several theories at once. But we aim to show that reliance on a distinct theoretical orientation is necessary for the implementation, interpretation, and organization of rehabilitation knowledge. A theoretical framework should encourage multiple interventions with a broader, more comprehensive approach, since any theory is likely to have several interrelated implications for rehabilitation that should be implemented as a comprehensive intervention package. Lack of any theoretical basis for intervention is likely to result in isolated single-shot interventions that tend to be quickly rejected upon their frequent failures. Without a theoretical framework, there is no guide as to what elements of the intervention should be, or could be, changed to produce a successful intervention. If an intervention that has some conceptual basis should fail, then the conceptualization offers a guide as to what went wrong and what can be corrected to result in a better chance of success in the future.

Some influential thinkers, most notably Morris and Hawkins (1970) and Wilson (1975), have asserted that theory about the causes of crime is irrelevant to the policy problems of dealing with offenders. They call, in effect, for a moratorium on research into the origins of crime. We find this view shortsighted. For several important reasons, pursuit of research into the causes of crime is valuable, should be continued, and should be accorded some priority in funding decisions.

First, the panel assumes that theory about causes of crime is relevant to the disposition of individual cases as well as to the nature and direction of treatment efforts for broad categories of offenders. For example, every scheme for what is called "just deserts" sentencing policy calls for some adjustment in sentences to reflect mitigating and aggravating circumstances. These mitigating or aggravating circumstances reflect or should be based on theories about the nature and origins of crime. The philosophy of just deserts assumes that crime involves rational bad behavior; otherwise the notion of its "deserving" varying degrees of punishment makes no sense.

Second, the panel is persuaded that the best form of crime control is primary prevention. More effective crime prevention surely depends upon research into the causes of crime. Wilson (1975, p. 55) asserts that "causal analysis attempts to find the source of human activity in those factors which themselves are not caused—which are, in the language of sociologists, 'independent variables.' Obviously nothing can be a cause if it is in turn caused by something else; it would then only be an 'intervening variable.' But ultimate causes cannot be the object of policy efforts precisely because, being ultimate, they cannot be changed." We disagree with this logic of causation and its policy implications. It is our view, one seemingly widely shared, that social policies can and do have profound effects on people's attitudes, relationships, and behavior. The concept of an ultimate cause can be challenged because there is always some prior factor that is alterable by policy changes in the long run. Whether unemployment is an intervening or an independent variable, if crime arises out of unemployment there is an added incentive to reduce unemployment. But without a better understanding of the causes of crime, researchers and practitioners will not know where best to focus their efforts or what kinds of changes they need to encourage.

Third, it would be unwise to imprison criminals in order to punish and deter them from further criminal activities without providing them with "room to reform" (Zimring 1978) by making available feasible and promising services or opportunities. Without better knowledge of the causes of crime, researchers and program planners will not know what services to offer or what resources should be invested in them. If, for example, economic factors are only weakly related to the probabilities of criminal

behavior, it would be pointless to invest extensive resources in economic interventions, especially if other factors proved better points of intervention.

DETERMINING THE NATURE OF THE PROBLEM

In attempting to solve any problem, a clear idea of the nature of the problem, its causes, and developmental processes is vital. In the absence of an adequate conceptual framework for rehabilitation research, the rush of enthusiasm for an interesting intervention is likely to short-circuit consideration of these factors. The result is rehabilitative efforts that may be unrelated to the causes of crime, ignore the most suitable target populations, and fail to consider questions of the optimal timing and strength of the intervention. The adoption of a theoretical framework necessarily prompts consideration of the above factors and, one hopes, thoughtful development and implementation of rehabilitative interventions, thereby increasing the chances for rehabilitative effectiveness.

THEORIES AND CONCEPTUAL FRAMEWORKS

The nature and role of theory in science is itself a matter of debate. Perhaps the most influential philosopher of science over the past 30 years, Karl Popper, espoused a strong version of the deductive method that requires that the propositions of a theory be set forth and tested for internal consistency, for their logical fidelity, and for their likelihood of representing an advance over existing theories (Popper 1959). The most critical requirement of a theory is that it lead to empirically testable hypotheses. A formal theory would require the statement of the axioms on which it is based, the theorems and corollaries consistent with those axioms, and an initial set of hypotheses implicit in the theorems. There are probably no theories in social science that fit such strictures, and it seems scarcely likely that there will be any very soon.

It is easy to be vulnerable to charges of either fatuousness or a lack of realism in recommending that efforts be devoted to development of more and better theory. There is scarcely an area of social science in which one does not hear repeated calls for better theory, and to repeat such a call one more time may seem scarcely necessary. Yet, this call is too rarely answered in a meaningful way. Instead, the field of rehabilitation, like so many other areas of applied research, persists in ameliorative efforts and research that are devoid of pattern and direction.

We do not wish to set higher standards for theory in the field of offender rehabilitation than in any other area of social problem intervention. For

this reason, we use the term theory in a much more general way, a way that might be better expressed by the term "conceptual framework." We do not recommend that those concerned with offender rehabilitation occupy themselves primarily with the development of formal, deductive theories. What is needed for the present is clearly something more modest—making explicit the assumptions that underlie intervention efforts and making the process as rational, systematic, and incremental as possible.

DIFFERENT THEORIES FOR DIFFERENT PROBLEMS

Theories of crime will differ in terms of the specific mechanisms by which they predict effects on behavior, and it may be that those mechanisms are only effective at a particular level of analysis. For instance, at the biological level of analysis, it may be posited that there is a specific gene, or small set of genes, that determines responsivity of the autonomic nervous system and hence ease of acquisition of some type of learned response, say, anxiety. Another biological analysis may suggest that there is a specific hormone in the brain that decreases the threshold for destructive, aggressive behavior. There may not, however, be any particularly integrative view of the various biological mechanisms purporting to account for differences in tendencies toward criminal behaviors. As yet, for example, specifiable links between genetic and neurohormonal mechanisms are rare (although phenylketonuria is one example), but one day such links may be established and well understood.

Conceptions at the social level of analysis are likely to be somewhat more vague about the mechanisms linking social phenomena to crime, but some degree of specificity exists. For example, social disorganization theory suggests that certain forms of social organization reduce the strength of mechanisms of social control over deviant behavior, thus making deviant behavior more likely. Social theories are likely to be complementary to one another rather than stand in relative isolation. Thus social learning theory helps to explain the specific ways in which the phenomena of social disorganization may be translated into patterns of criminal behavior rather than into other types of social deviation. An ultimate aim of theorists of criminal behavior should be a reconciliation, where necessary, of competing theories, and an integration of those theories appearing productively complementary.

FOCI AND LEVELS OF THEORIES

Among others, Kelly (1955) has argued that the most important question to ask of any theory is not whether it is correct, but whether it is useful. In-

deed, that question is the crucial one for theories involving criminal behavior, since the theories are most important in their implications for the prevention or rehabilitation of criminal behavior.

Kelly also noted that different theories may be useful for different purposes and that because theories are developed to serve particular purposes, each theory may be characterized by its focus of convenience and range of convenience. The focus of convenience of a theory is the central set of phenomena for which the theory was devised, for which it works best. The range of convenience is the range of phenomena to which a theory may reasonably be applied without seeming either unduly distorted or absurd. Thus, for example, a theory of crime that begins with the proposition that crime has its origins in financial problems experienced by criminals would seem to have as its focus of convenience relatively ordinary property offenses committed by small-time criminals. The theory might, however, be fairly easily extended to, say, drug dealing, embezzling, and even organized crime. Many crimes against persons would be beyond the range of convenience of such a theory, and in order to apply the theory to these crimes it would have to be either elaborated considerably or complemented by another theory. Kelly would probably have applauded the modesty of the explicit claim made by Ellis (1978) to have only "a partial theory" of crime.

Theories also differ in terms of the level of analysis that is appropriate for their testing and application. Some theories, for example, require an analysis at an individual level, others at the level of small social units such as the family, and still others at the level of large social institutions. This is not to say that any one of these theories may not be "stretched" to apply to some other level, but rather that each has a level for which it is optimally appropriate; i.e., each has a focus of convenience. For example, biological hypotheses about origins of crime are usually most applicable to individual cases; i.e., a particular person is assumed to have an impaired capacity to learn or a physiological defect (although some genetic mechanisms may be widespread within a particular population). On the other hand, social disorganization involves a set of hypotheses that lend themselves somewhat better to analyses at the level of large-scale social institutions. Thus, whereas the focus of convenience for biological hypotheses may most often be the individual's criminal proclivities, the focus of convenience for a social disorganization hypothesis may be the criminality in a group or neighborhood.

There is in the proposition that crime can be subjected to different levels of analysis an implicit expectation that different theories or conceptions of crime may prove differentially satisfactory in explaining crimes in particular in contrast to crimes in general. In this difference may lie both the source of the dissatisfaction with various theories and the potential

resolution of that dissatisfaction. Many of those working in the field of criminology have been dissatisfied for a long time with such "explanations" of crime as "the person comes from a broken home" because although criminals may be more likely than the law-abiding to come from broken homes, most persons from broken homes do not pursue criminal careers. On the other hand, others in criminology are likely to be dissatisfied with the "explanation" of criminal behavior as arising out of some personal characteristic or biological deficiency because such an explanation ignores the obvious fact that criminals in general also differ from the general population in their social backgrounds and experiences. The seeming discrepancy in explanations may be resolved eventually if the idea of *an* explanation of criminal behavior is abandoned in favor of that of a *set* of explanations having varying utilities for different purposes.

THEORY AS AN AID TO ORGANIZING KNOWLEDGE

Once a particular problem has been clarified and a conceptual framework with an appropriate level of analysis and focus of convenience has been chosen, the framework can be applied to the integration of existing empirical findings. That is, the framework can help to link unrelated program outcomes or to reconcile seemingly discrepant outcomes. Consider, as an instance, the finding that the amount of money an offender has accumulated upon release from prison is related to success on parole only for offenders who do not have extensive family and social networks outside the prison (Holt and Miller 1972). That finding has clear implications for the study of such economic interventions as work release or postrelease financial subsidies. In studying economic interventions, the finding that a financial subsidy may work with some offenders and not with others might be confusing unless one knew that a framework existed that implied just such a happening, e.g., that a subsidy might have no effects for offenders with extensive family and social networks.

A theory, or at least a consistent point of view, also greatly facilitates communication with persons outside a field, since it enables one to organize and simplify knowledge. If a conceptual framework is available, it is possible to summarize a great deal of empirical knowledge by means of relatively few concepts. For a variety of purposes, it is highly desirable that those in any field be able to achieve clarity and economy in communication, among themselves and with others, especially if both clarity and economy can be achieved without sacrificing accuracy. In short, a theory is a way of describing and organizing knowledge in a form that is communicable and, ultimately, usable for other purposes. These uses of

theories resemble the uses proposed for classifications by Sokal (1974). In fact, classification systems can be regarded as rudimentary theories.

THEORY AS A GUIDE FOR ACTION

Since we are involved in the search for a solution to a pressing social problem, it is not surprising that the previous arguments for the use of conceptual frameworks are firmly based in their heuristic value. A theory or an explicit but less well developed conceptual framework affords several advantages to the investigator. The most notable advantage is that a theory stimulates thought about what should be done next. Without at least some rudimentary theory of crime and rehabilitation, there is no guide as to what should be undertaken in order to achieve rehabilitation, and one thing might as well be tried as another. Given that at any one time there are likely to be numerous interventions that might be attempted, a sound theory may provide a basis for establishing priorities so that the more important or promising things get done first. The better developed a theory, the more research efforts are likely to be systematic, rather than random, and thus potentially incremental. Without the theory, knowledge is likely to consist of diverse unrelated bits and pieces of fact that amount even to less than the sum of the parts.

Kurt Lewin has pointed out that new programs "usually emerge from a more or less vague idea. An objective appears in the cloudy form of a dream or wish, which can hardly be called a goal. To become real, to be able to steer action, something has to be developed which might be called a 'plan'" (Lewin 1968, p. 44). Unfortunately, the administrators and program personnel who must give form and substance to any "plan" are often not well acquainted with many relevant bodies of theory nor trained in the kinds of theory building that are necessary to adapt and to put into operation existing theory for the purposes of intervention. Paradoxically, those social scientists who have relevant training are seldom involved in the planning of experimental programs. Although they are often ignorant of the practical realities of implementing an innovation, they could be of assistance to administrators and practitioners by acquainting them with existing bodies of relevant theory or even by helping them to clarify their own assumptions.

The failure to collaborate has contributed to the lamentable state of theory and practical knowledge in the field of rehabilitation. In lieu of early planning and collaboration, researchers have either remained detached from the program-planning process or have been invited to evaluate a program only after a plan, often a haphazard one, has been

created. Consequently, inadequate communication, misunderstanding, and poor research, rather than further contributions to knowledge and practice, have been the result. Indeed, an argument could be made that current levels of ignorance and disillusionment are due as much to the unsystematic, atheoretical character of the research on correctional programs as to the presumed failure of the programs themselves. A potentially rich source of knowledge has not been mined.

Yet it would be erroneous to assume that program staff are not guided by an underlying conceptual framework. Any time a program is set up, or any time one technique is chosen over another, someone thinks that the chosen technique is somehow preferable to others. That person, in other words, does have an idea, however rudimentary, as to what leads to illegal behavior and how that behavior can be changed. What is needed therefore is to make that theory explicit and to determine whether, for the target population in mind, it seems to be reasonably appropriate. If it is appropriate, it can be used as a guide both for program development and for research. If not, other alternatives should be sought.

DEVELOPING AND ASSESSING INTERVENTION AND RESEARCH STRATEGIES

Once a basic problem is stated in theoretical terms, planners have an explicit foundation on which to build an intervention strategy and from which to derive a research strategy in conjunction with the intervention. In brief (see Chapter 4 for a fuller discussion), the intervention strategy should grow from two types of explicit theoretical statements of the problem: intervention principles and operational guidelines.

The intervention principles are a set of propositions derived from the theoretical statement of the problem. Each principle, in addition to a brief statement in propositional form, is fleshed out with a fuller narrative statement of the theory and research bearing on it. These statements, in turn, suggest operational guidelines indicating ways in which the principles could be built into a program, including such considerations as the kind of organization needed to implement the intervention principles, the roles staff members would play in the organization, and the ways to link the organization with others existing in the community.

While the intervention is being developed, the propositions on which it is based are also used as a guide to devise the research strategy for assessing the intervention. Researchers should design measures for three areas of concern to both program implementers and program evaluators: tests of the theoretical assumptions on which the program was constructed; exami-

nations of actual program operation; and assessments of program outcomes. Tests of program assumptions should ask, for example, how accurate the propositions were for the selected target population. Researchers and practitioners often question the methods used or the program's operations, but they often fail to specify the bases on which the programs are built. Research on program operation should test both its theoretical adequacy and the actual integrity of the program (see Chapter 3) with respect to the implementation of the principles and guidelines. Researchers should ask if the actual character and operation of the program adhere to the guidelines. Finally, theory serves as a guide to the measurement of the outcomes, not only in terms of recidivism but also with respect to the ability of the program to affect relevant "intervening" variables. If favorable outcomes are observed, they can be examined to determine their relationship to the variations in recidivism rates, since it is necessary to explicitly test the assumption that pursuit of theoretically relevant intervening goals implies that their achievement affects recidivism.

Even the best theories that social scientists will ever be able to devise, as well as the best empirical indicators, will be probabilistic rather than deterministic in nature. These theories will enable us to say only that some sets of persons have a higher probability of becoming involved in crime than other sets of persons. The fact that all persons subjected to poverty do not become criminals is not an argument against the possible importance of poverty as a factor in crime. It may not be possible, even in principle, to develop deterministic theories of human behavior because some element of chance is likely for any complex behaviors. On the other hand, although in comparison to the natural sciences a considerable pessimism about even the long-range precision of the social and behavioral sciences may be warranted, social scientists should not despair of getting useful information on important social problems through careful and persistent research (see Cook and Campbell 1979).

We do not endorse any particular theory of criminal behavior and the rehabilitative strategies suggested by it. In subsequent sections of this chapter we present and describe some of the many partial theories of crime. They vary in their level of empirical support and to some extent in their level of plausibility, but all have at least some measure of support among criminologists. These theories are presented both because they seem to offer some insights that should be explored and because they exemplify the advantages and limitations of theoretical positions. This presentation will, we hope, help to foster a greater interest in theoretically informed program development and research.

The importance of the development of better and more comprehensive theories of criminal behavior and their use as a basis for program develop-

ment and testing has been well stated by Silberman (1980, p. 62): "At this point, criminal justice evaluation and evaluative research in general find themselves in a situation where theory lags far behind technology. . . . The area where developmental work is sorely needed is in theory-building. When advances begin to be made along this dimension, i.e., when theory catches up with technology, evaluators will have a potential that far exceeds that of the present."

To anticipate one potential objection or resistance to the stance we are taking in favor of theory, we note that the theories to be presented—and we remind the reader of our demurrers about that term—are numerous. Their very number might be taken as an embarrassment of considerable proportions; how is it tolerable to have so many theories of crime? The variety of theories may result from the fact that the phenomena labeled crime and criminal behavior are diverse and may require diverse explanations. It may arise from the contributions to theory of researchers studying crime from diverse disciplines. Moreover, as was indicated earlier, different theories may be cast at different levels of explanation or may have different foci of convenience. In the future, perhaps, we will have fewer, more complete interdisciplinary theories of crime; in the interim we have attempted to sort out and present the leading explanations of crime growing from several disciplinary traditions.

PSYCHOLOGICAL THEORIES OF CRIME

The psychological perspective is compatible with other theoretical approaches to crime, including the sociological, biological, and economic theories that will be addressed later in this chapter. Psychological theory should ideally provide the hypotheses that link the rather broad effects of the major societal variables that are associated with crime with the specific behavior of individuals in particular circumstances. Such linkages are by no means completely understood, and much research will be needed to elucidate them.

PSYCHOANALYTIC THEORY AND PSYCHOTHERAPEUTIC APPROACHES

Psychoanalytic theory provided a major psychological approach to understanding criminal behavior during the first half of this century. The major elements of psychoanalytic theory are that behavior is determined by unconscious and internalized motivations and that the process of socialization more or less successfully transforms infantile, primitive, and antisocial instincts into prosocial behavior. This process of socialization is

assumed to progress through a series of stages during infancy and childhood, and the successful resolution of each stage is thought to depend partly upon biological factors and partly upon parental child-rearing practices. Unsuccessful resolution of a phase is hypothesized to leave the individual prone to develop various forms of mental illness and behavioral abnormalities (Freud 1963).

Criminal behavior may be viewed as resulting from imperfect socialization in which superego deficiencies, acquired either through faulty identification with parental values or through identification with a parent's own suppressed criminal tendencies, leave the individual prone to develop antisocial behavior. More serious forms of antisocial behavior such as sociopathy are hypothesized to stem from failure in the earliest stages of development, which results in major deficits in affective behavior and social bonding (Feldman 1969).

This view of the development of criminal behavior led naturally to the notion that psychotherapy, especially psychoanalysis, could be effectively used in treating the problem. Moreover, since parental influences on the child's development are viewed as crucial, the possibility of prevention of criminal and delinquent behavior arose and, indeed, was one of the motives underlying the development of the child guidance movement.

Despite the profound influence of psychoanalytic theory and psychotherapeutic practice on the handling of delinquents, and to a lesser extent older criminals, by the police, courts, and prisons, several problems with the approach have become increasingly apparent. Many of the tenets of psychoanalytic theory either have proved impossible to test in a scientifically acceptable way or have not been confirmed when subjected to testing. Moreover, it appears likely that psychological abnormality, as indicated by personality tests, is only weakly related to global measures of criminal behavior (Gordon 1976, Hathaway and Monachesi 1963, Schuessler and Cressey 1950, Waldo and Dinitz 1967).

In at least one well-studied and carefully documented instance, psychodynamically oriented psychotherapy has failed to demonstrate its usefulness in the prevention or treatment of delinquent and criminal behavior (Bergin 1966). The Cambridge-Somerville youth study (Powers and Wither 1951) was designed to evaluate the efficacy of varied psychotherapeutic approaches in preventing delinquency. Short-term follow-up studies found that the interventions did not demonstrate any advantage for the treated over the untreated group. Indeed, longer-term follow-up of both groups now suggests that, for whatever reasons, the treated group probably fared worse than the untreated group (McCord 1978 and in this volume). Although the Cambridge-Somerville study has been criticized as an inadequate implementation of psychoanalytic theory (Quay 1977, Gon-

zalez 1975), its outcomes are so dismal as to afford no comfort at all to proponents of the theory.

Two additional shortcomings of psychoanalytic theory have led to growing disenchantment with it. First, although psychoanalytic theory often provides appealing interpretations of behavior after the fact, it seldom provides accurate predictions of future behavior. Second, from a procedural viewpoint, poor specification of the therapeutic technique has led some to conclude "after reading through the literature that a single unified approach to the treatment of patients that can be labeled 'psychoanalysis' does not exist" (Fisher and Greenburg 1977, p. 411). Moreover, this problem makes replication of therapeutic studies in this field almost impossible and therefore inhibits the development of a cumulative research program. At present, the influence of psychoanalytic theory, especially in relation to criminal behavior, seems to be on the wane.

"THE CRIMINAL PERSONALITY" AND A COGNITIVE PSYCHOLOGY APPROACH

Yochelson and Samenow (1976, 1977) provide another theory of criminal behavior. Yochelson was a psychoanalyst when he moved to St. Elizabeth's Hospital in Washington, D.C., to become head of their forensic unit. He was later joined there by Samenow, a clinical psychologist with a psychoanalytic orientation. Unlike many others who have formulated theories of criminal behavior, they were both working in a clinical capacity with criminals. They spent most of their working time treating criminals individually and in small groups, probing their thinking, observing them carefully, and looking for the common themes that would enable them to change ideation and behavior. Perhaps no other theory of criminal behavior has grown out of such intense clinical interaction and scrutiny.

There are two somewhat distinct aspects of the work by Yochelson and Samenow: a theory and a method of treatment. Their theory is largely cognitive. They claim that criminals have a unique set of cognitive patterns, termed "criminal thinking patterns," that are erroneous according to responsible thinking. Their definition of criminal is unique. They note, "We do not use 'criminal' in a legal sense. Our emphasis is on *thinking processes* that the irresponsible but nonarrestable person, the petty thief, and the 'professional' criminal all manifest, but to different degrees and with different consequences" (Yochelson and Samenow 1976, p. 253). They posit a continuum of behavior ranging from the fully responsible to the irresponsible; criminality is thus defined in terms of irresponsibility

and thinking patterns that are conducive to breaking the law and include nonarrestable but irresponsible behavior. The "extreme criminal" is at the far pole of irresponsibility; nonarrestable but irresponsible behavior is located toward the criminal pole between "responsible" and "irresponsible." Extreme criminals are not only irresponsible in the sense that they avoid obligations, are inconsiderate of people, and avoid work; they are also irresponsible in terms of the law.

In their first volume, Yochelson and Samenow present their theory of "the structure of the criminal mind." They point to 52 erroneous thinking patterns that are characteristic of extreme criminals and that, when combined with their irresponsibility, pervade all their behavior. Some of the patterns of criminal thinking that they describe are also found in the thinking of responsible persons but are exaggerated in extreme criminals. These include pride, fear, anger, sentimentality, and perfectionism. Other depicted "automatic errors of thinking" that pervade criminal thought include the perception of self as a victim, concrete and compartmentalized thinking, failure to consider the injury of others, a shutoff mechanism, pervasive lying, refusal to be dependent on others or to assume obligations, and manipulativeness, impulsiveness, and excitement seeking.

Yochelson and Samenow pointedly use the term "thinking patterns" rather than "personality traits" to reflect their emphasis on conscious volition and the active choice of a criminal life-style and criminal behavior. From intensive interviews they found that antisocial behavior began quite early in childhood for many of their patients. They contend, "It is not the environment that turns a man into a criminal. Rather it is a series of choices that he makes starting at a very early age. . . . Crime does not come to him; he goes to it, often traveling far outside his neighborhood to do so" (Yochelson and Samenow 1976, p. 247).

They do not attempt to explain how or why extreme criminals become irresponsible. Instead they assert, "the search for causation, primarily sociologic and psychologic is futile. From the standpoint of society correction or attempted correction of such causative factors has failed. For the criminal sociologic or psychologic factors serve as acceptable excuses" (Yochelson and Samenow 1976, p. 51).

Having rejected the search for causes, Yochelson and Samenow gradually became "reluctant converts" from a largely amoral, nonjudgmental psychoanalytic stance to one that emphasizes moral living and the eradication of criminal thinking patterns in their patients. Thus rather than merely seeking to enable their patients to lead crime-free lives, they set out to reorient their patients' thinking totally. Their treatment program evolved into intensive individual and small-group treatment de-

signed to confront the criminal with his irresponsibility and to correct faulty thinking patterns. In addition to attending daily 3-hour group sessions, participants in the program are required to keep a daily log or moral inventory that helps the person identify and eliminate criminal urges through self-monitoring. Much of the treatment consists of repeated rejections of what are considered wrong ways of thinking, with an accompanying insistence on a cognitive reformulation. An important element of the treatment, bringing the patient to an admission of responsibility for his own behavior, is an element found in several other programmatic approaches that seem to offer some hope of major personal change. Unlike Synanon or Alcoholics Anonymous, however, Yochelson and Samenow seek to teach responsibility as a set of mental processes.

The criticisms of their book, *The Criminal Personality*, have been varied and vociferous. An important shortcoming is their failure or refusal to explore the etiology of "the criminal personality." The authors regard etiological explanations as being of little value in guiding their treatment program, and so they offer only a fine-grained phenomenologically developed description of the "criminal personality" that does not go much beyond existing descriptions of the psychopath or sociopath. But a comprehensive formulation of crime should provide an explanation of the origin of criminal behavior. Such a background is important if one seeks to prevent the development of such personalities and thinking patterns or to intervene with incipient extreme criminals at an earlier age.

Their theory also suffers from an imprecise and idiosyncratic definition of "criminal." Whereas the term is ordinarily used to describe those who violate the law, Yochelson and Samenow use the term more broadly to describe patterns of thought and action that are found to varying degrees in people labeled responsible and irresponsible. These patterns end in crime in the criminal but not in the responsible person.

Another apparent shortcoming is the failure to distinguish a particular subset of habitual felons from other criminals. Yochelson and Samenow worked with a limited number of criminals of a particular sort: those who had been judged criminally insane and who for the most part were chronic adult offenders. They reject the sickness model and insist these men are sane but irresponsible and characterized by faulty thinking, but they are on shaky ground in generalizing beyond such a population. Their description does not pertain to all criminals or to all criminal behavior. Had their title been more modest (e.g., "One Type of Criminal Personality"), their work might be less subject to criticism for overgeneralization.

Other criticisms are largely methodological. The limitations of their small, unique sample mean that Yochelson and Samenow's study cannot provide unambiguous cause-effect conclusions. Even though their claims to clinical success are fairly modest—long-term personality change in only

about 15 of the 60 or more men that they worked with—the absence of control groups of any sort precludes acceptance of assertions of the success of the treatment. Case histories, while suggestive, are insufficient as a basis for a theory that attempts to generalize its principles to all types of criminal offenses. No attempt was made to validate the data gathered in interviews and clinical case histories, and there were no measures of inter-rater reliability. Because their methods were nonexperimental and their claimed outcomes can scarcely be said to have been objectively assessed, it is impossible to determine without further systematic testing if the treatment program they developed is transportable and replicable, even with other criminals labeled psychopathic.

SOCIAL LEARNING THEORY

In psychology and in other areas, there has been a shift away from personality as an explanation of human behavior and toward recognition of the importance of situational determinants of behavior. This shift has, of course, led to the development of theories of behavior change and therapeutic strategies that are very different from those derived under the personality paradigm. The most comprehensive theoretical framework to emerge that emphasizes situational determinants is social learning theory as conceptualized by Bandura (1968, 1977a,b).

How Behavior is Acquired and Maintained

The social learning approach suggests that behavior is acquired and maintained on the basis of three separate but interacting regulatory systems. The first of these is a continuous interaction between behavior and the stimuli that determine or control it; the second is external reinforcement; and the third is a system of cognitive mediational processes. Learning can occur by two processes: direct experience, largely influenced by external environmental variables, and observation. This latter process allows the acquisition of integrated units of behavior, short-circuiting the necessity to learn by the more tedious route of trial and error.

The stimuli controlling behavior may vary from simple signals, to complex verbal and nonverbal sequences of social stimuli, to entire nonsocial or social environmental settings and their cognitive representations. Behavior acquired and reinforced in a particular setting will have a higher probability of occurrence in that setting than in others. The occurrence of some behaviors may be limited to extremely specific circumstances. Behavior problems, for example, may be eliminated in one setting and yet recur in other, even quite similar, circumstances.

The pairing of environmental events and behavior also affects the

autonomic nervous system and affective responses. Of particular interest here is the production and elimination of fear responses. There is, for example, some evidence that a portion of the criminal population shows slow learning of such associations, which, in turn, may affect the socialization process, especially the response to punishment and perhaps the development of social bonding (Mednick *et al.* 1979).

Behavior is not only regulated by antecedent conditions but also by its consequences, among which are informational feedback regarding performance, reinforcement, and punishment. Informational feedback has been shown to be important in the acquisition of behavior, particularly of precision skills. To provide such feedback, behavior change goals need to be precise, stated in measurable terms, accurately measured, and fed back frequently to the person. Although feedback can be an important procedure in some learning and therapeutic situations, used alone it is not usually as effective as positive reinforcement in which feedback is an element.

Reinforcement, both positive and negative, has been demonstrated to have potentially powerful effects on behavior across a variety of circumstances. Positive reinforcement can include money, monetary substitutes such as tokens and points, social attention, commendation, approval, and, in essence, anything that increases the occurrence of a behavior. Negative reinforcement occurs by the cessation of some noxious or otherwise aversive stimulus as a result of some response. Anticipation of reinforcement probably influences what behaviors are attended to and enhances observational learning. Once behavior has been acquired within a therapeutic context, artificial reinforcement can be replaced by the natural consequences of the newly acquired behavior. However, if behavior is not reinforced in some way in the natural environment, it is likely to extinguish. For the field of rehabilitation, this fact, together with what is known about stimulus control, suggests that rehabilitation procedures must make natural support structures, e.g., the family and school, more reinforcing; direct the person to a new supportive network, e.g., a new peer group; or provide a new system of social support. Otherwise, the program of rehabilitation will probably fail.

The final consequence of behavior to be considered is punishment. Punishment is an aversive event that is contingent upon the occurrence of a particular behavior and that then diminishes the frequency of that behavior. Punishment is rarely used as the sole treatment procedure and is usually combined with positive reinforcement of behaviors that compete with the undesired behavior. The effects of punishment are likely to show poor generalization from one situation to another or over time.

The concepts of punishment as used in the criminal justice system and

as used in a learning paradigm should not be confused. Whereas one is based on the concept of retribution, the other is based on empirical evidence that shows that under certain conditions aversive stimuli (often labeled punishment) lessen the occurrence of a behavior. These conditions include contingent and temporally contiguous reinforcement. However, in the actual operation of the criminal justice system, detection of the target behavior is at a low probability, temporal contiguity is usually not exact, and punishment, such as incarceration, often teaches further deviant behavior rather than prosocial behavior. Therefore punishment would not necessarily be expected to show strong effects in terms of reducing future criminal activity. Nevertheless, under the right conditions, punishment can be expected to have a suppressive effect on undesirable behavior.

Current social learning theory postulates that the influence of environmental events is not always direct but may be modulated by cognitive processes. Thus reinforcement is not regarded as an automatic strengthener of behavior but as a source of information and incentive that regulates behavior. Procedures such as instructions and modeling exemplify a learning process that occurs through the coding of representational processes based on exposure to instructional, observational, or imagined material. Moreover, humans can influence their behavior through self-regulation. For example, the stimulus determinants of a given activity can be altered, and reinforcing consequences can even be produced by persons themselves. In addition, cognitive processes, such as attention and memory, are undoubtedly important in mediating such processes and in determining their effectiveness. Within the framework of social learning theory, environment and person are regarded as components of a single system with reciprocal influences. In this conceptual scheme a person is neither driven by internal forces nor merely a passive reactor to external events. Rather, a person is both the agent and the object of environmental influence.

The interest in cognitive influences on behavior has generated much recent research on cognitive therapeutic procedures. Some of these procedures appear useful, but on the whole it appears that to modify behavior effectively, additional procedures that make use of external influences on behavior and observational learning should be strongly considered.

Implications of Social Learning Theory

The findings derived from recent psychological research and theory building have implications both for the understanding of delinquent and criminal behavior and for the design of intervention strategies aimed at reducing such behavior and enhancing prosocial behavior. From the most

general viewpoint, it is apparent that environmental influences, particularly those emanating from the social environment, are likely to be implicated in both the genesis and the maintenance of criminal behavior. Thus the influence of the family and peer groups is of paramount importance although the precise ways in which such influences occur is only beginning to be understood. Similarly, the influences of schools, the workplace, and other societal institutions are also likely to be important. Thus treatment programs directed solely at the individual that ignore such influences will probably fail.

Since individuals both influence their environments and in turn are influenced by them, deviant behavior—particularly behavior that goes undetected—is likely to be progressively reinforced and thus become progressively strengthened. In addition, those engaging in delinquent activity are less likely to develop many of the complex skills essential to survival in modern society. This progressive socialization into a delinquent or criminal career suggests that early intervention is more likely to be successful than later intervention.

The experimental work associated with social learning theory suggests a number of important general considerations in the design of intervention strategies for rehabilitation. The objectives of an intervention must be clearly defined in terms of the various behaviors to be changed. In turn, such behaviors should be objectively measured so that the occasion for reinforcement or other consequences is clear and so that progress (or lack of it) is discernible to both the therapist and the client. Behavior change should be programmed to occur in small, discrete steps toward the final goal. Procedures to ensure both the generalization of newly acquired behavior to a variety of appropriate circumstances and the maintenance of behavior within such settings and over time should be an integral part of any treatment program. This necessity may call for intensive work to increase the support given in natural environments, such as the family or school, or to guide the development of new environments. It is important that the therapeutic procedure be precisely specified so that it can be taught to other therapists and applied in a replicable way in controlled experiments.

Experimental work across a variety of problem behaviors suggests that although effective intervention procedures exist different behavior problems require the application of different procedures and that much individual variation exists among persons in their responses to the same treatment. In the area of rehabilitation, future research should focus on the causes of such variation and the identification of interactions between personal characteristics and different types of treatment. No one treatment will be applicable to all types of problems or even to all types of per-

sons with similar problems. The success of interventions based on social learning theory in a variety of other problem areas would suggest that application of similar intervention approaches to the treatment of criminal offenders, if carefully devised and implemented, holds some promise.

SOCIOLOGICAL THEORIES OF CRIME

For purposes of convenience, most theories of crime in sociology can be organized into six groups of thought (see Empey 1978 and in this volume). For the most part, these theories have moved away from the notion that the sources of crime are inherent in the unique tendencies of the individual and toward the notion that they are inherent in the social, political, and economic organization of society. Crime is seen as the product of socialization in an imperfect, often criminogenic, social order. Consequently, sociological theories imply that if attempts at rehabilitation are to be successful, they will have to be based on a view of crime as an interactional, not an individual, phenomenon. From a sociological perspective, efforts should be made to change the organization and character of society as well as to change the organization and character of the individual. Sociological theories are not incompatible with psychological and economic theories that focus on the individual but, rather, complementary. The evidence bearing on the theories, however, is mixed at best. (For a fuller exposition of these theories, see Empey in this volume.)

CULTURAL DEVIANCE THEORY

Some young people are socialized in cultural settings that justify, make attractive, and may even require criminal behavior. Such behavior is as "normal" and as "moral" to the members of deviant groups as law-abiding behavior is to the members of conventional groups. However, the various versions of cultural deviance theory differ in their specifications of the sources of delinquent traditions. Based on their massive empirical studies, Shaw and McKay (1931, 1942, 1969), for example, attributed the most serious adolescent crime to the disorganized character of American slums. In contrast, Miller (1958) theorized that a relatively homogeneous American lower-class culture is now emerging and that it represents a common adaptation of unsuccessful whites, as well as blacks and browns, to the socioeconomic stratification of American society. Still another version of cultural deviance theory is not limited to the lower class but stresses the idea that high youth crime rates are attributable to a general youth subculture that separates adolescents from the adult world.

Cultural deviance theory implies the need for rehabilitative intervention that is directed as much to cultural and structural change as to change in the individual. The Shaw and McKay version implies the need for radical economic and social changes: full employment, altered housing policies, enriched schools, elimination of economic and ethnic segregation, and more effective control over children by family and neighborhood—in short, a full assimilation of lower-class offenders into the opportunity structures of American society.

Miller's version implies the need for even more change. Either society must accept and tolerate a deviant subculture in its midst, or it must seek ways of reasserting the importance of the American dream among them. If some social groups no longer value the things that middle-class people value, then these groups not only require realistic opportunities, but a change in their value system that fails to define prevailing and obtainable standards and goals as worth pursuing.

Finally, youth subculture theory suggests remedies to be applied to all youths. If the delinquent subculture is due to an excessive separation of adolescents from adult responsibilities and rewards, then the following remedies are implied: eliminate the ambiguity and lack of purpose inherent in the adolescent status; close the generation gap; and provide adolescents with a stake in conformity—a productive place in the economy, civic responsibilities, and the power of decision making.

All three versions of cultural deviance theory are overdrawn and overly deterministic. Nonetheless, the following facts on which these theories are based indicate the need for systematic attention to their implications for correctional programs: law-violating behavior occurs most frequently among adolescents; *officially designated* delinquents are concentrated in the most overcrowded, deteriorated areas of the city; most really troublesome delinquent behavior is committed in groups; and limited employment and other adult opportunities for adolescents are likely to contribute to criminal behavior.

The focus of convenience of cultural deviance theory is juvenile and adolescent crime. Much adult crime, however, falls fairly readily within the range of convenience of the theory, and to a certain extent the implications of the theory are the same as for youthful offenders, particularly with respect to the need to provide criminals with a stake in conformity. To the extent that there are segments of our society in which crime is an at least implicitly accepted way of life, that stake will be difficult to establish and maintain. Cultural deviance theory and social learning theory augment each other. Social learning theory and research have demonstrated that successful models are a powerful stimulant to like behavior, and cultural deviance theory suggests where such models will be found.

STRAIN THEORY

All versions of cultural deviance theory suggest that since society is divided into different cultural groups, there is no overriding consensus on basic values and standards for behavior. By contrast, the second major body of sociological theory—strain theory—implies that there is a moral consensus. Instead of being divided into competing cultures, based either on social class or on age, all people tend to share the American dream and want to achieve it. Hence pressures to be criminal are generated not by competing cultural standards, but by the frustration of legitimate aspirations that all people share. Essentially, strain theory supposes that when persons are bombarded with stimuli, e.g., through advertising, that tell them what they have a right to expect out of life and when they have no hope of achieving those things through legally condoned behaviors, they may well turn to crime rather than endure the frustrations.

Two somewhat different versions of strain theory have been developed by Cohen (1955) and Cloward and Ohlin (1960), each devised to explain the heavy concentration of officially labeled delinquency among adolescent males in the slum areas of our large cities. Both versions contrast the high aspirations of lower-class children with their limited capacities to get ahead by ordinary means. The resulting strain is likely to produce identification with a delinquent subculture and result in delinquent behavior and—in the long run—other maladaptive behavior such as abuse of alcohol and other drugs.

Superficially, strain theory suggests that if one wants young criminals to conform to the norms of the larger society, one has only to provide them with legitimate opportunities for success. Actually, the task is probably far more complicated. It may be that the further a youth has moved through the sequence from lack of achievement, to strain, to identification with a delinquent subculture, the more likely it is that he will have become a different person. Thus attention would have to be devoted to undoing his identification with delinquent values and peers and finding conventional substitutes, to enhancing his sense of esteem and reducing his sense of injustice, and to providing him with legitimate opportunities for education and employment. A series of steps are implied that would be directed to reversing a sequence that has been developing for years.

These conclusions are qualified somewhat, however, by research (Klein and Crawford 1967, Matza 1964, Yablonsky 1959) suggesting that although the success ethic is widely shared and lower-class children do not achieve as well in school and employment, the importance attributed by strain theory to membership in the delinquent subculture as a satisfying substitute for conventional success may have been overdone. Hence the

success of any rehabilitative program may hinge more on its ability to provide satisfying conventional associates and opportunities for young criminals than on attacking their ties to criminal groups.

Strain theory has as its focus of convenience the delinquent behavior of youths, particularly males. As with cultural deviance theory, however, strain theory is readily extendable to much adult criminal behavior. Strain theory reinforces cultural deviance theory in its implication that youths need to be provided with a productive role in society, a role in which the prospects for achieving their aspirations will seem less remote.

One inference that might be drawn from strain theory is that measures ought to be taken to lower the aspirations of youths to bring them more into line with their actual capacities. Clearly, however, adoption of such an approach would be both politically unacceptable and socially unrealistic. Our society is founded on the twin notions that through individual effort one can get ahead and that getting ahead is desirable. It would be politically offensive to be persuading a major segment of our society to lower their sights. Moreover, given the ubiquitous media in our society, with all their advertising and other imagery of "the good life," it is unrealistic to think that what constitutes that good life can be successfully concealed from any segment of society. That being the case, strain theory points to the very difficult social task that faces us.

SYMBOLIC INTERACTIONIST THEORY

The third body of theory—symbolic interactionism—grows out of the field of social psychology. This way of explaining crime was first advanced, in 1939, by William H. Sutherland, who was as interested in explaining white-collar crime as in explaining crime in its more conventional forms, and it was later amplified by Sutherland and Cressey (1955) and Sykes and Matza (1957).

In contrast to the macrostructural perspectives of cultural deviance and strain theories, symbolic interactionist theory states that criminal behavior, like any other learned behavior, is learned in small, intimate groups in a process of interaction and communication. It suggests that society is not organized by a monolithic set of norms and values on which there is universal consensus. Rather, all people are exposed to deviant as well as to conformist traditions. Whether or not they become criminal will depend on the kinds of groups in which they participate on an intimate basis. Not only the techniques for committing crime, but also the supporting motives, attitudes, and rationalizations for doing so are acquired in these small groups. Thus, whether in the corporate boardroom or on the city street, it is the symbolic learning of deviant values, norms, attitudes,

and techniques, not a person's age, social class, or gender, that makes the difference. A person becomes delinquent because of an excess of definitions favorable to violation of the law over definitions unfavorable to violation, which are learned through interaction.

If criminal behavior is the result of deviant motives, values, and rationalizations acquired in intimate groups, then any practice that tends to segregate offenders from conventional people, particularly if offenders are then collected into groups facilitating communication, will tend to ensure the continuation of crime. If one wants criminals to become more like noncriminals, then they need somehow to be incorporated into small, intimate groups of noncriminals. Indeed, Cressey (1955) has advanced a series of intervention principles suggesting that to change criminals, they must be assimilated into groups which emphasize values conducive to law-abiding behavior and, at the same time, alienated from groups that emphasize values conducive to criminality. Such groups should be highly cohesive and should see their primary purpose as that of reforming their members. "When an entire group is the target of change, . . . strong pressure for change can be achieved by convincing the members of the need for a change, thus making the group itself the source of pressure for change" (Cressey 1955, p. 118).

Research has questioned symbolic interactionist theory on several grounds (Empey 1978). Nonetheless, three things about it merit the attention of those who are concerned with devising correctional programs: its continuation of the theme stressing the social, not just personal pathological, properties of crime; its suggestion that change is most likely to occur if it is supported and ratified by intimate others; and its obvious similarity to social learning theory. Indeed, the emphasis of symbolic interactionism on verbal interaction might be fruitfully joined with other theories to suggest more comprehensive methods for reinforcing conventional behavior and for denigrating that which is criminal.

CONTROL THEORY

The fourth body of sociological theory is control theory. It is a response to the general tendency for sociologists to ignore the disruption of interpersonal relationships within the family and the inherent characteristics of the individual as sources of crime. Hirschi (1969) has reasserted the contention of Freud that it is not criminals alone who are animals "but that we are all animals, and thus all naturally capable of committing criminal acts." Hence the central question to which theory ought to be directed is not, "Why did they do it?" Since human nature, as posited by control theorists, is inherently evil, the appropriate question is, "Why don't they

do it?" (Hirschi 1969, p. 34). Why do most people refrain from criminal behavior most of the time?

Control theory answers this question by suggesting that it is an individual's bond to society that makes the difference. The societal bond has four elements: attachment, commitment, involvement, and belief in conventional social rules. If children are not attached to their parents, if they are not committed to educational or other conventional goals, and if they are not involved in conventional activities that, among other things, keep them busy, then they may not develop an adequate stake in conformity; they may not respect social values and rules, and delinquent behavior may result.

Control theory implies the need to strengthen each element of an individual's social bonds. Thus one should reattach young criminals to family, to teachers or employers, and to conventional friends; reinforce their commitment to conventional goals such as social attainment; and reward their involvement in conventional activities such as work, study, and socially accepted leisure and, at the same time, try to extinguish the salience of those that are illegal. These, in turn, should provide supports for the belief in the morality of law and inhibit criminal behavior. In contrast to social learning theory, control theory suggests intervening variables that a correctional program might attempt to influence, but does not suggest a way to accomplish behavior change. In this way, the two theoretical perspectives complement each other.

Many questions remain about control theory, e.g., the importance of social class, gender, and subculture, but its concern with the sources of social control have received considerable empirical support. Along with other theories therefore, its implications for rehabilitation merit careful scrutiny. Control theory also seems to have as its focus of convenience the behavior of juvenile offenders, although it is also applicable to adult criminals. It suggests the need to strengthen the attachment and commitment of youngsters to parents, school, and community, and for adult criminals it implies the need to strengthen ties to family, work, and community.

LABELING THEORY

The fifth body of sociological theory is labeling theory, which is based on the proposition that much of the troublesome crime problem is traceable to societal reactions to crime. Labeling as a concept related to crime was first formulated by Tannenbaum in 1938. He called the legal processing of young offenders the "dramatization of evil": "The process of making the

criminal . . . is a process of tagging, identifying, segregating, describing, emphasizing, making conscious and self-conscious; it becomes a way of stimulating, suggesting, emphasizing, and evoking the very traits that are complained of. . . . The person becomes the thing he is described as being" (Tannenbaum 1938, p. 19).

Later Lemert (1951) clarified these ideas further by suggesting that we must distinguish between primary deviance, i.e., law-violating behavior, and secondary deviance that results from the adaptations that a person labeled as criminal makes to the problems created by that new official status.

Labeling theory suggests that growing rates of youth crime have been due to the nature of the legal system itself: it has overcriminalized the young, has labeled and stigmatized them unnecessarily, and has not only failed to rehabilitate them, but has evoked the very traits that are complained of. Consequently, "the less said about deviance the better" (Tannenbaum 1938). "If there is a defensible philosophy for the juvenile court, it is one of judicious nonintervention" (Lemert 1967, p. 96). "Leave kids alone wherever possible" (Schur 1973, p. 155).

These admonitions have had a striking, albeit paradoxical, impact on social policy. The influence of labeling theorists on the members of the President's Commission and the National Advisory Commission led to their support for and the subsequent implementation of the now-familiar list of social reforms in juvenile justice: decriminalization, diversion, due process, and deinstitutionalization. But, in suggesting that agencies other than the juvenile justice system should attempt to address the problems of all but the most serious of offenders, labeling theorists have begged the question of what might be done of a more positive nature; they have not indicated to schools, to youth service bureaus, and to a host of diversion agencies what kinds of help primary deviants might require and how to provide it. Many diversion programs have been implemented, nonetheless, that provide the opportunity for testing the assumptions of labeling theory.

RADICAL THEORY

The last body of sociological theory to be considered here is radical theory. According to this perspective, crime is the product of a perpetual class struggle in which the ruling segments of capitalist society define what criminal behavior is, based on their particular self interests, create the social conditions that make criminals out of working-class people, and then devise legal machinery by which to maintain control over these peo-

ple. The rules and practices that govern crime therefore, and the criminogenic conditions that produce it, are the product of the inequities and injustices of a capitalist social order (Platt 1974, Quinney 1970, 1974).

Even the progressive concept of rehabilitation and those who have fostered it are inadvertent servants of the capitalist scheme of oppression. In believing that such "technocratic solutions" as enlightened managers, diagnostic centers, public defenders, probation officers, and treatment centers would provide the necessary answers, the efforts of reformers have always been marked by a singular failure: they "are invariably formulated within the framework of corporate capitalism and designed to shape new adjustments to existing political and economic conditions" (Platt 1974, p. 357). Hence, in failing to address the real sources of crime, they are destined to fail.

Taken at face value, radical theory denies that anything can be done to lessen the crime problem by working within the framework of capitalist society or by tampering with alternative modes for rehabilitation. The only effective alternative is a socialist system of government that places the ownership and control of the means of production into the hands of the community as a whole. Once that is done, there will be no need for rehabilitative programs because there will no longer be the need for crime (Quinney 1974, p. 25).

On a more subtle level, however, radical theory redirects our attention to the fact that most bodies of sociological theory tend to underplay the relation of socioeconomic factors to crime. Hence radical theory indirectly supports the implications of cultural deviance and strain theories, which suggest that, in trying to rehabilitate offenders, a major problem to overcome is the lack of realistic prospects of achieving the desiderata of American life, including rewarding and productive work.

FOCI OF THE SOCIOLOGICAL PERSPECTIVES ON CRIME

As was mentioned earlier, sociological theories have tended to move away from the notion that the sources of crime are inherent in the unique tendencies of the individual and toward the notion that they are inherent in the social, political, and economic organization of society. In part, this tendency is ideological, an attempt to elevate the importance of sociological variables and concepts at the expense of those that are primarily biological and psychological in nature. An integration of all three, however, is likely to be more useful than any of the levels taken alone.

Each theoretical approach described in this section has a different focus of convenience. Social control theory is perhaps most relevant for under-

standing and predicting individual criminal behavior and in this respect is most akin to the psychological theories discussed in the previous section. At the other extreme, cultural deviance and strain theories aim at the explanation of why some groups show higher rates of delinquency than others, and the radical perspective focuses on an entire social system. In designing interventions, the theories most relevant to explaining individual behavior—symbolic interaction theory and social control theory—may be the most useful in suggesting rehabilitation methods. The more global theories—particularly cultural deviance and strain theories—may be more useful in suggesting delinquency prevention strategies.

ECONOMIC THEORIES OF CRIME

Economic theories of crime have their roots in nineteenth-century economic thought. The essential tenet of the economic model is that potential criminals, like other human beings, behave rationally in the sense that they weigh the relative costs and benefits of behavioral alternatives. In Becker's (1968, p. 176) words, "[a potential criminal] commits an offense if the expected utility to him exceeds the utility he could get by using his time and other resources at other activities." In general, the benefits that the criminal may expect from crime depend not only on the monetary and/or psychic rewards from the offense, but also on the probability of apprehension and possible punishment. The alternatives to crime are generally thought to be work (or "legal labor market activity" in the economists' terms), for offenses that produce an income (e.g., burglary and larceny), and pleasurable leisure activities, for personal and moral offenses (e.g., gambling and assault).

The economic model is most directly applicable to property crimes committed primarily for monetary gains. For many offenses against persons, the model's application, while possible, and indeed advocated by some economists, is more difficult. For example, it may be supposed that murder in the process of a robbery occurs because the reward outweighs the expected costs as calculated in terms of risks of apprehension, public humiliation, and length and severity of punishment. However, the model is strained, i.e., it exceeds its range of convenience, when it attempts to explain murder that occurs out of abruptly aroused impulse or passion. In general, then, the model applies mainly to quantifiable behavior and should be most useful in explaining crimes for which the idea of rational calculation of gains and costs is appropriate.

THE NATURE OF ECONOMIC MODELS

In contrast to sociological approaches to theory construction, economists assume simple models of human behavior, specify their models in mathematical form, and then attempt to determine mathematically whether the models lead to unambiguous conclusions about human behavior under changed monetary incentives. For example, the model might answer the question whether increasing the legal alternatives to crime would produce a decline in criminality. Of course, the ability of the economists to derive mathematical predictions from their models depends on the nature of the model of human behavior utilized. The simplest and currently most widely used model, the wealth maximization model (Becker 1968, Ehrlich 1973), assumes that potential criminals attempt to increase their wealth, wealth being defined to include the monetized value of psychic rewards as well as money. The individual increases wealth by devoting a fixed amount of time (or wealth) to legal and illegal activities. Under Ehrlich's wealth maximization model, we can conclude that a wealth-increasing individual would (1) decrease (increase) participation in illegal activity with a relative increase (decrease) in legal wages, if he tries to avoid the risk of apprehension, etc., and (2) decrease illegal activity with either an increase in the probability of apprehension and conviction or an increase in the probability of punishment if convicted. This type of model has been used primarily to study income tax evasion (Allingbean and Sandmo 1972) and property crime.

More complex economic models of crime (Block and Heineke 1975, Witte 1980) view the individuals' level of satisfaction as directly affected by how they spend their time as well as their wealth. Under these time allocation models, people do not seek simply to increase wealth, but rather seek to spend their time in more satisfying ways. As might be expected, trade-offs result when time spent to increase wealth does not ultimately increase total satisfaction. For example, a person with moral reservations against theft may not choose to spend any time on robbery even though that might increase his wealth. At this point, however, one must examine moral attitudes to understand behavior, and economic theories become a variant of psychological theories.

The generality of the more complex time allocation model limits its utility as a theoretical basis for planned intervention, since it will yield ambiguous predictions under traditional assumptions about individual preferences. For example, the model does not imply that a rise in the wage rate or an increase in the probability of apprehension will *necessarily* lower crime levels. A more detailed explanation of economic models is given by Heineke (1978).

IMPLICATIONS OF ECONOMIC MODELS

The simple Becker/Ehrlich wealth maximization model of crime behavior yields a number of implications for rehabilitative programs, whereas more general time allocation economic models require empirical results before programmatic suggestions can be made. In general, however, simple economic models suggest that offenders will generally spend less time on criminal activity when (1) the expected gains of crime decrease when greater security efforts are made, (2) the chance of being apprehended increases, (3) the severity of penalties increases, and (4) the expected return of legal activity is higher, as would be the case if, for example, employment rates were low and wages were high. These again suggest the difficulty of distinguishing between special deterrence and rehabilitation and the need to view them together.

The full range of implications for planning interventions need not be detailed here, but some examples may be useful. First, the expected gains from criminal activity might be reduced by emphasizing that the benefits that are experienced are small or by helping criminals to reinterpret "gains" so as to view them in a less favorable light, for example, by noting their transience. Second, the expected costs of illegal activity might be increased. Many criminals are unrealistic in their assessments of the probabilities of eventually being caught (Petersilia *et al.* 1978), and so they could be informed of the actual probabilities. Other offenders might be susceptible to maneuvers designed to increase their personal assessments of the costs, e.g., separation from family and unpleasantness of prison life. Third, the gains to be expected from legal activities could be a focus of interventions, e.g., improving job prospects and improving interpersonal skills.

Perhaps the most straightforward derivation from economic models is to decrease criminality by improving legal work opportunities. Many rehabilitative programs (e.g., vocational training and prerelease programs) have been based, at least implicitly, on this suggestion. The appropriate level of intervention might be the individual, the community, or society as a whole. It might be effective and necessary to teach interpersonal or job-seeking skills (Goldstein 1973, Jones and Azrin 1973) that would make alternatives available as well as to intervene at the community or even the national level to improve overall employment prospects. Obviously, different packages of interventions would be required for offenders with different problems and backgrounds.

The focus of convenience of the simple economic models of crime is the rational property offender, who, while present in substantial numbers, is not the only type of criminal thought to be part of the "crime problem."

However, the range of convenience, like that of other models, can be extended greatly by relating it to other theories, most notably to strain theory. Because a lack of financial resources to achieve the American dream can produce strain, the interventions most appropriate might be those that would decrease the strain by increasing individual incomes. Presumably, any measures that might be employed to reduce strain for the individual offender would have some rehabilitative potential.

BIOLOGICAL BASES OF CRIME

Thus far, biological approaches to the understanding of crime are not well developed and consist, for the most part, of ideas backed only by limited, though in some cases provocative, bodies of evidence. The various partial theories that have been set forth are not linked to each other, and none has been more than implicitly linked to any theory at another level of analysis. Biological conceptions should be regarded as propositions about differential risk for development of criminal behavior; no direct influence on criminality can be supposed.

The several biological approaches are all fairly simple conceptually, although some may require complex biological mechanisms for their manifestations. In the paragraphs that follow, we discuss first some basic biological phenomena as they may be related to behavior and then more specific aspects of biological functioning.

BIOLOGICAL PHENOMENA AND CRIME

There is a current move to redress the rather long neglect, even rejection, of the biological side of human behavior by social scientists (for an extensive review of the recent literature, see Mednick and Volavka (1980)). Although some social scientists may not be comfortable with a biosocial view of human behavior, there is growing acceptance of the implications of the fact that humans are biological organisms. Research is being done on the effects of nutritional deficiencies on the behavior of young children and is giving rise to suggestions for public policy changes. Research on animals is also of importance in understanding biological phenomena. Animal research is the very essence of our drug and carcinogen testing programs, and it is also widely accepted as an analog for other human problems, e.g., the concept of the "population sink" (Calhoun 1962) so often cited in this period of great concern about the world population problem.

There is no reason to view criminal behavior as in some essential way

different from other kinds of behavior, as having different determinants or being the result of the operation of special principles. To the extent that any variables, forces, or empirical laws are accepted as potential explanations of any noncriminal behavior, they should be applied to the understanding of criminal behavior. We believe it is important to acknowledge the potential utility of biological variables in contributing to the understanding of crime or certain types of criminal behaviors. A biological approach to other aberrant behaviors, e.g., mental disorders and alcoholism, has been shown to be reasonable and productive. The same may well be true for some criminal behavior.

There are several basic biological phenomena that may be involved in aberrant behavior, all of which lead ultimately to the question of brain function. At a relatively peripheral level, a person's endocrine system may produce hormones in abnormal amounts, with consequences such as overarousal or underarousal in the presence of stimuli. Overarousal and underarousal may interfere with learning and may produce responses that are inappropriate to the type and level of stimulation. In the brain itself, there are various neurohormones that affect the speed and dependability of neural transmission. Presumably, they also affect the speed and durability of formation of neural pathways that reflect learning. Some neurohormones appear to act on specific parts of the brain to determine the affective state of the organism, anger being a notable example. It is also possible to produce a wide variety of behavioral and affective events and states by direct electrical stimulation of the brain, those outcomes presumably revealing the ways in which the brain works. One of the revelations of studies on direct electrical stimulation of the brain is that there are rather specific areas that seem to control a variety of important affective states. Finally, damage to the brain, and there are many possible mechanisms of damage, may produce various disabilities, including difficulties in learning, in controlling affective displays, and in inhibiting inappropriate behaviors.

Genetic Factors in Criminal Behavior

There are a number of ways genetic factors could influence behavior that might increase chances for criminality. Such factors could be involved in the production of various hormones, both peripherally and centrally, as well as in influencing the occurrence of structural anomalies that would influence both brain structure and function. To the extent that genetic factors influence functioning of certain parts of the nervous system, particularly the central nervous system, they might render some persons more vulnerable to any other factors tending to produce criminal behavior. Per-

sons might, for example, differ in their ability to learn various types of responses, to inhibit undesirable responses, or to express or inhibit aggressive displays.

For many years, there has been a persistent belief that a small subset of criminals, the so-called psychopaths, could be identified as different from the rest in terms of their superficial charm, adaptability, low level of anxiety, and incapacity for remorse and affection. Although the concept is still controversial, some investigators have persisted in their studies of psychopathy and believe that there is a biological basis for the behavior that is manifested. Hare and Schalling (1978) and Mednick and Christiansen (1977) strongly suggest that a small group of offenders, and, presumably, potential offenders, are characterized by "sluggish" nervous systems. These persons do not display normal levels of arousal in the face of threatening stimuli and hence do not learn well from punishment. Thus they do not readily learn to inhibit undesirable responses. They also, for less well specified reasons, do not learn to experience guilt or empathy for their victims. Mednick and Christiansen (1977) believe that their data support the contention that psychopathy is partly genetic in origin.

The evidence now available does not justify the conclusion that the psychopathic personality is a distinct entity and, if it is, that it has a genetic base. Yet the evidence is provocative and provides a sufficient ground for pursuing a concentrated program of further research. On the other hand, not all claims for genetic influences on crime are to be taken as bases for extensive research programs. Figlio (1977), for instance, has concluded that a relationship between chromosomal abnormalities such as the XYY syndrome and criminal behavior is not now supportable. That is not a reason to discontinue such research altogether, but, given the quantity and nature of the data that now exist, the problem probably cannot be accorded high priority.

Hormones and Aggression

Another partial theory linking biological factors and criminal behavior can be derived from studies of hormones in relation to aggressive behavior. Research has been directed toward determining the precise chemical imbalances in the brain that are associated with destructive, aggressive behavior (see, for example, Gusman 1979, Moyer 1976). Although the findings are not simple or straightforward, a series of closely related neurotransmitters and their inhibitors that are related to the occurrence of destructive, aggressive behaviors has been identified. For example, high serotonin (5-hydroxytryptamine) levels are associated with low levels of aggression, and serotonin depleters or antagonists such as monoamine oxidase are associated with destructive, aggressive behavior.

Although much of the evidence on neurotransmitters is derived from animal studies, there is no reason to doubt its relevance to human behavior. There are no known remarkable discontinuities between the biochemistry of the nervous systems of even the lower mammals and that of humans (Masterton *et al.* 1976). In addition, what evidence there is from studies of humans is consistent with that obtained from animal studies.

Ellis (1978) has formulated a "partial" theory of criminal behavior that attempts to account for some aspects of more "normal" criminal behavior, i.e., ordinary criminal offenses rather than destructiveness. Taking an evolutionary perspective, Ellis assumes that criminality is largely a form of immoderately high competition on the part of adolescent and young adult males for moderately scarce resources. Ellis notes the fairly remarkable congruence between the curves for changes in the production of androgens and changes in frequency of criminal behavior with age. Moreover, Ellis believes that androgen differences may explain, in part, the dramatic differences between crime rates for males and those for females. The theory also assumes that during adolescence most persons learn not to engage in criminal behavior. Those who are less able to learn to inhibit impulses are more likely to continue in criminal behavior and will constitute a disproportionate number of the repeating criminals.

Structural Pathology in the Brain

Animal studies have shown that certain types of aggressive, destructive responses, especially those termed "rage reactions," can occur following injury to or destruction of parts of the brain. Moreover, direct electrical stimulation of parts of the brain can both produce and inhibit aggressive responses, including those that may lead to killing of a member of another species (Gusman 1979, Moyer 1976). Apparently, there are in the brain both excitatory and inhibitory centers for aggressive responses, and any kind of damage or dysfunction that results in stimulation of one or the other of these areas can trigger destructive attacks or inhibit them.

Other investigators, most notably Mark and Ervin (1970), have pointed to the substantial similarity between rage reactions in animals and certain manifestations of hyperaggressive behavior in humans. There are well-identified brain syndromes, e.g., the Kluver-Bucy syndrome and the syndrome produced by rabies, that produce hyperaggressive and hypersexual behavior just as brain interventions do with animals. Mark and Ervin note that in many cases of uncontrollable aggressive behavior in humans, the afflicted persons recognize what is happening and may even ask to be restrained, but still cannot control themselves. From studies of a sizable number of patients who have come to their clinic asking for help in controlling their destructive, aggressive impulses, Mark and Ervin believe

they have evidence of an unusually high frequency of biological damage and dysfunction in such cases.

Ecological Factors in Crime

The term ecological factors is taken from Hippchen (1978) and refers, somewhat imprecisely, to a variety of factors in the everyday environment that are thought to contribute to stress or to aggressive reactions to stress. However, the ecological approach also assumes that persons with criminal tendencies may have characteristics that render them more than usually vulnerable to ecological stress factors, e.g., genetically determined reactions, including metabolic disorders, brain damage from the birth process, or nutritional deficiencies, and long histories of exposure to external stresses of a harsh life (Hippchen 1978). Among the ecological factors alleged to bear an etiologic relationship to delinquency and crime are the following: vitamin and mineral deficiencies or dependencies; excessive consumption of refined sugars, resulting in chronic hypoglycemia; environmental contaminants, including artificial light; and allergens, both naturally occurring and man-made.

The literature relevant to the ecological hypothesis has received an extensive, albeit somewhat uncritical, review by Hippchen and his associates (Hippchen 1978). The evidence marshaled would probably convince nearly any persuadable reader that all of the *categories* of variables studied are associated with a variety of behavioral anomalies, deficiencies, and disturbances and that these may even include criminal behaviors. The mechanisms that provide the links are often obscure, and the links may be spurious, e.g., the link between artificial light and hyperactive behavior or the link between a vitamin B₆ deficiency and delinquent behavior, but in general it is not difficult to accept the proposition that crime may be indirectly linked to any factors that produce such states as chronic irritability, perceptual disturbances, hyperactivity, impaired judgment, and poor learning ability. Not only are some such handicaps, e.g., irritability, capable of directly increasing the likelihood of delinquent and criminal behavior, but the burden of many of them might prove a strong barrier to many of the normal sources of gratification in life and, so, impel a search for alternatives, which may be criminal.

Learning Disabilities

The possibility of a link between poor school performance and delinquency and later criminal behavior has often been suggested. Certainly, many delinquent youngsters have poor school records, and many terminate their schooling prematurely. Explaining the poor school perfor-

mance is the first step, and a frequent suggestion has been that delinquent youngsters are particularly likely to be characterized by specific learning problems now usually referred to under the generic term learning disabilities. The work summarized in Hippchen's (1978) book, for example, is generously sprinkled with references to the effects of such factors as nutrition on learning disabilities and the assumption, implicit or explicit, that learning disabilities have a causal relationship to poor school performance and, thereby, to delinquency. Ellis (1978) assumes that learning disabilities may affect the capacity of youthful criminals to learn to refrain from crime and to learn alternative ways of social competition for resources.

Fortunately, Murray (1976) has done an extensive review of the learning disabilities-juvenile delinquency link. Murray's report concludes that many delinquents do have severe learning problems and that that fact needs to be taken into account in designing rehabilitative programs and other interventions. This point is underscored by recent work on the relation between low intelligence and delinquency by Hirschi and Hindelang (1977). However, there is little support for the notion that delinquents suffer from specific learning disabilities that could have been diagnosed and treated early in the school setting, thus preventing delinquency. The report of Murray *et al.* does not recommend support for large-scale preventive efforts. The diagnosis of learning disabilities usually depends either on clinical judgment or on the interpretation of difference scores in profiles of highly correlated measures. Neither approach is highly dependable, and the implication is that prevention strategies targeted at learning-disabled youths would be handicapped from the outset. Furthermore, recent research using self-report measures of delinquent behavior (Zimmerman *et al.* 1979) raises questions about whether or not learning-disabled youths actually engage in more delinquent behavior than do unselected youths.

IMPLICATIONS FOR REHABILITATION

Research into the biological factors related to crime is likely to be fraught with difficulties. The quality of the research in the areas reviewed in this section is variable, and the panel has been able to review little of it firsthand. Nonetheless, we believe that our review has been sufficient to justify the conclusion that this rather broad field of effort should be included in future criminal justice research. The risks inherent in ignoring the possibility of important biological elements in the origins of some crime are greater than the risk that research efforts would yield few persuasive findings.

It should be evident that none of the biological approaches to under-

standing the origins of crime can be taken as a sufficient explanation, even if correct. The theories are in no way competitive with other theories, and the complementarity might, in fact, be ultimately remarkable.

SUMMARY VIEWS OF THE THEORIES OF CRIME

To summarize the various theories of crime and to facilitate comparisons among them, we have presented them in tabular form. Table 1 sets out the theories by discipline, indicating for each the principal statement, the assumptions about human nature and the social order on which it rests, and the basic logic or content of the theory in the form of a summary causal sequence. Table 2 characterizes the theories of criminal behavior with respect to several factors and notes their major shortcomings. In examining the different foci of convenience, note that certain theories focus on explaining the etiology of either specific types of *offenses* or a much wider range of criminal activities; other theories attempt to explain the behavior of all *offenders*, or a particular subset of them.

Theories vary with respect to their level of analysis. Macrosociological theories seek to explain the role of cultural and social structural variables in the origin of criminal behavior; social psychological theories generally take the individual person as their level of analysis (Monahan and Splane 1980). Although theories of crime tend to take either social institutions or individuals as their appropriate level of analysis, other levels are sometimes employed.

The testability or ease with which its principles can be stated as a series of propositions that can be supported or refuted by empirical observation varies among theories for several reasons. Theories may be untestable because it is difficult to devise operations by which their important constructs may be observed or measured (e.g., symbolic interactionist theory), or because they do not admit unequivocal predictions that can be refuted (e.g., psychoanalytic theory), or because they are not testable within any realistic constraints (e.g., radical theory). Theories may be more readily tested in some parts of their range of convenience than in others. Psychoanalytic theory, for example, was not devised to account for criminal behavior, and some of its propositions may be more readily tested in domains other than crime. The judgments presented in Table 2 are specific to testability of propositions relevant to criminal behavior and tested in the context of that behavior. The testability of theories has been characterized as high, or easily tested; moderate, or testable with some difficulty in translating abstractions to quantifiable indicators; and low, or essentially untestable.

TABLE 1 Theories on the Assumptions and Causes of Crime

Theory	Theoretical Assumptions About Human Nature and Society ^a	Causal Sequence
<i>Sociological Theories</i>		
Cultural Deviance Disorganized lower-class life (Shaw and McKay 1931, 1942, 1969)	Humans are conformist and sociable; act in accordance with norms and values of particular group. Social order characterized by conflict between groups; no universal standard.	Community life and deteriorated neighborhood → Social disorganization → Lack of adult control over children → Street gangs → Delinquent traditions → Delinquent behavior
Integrated lower-class culture (Miller 1958)		Slums → Distinctive lower-class culture (one-sex peer groups) → Adolescent boys' unique "focal concerns" → Delinquent behavior
Youth subculture		Ill-defined adolescent status → Separation of generations → Youth culture → Delinquent behavior
Strain Cohen 1955	Humans are conformist and sociable; act in accordance with norms and values of particular group. Society characterized by moral consensus on values and goals.	American dream and lower-class socialization → Impaired ability to compete → Decreased achievement → Loss of self-esteem → Strain → Identification with delinquent subculture → Malicious negativistic behavior.
Cloward and Ohlin 1960		American dream and blocked opportunities → Sense of injustice → Identification with delinquent subculture → [Criminal subculture → Criminal behavior Conflict subculture → Violence and protest Retreatist subculture → Escape in drugs]

TABLE 1 (continued)

Theory	Theoretical Assumptions About Human Nature and Society	Causal Sequence
Radical Quinney 1974	Humans are inherently good but shaped by society. Social order of capitalist society characterized by conflict and coercion; in socialist order, cooperation would dominate.	Inequities and injustices of capitalist social order → <div style="border: 1px solid black; padding: 2px; display: inline-block;"> Rules and practices that govern crime Social conditions that are criminogenic Social control machinery </div> → Rightful behavior of exploited people defined as criminal by coercive state
Differential Association/ Symbolic Interactionism Sutherland and Cressey 1955	Human nature and society are plastic, changeable; neither inherently antisocial nor culturally fixed. Society is conflicted; no value consensus.	<div style="border: 1px solid black; padding: 2px; display: inline-block;"> Conventional traditions </div> → Intimate contact with <div style="border: 1px solid black; padding: 2px; display: inline-block;"> Deviant traditions </div> criminal associates → <div style="border: 1px solid black; padding: 2px; display: inline-block;"> Excess of definitions favorable to law violations </div> → <div style="border: 1px solid black; padding: 2px; display: inline-block;"> Learning of criminal techniques and rationalizations </div> → Criminal behavior
Labeling Lemert 1951 Tannenbaum 1938	Human nature plastic; criminals are normal. Society characterized by conflict (in which most powerful are able to stigmatize others).	Primary deviance → Selective application of rules to some offenders → Stigma → Deviant self-image → Secondary deviance (career criminality)

Control Hirschi 1969	Human nature inherently asocial and selfish. Social order largely consensual.	Antisocial nature → Defective socialization → Weak social bond → Criminal behavior					
<i>Psychological Theories</i>							
Social Learning Bandura 1968, 1974, 1977a,b, 1979	Humans are malleable. Behavior is learned through a variety of cognitive processes and is maintained by its consequences; social order characterized by conflicting norms.	Observational learning and direct experience (plus biological factors) → <table border="0" style="margin-left: 20px;"> <tr> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 2px;">Vicarious and self-reinforcement of observed deviant behavior</td> <td rowspan="3" style="font-size: 2em; padding: 0 10px;">}</td> <td rowspan="3" style="vertical-align: middle;">→</td> </tr> <tr> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 2px;">Learning of deviant behavior via interaction of behavior and stimuli</td> </tr> <tr> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 2px;">Instigation to criminal behavior</td> </tr> </table> Criminal behavior	Vicarious and self-reinforcement of observed deviant behavior	}	→	Learning of deviant behavior via interaction of behavior and stimuli	Instigation to criminal behavior
Vicarious and self-reinforcement of observed deviant behavior	}	→					
Learning of deviant behavior via interaction of behavior and stimuli							
Instigation to criminal behavior							
Criminal Personality Yochelson and Samenow 1976, 1977	Humans are malleable. Behavior is learned through cognitive processes, but once learned change is difficult. Social order largely consensual.	Faulty social learning → Faulty ways of thinking → Criminal behavior					
Psychoanalytic Freud 1963 Feldman 1969	Antisocial impulses universal and inherited, curbed by socialization. Social order characterized by consensus.	Primitive drives (id) → Inadequate parental socialization → Poorly developed ego and superego → Unconscious search for compensatory gratifications → Immature/delinquent behavior					

TABLE 1 (continued)

Theory	Theoretical Assumptions About Human Nature and Society	Causal Sequence
<i>Economic Theories</i>		
Wealth Maximization Becker 1968 Ehrlich 1973	Humans are rational decision makers seeking to maximize well-being (utility). Utility depends only on wealth, which includes the monetized value of leisure time. Social order conflicted.	$\left[\begin{array}{l} \text{Low perceived probability of apprehension} \\ \text{Low perceived probability of punishment} \\ \text{Low perceived severity of punishment} \\ \text{High expected gain from illegal activity} \\ \text{Low expected gain from legal activity} \end{array} \right] \rightarrow$ Perceived gain from criminal activity greater than perceived gain from legitimate activity → Criminal behavior
Time Allocation Block and Heineke 1975 Witte 1980 Heineke 1978	Humans are rational decision makers seeking to maximize well-being (utility). Utility depends on wealth and the uses one makes of one's time. The value of time uses (e.g., criminal activity) may vary across individuals and may not be monetized.	$\left[\begin{array}{l} \text{Low perceived probability of apprehension} \\ \text{Low perceived probability of punishment} \\ \text{Low perceived severity of punishment} \\ \text{High expected gain from illegal activity} \\ \text{Low expected gain from legal activity} \end{array} \right] \rightarrow$ Perceived gain from criminal activity greater than gain from legitimate activity → Moral/ethical reservations about participation in illegal activities absent; low valuation of legal activity → Criminal behavior

Biological Theories

Genetic

Mednick and
Christiansen 1977
Hare and Stallings 1978

No uniform view of human nature.
Individual genetic variation. Little
attention to social order.

Sluggish autonomic nervous system → Failure of arousal
or fear response in face of threatening stimuli → Failure
to learn from punishment or inhibit impulse → Criminal
behavior

Hormones

Ellis 1978

[High levels of serotonin → Destructive,
aggressive behavior
High androgen levels → High competitiveness] →
Criminal behavior

Structural Pathology of the Brain

Erwin 1979
Gusman 1979
Moyer 1976

Stimulation of excitatory center for aggressive response in the
brain → Rage reaction → Violent criminal behavior

Ecological Factors

Hippchen 1978a,b

[Excessive sugar consumption → Hypoglycemia
Vitamin and mineral deficiencies
Allergens] →
Irritability, perceptual disturbances, hyperactivity,
impaired judgment → Criminal behavior

Learning Disabilities

Murray 1976
Hippchen 1978a,b

Learning disabilities or low IQ → Poor school performance
→ Frustration, strain → Criminal behavior

^a Where only one set of assumptions is given, it applies to all versions of the theory in that group.

TABLE 2 Characteristics and Shortcomings of the Theories of Crime

Theory	Characteristics		Testability/ <i>Amount of Testing</i> /Empirical Support	Shortcomings ^a
	Focus of Convenience	Level of Analysis		
<i>Sociological Theories</i>				
Cultural Deviance				
Disorganized lower-class life	Lower-class urban youths: <i>Property, public disorder, and gang violence</i>	Social institutions	Moderate/ <i>Extensive</i> /Moderate	Failure to explain individual and group variations. Lower-class bias. Failure to explain adult crime in slums. Nostalgic view of gangs. Overemphasis on disorganization of slums.
Integrated lower-class culture	Lower-class urban boys: <i>Property, public disorder, and gang violence</i>	Social institutions	Moderate/ <i>Low</i> /Low	No single distinctive lower-class culture. Lower class has not given up American dream; little empirical support. Narrow range of convenience. Vague concepts make empirical evaluation difficult, particularly the concept of "subculture." Static (Has lower-class subculture changed since the 1950s?).

Youth subculture	Middle-class youths: <i>Property and public disorder</i>	Social institutions	Moderate/ <i>Moderate</i> / Low	Failure to explain individual differences. Overstates generation gaps. Overemphasis on group and nonserious offenses of middle-class youths; failure to explain serious youth crime.
Strain				
Cohen 1955	Lower-class youths: <i>Nonutilitarian; property and gang violence</i>	Social institutions	Moderate/ <i>Moderate</i> / Moderate	Lower-class bias including finding that school failure is not primarily a lower-class problem. Little evidence that delinquent behavior is due to frustration of high ambitions.
Cloward and Ohlin 1960	Lower-class youths: <i>Property, drug offenses, and gang violence</i>	Small groups, social institutions	Moderate/ <i>Moderate to high</i> / <i>Moderate to low</i>	Little evidence that delinquent subculture is strong and/or rewarding. No explanation of individual differences. Inadequate operationalization of theoretical terms, including "opportunity," "aspirations," and "frustration" (Cloward and Ohlin only). Explains limited variety of crimes (nonutilitarian) (Cohen only). Middle-class gang crime tends to be nonutilitarian; lower-class gang crime often is instrumental.

TABLE 2 (continued)

Theory	Characteristics			Shortcomings ^a
	Focus of Convenience	Level of Analysis	Testability/ <i>Amount of Testing</i> /Empirical Support	
	Offender: <i>Offense</i>			
Radical	Lower class: <i>Property crime or all crime in capitalist society</i>	Society and social institutions	Low/ <i>Low</i> /Low	<p>Fails to specify organization of liberated society in which law will not be tool of powerful.</p> <p>Fails to explain why some individuals are criminals and some not (no attention to criminal motivation).</p> <p>Ignores age and sex differences in crime in overemphasis on class differences.</p> <p>Circularity: capitalism explains oppression; oppression explains capitalism.</p> <p>Utopian illogic of crime-free society.</p>
Differential Association/ Symbolic Interactionism	All offenders: <i>All crime</i>	Individual, small groups	Low ^b / <i>Moderate</i> /Moderate	Fails to account for individual crimes committed without intimate associates or shared rationalizations, e.g., crime of passion.

				<p>Fails to specify conditions in life that motivate associations with criminals.</p> <p>Ignores differential receptivity of individuals to criminal messages.</p> <p>Disregards situational variables by treating opportunity for criminal acts (once the motivation exists) as constant.</p> <p>Overemphasizes verbal interaction and learning.</p> <p>Impossible to falsify because of lack of precise definitions of central concepts (e.g., "excess of definitions").</p>
Labeling	Lower-class juveniles: <i>Property career crime</i>	Social institutions (society's reaction to the deviant, particularly reaction of criminal justice system in social process of labeling individuals)	Moderate to low/ <i>Moderate/Moderate to low</i>	<p>Overemphasizes relativity of rules and failure to explain common law crimes.</p> <p>Labeling is not a necessary and sufficient explanation for the creation of criminals.</p> <p>Unable to explain differences in crime rates among groups or individual differences in motives.</p>
Control	Youths, all socioeconomic statuses: <i>Person and property</i>	Individual	Moderate/ <i>Moderate/Moderate to high</i>	Overemphasizes social consensus and failure to consider role of ethnic and class conflict as contributing to beliefs, poor school performance.

TABLE 2 (continued)

Theory	Characteristics		Testability/ <i>Amount of Testing</i> /Empirical Support	Shortcomings ^a
	Focus of Convenience	Level of Analysis		
	Offender: <i>Offense</i>			
Control (<i>continued</i>)				Ignores possible role of delinquent peers and subcultures rather than disaffection from conventional groups in production of delinquent behavior.
<i>Psychological Theories</i>				
Social Learning	Emphasis on juveniles: <i>Aggressive behavior</i>	Individual	Moderate/ <i>Moderate</i> /Moderate	<p>Lacks empirical evidence that criminal behaviors are learned according to principles tested mostly in laboratory (where social and legal sanctions are largely absent) and that may not hold in real world.</p> <p>Fails to explain individual differences in response to influences of learning.</p> <p>Learning may be necessary but not sufficient ingredient in crime.</p> <p>Incorporates any factor believed to relate to learning or performance of particular</p>

Criminal Personality	Adult chronic offenders: <i>All crimes</i>	Individual	<i>Moderate/Low/Low</i>	<p>behavior without regard to theoretical connections among factors.</p> <p>Failure to explore the etiology of the "criminal personality." Imprecise definition of "criminal." Failure to distinguish the particular psychopathic subset of felons they studied from all offenders. Small nonrandom sample, lack of controls leads to lack of scientific support for the claimed validity of their outcomes.</p>
Psychoanalytic	All offenders (adult and juvenile): <i>All crimes</i>	Individual	<i>Low/Moderate/Low</i>	<p>Tautological arguments: explain aggressive behavior as result of aggressive impulse; evidence of impulse is behavior. Criminals appear to try avoiding being caught (and largely succeed); not driven by guilt to be caught. Psychological abnormality only weakly related to global measures of criminal behavior. Replication of therapeutic studies is impossible in part because of poor specification of therapeutic technique.</p>

TABLE 2 (continued)

Theory	Characteristics		Testability/ <i>Amount of Testing</i> /Empirical Support	Shortcomings ^a
	Focus of Convenience	Level of Analysis		
	Offender: <i>Offense</i>			
<i>Economic Theories</i>				
Wealth Maximization	Rational offender with pecuniary motive: <i>White-collar crime (e.g., tax evasion), traditional property offenses (e.g., burglary)</i>	Individual	Moderate to high/ <i>Moderate</i> /Moderate to low	<p>Fails to allow for nonrandom irrational element in humans.</p> <p>Fails to allow for institutional effects not mediated by the individual.</p> <p>Fails to allow for differences in opportunity to commit crime, i.e., situational effects.</p> <p>Fails to allow for difference in moral and ethical position.</p> <p>Fails to allow for peer group effects.</p>
Time Allocation	Rational offender with strong pecuniary motive and/or few moral reservations against illegal activity: <i>White-collar crime (e.g., tax evasion), traditional property offenses (e.g., burglary)</i>	Individual	Moderate/ <i>Low; testing only beginning</i> /Low	<p>Fails to allow for nonrandom irrational element in humans.</p> <p>Fails to allow for institutional effects not mediated by the individual.</p> <p>Fails to allow for differences in opportunity to commit crime, i.e., situational effects.</p> <p>Fails to allow for peer group effects.</p>

Biological Theories

Genetic	"Psychopaths"; individuals with slow autonomic nervous systems: <i>Violent offenses</i>	Individual	Moderate/Low/Low	Delinquency and crime are widespread; genetic and physiological defects are found in only a small part of the population. Theories therefore explain only a fraction of crime, which is difficult to separate from nonbiologically related offenses. Inadequate specification of intervening variables linking biological organism to criminal behavior.
Hormones	<i>Assaultive offenses</i>	Individual	Moderate to low/Low/Low	
Structural Pathology of the Brain	<i>Assaultive offenses</i>	Individual	Low/Low/Low	
Ecological Factors	<i>Assaultive offenses</i>	Individual	Low/Low/Low	
Learning Disabilities	Learning disabled; low IQ	Individual	Low/Low/Low	

^aWhere only one set of assumptions is given, it applies to all versions of the theory in that group unless otherwise specified.

^bTheories can gain support from research outside that area. Therefore the amount of support for a theory may seem greater than would be warranted by its testability because of the accumulation of funding from other arenas of application.

The actual amount of testing to which various theories have been subjected also varies. Although the more testable theories tend to have undergone more frequent testing, that is not always true. Fads in social science have led to the testing of "fashionable" theories, and for several relatively new theories there has not been sufficient time for empirical testing. The economic theories, for example, have recently reemerged; given the interest in them and the specificity of testable propositions, it is likely that within a decade they will have been more extensively tested. The amount of testing has been trichotomized into high, moderate, and low.

The amount of empirical support actually found for the various theories is labeled high where empirical tests indicate strong and/or frequent support of the theory's propositions; moderate where empirical tests provide partial or limited support for the theory; and low where the theory has undergone empirical testing but it has not supported the propositions of the theory or where no testing has occurred. Our judgments of support for theories given in Table 2 are, again, specific to the context of criminal behavior. Some theories may lack strong support from testing in relation to criminal behavior but derive much support from testing in other arenas, thereby enhancing their standing among theories of crime (e.g., social learning theory). Others (e.g., psychoanalytic theory) lack the firm basis of broader empirical support that would give them good standing in relation to crime.

We include a column indicating the shortcomings of each theory to indicate our recognition of the limitations of current theories at the same time that we recommend theory-based research and programs.

Table 3 reviews the implications of these theories for programs of research on rehabilitation. As will be more fully explained in Chapter 5, interventions, whether prevention or rehabilitation, may be directed at producing changes in different targets or loci of intervention even though their ultimate goal is to alter certain behaviors of individuals and groups. The loci of intervention can range from the entire society (radical theory) to a number of social institutions, including the community, labor market, education system, family, and criminal justice system, to the individual offender.

CONCLUSIONS

The theories reviewed in this chapter are not to be regarded as having the endorsement of the panel. None of them is a theory in more than a loose sense of the term, and none is backed by any truly impressive body of empirical findings. Many of the theories seem plausible, but plausibility does not make them true. The theories are views of criminal behavior from

TABLE 3 Implications of Major Theories of Crime for Rehabilitation Programs

Theory	Implications for Rehabilitation	
	Locus of Intervention	Nature of Program for Intervention Techniques
<i>Sociological Theories</i>		
Cultural Deviance		
Disorganized lower-class life	Community, family, school, society	Emphasis on community mobilization for crime prevention (e.g., Chicago area project, roving gang leaders). Radical social and economic changes to assimilate lower classes into middle-class way of life.
Integrated lower-class culture	Community, society	Greater opportunities plus change in value system of lower-class youths.
Youth subculture	Community, criminal justice system, school, workplace	Decriminalization of status offenses; jobs and community involvement for youths.
Strain^a		
Cohen 1955 Cloward and Ohlin 1960	Delinquent peer group, workplace, school, community, society	"War on Poverty" Intensive group change processes for delinquents. Increased opportunities for achievement in school and at work. Community and youth participation in programs to prevent crime.
Radical	Society	Social revolution rather than melioristic, partial social improvements. Rejection of individualistic "rehabilitation."
Differential Association/ Symbolic Interactionism	Peer group	Guided group interaction and other intensive group therapies.
Labeling	Legal and criminal justice system	Minimize programmatic intervention at individual level. Changes in criminal justice system: decriminalization of juvenile status offenses; diversion from criminal justice system (not current

TABLE 3 (continued)

Theory	Implications for Rehabilitation	
	Locus of Intervention	Nature of Program for Intervention Techniques
		diversion programs); deinstitutionalization of status and other nondangerous offenders; and due process protection for juveniles.
Control	Family, school, workplace, community	Provide offenders with a stake in conformity by restoring their bond of attachment and commitment to family, conventional peers, school, and work; reinforce participation in conventional activities at school, work, and in the community.
<i>Psychological Theories</i>		
Social Learning	Family, school	Behavior modification procedures (e.g., token economies and behavioral contracting). Systematic reinforcement of desired target behavior; reprogramming social environment.
Criminal Personality	Individual	Intensive individual and group therapies involving direct confrontation of thinking errors.
Psychoanalytic	Individual, family	Early identification of "preelinquents." Psychoanalysis or shorter-term counseling (individual and group).
<i>Economic Theories</i>		
Wealth Maximization	Workplace, criminal justice system, school	Increased legitimate wages. Job creation and job placement program; may also include job training. Income subsidy. Increased security systems, law enforcement activities, prosecutions, and sanctions. Changed perceptions of legal and illegal gains and criminal justice system activity.

TABLE 3 (continued)

Theory	Implications for Rehabilitation	
	Locus of Intervention	Nature of Program for Intervention Techniques
Time Allocation	Workplace, criminal justice system, school, family	Increased legitimate wages, job opportunities, and job placement programs; job training; financial subsidy and more desirable jobs. Increased security systems, law enforcement activities, and prosecutions; more severe sanctions. Moral education. Changed perceptions of legal and illegal gains and criminal justice system activity.
<i>Biological Theories</i>		
Genetic	Biological organism, family	
Hormones	Biological organism	
Structural Pathology of the Brain	Biological organism	
Ecological Factors	Society	Reduce allergens and other harmful environmental substances.
Learning Disabilities	School, criminal justice system	

^aThe implications for rehabilitation given in the last two columns apply to both versions of strain theory.

different vantage points and different angles and are, for the most part, not competitive but complementary. Some of them come close to being alternative statements of each other, e.g., strain theory and economic theory. Unfortunately, none of the theories has the rehabilitation of criminal offenders as its focus of convenience. The better theorizing that is required if rehabilitation is going to become a reality rather than a promise may require multiple theories to deal with different types of criminals and criminal behaviors and theories specifically focused on behavior change processes.

3 Designing Intervention Programs: Some Conditioning Variables and Their Effects on Rehabilitation Research

In designing any intervention program, a number of variables regarding the circumstances and characteristics of the offender and of the intervention that may affect its appropriateness, implementation, and outcome must be addressed. And in designing evaluations of such programs, regardless of their treatment modality and content, consideration or lack of consideration of these same variables is likely to affect what is actually found and the value of the finding. These "conditioning variables" answer the questions "when," "for whom," "how much," and "under what conditions." In this chapter we focus on the following conditioning variables: target populations and offender types; the strength of the treatment; the integrity with which the intervention is actually implemented and measured; the timing of interventions in terms of offenders' ages and stages in the development of their criminal careers; and the social, environmental, legal, and ethical limits on interventions in a noninstitutional setting.

WHO GETS WHAT REHABILITATIVE TREATMENT?: THE TEMPLATE-MATCHING STRATEGY

Given a population of offenders and a set of rehabilitative techniques that one has some theoretical reason to believe will benefit some of them, how does one go about assigning offenders to "treatments" for the purpose of evaluation research?

One option is to eschew subject selection entirely, or to screen out only

those most obviously unsuitable for a given treatment (e.g., floridly psychotic offenders could be screened out of education programs). The disadvantage of the "open admission" approach is that it may be extraordinarily wasteful of limited rehabilitative and evaluative resources. Another important and genuine risk is that a very diverse subject population would introduce so much variability, or "noise," that it is improbable that a treatment effect would be detected. Given limited resources, the best initial strategy for evaluating a rehabilitative technique is to employ it only with those types of individuals believed most likely to benefit from it. Should the treatment work with this group, further research could test it with a somewhat different or broader subject population.

McKinney (1969) has noted that although types and typologies are ubiquitous, almost no one pays any attention to the nature of their construction. Typologizing in social inquiry is widespread, but remains a relatively underdeveloped aspect of methodology.

Typologies or classification schemes are essentially pragmatic enterprises; that is, they are a means to some end. For the most part, attempts to classify crimes and offenders seem not to have been developed with the aim in mind of enhancing prospects for rehabilitation. To achieve that aim, it will be necessary to devise ways of classifying offenders that take into account both their characteristics, including their situational realities, and the characteristics of the programs being employed.

The critical issue to be addressed is the likely amenability of a particular offender (and others similar in certain ways) to a particular intervention strategy. Consider the question, "Should offender Brown be placed in a job training program?" Rather than ask whether offender Brown would succeed at "treatment" in general or how offenders in general would be affected by job training, one asks how well Brown's characteristics mesh with the characteristics of job training programs in terms of rehabilitation outcomes (Bem and Funder 1978). To answer the question, one would create a set of descriptors, or a "template," of the kinds of people who, according to the theory or conceptions underlying the rehabilitative technique, could be expected to do best. Bem and Funder (1978) call this the "template-matching technique." Offender templates would have to be teased out of certain theories by closer examination of certain assumptions or expected outcomes and might vary in inclusiveness or specificity. (See Glaser (1980) for a similar discussion of "theory-focused sampling" in program evaluation.)

As an example, consider the use of job training as a rehabilitative technique. From the economic theory underlying its use, one might deduce that the person who could be expected to gain the most from job training is the person who does not already have marketable job skills,

who has the cognitive and motor capacities to acquire the job skills he or she would be taught, who has the motivation to learn and to seek out employment, and who is in a position to be able to use those job skills relatively soon after acquiring them. This would be one template for the initial selection of candidates for job training programs. There may, of course, be reasons for including offenders in treatment programs other than intent to rehabilitate that may be irresistible, e.g., to keep prisoners busy. Tests of rehabilitation, however, should not be contaminated by inappropriate samples.

For most interventions the template will be relatively coarse and imprecise. The ideal psychotherapy candidate, for example, has been described by the YAVIS syndrome (see Schofield 1964): Young, Attractive, Verbal, Intelligent, Successful. Actual psychotherapy clients vary widely with respect to these characteristics, but the most promising candidates are thought to be those best approximating the specifications.

Templates can be devised for units other than individuals. A family intervention might carry with it specifications for its potential applications, e.g., that the family must have sufficient economic resources to permit one parent to be at home whenever the children are at home, that the wage earners must be employed in legitimate activities, and that no adult member of the household may be a drug abuser or alcoholic. Even at the community level, it is appropriate to think of template matching. An intervention designed to increase community organization should begin by screening communities for existing types of community structure. It might require, for example, that the community have at least a certain percentage of permanent residents, a certain proportion of private organizations such as churches and clubs, and particular patterns of crime.

In template matching, it is important to consider the organizational setting of the program as well as the characteristics (behavioral and social background) of the offender and the characteristics of the program. Empey and Lubeck (1971) found that no uniform personal variables were consistently predictive of success across different organizational settings. Rather, behavior and program effectiveness seemed to be "the product of the proper match between personal and social systems."

The template-matching technique is different from the typological approach. Typologies, which involve mutually exclusive categories, may be intellectually elegant, but they have not proved useful for classifying offenders for placement in rehabilitation programs. There are too many individual and situational variables likely to affect treatment outcome that cannot be feasibly included in a broad, mutually exclusive set of types. Both approaches rely on theory, but with template matching a different template can be created for each intervention. It does not matter that

some offenders do not fit the template of any existing treatment or that the elements of any given template (e.g., motivation to learn) are shared with some other templates.

The panel's suggested approach to offender classification through template matching is both theory-based and pragmatic. Many programs appear to have failed because of the presence of inappropriate offenders and the largely unexamined interaction of offender and treatment effects. A closer look at many of the programs reviewed by Lipton *et al.* (1975) indicates that although most failed to bring about overall reductions in participants' recidivism, a number apparently succeeded in reducing the recidivism of particular subsets of offenders (although one cannot be certain that such findings were not simply the inevitable chance result of looking at so many comparisons). It is necessary therefore to try to begin locating and matching programs, program components, and intervention settings with the subset of those offenders most appropriate for them on the basis of theoretical rationale and empirical findings, to systematically test the match of offender and program, and to refine both the match and the theoretical premises on the basis of carefully measured outcomes by using the template-matching technique. In the testing of the templates of various programs with offenders, data on personality *and* demographic and social background must be gathered, and careful records of program implementation and actual processes must be kept to permit a closer examination of offender-treatment interaction. This will permit further refinement of the theoretical premises on which the treatment and offender template are based and more accurate specification of the offender population responsive to a particular intervention.

The template-matching approach is certainly not without its problems. If the template has too many facets, very few cases will fit its demands, and it will prove uneconomical and unfeasible. On the other hand, if a template is too coarse, it will not accomplish its aim of yielding a reasonably homogeneous group of persons suitable for a program.

Templates always fit somewhat imperfectly, and tolerances will have to be guessed at, but the template notion does not demand that everyone fitting a given template be forced into the same program. Template matching is aimed at selecting persons for whom a particular program is best designed; that need not preclude offering additional services or highly individualized treatment programs as needed. Obviously, some, perhaps many, offenders may not fit very well into any program. If so, it is useful to discover those failures, for they point clearly toward the problems for which new ideas are needed.

Within correctional institutions, programs labeled rehabilitative often may serve other functions, e.g., making a difficult life a bit easier and

more humane, and reducing violence levels by providing structured activities for prisoners. The proposal for template matching should not be seen as antithetical to goals such as these beyond rehabilitation. We are not recommending curtailment of these programs; we propose only that outcomes be assessed on the basis of the goals set for participants entering a program: rehabilitation for some and easier "time" for others.

HOW MUCH AND HOW CERTAIN IS TREATMENT?: THE STRENGTH AND INTEGRITY OF INTERVENTION

Two variables of critical importance in evaluating rehabilitation research are the strength and the integrity of the intervention. Neither has received much attention, and the interpretation of findings hinges directly on the question of whether tested interventions were powerful enough in concept to warrant expectations that they might produce the desired behavior changes and, if they were powerful enough, whether they were actually implemented according to plan. These two issues are considered briefly here but are discussed more fully in Sechrest and Redner (1979) and Sechrest *et al.* (1979).

STRENGTH OF INTERVENTION

To clarify what is meant by strength of intervention, consider an analogy from the medical literature, in which treatment strength has of absolute necessity been carefully considered. For a drug treatment, the dosage determines the strength. Of course, drug dosage can be varied depending upon the amount administered, the purity of the drug, the frequency of the drug intake, and the length of time over which the drug is given. A physician will develop a treatment plan for the particular drug and the particular patient based on the assumption that the response of the patient will be similar to the responses of other patients with the same problem. In medical work, this assumption is quite reasonable in light of the relative homogeneity of human physiology and the long history of empirical work on standard drug treatments. To continue the medical analogy, patients often have problems involving several systems (e.g., a diabetic with emphysema and hypertension). Not only must each problem be treated with different medications, but care must be taken to determine whether a medicine prescribed for one problem is contraindicated by potential side effects on the other systems.

If one extends the medical analogy to the area of rehabilitation, it becomes apparent that there are serious difficulties in determining the op-

timal strength of intervention for the rehabilitation of criminal offenders and the component elements of frequency, quality, and duration (Hudson and Galaway 1980b). If counseling were to be considered as an appropriate intervention for criminal offenders, what frequency and duration of group counseling using what treatment philosophy would be "strong enough" for a first conviction felon charged with robbery? How much is an optimal amount of financial support for a released ex-burglar—one that will make it possible for him or her to avoid going back to crime and still make it worthwhile to try to find a job? Uniformity of response of offenders is improbable, and there is no body of empirical research on which a plan for treatment can be based with confidence. There are no counterparts to animal studies and laboratory physiological assays to guide planning efforts. A way of assessing the strength of interventions both before and after they have been delivered is sorely needed.

Consideration of the strength of the intervention is necessary because in evaluating the results of an intervention it is easy to assume that something has happened that has not. If a decision about the effectiveness of a drug were made without knowing whether the dose was strong enough, the scientific medical community would raise vociferous objections, and yet when it has been concluded that some form of intervention does not work for rehabilitation, questions have rarely been raised concerning the possibility that the frequency or duration of the intervention might not have been sufficient to produce an effect. Instead, it is assumed that the service or activity itself is inherently inadequate. At the same time, it must be recognized that some treatments can be "too strong," at least in the way they are administered to their recipients, producing side effects that exacerbate the initial problem. Any conclusions about the effectiveness of an intervention must be reached in full knowledge of just how strong the treatment was.

We know of few studies in the human services delivery area in which strength of intervention, including the quality of the service delivered, has been a focus of concern. Yet quality needs to be determined to permit one to distinguish between an intervention that was merely poorly designed and executed and an ineffective intervention type. Studies of the length of exposure to subject matter in reading instruction, for example, found that the amount of instruction correlates positively with achievement in that subject (Bloom 1974). A study of hospitals has shown that more and better services are associated with better outcomes such as shorter hospital stays (Flood *et al.* 1979).

One instance in the criminal justice field in which strength of treatment was explicitly considered is Caplan's work on level of input by street-

workers assigned to juveniles (Caplan 1968). He developed a "Blood, Sweat, and Tears" (BST) scale with six scale points ranging from "minimal worker input" to "individual services" to "the supreme effort." The BST scale showed a positive relationship to outcome in terms of behavior change—up to a point. Caplan's findings indicated that as the boys in his study began to get closer to what would be regarded as a successful outcome, there was a shift toward a negative relationship between BST scale measures and outcomes. Apparently, in the initial stages of intervention a strong treatment is desirable, but as a boy progresses, the street-worker's level of involvement needs to be decreased.

There are not at present any handy ways of quantifying the strengths of various interventions; Caplan's is the only scale of its kind we have been able to locate. Probably, there will be little progress toward quantifying strength of treatment until those involved in planning it become accustomed to thinking in terms of treatment strength. Whatever is possible should be done to foster such thinking.

INTEGRITY OF INTERVENTION

A conceptual distinction can be made between the strength and the integrity of intervention, although after the fact they amount to the same thing. Once again, the medical analogy of a drug treatment is useful. Integrity of treatment refers to the fidelity with which a treatment plan, however strong or weak, is carried out. Thus the unwitting substitution of a drug of lower strength, the use of an adulterated or impure drug, and the failure of the patient to take a full dose of the medication would all threaten the integrity of what otherwise would have been a good treatment plan. Similarly, in a rehabilitation study there might be reason to suppose that for a certain subset of offenders five vocational training classes per week for one year would be a fairly strong intervention. However, if the instructors were poorly trained or unmotivated, if the classes were often not held, or if during the course of intervention the mode of training were switched, the integrity of what might have been a good plan would have been destroyed.

Maintaining the integrity of an intervention usually requires a specific set of mechanisms for measuring the implementation of the program and provision for continuous monitoring. In order to maximize integrity of intervention, the intervention must be well defined, so that standards of judgment can be applied, and, at any sign of deviation from those standards, there must be provision for a corrective action. When the intervention has been completed, it should be possible to make a good estimate of the degree to which the planned intervention was carried out. Results ob-

tained in a test of the intervention must then be interpreted in light of the achieved integrity of the intervention. Krisberg (1980), in a discussion of process evaluation of crime and delinquency programs, presents a useful framework for assessing various aspects of program implementation.

In their review of problems of integrity in rehabilitative efforts, Sechrest and Redner (1979) concluded that there are strong reasons to doubt the integrity of a high proportion of rehabilitation interventions. Quay (1977) virtually demolished any claim that the widely cited test of group counseling with prisoners (Kassebaum *et al.* 1971) should be taken seriously as a test of an intervention of any worth. Even worse in many respects is the discovery that most interventions are so poorly documented that one cannot even determine what was supposed to have happened, let alone whether it was done well.

Klein's (1979) review of deinstitutionalization and diversion programs is particularly instructive. Major efforts to deinstitutionalize delinquents and to divert other offenders from the justice system have been undertaken with much publicity and fanfare. In some cases the programs have been pronounced highly successful. Yet Klein shows that neither diversion nor deinstitutionalization of delinquents has ever been effectively implemented, and pronouncements of success result from corruptions of either programs or data. What is even more remarkable is that both kinds of programs had good rationales and were manifestations of powerful social movements. Nonetheless, there were major impediments to proper implementation of the programs: insufficiently developed rationales for specific programs; inappropriately selected client groups; insufficient and narrowly conceived social services and treatment strategies; professional resistance; and placement of programs in inappropriate settings.

What actually happened, according to Klein, is that the theoretical rationales available for program development were not adequately exploited, so that programs were vague, inconsistent, and misdirected. The definitions of clients to be served were so poorly drawn that many youths who should not even have been in the juvenile justice system were counted as clients, in part because their inclusion led to higher success rates for programs with very minor offenders; in some instances the definition of eligibles was so broadened that services were seriously diluted. No comprehensive service-treatment plans were developed, and the focus of most efforts was on individual counseling. In any case, large numbers of youths received no services at all, and many service plans were never carried out. There was a great deal of professional resistance to deinstitutionalization programs by those who wished to maintain control over offenders (judges and correctional staffs), and diversion programs were often co-opted, principally by the police. Finally, programs were often located in com-

munities where implementation of these policies was already under way and where successful but spurious results were inevitable. Klein concludes that the net results of deinstitutionalization and diversion programs may have been that new stigma were substituted for old; e.g., youths gained the new label of welfare case to replace the old label of delinquent. And the net of social control was widened, so that more children than ever came under the purview of governmental agencies. Klein asserts that no conclusions should be drawn about effects or effectiveness of deinstitutionalization or diversion programs because program activities do not implement and embody program rationales: they fail the test of program integrity.

Another example of a relationship between program implementation and program outcome is to be found in the evaluation of the Cities in Schools program (Murray 1980). This program was devised to improve the behavior and school performance of inner-city high school youths through counseling and an improvement in delivery and integration of community services to the youths and their families through the schools. The program was evaluated in three cities, and the outcomes were fairly good in one city (Indianapolis) and absent or even negative in the other two (New York and Atlanta). The evaluators say, "The results it (Indianapolis) achieved are not inexplicable; on the contrary, it happens that the program that achieved the most positive results is also the program that most systematically operationalized the objectives of the program" (Murray 1980, p. 86). The differences between cities were not attributable to a lack of effort in New York and Atlanta. Indeed, the authors conclude, "*If the response in New York and Atlanta is simply to try harder, the essential point will have been missed*" (emphasis provided in the original). The program works best when it is most thoroughly implemented.

Awareness of the problems of maintaining program quality and integrity in the field is growing in several service fields of research, including education, medicine, and mental health. If it is difficult to ensure implementation of and adherence to a program's goals and core elements in the fairly special circumstances of a research project, then the problems in maintaining program integrity when new programs are adopted in a general service setting are sure to be magnified.

An instructive case of the failure to maintain a program's essence following its transition from an experimental, university-run and university-monitored demonstration project to an established program administered by a local county agency is provided by Rappaport *et al.* (1979). Their Adolescent Diversion project employed carefully supervised volunteer student counselors to work with delinquent youths who normally would have been referred for adjudication. The program sought to provide

a form of social advocacy for the youths as a way of helping them stay out of trouble with the law. A number of careful process and outcome measures indicated that the program was quite successful, and when funding for the demonstration program dried up, an arrangement was made to transfer it to a local agency. Four years later the original investigators reexamined the program to see how it was being operated. Officially, the program was functioning well, operating at full capacity, and enjoying wide support—including that of the police. Yet the essence of the program had been lost. Under pressure from a newly elected judge, the police were less and less inclined to refer youths for whom a court petition was imminent; instead, they referred youths who would previously merely have been warned and released. The program was also receiving more and more referrals from mental health agencies and schools, with the result that clients' problems tended to be problems of mental health adjustment for which the original program was neither designed nor tested. In large part the changes grew out of pressures to maintain case loads at a high level and to provide sufficient volunteer positions for all the university students who wanted to earn credit for doing such work. The original investigators had hoped they were changing the juvenile justice system so that diversion of a certain type of offender to the program would become a normal procedure for the police; instead, they found that the organizational maintenance pressures and system needs led to preservation of the form of the program but transformation of its essence. As Rappaport *et al.* (1979, p. 125) observed somewhat ruefully, there is a difference between "manifest" and "true" adoption of a program; ". . . a successful demonstration project is not enough to create genuine systems change, and program adoption does not necessarily mean that systems change has been created."

WHEN IS TREATMENT BEST GIVEN?: THE TIMING OF INTERVENTIONS

For many reasons it would seem that interventions might be more effective at some points in an offender's life than at others. A common recommendation, perhaps the only one with a clear rationale, is that intervention should be "early." There is, however, a surprising paucity of readily interpretable data on the timing of interventions. As usual, it is easier to raise questions than to provide answers. The issue of timing of interventions hinges on two conceptually distinct, if empirically related, aspects of criminal careers: the age of the offender and the stage in his or her criminal career. Since crime is disproportionately an activity of the young,

it is difficult to separate these aspects completely, but they are separable at least in principle and probably to some extent in program development.

DISTINGUISHING BETWEEN PREVENTION AND REHABILITATION

A recommendation for early intervention is likely to raise questions concerning the distinction between efforts to prevent crime and efforts to rehabilitate youthful perpetrators of minor offenses. It is probably more fruitful, however, to think of prevention and rehabilitation as part of a continuum rather than as discrete or competing strategies. The common distinction in the health fields of primary, secondary, and tertiary prevention (Bolman 1969, p. 208) is probably applicable:

Primary prevention attempts to prevent a disorder from occurring. Secondary prevention attempts to identify and treat at the earliest possible moment so as to reduce the length and severity of disorder. Tertiary prevention attempts to reduce to a minimum the degree of handicap or impairment that results from a disorder that has already occurred. From the standpoint of the community, these distinctions are equivalent to reducing incidence, prevalence and extent of disability, respectively.

In the context of criminal behavior, primary prevention would include programs for the improvement of job, housing, and educational opportunities for a community. Secondary prevention would be typically illustrated by diversion programs for first-offense juveniles. Tertiary prevention—which might better be called treatment to prevent a recurrence of the behavior—would include therapy and training for more chronic or serious offenders.

Bloom (1968) has facilitated understanding of prevention efforts by providing a typology of primary and secondary interventions. "Community-wide" programs affect, or at least have the potential to affect, all members of a community. Improved street lighting and employment opportunities would be examples of community-wide interventions. "Milestone" programs are those that are used routinely with all persons as they pass through a particular period in their lives. A junior high school drug education program would exemplify a milestone intervention. Finally, "high-risk" programs identify individuals who are particularly vulnerable to the development of undesirable behavior patterns and provide interventions designed to interrupt that process. A program to divert youthful offenders to family counseling services could be considered a high-risk program.

Each of the three approaches to prevention described by Bloom (1968) has strengths and liabilities. High-risk programs can be the most focused

and efficient. They address only those people believed to especially need the attention. But one must be sure to identify the high-risk cases accurately, and one must consider that the very process of identifying high-risk groups, and thus labeling the group members, may make the prevention worse than the problem. In determining the acceptability of a high-risk program, one must also weigh the degree to which client participation is voluntary and the costs of overpredicting and underpredicting the phenomenon. For example, it is standard operating procedure to place drops of silver nitrate into the eyes of all newborn infants to prevent blindness from congenital gonorrhea. This condition, however, affects only one in several thousand babies. There are thousands of "false positives" for every correct prediction of blindness. Yet most would find this entirely acceptable, since the cost to the overpredicted babies apparently is nonexistent and the cost to a baby who was erroneously predicted not to need the drug would be great. The difficulty with this analogy in the context of criminal justice is, of course, that the interventions planned for high-risk populations tend to be much more intrusive than a few drops of silver nitrate in the eye. High-risk interventions can also have boomerang effects. It has been suggested, for example, that the currently notorious Scared Straight program actually increases criminal participation for youths not yet much involved in criminal activity (e.g., see Finckenauer 1979). Such an effect is made likely by the inadequate specification of the factors that contribute to the definition of the "at risk" population.

Community-wide and milestone programs avoid the problems of prediction and labeling, since no one is singled out as being particularly in need. The program is provided for all, even those who have no need for it. The disadvantage of these approaches is that because they include everyone they are likely to be more expensive. In addition, some programs of an educational nature may have the paradoxical effect of increasing the risks in some participants for behaviors the programs are designed to prevent, such as sometimes is alleged for drug and sex education programs.

There does not appear to be any single point in the array of services that might be provided at which a clear distinction between prevention and rehabilitation can be made. An intervention (e.g., counseling) with a 22-year-old first offender who committed a robbery would certainly be considered rehabilitative rather than preventive, but with an 11-year-old boy who took money from a schoolmate by force that same counseling might be considered rehabilitative or preventive, depending on how the youth's behavior is defined and handled by those who deal with him. On the continuum between prevention and rehabilitation, the choice of label for an intervention is often a matter of preference rather than substance.

WHAT IS AN INTERVENTION?

Much confusion over such issues as labeling and the wisdom of early intervention may have arisen out of a failure to define "intervention" explicitly. Consider, for example, an instance in which two youths are caught shoplifting small items from a local drugstore. Some labeling theorists have recommended that the best response to this and most minor juvenile misbehavior is "judicious nonintervention" on the part of the juvenile court. But prior to formal adjudication there is a wide array of reactions to such behavior. The shopkeeper or salesperson may apprehend the youths, demand their immediate return of the goods, and soundly lecture them, may detain them and call their parents, or may call a police officer. The officer may demand they return the stolen goods and lecture them, may "arrest" the youths and take them to the station for a warning and release, may call their parents to the station, may book the youths for shoplifting but refer them to a police diversion program, or may arrest them and refer them to court. A court intake officer, in turn, prior to adjudication may release the youths without any determination of guilt, may refer them to a variety of social service agencies, may put them on informal probation, or may send them to a special youth program. Some of these reactions to the shoplifting are intended merely to deter recurrence of such behavior; others involve a planned activity or program. At what point has there been an intervention? At what point could the intervention be defined as rehabilitation? At what point, if any, does labeling occur? The panel's position is that it is more useful to think in terms of specific types and degrees of intervention than to try to define some point that demarks a boundary between intervention and nonintervention.

EARLY INTERVENTION

Early intervention may refer either to interventions at earlier ages or to interventions at earlier stages in budding patterns of delinquency or criminality. One might advocate some sort of planned action at the first offense presaging further delinquency, one might urge intervention at the first offense at some threshold degree of seriousness, whatever the offense number, or one might advocate intervention with youngsters appearing to be at high risk for later delinquency, even if the behavior triggering the action was not itself delinquent.

The earlier the decision to take some action, the greater the risk of widening the net of social control and needlessly spending limited financial resources. Most youngsters who display behaviors indicative of the probability of later delinquency do not develop patterns of consistent

delinquent behavior, and so there is no way to predict with accuracy which individuals will persist, and there is apparently no point in the individual criminal's career at which he or she is more likely to commit a violent crime (Hamparian *et al.* 1978). On the other hand, it may also be that the earlier the intervention, the less serious it needs to be and the less stigmatization it will lead to. A program designed to reduce truancy with 6- to 8-year-olds, for example, may require only some problem-solving sessions with teacher and family, may not at all need to stigmatize the youngster as "predelinquent," since school attendance is legally required, and can be considered desirable in its own right. Since Robins and Wish (1980) found truancy at this early age to be strongly associated with later delinquency, intervention may have a substantial preventive effect. Police counseling with juveniles and their families is less restrictive and less stigmatizing than later adjudication and probation. But minimizing intervention may diminish respect for the law and the deterrent effects of enforcement efforts.

In fact, we do not know how and when to intervene. The various theories of crime and corrections suggest divergent reactions in part because they focus on different offenses and offenders and propose different interventions. Labeling theory focuses on the role of the criminal justice system in defining and "creating" crime and on the juvenile offender. It argues that since most youth crime is minor, does not persist, and is widespread and since formal court processing appears likely to stigmatize offenders and foster criminal careers, most youthful offenses are best ignored or dealt with informally. Formal intervention, particularly when coerced, is more likely to be harmful than helpful and should be avoided or minimized; it should occur "later" rather than "sooner," although there is no indication just what should occur and when. Klein's review (in this volume) of the evidence for a labeling effect found some meager but suggestive support for the proposition that "early sanctioning seems to exacerbate rather than discourage delinquent self image and behavior." Although the effects are not strong, they are consistently in the direction that would suggest a policy of avoiding rather than imposing early sanctions on all but serious offenders.

From the perspectives of social learning and control theories, however, earlier intervention would be more effective than later intervention. Control theory suggests that all persons are deterred from crime by bonds to conventional society. These bonds are not likely to develop if ignored, and so there is a need for a more active effort to reattach the offender to conventional significant others through positive reinforcement of conventional commitments and involvement in prosocial groups and activities in order to provide him or her with a stake in conformity. According to social

learning theory, people repeat behavior that is gratifying and desist from that which is not gratifying, and behavior that is punished will not cease unless an alternative and more gratifying course of conduct is available. Thus to eliminate criminal behavior, punishment alone is insufficient; alternative opportunities and reinforcement for alternative desirable behavior, particularly through restructuring the interpersonal environment, are needed. While apparently theoretically sound, an emphasis on a more positive "helpful" early intervention approach raises several problems: those of effectiveness, prediction, and coercion.

Early intervention programs assume that the intervention will be effective in reducing delinquent or criminal behavior. Evidence to support that assumption is equivocal; reported successes provide no clear guidelines for program development. Patterson and colleagues (Patterson *et al.* 1972, Patterson and Reid 1973, Patterson 1974) have had some success with an intervention to alter family interaction, but this intervention requires a great deal of family cooperation. Other early intervention programs such as the Cambridge-Sommerville project have proved to have no appreciable short-term benefit and may have had a harmful long-term effect (see McCord 1978 and in this volume).

The economic model of crime suggests that an early sanctioning policy will have deterrent effects, but that suggestion remains to be tested. Others suggest that for sanctions to be effective they probably must be swift and certain, be generalized from the particular act to similar acts, and be matched to the pattern of sanctioning that is meaningful to the recipient. None of these conditions is likely for apprehended offenders (see Klein 1979 and in this volume). Increased intervention with all youthful offenders would be unfeasibly costly and ethically undesirable; a policy of fuller enforcement and graduated, more predictable sanctions, not necessarily involving incarceration, for chronic and/or serious offenders, appears to be feasible to test systematically. More important, perhaps, is a greater investment of imagination in the development and testing of the effectiveness of sanctions that are likely to be effective as deterrents but that are not expensive and inhumane. The seemingly sensible sanction of requiring youths caught spray-painting New York City subways to clean painted cars failed because it required expensive supervision to keep the youths working and because it taught them a great deal of paint technology that got translated into more effective spray-painting (Glazer 1979). Finding the right sanctions may not be at all simple.

THE SUPPRESSION EFFECT AND DELINQUENT BEHAVIOR

Evidence that institutionalization or substantial restriction on freedom has a suppression effect on the delinquent activity of chronically delin-

quent youths has been reported by Empey and Erickson (1972) but was little noticed. More recently, a report on the Unified Delinquency Intervention Services (UDIS) program (Murray *et al.* 1978) also found evidence of a suppression effect. Their report seems to indicate that the rate at which a group of highly active delinquent youngsters committed delinquent acts was reduced dramatically by a fairly sharp and distinct intervention that seemed to involve some form of restriction on freedom. Neither the length (which generally was a period of several months) nor the severity of restriction had any effect on the outcome, a finding that was interpreted to mean that the effective aspect of the treatment was the signal to the youths that their behaviors were unacceptable and were going to be met with sanctions. The UDIS treatment thus might be regarded as going beyond a mere "slap on the wrist" (Klein, in this volume).

The controversy surrounding the UDIS report stems from the fact that the delinquents taken into the study and its various programs were those who had had high rates of offending immediately prior to getting into the study. It has been charged therefore that the study capitalizes on a regression artifact, i.e., that the delinquents would have shown lower rates of offending even if they had not been involved in any treatment program at all (McCleary *et al.* 1979). The authors of the original report believe, on the other hand, that the evidence supports the notion that the high-rate offenders were on an upwardly spiraling offense rate that would not have declined spontaneously for purely statistical reasons (Murray and Cox 1979).

The controversy is not easily resolved. That a statistical artifact *could* explain the findings does not prove that it in fact does. Certainly, some of the data are quite consistent with the idea of a regression artifact, but other data are not. For example, postintervention delinquency rates are lower than preintervention rates for youths of the same age, and the degree of reduction is nearly independent of prior offense rates. But a serious problem in interpreting the significance of the UDIS study arises from the fact that several treatment groups seemed to show about the same degree of reduction in rate of offending. The groups and the treatments involved were so diverse that it is difficult to know to what one should attribute the effect. The treatments themselves were not described in sufficient detail to permit replication, and the only common element seems to have been that the youths involved were removed from their normal milieu and restricted in their freedom of movement for a time.

The only immediate resolution to the UDIS and suppression effect debate, the panel believes, is to avoid the temptation to reach any conclusion at all on the basis of either the report or the criticisms of it. It is rare that a single study provides any definitive conclusions. Rather, with the present state of knowledge, the panel views the UDIS controversy as a

TABLE 4 Age-Specific Uniform Crime Reports Arrests per 100,000 National Population—1970

Offense	Age												
	13-14	15	16	17	18	19	20	21	22	23	24	25-29	30-34
Murder, nonnegligent manslaughter	4	13	20	25	36	36	35	<i>40</i>	35	37	38	31	24
Forcible rape	12	32	43	54	62	65	61	60	54	53	51	36	23
Robbery	164	274	340	373	393	<i>394</i>	358	346	293	250	250	154	82
Aggravated assault	109	189	243	272	309	317	320	<i>347</i>	328	316	<i>355</i>	284	240
Burglary	979	979	<i>1463</i>	1302	1176	968	788	697	585	527	505	320	191
Larceny over \$50	2178	<i>2741</i>	<i>2740</i>	2408	2183	1788	1460	1309	1100	953	936	631	463
Auto theft	397	898	965	759	556	436	344	295	236	197	193	119	69
Vandalism	570	<i>613</i>	514	375	238	191	141	134	111	76	97	69	51
Narcotic drug laws	215	665	1169	1585	1971	<i>2073</i>	1187	1763	1447	1199	1039	587	312

Note: Modified from a table presented by Greenberg (1977) based on FBI arrest counts and 1970 census data. Because not all police agencies are included in the FBI's Uniform Crime Reports system, age trends rather than absolute levels of these rates may be most meaningful. Peak rates are in italics.

useful starting place for further research on the suppression effect of intervention. What is needed now in this area is a more careful link to appropriate theory and a series of carefully planned and executed randomized experiments.

AGE, CRIME, AND INTERVENTION POLICY

Although it is well known that the young commit a disproportionately large share of crime, including serious offenses, little attention has been focused on analyzing the relationship of age and crime and considering the implications of the findings. In 1975 the male population between 15 and 20 years of age represented 8.5 percent of the population aged 15 and older but accounted for 45 percent of all arrests for FBI index crimes, 35 percent of all arrests for FBI-classified violent crimes, and 50 percent of all drug law arrests (Zimring 1978, pp. 35-36). Table 4, showing age-specific arrest rates, indicates that the age pattern for different types of crime varies but that "in large measure America's crime problem is a youth problem and vice versa" (Zimring 1978, p. 36). Vandalism arrests peak at age 15; the peak years for arrests for burglary, auto theft, and larceny occur during midadolescence and then drop rapidly. There is a different pattern for violent crimes: robbery, rape, and aggravated assault peak at about age 18 and decline more slowly.

The study by Wolfgang *et al.* (1972) of 9,945 boys born in 1945 who lived in Philadelphia at least from their tenth through their eighteenth birthdays supports these national statistics. They found that the rate of first arrest climbs steeply for boys from both lower and middle socioeconomic status census tracts from ages 13 through 16, peaks at age 16, and then drops off sharply. By age 18, one third of all boys in the cohort had acquired an arrest record.

Official arrest statistics vastly understate the extent of youthful criminal behavior; self-report studies indicate how much more widespread several types of offenses are. Gottfredson (in this volume), recalculating Gold and Reimer's (1975) data, found that juveniles 13 through 16 years of age committed 12 times as many robberies and 3 times as many burglaries as one would have concluded by knowing only how often youths in this age bracket were arrested. The exploratory study of Petersilia *et al.* (1978) on career criminals found that according to the retrospective self-reports of their nonrandom sample of 49 chronic felons, criminal activity dropped off sharply with age, from more than three serious offenses per month of freedom as juveniles to one serious crime every other month while free as adults.

Comprehensive explanations of the relationship of age to rates of crime

for different types of offenses are few. Efforts to separate age, cohort, time effects, maturational processes, and developmental factors and other structural variables have been limited.

Drawing on both strain and control theories, Greenberg (1977) argues that the high rate of juvenile crime results from several structural factors peculiar to juveniles, rather than age *per se*. These factors include exclusion from the world of work, which limits income desired for participation in peer group activities; exaggerated peer influence; lack of autonomy, particularly in school; low social status; anxiety over achievement of the traditional male role; and institutionalized leniency based on the belief in the reduced responsibility of youth. Ellis (1978), on the other hand, explains the sharp increase in crime rates among adolescent males largely in terms of increases in the production of androgens.

The implications of both explanations of youth crime for a crime reduction strategy are more similar than one might initially suppose. Greenberg argues that delinquency reduction should focus principally on primary prevention, through alteration of the educational and occupational structures, and deterrence, via more severe sanctions, particularly for those under age 16. Ellis's findings regarding naturally occurring hormonal changes in adolescent males also suggest social reactions, including educational and work programs designed to provide young men with conventionally acceptable ways to fulfill the male role.

Another difference between adolescent and adult crime is the fact that most juvenile delinquency occurs in groups (see Erickson and Jensen 1977). This fact has been largely ignored, and yet the group aspect of delinquency has important implications for the timing and nature of an intervention strategy geared to youths (as well as for the way crimes are counted) (Reiss 1980, Zimring 1979). It suggests the need to distinguish between the peer-oriented youthful offender, including but not limited to the gang member, and the more individualistic or isolated delinquent and to design different intervention strategies for each. The Silverlake Experiment (Empey and Lubeck 1971) found that peer-group-oriented, chronically delinquent boys were more responsive to treatment using guided group interaction techniques (which made the group the object and mechanism of change) than were delinquents who were loners or less peer-group-oriented.

RESEARCH IMPLICATIONS OF TIMING ISSUES

The matter of age permeates the juvenile justice system and its interface with the criminal justice system. The juvenile court was created out of a desire to mitigate the harsh treatment of youthful offenders and recogni-

tion of the need to assist those who are regarded as less than fully responsible for their acts. Today the "omnibus theory of delinquency" (Zimring 1978), which lies at the heart of the juvenile court, and the rehabilitation ideal on which it rests are being challenged and are undergoing change.

The policy options in regard to those changes are limited and unsatisfactory, however; those adopted in practice rarely rest on solid research evidence. Among the principal trends in juvenile justice is the adoption of the four "d's," decriminalization, diversion, deinstitutionalization, and due process (Empey 1978), indicating an emphasis on a hands-off policy, particularly in the treatment of minor and status offenders. There is a fifth "d" among the trends: deterrence targeted principally at serious offenders, through the implementation of harsher sanctions by the juvenile court, more frequent waiver of youthful offenders to trial in criminal court, and the lowering of the age of majority so that more and more youths 16 to 18 years old are treated as adults. The extent of actual implementation and the outcomes of these "reforms" are as yet unknown and merit further study. There are indications that diversion and deinstitutionalization have not been implemented with integrity (Klein 1979) and have led to undesirable unanticipated consequences, including widening of the net of social control and relabeling of youths caught in the system. Further research is needed on the effects of the implementation of more severe sanctions, including studies of the interface between the juvenile and the criminal courts, the disparities between them in the treatment of youthful offenders of the same age, and the effects of these treatment differences on offender outcomes.

To know better when to intervene, further knowledge is needed about criminal career patterns, including the variables related to and the situational antecedents of crime; patterns of entry into criminal activities; offenders' responses to various and differently timed interventions; and factors related to desistance. Research now focuses on the failures, measured by recidivism, rather than on understanding the factors leading to termination of criminal activities and on ways to accelerate or produce desistance.

The study of criminal careers, particularly through the use of longitudinal research, is important for increasing the accuracy of predictions of criminality; better prediction is a necessary precursor of increased efforts at early intervention. To learn more about criminal careers, long-term follow-up studies of several different early and/or intensive intervention programs are needed. Very few studies have done long-term follow-ups of experimental and control subjects; few have employed postprogram outcome measures other than (or in addition to) criminal recidivism. The assumption is that if there are no noticeable or lasting short-term out-

comes, long-term effects are unlikely. But one long-term follow-up study, McCord's examination of the effects of the Cambridge-Somerville program 30 years later (McCord 1978 and in this volume), presents disturbing findings indicating that even though no statistically significant short-term effects were reported in the first report (Powers and Witmer 1951), the program had harmful long-term effects. Similar efforts to locate program and control subjects and to carefully assess long-term program effects with the use of a variety of outcome measures, by studying those few intervention programs for which sufficient data are available regarding participants' backgrounds and program processes, would be highly desirable, although difficult and costly to carry out.

As was previously noted, controversy surrounds the finding of a suppression effect resulting from institutionalization or restriction of the activities of highly delinquent youthful offenders. It is desirable therefore, given these suggestive but inconclusive findings, to carry out a series of carefully designed experiments in order to clarify the characteristics of the offender population, the nature of the intervention, and the other conditions associated with any suppression effects.

LEGAL AND ETHICAL ISSUES

In an important sense, everything currently being done in the name of offender rehabilitation—including doing nothing at all—is experimental, in that there is uncertainty about the outcome. Even "standard" correctional practices such as time off for good behavior and parole have not been subject to the kinds of evaluations that could lead us to specify their effects with confidence.

The panel agrees with Shapard (1979) that "a good deal of clarity may be gained by recognizing that the experimental nature of an activity has primarily to do with the perceptions and motivations of the experimenter, and very little to do with the consequences of that activity to human subjects." The focus of ethical concern is better placed on the activities themselves than on their "experimental" nature, lest the only difference between an "experimental" innovation and a simple change in policy be that the former is characterized by open-mindedness about results and the latter is accompanied by unjustified self-confidence. "It is not apparent," Shapard (1979) notes, "that the mere labeling of a treatment as experimental should invoke standards of ethics different from those applicable to policy formulation in general." Indeed, if more rigorous ethical standards are invoked in formulating rehabilitative experiments than in simply implementing rehabilitative procedures in the name of policy, one

result might be that "non-consensual treatments that should be evaluated carefully will instead be labeled policy, and poorly evaluated."

Legal limitations on correctional research and practice derive from several sources (Winick, in this volume). Statutory law may limit correctional intervention, such as the 1974 California statute allowing mentally competent prisoners to refuse such "organic therapies" as psychosurgery and shock therapy. Regulatory law promulgated by a federal or state agency may set conditions on rehabilitation, such as the 1978 Department of Health, Education, and Welfare Guidelines for Research Involving Prisoners, which specify the necessity of institutional review boards. International law, such as the Nuremberg Code of 1947, may also prohibit certain experimental practices. Finally, judicial limits may be placed on correctional research and practice by the invocation of principles of tort law regarding negligence and malpractice and of constitutional law, particularly the First Amendment "right to mentation," the right of privacy, the right against cruel and unusual punishment, and various rights to due process.

Winick (in this volume) states that the position of a rehabilitative technique on three key dimensions appears to determine whether legal constraints will be brought to bear against it. The dimensions are (1) the extent of any physical or mental intrusion accompanying application of the technique; (2) the nature, extent, and duration of its effects; and (3) the extent to which these effects may be avoided or resisted by unwilling subjects. Surgical treatments would obviously hold down one end of the continuum, and verbal therapies the other. Behavioral programs such as token economies are at a midpoint in the continuum. "Based on these factors, it can be seen that most of the rehabilitative approaches utilized for prisoners or offenders placed in alternative community settings—educational or vocational programs, counseling, individual or group psychotherapy—fall along the lower end of the continuum" (Winick, in this volume).

Particularly relevant in the context of research on extrainstitutional correctional programs is the legal issue of whether offenders in such programs can be returned to prison (or can be sent to prison for the first time, in the case of diversion programs) if they "fail" in the community. Does failure to show up for the second appointment of a one-year diversionary sentence to outpatient psychotherapy justify the offender's being "transferred" to prison to complete his or her sentence? If so, in what sense can the rehabilitative treatment be said to be "voluntary"? One could claim that community treatment is voluntary because the offender is free to "choose" between it and imprisonment for the same period of time. "The mere offering of a new alternative, without prejudice to existing

alternatives, can hardly be cause for complaint" (Shapard 1979). Given the conditions of many American prisons, however, the volitional nature of extrainstitutional treatment is unlikely to be perceived as such by the persons experiencing it. In light of recent court decisions holding that parole revocation cannot be accomplished without at least a minimal due process hearing, it is unlikely that the judiciary will view community-to-prison transfer as merely an administrative matter. "Failure" may have to be demonstrated to some legal standard of proof. Whereas neglecting to show up for outpatient treatment or "eloping" from a community treatment facility may be considered *prima facie* evidence of failure, failure to achieve treatment goals (e.g., learning a trade) may be much more difficult to document.

In regard to community as well as institutional research in rehabilitation, the panel was pleased to note that both Shapard (1979) and Winick (in this volume) concluded that randomized experimentation, which by definition is "arbitrary" in its selection of experimental and control subjects, does not violate such legal principles as equal protection. A California appellate court, for example, upheld a study in which persons found guilty of driving under the influence of alcohol in certain counties were subject to suspension of their driver's licenses, while those in other counties were sent to alcoholism treatment programs and allowed to retain their licenses. The court explicitly rejected "the contention that the Legislature if it wishes to conduct an experimental program must conduct it and fund it in 58 counties or fail in its purpose" (*McGlothen v. Department of Vehicles*, 1977, p. 177). It found "a rational and even compelling reason for legislation for a demonstration project, which by its nature cannot operate uniformly or be established generally throughout the state" (p. 181).

Shapard (1979) states that randomized experimentation does not affront the "substance" of justice, but only the "appearance" of justice. The only real dilemma for what we have termed "formal policy experiments," then, may be an ironic tension between the appearance and the substance of justice. In this regard, one should perhaps ponder whether experiments that evidence rigorous, objective evaluation might really be more just than experiments implemented without careful attention to the prospect of producing valid, policy-relevant information (Shapard 1979).

4 A Research Model and An Evaluation Strategy

The criminal justice system is currently creating a variety of new programs but gaining little knowledge from them. The gap between programs and knowledge arises in part because the search for "successful" programs is guided by a "strategy of activity," characterized by opportunism and guesswork and a tendency to treat new programs as proven "reforms," rather than by a "strategy of search" (Empey 1967, pp. 7-8) characterized by a skeptical and experimental approach. Furthermore, there is a lack of consistent, theory-based, and cumulative programs of research.

This chapter suggests ways to rectify these shortcomings and more effectively bridge the gap between programs and knowledge. More effective linkage between programs and knowledge must occur if policy is to be based on scientific findings. First, we give a model for field experimentation in which the intervention and its evaluation are jointly developed as a single, coordinated activity designed to test one set of explicitly detailed theoretical propositions, and we note some of the methodological and practical problems of such an approach. Second, we outline a strategy for incremental development and evaluation of programs that maximizes the interplay between research results and program features and their design. The strategy, succession evaluation, is meant to preclude the potential waste of funds and physical and intellectual effort that is so frequently risked in one-time evaluations of static programs.

ELEMENTS OF THE MODEL

Moving from a vague plan to an actual field experiment that is implemented and evaluated is an arduous task that requires the collabora-

tion of practitioners and researchers. Although procedures will vary depending on the nature of the project, a general working model consisting of several elements can guide such efforts. To many social scientists the suggested working model will appear familiar or "obvious"; yet, although the model frequently receives lip service, an examination of the criminal justice literature indicates that the number of studies actually implementing or adhering to it is very small. The model consists of six interlocking elements: definition of project goals, selection of the target population, theoretical statement of the problem, development of an intervention strategy, development of a research strategy, and assessment of implications (for a fuller discussion of this model, see Empey (1980)—from which much of the material in this section is drawn).

DEFINITION OF PROJECT GOALS

In developing a new project, the first step is to define its goals clearly. The goals are of two types: those defining the objectives of the program or innovation and those indicating the questions to be addressed by research on the program. The first are the province of program administrators and practitioners, and the latter, that of researchers. Too often, only the former are the object of attention. Program personnel, convinced that their innovative program will work, perceive little need to evaluate its efficacy. Indeed, program personnel often view program evaluation as a threat to their beliefs and their jobs. With increasing frequency, funding agencies stipulate that a new program must be evaluated; nevertheless, the requirement for an evaluation is honored more in form than substance. An altered perspective—one that questions rather than assumes that a program will work—is necessary. It is essential to assume from the outset of a project that the pursuit of knowledge will be a high priority and that issues related to the planning for and financing of good research will be as important as those involved in the development of good programs. Achieving these dual program and research goals requires true collaboration between researchers and practitioners; this, in turn, necessitates acknowledgment of the value of research as a project goal, its incorporation as a legitimate part of the organizational structure, and adequate financial support to ensure its completion.

The planning required in designing good research and that required in devising good programs do not differ greatly: in each instance the basic assumptions must be clarified, the range of alternative methods used to attain goals must be examined, and the choices among these alternatives must be made. Program goals must include consideration of not only final

goals (e.g., reduction in recidivism) but also intermediate goals or means of attaining the final goal(s). To say that a program's objective is "to divert serious delinquents," "provide restitution to offenders," or "reduce recidivism" tells little about its substance in theoretical or operational terms. Thus much emphasis must be on specifying the intermediate goals. For example, does the diversion program seek to reduce delinquency by providing legal assistance, family counseling, or job training? Will it divert offenders from the criminal justice system to other community agencies or merely minimize their penetration into the system? How does the program operate? Through which agency or agencies? For which offenders? According to what principles? For how long? If a program is to use its limited resources best, it must have clear goals and priorities to permit reconciliation of competing purposes.

SELECTION OF THE TARGET POPULATION

A program should explicitly define the target population by creating a template for acceptable participants, since the program's substance and operational elements depend on whom it is designed to benefit. This involves decisions with respect to both the offenders' characteristics and offense types. Most programs for chronic juvenile delinquents, for example, assume little offense specialization and select participants from a broad spectrum of youth, principally on the basis of age, sex, and chronicity. Failure to create a program template that attempts to specify appropriate offender background characteristics may undermine program success (Empey and Lubeck 1971). In addition, where programs are more specifically targeted to a particular offender type, a number of choices still must be made. In creating a program for sex offenders, for example, one should determine if it is to include both adults and juveniles and both nuisance offenders (e.g., exhibitionists and voyeurs) and more serious offenders, and, if it is to include the latter, whether both child molesters and rapists should be included. Each of these choices implies different intervention strategies. When program planners begin to address questions of specification of the characteristics of the population for which the program is designed, weighing the advantages and disadvantages of, for example, narrowly delimiting versus including a more heterogeneous population in terms of age and assumed intervention needs, they must confront the complexity of the intervention task and the need to specify goals. If they opt for a wide range in terms of age or offense type, for example, the task becomes more complex, and although the external validity of the study may be increased, internal validity and control over the experiment may be threatened.

THEORETICAL STATEMENT OF THE PROBLEM

By elaborating on the program goals, the statement of program assumptions in theoretical terms can aid decision makers in determining the scope of the program and the parameters of the target population. It also forces the decision maker to pay close attention to research methodology. It is not sufficient to suggest that a diversion program, for example, provide legal assistance to chronic delinquents or that a program for sex offenders provide sex reeducation. It is necessary to make explicit both why and how this should be done.

The first step in making assumptions explicit is the development of a theoretical statement of the problem. What does it assume to be the sources of crime or the bases for conformity? If the assumptions on which the program is being developed are clearly stated, the tasks involved in developing an intervention strategy become more apparent and the intervention strategy that is devised and tested can be reviewed in light of the underlying conceptual framework to see if the assumptions were accurate. Too often, program assessments ask only if the program "worked." If it did not, it is essential to determine whether the failure was due to faulty assumptions or to shortcomings in implementation. If it succeeded by whatever criteria, data on the particular nature of the client population, the program elements, the program setting, and the intervention and its delivery are essential in order to replicate the program.

DEVELOPMENT OF AN INTERVENTION STRATEGY

Once a basic problem is stated in theoretical terms, planners have an explicit foundation on which to build an intervention strategy. This strategy, in turn, will probably be most effective if it is composed of specific statements of two types: a set of intervention principles and a set of operational guidelines.

Intervention Principles

Intervention principles are easily developed if one takes advantage of the fact that an adequate theory of criminality will usually imply a theory of conformity. By examining the converse of one's theory of criminality, one should find a theory of conformity, and thus a set of intervention principles.

Consider an example. Suppose one drew elements or propositions from several theories to create a composite explanation of the criminal behavior

of a target group of chronic, lower-income male delinquents. The propositions of that theory might appear as follows:

1. Poor attachment to conventional institutions leads to a decreased stake in conformity.
2. A decreased stake in conformity leads to a heightened sense of strain.
3. A heightened sense of strain leads to identification with delinquent subculture.
4. Identification with delinquent subculture leads to criminal behavior.

When the converse of this theory is examined, the following premises as a basis for the intervention principles are suggested as guides for program developers and research planners.

1. Strong attachment to conventional institutions leads to an increased stake in conformity.
2. An increased stake in conformity leads to a heightened sense of self-worth.
3. A heightened sense of self-worth leads to identification with conventional norms and peers.
4. Identification with conventional norms and peers leads to law-abiding behavior.

For the purposes of this illustration, both the original explanation for youth crime and the intervention principles are stated in the most parsimonious of terms. When they are being adapted for experimentation, however, they would necessarily be enriched by a longer narrative statement including relevant theories, the research that bears upon them, and how the basic concepts are to be operationalized for the purposes of intervention.

This enrichment permits the use of the intervention principles to direct attention to program objectives of a more positive nature that are very similar to the intermediate program goals previously discussed, instead of directing attention solely to the evils that must be eliminated in the target population, as is so often the case in correctional programs. In our example, program personnel would be charged with improving the institutional ties of delinquent boys to home, school, community, and work, with increasing their stake in conformity by helping them to realize some conventional successes, with heightening their sense of self-worth, and with helping them to associate and to identify more effectively with law-abiding

norms and people. Theoretically, at least, the principles would suggest a general strategy for placing the young target population back on the legally acceptable or noncriminal track leading from childhood to adulthood rather than diverting them further from it. Such a statement of intervention principles serves to clarify both the intervention and the research tasks, since the program is concerned with implementing the principles and the research will be devoted to assessing the success and consequences of the implementation.

Operational Guidelines

The operational guidelines are an extension of the intervention principles. They describe the ways by which those principles could be made operational by answering general questions such as the following: What kind of organization is needed to implement the intervention principles? How should it be structured? What rules should be imposed on program participants? What program components should be included? What are the implications of the proposed organization for its ties with other organizations existing in the community? What training will staff members need? How will program participants who continue to violate the law and/or the program rules be handled? In designing operational guidelines for a program for chronic delinquent males based on our illustrative principles, additional questions include the following: What program elements are most likely to strengthen the attachments and commitments of delinquents to their families, schools, prosocial peers, and communities? What elements are most likely to improve their stakes in conformity? What elements are most likely to weaken their ties to delinquent subculture? In what ways is it necessary to alter current practices in their families, schools, places of employment, and neighborhood institutions?

Attempts to answer these general and specific questions should be made *before* any experiment enters the field; that is, in seeking answers to emergent problems, staff members should look to the intervention principles for guidance and not resort to *ad hoc*, off-the-cuff decision making. In this way, those in charge of the experiment could avoid the kinds of expedient actions that tend to destroy the basic integrity of any experiment.

The content of the operational guidelines will depend in part on the template of characteristics selected for the target population of the program. If it includes only younger delinquents (e.g., 12 to 15 years old), to use a simple example, it is likely to put greater emphasis on program elements that strengthen ties to the family and school; if the program is designed for 17- and 18-year-olds, on the other hand, it is likely to emphasize elements that create new opportunities for vocational training,

provide more supportive work environments, foster employment opportunities, and affect attitudes toward work.

DEVELOPMENT OF A RESEARCH STRATEGY

The next component in the model is a research strategy that seeks to test the same propositions as were used to guide the intervention, preferably through the establishment of the program as an experiment, with those eligible for the program being randomly assigned to the experimental or the control conditions. By designing the program as an experiment in advance, involving both program and research people in the process, the pursuit of both program and research objectives can be greatly facilitated. Researchers and practitioners are in partnership to gather data in three areas of concern. As they implement the program, they can test program assumptions, thereby contributing to the building of a body of theory; test program operation, thereby assuring the integrity of program implementation and adding to our understanding of the change processes in individuals and organizations; and test program outcomes in terms of the fulfillment of intermediate and larger goals.

Tests of Program Assumptions

Too often, researchers who rigorously question the methods used to assess programs fail to clarify or question the underlying theoretical assumptions. Similarly, practitioners are disinclined to question the theoretical bases on which their programs operate. Research testing the theoretical propositions underlying a new program should seek to measure the accuracy of the propositions for the target population in question and propose any needed modifications to the theory.

By testing the assumptions on which the Silverlake experiment was based, for example, Empey and Lubeck (1971, pp. 119-137) found that several were faulty. The hypothesized linkage between social class and delinquency was not found. Identification with delinquent peers and values, although predictive of delinquent behavior as assumed, was less predictive than family disruption, lack of family control, and poor school performance. The experimental program that focused on the creation of a prosocial peer group was more successful with those boys found to be closely tied to the delinquent peer group than with those whose delinquency was rooted in family and school problems. These findings suggest the need to match more closely the personal characteristics of youthful offenders with the specific elements of a program and to develop program elements that strengthen delinquents' ties to family and school. The col-

lection of background and attitude data to test the assumption that identification with delinquent subculture leads to criminal behavior and that identification with a prosocial peer group leads to law-abiding behavior allowed the researchers to suggest further refinement of this theory.

Tests of Program Operation

A second facet of the research strategy involves testing the accuracy of the program description in actuality and the integrity of the implementation of its principles and guidelines. Sound process research of this type is rarely conducted. In most cases, researchers describe the offenders in any program, usually in theoretically irrelevant terms, and then measure what happens to them after they leave it, but they frequently fail to study the character and operation of the program itself. "The mere existence of a treatment says nothing about how well, how often, and to whom it is administered" (Rezmovic 1979, p. 191). Only through substantive knowledge of actual treatment program events and activities does it become possible to distinguish programs that fail in implementation from implemented but ineffectual programs.

Tests of Program Outcomes

Great emphasis in rehabilitation research is placed on the assessment of program outcomes. A variety of problems in research design, outcome measurement, and statistical analysis lead to the frequent failure to fully measure true program effects. These problems will not be reviewed here (see Rezmovic 1979, Sechrest *et al.* 1979), but other important issues, particularly those related to testing causal theory, are often overlooked. From a theoretical standpoint, any measurement of outcomes should be concerned not only with recidivism (or another final goal) but also with the capacity of a program to change relevant intervening variables (or achieve its intermediate goals). The pursuit of theoretically relevant intervening goals, however, always assumes that their realization will somehow reduce recidivism and improve adjustment. This assumption may not be accurate; it needs careful testing.

Furthermore, in interpreting program outcomes, three additional cautions are in order. First, given the tendency of criminal justice practitioners to tamper with the selection process, a fail-safe method of assigning offenders to control and experimental groups and frequent monitoring of the assignments are desirable. In programs designed as alternatives to incarceration, for example, it is necessary to assure that the participants assigned to the program would otherwise have been incarcerated. When

programs accept less serious offenders who otherwise would *not* have been incarcerated, the program's goal (to provide an alternative to incarceration) and integrity are undermined and the validity of the research findings is threatened.

Second, it is necessary to implement outcome measures free from manipulation by program staff. The apparent success of the Community Treatment Program of the California Youth Authority in reducing parole violations, for example, has been interpreted as an artifact of the difference in the ways parole officers supervising experimental and control subjects handled their cases rather than in their clients' behavior (see Lerman 1975, Chapter 4). Making intermediate and final outcome measures explicit at the outset may reduce disagreements about the interpretation of the program evaluations as well as adding to knowledge.

Third, close attention must be given to the way in which program dropouts are handled to avoid biased outcome measures.

ASSESSMENT OF IMPLICATIONS

The final element in the working model involves an assessment of the research findings in terms of the implications for theory, the concerns of policy makers and practitioners, and future research activities. An assessment of the findings in terms of the theoretical assumptions is likely to lead to a reformulation and refinement of both theory and intervention principles. This reformulation should guide the research and practitioner teams in refining their next iteration in a longer-term research strategy and should suggest other lines of programming and inquiry.

Findings should also be examined in terms of their implications for public policy. This includes a benefit-cost analysis or other type of study of the implications for the sponsoring agency. As will be explained in the next section, this six-step process marks one stage in a multistage process of program development and knowledge building. In assessing the implications of this first stage of research in a longer-term process, it is important to inform policy makers of the findings and involve them more actively in the next cycle of program implementation and testing. This involvement will improve the likelihood that as the program develops it will be designed in such a way as to be feasible for larger-scale implementation at a later time.

Finally, the experience should be examined in terms of its implications for the conduct of field research. What ethical, legal, and practical problems affected the activity and how might they be addressed in future endeavors? Close attention should be given to the conditions that permitted or facilitated the implementation of the experimental project as well as

to the conditions that hindered or otherwise affected its completion as initially planned. Although there are many difficulties in mounting field experiments, the growing number of successful randomized experiments indicates that this model is feasible as well as desirable.

A RESEARCH STRATEGY OF SUCCESSION EVALUATION

Effective rehabilitation techniques and interventions can only be produced by comprehensive programs of development and evaluation. One-shot field experiments, while essential, must be embedded in such larger programs, and the research strategy for seeking more effective interventions with offenders must be altered to permit the accumulation of knowledge. The panel believes that the research strategy presented in this section will be more profitable than the pattern of research followed to date.

In general, research to date has selected one type of intervention to be tested from among the myriad of commonsense things that might be done. More often than not the intervention appears to have been selected because it was already being done or was going to be done anyway or because it seemed feasible if not especially powerful. When, as was most often the case, the intervention was shown to be ineffective, it was abandoned forthwith, sometimes being "rediscovered" at a later time, sometimes being forgotten altogether. Rarely have there been any follow-up studies to try to improve interventions that, although appealing, failed or that failed in the main but produced interesting specific effects.

This research pattern, characterized by haphazard choice of intervention as well as by failure to pursue a line of research consistently or systematically, appears to result from the inadequate bases on which most programs are built. This situation, in turn, is a result of funding agency practices as well as the structure and reward systems of the researcher and practitioner communities. Effective models of program development and evaluation have been created in other fields; these models should now be tried in the important area of rehabilitation. Generally, these models are based on existing theory or knowledge and use that theory along with current empirical findings as a guide in the longitudinal development of an intervention.

THE MODEL

Tharp and Gallimore (1979) have described a model for program development and evaluation, which they call succession evaluation, that could

well be a model for the research strategy in offender rehabilitation. It offers an example of a process that is applicable to other content areas and that will illustrate the type of strategy that is lacking in current research on rehabilitation. The model is based on the notion that one-time evaluations of even well-conceived interventions are not adequate for developing solutions to difficult social problems. Rather, multiple research approaches aimed at program development and using different types of methodology, perhaps over the course of years, will be required to reach a satisfactory level of effectiveness. Within this approach the social condition is investigated from many different angles, and failure of one aspect of a program does not necessarily indicate elimination of that aspect, but rather possible refinement and further evaluation. In essence, one begins with the potentially most effective intervention one can devise on the basis of existing theory or empirical results and then tests the intervention, taking the results back to the planning stage to determine what might be done to improve the intervention. For instance, after an initial test of an intervention, one may need to do smaller-scale experiments on specific program elements to determine whether the revised elements can, or should, be incorporated into the program. The program is then redesigned, implemented, and tested again. In an iterative fashion, these developmental cycles are performed until a program is achieving its intended goals or until it seems evident that the goals cannot reasonably be attained.

The detailed experiences of Tharp and Gallimore cannot be recapitulated here, since they spent nearly 10 years in the development of an effective program to teach reading to culturally disadvantaged (by some standards) Hawaiian children. That is a long time to spend on program development, but their Hawaiian children are now reading on a level near the fiftieth percentile by U.S. norms; at the beginning of the program they were below the twentieth percentile. Given the time and money that have been spent in arriving at the equivocal conclusion that offenders cannot be rehabilitated by present means, 10 years would not, in retrospect, seem an inordinately long time to have invested in the production of an even modestly successful rehabilitative program.

The succession evaluation model is outlined in Table 5, taken from Tharp and Gallimore (1979). They point out that the first steps in the development of a program are likely to be based on qualitative, personal ways of knowing, i.e., on knowledge that is a subjective combining of theory, previous research, and values. At that stage the primary concerns about program validity are construct validity (does the idea make sense?) and external validity (is it generalizable?). One goes from the planning step to experimentation in order to determine whether empirical support

TABLE 5 An Evaluation Succession for Program Research and Development

Stages	Stages in Program Element Development	Ways of Knowing	Validity Concerns	Selection Pressures
	Step 1. Initial selection: values, theories, goals, and objectives	Qualitative/personal	Construct and external	Does the idea have potential?
1	Step 2. Treatment, independent variable formation	Experimentation: true or quasi	External-internal or internal-external	Are the relationships of enough magnitude?
2	Step 3. Decision point: review, evaluate, translate; proceed, recycle	Qualitative/personal	Construct and external	Can treatments/independent variables be translated into stable, program element(s)?
3	Step 4. Program element formation	Experimentation: true or quasi	External-internal	Does it work in the setting employed?
	Step 5. Decision point: review, evaluate; proceed, recycle	Qualitative/personal	Constructive and external	Is it worth further work?
	Step 6. Program element implementation	Data guidance	External-internal	Can it be improved with tinkering?
	Step 7. Decision point review, evaluate; proceed	Qualitative/personal	Construct and external	When and if in or out of the program?
	Step 8. Full-scale program element operation	Program evaluation	Internal and conclusion, statistical	Does the program element, with other elements in association, bring benefit?

Source: Tharp and Gallimore (1979), p. 50. Copyright © 1979. Sage Publications, Beverly Hills, Calif. Reprinted by permission.

can be generated in favor of the intervention. Subsequently, one is again at the level of qualitative, personal knowing, the decision at step 3 involving a complex judgment as to whether the tested intervention can be translated into an element in a program. Then the program element is tested in an experimental context, and there may be additional iterations to improve the element or the formation and testing of new elements. The final step, the testing of the full-scale program, is only the final step for one complete cycle of program development, for the outcome of the evaluation may indicate the need for recycling to step 1 to develop new, or improve existing, program elements and ensure their integration into an effective program.

There is an interesting similarity between the succession evaluation model and the evolutionary operation research design. That design enables those actually operating some process, e.g., a manufacturing enterprise, to experiment with factors in the process with the aim of improving operations but at the same time without interfering with satisfactory production (Box and Draper 1969). The design and its analysis capitalize on the fact that in manufacturing and fabricating processes—and by implication in many other processes as well—runs must be made anyway and in large numbers, so that additional costs may be kept low as long as changes are simple and limited to one or two factors. It is, however, possible to run numerous limited experiments over time. One can, then, feed the results back into the system, observe changes, experiment further, and by iterations, improve the process.

IMPLEMENTING THE STRATEGY: A HYPOTHETICAL EXAMPLE

A brief example of how succession evaluation might work in a diversion program for juvenile offenders may facilitate understanding of the processes we have in mind. Diversion programs are based generally on the propositions that most juvenile offenders are worse off the more deeply they penetrate the justice system, that they do not represent a sufficiently serious threat to the community as to require detention, and that they can profit from a variety of services that can be made available in the community. Although there have been claims that diversion programs "work," we know of none that have been shown to be so dependably and substantially successful as to merit recommendations concerning anything further than additional exploration. Claims for success are only modestly documented and presented without consideration of the actual magnitude of the effect achieved. Moreover, once a claim for success has been made, there is little additional published follow-up work on the program. The programs and implementation processes are usually so poorly described

that it is impossible to replicate them elsewhere and test them further. (For a fuller critique of juvenile diversion programs, see Klein (1979).)

Were we to begin the development of a pretrial diversion program with the aim of following the succession evaluation model, we would design the initial diversion program following the steps outlined in the first part of this chapter: specification of the intermediate goal and selection of a target population, elaboration of a careful theoretical statement, and empirical analysis of the problem into a set of intervention principles and operational guidelines, which would suggest effective and legal ways of determining which offenders would be good prospects for a diversion program and the context of the program to be implemented.

Careful specification of those legally eligible for inclusion is important, for the courts are not likely to allow a great deal of leeway in decisions to return some youngsters to the community and send other similar ones into detention. On the other hand, diversion may not be the best disposition for every youngster, and every mistake not only undermines support for the program but also tends to obscure results. One should also consider carefully what services and program elements are actually needed by the target group and how and by whom those services would be provided and operational guidelines developed. One should also have some prior assessment of the quality of services available so that one would know whether there was any reason to expect that the services would be effective. The next step is the development of intervention principles and operational guidelines, including a protocol for selection and processing juveniles through the program, and specification of research guidelines, including effective techniques for monitoring the use of the protocol to make sure it was adhered to and for collecting other process and outcome data. It might be, for instance, that although clear criteria are specified for determining which youthful offenders should simply be dismissed, which placed on probation, and which placed in the program, these criteria are not always followed by court or project personnel, who might have their personal biases or interest in program maintenance (see Klein 1979). In brief, the initial program should be carefully developed and fully documented so that one can be certain what one is testing.

The second stage in the succession evaluation process would be to set up a small-scale experiment, probably in one community, to determine whether the program seemed likely to be effective enough to merit further work. At this stage, in fact, one might test only one segment of the program; e.g., one might confine the initial test to juveniles likely to benefit from special school programs and interventions. The design of the initial experiment should be sufficiently strong to make the case for the effect of the program, although it would not necessarily have to be a very complex true experiment.

If the initial partial test of the intervention seemed promising, further work in developing the program would be justified. The next activities, however, might involve further development of instruments or protocols, e.g., to improve on selection; small-scale experiments on program elements, e.g., comparison of educational enrichment activities A and B for their value in maintaining interest and motivation of children; or work on improving program elements revealed as weak, e.g., ways of getting greater involvement of parents. If the initial test indicated that some youths were not much affected by the intervention, then during this phase of program development, efforts would be made to determine why and to determine whether the program might be modified to be made more effective for that particular group or type or whether a rather different intervention would be required for them.

Ultimately, the intervention would either be abandoned as not sufficiently promising to merit any further development or it would evolve into a program worthy of field testing on a full-blown scale. Such a field test might involve multiple sites, tests of alternative versions of the program, and so on. Although at this stage, given extensive previous development and testing, it is not likely that the outcome of the evaluation would lead to a recommendation for abandonment, it is entirely possible that a field-tested program would produce findings so mixed that the succession evaluation cycle would have to be begun again with new developmental work on parts of the program or with subsets of those exposed to it and not responsive. Certainly, at the stage of field testing considerable emphasis would be placed on determining why certain parts of the program did not work. Among other things, issues of program integrity would come to the fore, especially if there were multiple program sites that were not all under the direct control of the investigators. If it seemed as if the program was not properly implemented in one or more sites, then further efforts would be required to determine how to achieve adequate implementation. An example of such mixed findings is the recent report on *Cities in Schools*, for which results varied markedly across the three sites (Murray 1980).

The type of program development effort recommended here is demanding, offers no quick solutions, and requires a longer-term commitment than is common. Examples of such program development in the real world of offender rehabilitation are rare. Perhaps that is why examples of dependably effective intervention programs are also rare.

EXISTING PROGRAMS USING A STRATEGY SIMILAR TO SUCCESSION EVALUATION

If the Tharp and Gallimore reading program were the only example of successful program development by the iterative, or succession evaluation,

method, it could be ignored as an anomaly. There are, however, other notable examples, both inside and outside the criminal justice field.

Several criminal justice research programs have been consistent with the principal aspects of the succession model. These include the teaching-family group home model implemented as Achievement Place, a community-based treatment facility for delinquent and potentially delinquent youngsters; the program developed by the Oregon Social Learning Institute to modify the behavior of aggressive and delinquent children; and the Adolescent Diversion project. These programs are examples of what more programmatic research in rehabilitation should be like and will serve to illustrate what can be done within the succession evaluation model. Since the succession evaluation model is a process that is in part defined and influenced by the particular interventions evaluated, we can only present examples that illustrate the essence or outlook of the approach we are suggesting.

Programs Outside of Criminal Justice

The remarkably successful children's educational program *Sesame Street* was developed in a way very similar to that proposed by Tharp and Gallimore. A comprehensive study (Ball and Bogatz 1970) of *Sesame Street* concluded that it "achieved high audience appeal in its first year . . . associated with excellent educational impact" (p. 365).¹ This success was achieved by a careful, extensive developmental process that began with an 18-month period for planning and research.

Similar developmental research programs were employed in the production of the Distar programmed educational materials and *The Electric Company*, an educational TV program for older children. In Germany a seemingly effective program for weight loss and control was developed (Streigel and Ferstl 1978) by means of a protracted and systematic developmental research procedure similar to succession evaluation.

Teaching-Family Group Home Model

The development of the teaching-family group home model has occurred in several interactive and overlapping stages. The first stage continued over a period of 6 years and was devoted to research involving the development, testing, and refinement of treatment approaches in a group home in Lawrence, Kansas, called Achievement Place. When the results of the ap-

¹On the other hand, subsequent assessments by Cook *et al.* (1975) argue that *Sesame Street* was not successful in meeting other of its objectives.

proach appeared quite promising (after about 2 years of research), the second stage, involving independent evaluations of the project by the funding agency and outside consultants, began. While research and monitoring continued, the third stage, preparation of project materials for wider dissemination, was initiated. In the fourth stage, special training courses were developed for potential users in state and local agencies.

The current stage involves a number of related activities: replications of the model and their independent evaluation to determine whether the program can be applied by the newly trained "teaching parents," refinement of the training activities, tests of the model in a number of different field settings, and dissemination activities. These later stages of development are a necessary part of the development of most rehabilitation programs, since rehabilitation programs must be applied by personnel in agencies in a variety of settings that may affect the application of the original model.

Oregon Social Learning Institute Program

Another example of a research program utilizing some features of a succession evaluation approach is the work of Patterson and his colleagues at the Oregon Social Learning Institute (Patterson and Brodsky 1966, Patterson and Gullion 1968, Patterson and Reid 1973, Patterson *et al.* 1967, 1968, 1972, Reid and Hendricks 1973, Reid and Patterson 1976). Since 1965, Patterson has been developing and refining a program based on social learning theory, which has achieved substantial improvements in the behavior of young children labeled "conduct problems," principally through interventions with their families in the home setting. The intervention strategy rests on the premise that to change the child's behavior it is necessary to change his or her social environment. Since the family is the central shaper and controller of the behavior of youngsters between 5 and 12 years old, the researchers sought to understand how parent-child interactions fostered the child's aggressive behavior. Patterson developed techniques for parents to use to reduce their child's aggressive behavior, in part through modification of the parents' responses to their child.

During the first 3 years, the researchers developed their basic treatment and assessment technologies, which they tested by using a case study methodology with five families. Moving from the laboratory to a natural setting and from interviewing parents to observing them, the researchers gradually developed seemingly effective intervention techniques as well as a system for observing and recording behavioral events for use by parents in the home, a program for training and monitoring the parent's use of these techniques, and a multicategory coding system for handling the data collected by parents.

Successful outcomes with four of the five families led to a second phase of more stringent testing of the treatment. During the next 4 years, 27 new families with sons labeled "conduct problems" participated in the program. They were followed for a longer period of time and evaluated on new outcome measures, as the researchers lowered the cost per family treated. The nearly 30 percent failure rate led researchers to replicate the study, refine their techniques, and initiate a new line of inquiry, i.e., a reanalysis of existing data to distinguish characteristics of families that had profited from the program from characteristics of those that had not. They found that there were two different types of problem children in the program: "aggressives" and "stealers."

Subsequently, the researchers sought to refine the techniques they used with young stealers, adapt the program for use in a classroom setting, develop a treatment approach appropriate for adolescent stealers and their families, and devise empirical measures to test a theory of juvenile delinquency. Through an iterative process of testing, replicating, and readjusting program components, they developed a program for intervening with families of problem youngsters in their natural setting, which only now is undergoing outside formal evaluation as a demonstration project for possible wider dissemination. Preliminary assessments indicate that this theory-guided research program has resulted in both theoretical advances and the development of materials that help program staff teach parents how to modify their child's problem behavior. Although the criminal justice system has not yet realized a programmatic "payoff" from this investment in research, it appears likely that the intervention program can be "marketed" and widely employed in agencies that have developed, or will develop, programs for family interventions. One wonders what might have been the outcome had this program been faced with a final evaluation after only 2 years and whether the intervention model would have been as promising if it had been turned into a nationally marketed demonstration project after only 3 to 5 years of development and refinement.

The Adolescent Diversion Project

Although the Adolescent Diversion project did not fully follow the succession evaluation model, it resembled that model in some important respects. In particular, the investigators spent a full year developing the program, and they later dismantled it in order to determine the effective elements (see Davidson and Rappaport 1978, Davidson *et al.* 1977, Rappaport *et al.* 1980). The program rested on several assumptions about adolescent offenders and the best approaches to keeping them out of fur-

ther difficulties. First, it was assumed that it would be necessary to intervene relatively early in the process that leads to incarceration but also that there is a considerable danger in overidentifying youths as predelinquent. Second, it was assumed that there were environmental resources in the communities involved that could be tapped if the adolescent had an effective social advocate. Finally, it was assumed that the youths with which the program was to deal had a variety of strengths and resources that would benefit from encouragement and development but that they did not require therapy.

The first year of the program was essentially a pilot study devoted to working out procedures and agreements with the local police and to developing measurement devices. The second year involved a small-scale study of 25 youths treated on an experimental basis and 12 treated as usual. The experimental treatment was the assignment of a volunteer to work with the referred youths, using relationship, advocacy, and behavioral contracting skills. The student volunteers were trained and supervised on a continuing basis by graduate student supervisors who in turn were trained and supervised by the investigators. Examination of archival data at several intervals indicated that the treatment was probably associated with sizable and significant decrements in police contact and seriousness of offenses, and the diversion project seemed to have reduced the proportion of all youth sent to the courts by the local police. (Interestingly, self-report measures showed no changes in the targeted youths, nor in the perceptions of them held by their parents and friends.)

In the third project year the complex treatment was dismantled, and separate groups of youths were assigned to behavioral contracting, social advocacy, and control conditions. Again there were changes in objective measures of police contact and school attendance (but not in questionnaire data). At this point, a more detailed examination of the findings suggested that successful cases were more likely to have maintained positive interactions with important social systems such as family and school, were more likely to have begun their indicated intervention efforts successfully, and were more likely to have received a broad intervention directed at more than one social system.

The investigators note four things requiring emphasis (Rappaport *et al.* 1979):

1. The youths referred to this program and kept out of legal difficulties were not from an "easy" population. In 23 of the 24 cases, the control youths (referred to the program and randomly assigned to "treatment as usual") were found to have further legal difficulties.

2. The youths referred were, in all cases, those for whom formal court

action was about to be initiated. The program did not take first or minor offenders for whom a warn and release action might be effective, nor did it wait until youths were officially in the system and on probation.

3. Although the Adolescent Diversion project personnel were successful in ending further contact with the law, they did not turn these children into fundamentally different people. The children may have attended school more often, but they did not necessarily do any better academically, nor did significant others view them differently. The major change that took place was that they stayed out of the justice system.

4. Those youths for whom the program failed to make a difference tended immediately to become reinvolved in the justice system rather than in the school, family, or other social systems (pp. 118 and 120).

A PROGRAM THAT COULD HAVE BENEFITED FROM A SUCCESSION EVALUATION STRATEGY

The following example illustrates the current research approach, why it fails, and how the succession evaluation model might have worked in this particular situation.

As will be detailed in Chapter 5, the Living Insurance for the Ex-prisoners (LIFE; Lenihan 1977) experiment consisted of three interventions: financial aid, job placement service, and a combination of the two. The results showed that financial aid reduced the number of what might be thought of as economically motivated crimes whereas job placement service did not affect arrests, and the combination of the two was only as effective as financial aid alone. On completion of LIFE, an expanded version called Transitional Aid for Released Prisoners (TARP) was instituted at two other sites (entire states). TARP generally failed to reproduce the lowering of arrest rates that made LIFE seem so promising.

It is likely that the differences in the implementation of LIFE and TARP were mainly responsible for the failure to replicate positive findings. For instance, the target population of the intervention was greatly expanded in TARP to include women, first offenders, and drug and alcohol abusers. Further, the organization implementing the program was different. Instead of expanding and arbitrarily changing a successful intervention, a succession evaluation approach would have examined, refined, deciphered, and replicated the successful LIFE intervention prior to any change or major extension, thus increasing the probabilities for subsequent large-scale success.

First, a follow-up of the LIFE project might have been conducted on the job placement service condition alone prior to its implementation in any other site. Qualitative kinds of data might have been collected to deter-

mine what about the service was ineffective from the ex-offender's point of view. An alternative type of job placement varying some parameters of the service might have been tested on a much smaller scale to investigate possible defects. Such attempts to explore the differing possible reasons for the failure of the job placement condition initially would ultimately have led to a better data base from which to operate in making decisions concerning further dissemination or elimination of the job placement service.

Second, the success of the financial subsidy condition might have been further explored, by varying the parameters of the subsidy as well as the target population of the study. A small-scale replication might have been done using types of offenders not included in the first study, e.g., women. Or both offenders whose arrest rate was lowered and those whose rate was not might have been interviewed to ascertain their subjective reactions to the intervention. Either group might have revealed possible adjustments that might have increased the effectiveness of the financial subsidy condition.

Third, an alternative agency to administer the program might have been sought or some of the employees of the U.S. Employment Service might have been made aware of the experimental nature and goals of the program to gain greater cooperation from those administering the program. The important point is that refinements of the intervention should occur on a small scale before dissemination and extension take place.

CONDITIONS FOR CONDUCTING A SUCCESSION EVALUATION

Although in principle the succession evaluation approach is straightforward and sensible, it has implications that are complex and far-reaching. Stability of funding and goals, longevity of the program, and evaluator authority are necessary conditions for full adherence to the model and are not easily achieved. Wider adoption of this type of research strategy will require changes on the part of funding agencies, researchers, and practitioners.

The primary need of research conducted along the succession evaluation model is for stability of goals and funding. Both these elements must be insulated as much as possible from shifting political winds. In some senses, it was easy for Tharp and Gallimore to conduct research along the lines of their model; that is, the goal of improved reading skills is widely accepted and not subject to frequent change of fashion, and measures of success are relatively straightforward. The goal of rehabilitation has been questioned of late, intermediate goals for rehabilitation programs have

been subject to fad, and outcome measures of success have not been clearly defined (see Sechrest *et al.* 1979). Society, funding agencies, and researchers must remain committed to the goal of the rehabilitation of criminal offenders to make any headway. If researchers are aware of the improbability of long-term funding for a particular line of inquiry, they will not propose long-term funding for research and will instead pursue the search for the quick, easy (and elusive) solution to crime.

Long-term funding and stable program goals allow for the testing of innovative programs on a small-scale, single-site basis, which permits researchers to develop, modify, replicate, and test a program and its various elements under closely controlled conditions and encourages practitioners at the site to cooperate with and participate in development and testing without feeling pressure to keep an eye on their next program if initial findings are mixed. This stage of program development should continue until the various program elements "fit" together comfortably and those that do not fit are eliminated or until it is clear that the underlying theoretical premise of the program is flawed and thus a complete reconceptualization is necessary.

Many problems can be avoided by replication of a program first at the initial site and then at one other site to determine whether its apparent success was due to the program elements, a charismatic director, or other local variables. Answers to questions about the effects of the personalities and work styles of program personnel, the nature of the intervention, the setting in which it occurred, and the characteristics of program participants can only be obtained through a program replication of the original model. Partial replication also is useful for testing variations that may reduce the costs of a program. Can volunteers or paraprofessionals be trained to teach parents and children the basics of contingency contracting as well as professionals? Can vocational counseling sessions be reduced in number or length without negatively affecting their effectiveness? Answers to many such questions must be obtained through additional tests that are vital to the development of a program, despite the lack of interest in partial replications on the part of researchers and funding agencies. Support for limited replications without premature extension is vital, as the previous LIFE/TARP example has shown.

Another implication of the succession evaluation model and long-term funding is that laboratory and qualitative data collection should be encouraged and funded as part of the larger program evaluation. If the program researchers feel that work needs to be done in a lab setting to refine a particular aspect of the intervention, then that research should be viewed as part of the program and supported. If the researchers feel that a needs assessment should be done prior to the implementation of some

aspect of the intervention, then that should be viewed as part of the program. A needs assessment following the intervention to determine the cause of failure should also be encouraged. Any reasonable effort to improve the quality and effectiveness of an intervention should be supported, whether or not the effort involves direct implementation with clients in the field.

It is necessary that the researchers have substantial control over important decisions regarding the program and all its elements. Tharp and Gallimore had almost complete control over the school they developed and could hire and fire personnel, change teaching methods, assign children to experimental conditions, and so on. That such a level of control cannot often be expected in rehabilitation research may only point to one of the reasons why progress is so tortuous and uncertain. Still, much could be done to strengthen the position of the researcher. For example, the position and authority of the evaluation researcher could be established contractually, and funding of programs could be contingent upon the adequacy and strength of the contract. The position of the evaluation researcher might be inherently stronger in any program operating under the commitment that initial program failure or partial failure would not inevitably lead to termination of funding but to continued effort at program development and improvement.

Still another implication of the succession evaluation approach is that long-term systematic interventions can best be investigated when the program is based on an explicit theoretical framework and theory guides the flow of the investigation. We do not wish to encourage or support long-term and piecemeal research; rather we wish to encourage long-term and systematic research. Systematic research benefits immeasurably from the direction provided by theory.

Two things are *not* implied by the succession evaluation model: early decisions to spend millions of dollars and funding to the bitter end. The succession evaluation strategy, in fact, permits successive funding decisions guided by outcomes.

The model for funding being proposed here is akin to that long followed by the National Institutes of Health and the National Science Foundation in a number of respects. Program areas in which the need for research is evident are established, accompanied by long-term commitment of funds to these ongoing research programs. The specific subject or research question of individual projects within these areas is selected by the researcher. He or she initiates an application that is subjected to peer review by a panel of experts in the program area. Initial funding may be for a limited time (1 to 3 years) with the understanding that the researchers may apply for continuation funding. Investigators have a reasonable assurance of

continuous funding if the project or study shows evidence of meeting intermediate goals and producing favorable outcomes by measures that it has established as the criteria of success. This strategy has enabled some investigators to receive substantial funding over the years but in relatively small increments and under circumstances that make it possible for funding to be terminated when programs cease to be productive. This sort of commitment to long-term program funding is required in the field of offender rehabilitation.

Clear-cut "success" is neither difficult to detect nor a frequent occurrence in rehabilitation research, and dismal failure is fairly apparent; the difficult choices for reviewers and funders come in the "gray areas" where a program shows qualified favorable outcomes. We know of no simple formula or measure that can be used as a criterion for continuation or abandonment. We do not believe that a single measure such as a specified proportion of offenders with reduced recidivism is useful. The best guideline we can suggest is that which is employed in most scientific fields: progress must be periodically reviewed and assessed by some method of peer review, and funding must be made contingent on that assessment.

IMPLICATIONS OF THE PROPOSED RESEARCH STRATEGY FOR FUNDING AGENCIES

The research strategy being proposed here will require some changes and accommodations on the part of almost all funding agencies interested in problems of offender rehabilitation. At least some of the necessary changes will be of considerable magnitude and difficult to achieve under the best of circumstances.

FUNDING AGENCY POLICIES

The difficulties that face those charged with the responsibility for planning a programmatic attack on problems related to crime are well illustrated by the history of the National Institute for Law Enforcement and Criminal Justice (NILECJ; now the National Institute of Justice (NIJ)). The institute's mission includes support of research, demonstrations, and behavioral studies to develop new and improved systems, techniques, approaches, and equipment to strengthen and improve law enforcement. It is empowered to carry out studies and behavioral research in pursuit of more accurate information on the causes of crime and the effectiveness of various methods of crime prevention and correctional procedures, to disseminate new knowledge, and (since 1973) to conduct program evalua-

tions. During its first decade, under strong pressure to "do something" about crime, NILECJ emphasized applied research on crime control techniques to improve the effectiveness of the criminal justice system.

A review of NILECJ's first decade of efforts sponsored by the National Research Council (White and Krislov 1977) makes it clear that money, determination, and efforts to devise short-term technical solutions to complex social problems cannot supplant patience, long-range planning, and a carefully devised research strategy for building the cumulative knowledge necessary for meeting the challenge of crime. The report, *Understanding Crime*, reviewed the substance and quality of NILECJ's research in the broader context of the roles, goals, and structure of the institute and made a number of recommendations for improving its research and knowledge-building processes, including a long-term research agenda, sustained research support in priority areas, research based on accumulated knowledge, more support for basic research, greater involvement of the academic community, improvement in the process of reviewing research applications, and integration of the evaluation, dissemination, and technical development functions into the research effort.

Since 1977, the institute has adopted a series of changes that appear to have improved its research program. Yet continued pressures to turn a promising preliminary or experimental effort into a "marketable" national product still result in premature implementation of research. Thus the discussion that follows is intended generally to support intensified efforts to operationalize and improve upon a strategy of systematic planning and long-term research programming on the part of all agencies funding research in criminal justice generally and rehabilitation specifically.

In addition to research-initiated projects and studies specified by the funding agency, another strategy of program development and field testing, one which is likely to promote staff cooperation with evaluators and adherence to the research design, is for a funding agency to develop a research program around the needs of a local agency. This need not be a law enforcement agency or corrections department; it might be a school system willing to adopt an experimental program to reduce truancy, vandalism, and crime. Instead of taking an existing program model and trying to convince several local jurisdictions or agencies to implement it, a funding agency might seek out administrators committed to experimental program development and innovation and use their agencies or institutions as field experimentation labs. Researchers serving as program resources can work with agency personnel to assure that the program model tests a theoretically grounded effort that is evaluable and that the intervention and evaluation are designed conjointly.

This approach must be employed sparingly by a funding agency. There

must be strong and evident commitment by the local agency to the use of an experimental design and clear understandings with researchers to assure that they have sufficient authority to see that the program design is implemented with integrity. It may be easier to negotiate with a provider of services than a governmental agency subject to bureaucratic regulations and local political pressures.

A disadvantage of this approach is that the research may not fit neatly into the development of a particular program model. But given the limitation on opportunities to implement experimental interventions, particularly with adjudicated offenders, it is a useful way to increase those opportunities for field experiments and, through a variety of inducements that involve the staff of state and local agencies in the research process, to increase the chances of maintaining the integrity of the experimental design.

When a promising program appears ready for wider testing, field tests in one or more sites must be arranged. At NIJ the Office of Development, Testing and Dissemination develops a program model, devises a field test design for implementation in three sites, and plans a separate evaluation of the program. This policy is an improvement over the previous strategy of moving right into a national action or demonstration program tested in as many as a dozen sites because it permits more carefully controlled research. When evaluators are presented with a large number of very diverse projects sharing only the same label, there is no overall "program," so that they must "evaluate" what is virtually unevaluable.

An essential element in a field test of a program model, even at as few as three sites, is the coordinated development and integration of the program and evaluation designs. The goals of a program and the assumptions on which it rests must be clear enough to permit the evaluation of the program. In addition, the program elements and procedures must be consistent with, grow from, and test those assumptions. The evaluation design grows from the program model that serves as the basis for project site activities. In a multisite program evaluation, it is necessary to make sure that the program model being tested at each of the sites actually is the same or to document the ways in which the models differ. A multisite program must rest on and test theoretically related propositions so that differing program elements become systematically designed variations on a theme.

A critical issue in designing a field test that permits the acquisition of knowledge about the model's effectiveness is the question of the timing and execution of the evaluation and the project site activities. Often evaluations of criminal justice programs are devised as an afterthought, following the development and implementation of a new program. Such

evaluations have yielded little knowledge. The selection and initiation of the field site projects and the program evaluation team simultaneously also is almost certain to create problems. "Double blind inception" (Harland and Warren 1978, p. 31) means that the evaluators must develop a research design with little knowledge of the individual projects and their potential for data collection and can make no input into the selection of those field test sites that are likely to yield useful data.

Selection of the evaluators prior to selection of field test sites is essential. It permits evaluators to work with prospective project groups to clarify program goals and underlying assumptions and assure that the proposed project is congruent with them. It enables researchers to aid project staff in making the necessary arrangements for data collection, fosters the development of open channels of communication between project and evaluation staffs, and enables the researchers to participate in the selection of project sites on the basis of their willingness and ability to adhere to the project and evaluation design. The increase in evaluation costs that may be engendered is minor in terms of the total cost of the program, whereas the potential integrity and utility of the findings are greatly increased.

IMPLEMENTING SOFT TECHNOLOGIES

In implementing tested programs that have been shown to be effective, it is important that they adhere as closely as possible to the original model. Often it is assumed that tested programs, including rehabilitation efforts, both can and should be adapted to meet local circumstances even when the adaptations represent substantial departures from the original program plan. We suspect that such adaptations alter programs in ways likely to decrease their effectiveness. Often a distinction is made here between hard and soft technologies, with the former referring to the products of engineering efforts and the latter to the products of behavioral and social sciences. In the implementation of hard technologies, there is usually careful specification of the technologies and the conditions for their effective use. Any adaptations are likely to be made with exceptional attention to maintaining the central features of the original plan. Such attention seems to be rarely afforded to the softer technologies. *Putting Knowledge to Use*, a collaborative publication of the Human Interaction Research Institute and the National Institute of Mental Health (Human Interaction Research Institute 1976), for example, presents an overview of the utilization of soft technologies in mental health and synopses of a large number of publications. None of these appears to address the issue of the need for fidelity in implementing programs.

Several steps might be taken to improve the faithful implementation of soft technologies. The first is better specification of the exact nature of the interventions—a recommendation that we have made elsewhere in this volume and in the previous one. Faithful implementation requires a description of the model sufficiently detailed to permit those that want to adopt it to replicate the essential program features. A second step is better specification of each of the essential program features. Interventions in the behavioral and social sciences undoubtedly include both features that are critical and others that are of lesser importance. Often it is difficult to determine which are the key features of a program without considerable research; that research should be undertaken. The method of testing complex programs for effectiveness and then decomposing them in order to determine their essential elements is well established, for example, in the behavior therapies. A third desirable step is the publication of a specific set of guidelines for implementation of each program, including guidelines concerning features of the intervention that might not be evident from the description of the program itself. For example, if particular selection procedures are used to screen personnel in order to select effective program staff, then these screening procedures should be part of the guidelines. A fourth step that might be especially cost-effective is the training and provision of change agents who would serve as consultants to organizations and agencies wishing to implement a soft technology. The use of change agents in dissemination and utilization of information is well established (Human Interaction Research Institute 1976). Finally, although it is an intrusive step, programs funded by a federal agency might need to be subjected to regular monitoring by program auditors to determine the adequacy of program implementations; agencies not implementing programs according to guidelines would have their funding withdrawn. Such a stringent step may be justified if there is no alternative way to ensure that programs are implemented as planned. If the same attention to detail and uniformity were displayed for the implementing of social programs as characterizes, for example, fast food service chains, the success of the former might more nearly approach the success of the latter.

STRENGTHENING THE LINKS BETWEEN RESEARCHERS, PRACTITIONERS, AND FUNDING AGENCIES

Since the goal of research on rehabilitation ultimately is the use of the findings in the field, effective links between researchers, practitioners, and funding agencies are essential to permit the development of basic

knowledge and its application in various field settings. Currently these links are weak.

Sometimes funding agencies have weak ties to the researchers who develop basic knowledge. Emphasis on short-term, applied efforts does little to build those ties. Structural and administrative arrangements that incorporate basic researchers in advisory bodies and in the peer review process, major allocation of funds for unsolicited grants and long-term research agreements, and efforts to designate long-term research agendas all will encourage the development of more sustained, high-quality research programs. Other developments such as extending periods from the announcement of a contract solicitation to the closing date for submission and greater involvement of evaluators in defining, clarifying, and refining projects and programs can strengthen the commitment of researchers involved in the development of basic knowledge to carrying out research on rehabilitation.

Other barriers to high-quality research originate within the academic community and need to be addressed there. Academicians tend to view applied and/or evaluation research as "hired hand" work that limits their highly valued freedom to design, execute, and control their own studies. This reluctance to conduct applied research has sometimes been exacerbated by the policies of funding agencies. Some of the most creative and rigorous researchers may be discouraged by tightly specified evaluation designs, indications of overmonitoring of program execution and evaluation, and proposed program evaluations that are so diverse and loosely structured that they are essentially unevaluable.

Greater researcher autonomy and longer-term funding may be helpful, but the values and reward systems of the academic community also inhibit involvement of qualified researchers in criminal justice research and need to be modified if research and development programs are to improve. Promotion and tenure decisions are based largely on the individual's research and publications record. "Original" research, particularly of a theoretical nature of interest to the discipline, is accorded the highest esteem; replication studies, policy research, and evaluations designed to guide social action yield less prestige and fewer career benefits. Publication in the journals of the disciplines is preferred to writing for the criminal justice community, which might benefit from and use the findings.

There is also a lack of communication between researchers and practitioners that inhibits the translation of theoretical suggestions into intervention programs or the accurate implementation of these programs. Researchers often fail to communicate theoretical understanding and their programmatic implications to practitioners in clear terms or in jour-

nals likely to be available to practitioners. When researchers become involved in an experimental program and its evaluation, their interest in abstract questions and "pure" research sometimes leads to a gap in communications about organizational matters that affect program implementation.

Correctional administrators and practitioners, on the other hand, tend to be untrained in translating theoretical propositions into programs, unfamiliar with research principles, and suspicious of research as "impractical" or simply too slow in providing practical answers. Their concerns center on practical problems of implementation and in the long-term implications of the program outcomes for their job and the organizations. Even in those areas where there appears to be a growing convergence of theory and practice (such as behavioral psychology and juvenile justice system diversion programs), there are limited efforts to incorporate basic research advances into diversion programs and limited involvement of academic researchers in the development and evaluation of action programs beyond their university-based, laboratory-like settings (Binder and Binder, no date).

Although researchers have become more involved in correctional program evaluation in the past decade, there has been limited evaluator input into program design. Because the evaluator's findings have often been negative, they may have intensified the views of program administrators and practitioners of researchers as dangerous and/or bothersome "outsiders." Ways need to be found to encourage program administrators and staff to call on evaluators' conceptual skills to aid in the planning and development of theoretically sound, evaluable programs and to gain their support in seeing that the program is implemented as planned. Administrators would be more likely to do so if researchers were more sensitive to the needs, problems, and demands of the users of their research (Shah 1976).

The vested interest of administrators and practitioners in the outcome of experimental programs also may frustrate the acquisition of dependable knowledge by leading to the subversion, even if inadvertent, of the integrity of programs in efforts to assure their success or failure. The researcher or evaluator must closely monitor program implementation to prevent such subversion, often at the cost of cooperative relationships with program personnel. In some instances, the evaluator may have to modify selection criteria, program components, or elements in the research design to maintain the goodwill of program personnel as well as that of community residents (Empey and Erickson 1972).

The involvement of university-based researchers in the development of intervention programs does not, however, necessarily guarantee adequate

research designs or high-quality evaluations. The rapid growth of the field of criminal justice in the past decade has resulted in poor quality control over academic programs, faculty appointments, and research conducted by some individuals and institutions (Sherman 1978). In addition, some academic program innovators become as convinced of the efficacy of their program as the program staff and, consequently, fail to incorporate an evaluation component into it. Clearly, programs vary widely in the extent to which they lend themselves to rigorous evaluation at various stages in their development. Nevertheless, if academic researchers who are trained in research methods and whose occupational role involves the generation of knowledge do not seek to include an adequate research component into the programs they develop, how can program personnel be expected to do so?

COORDINATING RESEARCH ACTIVITIES

A research strategy for furthering knowledge about offender rehabilitation must look beyond the immediate programs, goals, and funding resources of individual subunits and whole agencies to opportunities for research that can be created by better intraagency and interagency coordination and communication. In addition, support for secondary analyses of available data (gathered as part of research projects outside the agency) would enable the agency to capitalize on existing research and action programs.

Few organizations in the corrections field have coherent long-term policies to guide decisions related to research. The Law Enforcement Assistance Administration (LEAA), for example, never established a single code or set of policies to guide the development and implementation of a program for supporting corrections research, innovation programs, and technical assistance. The resulting "inadequate communications, lack of continuity and . . . absence of coordination among Offices doing program planning" led LEAA's Research Group for the Advisory Committee of the Corrections Policy Working Group (1979, p. 2) to recommend the explicit articulation of such a statement of policy. Such a statement, however, requires communication among the various offices in an agency and efforts of top level administrators to facilitate continuity and progression of programs from research through action.

Intraagency problems in planning and coordination are dwarfed by those arising in interagency efforts. These problems arise from the tying of financial resources to categorical programs, making transfer difficult, the resistance of each agency to transferring funds over which they lose control, and the inadequacy of formal mechanisms of interagency coordination. Nevertheless, greater interagency coordination would provide many

research opportunities that are currently untapped. The Departments of Health and Human Services, Housing and Urban Development, Education, and Labor all have action and research programs that could provide data for analyses of many aspects of the relationship of crime to employment, community structure, the educational system, and the family. It would be highly desirable therefore for the staff of the National Institute of Justice and the Office of Juvenile Justice and Delinquency Prevention (OJJDP) to participate in the planning of related research projects sponsored by other agencies and take initiatives in creating interagency efforts. The Department of Labor and NIJ might, for example, work together on vocational training programs for offenders in community-based facilities, or the Department of Education and OJJDP might cooperate to develop a teacher training program that would place student teachers (who would become future staff) in juvenile correctional institutions. Furthermore, structures should be developed to facilitate collaborative evaluation of those initiatives. Often the goals of different agencies are similar enough to make such joint ventures valuable for all parties.

In numerous areas of research tangentially related to the study of rehabilitation, interagency cooperation could increase the value of the research. These include domestic violence, crime in the schools, community redevelopment, and vocational education. It is unfortunate that in conducting a national study of school violence, for example, the former Department of Health, Education and Welfare did not more actively involve LEAA or OJJDP in designing and carrying out the study despite their obvious stakes in the issue. In light of the increasing fiscal austerity, interagency cooperation and efforts to participate in and benefit from other research undertakings provide a desirable way of avoiding duplication and gaining usable data at relatively low cost.

5 Loci of Intervention and Promising Avenues of Research

Every intervention is associated with the context within which it is delivered. Part of that context is what we here call the locus of intervention. There must be some set of arrangements and circumstances within which an intervention may be conveniently and effectively delivered and coordinated with other interventions directed toward the same target population or problem. Delivery and coordination of services or intervention activities are more likely to be effective if an organizational or institutional arrangement can be identified as an integrating point. We have attempted to identify several especially promising loci of intervention.

Four loci of intervention—the family, the school, the workplace, and the community—involve a key institutional complex whose importance is suggested by several theories, empirical findings, and policy-oriented questions. These loci include those socializing institutions that function as the primary source of identities, the key mechanisms of informal social control, and the principal social environments in which behavior is shaped and expressed. Each locus affects a wide spectrum of individuals and groups and provides a leverage point for changing behavior. The fifth locus of intervention, on a different level of analysis conceptually, is the individual. Research on the biological bases of criminal behavior provides a way of comprehending the individual as well as the social and environmental factors contributing to criminal behavior. For each locus we note relevant theoretical statements and empirical findings and suggest further research.

THE FAMILY AS A LOCUS OF INTERVENTION

Several theories of the etiology of crime and many empirical findings suggest the importance of the family, although the role and significance attached to it vary widely. Psychological theories tend to emphasize the importance of internal family processes and parental child-rearing practices in shaping the personality and subsequent behavior of children, including delinquency. Sociological theories, on the other hand, emphasize the role of the family as a mediating variable linking the child and the larger social structures and cultural patterns, and as a transmitter of the parents' social status and life chances to the child.

SOCIOLOGICAL THEORIES AND EMPIRICAL FINDINGS

Sociological theories tend to focus on delinquency and youth crime, particularly that of lower-class gang youths, rather than adult crime and on the social structural variables that shape motivation and behavior. These theories treat the family principally as a transmitter of cultural and ethnic attitudes, values, and behaviors and a determiner of social status, life chances, and the immediate community in which the family resides (see Rodman and Grams 1967).

Cultural deviance theory, for example, views delinquent behavior as an expression of conformity to cultural values at odds with those of the larger community. Its emphasis on neighborhood disorganization suggests intervention concentrated on the community and youth group, since parents are viewed as being relatively helpless to control or assist their children in the face of poverty and social disorganization. Strain theory holds that strain results for many lower-class youths from the disjunction between achievement goals and the limited means to achieve them. Lower-class parents transmit their aspirations to their children, but fail to provide them with the ability to compete successfully. Consequently, many lower-class youths tend to identify with delinquent peers.

In an empirical test of a number of theoretical propositions drawn from these theories and an intervention strategy focused on the peer group, Empey and Lubeck (1971) found, almost by accident, that the participation of parents in weekly family groups operating on the same self-help basis as peer groups had a salutary effect for a number of the youths. They conclude that "too little systematic attention to family linkage seems to have been the major omission in the design of the study" (Empey and Lubeck 1971, p. 182) and suggest that the first order of business in intervening with chronic midadolescent delinquents should be to link them more effectively with the family and school.

We will not review here the extensive empirical literature on the relationship of the structure of the family or internal family dynamics and crime. We note in brief that there appears to be no simple link between "broken homes" and delinquency and that the quality of parenting and the nature of child-rearing practices rather than simply the structure of the family are important variables to consider in understanding the origin of crime and in designing interventions with the family as the locus. Studies of family functions have examined marital relations, affectional ties between parents and child, and parental discipline and their relationship to delinquency but have failed to explore the interaction of these dimensions of family functioning (except McCord and McCord 1964). Studies of parental discipline have found that consistency of discipline and a sense that it is fair are related to nondelinquency; lax discipline and a lack of parental affection are associated with delinquency (see Rodman and Grams (1967) for a review and McCord (1979) for new data). Recent findings linking aggression (Eron 1980) and violence (White and Straus, in this volume) on the parts of parents and siblings with delinquency indicate the need for systematic research into family violence and consideration of ways of intervening to reduce it that may have the additional benefit of reducing crime. As White and Straus suggest, intervention strategies for use with children who have already "learned the lessons of violence at home" may need to alter the parents' techniques of managing problem children, change the rules governing exercise of social control in a family, and directly alter the child's behavior.

THE EFFECTS OF COMMUNITY CONTEXT AND FAMILY VARIABLES ON DELINQUENCY

Johnstone (1978, 1980) looked at the family and delinquency in light of the relationships of different types of contranormative behavior to both the family functional and structural properties and to the wider social environment. He found that the influence of the family appears to vary with the type of norm violative behavior *and* with the community setting. Using a multilevel regression analysis of survey data, Johnstone found that the seriousness of the offense pattern was inversely related to the importance of the family in accounting for it. Weak family integration was predictive of status offenses, drug infractions, and minor property offenses but had virtually no power as a predictor of nonutilitarian violence or more serious delinquent offenses (larceny, robbery, and burglary), which appear to stem from pressures in the wider social environment. He suggests that where the external environment is relatively stable and secure, disrupted family conditions may more frequently generate delinquent outcomes

than in hostile slum settings where external factors have profound consequences of their own.

These findings suggest the need to design interventions to fit the situational needs of the family and to focus on different problems in different types of communities. Interventions focused on internal family dynamics are more likely to be successful with families whose malfunctioning has a more direct impact on delinquent behavior. Family therapy may be an effective intervention for youths from a stable community whose offenses are minor, but it is likely to be less effective with delinquents and their families who reside in disorganized slum communities. For families in a hard-core poverty area, interventions that help them combat environmental pressures must take priority over those affecting the family's internal dynamics. Here a more fruitful strategy might be a community-oriented one, such as bringing families with similar problems together to bring more effective pressure on public and private agencies to provide more adequate services and jobs.

CONTROL AND SOCIAL LEARNING THEORIES AND FAMILY INTERVENTIONS

Control theory postulates that the individual's social bonds are the basis for the conforming behavior; when the bonds to society are weakened, individuals are freed to engage in criminal activities (see Empey, in this volume; Hirschi 1969). It suggests that a key task of prevention and rehabilitation programs is the strengthening of attachments of individuals to the family as well as other central social institutions including the school, community, and workplace.

Social learning theory fleshes out control theory by suggesting specific mechanisms that strengthen and weaken the bonds to conventionality. Since both deviant and prosocial behaviors are influenced by current environmental events, intervention procedures are most likely to be effective in populations where such influences can be altered. Thus delinquent populations in which the family and school constitute areas of influence are ideal targets in which to test applications of social learning theory.

Interventions based on social learning theory to date must be regarded as preliminary but encouraging. One hypothesis underlying intervention with delinquent populations is that the families of delinquent teenagers represent disintegrating systems (Alexander 1973), a viewpoint that is similar to that of many sociological theorists (Empey and Lubeck 1971, Hirschi 1969). These families show less interaction, less positive interaction, and more negative or punitive interactions among family members than do families of nondelinquents. Thus interventions have, for the most part, been aimed at increasing positive interaction and diminishing

punitive interaction among family members, fostering more adequate problem solving, and setting clearer rules governing behavior within and outside the family.

In a rare experimental test of this approach, 99 families were randomly assigned either to a social learning approach or to control groups, which included a client-centered family approach, a psychodynamically oriented family treatment, and no treatment (Alexander and Parsons 1973). When the comparison of outcomes was on recidivism rates, as measured by juvenile court appearances, only the social learning approach was superior (26 percent recidivism) to no treatment controls (50 percent recidivism) between 6 and 18 months after treatment. Moreover, measures of family interaction after treatment showed changes in communication patterns in the expected direction only in the social learning group.

Similar effects for a family approach combined with work with schools to enhance social and academic performance have been reported by Patterson and his colleagues, both in uncontrolled and in small-scale controlled studies (Patterson 1974). In addition, these workers found that siblings of delinquent youths also showed improvement, even though therapy had not been directed toward them, a major potential advantage of a family-based intervention procedure (Arnold *et al.* 1975). Perhaps as important as the therapeutic applications has been the development by Patterson's group of an objective system of measurement of interpersonal and problem behavior within the family, opening the way for detailed process analyses of the effects of various interventions.

In work with institutionalized delinquents, Wolf and his colleagues have developed community-based family-style group homes and have shown that prosocial behavior can be developed, and academic performance enhanced, through the use of a carefully programmed reinforcing environment (Phillips 1968, Phillips *et al.* 1971). Moreover, these workers have carefully tested the effectiveness of many elements of the program in short-term controlled experiments (Bailey *et al.* 1970, Liberman *et al.* 1975). At present, however, no controlled studies of the effect of this program upon recidivism have appeared.

A research program implementing and testing the principles of social learning theory would seem to be most appropriately targeted at youthful offenders, particularly those from a relatively secure economic and social environment, whether living within the family or in community-based family-style homes, since such populations offer the greatest chance of success in initiating, generalizing, and maintaining behavior change. Such research needs to be aimed at discovering critical, causal differences in family interaction between delinquent and nondelinquent families, so that therapeutic interventions can be more precisely applied.

THE ROLE OF THE FAMILY IN INTERVENTIONS WITH ADULT OFFENDERS

The theoretical literature on the role of the family in the etiology of adult crime and its potential for contributing to the rehabilitation of adult offenders is limited, and research is even rarer. As Fox (in this volume) notes, "the degree to which the family might be involved successfully in rehabilitation simply cannot be assessed from the information currently available." It is worthwhile, nevertheless, to consider ways in which family members might be able to make an important contribution to crime prevention and control and the rehabilitation of the offending family member.

Knowledge about the family status of offenders is limited. Only about one third of the inmates admitted to state correctional facilities are married at the time of their incarceration (Fox, in this volume). For them, sustained marital relations during incarceration is a good predictor of postrelease success (Freeman and Rice 1977, Glaser 1969, Kaslow 1978). By reincorporating the offender in a system of moral, economic, civil, and emotional exchanges of rights and responsibilities, the family may maintain or reinstitute an offender's commitments to conventional activities and institutions (Fox, in this volume). Thus a potentially promising intervention strategy is to actively assist the families of inmates and involve the free spouses in the rehabilitation process.

Research is needed to test a variety of interventions that harness the potential of the family for contributing to the rehabilitation process. In some instances, minimization of the disruption of the family and supportive family counseling may be sufficient. In many more instances, however, families are likely to need more extensive assistance and support of various types. When a family member has participated in an intensive rehabilitation program resulting in a "new" person, in order to sustain the change it may be necessary to involve the spouse or intimate others in altering family patterns that developed around relations to the "old" self.

AN EXAMPLE OF AN INTERVENTION AT THE FAMILY LEVEL

In this chapter we present three examples of intervention programs to illustrate our general approach to program and research development. The following program for intervention at the family level is of a simple nature and is not to be taken as a literal suggestion for rehabilitation, but as a starting point for research on the process.

In considering the potential role of the family, the first step is to define a problem and consider when to initiate an intervention. Parents who have just experienced the initial arrest of one of their children are a clearly

identifiable population for whom an intervention would seem appropriate. From the diverse population of first-time offender juveniles and their families, one must define a reasonably homogeneous subset of offenders and their families. One could limit intervention attempts to families of youngsters first arrested during elementary and junior high school and then further specify a focus on those youthful offenders found to come from homes with inadequate parental control. There is, at this point, a definable problem for which an intervention might be devised: how to help the families gain better control over their children.

The specific intervention that might be devised is to teach parents to implement a form of behavior contracting with their children. That intervention has often been effective in altering behaviors and is an important element in programs for delinquent youngsters that appear to have met with some success (see Alexander and Parsons 1973, Patterson 1974, Patterson *et al.* 1968). The report by Jesness *et al.* (1972), which showed that behavior contracting was not successfully implemented by corrections personnel, however, indicates that the task of implementing it with parents is likely to require careful, intensive training and considerable support.

The theory underlying behavior contracting assumes several things that require further application of the template-matching procedure. First, the contracting is based on a *quid pro quo*—in this case meaning that the parents must have resources desired by their child. The resources need not necessarily be economic; e.g., they might consist of privileges that can be granted. The granting of privileges does imply a considerable degree of parental control over the child; the privilege of going out with friends can be granted only if the child cannot or does not go as he or she pleases. Thus families would have to be screened (probably by interview) to determine the availability of resources that might be used to foster the cooperation of the child. The parent-child relationship would have to be reasonably intact in that the parents would have to have enough residual control to initiate and enforce behavior contracts. Parents and the child must be sufficiently intelligent to understand the nature of the contracts and the processes that underlie them. Home life must be fairly stable. Thus families would also have to be screened for their understanding and stability, the latter reflecting fairly constant parental presence, personal stability (e.g., not psychotic or alcoholic), and the absence of major outside perturbations. Finally, the theory presumes that those involved in developing and enforcing the contracts are willing, motivated participants. Thus the program would be limited to families wanting help.

All the restrictions placed on the acceptance of families into the treatment program might seem to represent a prime instance of "creaming," selecting cases with such favorable characteristics that success is assured.

We are recommending experimental tests of treatments, however, so that a control group with the same characteristics would provide a base against which to judge success. Far from representing creaming, the type of selection procedure described would result in a stringent test of the effectiveness of the intervention.

A template-matching process may also raise questions about the fate of those persons not selected, e.g., families with inadequate resources. There is no justification for exposing anyone to an intervention that is not suitable to the circumstances of the case. If it is not likely to be effective, then providing it is at least wasteful and potentially harmful. The appropriate action when a template-matching process eliminates persons or families is to attempt to devise an intervention that has greater promise for them by fitting their situational needs. Such interventions might include financial subsidy, casework designed to increase family access to and utilization of social services, and community organization activities to mobilize similarly situated families. These interventions might make behavior contracting feasible at a later time. If the youth is without adequate family with which to live, an out-placement of the offender for purposes of behavior modification along the lines of the Achievement Place project (Phillips *et al.* 1971) might be adopted. The devising of more focused treatment programs for well-defined populations should have the salutary effect of making evident where the most serious, intractable problems lie.

PROSPECTS AND LIMITS OF THE FAMILY AS A LOCUS OF INTERVENTION

Among the factors consistently found to be important in the etiology of delinquency are a variety of family-related variables. Until recently, the emphasis of sociologists on the delinquency of lower-class gang youths led to intervention efforts focused on education, employment, housing and neighborhood conditions, and gang activities. The family was regarded primarily as a mediating variable and was not the target of intervention. Dominant psychological approaches often regarded the delinquent as a disturbed personality and led to interventions involving individual therapy and counseling, largely overlooking the interpersonal, social, and cultural environmental factors affecting behavior. Control and social learning theories are able to integrate structural and individual level variables, and they emphasize examination of the role of interpersonal dynamics. These theories can foster the development of techniques of contextual analysis to guide the template matching of offender and program, and they point toward the potential of renewed focus on the family. Research programs such as those at the Oregon Social Learning Institute, which involve interventions in families in a natural setting, and the work modeled on

Achievement Place, in which youths participate in an intensive program in a homelike, community-based setting, while not yet fully evaluated, appear to indicate both the feasibility and the success of a focus on the family and efforts to strengthen bonds of attachment. Other programs that combine intensive peer group processes with educational and/or work skills development components also appear to profit from the addition of family involvement.

Imaginative programs involving parents and spouses of offenders who remain in the community have been notable by their absence. Yet some evidence points to the importance of the family in strengthening ties to other conventional institutions and in strengthening commitments to conventional life styles by providing an interpersonal environment to encourage self-control. We suggest therefore the need for research that does the following:

- further develops and tests the theoretical understanding of the role of the family in the etiology of crime, as well as examines the contribution of domestic violence and aggression to criminal behavior;
- focuses on interventions to alter interaction patterns and the functional reinforcement properties of family environments;
- includes family components in multifaceted intensive intervention programs in the community;
- tests a variety of programs designed to engage family members in the change process and the provision of posttreatment support;
- provides surrogate families or homelike living situations as a basic part of rehabilitation programs.

Better understanding of the interpersonal environment of the offender and the development of programs designed to alter behavior by reshaping that environment, particularly with respect to the family, while they do not offer a panacea, do appear to be a fruitful focus for a variety of potentially promising intervention programs. For a limited segment of the offender population, a family-based intervention may be sufficient; for most offenders, intervention in the family will need to be accompanied by programs addressed to related problems such as school failure, limited employment opportunities, and delinquent peer group pressures.

THE SCHOOL AS A LOCUS OF INTERVENTION

School-based educational interventions to prevent delinquency or to reduce delinquent behavior are worthy of careful and systematic examination. The reasons for this are sixfold: (1) Rates of delinquent behavior

among school-aged youths are high. (2) Schools are a major social institution in the lives of contemporary youths and an institution intended to socialize and educate young people to participate in an orderly way in adult social and economic activities. (3) Several theoretical perspectives on the causes of delinquency implicate schooling or educational experiences. (4) Provocative evidence implies that interventions designed to reduce disruptive behavior in schools can sometimes be implemented and produce the desired effects. (5) Delinquency and subsequent adult crime have been linked with educational difficulties and school problems. (6) Reductions in disruptive behavior in schools would help to create a better environment in which to teach or learn.

YOUTHS IN SCHOOL TODAY

Large-scale changes in the major social institutions affecting young people—family, work, and schools—have occurred over the past century. The position of the family as a source of education for adult work and social roles and occupational skills has eroded. In this century, there has been a dramatic decline in the involvement of youths in gainful employment while the participation of youths in formal secondary education has soared. Unprecedented proportions of youths are now enrolled in school. Indeed, most states now make attendance compulsory through age 16 or 17. Furthermore, the average number of days of school attended each year had increased from 78 days in 1870 to 163 days in 1968.

A description of the status of contemporary youths includes the following components: (1) Youths are estranged from adults in an age-segregated system of compulsory schooling. (2) Youths are spending large amounts of time in school rather than being directly involved in work or even (to some degree) in the preparation for work. (3) The time spent in school is characterized by much lackluster activity focused on what are to many students meaningless academic goals. (4) The payoff gained by many youths for their time spent in school in terms of labor market returns is modest at best. (5) Youths are held to different standards of conduct than adults—youths tend to be treated leniently by the courts, police, and others. (6) The population of youths engaged in secondary education is now much more diverse than in the past.

Formal academic schooling may be expected to be difficult and uncomfortable for some of today's youths, despite the wide array of social rewards associated with school attendance. The more difficulty a youth has with academic course work, the more likely a youth is to get into trouble with the law and to be disruptive in school (Bachman *et al.* 1978, Hirschi 1969). Furthermore, how far a young person eventually goes in

school is strongly associated with the level of disruptive behavior the person engages in (Bachman *et al.* 1978). And contrary to popular conceptions, there are indications that the delinquent behavior of youths who drop out of school decreases after they drop out (Elliott and Voss 1974).

Careful attention to the issue of appropriate forms of education for a large group of students for whom ordinary schooling is ill-suited is needed. Some observers (e.g., Glaser 1975b) go so far as to question the advisability of continued secondary education for such youths; others urge careful attention to alternatives to conventional academic schooling. A recent report by the Carnegie Council on Policy Studies in Higher Education (1979) suggests major changes in the basic structure of high schools, including the creation of part-time specialty schools in which students attend school one or two days a week and spend one or two days a week in education-related work or service. This idea merits implementation and thorough evaluation. A major task of childhood is learning to become an adult, including finding opportunities for experience with adultlike work and social roles. Education should foster this process. When a youth perceives that achievement of these opportunities is thwarted, or that schooling is irrelevant in the pursuit of adulthood, then delinquency may be seen as a shortcut to adult roles (Stinchcombe 1964).

IMPLICATIONS OF THE THEORIES

An earlier chapter reviewed several major theoretical perspectives, particularly control theory and social learning theory, that imply a central role of school experiences in the production of delinquency. Control theory assumes that delinquent behavior is a natural consequence of a failure to develop (or a weakening of) bonds to society; social learning theory complements control theory by suggesting ways to alter the strength of an individual's bonds to society as well as to influence delinquent behavior directly through changes in a youth's environment or in his or her ability to cope with it. Social learning theory and its applied extension, applied behavior analysis, have led to active attempts to change a broad range of social behaviors (Kazdin 1979), including those of teachers and parents as well as delinquent youths. The goal is to find ways to promote orderliness and to restructure social interaction so that the skills and competencies required to promote prosocial behavior can be learned. The promising strategies involve getting all members of a social group—teachers, students, and family members—to exert control over the others. In an environment characterized by this model, one would expect the elements of the bond defined by control theory to be strengthened. As far as we know, no one has systematically attempted to measure outcomes of

social learning interventions in terms of the intervening variables suggested by control theory, but the two perspectives seem to imply convergent strategies to reduce delinquent behavior.

SOCIAL LEARNING THEORY AND INTERVENTIONS IN SCHOOLS

Applied behavior analysts have compiled an impressive record of successful interventions in schools to reduce disruptive behavior, and they have demonstrated that some related interventions involving both the school and the family can also be successfully implemented. Most of these interventions involve the creation of a special environment in which specified behaviors are rewarded, not rewarded, or punished according to a set of rules. Rewards generally involve the granting of special privileges, snacks, or the like. Sometimes a token, points, or other symbol is given that may be exchanged for "back-up reinforcers" of the child's choice. Punishments may involve the withdrawal of points or the denial of privileges. Not just any "rewards" or "punishments" will do, and the establishment of the appropriate reinforcers and reinforcement schedules is regarded as crucial and often difficult. Once behavior change is accomplished, the artificial contingencies may be faded or substituted with more natural contingencies in an effort to maintain the more acceptable behavior. The choice of back-up reinforcers and the way the program is to be administered often involves mutual contracting among the parties—parents, teachers, and youths—participating in the attempt to change behavior. (For a more detailed account of the principles and techniques involved, see Burchard and Harig (1976), O'Leary and O'Leary (1977), or Reid and Patterson (1976).)

The arcane language used by applied behavior analysts and popular but incorrect or grossly exaggerated notions about the techniques used (which are often wrongly assumed to be highly aversive and to include psychosurgery or electroconvulsive shock) hinder wider acceptance of a set of relatively benign, but systematically applied, strategies to change behavior. In general, for a number of reasons, even mild forms of punishment are used sparingly (O'Leary and O'Leary 1977), although punishment is often a part of the learning strategies used. The punishments involved in the application of social learning principles are not necessarily different from those used ordinarily by teachers and parents. The major difference is that an attempt is made to make predictable consequences follow a person's behavior by systematically rewarding desired behavior and punishing undesired behavior. The meaning of the word "punishment" is very different in the context of social learning from the meaning in the criminal justice system. In that system, sanctions are applied in a way that can

hardly be regarded as contingent or consistent, when the link between the behavior being sanctioned and the punishment is often unclear, and when the offender is usually not involved in a contract to alter his or her own behavior. The moral condemnation of behavior punished by the criminal justice system is absent from social learning behavior change approaches.

The ethical considerations relating to the use of applied behavior analysis in schools and elsewhere are essentially the same as the ethical concerns relating to any kind of treatment effort aimed at delinquent behavior or misconduct. Because of widespread misunderstanding of its methods, however, applied behavior analysis is often regarded as a particularly offensive treatment strategy. Furthermore, schoolchildren, whether or not they have been adjudicated delinquent, appear to be a particularly vulnerable group. Therefore careful consideration of the legal and ethical issues discussed elsewhere in this report is an essential part of any operational or experimental program using applied behavior analysis. Fortunately, our discussion can be supplemented by an excellent review of ethical considerations in applied behavior analysis (Stolz 1977).

Applied behavior analysis has been employed in a variety of schools and classrooms to alter many kinds of disruptive behavior (Barrish *et al.* 1969, Koegel and Rincover 1974, O'Leary and O'Leary 1977). The techniques involved have included teacher praise (Madsen *et al.* 1968), soft verbal reprimands (O'Leary *et al.* 1970), peer reinforcement (Solomon and Wahler 1973), a variety of token reinforcements (Ayllon *et al.* 1972), and self-regulation (Bolstad and Johnson 1972). It appears worthy of note that the demonstrated success of a number of programs of this sort—success that contrasts sharply with the general literature on the treatment of offenders—may be due to the focus on changing specific behaviors and on careful monitoring of the implementation of the treatment. Demonstrating a marked decrease in specific examples of violent or verbally abusive behavior, for example, is a different matter from demonstrating a reduction in arrests or court convictions—the typical criteria in most of the general offender rehabilitation literature.

A major limitation of attempts to use applied behavior analysis in the school to reduce disruptive behavior is the limited range of responses to a student's behavior (rewards and punishments) available in the school. This problem is clearly perceived both by survey researchers who attempt to assess the relation between school reward structures and delinquent behavior (McPartland and McDill 1977) and by applied behavior analysts who design intervention programs (Atkeson and Forehand 1979, Barth 1979). One approach to overcoming this limitation has been to initiate home-based reinforcement programs to increase the power of school interventions. Parents may grant special privileges or increase the allowance;

they may allow the child to go out, to watch television, or to have special snacks; and they can take privileges away. This greater latitude for parental responsiveness, together with the limited time and ability of teachers to administer a program for a few disruptive students while they cope with a large class, has led to research involving home-based reinforcement.

Teachers may find home-based reinforcement programs more acceptable than in-school reinforcements because they require less effort to administer. In programs that have been tried, teacher reports to parents have varied widely in frequency, content, and specificity, and the relative efficacy and acceptability of various types of reports have not been systematically examined, although it does appear that a variety of procedures can be effective (Atkeson and Forehand 1979).

Two reviews of the literature on home-based reinforcement have recently appeared (Atkeson and Forehand 1979, Barth 1979). They summarize the numerous original reports (e.g., Ayllon *et al.* 1975, Bailey *et al.* 1970, Saundargas *et al.* 1977), so that our focus is on the remaining major research tasks necessary to explore more fully the utility of the technique for reducing delinquent behavior and to overcome some obstacles to its use.

Major problems may be encountered in attempting to involve parents and teachers in implementing and maintaining a program. Because participation by parents and teachers is often difficult to obtain, one research task should focus on finding ways to foster it.

A second research task is to find ways to use applied behavior analysis to decrease behavior that is covert or difficult to detect. The learning principles involved require the contingent application of consequences to behavior. Observing, recording, and responding to concrete instances of behavior as they occur are essential ingredients in a treatment program. Some delinquent behaviors, such as stealing, are difficult to detect, count, and respond to. These kinds of behavior will constitute a continuing challenge for applied behavior analysis (Reid and Patterson 1976).

A third major research task is to examine more comprehensively the effectiveness of social learning strategies on other kinds of outcomes such as arrests and convictions. Although the evidence that social learning strategies can often be used effectively to reduce a variety of destructive or disruptive behaviors is incontrovertible, little research in the applied behavior analysis tradition has examined such criteria as arrest or conviction rates. Similarly, more research focused on the long-term maintenance of improved behavior and generalization to new settings is required. Because the association between disruptive behavior in school and official delinquency is well documented and because of the expectation that the kinds of environmental restructuring that occur in an intervention based on

social learning principles may lead to a strengthening of the bonds of social control, there is reason to expect that more global outcomes such as arrest or conviction measures, and measures of behavior in settings other than the school, may also be altered by these interventions if they are applied extensively and systematically enough.

ALTERED SCHOOL ORGANIZATION AS A PREVENTION STRATEGY

Youths who perform poorly in school, who receive failing grades, who are not tied to teachers and peers, and who have limited expectations for educational or occupational attainment are those who may benefit most from altered school organization. Correlational evidence implies that these youths engage in more delinquent behavior, and suggestions of remedies involving changed school organization come not only from theory and research (Weis and Hawkins 1980), but also from educational practitioners advocating change (Howard 1978, Johnson *et al.* 1979). One of these practitioners persuasively argues that schools are "rigged" to promote delinquency by failing to provide a reward structure that enables all students to experience at least occasional success in school (Howard 1978).

A combination of control, strain, and social learning theories suggests some prevention strategies worthy of experimental test according to the succession evaluation model. One such strategy might involve the search for workable altered reward structures in schools, particularly for students who now experience mostly failure. Ways need to be sought to alter school structure so that rewards provided by peers are taken into account. The goal would be to integrate marginal students with successful students as well as reward them for academic performance. Slavin (1980) has recently reviewed a number of cooperative learning techniques that ensure that all students are rewarded for performance. According to his review, experimental tests imply that these methods increase not only learning, but also satisfaction with school and peer ties. No experimental tests have yet been performed to learn whether systematically altering reward structures in these ways will decrease delinquent behavior, but the outcome variables that have been shown to be influenced are those that control theory suggests restrain a youth from delinquency. If these altered reward structures were applied systematically and pervasively enough, they might prove to be useful in both prevention and remediation efforts.

Another organization change is suggested by the Cities in Schools program (Murray 1980) based on the proposition that the school is a major social institution in the lives of its pupils and that it is a logical point at which to try to integrate services. The program itself provides some ser-

vices in the form of counseling, tutoring, and program enrichment, but it places emphasis on the advocacy role in ensuring that needed services are obtained from whatever source. The program also emphasizes "personalism," i.e., working with students in sufficiently small case loads and groups that they sense a strong personal interest and commitment. That personalism—the standard groups of four staff members and 40 students are called "families"—is designed to enhance students' bonds to and involvement in school. Although evaluation results have been mixed, the findings from the one school in Indianapolis in which the program was best implemented suggest a fairly consistent pattern of improvement: stricter standards of personal behavior, increased attention and effort in the classroom, increased success in learning situations, improved attendance, increased success in interpersonal relations, and to a lesser extent improved grades and less official delinquency (Murray 1980).

Other research on school organization (Gottfredson and Daiger 1979, Gottfredson *et al.* 1980, National Institute of Education 1978) provides provocative suggestions that other kinds of changes in school organizational properties may have potential for prevention as well. Based solely on correlational evidence, these studies imply that well-administered schools tend to be characterized by clearly delineated, well-understood, and firmly enforced rules, and that such schools experience less disruption than others. This observation might also provide the starting point for the development of an intervention program and succession evaluation research. An analysis of the reinforcement properties of several schools might provide the basis for a cycle of planned interventions, theoretical and practical reformulations, and new evaluated interventions.

LEARNING DISABLED CHILDREN AND DELINQUENCY

Much attention has recently been focused on a potential link between specific learning disabilities and delinquency. Pupils to whom the term learning disabled is applied are often disruptive and ill-behaved in school, in addition to having difficulty in listening, writing, talking, reading, spelling, and doing arithmetic. Presumably, the term does not apply to a child if these difficulties can be interpreted as being due to mental retardation, physical disability, emotional disturbance, or socioeconomic handicap (Murray *et al.* 1976). Although the ambiguity of the definition of and diagnostic procedures for specific learning disabilities (Barrows *et al.* 1977, Murray *et al.* 1976) undermine confidence in the usefulness of this diagnostic category, its components appear to be among those behaviors that can be altered by using the techniques of applied behavior analysis. A strategy of attempting directly to eliminate disruptive behavior

as well as reinforcing academic performance shows promise for children who are disruptive and have academic deficits (Allyon *et al.* 1975, Rollins *et al.* 1974). Therefore remediation efforts for children diagnosed as specific learning disabled might include the evaluation of these social learning strategies.

A recent report (Zimmerman *et al.* 1979) calling into question the link between learning disabilities and delinquency has been widely publicized. That report examined the self-reports of delinquent behavior of public school children and failed to confirm the prior expectation that those diagnosed as learning disabled would report more delinquent behavior. Yet it did find a much higher proportion of adjudicated delinquents than of public school youths classifiable as learning disabled.

This report is worthy of attention because it used a more consistent diagnostic procedure than had characterized earlier research. The publicity about this report has focused on *speculations* by its authors that the higher proportion of learning disabled youths among adjudicated delinquents may be due to the differential treatment of these youths by the courts rather than to the extent of their delinquent behavior. This is plausible, but so are other explanations. For example, if adjudicated delinquents are less cooperative than typical students, their abilities will be measured less reliably. Because the diagnosis of learning disability depends on an interpretation of difference scores in a profile of correlated measures, measurement error (unreliability) would result in classifying more persons as learning disabled for this reason.

At present, the most defensible conclusion appears to be that learning disability remains an area in which improved diagnostic procedures and greater conceptual clarity about the nature and meaning of the condition would be helpful, as would research directed at clarifying the meaning of the paradoxical results of Zimmerman *et al.* (1979) and at learning about appropriate treatment strategies for learning disabled youths and youths who experience more general educational difficulties.

INTERVENTIONS WITH DELINQUENTS VERSUS INTERVENTIONS WITH SCHOOLS

The school-based treatment strategies that we have indicated are worthy of further trial, extension, and evaluation involve a reorganization of the youth's environment in some way. These strategies not only show promise for individual remediation, but they also suggest a shift in focus away from the individual delinquent and toward the social environment. Research on alternative school environments, organizational patterns, and reorganized reward structures to prevent delinquent behavior may be a

more plausible approach to reducing delinquency than focusing on problem youths. In short, rather than emphasizing the remedial treatment of youths who get into difficulty, social scientists should consider restructuring the learning environment in fundamental ways and evaluating these alternative forms of education.

THE WORKPLACE AS A LOCUS OF INTERVENTION

The reasons for selecting programs aimed at improving economic viability as a locus of intervention are similar to those that led to the selection of the family and the school: First, several theoretical approaches suggest that improving legitimate opportunities for work will decrease crime. Second, although much research in the past has led to equivocal findings regarding the relationship between jobs and crime, two recent sets of empirical results seem to indicate the promise of carefully implemented rehabilitative programs in this area.

THEORETICAL RATIONALE

As was noted in Chapter 2, some economic models of crime predict that rational individuals will respond to increased legal opportunities for economic viability by decreasing the time (and effort) they allocate to crime. Other, more general economic models yield no such predictions, but rather suggest that offenders' responses to changed opportunities can only be discerned empirically. Several sociological theories also point to the importance of employment opportunities and jobs in the etiology of crime. Strain theory emphasizes the importance of providing legitimate occupational opportunities for all citizens through changes in schooling, expanded job opportunities, and elimination of structural barriers limiting economic opportunities. Control theory emphasizes the importance of the individual's bonds of commitment to prosocial goals. It suggests the adoption of interventions designed to reinforce commitment to study and work, to support involvement in conventional work activities, to strengthen links between the school and workplace, and to provide legal economic opportunities. Crime prevention policies and rehabilitation programs suggested by these disciplines include efforts that focus both on changing the individual by increasing economic viability through improving job skills, providing job counseling and placement, and altering work-related attitudes, and on social structural changes such as eliminating barriers to opportunities ranging from racism to high rates of unemployment and the denial of bonding to ex-offenders and creating new jobs.

EMPIRICAL SUPPORT

Despite the hundreds of empirical studies of the relationship of unemployment and crime, the evidence is equivocal and raises a host of further research questions (for a review of the issues, see Tropp (1978)).

One set of empirical results relates legal labor market performance to criminality by analyzing available data. Most work in this area to date has used aggregate data. This aggregate work, surveyed by Gillespie (1975) and Orsagh (1974), and most comprehensively by Long and Witte (1981), provides only weak support for the expected positive relationship between the unemployment rate and crime. The results indicate that the unemployment rate has a larger effect on adult than on juvenile crime. Aggregate studies only inadequately measure the effect of income on crime rates over time and across social areas because the income relevant to each individual's decision to commit crime cannot be identified by using aggregate data. Most studies use the percent of population living in poverty or a measure of the average income of the poor as the relevant measure of economic opportunity. Studies of income and crime, like the work examining the effect of unemployment on crime, provide at best weak support for the expected relationship—crime decreasing with increasing income of the poor. This work also provides weak support for the proposition that decreased income dispersion will lead to lower crime rates.

Although the economic theory of crime is based on a model of individual behavior, there have been only a few attempts to use individual data to test this theory (see Cook 1975, Sickles *et al.* 1979, Witte 1980). This work again provides consistent but only weak support for the expected inverse relationship between income and crime and weak, if any, support for the relationship between unemployment and crime. It appears that offenders have little trouble finding jobs, but that the jobs they find are undesirable. The unpleasant nature of these jobs leads to high turnover rates. Offenders typically remain voluntarily unemployed for varying periods between jobs. Cook has suggested that offenders will "drop out" of crime only if they are able to find relatively pleasant jobs with relatively good wages and advancement opportunities. Unfortunately, our knowledge of the labor market for these persons (see Witte and Reid 1980) indicates that ex-offenders are unlikely to find such jobs without aid and that even with aid they often prove to be unstable employees.

Recent studies involving interviews with prison inmates (Petersilia *et al.* 1978, Sviridoff and Thompson 1979) indicate that the relationship between economic viability and crime is far more complex than suggested by the economic models. The nature of the relationship between unemployment and crime depends on the type of crime and type of offender.

Sviridoff and Thompson identify four distinct types of relationships between unemployment and crime:

1. Some offenders require jobs in order to commit crimes (e.g., embezzlers).
2. Some offenders mix employment and crime, using their legitimate jobs as a front for criminal activities.
3. Some offenders alternate between employment and crime, most closely fitting the simple model, "unemployment causes crime."
4. Some (estimated as between 5 and 18 percent of property offenders) are firmly committed to crime as their primary means of support.

An increase in employment opportunities would be associated with a drop in criminal activity only for offenders in group 3 and some in group 2.

The second set of empirical results comes from evaluations of rehabilitative programs designed to improve the economic viability of offenders. As a whole, these empirical results provide some support for the relationship between improved economic viability and lowered crime. Further, these results indicate that certain types of rehabilitative programs are probably more effective than others. Evaluations of vocational training and remedial education projects in prison, parole, or probation settings have almost uniformly found that such programs have insignificant effects on both labor market performance and criminality (Cook 1975).

Evaluations of work programs in prison (e.g., work release and prison industries) have had mixed results. These evaluations generally show that such programs reduce the cost of running a prison system (see Cooper 1968, National Institute of Law Enforcement and Criminal Justice 1978a,b) but they have reached conflicting conclusions regarding the rehabilitative effect of such programs. On the one hand, quasi-experimental evaluations of work release programs in California (Jeffrey and Woolpert 1974, Rudoff and Esselstyn 1973) indicate that these programs significantly decreased the level of reported criminal activity among prison releasees. A quasi-experimental evaluation of the North Carolina work release program (Witte 1977) found no significant effect on recidivism, but did find that inmates who participated in the work release program committed significantly fewer serious offenses after release. On the other hand, a quasi-experimental evaluation of the Massachusetts work release program (Leclair 1972) and a randomized experimental evaluation of the Florida program (Waldo and Chiricos 1977) found no significant effects on postrelease behavior. Evaluations of pretrial intervention projects that provide employment-oriented assistance find that such programs are more

effective for adults than juveniles and that they decrease criminality in the short, but not the long, run (Rovner-Pieczenik 1970, Taggart 1972).

In the early 1970s, two new programs, transitional aid and supported work, aimed at improving the economic viability of released offenders in the community were implemented and produced promising results. The transitional aid program, begun in Baltimore in October 1971 by a non-profit research organization, provided financial and other aid to offenders in the period immediately following their release from prison. This program called LIFE (Living Insurance for Ex-Prisoners) carefully selected a pool of "high-risk" eligibles from Maryland Corrections Department releasees returning to the Baltimore area. In order to be eligible for the program a releasee had to be a male, under 45, have a number of previous convictions, have at least one arrest on a property-related charge, be neither an alcoholic nor a heroin addict, have less than \$400 in savings, and have participated in work release for less than 3 months or not at all. Persons meeting the above criteria were randomly assigned to four groups. The first group was eligible to receive \$60 per week for 13 weeks and was offered job placement services. The second group received \$60 per week for 13 weeks but no placement services. The third group received job placement services but no financial aid. The final group served as a control group and received no services of any kind. Financial payments were made in such a way as to provide little, if any, work disincentive effect. Specifically, the payments to employed persons were reduced, but employed persons, like those who were not employed, eventually received \$780 ($\60×13). During the first year after program completion, persons receiving financial aid had 8 percent fewer arrests for property offenses than did those who received only job placement services or no services at all. Those receiving financial aid had no better employment experience than those who did not and did not have significantly fewer arrests for offenses other than property crimes. Persons receiving only job placement services performed no better than the control group (see Lenihan 1977). A benefit-cost analysis (Mallar and Thornton 1978) of the LIFE program indicated that the social benefits emanating from the program substantially exceeded the social costs.

The supported work program, begun in New York City in 1972 by the Vera Institute of Justice, provided subsidized employment in a "low-stress" environment for ex-addicts who were eligible for supplemental security income benefits, had been successfully enrolled in a drug treatment program for at least 3 months, had been employed for less than 12 months during the last 2 years, and were judged qualified by management. Persons meeting these eligibility requirements were randomly

assigned to the program and a control group. The supported work program provided reasonable wages (average of \$100 per week) and graduated performance demands designed to lead to eventual economic viability. An interim evaluation of the program effects indicated that persons who participated in the program earned more, required fewer welfare benefits, and were arrested less often than controls. Further, as was the case for transitional aid, a benefit-cost analysis of the program indicated that the social benefits substantially exceeded the social costs. (See Friedman (1977) for additional details.)

In the late 1970s, both the transitional aid and the supported work programs were rapidly expanded. Fortunately, these expansions were subject to careful experimental evaluation and at least partial results are currently available. Not surprisingly, the nature of both programs was substantially modified during expansion.

The expanded transitional aid program, renamed TARP (Transitional Aid Research Project), was operated in Georgia and Texas by the State Department of Corrections and Employment Security Offices and made available to persons released from jail and prison between January and July 1976. This program made transitional aid payments available to all Department of Corrections releasees returning to areas with Employment Service Offices (mainly urban areas) and to selected groups of those returning to areas of the state without such offices. All out-of-state releasees and releasees with detainers or outstanding warrants were excluded from the program. Eligible releasees were randomly assigned to the following programs: (1) 26 weeks of payments (\$63 per week in Texas, \$70 per week in Georgia) with a dollar loss of benefits for each dollar earned (100 percent marginal tax rate), (2) 13 weeks of payments and 100 percent marginal tax rate, (3) 13 weeks of payments and 25 percent marginal tax rate, (4) job placement services, (5) interviewed controls, (6) noninterviewed controls.

There are several substantial differences between LIFE and TARP. First, the geographic area and the time of implementation differed. Second, the administering agencies for TARP were existing state agencies, whereas the administering agency for LIFE was an external, nonprofit research group. Third, marginal tax rates on earnings were higher in TARP than in LIFE. Fourth, the period of eligibility varied under TARP but not LIFE. Finally, all releasees residing in certain areas were eligible for TARP, not a selected sample as in LIFE.

Evaluation results indicate no significant differences in rearrests between persons receiving transitional aid payments and the control groups. Further, persons receiving transitional aid were found to work less and earn lower incomes during the follow-up year than persons in the control

group. This effect is probably the result of the high marginal tax rate on earnings for those receiving transitional aid payments. When the work disincentive effect of transitional aid payments is controlled, evaluation results indicate that releasees who received transitional aid payments had significantly fewer property and nonproperty arrests than persons who received no such payments. In addition, employed members of the treatment groups earned higher weekly wages, a finding consistent with job search theory. (See Rossi *et al.* (1980) for additional details.)

The supported work program was expanded originally to 13 cities and to include three target groups in addition to ex-addicts: women who had received AFDC welfare payments for substantial periods of time, prison and jail releasees, and young (17 to 20 years old) school dropouts, half of whom had criminal or delinquency records. The program was administered by diverse groups in the various locations ranging from governmental bodies to nonprofit community groups. Although the exact program and nature of jobs available varied from location to location, the new programs were quite similar to the original.

Results for the first 18 months of the expanded program are available (Maynard *et al.* 1979). The welfare mothers (who did not have criminal records for the most part) were helped most; twice as many experimentals as controls made the transition from welfare to self-sufficient employment. Ex-offenders significantly improved labor market performance only during program participation, although significant welfare payment decreases continued even after ex-offenders left the program. There was no significant decrease in reported criminal activity for ex-offenders either while they were in the program or after termination. For the young school dropouts, supported work had no significant impact on employment, earnings, criminal activity, or drug abuse. Ex-addict participants, however, did decrease their criminal activity significantly. These results are disappointing for ex-offenders and young school dropouts but support the original results for ex-addicts.

A RESEARCH STRATEGY INVOLVING JOBS AND ECONOMIC VIABILITY

Despite the weak empirical evidence that higher income is associated with lower levels of criminal activity and unemployment is associated with criminal activity, and only glimmerings of hope among program effects, we are not prepared to reject the hypothesis that crime and economic status are connected and that more effective interventions would therefore affect that relationship to reduce crime. Much evidence only imperfectly tests the financial and other models.

The financial model asserts the existence of a crime-economic status

relation only for a particular population, namely those for whom marginal differences in returns to legitimate versus illegitimate activity are not large and for whom legitimate and illegitimate activity are substitutes. This "marginal group" (see Zimring and Hawkins 1973) population is a small proportion of the total population of offenders. Empirical tests may have yielded inconclusive findings because programs designed to improve economic viability have generally been implemented rather haphazardly and have included habitual assaultive offenders and morals offenders as well as a variety of property offenders. Given this diverse clientele, it is not surprising that evaluations have only occasionally found such programs to be effective. The effectiveness of such programs can only be truly judged if they are applied to persons who fit the model. Furthermore, the treatments have generally not been combined with other procedures that would make them more potent. Combining subsidies with job search skills training (Azrin *et al.* 1980) might be worthy of trial. The Baltimore LIFE experiment comes closest to meeting this requirement. We suggest a careful research strategy to test the validity and breadth of applicability of rehabilitative strategies suggested by the economic model of crime, via randomized experiments.

In initiating this research strategy, whose goal is the reduction of recidivism through the improvement of offenders' economic viability, the template of offenders most likely to benefit from the program would include those whose offenses appear to be caused by economic need (e.g., those unemployed, underemployed, and lacking in job skills or experience) and whose crime was based on rational decisions. It would exclude primarily assaultive offenders, very youthful offenders still in school, and those with severe psychological problems, limited mental abilities, and serious addictive problems.

The next step is to develop a program designed to expand and improve the legitimate opportunities as well as strengthen the social bonds of commitment to and involvement in work for this group. One program component might increase economic viability by providing remedial education and vocational training. To reach these participants, however, this component should provide immediate feedback and positive rewards for progress in a manner quite different from the educational system. In addition, the program should address the largely negative attitude toward work and the "square" life and alter the poor work habits found among many prospective program participants. If the program is designed specifically for inmates, it may involve in-prison training in a marketable skill or *positive* work experience coupled with a good prerelease program and transitional aid or supported work. Whatever the program specifies, its component activities must actually improve legal economic viability,

not merely to claim to do so. The program components are likely to be discovered only through trial and error through the type of evolutionary program development previously elaborated. When an effective program is developed for one limited client population, it is necessary systematically to evaluate the economic model on which the program rests and the program's effect on behavior both during and after program completion by using the strongest data assessment methodologies. If the program is found to be effective with all or a segment of the target population in improving legal income-producing opportunities and in decreasing crime, it is ready for replication and limited expansion, preferably as an experiment. At the original site, the program might be subjected to certain modifications in, for example, the client template, the mode of delivery, or other specific program elements; at a new site, the original program should be implemented to determine whether changes in personnel and setting affect program effectiveness.

Programs affecting income-producing opportunities should be aimed at making changes in institutions as well as in individuals. Such programs could include tests of ways of generating more primary sector jobs, tests of various more flexible and supportive work environments, and experimental tests of policies to encourage the employment of low-skill/high-risk workers such as the suspension of minimum wages for some youths.

THE PEER GROUP AND COMMUNITY AS A LOCUS OF INTERVENTION

The various theories of the origins of crime easily encompass within their range of convenience the community as a construct of great importance. Social disorganization, the absence of social controls, deviant cultures and subcultures, juvenile gangs, and abundant opportunities for modeling criminal behavior are all manifestations of community-level phenomena. These have led to a variety of community-based intervention strategies, from the War on Poverty to "the new corrections." In some instances, these are interventions at the individual level, designed to change behavior of offenders who remain in the community; in other instances, the community rather than the individual is the target of the change.

THEORETICAL APPROACHES

Cultural deviance theory (Shaw and McKay 1942, 1969) suggests that the deteriorated areas of cities produce social disorganization that permits the development of the street gangs that are the primary source of the commu-

nity's high delinquency rates. This causal sequence suggests that community mobilization and programs that concentrate on altering the delinquent traditions and behavior of street gangs are necessary to reduce crime.

Strain theory suggests that "the major effort of those who wish to eliminate delinquency should be directed at the reorganization of slum communities" (Cloward and Ohlin 1960, p. 211). This view suggested the ambitious Mobilization for Youth project in New York, the War on Poverty, and the President's Commission's call for the reintegration of the offender into the community. Yet both cultural deviance and strain theory fail to specify the nature of "community," to distinguish clearly between community and social structural variables, and to identify different organization sectors, their components, and interrelationships within a community.

Symbolic interactionist theory points to an intervention strategy focused on the peer group rather than on the individual or the whole community. The goal is to redirect the group to noncriminal activities and instill new anticriminal attitudes and beliefs through the development of mechanisms that make the group itself both the target of change and the source of pressure for change. This is most effectively done when criminals and noncriminals are integrated into groups that emphasize values conducive to law-abiding behavior and when such anticriminal groups have a common purpose, mechanisms for internal cohesion, and a system by which status within the group is achieved by the exhibition of proreform or anti-criminal values and behavior patterns.

These principles have been applied in the past two decades in a variety of grass roots efforts to build antideviance groups. Some are based on the same self-help model as Alcoholics Anonymous; others build on a variety of group dynamics and organization development theories and techniques (Jones 1953, McCorkle *et al.* 1958). Some therapeutic communities such as Synanon and Daytop Village are largely isolated by strong psychological and physical boundaries from the surrounding community. Others, such as Delancey Street in San Francisco and the House of Umoja in Philadelphia, are more actively involved with the surrounding community. The conclusions about promising outcomes that have been reported by many of these peer group cultures and therapeutic communities are based largely on journalistic accounts of action programs without control groups, experimental designs, or formal evaluations (see, for example, Hampden-Turner 1976 and Woodson 1981). Careful evaluation of such "promising" programs and efforts to replicate program elements under controlled conditions are now required.

The Provo and Silverlake experiments (Empey and Erickson 1972, Empey and Lubeck 1971) are examples of two antideviance, peer group

change programs that have been carried out with the use of a rigorous experimental design. Each sets out to test a causal model of delinquency based on a combination of strain, cultural deviance, and differential association theories and a program designed to reduce delinquency by creating an anticrime peer group using guided group interaction. Although the programs were largely successful in creating prosocial norms and reducing the delinquent behavior of the peer-oriented boys involved, efforts to eliminate strain by reducing obstructions to legitimate achievement by the boys in the group and larger community were less successful. The researchers concluded that future programs should supplement the peer group process with elements focused on building the institutional ties of the boys, particularly ties to family, school, workplace, and neighborhood. This conclusion accords with control theory, which suggests that interventions with delinquents should give them a stake in the community by fostering participation in conventional groups and activities in it.

COMMUNITY CORRECTIONS AND REHABILITATION RESEARCH

In the past 15 years, there has been a great expansion of what is now termed "community corrections." Among the broad alternative strategies and programmatic efforts that have been adopted to supplement traditional probation casework are diversion, community-based residential treatment programs, the deinstitutionalization of status offenders, restitution and community service sentences, supported work and other employment programs, reduced probation case loads, and a brokerage approach to probation.

Probation and parole are both sentences or legal categories assigned to offenders in community corrections and state and local administrative units responsible for carrying out rehabilitation programs. Diversion occurs in lieu of formal adjudication but also involves a variety of programs administered by diverse agencies. Restitution may be an independent sentence or a condition of either diversion, probation, or parole. It is important to understand the ways in which probation and parole agencies work, since they have the primary responsibility for delivering rehabilitation services to offenders, but research on probation and parole (as well as on diversion and restitution and community service) as generic types of rehabilitation activities has proved to be of limited value in the search for more effective interventions. Because these terms encompass such diverse activities and programs, there is not a unifying or clearly articulated theoretical basis guiding program development in each category and overall assessment is virtually meaningless, obscuring important differences among programs and reported outcomes.

Diversion

The President's Commission (1967b) recommended a policy of the diversion of youthful offenders away from formal justice system processing based on the arguments of labeling theory that many minor offenders' problems might better be ignored, normalized, or dealt with by another institution. In practice, however, diversion has come to mean turning offenders toward treatment programs, which are often operated directly by the justice system.

The literature on diversion is large, but the actual knowledge is limited and inconclusive (for reviews, see Colomy and McDermott 1975, Cressey and McDermott 1973, Gibbons and Blake 1976, Klein 1979, Neithercutt and Moseley 1974). The vast array of activities encompassed under the rubric diversion and the absence of any adequate classification of programs in terms of their theoretical premises, goals, program activities, applicability to various types of clientele, and outcomes make assessment of diversion programs difficult. As was noted in Chapter 3, a recent review of the diversion literature (Klein 1979) concludes that the question "does diversion work?" cannot be answered because diversion has not really been tried.

Probation and Parole

Probation based on a casework or individual counseling approach has been the principal form of community corrections for more than half a century. The President's Commission's call for the reintegration of the offender into the community, new programs in the community, and changes in the ways probation and parole officers spend their time has led to the introduction of innovations at both policy and program levels of probation and parole departments. These include day training centers, outreach centers, residential treatment centers and halfway houses, vocational guidance and training programs, shock probation and parole, team management of probationers, brokerage approaches to the role of probation officer, wider use of volunteers and paraprofessionals, work- and study-release programs, restitution as a condition for probation and parole, and decreased case loads for intensive supervision (Carlson and Parks 1978). Nevertheless, most probation departments continue to operate on an individual casework approach (Nelson *et al.* 1978).

Knowledge about probation and parole activities and outcomes is limited by the lack of a clear definition of goals, the absence of an adequate theory of practice, and a variety of methodological problems. This situation led Carlson and Parks (1978, p. 237) to conclude that "most of

what has been undertaken as research in probation has not met the minimum standards of research and thus does not materially contribute to our knowledge." Banks *et al.* (1977) arrived at a similar conclusion regarding special and intensive probation programs.

Among the principal avenues for future research regarding probation and parole are the following: (1) the development and testing of a conceptual framework for probation, (2) exploration of actual probation department practices with respect to the delivery of services to clients and/or their placement in programs or private treatment facilities, (3) controlled experiments to assess the effectiveness of innovative programs and policies, and (4) examination of the relations between probation and/or parole departments and other community service agencies and the effects of interagency cooperation or the lack of it on probation and parole outcomes.

Restitution and Community Service

Restitution is an old legal concept currently enjoying renewed popularity as a promising alternative sentence that "does something" to the offender, is less expensive than probation or incarceration, and benefits the actual or symbolic victim. It is "a sanction imposed by an official of the criminal justice system requiring the offender to make payment of money or services to either the direct or a substitute crime victim" (Hudson and Galaway 1978, p. 1). The symbolic substitute is usually the community. This type of restitution is often termed community service and is increasingly treated as conceptually and programmatically distinct.

Several rationales support restitution and community service sentences. Some assert that restitution can be rehabilitative in that it can assist defendants to accept responsibility for their acts, can lead to a consideration of the consequences of their actions for crime victims, can offer a meaningful experience to offenders, thereby changing their attitudes and behavior, and can provide a constructive way for offenders to alleviate guilt feelings that arise from their criminal behavior. Others argue that restitution is useful as a deterrent to crime (Tittle 1978) and as a just punishment (McAnany 1978, Schafer 1970).

Systematic restitution and community service programs are new and varied; they appear to be feasible, but their impact on offenders is unclear. Evaluations and research on them are under way, and findings are limited (see Martin, in this volume). Programs differ with respect to the goal (i.e., offender benefit, victim benefit, or community benefit); the timing (e.g., as a form of pretrial diversion, probation, or a condition of parole); the victim eligible for payment; the amount, type, and conditions

of payment; the administrative agency operating the program; and the role of the victim. Although often justified as alternatives to incarceration, restitution and community service sentences more often are being used as an alternative to a fine or probation or to supplement another sanction (see Chesney *et al.* 1978, Harland 1980a).

At present, two national evaluations of a number of newly established, diverse restitution programs funded by the Law Enforcement Assistance Administration (LEAA) and the Office of Juvenile Justice and Delinquency Prevention (OJJDP) and a similar national evaluation of newly created community service programs funded by LEAA are in progress. None had produced a final evaluation as of November 1980. In addition, the National Institute of Justice (NIJ) is now funding a national assessment of adult restitution programs. This project is reviewing the research literature on restitution and community service and gathering survey data on uses and outcomes of restitution and community service programs from a sample of existing programs and projects around the country.

If, as appears to be the case from preliminary data, restitution and community service are found to be administratively workable sentencing alternatives, much more carefully controlled, longer-term, experimental research using the best research methodology available will be needed. It should test the theoretical premises on which the widely varied programs rest, and the relationship of program rationales to offender and victim characteristics, program implementation activities and processes, and outcomes with respect to offender behavior. Although restitution and community service appear to be promising sentencing alternatives with widespread support from the community (Hudson and Galaway 1980b), offenders, and victims (Hudson and Galaway 1980a), one must remember that (Harland 1980a, p. 58):

With a history of one criminal justice innovation after another producing counter-productive and often inhumane side-effects and unintended consequences . . . the exciting opportunity to innovate (with community service and financial restitution programs) also carries with it a responsibility to do so cautiously and with a sensitivity to what has gone before.

INTERNATIONAL PERSPECTIVES ON COMMUNITY CORRECTIONS AND CRIME CONTROL

In examining community-based strategies of crime prevention and offender rehabilitation, the panel briefly considered practices in other societies and their potential for implementation in the United States. In the Scandinavian countries, disillusionment with the use of imprisonment as a penal sanction as well as with the intrusiveness of probation has led to

efforts to decrease the use of incarceration, shorten prison terms, reduce the use of probation, and increase the use of nonincarcerative alternatives including suspended sentences and fines (Carlson and Parks 1978, Hechscher 1979, Snare 1979). One widely used alternative, the day fine, is figured in terms of a fixed percentage of an offender's wages for a specified number of days. The number of days reflects the severity of the offense; the amount of fine reflects the offender's financial capacity. It thereby adjusts the punishment to both the crime and the financial status of the offender. The successful implementation of the day fine in societies resting on democratic principles and materialistic values similar to our own suggests that it might be worth systematically testing in several jurisdictions with the use of different penalty formulas to determine its feasibility and outcomes with different types of offenders, particularly white-collar criminals.

A very different, but seemingly generally successful system of urban crime control in the People's Republic of China is described by Whyte (in this volume). It is based on extensive government control over urban residence through a system that restricts urban migration and requires household registration in order for one to gain employment, housing, and other necessities of life. This system makes illegal urban residence difficult and deters crime by the threat of the loss of one's permit to reside in the city. It is supplemented by informal control of individual behavior through the work unit and neighborhood organizations. Serious offenders are sent to labor reform or labor reeducation camps in the countryside. Postrelease recidivism rates appear to be low, owing less to the success of the camps in reeducating or changing the attitudes of offenders than to the deterrent effect of postrelease residence control and continued informal scrutiny of releasees' activities. While Whyte concludes that the Chinese system offers little that is transferrable to the United States, it can serve to sensitize us to the ethical dilemmas posed by the apparent conflict between individual autonomy and social order that must be addressed in every complex society.

A FIELD EXPERIMENT WITH A COMMUNITY LOCUS OF INTERVENTION

The amount of knowledge gained in the past decade from group- or community-focused intervention programs has been limited by the lack of rigorous experimentation and evaluation. What might an experimental program with the community as a locus of intervention be like? We can only broadly illustrate one such a program here, pointing to a number of crucial elements and considerations in establishing a program adhering to the succession evaluation model proposed in Chapter 4.

Were we to create an intensive program in the community as an alternative to incarceration for chronically delinquent boys, for example, we would begin by building on existing research, drawing on the model of the Silverlake and Provo experiments (see Empey and Erickson 1972, Empey and Lubeck 1971), and altering it to incorporate the researchers' suggestions for further research and some promising elements found in the descriptive literature and a variety of existing programs. In brief, the program would incorporate the therapeutic milieu/peer group as a target and mechanism of change but would, in addition, seek to strengthen the ties of the boys to their families, school, and community.

To begin, it would be necessary to state the goals of the program. The broader goals would include in-program and postprogram decreases in delinquent activities; the immediate goals, an alteration of peer group identity, reduction of strain, and strengthening of the boys' ties to conventional institutions. Further specification of program goals would be jointly determined by program and research staff in the process of defining the target population and determining program elements.

Having determined that the program is to be a residential one for chronic delinquent boys, further refinement of the target population is necessary. Consideration must be given to the age, family characteristics, and other background factors of the boys. Since the program would be geared to altering peer group orientation and linking the boys to conventional institutions, the template for selection might be the following: youths adjudicated for serious offenses who are sentenced to a residential facility in part because of disrupted or chronically conflict-ridden home life; who do not have a marked psychiatric or drug addiction problem, physical handicap, or abnormally low intelligence; who have been arrested at least three times but not for a violent offense; and who are between 14 and 17 years old and members of or affiliated with a gang or whose property crimes were committed in a group. The age range would be specified to facilitate the development of an educational component of the program through one high school. Because the intervention would focus on making the peer group the target of change, a screening mechanism to include only peer-oriented delinquents would be desirable. Because the target group would probably be limited, planners should attempt to locate the program in a large metropolitan area to assure that there are enough youth eligible for it.

In implementing the program, which would grow from a theoretical statement of the problem such as that found on p. 106 of Chapter 4, two related but distinct components would have to be designed: one focused on altering attraction to delinquent peers directly and the other concentrated on strengthening ties to conventional persons and institutions. In

designing an intensive residential setting with a peer-group-oriented program, one could draw largely on Empey and Lubeck's (1971) theoretical statements and experience in establishing such a group. The program would be designed to confront the delinquents' identification with peers by making the group both the target and the agent of change and creating an alternative social system in which criminal and noncriminal are joined in the common task of promoting anticriminal values. The program would have to provide a social climate that would permit the youth to examine choices, declare dedication to changed values, and assume responsibility for creating norms and making decisions in the group. There would have to be sufficient rewards for prosocial behavior to make changing worthwhile and an alternative support system to that provided by the delinquent gang.

A small residential program of about 20 youths with a relatively simple structure, few rules, and several component parts might be established. The small size would facilitate development of group solidarity as well as a more "familylike" living arrangement. The program would consist of a daily group meeting based on the principles of guided group interaction (McCorkle *et al.* 1958). The rest of the daily routine would be tightly structured to facilitate the boys' adjustment to conventional habits and schedules. It would include school, afternoon work responsibilities both in the community and at the program facility, and structured study time, dinner, group meetings, free time, and lights out. Tasks and privileges would be ranked and awarded on the basis of display of prosocial behavior. Certain paid jobs might be reserved for boys achieving a certain level of responsibility within the program. Thus boys would move through a series of steps toward graduation from the program, and those on the higher rungs of the status ladder would serve as role models for newer boys.

Involvement in the program would not end on release by the court; there should be postresidential support to help graduates maintain the changes and readjust to home (or foster placement), school, and neighborhood. Releasees might be required to return to the facility once a week for several months for a meeting, perhaps as an alternative to being placed on probation. In addition to providing support in dealing with new problems, postresidential follow-up would provide the graduate with an opportunity to serve as a model of success for boys newly admitted to the program.

Program staff might be persons trained in group leadership techniques and experienced in the role of facilitator. Given the difficult home life situation of the boys, it might be desirable to have both male and female staff. An alternative staff model would be to structure the program as an

extended family, as has been done in the House of Umoja and Achievement Place.

The other, more difficult aspect of implementing the theoretical propositions would be the creation of legitimate opportunities for achievement and the strengthening of the boys' bonds to school, family, and community. Since strain arises from academic failure, the intervention should seek to provide opportunities for academic success and social acceptance in the school. Given the probable academic and school behavior problems of most program participants, the difficulties of integrating them into a school would be profound. A consideration in selecting a residential site for the program might be to locate a school district in which authorities would be willing to cooperate with program and research staff in seeking to integrate the youths into the high school. Remedial educational assistance outside of school would be part of the program at the residential facility. Integration into regular classes at the school would be preferable to establishing a school for the boys at the residential site, because the latter would further remove the boys from the community. The program might seek, however, to establish alternative educational options within the school. For example, a work-study program might be created in cooperation with the school and community employers. It would be desirable to involve program participants in extracurricular clubs or activities likely to attract good kids such as an auto mechanics workshop, a filmmaking project, or intramural sports. Involving program participants in classes and activities in the school would require delicate negotiation prior to program initiation and continued communication between school and program staff. The availability of program funds to provide materials, teacher's aides, or personnel to run after-school activities for the school might facilitate school-program cooperation.

The second institutional link to be developed would be that of the youths to their families, a task made more difficult by the disturbed states of the families. The theoretical and empirical rationale for involving parents in the intervention program grows principally from control and social learning theories. Many of these parents may need additional social services, financial support, and/or medical assistance before they could be actively involved in the program through weekly family group meetings using the guided group interaction format. Additional individual sessions involving a youth, his parents, and a staff member might also be included for some parents and might be varied in terms of frequency and structure to determine the effects of various types of family involvement and intervention strategies on program outcomes.

The third institutional link to be developed would be that of the boy to the community. Most programs overlook this aspect, and yet there are

many ways to provide program participants with opportunities for responsibility and conventional success through community involvement. In the House of Umoja, for example, boys are required to provide some regular service to residents of the immediate neighborhood. Often they tutor an elementary school child in reading. This fulfills several goals simultaneously. It improves the reading of the tutor, creates a situation wherein the delinquent must act as a positive role model for another, and promotes contact and goodwill between the program and neighborhood residents. Other community service components that could be built into the program, depending on the needs and activities of actual organizations in the community, might include regular visits to the elderly in a nursing home, collecting newspapers for recycling (and money for the use of the group), and mobilizing community residents and lobbying city hall for street improvements or a neighborhood park.

Creating a complex, well-designed program would be only part of the task; it would have to be designed to mesh with a research strategy that tests program assumptions, examines program processes, and assesses outcomes. The research would optimally be designed as an experiment, with random assignment from a pool of eligibles to the experimental program and two control conditions, probation and an alternative, more traditional secure institutional program. This design would require the establishment, prior to initiation of the program, of a mechanism for assignment to experimental and control conditions that would be approved by the court and designed in such a way as to prevent court personnel from circumventing it. To test program assumptions, a variety of input measures would have to be designed to collect data on offense history, peer group commitment, family relations, background, academic record, and personality of participants. Program operations would have to be carefully monitored both to assure the integrity of program implementation and to provide data on the change process itself. Qualitative data about the experience from the perspectives of the client and staff should be gathered to indicate how these actors perceive and react to the program. It would be necessary to collect data on actual program operations of both the control program and the experimental programs, since they could not be assumed to operate as planned. Process data might include periodic tapings of peer group and family discussion sessions, interviews with participants at reguoar intervals, and analyses of "critical incidents" that alter or otherwise affect program operations. Data gathered by the researchers could be supplemented by the observations of participants. Some of the boys, for example, might be paid to keep a log or diary. This requirement would have the added value of providing some boys with a legitimate source of income and encouraging the development of writing

and observational skills. Other measures to assess school and family change processes and to explore the problems involved in implementing institutional change would also be necessary.

A variety of outcome measures would also have to be devised. These should include several short- and long-term measures of recidivism (using both official records and self-report data) and other indicators of program outcomes including official data such as school grades, disciplinary information from school personnel, and follow-up interviews with participants, teachers, and parents (or postprogram guardians). In addition, data examining the problems and successful strategies in establishing a collaborative endeavor from the points of view of program staff, school personnel, and researchers would need to be gathered and analyzed.

Finally, it would be necessary to assess the implications of the research findings for theory, practical programs, and future collaborative efforts. If it were well executed, a study as proposed would lead to further refinement of theory and suggest modification of several of the program components as well as revision in data collection instruments. These should be incorporated in the next iteration in what is likely to be a series of field experiments in the development of a program model using the succession evaluation strategy.

THE INDIVIDUAL AS A LOCUS OF RESEARCH: BIOSOCIAL ASPECTS OF CRIMINAL BEHAVIOR

As was noted in Chapter 2, several lines of evidence have pointed to a link between criminal behavior and certain biological factors, but none of them is well established or likely to account for more than a fraction of the criminal population. The empirical evidence is more intriguing than impressive. Nevertheless, we think that given the potential of the evidence for explaining some criminality and some puzzling aspects of other criminality, further research on the biosocial aspects of crime is merited.

The lines of evidence previously cited point in rather different directions, and have widely differing implications, for understanding crime and rehabilitating criminal offenders. It must be emphasized that the involvement of a biological factor in crime does not necessarily imply the desirability of a biological intervention. Some of the research on the brain and violent behavior has raised the specter of zombielike people who have had large parts of their brains rendered inoperative by surgery, their emotions wiped out by drugs, or their behavior controlled by electronic gadgets implanted in their skulls. Such exaggerated and distorted images

tend to create a climate in which potentially more reasonable and more effective interventions may be undiscovered or foresworn if known. At the same time, recognition of past abuses of surgery and current practices of administering tranquilizers to prisoners strongly suggests close attention to the legal and ethical issues attendant on pursuit of this line of inquiry. Research on the biosocial aspects of criminal behavior should proceed with great caution.

If it were found that certain types of structural or chemical brain anomalies were associated with high rates of violent aggression, interventions of a behavioral or situational sort might be employed. Some persons might be taught by various means to recognize prodromal signs of an impending hyperaggressive episode and means of avoiding it or of limiting its consequences. Such recognition techniques are currently being included in some programs for sex offenders (Brecher 1978). Careful study might reveal particular stimuli likely to trigger an episode of destructive violence and suggest ways of eliminating such stimuli. In the case of children, parents might be taught more effective ways of dealing with violent outbursts, perhaps through channeling them into nondestructive activities.

The use of drugs to control violent behavior does not necessarily mean drugging persons to the point of stupor. Many manic-depressive persons are apparently functioning well in society with the aid of lithium, and there appears to be no widespread objection to its use for them. Lithium has been tentatively reported to be effective in controlling violent episodes in some criminals (Sheard *et al.* 1976), suggesting the need for more intensive and systematic research. Apparently, lithium produces a calming effect without the detrimental effects on cognitive processes that often accompany major tranquilizers. More effective drugs with even more specific effects may be developed, and their value in treating certain forms of aberrant behaviors that also happen to be criminal should not be overlooked.

Mednick and his associates believe (Mednick, in this volume; Mednick and Christiansen 1977) that a small subset of criminals can be classified as psychopaths on the basis of autonomic nervous system responses and that there is a genetic basis for the "sluggish" autonomic response that supposedly characterizes psychopaths. Mednick also believes that it is now, or will soon become, possible to identify the critical response pattern in relatively young children. While this raises the troubling possibility of abuses (genetic screening, early detection, and labeling), it also suggests more positive alternatives. The genetic characteristic that is presumed to be transmitted is not the array of behaviors that ultimately results in the label "psychopath," but rather specific autonomic response characteris-

tics that facilitate the development of early behavior patterns that can culminate in the label but that presumably could be avoided through alternative patterns of socialization. It is widely accepted that a child who is not able to hear should be taught through another modality. Similarly, if a child does not readily learn to avoid undesirable behaviors by ordinary methods of training, it seems reasonable that other methods should be developed and employed. That what those methods might be is not known is precisely the point of recommending research on the issues that have been raised with respect to psychopathy. Such research, if it is productive, offers hope of averting the processes that when they result in criminal behavior in certain adults have proved extremely difficult to deal with. Although the hypothesized characteristics of the psychopath occur in only a small proportion of identified offenders, if these persons account for a disproportionately large amount of serious crime, the potential importance of the research may be great.

Research of the kind surveyed by Hippchen (1978) also may be worth pursuing because the variables involved are thought to be associated with a wide range of deviant behavior, including such crime. Moreover, the interventions that would seem to flow naturally from substantiation of the kinds of hypotheses involved in the "ecological" approach he pursues should meet few objections on ethical or moral grounds and should be far less costly than the costs of dealing with crime. It may be no simple matter to detect and identify allergies that are as widespread and attributable to such common food substances as Hippchen and his associates seem to think is the case, but the stigma associated with the diagnosis is probably minimal, and the problems involved in reducing intake of allergens are likely to be relatively manageable in relation to other kinds of interventions that are often recommended. Similarly, if diet, lighting conditions, and local climate do prove ultimately to make even small differences in the behavior of delinquents and criminals, the alteration of such factors might be cost effective in reducing the frequency of undesirable behaviors and in some instances would be accompanied by positive effects on a broader segment of the population, since many ecological changes would probably be widely desirable.

The panel does *not* endorse any particular line of research nor any particular investigator; nevertheless, it believes that research on biological variables potentially associated with criminal behavior should be systematically pursued and supported. Research on biological variables seems to offer some hope of comprehending obvious individual differences in criminal behavior. At least some forms of criminal behavior occur with greater than expected frequency among persons with certain social or cultural characteristics (e.g., those lacking education), but few persons with

these characteristics become chronic, serious offenders. What accounts for these individual differences? Specific life circumstances and quirks of fate that may be difficult even to determine probably account for a substantial part of the difference. But perhaps identifiable biological differences interacting with a complex set of social and environmental factors that can be untangled, and therefore dealt with in some manner, also play a role.

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COMMISSIONED PAPERS

Introduction

The papers that follow were commissioned by the panel to provide background support, basic resource materials, and a context within which its own endeavors could be developed. The papers vary widely in content, scope, and purpose; they do not constitute a systematic overview of the field. Some provide a summary and synthesis of a particular body of theory or empirical research believed relevant to the panel's mission; some inform the panel about problems or areas of knowledge about which panel members have little expertise; and some, more speculative in nature, raise questions and explore issues that the panel planned to address in the report. These papers are included in this volume because they form a background against which the work and conclusions of the panel may be better understood and because they represent scholarship of considerable quality.

Earlier drafts of these papers served as the basic materials for a conference convened by the panel in Woods Hole, Massachusetts, on June 11 to 13, 1978 (see p. 497). The papers were discussed individually by invited discussants as well as by panel members and other conference participants. The authors were then given the opportunity to revise their papers for publication.

The papers are grouped into four sets: those with a generally theoretical orientation; those concerning limitations on interventions; those addressing foci of intervention; and a single paper addressing the prospects for an alternative to the general practice of incarceration or probation based on a social casework/minimal supervision approach.

THEORETICAL ORIENTATIONS

The paper by LaMar T. Empey is a comprehensive systematic survey of sociological theories of crime. It summarizes and critiques the diverse theories that have been developed to account for criminal behavior and points to their implications for implementing programs designed to rehabilitate offenders. The paper by Susan O. White and Murray A. Straus presents a partial theory that violent behavior arises out of violence within the family. They suggest the need for implementing interventions early in the lives of persons who may be at risk of developing violent and criminal behaviors, as well as some of the difficulties involved, particularly with interventions of a preventive nature. Sarnoff A. Mednick's paper is on the origins of psychopathy, a condition often said to be involved with resistant and socially damaging patterns of criminal behavior. Although the paper has a distinctly biological orientation, it has broader implications for research on intervention efforts.

LIMITATIONS ON INTERVENTIONS

The paper by Martin King Whyte on crime control and offender rehabilitation in China presents an interesting comparison and contrast with corresponding policies in our society. It effectively counters any notions that easy solutions might be borrowed from another culture or that such "solutions" are without costs. Bruce J. Winick's paper demarcates the scope and nature of interventions called "rehabilitation" that would be legal and constitutional and indicates the likely legal limits on the planning and experimental implementation and testing of different types of interventions. Malcolm W. Klein's paper explores the scientific basis for the widely held belief in the efficacy of early intervention. He finds little firm support for the case for early intervention and in his review raises a number of questions regarding the meaning and measurement of early intervention. The paper by Joan McCord warns that the benefit-risk ratio of interventions cannot be taken for granted. The long-term results from at least one well-intended intervention were found to be distinctly harmful.

POINTS OF INTERVENTION

The paper by Greer Litton Fox explores the limited knowledge about the role and potential of the families of adult offenders in intervention efforts, speculates about the ways that such families might be permitted to par-

ticipate in and to support intervention efforts, and acknowledges the limitations of such efforts. Gary D. Gottfredson's paper on the schools is parallel in intent to Fox's paper on the family. Its aim is to point to characteristics of schools and the school environment that may have implications for interventions.

THE RESTITUTION ALTERNATIVE

Susan E. Martin's paper grew out of the recognition that there is a new and spreading interest in the use of restitution and community service as alternative criminal sentences. She found that despite the implementation and the enthusiasm of many programs, scientific findings on the effects and effectiveness of these programs are very limited; further research is needed before widespread adoption can be recommended.

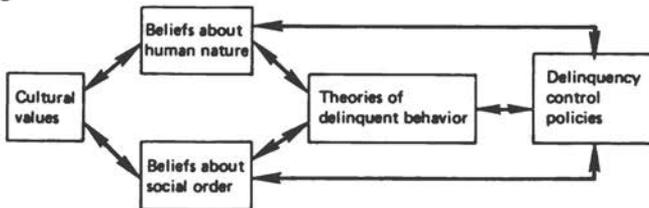
Constructing Crime: Evolution and Implications of Sociological Theory

LAMAR T. EMPEY

I have attempted in this paper to trace the evolution of sociological theories of crime during this century and to assess their changing implications for social policy. In pursuing this task, I have found it necessary to take three steps about which the reader should be informed.

The first was to organize the scores, if not hundreds, of theories that might have been cited into more comprehensive frameworks, each of which tends to be unified by a common explanatory theme. Space and time, if not energy, precluded a detailed analysis of each of them.

Secondly, I felt constrained to pay heed to the fact that scientific theories are more than pristine guides for research. They are also influential bodies of social thought whose origins are very much related to time and culture. Indeed, if one were to draw a simple diagram of the place of theories of crime in our cultural life, it might look something like the following:



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NOTE: This essay draws directly from the author's more extended work, *American Delinquency: Its Meaning and Construction*. Homewood, Ill.: Dorsey, 1978.

This diagram indicates that cultural values lead to certain assumptions about human nature and social order. These in turn contribute both to the construction of theories of criminal conduct and to policies designed to control it. But the relationship is not all in one direction. While theories of crime are affected by prevailing values and beliefs, they also tend to alter these beliefs in return. Indeed, it is often difficult to tell whether changes in belief produce new theories or whether the reverse is true. But since it is likely that both things happen, it is clear that theories not only play an important role in the scientific game of accumulating knowledge but play a central role in constructing new social values and ways of responding to criminal conduct. Moreover, it is not always the scientific quality of any theory that will determine the uses to which it is put. Rather, its capacity to capture and give expression to emerging cultural trends may also determine its fate. How well it conforms to emerging beliefs and delinquency control policies may determine its popularity as much, if not more, than the actual evidence that can be brought to bear upon it.

Given the need to consider these possibilities, the examination of each body of theory has been organized to answer a series of questions:

1. What are the beliefs about human nature and social order upon which it is constructed? What values does it reflect and what pictures of people and society does it portray?
2. What is its underlying logic and basic content?
3. What are its implications for social policy, and how has it actually affected policy?
4. How well does it stand up to logical and empirical scrutiny?

Once these questions are answered, one is in a better position to draw some conclusion about the overall contribution of sociological theorists to our social construction of crime and to policies designed to control it.

I. CULTURAL DEVIANCE THEORY

The first body of theory is called "cultural deviance" theory. Its origins can be traced to the massive empirical studies and theorizing of two Chicago sociologists, Clifford R. Shaw and Henry D. McKay (1931, 1942, 1969; Shaw *et al.* 1929). The results of their endeavors, moreover, were nothing short of revolutionary because they diverged so markedly from the biological and psychodynamic explanations for crime that dominated science and social policy in the late nineteenth and first third of the twentieth centuries.

Based upon the early scientific studies of biologically oriented investigators, the belief was widespread that criminals are distinct physical types at birth (Lombroso 1897), are mentally defective due to poor heredity (Goddard 1914, Goring 1913), or are both mentally and physically defective (Hooton 1931, 1939). The implication was that crime can be controlled only by placing permanent constraints of some kind on the offender, or by killing him.

Somewhat later in impact, but of more lasting influence, were the psychodynamic formulations of Sigmund Freud (1963) and his followers (Abraham 1927, Abrahamsen 1960). Although Freud (1963, p. 14), in particular, was convinced that every child is born inherently antisocial, he did hold out the hope that its primitive instincts could be constrained by proper socialization, or even that a person who was already criminal could be rehabilitated by the appropriate therapy.

By contrast, the cultural deviance theory of Shaw and McKay, and the later theories to which it contributed, rejected the notion that delinquent impulses are either inherited or can be traced to antisocial impulses that are universal. Instead, they theorized that criminal acts are caused by learned beliefs that make crime an appropriate response to social conditions. The criminal is nothing more than a social individual who is behaving in accordance with the values and norms of his particular group. His behavior is simply an expression of conformity to cultural values and expectations that run counter to those of the larger society.

Not only was this view of human nature different from that of earlier theorists but it suggested that the social order is characterized by cultural conflict, not by consensus. Since criminal, no less than conventional, behavior is the product of learned values, there is no universal standard of good and bad shared by all people.

Shaw and McKay were not armchair theorists, however. They reached these conclusions only after conducting an empirical study of unparalleled proportions. Between 1920 and 1966, they gathered data on the demographic characteristics and ecological dispersion of thousands of official delinquents in several American cities: Chicago, Philadelphia, Boston, Cincinnati, Cleveland, and Richmond. Their theory, as a result, represents an attempt to explain three major sets of facts that were reaffirmed repeatedly.

1. Official delinquents are highly concentrated in the most delapidated, least desirable areas of the city. Moreover, the official rate of delinquency declines steadily as one moves from the urban core to the suburban fringe.

2. High-delinquency areas are characterized by physical deterioration,

loss of population, economic and racial segregation, and a high incidence of social ills—infant mortality, mental disease, truancy, suicide, physical disorders, and crime.

3. High delinquency rates are not a function of ethnic or racial depravity. Today, as in the late nineteenth and early twentieth centuries, many people are convinced that crime and disorder are due to the moral depravity of the racial or ethnic minorities who inhabit the slums. Shaw and McKay rejected this belief, however. Earlier in history, the slums were inhabited by Irish, Italian, Polish, and other white groups, while today they are populated by blacks and browns. Yet the crime rates in these areas have remained the same as group after group has passed through them. Moreover, as each successive group has moved outward into more desirable areas, its crime rate has declined. Thus Shaw and McKay concluded (1969, pp. 153-154) that the explanation for crime must lie in the kind of community life that deteriorated neighborhoods produce, not in the kinds of people who inhabit them.

The following postulates capture the essence of their explanation:

1. *The deteriorated areas of the city produce social disorganization.* Shaw and McKay argued that there is an almost total absence of a sense of community in slum areas. The cultural standards of different immigrant and racial groups not only conflict with each other, but these groups are beset with a host of additional ills—"inadequate family life, poverty, ineffective religion, education, and recreation" (Thrasher 1927, p. 339). Slum conditions produce socially disorganized neighborhoods (Shaw *et al.* 1929, pp. 204-205; Shaw and McKay 1969, pp. 171-172).

2. *Socially disorganized neighborhoods lead to a lack of social control over children.* "The absence of common community ideals and standards prevents cooperative social action . . . to . . . suppress delinquency" (Shaw and McKay, 1931, p. 102). Children who grow up in disorganized neighborhoods have little access to the cultural heritage of the larger society (Shaw 1931, p. 15). Hence parents are relatively helpless in trying either to control or to help their children.

3. *Loss of social control encourages the development of street gangs.* Shaw and McKay (1969, p. 173) found that approximately 8 out of 10 delinquent boys had committed their offenses in groups. Hence they concluded (1931, p. 256) that "membership in such groups is an important contributing factor in delinquency, since it is found that very often the boy's contact with the delinquent group marks the beginning of his career in delinquency and that his initial delinquencies are very often identical with the traditions and practices of the group."

4. *Delinquent traditions are transmitted from one generation of gang boys to the next.*

The heavy concentration of delinquents in certain areas means . . . that boys living in these areas are in contact . . . with groups which sanction such behavior and exert pressure upon their members to conform to group standards. . . . This means that delinquent boys in these areas have contact not only with other delinquents who are their contemporaries, but also with older offenders, who in turn had contact with delinquents preceding them, and so on, back to the earliest history of the neighborhood. This contact means that the traditions of delinquency can be and are transmitted down through successive generations of boys in much the same way that language and other social forms are transmitted (Shaw and McKay 1931, p. 256).

5. *Delinquent traditions produce high delinquency rates.* As a result of a long series of delinquency-generating conditions, delinquent traditions culminate in high delinquency rates. Delinquents are inherently sociable people whose response to parental and neighborhood demoralization is the development of alternative forms of organization whose norms happen to be delinquent according to the standards of the larger society (Kobrin 1971, p. 124).

IMPLICATIONS FOR SOCIAL POLICY

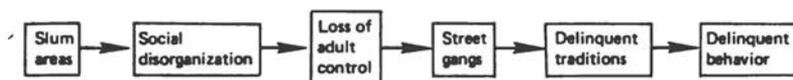
Policy recommendations derived from this form of cultural theory have been concerned primarily with prevention. The first was suggested by Clifford Shaw himself. Since delinquent traditions and illegal behavior are the product of learning in an age-divided community, prevention should look to the community for a solution. Rather than administering therapy to delinquents one by one, demoralized neighborhoods should be recreated and made into more effective instruments of social control. Rather than looking to parents alone for a solution, effective socialization should be the product of a united set of institutions. Conventional norms should be developed and reinforced in lieu of those that are delinquent.

Consistent with these ideas, Shaw fathered the Chicago Area project, which sought to realize three goals: (1) to induce the residents of slum areas to take up the cause of crime prevention; (2) to assist them in gaining greater influence over their children by organizing local programs and resources for them; and (3) to foster cooperative action among families, schools, places of recreation, and the agents of social control. Indeed, Shaw was a charismatic leader who not only inspired and gained the respect of various immigrant groups but whose ideas were eventually taken over by Illinois and used as a model throughout the state. It is still being applied today (Kobrin 1959, 1971).

Secondly, the implications of the Shaw-McKay theory have been seen as grounds for massive social action by two national commissions: the National (Wickersham) Commission on Law Observance and Enforcement (Shaw and McKay 1931) and the President's Commission on Law Enforcement and Administration of Justice (1967).

"It is inescapable," said the President's Commission (1967, p. 57), "that juvenile delinquency is directly related to conditions bred by poverty." It suggested, therefore, that the most promising method for dealing with delinquency would be to ameliorate the conditions that "drive" people to commit it: strengthen the ability of lower-class families to guide and control their children, reduce unemployment, improve housing, enrich slum schools, combat racial and economic segregation, put more personnel on the streets to work with gangs, and establish youth service bureaus in slum areas (pp. 58-77). "The commission doubts that even a vastly improved criminal justice system can substantially reduce crime if society fails to make it possible for each of its citizens to feel a personal stake in it—in the good life it can provide" (p. 58).

Finally, although it has not been done, the Shaw-McKay theory could be used as the basis for intervention with convicted offenders. Using the causal chain implied by their theory, one could postulate that the further a delinquent has moved along the chain, the more relevant each of the variables would become for the purposes of rehabilitation, since, theoretically, the variable(s) at the very end of the chain would have a higher correlation with the actual commission of delinquent acts than would those at the very front of the chain:



One would concentrate, first, upon the most immediate antecedent to delinquency—delinquency traditions—and then move backward to other variables—gangs or loss of social control—only if it seemed relevant. But since these ideas are equally applicable to other theories, as well as to this one, they will be fully developed in a later section.

SCIENTIFIC LEGACY OF SHAW AND MCKAY

The work of Shaw and McKay had a profound impact on the field of criminology. Their emphasis upon gangs and delinquent traditions has since been a major source of many subsequent theories. At the same time, important questions have been raised.

1. The Shaw-McKay theory is highly deterministic, suggesting that virtually all lower-class children will become delinquent. Yet Kobrin (1971, p. 130) found that "approximately half the boys of a high delinquency rate area did not participate at all in its juvenile street life."

2. For ideological as well as scientific reasons, many sociologists have suggested that what we should look for in a high-delinquency area is differential social organization, not social disorganization (Cohen *et al.* 1956, p. 21; Kobrin *et al.* 1967; Whyte 1943). "Social disorganization" has become an unpopular term.

3. The Shaw-McKay theory supports the common belief that law-violating behavior is primarily a lower-class phenomenon. Yet a host of self-report studies indicate that this behavior is spread throughout the class structure (see Empey 1978, Ch. 7).

4. Shaw and McKay suggested that deteriorated areas are so demoralizing to lower-class adults that they cannot maintain a sense of community. Yet they reach the startling conclusion that children are able to do so.

5. Although few investigators have disconfirmed the notion that delinquency is primarily a group phenomenon, Shaw and McKay started a trend in which lower-class gangs are portrayed as possessing a free and easy life, with members whose commitments to the gang exceed their commitments to any other purpose (cf. Thrasher 1927 or *West Side Story*). But an increasing number of investigators question this nostalgic view of gangs (Klein and Crawford 1967, Short and Strodtbeck 1965).

DELINQUENCY AS A PRODUCT OF INTEGRATED LOWER-CLASS CULTURE

Partially reflecting some of these criticisms, Walter Miller (1958), an anthropologist, gave voice to a theory which suggests that delinquency is the product of a united, not an age-divided, lower-class culture. The picture that he painted is as follows:

1. *The slums are organized by a distinctive lower-class culture.* According to Miller (1958), delinquent groups are neither the product of disorganized communities nor are they isolated from adult influence. Adults and children in lower-class communities share a common set of values. In response to the processes of economic and social segregation in American society, "there is emerging a relatively homogeneous and stabilized native American lower-class culture" that now represents a common adaptation of *unsuccessful whites* as well as blacks to the American system.

2. *Lower-class culture emphasizes membership in one-sex peer*

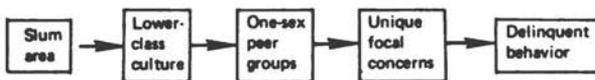
groups. A key to understanding this culture is the way it organizes family life and relations between the sexes. Family life is dominated by the female. Men do not usually play a consistent and predictable role in it, nor do they provide it with reliable economic support. Except for transitory relations between the sexes, males and females lead relatively separate lives.

This means that children spend the first few years of life under the domination of women, during which time they receive mixed messages about the male role. A mother does not want her boy to grow up like his father but anticipates that he will.

This problem is resolved during adolescence. While girls continue to identify with their mothers, boys take up membership in male street gangs, a natural outcome of the lower-class emphasis upon one-sex peer groups. These gangs are simultaneously a haven for escaping female domination and for learning how to be a man. Why then do lower-class males tend to get into trouble? What motivates them?

3. *One-sex peer groups are organized by a unique set of "focal concerns."* The answer lies in the unique "focal concerns" of lower-class culture: trouble, smartness, toughness, fate, and autonomy. "Adult status [for males] is defined less in terms of the assumption of 'adult' responsibilities than in terms of certain symbols of adult status—a car, ready cash, and in particular, a perceived 'freedom' to drink, smoke, and gamble as one wishes, and to come and go without external restrictions" (Miller 1958, p. 17). Hard work and deferred gratification are for suckers.

4. *Adherence to lower-class "focal concerns" produces crime.* What this suggests, then, is that the better the members of lower-class gangs conform to the values and beliefs of their culture, the more likely they are to be defined as officially delinquent. Whereas Shaw and McKay suggest that delinquent traditions are the sole possession of unsupervised gangs and playgroups, Miller indicates that they belong to the entire lower-class community.



As we will soon see, other theorists have taken exception to Miller's contention that there is a distinctive lower-class culture in this country, or that lower-class people have given up on the American dream. Yet an increasing number of commentators are beginning to agree with Miller (Wilson 1978). Automation and technology have rendered *all* unskilled workers obsolete, says Bayard Rustin, the civil rights activist (*Los Angeles Times*, August 11, 1976). A class of "economic untouchables" has been

created whose ancestry is white as well as black. Thus "the future advancement of black and other poor people in this country has little to do with the color of their skin." Instead, a relatively homogeneous lower-class American culture has emerged in which all races are members.

To the extent that this point of view is accurate—that American society is divided by contrasting cultures—the question of "rehabilitation" becomes increasingly problematic. Not only would it be necessary to provide education and employment for lower-class offenders, but, even more difficult, it would be necessary to replace their traditions and values with conventional ones. Hence the task of inducing change might be as difficult as that supposedly attempted by the Chinese on Americans in Korea, or by the radical Cambodian communists on their countrymen, when they recently sought to destroy all vestiges of Western influence, to empty their cities, and to make farmers out of all their people. Hence one begins to see why, when some scholars and policy makers gain some notion of the heroic policies that are implied by cultural deviance theory, they are inclined to "administer justice" rather than to "reclaim offenders." But, lest total pessimism reign, there is yet another body of cultural deviance theory about which they might be less concerned, since it has to do with the middle class.

MIDDLE-CLASS SUBCULTURE THEORY

In addition to the insights provided by Shaw and McKay, cultural theories of middle-class delinquency grow out of two traditions in social science. The first is a concern with adolescence in general. It is seen as an ill-defined period in the life cycle in which peer relationships take on unusual significance. Because adolescents are segregated from the adult world, a youth subculture is created that is hedonistic and irresponsible (Coleman 1961, Davis 1944, Glaser 1971, Parsons 1942). The second tradition grows out of a direct concern with delinquency. Shortly after mid-century, the first of the self-report studies and some official data suggested that middle-class delinquency might be increasing. These findings led to scattered efforts to explain the deviant acts of more affluent youths (Bloch and Niederhoffer 1958, Bohlke 1961, England 1960, Scott and Vaz 1963).

Though these two bodies of theory had different origins, and though the first is ostensibly concerned with all adolescents, they are remarkably alike. The reason is that they are constructed from the world view of the middle class: they apply to youths whose families are intact, who are attending school, and who are preparing for college and white-collar jobs, and they do not portray middle-class delinquency as a particularly serious problem. As Kvaraceus and Miller (1959, p. 234) put it, middle-class

delinquency appears less as a "social problem" than as a "home problem." The main theme of this way of constructing delinquency is captured in the following postulates:

1. *The social status of middle-class adolescents is ill-defined.* Adolescents are barred from productive labor but are expected to be hard-working; they attend school to develop their intellects, but they are not expected to challenge the opinions of parents and teachers; they are sexually mature and encouraged to be socially skilled but are supposed to refrain from adult vices; they are expected to be civic-minded but cannot hold public office or serve on juries; they are often separated from the direct supervision of parents and are granted considerable freedom, yet they lack the kinds of ties to other adults by which privilege and freedom can be prevented from deteriorating into license (England 1960, p. 537). As they attempt to deal with these ambiguous directives, therefore, "Boys and girls . . . often find it difficult to tell when and how 'adult' behavior is expected" (Williams 1952, p. 71).

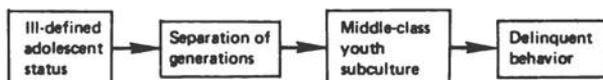
2. *An ill-defined status separates adolescents from the adult world.* To make matters more complicated, the ill-defined adolescent period has been growing longer (Flacks 1971, Keniston 1972), and this extension has further diminished the contact of young people with the adult world (Berger 1971, Coleman 1961). More than ever before, young people are separated from adult work roles and civic responsibilities.

3. *Social separation produces middle-class youth subculture.* The separation of adolescents from adult responsibility produces new customs and values. "A fundamental law of sociology and anthropology," says Glaser (1971, p. 35), "is that social separation results in cultural differentiation." A youth culture develops that is inward looking, that fosters a psychic attachment among the young to others their own age, that rejects adult standards and presses for autonomy, that develops an unusual regard for the underdog, and that seeks to foster change (Coleman *et al.* 1974, pp. 116-125). It is a natural response to an unnatural position in which the young find themselves in society (Coleman *et al.* 1974, p. 125).

4. *Middle-class youth subculture produces delinquent behavior.* "Delinquent motivations among middle-class teenagers arise from [an] adaptive process in which the teenage world, peopled by immature and inexperienced persons, extracts from the adult world those values having strong hedonistic possibilities, with the result that the values of the teenage culture consist merely of distorted and caricatured fragments from the adult culture" (England 1960, p. 539).

Thus the dominant forms of middle-class delinquent conduct are joy-riding, drinking, using pot, staying out late, gambling, or engaging in

sex—acts that are scarcely unknown to middle-class adults in their hedonistic moments. By contrast, when serious delinquency is committed by a middle-class adolescent, it probably represents “pathological” rather than group-supported behavior (Kvaraceus and Miller 1959, p. 241). Hence middle-class theory may be summarized as follows:



POLICY IMPLICATIONS

The implications of this body of theory apply as much to lower- as to middle-class adolescents.

1. *Decriminalize status offenses.* For almost two decades, a growing number of influential organizations have recommended that juvenile status offenses be decriminalized. “We must strip off the moralistic excrescences on our justice system” say Morris and Hawkins (1970, p. 2), “so that it may concentrate on the essential. . . . Man has an inalienable right to go to hell in his own fashion, provided he does not directly injure the person or property of another on the way.” In other words, many delinquent and criminal acts—truancy, drinking, prostitution, gambling, or drug use—could be prevented merely by decriminalizing them.

2. *Providing adolescents with a stake in conformity.* If delinquent subculture is due to the separation of adolescents from responsible middle-class adults, then the following remedies are implied: (1) eliminate the ambiguity and lack of purpose inherent in the adolescent status; (2) close the generation gap; and (3) provide adolescents with socially desirable adult roles—a productive place in the economy, civic responsibilities, and the power of decision making. Theoretically, if these steps were taken, the functions served by the youth culture would no longer exist. Because they are inherently social, adolescents will develop a sense of competence and belonging. Generational conflict will be eliminated, and youths will exhibit a firm attachment to the aims, values, and norms of a unified adult-youth culture (Polk and Kobrin 1972).

SCIENTIFIC LEGACY

As with lower-class cultural deviance theory, questions have been raised about the deterministic character of middle-class theory. It leaves little room for individual choice and overdoes the extent to which there are un-

bridgeable gaps between the generations (Bengtson *et al.* 1974, Elkin and Westly 1955, Kandel and Lesser 1972). Likewise, the evidence remains unclear as to whether group violations among adolescents are due to strong feelings of attachment among friends or are merely situational acts committed by loosely knit groups (Jensen and Erickson 1976). Finally, the most telling criticism of the theory is its contention that delinquent acts by middle-class youths are overwhelmingly nonserious. While less likely than lower-class adolescents to commit serious personal crimes, those in the middle class commonly commit some serious property and drug abuse crimes (Empey 1978, Ch. 7).

II. STRAIN THEORY

The next major body of theory is strain theory. On the one hand, it is like culture deviance theory in the sense that it assumes that human nature is inherently social: people feel morally obligated to conform to social rules and are sensitive to the expectations of others. On the other hand, strain theory assumes that the social order is characterized by value consensus, not by conflict. Rather than being divided into competing class structures, lower- as well as middle-class people share in the American dream and want to achieve it. The criminal is one of these; he is a normal person with normal expectations. Hence pressures to be criminal are generated by the frustration of legitimate aspirations, not by immature fixations or pathological motives.

Two different versions of this general view have been developed and applied primarily to juveniles, the first by Albert K. Cohen (1955) and the second by Richard A. Cloward and Lloyd E. Ohlin (1960).

COHEN: STATUS FRUSTRATION AND DELINQUENCY

Cohen set out to explain two sets of "known" facts that were first suggested by Shaw and McKay: the existence of group-supported delinquent traditions or subculture, and the concentration of this subculture among the male working-class segment of American society. Cohen advanced the following propositions to explain these facts:

1. *Lower-class Americans embrace the middle-class ethic.* Cohen rejects the notion that a distinctive culture has been perpetuated or has developed among lower-class Americans. The American dream is shared by everyone. Moreover, since every individual is encouraged to compete for success, there is only one standard for measuring success: *the middle-*

class measuring rod—the ability to get ahead. Hence, no less than middle-class children, each lower-class boy is expected to compete for success with all comers.

2. *The socialization of lower-class children hinders their capacity to compete.* Lower-class children are handicapped in terms of their ability to compete, not only because their parents lack financial resources and social power but because they are socialized in different ways. While middle-class parents are rational, deliberate, and demanding, lower-class parents are easygoing and permissive. Their children receive less training in self-discipline, have much less contact with highly structured learning situations, and are thrown into unsupervised contact with their peers at an earlier age. As a result, they are less prepared to compete for success when they first enter the world of middle-class institutions.

3. *Decreased ability to compete produces strain.* The one place in which the children of all social levels come together to compete for status is in the school. Like everyone else, the working-class child wants status and acceptance, but the techniques he has learned for acquiring them are not those of the middle class: his boisterous behavior destroys the order and routine of the classroom; he does not read well; he has little experience in being studious, docile, and obedient; and he lacks interest in intellectual matters. More than others, therefore, he is programmed to fail. This failure, moreover, is not confined to the school; the lower-class boy experiences failure, rejection, and punishment in other middle class-sponsored settings as well.

The result is that lower-class children tend to find themselves at the bottom of the status ladder in most of the official youth institutions in society, not only among adults but among their peers. Even more important, this loss of social status is accompanied by a growing sense of personal failure. Having adopted the middle-class measuring rod for judging themselves, they share the view that they are failures. Their sense of self-worth is lowered, and they experience a growing sense of ambivalence toward prized middle-class goals. Hence, as Cohen puts it, they face a serious problem of adjustment and are in the market for a solution.

4. *Increased strain produces identification with the delinquent subculture.* Cohen argues that most people adjust to strain by joining with others to seek a solution. Only the rare individual becomes mentally unstable by remaining totally alone. Hence he suggests the availability of three possible solutions. The first, and most common, is for the young person to withdraw from competition, to become a stable member of the working class, and, like Archie Bunker, to carry a chronic load of frustration the rest of his life. The second is to be one of the few individuals who ruptures ties with working-class society, to become a "college boy," and to

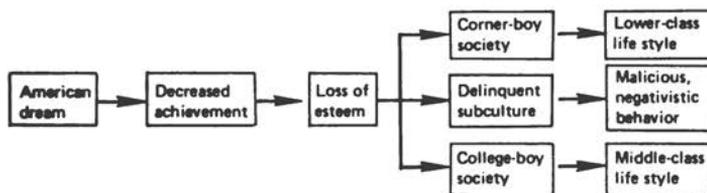
be upwardly mobile. The third is to turn to the standards of the delinquent subculture for a solution.

According to Cohen, the delinquent subculture is nonutilitarian, malicious, and negativistic. Ordinarily, he says, people steal things because they can use them, can buy something with them, or can wear them. But the delinquent acts of lower-class boys usually do not appear to have a useful purpose. Instead, they steal things "for the hell of it"; they delight in terrorizing "good" kids or older people; they vandalize, even destroy, their own schools; and they dump garbage on their neighbors' doorsteps, deface public buildings, or defecate on their teacher's desk.

Such behavior makes no sense to middle-class people, but it is precisely for this reason that it makes sense to rejected lower-class delinquents. "The hallmark of the delinquent subculture is the explicit and wholesale repudiation of middle-class standards and the adoption of their very antithesis" (Cohen 1955, p. 129). In short, the delinquent subculture is appealing because it rejects everything valued by the middle class and because it compensates for the humiliation that middle-class institutions cause lower-class boys. Because they continue to harbor beliefs of the importance of success, the only way they can handle their anxiety is to deny middle-class values completely.

5. *Identification with the delinquent subculture produces delinquent behavior.* Since the hallmark of the delinquent subculture is the wholesale repudiation of middle-class standards, the delinquent behavior of its members will reflect this spirit. It is a contraculture, a way of life opposed to everything conventional. Humiliation provides the motive for delinquent behavior, while the delinquent subculture provides the means for translating that motive into action and for granting status to those who act on it.

In summary, Cohen's schema can be summarized as follows:



CLOWARD AND OHLIN: DELINQUENCY AND OPPORTUNITY

Cloward and Ohlin's version of strain theory (1960) possesses some of the same features as Cohen's. Like Cohen, they assume that delinquent subcultures and gangs "are typically found among adolescent males in lower-

class areas of large urban centers" (p. 1). Hence their goal is to explain how these subcultures arise and persist. They also start from the premise that virtue promotes vice; i.e., that the desire to get ahead promotes delinquent behavior. But beyond these similarities their theory possesses some distinctive features of its own. Cohen's delinquents are irrational and malicious, the opposite of everything middle class. Cloward and Ohlin's, by contrast, are often rational and utilitarian. When legitimate channels for success are closed to them, they simply turn to illegitimate ones. Consider the propositions that carry this theme.

1. *The success ethic is a prized possession of all Americans.* America has been the promised land to all its people; everyone wants to get ahead. In fact, lower-class people feel a relatively greater need to be upwardly mobile than do persons already higher in the social structure.

2. *Opportunities for success are not equally distributed throughout the class structure.* No less than Cohen, Cloward and Ohlin indicate that education is an indispensable tool for upward mobility. They also suggest that the early socialization of lower-class children may inhibit their capacity to do well in school. But, to them, this is not the most serious problem. The most serious problem is "structural"—a result of a class system in American society. Many lower-class families simply cannot afford to keep their children in school, particularly beyond high school. If and when lower-class children scale down their educational expectations, therefore, it is not because they want to. For them, opportunities are blocked.

3. *Blocked opportunities produce strain.* "The disparity between what lower-class youth are led to want and what is actually available to them is the source of a major problem of adjustment. . . . Faced with limitations on legitimate avenues of access to conventional goals and unable to revise their aspirations downward, they experience intense frustrations" (Cloward and Ohlin 1960, p. 86). However, unlike Cohen's youths, Cloward and Ohlin's boys do not see themselves as failures. Instead, the strain they feel is due not to a lowered sense of self-esteem but to a sense of injustice.

4. *Strain produces delinquent subcultures.* Unlike Cohen, Cloward and Ohlin suggest that the American dream rarely loses its hold on lower-class boys. Hence, when they are frustrated by limited access to legitimate means, they turn to ones that are illegitimate. But whether their dream ever comes true will depend upon the way their slum communities are organized.

Some slum neighborhoods provide opportunities for success through criminal means. There are close ties between adults and children, and the

adults transmit traditions that are criminal and career oriented. In other words, a *criminal* subculture exists that provides illegitimate means for success. Thus in organized, age-integrated neighborhoods, delinquent behavior is rational and utilitarian, not the opposite.

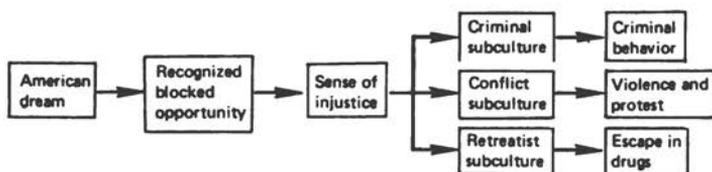
By contrast, in disorganized neighborhoods where there are neither legitimate nor illegitimate means for success, a *conflict* subculture, characterized by malicious and violent activities, is likely to exist—a subculture that embodies protest against the meaninglessness of the social experience.

Disorganized neighborhoods also produce a third delinquent subculture—a *retreatist* subculture. This is made up of juveniles who give up on the struggle for success and who turn to drugs. They are double failures, individuals who have not been a success in the use either of legitimate or illegitimate means. But rather than blaming society they blame themselves, retreat from the struggle, and seek solace in escape.

In summary, all three modes of adaption—criminal, conflict, and retreatist—symbolize blocked opportunities, not the repudiation of fundamental societal goals. In each case, illegitimate activity and subcultural standards develop as alternative means for the satisfactions that all people seek.

5. *Delinquent subcultures produce delinquent behavior.* Cloward and Ohlin have suggested that delinquent subcultures are specialized. For that reason, they imply that we should guard against the tendency to see all delinquent behavior as representing responses to subcultural requirements. Instead, the only really serious delinquency arises in the lower class, since it is only in lower-class communities that conditions exist to produce tightly knit, narrowly focused subcultures.

The Cloward-Ohlin schema may be summarized as follows:



POLICY IMPLICATIONS OF STRAIN THEORY

Strain theory is quintessentially American. Like Father Flanagan, it implies that there is no such thing as a bad boy and that, if one wants young criminals to conform to the norms of the larger society, that society has only to provide them with opportunity (Moynihan 1969, p. 51). Consequently, since that is what America is supposed to be all about, strain

theory has provided the rationale for some of society's most ambitious attempts at social engineering.

First, Cloward and Ohlin drew up a multimillion dollar project, *Mobilization for Youth*, that was carried out on the lower east side in New York with major funding from both public and private sources. Its goals, though not unlike those of Shaw and McKay, were more ambitious: to improve education, to create job opportunities, to organize the lower-class community as an effective political entity, to provide specialized services to families and individuals, and to create conventional resources for adolescents.

The heroic implications of strain theory did not end with *Mobilization for Youth*, however. It went on to become the conceptual foundation, first, for the activities of the President's Committee on Juvenile Delinquency and Youth Crime and, then, for the War on Poverty. Between 1965 and 1970, billions were spent in an endeavor to assimilate the poor into the opportunity structure of American society and, thereby, to reduce crime and its attendant ills. That all of these efforts were not successful is a well-documented fact. Nonetheless, various analyses have suggested that political ineptitude, organized opposition, poorly implemented programs, and ever mounting protest and cynicism over the assassinations of the nation's leaders and the war in Vietnam, as much as the theory itself, were at fault (Marris and Rein 1973, Moynihan 1969).

Strain theory has also served as the rationale for intervention in the Provo and Silverlake experiments with serious convicted offenders (Empy and Erickson 1972, Empey and Lubeck 1971). As indicated earlier, the causal sequence suggested generally by both bodies of strain theory is as follows:



Since this theory was to be used as the basis upon which to build an alternative to incarceration for older delinquent boys, ages 15 to 18, it was theorized that the further such boys have moved down the causal chain from the "American dream" to "identification with delinquent peers," the greater the relationship each subsequent variable in the chain would have to delinquent behavior; that is, "identification with delinquent peers" would have a stronger relationship than "increased strain," "increased strain" a stronger relationship than "decreased achievement," and so on. Thus, in setting priorities for intervention, the most immediate antecedent to delinquent behavior, "identification with delinquent peers," was given the greatest weight, followed by the other variables in turn.

Following this logic, the priorities for intervention were as follows:

1. *The delinquent group should be made the target of change.* Techniques were required for dealing not just with the individual but with his group, not just with his unique characteristics but with those he shares with others. His delinquent beliefs and rationalizations would be replaced with new beliefs and rationalizations. This kind of change could be accomplished most effectively if offenders became active members of groups who sanctioning systems opposed delinquent activity and rewarded conventional behavior.

2. *Strain among delinquents should be reduced.* This involved a complex set of efforts designed to provide delinquents with the opportunity to consider delinquent versus conventional alternatives in an open and objective way, to reward candor in pursuing this task, to share information relating to the need for change, plans for change, and consequences of change, and to make the peer group the medium as well as the target of change.

3. *Means for legitimate achievement should be made available.* The reduction of strain in the long run would be contingent upon the capacity of the program to provide legitimate opportunities for success. Indeed, as one moves backward in time from peers to strain to achievement, the issues relative to intervention become increasingly global. Larger and larger units—schools, places of employment, opportunities for association with conventional people—are those that, along with offenders, require change. Ways had to be found by which conventional gates could be opened, assistance given to offenders, and opportunities provided.

SCIENTIFIC LEGACY OF STRAIN THEORY

The boys in Shaw and McKay's cultural deviance theory had a great deal of fun running the streets, dumping over garbage cans, vandalizing the school, and stealing from the neighborhood stores. The delinquents described by strain theorists, by contrast, "are driven by grim economic and psychic necessity into rebellion" (Bordua 1961, p. 136). Crime is not fun, and rejected boys are virtually forced to use desperate measures, either to overcome a gnawing sense of inadequacy or to open up new avenues to success. But is this construction of what delinquents are like an accurate one?

The class foundation One of the most serious limitations of strain theory may be the class foundation upon which it is built. Not only have repeated self-report studies tended to question the idea that delinquent behavior is restricted to lower-class boys, but such things as poor attach-

ment to parents or failure in school may predict illegal behavior much better than class membership (Aultman and Wellford 1976, Empey and Lubeck 1971, Hindelang 1973, Hirschi 1969).

The American dream There is considerable evidence that the American dream is widely shared. Existing studies lend greater support to the argument of strain theorists that lower-class children internalize conventional values than to the argument of Miller (1958) that middle- and lower-class values are separate and distinct (Empey 1956, Gold 1963, Gordon *et al.* 1963, Gould 1941, Kobrin 1951).

School failure and blocked opportunities Research findings confirm the notion that school performance is highly related to delinquency. Study after study indicates that those boys who do the worst in school are the most likely to be delinquent (Elliot 1966, Empey and Lubeck 1971, Hirschi 1969, Polk and Halferty 1966, Polk and Schafer 1972). But such studies do not support the idea that this problem is primarily a lower-class problem, as strain theory suggests. Rather, they indicate that it is a problem that cuts across the social classes.

Sense of strain There is some evidence that failure in school results in frustration and a lowered sense of self-esteem, but the variable is not a strong one (Empey and Lubeck 1971, Ch. 5; Quicker 1974). Furthermore, there is not much sign that delinquent behavior is due to the frustration of long-range ambitions held by highly motivated boys. Indeed, Hirschi (1969, pp. 182-183) found that high rates of aspiration are associated with low rates of delinquent behavior, a relationship that is just the opposite of that predicted by Cloward and Ohlin. Hence he concluded that "frustrated occupational ambition cannot be an important cause of delinquency."

Delinquent subculture Delinquent behavior tends to be a group phenomenon. There is something about group processes that makes deviant behavior easier to justify and carry out. However, there is a puzzling lack of evidence that delinquent subculture does much to compensate for the serious problems of adjustment that lower-class boys are supposed to have. Gang members tend to hold each other in low esteem (Hirschi 1969, Short and Strodbeck 1965); their relationships are characterized by aggression and insults (Matza 1964, Miller 1958); and delinquent gangs do not appear to be cohesive and inherently rewarding (Klein and Crawford 1967, Yablonsky 1959). It may be that delinquent groups are held together more by external pressures than by internal bonds. If that is the case, the so-called delinquent subculture may be much less elaborate and influential than previously thought. Relative to this point, in fact, research has been unable to confirm the contention by Cloward and Ohlin that delinquent subcultures are specialized and narrowly focused. Rather,

they fit the pattern suggested by Cohen in which offenders engage in a garden variety of activities—everything from status offenses to serious crimes.

III. SYMBOLIC INTERACTIONIST THEORY

Symbolic interactionist theory grows out of the larger field of social psychology that is shared both by sociologists and psychologists. This fact gives us some clue as to its character. Like other theorists, symbolic interactionists believe that parental training is important and that broad cultural standards affect behavior. But they do not believe that children are cast into a permanent mold by either set of forces. Instead, they theorize that human behavior reflects a changing concept of self. Initially, children acquire a view of themselves based upon their relations with their parents. Over time, however, these views change, acquiring new forms as the children interact with new groups and learn new definitions for behavior. Because of this unique perspective, therefore, symbolic interactionist theory has ways for locating the motive for delinquency and for defining human nature and social order that are different from other theories.

In contrast both to control and subcultural theories, symbolic interactionists view human nature and social order as opposite sides of the same coin. Neither is permanent; both are plastic and subject to change. On the one hand, individuals are constantly being modified, taking on the expectations and points of view of the people with whom they interact in intimate small groups. On the other hand, these same individuals contribute to the process of change, helping to shape the groups of which they are a part. Thus it is out of this ongoing process of interaction that the motive for delinquent behavior arises, not out of permanent antisocial impulses or broad cultural imperatives that require it. Furthermore, since any individual participates in intimate groups in several different settings, the roles he or she plays will often be inconsistent and conflicting.

This is a significant point of view because it not only implies a human nature that is malleable but suggests that the social order is conflicted; that is, that society is not organized by a monolithic set of conventional values on which there is universal consensus. Rather, all people are exposed to deviant as well as to conformist traditions. Whether or not they are delinquent will therefore depend on the kinds of groups in which they participate on an intimate basis. If one or more is a delinquent group, it may provide the individual with all the justifications he or she needs for violating the law. If none is delinquent, conformist traditions will be supported. In short, symbolic interactionist theory assumes three things: (1)

that human nature is plastic and changing; (2) that the social order presents deviant as well as conformist guides for behavior; and (3) that the motive for delinquency resides in the rationalizations and techniques supplied by intimate, personal groups.

THE THEORY OF DIFFERENTIAL ASSOCIATION

The first explanation for crime that was based upon these ideas was constructed in 1939 by Edwin H. Sutherland, the dean of sociological criminology. Like Shaw and McKay, he was a powerful and persuasive opponent of the biological and Freudian explanations that dominated theory and policy in his day. Consequently, he set out to provide an alternative explanation.

Sutherland's theory consists of nine principles that have remained unchanged since the fourth edition of his *Principles of Criminology*, which was published in 1947, three years before his death. However, later statements by Donald R. Cressey, Sutherland's student and coauthor, have helped clarify these principles. As stated by both authors, therefore, they are as follows (see Sutherland and Cressey 1955, pp. 77-80):

1. *Criminal behavior is learned.* People are not inherently antisocial, nor do they possess permanent personality traits that predispose them to delinquent behavior. Rather, if they violate the law, it is because they have learned to do so.

2. *Criminal behavior is learned in interaction with other persons in a process of communication.* "What . . . we should study if we are going to establish a theory for explaining criminal conduct is, in a word, *words*" (Cressey 1965, p. 90). It is the symbolic learning of deviant values, attitudes, norms, and techniques that leads a person to commit delinquent acts.

3. *The principal part of the learning of criminal behavior occurs within intimate personal groups.* "The person (personality) is not separable from the social relationships in which [the individual] lives. . . . Criminal behavior is, like other behaviors, attitudes, beliefs, and values which a person exhibits, the *property of groups*, not individuals" (Cressey 1965, p. 90).

4. *When criminal behavior is learned, the learning includes techniques of committing the crime, which are sometimes very complicated, sometimes very simple, and the specific direction of motives, drives, rationalizations, and attitudes.* People do not become mechanics, school teachers, or quarterbacks until they learn the necessary techniques. The same is true of delinquents. Even more important, the commission of il-

legal acts requires the development of appropriate motives, attitudes, and rationalizations. These are derived from group definitions that make criminal behavior acceptable.

5. *The specific direction of motives and drives is learned from definitions of the legal codes as favorable or unfavorable.* Whether people become delinquent will depend on what they learn from the particular groups they encounter and on how those groups define the legal codes. If they define them favorably, the person will be motivated to abide by the law. If they define them unfavorably, delinquent motives will be supplied.

6. *A person becomes delinquent because of an excess of definitions favorable to violation of law over definitions unfavorable to violation of law.* This is the proposition that sets forth the crucial condition for criminal behavior to occur. If persons become delinquent, it is because their contacts with delinquent patterns exceed their contacts with ones that are nondelinquent.

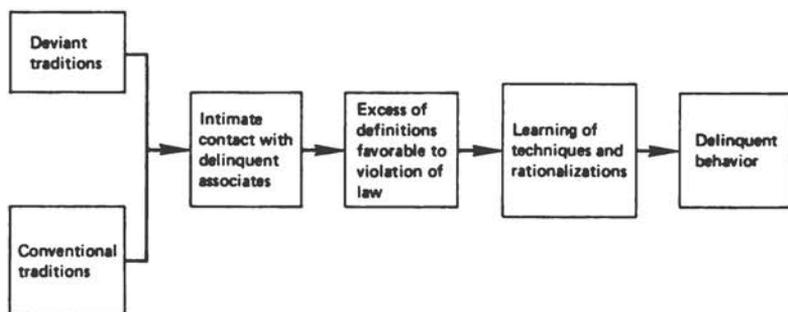
7. *Differential associations may vary in frequency, duration, priority, and intensity.* These four elements explain the nature and effects of association in different groups. Sutherland did not explain them well, but, presumably, "frequency" refers to how often a person associates with delinquent groups, while "duration" refers to the length of the associations. Hence the greater the frequency and/or duration of delinquent associations, the more likely delinquent conduct will follow. "Priority," meanwhile, has to do with the time in life when delinquent associations begin—the earlier they develop, the more likely they will persist. Finally, "intensity" has to do "with such things as the prestige of the source of a criminal or anticriminal pattern and with emotional reactions related to the associations" (Sutherland and Cressey 1955, p. 78). If a criminal group has high prestige and is emotionally satisfying to its members, the more likely its members are to be delinquent.

8. *The process of learning criminal behavior by association with criminal and anticriminal patterns involves all the mechanisms that are involved in any other learning.* Sutherland considered the meaning of this proposition to be self-evident; namely, that the same mechanisms that are involved in learning nondelinquent behavior—reward, punishment, imitation, coercion, or search for self-acceptance—are involved in learning delinquent behavior.

9. *While criminal behavior is an expression of general needs and values, it is not explained by those general needs and values, since non-criminal behavior is an expression of the same needs and values.* In striking contrast to strain theorists, Sutherland argued that the pursuit of money, success, and prestige does not help explain delinquent behavior. He put it this way (Sutherland and Cressey 1955, p. 79): "Thieves gener-

ally steal in order to secure money, but likewise honest laborers work in order to secure money. The attempts by many scholars to explain criminal behavior by general drives and values, such as the happiness principle, striving for social status, the money motive, or frustration, have been and must continue to be futile since they explain lawful behavior as completely as they explain criminal behavior."

In short, delinquent behavior cannot be explained by reference to the drive for status, money, or success, since these also explain conformity. Rather, it is differential association and the learning of delinquent motives and rationalizations in small, intimate groups that make the difference. The following diagram summarizes these ideas:



POLICY IMPLICATIONS OF SYMBOLIC INTERACTIONIST THEORY

Symbolic interactionist theory has the following kinds of implications:

In terms of *prevention*, it can be combined with cultural deviance theory to suggest that, to the degree that certain segments of the population remain isolated from rewarding participation in conventional groups, they will be inclined to develop and to foster deviant techniques and rationalizations. Conditions will be spawned by which more crime can be anticipated.

In terms of *rehabilitation*, the same principles apply. If criminal behavior is the result of deviant motives, values, and rationalizations acquired in intimate groups, then the practice of keeping offenders apart from nondelinquents in detention centers and correctional institutions is one way of ensuring that crime will continue. By contrast, if we want criminals to become more like noncriminals, these two groups should be integrated, not kept apart. Only then would offenders learn that a delinquent image is bad and that criminal conduct is wrong.

Reflecting these ideas, Cressey (1955) has advanced the following principles, many of which were reflected in the Provo and Silverlake experiments:

1. "If criminals are to be changed, they must be assimilated into groups which emphasize values conducive to law-abiding behavior and, concurrently, alienated from groups emphasizing values conducive to criminality."

2. "The more relevant the common purpose of the group to the reformation of criminals, the greater will be its influence. . . ."

3. "The more cohesive the group, the greater the members' readiness to influence others. . . ."

4. "Both reformers and those to be reformed must achieve status within the group by exhibition of 'pro-reform' or anticriminal values and behavior patterns."

5. "The most effective mechanism for exerting group pressure on members will be found in groups so organized that criminals are induced to join with noncriminals for the purpose of changing other criminals."

6. "When an entire group is the target of change, . . . strong pressure for change can be achieved by convincing the members of the need for a change, thus making the group itself the source of pressure for change."

SCIENTIFIC LEGACY OF SYMBOLIC INTERACTIONIST THEORY

Sutherland's theory has had immense influence on sociological criminology, coming as it did prior to mid-century and in opposition to genetic and Freudian explanations of crime. Furthermore, unlike most other theories, its principles can be applied to any type of crime—to white-collar and to organized crime as well as to common street crimes. Nonetheless, a number of questions have been raised with respect to it.

1. It fails to account for individual crimes in which intimate associates and shared rationalizations are not present. For that reason, Glaser (1956) argues that its organizing principle should be "differential identification," rather than "differential association." One might identify with a reference group without being a member of it.

2. Sutherland's nine principles are not a theory. As Cressey (1969, p. 20) puts it, they should be viewed instead "as a set of directives about the kinds of things that ought to be included in a theory. . . ." But even if this is true, the "theory" is untestable as now formulated.

3. While symbolic interactionism suggests that motives for criminal

behavior are solely the product of membership in criminal groups, virtually every other theory suggests that some condition in the life of an individual—lack of attachment to parents and other conventional people, class position, poor performance in school, or a loss of esteem—motivates both membership in delinquent groups and delinquent behavior. Indeed, some theorists argue that membership in delinquent groups usually occurs *after* an individual becomes delinquent, not before (Glueck and Glueck 1950, Hirschi 1969). In other words, birds of a feather flock together; grouping is a product of delinquent behavior and labeling, not the primary cause of it.

4. Symbolic interactionism possesses features that are obviously similar to learning theory, particularly the notion that behavior is shaped by social interaction. However, because of its singular concentration on verbal interaction, Burgess and Akers (1966) attempted to reformulate Sutherland's theory so that it might take account of a wider set of contingencies, as learning theory suggests.

IV. PSYCHOSOCIAL CONTROL THEORY

Our analysis thus far indicates that by late mid-century sociological criminology had become highly deterministic in its suggestion that social and cultural factors are the primary causes of crime. Generally discarded were matters of psychological motivation and the influence of the family in socializing the young. As one sociologist put it, "the discussion of delinquency in recent sociological theory . . . seems to be distinguished more by a desire to avoid 'psychologizing' than by a desire to understand delinquency" (Bordua 1962, pp. 249-250). If a boy is humiliated by his teacher, then that is "social class" and is admissible, but if he is humiliated by his father, that is "child psychology" and is inadmissible.

Likewise, Travis Hirschi (1969), a second sociologist, not only reasserted the importance of the family but took issue with the entire rejection of Freudian notions, particularly the idea that human nature is inherently antisocial. Alluding to Freudian theory as "control" theory, Hirschi contended that such theory remains what it has always been—a framework that suggests that it is not criminals alone who are animals "but that we are all animals, and thus all naturally capable of committing criminal acts." Hence the central question to which theory ought to be directed is not "Why did they do it?" Since human nature is inherently evil, the appropriate question is "Why don't they do it?" (Hirschi 1969, p. 34). Why do most people refrain from becoming human predators?

THE SOCIAL BOND

In seeking to answer these questions, Hirschi formulated a psychosocial version of control theory that is designed to remedy and expand upon those versions that are entirely psychodynamic in character. As a result, he theorized that it is an individual's bond to society that makes the difference; that is, we are moral beings to the extent that we have internalized the norms of a largely consensual society and have become sensitive to the needs of others. Indeed, sensitivity is the social bond. But in explicating the conceptual elements of which the bond is composed, Hirschi took care to make them more amenable to scientific test than are those outlined by Freud.

The first element is *attachment*. It refers to the ties of affection and respect between children and such key persons as parents, teachers, and friends. A strong bond with all three will be a major deterrent to delinquency. Attachment to parents, however, is the most important, since it is by parents that children are first socialized. Furthermore, it is not whether families are broken by divorce or desertion that is the greatest importance, but what the nature of the bond is between children and one or both parents. If children are strongly attached to their parents, they are much more likely to internalize the norms of society and to develop feelings of respect for persons in authority, like teachers, or for equals, like friends. But if they are alienated from their parents, they will likely be alienated from others. They will not learn or have a feeling for moral rules, nor will they develop an adequate conscience (Hirschi 1969, p. 86).

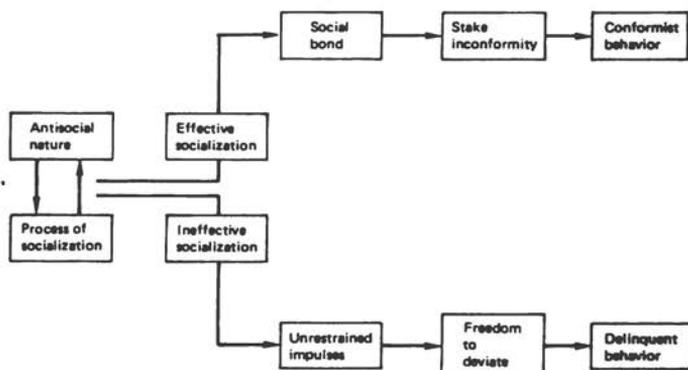
In a sense, Hirschi's attachment is analogous to Freud's superego. But it locates "the 'conscience' in the bond to others rather than making it a part of the personality" (p. 19). Thus the extent to which a person is attached to others can be measured independent of one's delinquent behavior—something that was not possible with Freud's superego.

The second element of the bond is *commitment*. This is a rational component similar to Freud's ego, but it also has roots in long-standing traditions. It has to do with the extent to which children are committed to the ideal requirements of childhood—getting an education, postponing participation in adult activities like drinking and smoking, or dedicating themselves to long-term goals. If children commit themselves to these activities, they will develop a stake in conformity and will be disinclined to engage in delinquent behavior. To do so would be to endanger their futures (p. 21). And, although commitment refers to an internalized set of expectations, it too is amenable to measurement.

The third element is *involvement*. This is the equivalent of the tradi-

tional belief that "idle hands are the devil's workshop." It is a concept that has particular relevance for adolescents, since they are in that phase of the life cycle when they are neither under total parental domination nor totally free to behave as adults. Instead, they are in a semilimbo where expectations are not as clear-cut as they might be. Hence, large amounts of unstructured time may decrease the effectiveness of the social bond and increase the likelihood of delinquent behavior. By contrast, adolescents who are busy doing conventional things—duties around the home, studying, or engaging in sports—do not have time to be delinquent (pp. 21-23).

The fourth element is *belief*. Some persons simply do not have an attitude of respect for the law. They feel no moral obligation to conform to it. This is not to say that such persons do not know that they are breaking the law or that they are doing wrong. It is just that their consciences are not offended by deviant behavior. Thus the less a juvenile believes in the morality of law, the greater the likelihood that he will be delinquent (pp. 25-26). Taking into account the emphasis of control theory upon the forces that contribute to deviance as well as to conformity, it can be diagrammed as follows:



POLICY IMPLICATIONS OF PSYCHOSOCIAL THEORY

Hirschi's attention to social relationships beyond the first few years of life not only extends the scope of control theory but overlaps with other theoretical perspectives as well. On the one hand, there is the parallel between Hirschi's theory of social control and that expressed by W. I. Thomas (1923, pp. 43-44):

As soon as the child has free motion and begins to pull, tear, pry, meddle, and prowl, the parents begin to define the situation through speech and other signs and pressures: "Be quiet," "Sit up straight," "Blow your nose," "Wash your face," "Mind your mother," "Be kind to your sister," etc. This is the real significance of Wordsworth's phrase, "Shades of the prison house begin to close upon the growing child." His wishes and activities begin to be inhibited, and gradually by definitions within the family, by playmates, in school, in the Sunday School, in the community, through reading, by formal instruction, by informal signs of approval and disapproval the growing member learns the code of his society.

On the other hand, the implications of Hirschi's theory for intervention are not strikingly different from those implied by social learning theory (see Phillips *et al.* 1971): (1) *reattach* young criminals to family, teachers or employers, and conventional friends; (2) reinforce their *commitment* to study, work, and socially acceptable leisure; (3) reward their *involvement* in a heavy routine of conventional activities while trying to extinguish the salience of those that are illegal; and (4) provide supports for a *belief* in the morality of law. In short, provide offenders with a stake in conformity by restoring their bond to society and by reinforcing their participation in conventional activities.

SCIENTIFIC LEGACY OF PSYCHOSOCIAL THEORY

Hirschi has not only avoided some of the conceptual pitfalls found in other control theories but has conducted a comprehensive examination of his own theory (Hirschi 1969). The following is an extremely brief summary of his conclusions and the related findings of others:

1. Regardless of class or racial status, the closer a boy is attached to one or both parents, the less likely he is to be delinquent (p. 97, Dinitz *et al.* 1962, Empey and Lubeck 1971, Hindelang 1973).

2. The lower a boy's grades, achievement test scores, and other measures of performance, the more likely he is to be delinquent (pp. 113-118, Cohen 1955, Dinitz *et al.* 1962, Reiss and Rhodes 1961, Short and Strodtbeck 1965, Toby and Toby 1962).

3. The less a boy likes school, the more likely he is to reject school authority and to be delinquent (pp. 120-124, Hindelang 1973, Stinchcombe 1964).

4. The more a boy is involved in activities traditionally prohibited for children—smoking, drinking, frequent dating—the more likely he is to commit crimes (pp. 166-169, Hindelang 1973).

5. The greater the involvement in conventional activities, the fewer delinquent acts committed (p. 193).

6. The lower the attachment to parents and school, the lower the belief in the efficacy of law and authority and the greater the delinquency (pp. 200-203, Dinitz *et al.* 1962, Hindelang 1973).

Despite the fact that Hirschi's version of control theory has stood the test of empirical investigation better than other control theories, several questions have been raised about it: the extent to which it is ethnic or class membership, rather than attachment to parents, that determines basic beliefs; whether it is the lack of attachment or the disadvantage of class position that contributes most to poor performance in school; the extent to which it is conformity to the norms of delinquent peers and subcultures, rather than disaffection from conventional groups, that produces delinquent behavior; or whether, as Hirschi suggests, the social order is characterized by value consensus rather than class and ethnic conflict. In short, many questions remain that can only be addressed by considering other theories.

V. LABELING THEORY

The theories of delinquency we have examined thus far have been concerned primarily with one central issue: whether the factors that distinguish law violators from conventional people can be identified. In recent years, however, there has been a marked shift away from this central concern. Rather than devoting primary attention to the presumed causes of criminal behavior, a new group of theorists—labeling theorists—have become preoccupied with societal reactions to it.

Most labeling theorists are symbolic interactionists. Their assumptions about human nature and social order, therefore, are generally the same, but with a special twist. Like symbolic interactionists, labeling theorists assume that human nature is relatively plastic and subject to change. Yet they are far more concerned with the stigmatizing effects of official reactions to offenders than with the processes of interaction that produce their illegal behavior in the first place. The reason is that labeling theorists are inclined to believe that delinquents are relatively normal people. Hence if they persist in delinquent behavior and become serious criminals, this will be due less to evil tendencies on their parts than to the negative effects of police, judges, and correctional authorities upon them.

The assumptions of labeling theorists about social order reflect this same bias. Although they acknowledge that society is characterized by cultural conflict, they suggest that this conflict is usually resolved in favor of people in positions of power and influence. Thus the definition and im-

position of social rules will reflect the interests of these people, not those of less powerful groups.

If these assumptions about human nature and social order are combined, they suggest that delinquent characteristics are not an inherent property of individuals but, rather, a property that is conferred upon them by others—by legal officials and by those who have the power to legislate their own brand of morality. Hence children become delinquent not because of their behavior or because they are predisposed to do so but because they are labeled by someone in a position of power.

DRAMATIZATION OF EVIL

Frank Tannenbaum (1938) was probably the first person to set forth some of the principles of labeling theory. Tannenbaum argued that the final steps in the making of a criminal occur not when some child violates the law but when he or she becomes enmeshed in the juvenile justice system. An official step is taken that makes an insignificant problem a serious one.

Tannenbaum called this process the “dramatization of evil,” a process that sets up a self-fulfilling prophecy that tends to evoke and make worse the very behavior complained about in the first place. As he put it, “The process of making the criminal . . . is a process of tagging, identifying, segregating, describing, emphasizing, making conscious and self-conscious; it becomes a way of stimulating, suggesting, emphasizing and evoking the very traits that are complained of. . . . The person becomes the thing he is described as being” (p. 19). Therefore, said Tannenbaum, the only way out is to refuse to dramatize evil in the first place. “The less said about it the better” (p. 20). It is the community’s action in labeling children as evil and then making them self-conscious of that label that is the major source of delinquent gangs and serious crime, not something that is inherent in the children themselves.

PRIMARY AND SECONDARY DEVIATION

In 1951, some 13 years after Tannenbaum made his pioneering analysis, Edwin M. Lemert, a professor at the University of California, added some new concepts to labeling theory. First of all, said Lemert (1951, pp. 75–76), it is necessary to distinguish between two kinds of deviant behavior, primary deviance and secondary deviance.

Primary deviance. Something that Tannenbaum failed to mention is the fact that many delinquent acts go undetected. This is primary deviance—deviance that is not identified and punished by anyone in author-

ity. Such deviance is common, as self-report studies indicate, and can be due to any number of "original" causes. In fact, says Lemert, there are an "embarrassingly" large number of theories designed to explain these original causes—control theories, cultural deviance theories, strain theories, and others that we have already discussed. Although most of these theories possess elements of truth, and thus are important from a scientific standpoint, they are relatively unimportant in terms of actually understanding how official delinquents are created.

The reason is that until primary deviance is detected there are no delinquents. Hence its impact on children will be minimal. Since their reputations have not been destroyed by labeling, they will tend to retain a conformist self-concept and to avoid many of the negative consequences of being defined as evil persons.

Secondary deviance If, on the other hand, their primary deviance is discovered, the results may be like those described by Tannenbaum: evil will be dramatized and the status of offenders transformed. It is when this occurs that the most serious form of deviance—secondary deviance—is spawned. This is when labelees begin to behave in accordance with the expectations associated with their deviant status. In their own minds, they have become criminals and act in accordance with the role.

In summary, then, both Tannenbaum and Lemert were symbolic interactionists who viewed the creation of the criminal as the end product of a sequence of interactions between a child and various authority figures, a sequence that might be diagrammed as follows:



Only after several instances in which acts of primary deviance result in official reaction and labeling does the child eventually become the thing he is described as being. It is not until he begins to mirror the social image of himself as a delinquent that he adopts a delinquent identity and engages in acts of secondary deviance.

THE SOCIAL CREATION OF DELINQUENCY

The 1960s were characterized by a wave of excitement over this new way of constructing delinquency. No longer could society and its reactions to delinquent behavior be taken for granted. All of the frustrations associated with 100 years of trying to explain delinquency now took on new light. In concentrating upon the inherent characteristics of offenders, positivistic

science had been searching in the wrong place. It is society's reaction to the deviant, more than the deviant himself, that creates the problem. Rather than inherited or learned predispositions to be evil, the dramatization of evil transforms children into criminals. Were it not for society's reactions to their deviant acts, entangling them in a web of rigidity and self-fulfilling prophecy, there would be few serious offenders. But as increased attention was paid to this exciting conception of the problem, new versions of it began to concentrate less on the role of mischievous children and their acts of primary deviance, and more on society's role in making criminals out of them. As Schur (1971, p. 19) describes it, labeling theory began to exhibit a high degree of ambivalence. On the one hand, early versions described the delinquent as a person who had a hand in shaping his own fate by the commission of a deviant act. On the other hand, later versions described him as being at the mercy of those who react to him. More and more he was treated as a passive social object, helplessly transported without much input on his part to the process by which he was labeled. In other words, the emphasis of the symbolic interactionists upon the dynamics of the social process was downgraded in favor of a structural approach in which the organization of society became the center of attention. A new kind of determinism was asserted in which the issue was less that of explaining why children violate the law than that of indicating why it is that society selectively transforms some of them into "outsiders" (Becker 1963).

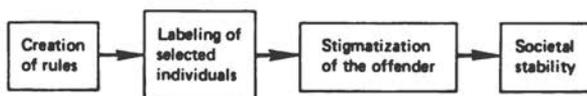
This new determinism stressed three things. The first was the long-accepted idea that society creates deviants by setting up the rules that define what deviance is. But labeling theorists went beyond this truism by stressing the role of "moral entrepreneurs"—crusading reformers—in generating new rules. Typically dominated by well-to-do and influential people, moral entrepreneurs seek to overcome some new evil by passing new rules and creating new enforcement bureaucracies. But in their fervent, often self-righteous, crusades, they often make the cure worse than the disease (Becker 1963). Once the new enforcers are in place, it is in their self-interest to see that everyone is made aware of evil, that the new rules are enforced, and that the number of deviants is expanded.

The second feature of the new determinism was the idea that rules are selectively enforced. Not everyone who is caught is actually labeled. Instead, the actual labeling of a person depends upon many things that are extraneous to his behavior: who the person is, of what class or race he is a member, whether he shows proper respect to officials, or whether a given rule is high or low on the list of an agency's list of rules to be enforced. The point is that rule enforcers have a great deal of discretion in deciding whom to label, if only because it is absolutely impossible for them to pro-

cess all rule breakers. Hence if they cannot tackle all violators at once, they must temporize with evil by selectively choosing whom to label (Becker 1963). Unfortunately, it is the powerless—the young, the black, the poor—who are most likely to be numbered among the chosen, not the powerful.

Finally, labeling theorists drew upon earlier bodies of theory suggesting that the selective labeling of persons serves important boundary-maintaining functions for society. "Each time the group censures some act of deviation, . . . it sharpens the authority of the violated norm and declares again where the boundaries of the group are located" (Erikson 1964, p. 15). The implication is that the labeled person is a resource of greater worth to society as a deviant than as a nondeviant. That is why elaborate rituals, involving robed judges, juries, defense attorneys, and spectators, are used to induct people into a deviant status but are not employed to induct them back out of it. By maintaining the deviant in an undesirable position, society can use him as a permanent signpost, indicating what the limits of society are.

In the course of its development, then, labeling theory tended to shift from a processual to a structural orientation. If a person is lucky enough to avoid being labeled as a criminal, he is viewed as being the master of his own fate. But should that unfortunate circumstance befall him, his fate is totally determined by others. This way of applying labeling theory may be diagrammed as follows:



IMPLICATIONS OF LABELING THEORY

The implications of labeling theory have been clearly stated by labeling theorists themselves: "The less said about deviance the better" (Tannenbaum 1938); "If there is a defensible philosophy for the juvenile court, it is one of judicious nonintervention" (Lemert 1967, p. 96); "Leave kids alone wherever possible" (Schur 1973, p. 155). Were it not for some remarkable events in American history, it is possible that these injunctions might have gone largely unheeded. But American society experienced a series of traumas in the late 1960s and 1970s that made them appear eminently sensible. The decade of the 1960s started on a buoyant note. John Kennedy had just been elected president, and Americans responded warmly to his charismatic leadership. After a decade of little growth and limited vi-

sion, he suggested, it was time "to get the country moving again." Heroic undertakings were in order; America should continue to pursue its grand destiny.

Consonant with these ideas, the implications of cultural deviance and strain theory, not those of labeling theory, were implemented by the Kennedy administration. Mobilization for Youth and the President's Committee on Juvenile Delinquency and Youth Crime were organized and funded. Heroic efforts were begun to give the nation's poor and uneducated a stake in conformity and, thereby, to prevent crime. Then disaster struck: President Kennedy was assassinated. Attempts to block integration were followed by civil disobedience, urban riots, and burning cities. Martin Luther King and Robert Kennedy, the two remaining symbols of earlier hopes, were themselves assassinated. And even though the War on Poverty was carried on by Lyndon Johnson, an escalating war in Vietnam brought increasing disruption and opposition. More and more young people dropped out, turned to drugs, joined communes, ran away, marched on Washington, or found some other way to attack the "establishment." Crime rates rose and violence beget violence. Finally, the Vietnam war, along with the burglaries, the wiretaps, the perjuries, and the cover-ups of the Nixon administration, spilled the crises of the 1960s over into the 1970s. As a result, faith in the capacity of American institutions to ensure tranquillity and to implement reforms fell to an all-time low. A period in history that had begun buoyantly and with great hope ended in disillusionment, mutual distrust, and cynicism.

In a way that no other theory did, labeling theory captured this spirit of cynicism and gave it voice: crime and delinquency, like other social problems, were due to the corrupting influence of the very institutions charged with eliminating them. Hence the only sensible thing to do was to eliminate or to circumscribe their influence. As a result, the following catchwords—the four d's—came to characterize the reforms that were proposed and that, in many jurisdictions, have been implemented:

1. *Decriminalization* All juvenile status offenses and all victimless crimes should be decriminalized. "Individual morality has become functional rather than sacred or ethical in the older sense" (Lemert 1967, p. 97). The legal system should not have a part in dealing with them.

2. *Diversion* All first-time and petty criminals should be diverted from legal processing. The justice system can only seek to redress harms, to enjoin offenders from further crimes, and to punish them for what they have done. It cannot correct their problems.

3. *Due process* The juvenile court, like the adult court, should serve as a court of law, not as a substitute parent or a redemptive helper. There-

fore its principal purpose should be that of ensuring that the rights of the accused are protected and that a fair trial is conducted.

4. *Deinstitutionalization* Correctional programs should be removed from the destructive influence of training schools and prisons and located in open community settings where the offender can be reintegrated into conventional institutions.

SCIENTIFIC LEGACY OF LABELING THEORY

Labeling theory made an important contribution both to science and to policy by stressing the importance of studying rule makers and rule enforcers, as well as rule breakers. Indeed, it challenged the deterministic view of positivistic science by questioning the idea that there are universal laws by which criminal behavior can be explained. There is no cosmic glue, it suggested, by which the world is held together; there is no objective reality beyond some individual's or group's perception of it. At best, therefore, we can only hope to understand how our own society operates, since it is impossible to derive theories that locate causes for criminal behavior which are both inherent within the individual and which transcend time and culture.

Despite its profound impact on policy, several limitations with this point of view have been noted.

1. Labeling theorists have greatly exaggerated the relativity of most rules. All societies have found it functional to control such kinds of behavior as murder, assault, rape, and other serious crimes (Wellford 1975).

2. Carried to its logical extreme, labeling theory suggests that labeling is a necessary and sufficient explanation for the creation of criminals (Mankoff 1971). Yet even labeling theorists have been quick to acknowledge that it would be fatuous to suggest "that stick-up men stick people up simply because someone has labelled them stick-up men . . ." (Becker 1974, pp. 4-5).

3. Labeling theory cannot explain why the incidence of criminal conduct is greater in one population than in another, or why the motive for crime may differ from one individual to another in the same population.

4. Labeling theory suggests that, after people have been labeled and stigmatized, their behavior will inevitably grow worse. Yet such self-help groups as Alcoholics Anonymous maintain that they cannot help people until these people confess their deviance and acknowledge the need to do something about it. A deviant identity, in short, is an aid to rehabilitation, not a hindrance.

5. Finally, labeling theorists, like their critics, are quick to acknowledge that labeling theory is not really a "theory" (Becker 1974, Lemert 1972, Rains and Kitsuse 1973). Instead, it is a loosely constructed perspective that simply admonishes us to acknowledge and to evaluate the impact of official processing on the individual.

Given these criticisms, labeling theorists believe that they have been misinterpreted and that their loosely formulated ideas have been extended much further than they intended. Thus they maintain that, while we "can't go home again" to the old-style criminology, neither can we place total reliance on a labeling perspective (Lemert 1974, pp. 466-467). Instead, the term "labeling theory" should be discarded and a new term adopted: interactionist theory (Becker 1974, p. 6). In studying any episode of deviance, we would be concerned with all three contributors to it: rule breakers, rule makers, and rule enforcers.

VI. RADICAL THEORY

Radical theory is the last of the bodies of theory with which we will be concerned. According to this perspective, crime is the product of a perpetual class struggle in which the ruling segments of capitalist society (1) define what criminal behavior is, based on their particular self-interests; (2) create the social conditions that make criminals out of working-class people; and (3) then devise legal machinery by which to maintain control over these people. The rules and practices that govern crime, therefore, and the criminogenic conditions that produce it, are the products of the inequities and injustices of a capitalist social order.

Given this view of the sources of crime, radical theorists strongly imply that human nature is inherently good. While people may inherit some selfish tendencies, they become really bad only if society defines or makes them that way. Hence if they were liberated from the evils of capitalism and from the class struggle, their cooperative instincts would become dominant and a humane, crime-free society would emerge. The social order, which is now characterized by conflict and coercion, would be changed, and cooperation would dominate social relations and interactions.

Radical theory is rooted in two theoretical traditions: in the traditions of conflict theory, which suggests that social order is maintained not by the value consensus of the governed but by the coercion of the majority by a powerful few, and in the emphasis of Marxian theory on "dialectical materialism," the belief that history is characterized by a succession of

economic arrangements in which the weak must forever struggle against exploitation by the powerful.

These traditions, in turn, have experienced a rebirth of interest in the past 20 years, apparently as a result of the crises through which this and other countries have gone. Radical theory expresses dismay over the past, places blame on capitalist rulers, and provides a definite course of action for the future. As expressed by Richard Quinney (1974), the following are the organizing principles of radical theory:

1. "American society is based on an advanced capitalist economy."
2. "The state is organized to serve the interests of the dominant economic class, the capitalist ruling class."
3. "Criminal law is an instrument of the state and ruling class to maintain and perpetuate the existing social and economic order."
4. "Crime control in capitalist society is accomplished through a variety of institutions and agencies established and administered by a governmental elite, representing ruling class interests, for the purpose of establishing domestic order."
5. "The contradictions of advanced capitalism—the disjunction between existence and essence—require that the subordinate classes remain oppressed by whatever means necessary, especially through the coercion and violence of the legal system."
6. "Only with the collapse of capitalist society and the creation of a new society, based on socialist principles, will there be a solution to the crime problem."

POLICY IMPLICATIONS OF RADICAL THEORY

Radical theory denies the possibility that anything can be done to lessen the crime problem by working within the framework of capitalist society or by tampering with the existing system of criminal justice. Rather, the only alternative is a socialist system of government that places the ownership and control of the means of production into the hands of the community as a whole. "When there is no longer the need for one class to dominate another, where there is no longer the need for a legal system to secure the interests of a capital ruling class, then there will no longer be the need for crime" (Quinney 1974, p. 25).

A society would be created in which group differences and individual rights would be guaranteed. Human greed and the historical tendency for people to disagree over religious, political, economic, or cultural differences would disappear; and all racism, sexism, poverty, and crime would be eliminated (Edwards *et al.* 1974, pp. 433-434). Though the

history of civilization up to now has been characterized by value conflict and clashing interest, order in the liberated society would apparently be maintained by an enlightened consensus.

Despite these impressive goals, the organization of the liberated society is not clearly stated by radical theorists. Any attempt to provide a blueprint, they suggest, would be to appear excessively "utopian."

SCIENTIFIC LEGACY OF RADICAL THEORY

Space precludes an analysis of the broader implications of radical, particularly Marxian, theory for science and scholarship. Suffice it to say that it does direct our attention to persistent discrimination or to collusion between governmental and ruling-class interests—matters to which criminologists have not paid enough attention. It correctly notes the persistence of exploitation, sexism, and racism. And it reminds us that crime is not merely an expression of pathological individuals or depraved immigrant groups colliding with an always equitable and just legal system. Rather, that system and its underlying values must be taken into account, and its contribution to the creation of criminals must be assessed.

Perhaps because of its recency and rhetorical character, however, radical theory fails to come to grips with a number of highly relevant issues.

1. Radical theory is somewhat akin to strain or cultural deviance theories in suggesting that crime is due to the demoralization and lack of opportunity produced by capitalist society. Yet it does little to indicate how the processes of demoralization lead to delinquent acts or why some individuals are criminals and others are not. The motivation to be criminal is either assumed or considered unimportant.

2. The radical, like the labeling, perspective is just that—a "perspective"—not a theory in a scientific sense.

3. Despite its emphasis upon class structure and class oppression, radical theory overlooks the remarkable fact that crime is more strongly related to age and to sex than to class. In every developed society, moreover, these stronger relationships persist.

4. Radical, like Freudian, theory is circular. Repression is inferred from capitalist society, while capitalist society is explained by repression.

5. Radical theory maintains that history has been characterized by a succession of economic orders in which the law inevitably reflects the interests of the powerful. "The problem with this position is that it can never specify the conditions under which law would not be simply an instrument of a currently powerful interest" (Taylor *et al.* 1973, p. 366). Why can it

be expected that enlightened consensus will eventually govern social relations in the ideal socialist society? How can freedom be guaranteed to those who are not affiliated with some powerful interest group?

6. Finally, there is the hope that crime can be eliminated in the utopian society—a hope that has been harbored not merely by radical theorists but by reformers of every political stripe. Consider the issues.

A number of theorists have argued that we must be leery of utopian schemes because crime, like disease, is a normal aspect of human life (Durkheim 1938, Ch. 3). It is virtually impossible to conceive of a society in which all passion, all innovation, all inclinations to deviate would be so effectively managed that deviant behavior would not exist. To accomplish this, one would have to purchase harmony at the cost of creating a totalitarian state. Hence the idea that either crime or disease can be ultimately vanquished is said to involve “a particularly trivial kind of utopian dreaming. Out of control, malfunction and crime could possibly overcome life, but control could never succeed in more than keeping them to a level appropriate to the prevailing form of human life” (Bittner 1970, p. 49).

Paradoxically, some scholars make this argument not just because they assume that people remain unalterably bad but because standards of morality are constantly changing. Consider Durkheim’s well-known allegory (1938, p. 68): “Imagine a society of saints, a perfect cloister of exemplary individuals. Crimes, properly so called, will there be unknown; but faults which appear venial to the layman will create the same scandal that the ordinary offense does in ordinary consciousness. If, then, this society has the power to judge and punish, it will treat them as such.” What Durkheim meant, in the words of Cohen (1973, p. 5), was that,

if those acts we know as crime were extinguished, small differences in behaviour that have no moral significance [at present] would take on new and larger meaning [in the future]. Small improprieties and breaches of manners and good taste would become crimes of a lesser degree, and so on. In short, there *cannot* be a society of saints because a process of social redefinition operates continuously to insure that all the positions on the scale from wickedness to virtue will always be filled and that some will always be holier than others.

In other words, there is a law in social relations that suggests that the solution to a current set of problems inevitably produces its own set of new problems. We mortals seem to have a chronic tendency to redefine misery, injustice, delinquency, or poverty in such a way that regardless of what we do about them they are always with us (Cohen 1973, p. 5). There can be little doubt, for example, that actual rates of malnutrition, infant mortality, and disease during the Middle Ages were higher than they are today.

But we are no less concerned about them. Indeed, radical theory itself suggests that we have become more concerned about them, since capitalism represents an improvement in morality over feudalism, and socialism will be an improvement over capitalism. Our standards are getting better. But, if this is the case, why will morality stop improving in a utopian society if it does not do so among saints in heaven? Even if life is improved according to today's standards, it will be marked by serious problems according to tomorrow's standards. Thus, while there is social utility in pursuing the search for a more humane society, the belief that it can be free from crime may be unreasonably optimistic.

THE QUESTIONED UTILITY OF THEORY

This review has revealed that scientific theorizing about crime has progressively led away from the notion that criminal tendencies are to be found in the individual and toward the notion that they are inherent in the political, social, and cultural organization of society. As a consequence, two types of complaints have been raised about the use of theory for the purposes of rehabilitation.

TRADITIONAL COMPLAINTS

The first set of complaints are traditional. The point has been made that most theories treat criminal behavior as though it were a unitary phenomenon, capable of explanation by a single framework. As a result, there are no notably useful typologies by which to distinguish among crimes or criminals and, thereby, to adapt different intervention strategies to individual propensities or needs.

A closely related problem has to do with the deterministic, all-or-none character of many theories. Few provide a system of propositions that makes it possible to account for the choices people make among the alternatives postulated by any scheme. For example, Cohen's (1955) version of strain theory suggests that, in response to social and self denigration, three major adjustments are possible: (1) a despairing acceptance of social and self definition and a despairing adaption to a working-class life style; (2) resistance to definition and the pursuit of a college education and a middle-class life style; and (3) rejection of social definition and involvement in an alternative, delinquent subculture. The difficulty is that there is nothing in his scheme to account for the choices that young people actually make, or for why they make them. Thus explicit guidelines for intervention at key points are lacking.

CURRENT COMPLAINTS

A second set of complaints are not only more recent but are more important, either because of their contribution to the contention that the concept of rehabilitation is bankrupt, or because of the related assumption that "nothing works" (Martinson 1974).

1. *Ultimate causes cannot be changed.* Partly as a way of justifying his contention that we should return to a more retributive, classical form of justice, James Q. Wilson (1975, p. 55) argues that scientific theory has no practical utility: "Causal analysis attempts to find the source of human activity in those factors which themselves are not caused—which are, in the language of sociologists, 'independent variables.' Obviously nothing can be a cause if it is in turn caused by something else; it would then only be an 'intervening variable.' But ultimate causes cannot be the object of policy efforts precisely because, being ultimate, they cannot be changed."

Wilson is apparently confused over the logic of causal analysis. For example, consider a theory for heroin addiction that he formulates after having rejected theory as useful. Not only is it similar to cultural deviance theory, but it is questionable that it is impervious to application: "The continued disintegration of the lower-income, especially black, family living in the central city," Wilson says, "may have heightened the importance of street peer groups to the individual, and thus . . . placed him in a social environment highly conducive to heroin experimentation" (Wilson 1975, p. 145).

As Hirschi (1979, p. 209) points out, it is only Wilson's logic, not scientific logic, which suggests that nothing could be done to address either the "ultimate" or "intervening" variables to which he alludes. According to Wilson's logic, "nothing can be done about the disintegration of the lower-income black family because *in his model* this variable is the ultimate cause (which 'cannot be changed'), and efforts to deal with peer groups or with heroin addiction as a means of reducing crime must be pointless because *in his model* these are only 'intervening variables.'" Obviously, there is nothing in either scientific or more pragmatic logic which suggests that one could not devise some strategy to address both the problems of the black family or the effects of a peer group upon the individual black person. Any failure to try such a strategy, in fact, would more likely be due to various kinds of political, economic, and bureaucratic impediments than to anything that is inherent in the theory.

2. *Nothing to be explained.* A second complaint is based upon the recent popularity of labeling theory or of self-report studies which suggest that virtually all juveniles have violated the law at some time or another,

some of them many times. This complaint is based upon the notion that criminal behavior is normal behavior; hence there is nothing to be explained.

Morris and Hawkins (1969, p. 154), for example, say "that delinquent behavior of some kind among young people if not universal is at least far too widespread to be regarded as abnormal. . . . It is in fact perfectly natural for children to lie, cheat, steal, indulge in physical assault and behave indecently."

Sue Titus Reid (1976, p. 240) agrees. "With the exception of labeling and conflict theory," she says, "all of the theories presume the existence of a phenomenon called 'crime,' which does not exist and which therefore cannot be distinguished from noncrime. As a result, they cannot distinguish criminal from noncriminal behavior or criminals from non-criminals." Reid concludes that we should not abandon scientific research in criminology, but the only research that makes any sense is the study of "official reaction to crime."

Gwynn Nettler (1974, p. 210) has responded to such extreme translations of labeling theory by noting that they slide "between the truth that social groups create the *definitions* of 'crime' and the falsehood that the *injuries* condemned by these definitions would disappear (or would not have been 'created') if the definition had not been formulated. . . . The ordinary reaction to this semantic sleight of hand is to say, 'A mugging by any other name hurts just as much.' "

Furthermore, in light of what science has already shown, it comes as some surprise to find that crime cannot be distinguished from noncrime, that it is "perfectly natural for children to lie, cheat, steal, indulge in physical assault and behave indecently," that people cannot be distributed on a continuum on which criminal conduct is low at one end and high on the other, or that no factors have been discovered that tend to distinguish the most frequent or most serious violators from those that are the least frequent or least serious. Nonetheless, the contention that our primary concern should be with official reactions to crime, and not with its causes, has become progressively stronger over the past generation. Consequently, attempts to improve theory, and to refine it through empirical investigation, have stagnated.

3. *Just deserts philosophy.* Finally, there is the "just deserts" philosophy (Fogel 1979, Hirsch 1976, Morris 1974). Perhaps more than any other recent development, this philosophy captures the current state of despair over the concept of rehabilitation, and the belief that theories of causation are no longer relevant to social policy.

First, it rejects the utility of theory. "We recognize that, in giving up the rehabilitative model, we abandon not just our innocence but perhaps

more. [The rehabilitative model] was a scheme born to optimism, and faith, and humanism. It viewed the evils in man as essentially correctable, and only partially the responsibility of the individual" (Gaylin and Rothman 1976, pp. xxix, xxvii). Today, by contrast, "there is virtually no sound proof that, short of killing him, anyone knows how to stop another person from committing crimes" (Fox 1974, p. 3).

Secondly, it views a treatment-oriented system of justice as a source of tyranny; benevolence is oppression. Consequently, a greater "mechanization" of justice is proposed because understanding, individual love, and the social distribution of power and property have not been achieved (Gaylin and Rothman 1976, p. xli). Our treatment-oriented system of justice has "produced far too many instances of recorded abuse to think fairly that it much more than simply a vehicle for abuse" (Fox 1974, p. 3).

Lastly, the state should concentrate only upon doing justice through punishment, not upon trying to reform offenders. "[The state should] scale down the length of sentences to the point where it satisfies our sense of equity, but no more than that: 'warnings' for crimes low on the scale of seriousness, intermittent confinement (weekends or evenings) for serious offenses, and . . . full-time incarceration only for the most serious crimes (Gaylin and Rothman 1976, p. xxv).

In short (Gaylin and Rothman 1976, p. xxxiv), "The concept of just deserts is intellectual and moralistic; in its devotion to principle, it turns back on such compromising considerations as generosity and charity, compassion and love. It emphasizes justice, not mercy, and while it need not rule out tempering justice with mercy, by shifting the emphasis from concern for the individual to devotion to the moral right, it could lead to an abandonment of the former altogether."

This increasingly popular philosophy is being written into an ever larger number of federal and state statutes. It is also heavily reflected in the new Standards for Juvenile Justice recently adopted by the prestigious American Bar Association (Flicker 1977). Finally, it forms the basis for a totally new juvenile code in the State of Washington (Revised Criminal Code of Washington 1977). In that state, new goals for juvenile justice make no mention of "treatment" or "rehabilitation" until such objectives as community protection, accountability, due process, determinate sentencing, and appropriate punishment are enumerated. Hence, to the extent that "doing justice" is considered more important than rehabilitating offenders, including children, theories of causation are likely to fall further into disuse and to be considered irrelevant to social policy. Yet, as the next section indicates, any policy of benign neglect is likely to fall most heavily, as it has always done, on the youngest and most deprived seg-

ments of the population. From an ethical, as well as from a theoretical, standpoint, therefore, such an outcome merits consideration.

PLACING THEORY IN SOCIAL CONTEXT

Efforts to determine the possible relevance of theory may be illustrated, first, by placing crime and its attendant ills in an appropriate social context and, then, by noting possible ways in which theory might be applied to them.

As a start, it is worth noting that, of the various types of crime, those with which the average citizen seems most concerned are predatory acts that directly threaten either his property, his loved ones, or his own person. Despite the outrageous costs of both white-collar and organized crime, they either seem so impersonal or so closely intertwined with our economic and political systems, or with such subterranean pleasures as gambling, prostitution, and vice, that they arouse much less popular and official opposition. Hence, from a purely pragmatic standpoint, it might be wise to focus on traditional crimes and who it is that commits them. Some rather clear priorities are implied.

1. *Importance of age* In any consideration of priorities, one finding stands out above all others: traditional crime is predominantly a youthful phenomenon. It is concentrated so heavily in the adolescent and early adult years that it is obviously related to this crucial phase in the life cycle. Hence if that crucial phase could be affected in such a way that crime played a less important part in it, the results for everyone could be highly desirable.

2. *The socializing institutions* As a phase in the life cycle, adolescence has become progressively longer during the past century. Except for contacts with their parents and teachers, children and adolescents have been increasingly segregated from other adults and the responsibilities associated with adulthood. Yet as the degree of age segregation has increased, the socializing influence of the family and school has decreased.

Kingsley Davis (1979) highlights the dramatic finding that, because of high divorce rates and the current trend toward single parenthood, the likelihood that a child will remain with both parents throughout childhood has been reduced to about the same level it was in the preindustrial era, when high death rates were the primary cause of family disruption. Not only has the divorce rate tripled since 1933, but the number of il-

legitimate births has gone up 314 percent since 1947. Furthermore, there is no sign that the trend is leveling out.

At the same time, educational authorities have responded to current disruptions and traumas in the schools by absolving themselves of responsibility for these problems. Such difficulties, they argue (with considerable justification), are rooted in society as a whole (Short 1979). Hence the traditional reliance on the school as a major medium for resolving youth problems is now much less tenable (Ianni 1978).

3. *Socialization by peers* The prolongation of adolescence, along with the diminution of social control by the home, school, and place of work, has had the effect of enhancing the role of peers as an alternative source of socialization. This is probably more true, however, for the culturally disadvantaged in our urban slums than for the middle-class residents of suburbia. For the former, youth ghettos have superseded both the family and the school as a source of values and norms.

4. *Population most at risk* These developments clearly indicate that the entire youth population is not equally at risk. Instead, as has been the case throughout American history, it is poor and minority youths who, by almost every criterion, are at jeopardy as persons most likely to be defined as criminals or to be the victims of crime.

a. *Crime* Arrest rates are not only higher for the young than for the old, but are higher for minorities than for whites, higher for the poor than for the affluent, and higher in the central city than in the suburbs. Furthermore, the tendency to commit murder and other violent crimes, traditionally the province of older males, has been moving steadily down the ladder of age (Block and Zimring 1973).

Victimization studies, though they look at crime from a totally different perspective, paint an identical picture: the prototypical victim is a young, minority, poor, ghetto-dwelling male. Indeed, the leading cause of death among young black men is not some dread disease but violent killing.

Finally, self-report studies, while questioning whether the differences between blacks and whites, or between lower- and middle-class youths, are as great as the other measures indicate, do suggest that black males are more inclined to commit serious, particularly serious personal, crimes than are their white counterparts (for a detailed analysis of these findings, see Empey 1978, Ch. 6-8).

b. *Family instability* The trend toward single parenthood, while accelerating among all segments of the population, is most heavily concentrated among the minority poor. In 1950, 18 percent of all black families were headed by females; in 1969, the proportion had risen to 27

percent; and by 1977, it had reached 41 percent (Bronfenbrenner 1974, Davis 1979, Monahan 1957). Indeed, the number of female-headed households per 100 two-parent black families could reach as high as 117.9 by 1985 if present trends continue, versus 19.1 percent for whites (Davis 1979). The point is that the majority of unmarried mothers are not successful liberated women but uneducated, unemployed teenagers, many as young as 13 or 14. Not only are disadvantaged children begetting more such children, but they are doing so at a much higher rate.

c. *Attendant ills* It is among these mothers and their offspring that the rates of infant mortality, of school failure, of poverty, of mental and physical disease, of child abuse, of crime, and of confinement in institutions are the highest. Indeed, a recent national study of the educational levels of children in state institutions revealed some striking disabilities (Bartell *et al.* 1977, pp. 38-40). Although 81 percent of these children were between the ages of 14 and 17, and presumably getting ready to enter the job market, only 7 percent could read at an eighth-grade level or higher. By contrast, one out of five could read no better than a second-grade child, and 80 percent no better than a fifth grader.

d. *Unemployment* Almost half of the nation's unemployed in 1976 were between the ages of 16 and 24—3.5 million of them (National League of Cities 1977). But, while unemployment rates for adolescents in general run anywhere from 20 to 40 percent, they may be as high as 50 or 60 percent for black and brown teenagers. Thus, rather than experiencing conventional work roles, the road to independence for many minority youths is welfare. The American dream has been reduced to these proportions.

In short, a contextual analysis of traditional crime reveals that its burdens fall most heavily on the younger and more deprived segments of the population. To the degree that society is concerned either with lifting these burdens or with merely protecting itself, the most likely focus for rehabilitative intervention would be on these segments. And while such a focus might do little to ameliorate the incidence of white-collar, organized, and professional crime, it would be directed to a compellingly large number of young people.

USING THEORY: AN ILLUSTRATION

Any number of theories might be formulated to explain this portion of the crime problem. For the purposes of illustration, however, the following is drawn from many of those already discussed: control, cultural deviance, strain, symbolic interactionist, and labeling theories:

1. *Poor attachment to conventional institutions leads to a decreased stake in conformity.* Research has revealed that poor attachment to parents, school, and conventional friends is more predictive of illegal behavior than is class membership. When that attachment is weak or broken, the stake of young people in conformity will be decreased. They will be less likely to internalize the conventional norms of society, to commit themselves to long-term conventional goals, and to acquire beliefs in the legitimacy of legal rules and requirements.

2. *A decreased stake in conformity leads to a heightened sense of strain.* Of the several variables in the chain, a sense of strain has been the most difficult to document empirically. Nonetheless, a small but persistent relationship tends to exist. It suggests that those marginal youngsters who are unsupervised or at odds with their parent(s), who do not do well in school, and who do not fit in well with their more conventional peers are labeled, isolated, and stigmatized. As a result, they may experience a progressive loss of self-esteem and a growing sense of alienation.

3. *A heightened sense of strain leads to identification with delinquent subculture.* Evidence does not warrant the assumption that delinquent groups are highly cohesive and inevitably rewarding. Nonetheless, the majority of criminal acts occur in groups. Hence theory continues to suggest that marginal youths adjust to their sense of strain by identifying with the values and carriers of delinquent subculture.

4. *Identification with delinquent subculture leads to criminal behavior.* The strong tendency for criminal acts to be committed in groups suggests that, if nothing else, delinquent subculture provides the individual with the necessary techniques, rationalizations, and rewards for committing crime. In those areas where delinquent gangs are omnipresent, moreover, delinquent associates also provide the individual with protection from rival gangs and perhaps with some sense of belonging.

IMPLICATIONS FOR REHABILITATION

When one considers the implications of this theory for rehabilitation, particularly as it applies to the social conditions that continue to spawn youth crime, one can begin to understand the present disillusionment with rehabilitation, or why radical theorists argue that nothing can be done about crime short of social revolution. Given the rising instability of the family, particularly among the minority residents of our ghettos, the declining effectiveness and isolation of minority schools, and high rates of poverty and youth unemployment, nothing short of massive forms of intervention, preventative as well as rehabilitative, are implied. There *are*

real reasons to question whether society has the knowledge, power, or will to reduce crime significantly.

Even short of massive intervention, however, certain steps might be taken to make rehabilitative efforts seem more coherent and effective.

Recognize the Elliptical Nature of Theory

People who run correctional programs are usually more concerned with using theory to identify and to control evil than to cultivate good. Hence, in their preoccupation with evil, they tend to overlook the elliptical nature of theory; namely, the fact that any adequate theory will not just be a theory of crime but a theory of conformity as well. To explain one is to explain the other (Cohen 1959). For example, when stated as a theory of conformity, the composite propositions listed above would appear as follows:

1. *Strong attachment to conventional institutions leads to an increased stake in conformity.* When the attachment of young people to parent(s), teachers, conventional friends, and employees is strong, their stake in conformity will be increased. They will be more likely to internalize the conventional norms of society, to commit themselves to long-term goals, and to acquire beliefs in the legitimacy of legal rules and requirements.

2. *An increased stake in conformity leads to a heightened sense of self-worth.* Those youngsters who are strongly attached to their parent(s), who do well at school or work, and who fit in well with their more conventional associates are usually defined as successful and rewarded for their behavior. As a result, they are more likely to experience a sense of personal worth and a sense that they have the power to affect their own destinies through conventional means.

3. *A heightened sense of self-worth leads to identification with conventional norms and peers.* Youths who possess a sense of self-worth, acquired through conventional means, are more likely to identify with the values and carriers of conventional culture. To do otherwise is to endanger a future in which they now have considerable investment.

4. *Identification with conventional culture leads to law-abiding behavior.* Conventional culture provides the individual with the necessary techniques, rationalizations, and rewards for pursuing a conventional career.

In short, one way to test the pragmatic adequacy of any theory is to determine its capacity to guide rehabilitative efforts. Rather than directing attention solely to factors that must be undone in offenders, any

operationalization of the theory should be explicit about the desirable things that are being sought.

Operationalize the Theory

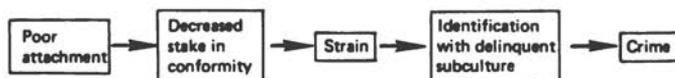
The task of operationalizing theory for the purposes of intervention is probably more difficult than constructing or testing it. Our composite theory, for example, suggests two things. First, it suggests that to the degree that the safety of the citizenry permits, rehabilitative programs should be a regular part of the institutional fabric of the community. Since it is the maladaptation of community institutions that initiates the crime-generating sequence in the first place, it is these institutions, as much as offenders, that require change.

Second, the theory implies the need to identify the kinds of institutional structures and processes in the community most likely to help the individual acquire a stake in conformity and a sense of self-worth; to restructure existing institutions or to build new ones so that they do more to reinforce those desirable traits; and to discard or to render ineffective those structures that foster predatory behavior and a criminal identity.

The difficulty of taking these steps is nothing short of profound. How does one compensate for the lack of attachment and the anomic character of some young people's lives, reduce strain, and provide them with a stake in conformity? To what degree will it be necessary to alter the "natural" practices and structures of families, schools, places of employment, and other neighborhood institutions, perhaps by building something analogous to an Israeli kibbutz, where there is age integration and a unified sense of purpose? Far more than simply altering the presumed faults of the offender, our composite theory implies social, economic, and political change of considerable magnitude.

Set Correctional Priorities

Once attention has been paid to the task of operationalizing theory, the next involves that of setting correctional priorities. Our composite theory, for example, specified the following crime-generating sequence:



It would seem that, depending upon the age and/or sophistication of the criminal population in question, intervention priorities would vary. If

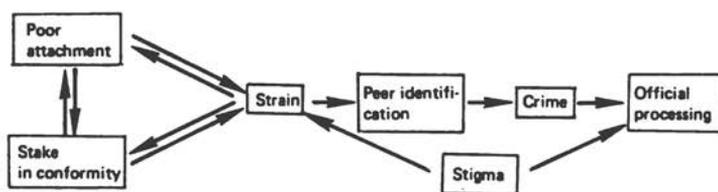
the target population were a group of younger adolescents, one might want to pay greater attention to their attachment to homes and schools than if they were an older group of young adults. While, in both cases, some attention would have to be paid to lessening the influence of criminal associates and to reducing strain, this task might not only be qualitatively different for the two groups, but would entail more immediate attention to providing vocational training and genuine work opportunities for the older group. Any single theory does not always have the same implications for all offenders.

Continue to Refine Theory

In addition to evaluating the impact of any program, or studying the way it operates, there is a constant need to test and refine the theoretical assumptions upon which it is based. As with most other theories, for example, our composite theory specifies an asymmetrical sequence leading from an initial "cause" (poor attachment), through several intervening variables (stake in conformity, strain, and delinquent peers), to criminal behavior. Each variable in the sequence is followed in time by its effect, rather than covarying with it. The causal sequence does not leave room for interactional effects and is not reversible.

Obviously, such a formulation is not likely to square with reality. Indeed, consider but three of the many alternative models that might be suggested, some of which account for the effects of official processing and labeling that were not even considered in the composite theory.

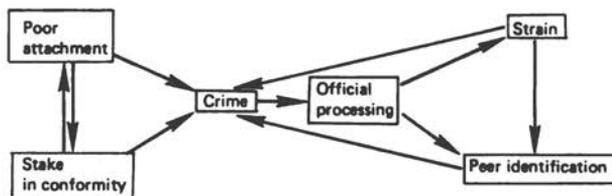
Model 1



This model suggests not only that poor attachment and a decreased stake in conformity are interdependent but that both have a symmetric and interdependent relationship with strain; all three variables feed upon each other. Furthermore, strain also leads to peer identification, which in turn leads to crime. But the interdependence does not end there. Instead, there is a feedback from crime to strain introduced by the stigma resulting from

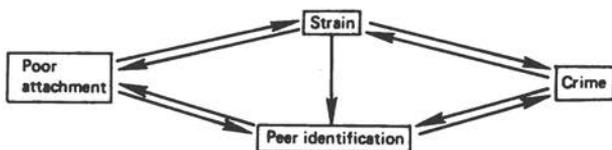
official processing. This theory, in fact, would suggest a continually worsening problem unless intervention breaks the cycle.

Model 2



This model suggests that peer identification is the product of both poor attachment and strain, that peer identification and strain, in turn, tend to exacerbate the lack of attachment, and that they also have a reciprocal and interdependent relationship with crime. Again, the interdependence of key variables suggests a cyclical and worsening effect.

Model 3



Model 3 suggests that poor attachment leads to a decreased stake in conformity and that the latter, in turn, only makes the lack of attachment greater. But, in this instance, both contribute directly to crime rather than being mediated by strain and peer identification. The theory suggests, instead, that rather than preceding crime, strain and peer identification are precipitated by official processing. Further, as labeling theory would suggest, these relationships are interdependent and tend to make the problem worse.

CONCLUSIONS

What these models suggest is that existing theories of crime are primitive relative to a host of a specific and likely interdependent variables. The failure to rectify these problems is due, in part, to the horrendous complexity inherent in trying to explain crime and, in part, to poorly con-

ceived research studies, particularly those concerned with applying and testing the pragmatic adequacy of theory. But these limitations notwithstanding, a far greater impediment in recent years has been the growing sense of despair and cynicism among students of criminal justice: the belief, based on questionable evidence, that nothing has, or can, work; that causation theory is irrelevant; that an individualized system of justice is inevitably abusive; and that an alternative system, based on a punishment model, must be implemented. Hence, to the degree that these sentiments prevail, it is unlikely that much progress will be made in the near future in improving theory. Instead, any interest in it will remain largely academic, the province of a persistent few.

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The Implications of Family Violence for Rehabilitation Strategies

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INTRODUCTION

Criminologists have long studied the various socializing factors that contribute to the development of criminal careers. Many investigators have related experiences in the family, a primary socializing agency, to delinquency. However, the level of *physical violence* in families and the effect of this violence on subsequent criminal careers have not been adequately investigated. This neglect probably stems from two sources. First, the family is an institution of cultural value from which the society expects love, supportiveness, and moral training. This makes it hard for us to accept the premise that the family can also be an extremely violent institution (Steinmetz and Straus 1974). Second, most family violence is either explicitly legitimate, as in parental use of physical punishment, or implicitly legitimate, as in the high rate of pushing, shoving, slapping, and throwing things that occurs between spouses (Gelles and Straus 1979, Straus 1974a). The acceptance of this violence tends to blind us to the possibility that violence in the family can not only train children to be violent but can also make an indirect contribution to criminal behavior.

This paper presents data that show a relationship between certain fam-

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ily experiences—specifically violent behavior¹ between parents and between parent and child—and the propensity to commit crimes. For the purposes of rehabilitation, this relationship has two implications. The first is that one source of delinquent and criminal behavior is experiences of a certain identifiable and observable kind. The second is that these experiences take place in the context of a particular kind of social organization—the family—that is both a plausible model for social interaction in other settings and itself subject to empirical study. The paper explores some of the research and policy questions that arise if the family, and in particular the violent family, is to become a focus for rehabilitation efforts.

VIOLENCE IN FAMILIES AND THE DEVELOPMENT OF CRIMINAL BEHAVIOR

REASONS FOR INVESTIGATING THE RELATIONSHIP BETWEEN FAMILY VIOLENCE AND CRIME

At first glance, the connection between family violence and rehabilitation may seem remote. It is well known that peer relationships frequently override family influences, especially during the age at which delinquent and criminal careers are developing. Furthermore, it could be argued that the “causes” of delinquent and criminal behavior are so complex that exploring connections between experiences in one setting and subsequent behaviors in another entails an unwarranted leap of inference. From this point of view, a focus on family violence for the purposes of rehabilitation research would be useless and a diversion from primary concerns.

Three counterarguments suggest that family violence is a productive focus for research on rehabilitation techniques. First, what children learn from their families about social norms and the acceptability of various

¹ For the purpose of this paper, violence is defined as “an act carried out with the intention of, or perceived as having the intention of, physically hurting another person” (Gelles and Straus 1979). The “physical hurt” can range from slight pain, as in a slap, to murder. Although this is the basic definition of violence, it is usually also necessary to take into account a number of other characteristics of each violent act, such as whether it is “instrumental” to some other purpose or “expressive,” i.e., and end in itself, and whether it is a culturally permitted or required act or one that runs counter to cultural norms, i.e., legitimate versus illegitimate violence). Thus the basis for the “intent to hurt” may range from a concern for a child’s safety (as when a child is spanked for going into the street) to hostility so intense that the death of the other is desired. The former would be an example of “legitimate instrumental violence,” and the latter of “illegitimate expressive violence.”

kinds of social interaction influences their future behavior and attitudes. The direction and magnitude of this influence varies with other factors, but the effects cannot be ignored. If experiences of violence in the family are related to later delinquent and criminal behavior—as the data below indicate—it is clear that these experiences are part of the process of socialization to crime. Therefore knowledge of the specific factors involved in this process should be helpful in designing intervention techniques to reverse or remedy the process.

Second, the family is a learning unit, and so might be well-suited to the task of resocialization. This kind of approach to rehabilitation would depend on a number of factors, such as amenability to therapy in that setting. Current clinical strategies that are being used in dealing with child abuse are providing opportunities to test the effectiveness of this approach for broader purposes. In any case, more work on understanding the dynamics of family violence and on developing techniques to reduce the level of family violence could eventually produce major socializing effects.

Third—a point that is both obvious and seldom noticed when rehabilitation is debated—violence in the family is frequently serious enough to count as crime itself, whether it is reported and charged as such or not (Straus 1980b, Straus *et al.* 1980). Changes in social attitudes and new research have spurred greater awareness of violent phenomena in families and a far higher level of official response. Rehabilitation for criminal offenders in this category is therefore a relatively new but increasingly important need.

DATA ON FAMILY VIOLENCE AND ITS CORRELATES

None of the reasons for exploring connections between experiences of violence in the family and subsequent criminality would be compelling in the absence of evidence that relationships between these factors exist. Until recently, no studies to test hypothesized relationships of this sort have been attempted. Three recent studies have developed data appropriate for testing the hypothesized relationships, however.

McCord's recent analysis of subsequent careers and life experiences of participants in the Cambridge-Somerville Youth Study (see McCord in this volume) provides one kind of data (McCord 1979). She compared observational records of each participant's home atmosphere, rating each child with respect to parental characteristics (parental aggression, paternal deviance, and maternal self-confidence) and child-rearing characteristics (amount of parental conflict, parental supervision, and affection from the mother). Scores on this home atmosphere index were then correlated with official records of subsequent criminal convictions across the entire popu-

lation of participating subjects. McCord reports, "Multiple regression analyses indicated that six variables describing home atmosphere in childhood account for a significant proportion of the variance in number of convictions for serious crime. After controlling effects of differences in social status, parental characteristics and child-rearing variables accounted for 32.2% of the variance in number of convictions for property crimes and 30.7% of the variance in number of convictions for personal crimes." In addition, "Discriminant function analyses based on the six variables describing home atmosphere correctly identified 73.5% of the men as either subsequently criminal or non-criminal; further, these six variables provided a function which, for 80% of the men, correctly discriminated those convicted and those not convicted for serious crimes as adults."

As McCord notes, these data are somewhat limited with respect to inferences about the *general* relationship between family experiences and subsequent criminality. In particular, there was little variation in the social status of the population studied, since all subjects were drawn from congested urban neighborhoods. Also, the home atmosphere index measures more than violent behavior, and so the particular effects of conflict or violence *per se* cannot be established. Even with these limitations, however, the results clearly show different effects in terms of criminality and noncriminality for different kinds of parental behavior. Family experiences are related to subsequent criminal behavior even among lower-class children who are normally more "at risk" for criminality.

Research by Straus, reported for the first time in this paper, focuses specifically on possible links between violence in the family and crimes outside the family. Straus's findings strongly indicate the existence of such a link, although the data do not provide information on either the causal direction or the reasons underlying the association. The original data come from two sources: adult crime data based on a nationally representative sample of 2,143 American families, and juvenile crime data from a sample of 385 families described in Straus (1974b). Each set of data is discussed below.

With respect to adult crime, the national sample survey included a question that asked if, during the previous year, the respondent had been "arrested or convicted for something serious." The question was not originally included with the intention of using the responses to consider the possible link between family violence and crime. However, despite the limitations inherent in this kind of data, they give some preliminary information on the issue.

The self-reported arrest or conviction rate per 1,000 based on this question is 19.1 for males and 8.6 for females. (The males and females in this

study had to be age 18 or over and had to be living as a couple with a member of the opposite sex; consequently, these rates exclude both the majority of teenagers and most single persons.) As is true of all other crime data, there are important sex differences. The data in Table 1 control for the sex of the aggressor, and the crime rates for men and women are reported separately. Three main conclusions can be drawn from Table 1.

Seven of the eight comparisons of violent with nonviolent couples show that the arrest or conviction rate is higher among those who assaulted a spouse or were assaulted by their spouse. So intrafamily violence and crime outside the family are related. There are a number of possible reasons for this relationship.

1. It could be a methodological artifact. Both the violence data and the crime data are self-reports. Therefore the correlation between the two variables could be the result of an underlying "response style" such as willingness to admit deviant acts. We do not think this is the case for two reasons: (1) If the response style explanation is correct, there should also be a relationship between child abuse and arrest or conviction rates. But other data from the survey show that there is not. (2) Even if a response

TABLE 1 Arrests and/or Convictions per 1,000 Married Adults by Spouse Abuse and Sex

Family Violence Measure ^{a,b}	Arrest and/or Conviction Rate per 1,000 Married Adults		N	
	Men	Women	Men	Women
Overall husband-to-wife violence:				
Nonviolent	17	5	809	991
Violent	25	31	119	129
Severe husband-to-wife violence:				
Nonviolent	17	7	898	1,080
Violent	61	43	33	47
Overall wife-to-husband violence:				
Nonviolent	19	5	805	1,008
Violent	10	30	102	135
Severe wife-to-husband violence:				
Nonviolent	17	7	864	1,099
Violent	21	40	47	50

^a Measured according to the conflict tactics scales (Straus 1979).

^b Violent means one or more acts of violence in the survey year.

TABLE 2 Delinquent Behavior of High School Seniors by Parental Violence and Spousal Violence

Delinquent Behavior	Sex of Child	Parental Violence Delinquency Rate per 100 Adolescents Whose Parents				Spousal Violence Delinquency Rate per 100 Adolescents Whose Parents			
		Hit Child		Did Not Hit Child		Hit Spouse		Did Not Hit Spouse	
		N	Rate	N	Rate	N	Rate	N	Rate
Hit a nonfamily member with an object	M	51	13.7 ^a	124	4.0	29	17.2 ^a	140	4.3
	F	62	3.2	146	0.7	33	0.0	176	1.7
	T	113	8.0 ^a	271	2.2	62	8.1 ^b	317	2.8
Committed vandalism	M	53	56.6 ^a	127	33.1	29	51.7	141	38.3
	F	65	12.3	150	10.0	33	15.2	176	10.2
	T	118	32.2 ^b	278	20.5	62	32.3 ^b	318	22.6
Stole something worth more than \$50	M	51	9.8	126	5.6	21	3.6	139	6.5
	F	65	1.5	149	0.7	32	0.0	176	1.1
	T	116	5.2	276	2.9	60	1.7	316	3.5

^a*p* = 0.01.^b*p* = 0.05.

style variable leads some respondents to admit both spousal violence and having been arrested or convicted, and inhibits other respondents from reporting these events, both the spousal violence and the arrest or conviction have to be present for those who *are* willing to report them.

2. The more severe the assault, the larger the difference in crime rate between those who are violent to a spouse and those who are not. This can be seen by comparing the "overall" violence rate rows with the "severe" violence rate rows. It is important, however, not to overlook the fact that even the ordinary violence of married life (pushing, shoving, throwing things, and slapping) is associated with crime outside the family.

3. Women who were assaulted by their husbands have a higher crime rate than do other women. On the other hand, men who were assaulted by their wives (which occurred almost as often) do *not* have an importantly different rate of arrest or conviction from that of other men.

Table 1 poses intriguing questions with respect to the effects of violence on victims, on perpetrators, and on observers. The national sample survey itself cannot provide answers to such questions. Nor can it provide answers to longitudinal questions about the subsequent criminality of children who observe or are the victims of such violence. But all the results in Table 1 point to the same conclusion: violence between spouses is associated with a higher rate of arrest or conviction for behavior that the respondent regarded as "something serious."

Table 2 reports data from a different study based on self-reports by college students (Straus 1974b). The subjects were asked if their parents had hit them and if their parents hit each other during the year they were high school seniors. They were also asked about their own behavior during that year.

All but one of the six comparisons in the first three rows of Table 2 show that subjects who were hit by their parents or who observed their parents hitting each other were themselves at least three times as likely to hit a nonfamily member with an object as were subjects who were neither victims nor observers of violence in their families. This relationship extends to vandalism, although it is somewhat weaker. For theft, having been hit by a parent is related, whereas violence between the parents is not.

Again, intriguing questions are posed, but not answered, by the data. First, what accounts for the exceptions in Table 2 to the overall pattern of association of family violence with the child's nonfamily violence, vandalism, and theft? Second, and more important, what underlies the positive relationship between experiences of violence between persons in the family and nonviolent deviancy such as theft and vandalism? Other data from the same studies, not reported here, indicate that the relationship

extends to personal crimes, property crimes, truancy, and other delinquent acts. Without further research, one can only speculate that family violence undermines the normal learning of acceptable social behavior. For most individuals, family experiences are part of one's socialization to virtue; for others, family experiences are a socialization to crime.²

Since the data reviewed above strongly suggest that experiences of family violence are associated with delinquency and criminality, it is useful to know how widespread the evidence of violence is in American families. Table 3 summarizes the annual incidence rates for the national sample of 2,143 families.³ But even without looking at the specific figures, it is well to remember that these rates differ radically from the usual crime statistics. Crime rates are typically expressed as a rate per hundred thousand, whereas we found it more convenient to express the frequency of family violence in rates per hundred children or per hundred couples. So there is an order of magnitude difference between the official crime rates and our rates.

Each year about 16 of every 100 American couples experience at least one incident in which either the husband or the wife uses physical force on the other. That is about 1 of every 6 couples. Most of these violent acts are minor assaults, such as slapping, pushing, shoving, and throwing things. However, just over 6 of every 100 husbands and wives are involved in a more serious act of violence, such as kicking, punching, biting, hitting with an object, beating up the other, and using a knife or gun. Applying this rate to the 47 million couples in the United States suggests that serious assaults of this type take place in almost 3 million American homes each year. Clearly, the typical American husband or wife stands a much greater chance of being assaulted in their own home than they do on the streets of even the most crime-ridden city.

We do not bother to give the figures on the ordinary violence that the typical American parent engages in against their children because it is just about universal in infancy and early childhood. Even as late as the last year in high school, at least half of all American parents hit their children (Straus 1971). For acts of violence by parents that are more serious than

²We can, however, say that the findings reported in Tables 1 and 2 are not the result of confounding with socioeconomic status. To check on this, the sample was subdivided into those families in which the husband or father was engaged in manual work (blue-collar workers) and those families in which he was engaged in nonmanual work (white-collar workers). The results showed essentially the same pattern of association between family violence and crime and delinquency as was found for the sample as a whole.

³The statistics are given in more detail in Straus (1980) and Straus *et al.* (1980). Therefore we will only briefly summarize the main incidence rate statistics.

TABLE 3 Annual Incidence Rates per 100 Couples, Parents, or Children, Based on a Nationally Representative Sample of American Families ($N = 2,143$)

Type of Violence	<i>N</i>	Overall Violence Index ^a	Severe Violence Index ^b
Between spouses	2,089	16.0	6.1
Parent to child	1,125	63.5	14.2
Child to parent	1,050	18.0	9.4
Child to child	873	79.9	53.2

^a Based on the occurrence of any of the following: throwing something at the other person, pushing, grabbing, shoving, slapping, kicking, biting, punching, hitting with an object, beating up, threatening to use a knife or gun, and using a knife or gun.

^b The same list, but excluding throwing things, pushing, grabbing, shoving, and slapping.

SOURCE: Adapted from Straus *et al.* (1980).

slapping, spanking, pushing, shoving, and throwing things, Table 3 shows that 14 of every 100 children per year are the victims of parental attacks that are serious enough to fall into our child abuse index. Acts of this sort include kicking, punching, biting, hitting with an object, beating up the child, and using a knife or gun. Again, translating this rate into an estimate of actual numbers suggests that each year about 6.5 million children are victims of child abuse.

Since to many people striking a child with a belt, paddle, or hair brush is just a severe type of physical punishment, and not child abuse, we re-computed the child abuse index without this. The rates are, of course, lower, but still astoundingly high—almost 4 of every 100 children per year. Translating this rate into estimates of actual numbers means that each year about 1.7 million children are kicked, bitten, punched, beaten up, or attacked by a parent with a knife or gun. (Data on each of these acts separately are given in Straus *et al.* (1980).)

Given this level of violence between the parents, and this level of violence by parents against their children, it should come as no surprise that American children are also extremely violent. Each year, about 1 of every 5 (18.0 percent) American children strikes a parent. The rates range from 38.8 for 3- to 4-year-olds to 22.3 for 5- to 9-year-olds, 8.7 for 10- to 14-year-olds, and 10.0 for 15- to 17-year-olds. Even if we leave out of the violence index the minor acts of violence, the figures are still high. Almost 4 of every 100 children aged 15 to 17 attack a parent each year using methods that carry a high risk of causing injury.

Finally, the most frequently occurring type of family violence is attacks

by one child in the family against a sibling. This is so common that some parents worry if it does not happen. Eight of every ten American children get into a physical fight with a sibling each year. But this is even more likely to be an underestimate than the other rates because there are certain to have been fights the parent did not know about.

Not only are children more violent to each other than to anyone else, they are also more likely to attack in ways that could cause serious injury. Over half of American children commit one of the more serious acts of violence against a sibling each year.

One final point on incidence rates deserves note. As children grow older, their violence rate goes down, but it far from disappears. For the major acts of violence, the rates go from 74 of every 100 3- and 4-year-olds, to 64 of every 100 5- to 9-year-olds, to 47 of every 100 10- to 14-year-olds, to 36 of every 100 15- to 17-year-olds.

FAMILY VIOLENCE DOES MAKE A DIFFERENCE—BUT WHY?

The above statistics at least partly document the assertions made earlier in this paper concerning the preeminence of the family in respect to all forms of violence ranging from slaps to torture to murder. Ironically, it is also true that the family is at the same time the most supportive and loving group in which a typical citizen is likely to be involved. The fact is one of the reasons why most people, including most students of crime and students of the family, have failed to perceive the extent of family violence until recently. How can it be that the family is the locus of both love and violence?

Physical punishment is the foundation on which the edifice of family violence rests. It is the way most people first experience physical violence, and it establishes the emotional context and meaning of violence. Physical punishment has several consequences. The first is that the child learns to do or not to do whatever the punishment is intended to teach. Less obvious, but equally or more important, are three other, unintended consequences.

The first of these is the association of love with violence. Physical punishment typically begins in infancy with slaps from the parents to correct and teach. For most children this continues through adolescence. The child therefore learns that those who love him or her the most are those who hit. The second is that the moral rightness of hitting other family members is established, because physical punishment is used to train the child or to teach about dangerous things or immoral acts to be avoided. The third is the lesson that when something is really important, it justifies the use of physical force.

These indirect lessons do not merely provide a model for later treatment of one's own children. Rather, they can become such a fundamental part of the individual's personality and world view that they are generalized to other social relationships. Early experience with physical punishment lays the groundwork for the normative legitimacy of all types of violence. The following discussion draws on socialization literature to identify and explore the theoretical dimensions of this relationship.

Types of Family Violence: How Is Violent Behavior Learned?

A major focus of recent literature has been the *extent* of violence in the family: the amount of hitting, no matter what the form or purpose. In considering a particular kind of effect—e.g., delinquent behavior—and ways to prevent that effect, it is necessary to attempt a more pointed analysis. Violence that is directed to a purpose is different from violence that is strictly impulsive or spontaneous. They are different from the standpoint of the perpetrator, since the use of violence to an end implies an instrumental calculation that is missing from impulsive violence even when the latter is psychologically functional. Spontaneous or impulsive violence may, however, be "provoked" by some behavior or attitude of the victim and therefore carry overtones of purpose even though it is not strictly instrumental. They are also different from the standpoint of the victim. The sudden terror caused by impulsive or spontaneous violence may be qualitatively greater or less to the victim than the anticipated terror caused by instrumental violence, but to the victim the intent to hurt for the sake of advantage is a source not only of anger but also of learning. Regardless of such qualitative variation, however, the victim learns that terror can be produced either way.

What is likely to be the effect of impulsive or spontaneous violence on the victim or on others in the family? There may be a tendency on the part of the victim to learn retaliation; that is, the terror-withdrawal escape response may eventually give way to purposive anger that results in acts of violence. The logic of transference to other settings is unclear, however. The beaten wife may eventually kill her husband, although that response in itself is unlikely to be connected with a criminal pattern of behavior. Retaliation for the child may be more likely to occur outside the home, if at all.

The most reasonable conclusion that can be drawn from this kind of speculation is that violent behavior is *transferable* from one setting to another, although in different ways. Child abuse that is a part of erratic punishment patterns teaches the victim that the world is not predictable or controllable. This is probably so overwhelming a lesson that instrumen-

tal learning other than escape is unlikely to occur. A sibling might well take away an instrumental lesson about terror tactics and the invincibility of the bully that is transferable to other settings.

Instrumental violence in the family, physical punishment of one kind or another, is also a training ground for violence or other delinquent behavior outside the home. Exercise of authority and the systematic maintenance of order in the family are clearly related to the same functions in the community. In addition, instrumental violence is generally predictable and is therefore a continuing model and reinforcer of patterns of behavior toward "the system" in which the child lives. But does physical punishment teach a child to *fear and respect* authority or to *fear and hate* and at the same time to use violence against authority? This question cannot be answered with the existing data. However, the available evidence suggests the latter (Bandura 1967, Carroll 1977, Gelles and Straus 1975, McCord 1978, Owens and Straus 1975, Straus *et al.* 1980).

The many studies of discipline practices are in basic conflict over the issue that is central in this paper: what is the mechanism by which children are socialized to prosocial behavior? Studies have shown that aggressive behavior is imitated (Bandura 1967, 1973) and that children of aggressive punishers are themselves more aggressive toward their peers (Becker *et al.* 1962, Eron *et al.* 1963). But the learning mechanism implied by such studies—modeling—cannot explain other findings that suggest that the child who is punished by largely nonphysical means is more likely to develop internalized controls over his offending behavior than is the child who is physically punished (AllinSmith 1960, Aronfreed 1961, Sears *et al.* 1957).

Internalization theory holds that induced controls are motivational and not modeling responses to discipline (Aronfreed 1969). Arguments from the first group of studies lead to the conclusion that severe physical punishment should be avoided in order to decrease the modeling of aggressive behavior. But this conclusion says nothing about other forms of discipline, the effects of which would also bear on a child's potential for delinquency. Arguments from the second group of studies imply that nonphysical punishment (usually in some form of love withdrawal) produces more effective, long-term behavior control. But this conclusion tends to ignore the fact that most children receive both forms of punishment.

This dichotomy of physical versus nonphysical punishment dominates the literature on child rearing and is central to much of the recent social learning literature. The basis for the dichotomy, and the reason for its importance in discussions of social control, is the theoretical distinction between behavior that is directly responsive to external consequences and

behavior that is controlled by internalized monitors. The distinction has been found to be empirically valid in a number of experimental situations, but its manifestation in real settings is difficult to define.

A common approach is to differentiate between discipline that sensitizes a child to direct punitive consequences and discipline that induces an internal mechanism in the child for controlling future behavior. Both "sensitization" and "induction" (Aronfreed 1969) techniques produce anxiety in the child (fear of punishment, or feelings of shame or guilt) related to offending behavior. Theoretically, the anxiety created by sensitization to punishment requires the presence of the punishing agent, whereas the anxiety created by induction is dependent more on internalized mediating feelings, such as guilt. Induction is often called psychological punishment because it is not produced by a physical means and the pain that results (anxiety) is psychological. The popular term "conscience" often labels the same phenomenon.

The implication that induction techniques of discipline are more effective for the purpose of social control than is physical punishment rests on a large jump from a theoretical distinction and experimentally produced behaviors to disciplinary techniques in real settings. In practice, induction techniques have been difficult to evaluate because most children experience them in combination with physical punishment. Furthermore, each induction and sensitization technique has cultural significance that varies across ethnic groups in ways that affect both the capacity of parents to use it effectively and its eventual impact on the child. It was once thought that class differences determined which technique would be used in a family, but recent research indicates a number of confounding factors in that hypothesis (Kohn 1969), some of which are cultural. The distinction between internal and external sources of social control, and especially the concept of internalization, is very important, but it cannot solve the problem of interpreting the cultural meaning of the learning contingencies on which the distinction is based.

A possible explanation for the different consequences of physical punishment and of techniques that depend on shame and withdrawal of love lies in the fact that physical punishment can be, and is, used in the absence of a loving relationship or an identification of the child with the parent. But withdrawal of love and shaming are not possible in the absence of love and identification. Thus parents who use the latter techniques must simultaneously work to build bonds with the child. Consequently, one factor accounting for the difference between the two techniques is greater bonding between parent and child. A second factor is the possibility that each *successful* use of guilt, shame, or threat of withdrawing love further strengthens the bond, whereas even successful uses of

physical punishment may tend to weaken the identification of the child with the parent and probably with adult authority figures generally.

We are unable to specify the effects of combinations of punishments or to characterize the continuum ranging from severe physical punishment to severe psychological punishment. Nevertheless, we do know that the importance of the family as a socializing agent lies largely in the fact that it is the primary model of authority in the child's early formative years. Parents (and siblings) are not simply agents of punishment but also holders and wielders of authority. The family is a microcosm of the community, with rules that are more or less clear and more or less arbitrary, enforcement that is more or less predictable, and punishment and rewards that are more or less certain. Authority wielding in this context defines the future problems of social control for the child, the values to be expected or sought in coexistence with others, and the techniques by which he or she will be manipulated and will manipulate others. It is important therefore to relate the notion of learning contingencies to the total context of the model of authority in the family.

There are several further distinctions to be made that affect current thinking about family intervention. First, the fact that the punishment is physical—hitting—does not necessarily make it pathological either in itself or in its effects on the child's behavior outside the home. In some ethnic groups, both hate and love are expressed violently. Physical punishment can be loving not only in the hypocritical sense of "it hurts me more than it hurts you" but in the more straightforward sense of accepting anger toward the misbehaving child as a normal part of binding the family (community) together. Such bonds are all for the same purpose, and violent expressions of love and hate are equally legitimate in these terms. But physical punishment that is short of abuse but at the same time maliciously violent rather than lovingly violent means something different to the child who is its target. Here the physical punishment has no positive purpose for the community (family), and it therefore teaches only negative lessons about the use of force. Although it is not clear whether there are differential effects of these two types of punishment, the difference in meaning within the family would dictate that the distinction be observed in any intervention strategy. Intervention to prevent assaultive and other predatory behavior outside the home must be based on a clear understanding of the different meanings of violence in the home. Otherwise, the intervention could be misplaced and probably counterproductive.

Second, for the same reason, the purpose of discipline itself in different family contexts must be understood. The use of physical means of correction or punishment may be far less relevant to the child's behavior outside the home than is the overall model of authority that is being taught in

home discipline situations. This model will influence the child's view of the role of authority in a community, an important concept for any child to learn. One role of authority is to define what is unacceptable to the community in a way that expresses the community's real response to real harm. The appropriate expression of that response includes anger (as opposed to out-of-control adult rage) in order to make the point about harmful conduct in real terms. Thus if the purpose of a spanking is expressed verbally as well as physically, the child can learn on both levels what kind of conduct is unacceptable to the community (Aronfreed 1969, Kohlberg 1969). Taken in this sense, physical punishment can be part of a broader context of meaning that is transferable to other settings in a positive way.

As an aside to the general thrust of these comments, but underscoring their purpose, it is interesting to consider the consequence of the disjunction between a child from a love-hate culture and his or her school. For example, the Hispanic child in an East Harlem neighborhood whose family life expresses violent hate and love encounters teachers who do not laugh or cry, hit or hug. To this child, the teachers are "steely," and the child learns to put a "steely" mask on himself or herself upon entering that environment. The mask is a way of coping with the cultural disjunctions, but it might permit, even justify, the use of culturally accepted violence outside the cultural context, and therefore without its original meaning. This kind of disjunction must be noted seriously as a possible source of normlessness in many young people. It is the very impossibility of transferring their home behavior to an alien setting that creates problems for such children, who may not know how to respond to authority in an atmosphere drained of normal emotion.

Rule Transference: What Is Learned?

The family is the setting where rules and norms are first learned and reinforced. As discussed earlier, the rule that a marriage license is a hitting license and the rule that members of the family can be physically punished "if they deserve it" are both common in American families. The theory of transference assumes that once a child has experienced repeated violence that can be described in terms of these rules, the rules are understood as norms of behavior, even if not articulated as such, and can then be applied to other interactions.

The most direct transfer is one that has been at least partially documented in the national sample study of family violence. Straus *et al.* (1980) found that the more the husbands and wives they studied were hit as a child, the greater the rate of both mild and severe violence toward their own spouses.

Although the evidence is less direct because the dependent variable refers to approval of violence rather than actual violence, Owens and Straus (1975) also found that the more a person experienced violence as a child, the greater that person's approval of the use of physical force to correct various personal and social wrongs.

We think that parents also tend to transfer these rules to other settings. For example, many parents expressly or implicitly authorize teachers to "hit him when he needs it." Sometimes the children simply model their own behavior in school after aggressive behavior between their siblings or after a parent's aggressive behavior toward a sibling or other parent.

Since not all children from violent families transfer those rules of behavior to other settings, what accounts for nontransference? It would be naive to assume that the child ignores old rules altogether in being socialized into new settings. Sometimes the child encounters settings or occasions in which it is so clear that different rules obtain that he or she knows the home rule or model is inappropriate. But for most situations the question of transfer is not so clear. Leaving aside individual differences in social perception that somehow prevent some (a few) children from sensing variations from one setting to another, it is likely that the child at school is different from the way he or she is at home in ways that reflect ambiguities in rule transference.

Ambiguities in rule transference are well known to social psychologists who have long been frustrated in their efforts to predict behaviors in particular situations from trait or attitudinal measures (Mischel and Mischel 1976). The difference between competence or capacity and actual performance is at the heart of the problem of rule transference, and the ambiguities provide opportunities as well as uncertainty. These ambiguities are like loopholes through which the creative child, like the creative lawyer, can use a rule in new ways. When the rule is implicit—known only through example and precedent—the opportunities for exploiting ambiguities or for misreading cues in new settings increase greatly. Add to this the general willingness of children to learn new sets of operating rules as they have to adapt to different settings (something every elementary teacher knows). In short, there is every reason to believe that nontransference is as common as transference. Furthermore, there is sufficient looseness in the transfer process to make almost all children susceptible to resocialization, to change the rules in some fashion even in the home itself, such that new learning and resocialization occur.

Before tackling resocialization, however, we must first identify what behavior is learned in the violent home and subsequently transferred to other settings, eventually leading to delinquent or criminal behavior.

First, a child can learn from the violent home that violence can be legiti-

mate. This is learned both from impulsive or spontaneous violence and from violence as bound by rules that assert the legitimacy of just deserts. Spanking for violating a norm of conduct or expectation among family members may not transfer to administering punishment on the street, but a serious beating administered for the same reasons could.

Second, a child can learn that violence can be useful. This instrumental value of violence is illustrated every time a child sees someone achieve a goal by hitting, fighting, or some other form of physical coercion. Most children in American families learn this rule also, whether through the example of a child taking something from a brother or sister or the example of a parent causing pain to his or her child to deter the child from running into the street. Obviously, these examples do not of themselves lead to predatory behavior, but they do provide a strong justification for the use of violence to bring about various ends.

Third, a child can learn that hitting or beating is one way of defining authority relationships. Disobedient behavior and attitudes are annoying to a parent. It is tempting to respond by trying to coerce the respect that the child is not showing otherwise. For example, police officers often justify their use of force in exactly these terms: "You have to teach them some respect," while referring approvingly to their own father's use of force against them. The child who learns in this way that it is proper to coerce respect learns also that authority is coercive and violent and that challenges to authority must be coercive and violent as well if they are to succeed. It is not hard to imagine a variety of ways in which such a rule of behavior can be transferred to delinquent or criminal behavior.

Fourth, a child can learn that violence is a way of solving disputes. This can be learned from watching violent interactions between parents or from beatings by siblings or parents when a dispute within the family escalates to a certain point. The child who learns this behavior rule in the home will find many opportunities to apply it in other settings.

IMPLICATIONS FOR REHABILITATION

The first section of this paper presented data suggesting a relationship between the experience of violence in the family and the development of delinquent or criminal behavior. This section addresses a different kind of question. Can the socializing influence of the family be manipulated to reverse this debilitating process? The purpose of posing this question is to explore the research and policy implications of early intervention, at a time of primary socialization, for the purpose of rehabilitation.

THEORY BEHIND FAMILY INTERVENTION AS A MEANS OF REHABILITATION

We focus on violence in the family not because it is the sole or even the most critical factor in socializing children to delinquency but because it is one of a variety of family characteristics that combine (probably) to teach and motivate children to antisocial behaviors. Patterns of violence in the family are plausible models for assaultive, predatory, and vandalizing behaviors that are common patterns of delinquency. The focus on the family for rehabilitative purposes is based on our belief that the family is a critical locus for learning both prosocial and antisocial behaviors in a child's early years. To intervene in that setting is—at least hypothetically—to attempt to change problem behavior at its source and at a formative time. In the absence of compelling evidence to the contrary, we believe that early intervention should maximize the possibility of effective behavior change.

These arguments are intuitively plausible. In fact, the practice of intervening in the family at the early stages of a predelinquent career for the purpose of rehabilitation is almost nonexistent. Family therapy is a growing field, but it is tied primarily to clinical disciplines that have limited communication with the social sciences, where problems of delinquent and criminal behavior are studied. Most family therapy occurs in response to clinically defined family disorders, such as marital conflict, or to what are seen as symptoms of family disorders, such as child abuse and alcoholism. Delinquency itself is not normally thought of in these terms. What follows therefore is not and cannot be a review of the literature in the ordinary sense. Relevant literature from various behavioral and social science fields will be referred to as appropriate. But this section of the paper is necessarily speculative.

For the purposes of clarity, we begin with a terse statement of the problem of family intervention as we have defined it:

1. Violence in the family has as one of its effects the learning, by a child, of violent behavior that transfers to other settings and that also increases the probability of delinquent behaviors.
2. One means of changing the delinquent behavior is to identify and treat the use of violence in the family, using a treatment technique that at the same time resocializes the child.

These assertions are based on several assumptions:

1. A child can be socialized to delinquency by experiences in the family.
2. Behaviors learned in one setting can be transferred to other settings.

3. Violence in the family can be identified precisely enough to be able to treat it.

4. Reducing the level of violence in the family also resocializes the child. Or, to put the point another way, resocialization of the child can occur as part of the treatment of violence.

This is a complex set of assumptions. Some are probably more reasonable than others. Each encompasses its own complex set of assumptions about behavior change. In no case is there sufficient research to provide solid evidence that the assumption is true. In some cases, there is no research at all; in other cases, one can argue from analogs or related research.

Having bared these roots of the policy problem, we must now prune it to an analyzable size and shape. We must ask not only about the possibility of family intervention for rehabilitative purposes, but also about its feasibility and desirability. Can we even gain access to families that exhibit such pathologies? What is the most effective means of intervention? What are the costs to our society's values of privacy and individual dignity if such means are adopted? The analysis that follows is in large part a screening process aimed at defining the limits of family intervention as a rehabilitative tool. Its intended effect is to narrow—perhaps drastically—the range of cases for which the tool would be appropriate.

TECHNIQUES FOR REHABILITATION

What does this analysis teach us about the possibility of using family intervention to resocialize the child who has already learned the lessons of violence at home? There are at least three ways to attempt resocialization:

1. One can try to change the parents' techniques of managing the problem child.

2. One can try to change the rules under which social control is managed in the family.

3. One can try to change the behavior of the child directly by restructuring the learning situation in key social interactions.

These are not mutually exclusive, although in behavioral terms each possibility looks very different when put into a programmatic context. In the first case, one is intervening to work with parents and their techniques of managing behavior in the family. In the second case, the intervention focuses on cognitive, social, and normative levels of dealing with conflict. And in the third case, the focus is specifically on the child's behavior and on manipulating that behavior.

It is important to remember that the purpose of each technique is not only to change antisocial behavioral responses within the family but also to facilitate the transfer of new, prosocial behaviors to settings beyond the home. The following analyses summarize the literature relating to each technique and assess their value for resocialization and positive behavior transference.

Focus on Parental Discipline

The bulk of the literature dealing with child rearing has focused on the parent's behavior toward the child. Some studies have used an explicit "modeling" concept for teaching and learning aggressive behavior and have tended more toward experimental testing of hypotheses (Bandura 1967, 1973; Mischel 1973). Other studies have relied on descriptive data including some self-report surveys (Sears *et al.* 1957). The latter studies tend to focus on personality characteristics that are assumed to be developed through early parent-child relations.

As previously indicated, a common theme in this literature is the dichotomy of internal versus external controls on the child's behavior. Internalization of controls is accomplished by "induction" of feelings of guilt or shame through some form of love withdrawal; the anxiety that is thereby produced in the child can be activated without the presence of the punishing agent. In contrast, a child who is continually subjected to serious physical punishment in the absence of induction techniques is merely "sensitized" to external controls, and the resulting anxiety is activated primarily by the presence of the punishers (Aronfreed 1969).

From the perspective of family intervention for rehabilitative purposes, this view of parental discipline has several deficiencies. There are important cultural variations in the use and meaning of the two kinds of techniques. The kind of systematic bias in describing parental techniques that resulted in erroneous assertions of significant social class differences (Kohn 1969) is even more likely in dealing with cultural variation. There is, as yet, no reliable scientific basis for projecting family intervention strategies that can cope adequately with cultural variation in parents' uses of disciplinary techniques. The simple modeling paradigm is useful in extreme cases of physical punishment, but such cases are unlikely to be amenable to family intervention. This deficiency is particularly unfortunate in our view because much of a child's learning about the legitimacy and instrumental uses of violence is embedded in complex distinctions within cultural norms. Cultural transmission is a powerful socializing process and could be a valuable aid in resocializing strategies if better understood.

Another inadequacy in the parental discipline literature is the tendency to treat the exercise of authority narrowly, more as a personality characteristic than as a fundamental structural element in any community. For our purposes, this problem goes primarily to the question of transference. We have argued that, since the family is the primary source of norms for the young child, the coercive and violent use of authority in the family teaches the child both that authority is coercive and violent and that successful responses to authority are violence or submission.

Most of the parental discipline literature does not specify the learning contingencies on which behavior transference would depend. One can speculate about the extent to which a violent home has taught the violent and predatory delinquent a concept of coercive authority. One can also find some statistical evidence supporting that speculation: the recent data from McCord's longitudinal study of participants in the Cambridge-Somerville program indicate a significant contribution of violently coercive behavior by parents to a child's subsequent delinquent or criminal behavior (McCord 1979). But the mechanism of transference is not clearly understood, and it is this mechanism that intervention must be designed to manipulate. Not all physical punishment has pathological effects; not all severe physical punishment results in violent behavior disorders. Much more needs to be understood about the connections or mechanism of transfer.

Two other aspects of this literature deserve mention because they represent particularly important gaps in our capacity to manipulate the use of discipline in family interactions. The first has to do with the different levels on which the child is simultaneously learning about authority and prosocial behavior. Recent studies of cognitive social learning, notably by Mischel (1973), are seeking to understand the role of reasoning and verbalization in the process of internalizing norms and learning appropriate social roles. It is becoming clear to the social learning researchers that articulation of reasons and exchange of points of view are important parts of reinforcement. A better understanding of such cognitive-normative factors is indispensable for the development of effective intervention strategies.

Likewise, the motivations of the parent involved in pathological disciplinary interactions are critical for any manipulation of the interaction pattern. It would probably not be useful to explain to the violent parents that their actions are teaching the child antisocial behavior or that love-oriented techniques get better results. The violent parent is probably fulfilling some of his or her own needs for ego enhancement or personal power. To the extent that such motivations are impervious to manipulation, any strategy for family intervention will be drastically limited to the

mildest cases. This is a severe amenability problem that can be alleviated only if the pressures and the parent's own life outside the family, as well as his or her interactions within, can be changed.

Focus on Rules and Norms

Focusing on rules and their cognitive and normative components in the social learning process leads to a different kind of literature. Although there is some overlap, particularly in the work of Mischel, this literature differs from that just discussed in several ways that can contribute to a better grasp of the problems inherent in developing programs for family intervention. The research ranges from studies of learning contingencies that shape behavior in real settings to verbal measures of cognitive levels of development. The work of Kohlberg (see, especially, 1969) is best known, but there are many other contributors. Two aspects of this research are important for the purposes of this paper: the theory of stages of moral development and the nature of rule-bound behavior.

Kohlberg's research is built upon Piaget's seminal work on stages of cognitive and moral development in children. To summarize briefly, Kohlberg postulates a six-stage sequence in the development of moral reasoning, ranging from avoidance of punishment and strict adherence to authority through reference to social consequences to the following of conscience and moral principle. Research has provided strong support for the existence of these stages, but studies also indicate that individuals are not rigidly located at any one stage at any particular time and that measures of reasoning level are not better predictors of actual behavior than are those that have been used in the past (Mischel and Mischel 1976).

Two findings are most important for the purposes of socialization in the family. First, children, on their own, are unlikely to behave at moral levels higher than their own developmental stage (Kohlberg 1969, Mischel and Mischel 1976). Second, children tend to model admired elders who reason at a higher stage. The implication is that access to a child's cognitive-moral reasoning process for the purpose of moral persuasion should always be established initially at the child's own level, but that children can also be influenced over time by modeling from a higher level. Moral persuasion and moral modeling are both possible, according to studies of moral development, but techniques should be designed to affect the appropriate developmental level.

One characteristic of much of this literature strongly detracts from its programmatic usefulness at this point. Kohlberg and many of his followers are zealous advocates of their approach, and, like any "movement," they are not much inclined to find out if they are wrong. Consequently, the

studies of attempts to put moral development theory into practice are more reports from the field than tests of specific hypotheses and are therefore of limited value for the purposes of this paper. What they do show, however, are cognitive footholds for moral socialization that exist in the process of setting up and maintaining a rule-bound community. Much of this research is being done in classrooms, where activities can be monitored and directed in various ways. The Kohlbergian approach is based on values of equality ("taking a kid's point of view seriously"), participation ("giving kids the sense that they made, and own, the rules"), and fairness ("the consequences are the same for everyone"). These values and the rules by which they are operationalized introduce the cognitive dimension of behavior change that has been found to be important for understanding the development and reinforcement of mediating feelings that play a key role in the process of internalizing controls (Aronfreed 1969). The rules also provide an opportunity to induce children to bring their repertoire of moral reasoning competencies to bear on hard issues requiring real choices. Furthermore, the incentive of self-interest, both long- and short-term, is present in a rule-bound situation. In a real moral dilemma such as is often found in classroom situations, it is certainly plausible that the procedures invented by Kohlberg in order to test the effectiveness of moral development techniques do in fact socialize children into new moral behaviors by creating and testing possibilities for alternative responses.

What does this literature contribute to our analysis of family intervention for the purposes of rehabilitation? Aside from the implications of the existence of stages of moral development for questions of access and techniques in dealing with children, the concept of rule-bound behavior holds potential as a socialization technique. When operating properly, a rule-bound community engages both affect and intellect and focuses on both the consequences of behavior and the reasons for it. For example, a program run by Odyssey House, a group home facility for community-based corrections in New Hampshire, had responsibility for a live-in population of delinquents, most of whom had histories of violent behavior. In order for the group to function at all, rules were established that reversed the "hitting license" rules of the family. No violence was permitted, *or occurred*, under this regime. Instead, the rules specified an alternative mechanism (essentially an encounter group) that would be invoked at any time by any resident for any kind and intensity of complaint. The introduction of a set of rules governing all cases in the same way successfully suppressed normal behavioral patterns that were considered unacceptable (Straus 1978a).

The notion of a rule-bound group provides the beginnings of a technology for behavior modification, but only the beginnings. It lacks rigor and

clarity and requires considerable development if it is to become a tool for intervention. At present it seems appropriate only for groups of peers, although there is no intrinsic reason why it cannot be adapted to include a concept of authority that would encompass a parental role. The most difficult problem, however, remains amenability. Given the many other problems that are often confounded with violent homes, it is hard to imagine parents or children being receptive to such a technique.

Focus on Child's Interaction with Parents

A focus on the systematic nature of parent-child interaction may have the greatest promise for developing technology for family intervention. Applications of social learning theory have generated a movement usually referred to as behavior modification. This approach is clinical in orientation, and in this context a variety of programs for changing or managing problem behavior on the basis of Skinnerian principles have been developed. These programs are designed for and tested and modified in real settings, including families, both in clinic visits and in the home. There are a number of such programs to manage the behavior of children who are disruptive in school or at home, although they are not specifically directed at what has been defined as predelinquent or delinquent behavior.

The best representative of this clinical-research literature is the continuing work of Patterson and his colleagues (Patterson 1974, Patterson and Cobb 1973, Patterson *et al.* 1973). Because of its clinical nature, this research is necessarily based on small numbers of families. But even so, the record of success is impressive. Patterson begins with the twofold premise that continuing antisocial or disruptive behavior by a child is usually reinforced instead of suppressed in the home by the nature of the child's interactions with family members and that this pathological chain of socialization can be reversed if the interacting parents or siblings can be taught very specific responses that do not reinforce these disruptive behaviors. The child's behaviors that can be controlled in this way include aggression, disobedience, and various forms of self-victimization usually resulting in severe physical punishment. In short, the problem behavior is defined as part of an interaction routine that is continually repeated, thereby reinforcing the problem behavior.

This explanation is oversimplified, of course, particularly with respect to the variations on problem behavior that occur in real settings. But the behavioral principles involved are simple, and Patterson has developed a standardized set of training procedures for the parents and other social agents whose reinforcement behaviors he is seeking to change. Problem

behaviors by the child are specified (usually some form of coercive behavior such as hitting), and reinforcement behaviors and patterns of reinforcement by parents and other socializers are identified. Procedures for tracking the child's aversive stimuli are then matched to a schedule of contingencies designed to terminate instead of escalate the interaction of aversive stimuli between child and control agent. The procedures not only show immediate results, but they also make clear to the control agent how much the behavior problems depend on the specific interactions.

Specific deficiencies in parental tracking and reinforcement of a child's behavior, such as low rates of contingent reinforcement for prosocial behavior and uneven rates of contingent reinforcement for antisocial behavior, are the focus of change. For example, a parent may fail to "track" a chain of behavior that normally ends in aggression unless the chain is disrupted. Tracking requires paying close attention to the child's behavior patterns and identifying the beginning stages of an aggressive chain. A parent can be trained to track properly and then intervene effectively. Payoff for the parent's newly learned skills is immediate, as is the effect of backsliding by a parent.

Such programs, in spite of their success, are not without problems for purposes of rehabilitation. The amenability factor may or may not be enhanced by the relative ease with which success can be shown. Violence in the family—both aggression by a child or children and physical punishment by parents in response—is one of the targets of these techniques. The clinics using the techniques obtain clients mostly by referral from schools and other settings where problem behavior has been identified. It is not known whether this referred and largely voluntary clientele can expand to a level where the effect on delinquency would be felt. If family intervention for the purposes of socialization or rehabilitation is to be proactive, amenability and receptivity will become important unknown factors.

A different kind of problem with this approach has to do with its potential effectiveness for suppressing delinquent behavior. These social engineering procedures have the advantage of being specific enough to standardize and articulate as a set of training procedures. But this very specificity is disadvantageous as well because the effects of a program are narrowed to the particular interactions that the program is designed to modify. While these programs are broadly applicable across many settings (e.g., family and school), it is unclear to what extent the modified behaviors transfer from one setting to another. The learning contingencies having to do with social control are theoretically the same from one setting to another, but there may be critical differences in techniques and how they are used in the social perception of the various settings. In short, a behav-

ior modification program that successfully manages aggressive interaction in the family may not change a child's aggressive behavior outside the home.

CONSTRAINTS ON INTERVENTION

Capacities of Interveners

One reason for differences in the type of intervention that might be employed is that the capacities of the interveners vary. The three different types of connection of the interveners to the family are particularly important ways in which their capacities vary: the institutional connection, the specialized connection, and the environmental connection. Two factors affect these connections. First, the occasion for interventions is some *problem* with a family member, ranging from child abuse or predelinquent conduct at school to delinquent or criminal activity. Second, family behavior is normally considered a *private* matter. Indeed, this privacy is often most jealously guarded when the occasion for intervention is a problem that has come to the attention of "the authorities." The combination of these two factors—what might be called the problem-privacy condition—is an intrinsic obstacle that family intervention for socialization or rehabilitative purposes must inevitably confront.

The traditional intervener in our society is an institution that already has a connection with the family for a different purpose. Police, courts, welfare agencies, and schools all commonly invade the privacy of family life as a normal extension of their mandated duties as public agencies. Even though their interventions might be resisted by the family, the status of these agencies as interveners is legitimate in the eyes of the general public. Intervention by these agencies is usually in response to a negative situation: the child's involvement in delinquency, suspicion of the family's ineligibility for welfare, the child's failure or behavior problems at school. In most cases, such agencies are not welcome in the homes they enter even if the privacy of family affairs is not an issue. Furthermore, the individual interveners often dislike and resist their role; there is considerable literature on the reluctance of police officers to become involved in domestic disputes, and teachers are often described in the literature on schools as unwilling to intervene in a family situation even when there is evidence of child abuse.

Agencies that specialize in family intervention have another type of connection to the family. They are designed for the particular requirements and objectives of family intervention and staffed by individuals trained to address those objectives. This kind of arrangement has clear advantages.

Specialized interveners have appropriate expertise and presumably accept their role as interveners. They might also be more acceptable to the family than are traditional interveners because of the specific knowledge and/or capabilities they have to offer. The means of access to a family is an offer of assistance (e.g., to teach parents how to manage a delinquent child) rather than an official and mandated response to control misconduct.

It is well to remember, however, that the government has used specialized agencies to solve social problems a number of times in recent years with (at best) mixed effectiveness. In this case, the problems of such an approach are exacerbated by the problem-privacy condition already discussed. Any existing resistance to intervention may well be heightened by the nature of the problem and the extremity of intervening into the private affairs of a family. The advantages of greater specialization and expertise in the intervener must eventually be weighed against the loss of legitimate access that is inherent in traditional interveners. Unless one can create a social climate in which family intervention services would be in demand across all social groups, reliance on creating new programs for specialized intervention in this area may be unrealistic.

There is another, quite different, way of thinking about intervention and interveners. The most important capacity of traditional interveners is their command of legitimate access to the family. The most important capacity of specialized programs for family intervention is appropriate knowledge and expertise in solving or helping to solve the family problems that are linked to delinquent or criminal behavior. An approach that combines the legitimate access of traditional interveners and the appropriate knowledge of specialized programs is the model of the extended family. Many studies in the anthropological literature have shown that one function of the extended family is to socialize children into larger groups of people than exist in the nuclear unit and to absorb not only some of the training responsibility in preparing the child for adulthood but also some of the problems that accompany that process (Bronfenbrenner 1974).

Traditionally, when aunts, uncles, and cousins are involved in a child's upbringing, they are not perceived as outsiders invading the privacy of the nuclear family. In effect, the immediate community is the source of social control for each family. Recent studies of child abusers indicate that a high proportion are isolated from any level of community involvement, whether through family connections or social groups (Parke 1977). This isolation may be effect as well as cause, but either way it seems to be a condition of the pathology.

Reversing that condition of isolation, and concentrating instead on ways of creating and maintaining natural linkages to the immediate community, would seem to be an important research focus. Since the purpose

of these interventions is to reduce the amount of delinquent behavior in the community, community members would have a stake in the intervention process. Where simple altruism or sympathy for victims of violence might not be sufficient to evoke involvement, the general interest in public safety could provide the necessary linkage between community concern and family need. On the other hand, some studies have suggested that the absence of a specific nurturant agent, as would be the case with extended family socialization, decreases the likelihood that a child will develop internalized norms. More research is needed to resolve these conflicting implications.

Amenability Limits

We have discussed the characteristics of interventions and interveners as these pose limitations on the feasibility and/or desirability of family intervention. Other limitations inhere in some characteristics of the family itself and of the child or other family member whose delinquent or criminal behavior is the occasion for intervention. They are limitations in that they decrease the amenability of the individual or family to successful intervention. Each of these characteristics should be explored in depth when detailed strategies for intervention are being developed. For the present purpose, we shall simply list the most obvious and briefly comment on their relevance to the issue of intervention strategies.

Developmental Stage of the Child. A key consideration is the developmental stage of the child. Personal developmental stages include cognitive, social, and normative development. For the purpose of designing intervention strategies across situations, it is important simply to take account of the fact that different levels of development create different patterns of interaction within the family. Both normative and social development color a child's view of authority. Both also restrict the kinds of reasons for obeying or disobeying rules that are acceptable to the child. If a particular, continuing set of interactions in the family is thought to contribute to a youth's delinquency, and therefore to be pathological in that respect, it is important to consider how the child perceives those interactions, in terms of fairness, legitimacy, and effectiveness.

The extent of the child's involvement in deviancy may determine how effective family intervention can be. The predelinquent child is usually younger and has a longer time ahead to spend in the family. In addition, the child's deviancies are typically behavior problems at school. Intervention in the family makes sense in this child's case because he or she is likely to be susceptible to family influence. The further one moves from

these conditions, the less amenable the problem is to family intervention even if family pathology was the original source of the child's deviancy.

Family Characteristics. A second consideration is the status of the family itself. A number of factors can affect the extent to which a family can be used as a vehicle for resocializing or rehabilitating its members. A family that is isolated from the community for whatever reason—possibly to hide its own deviancy—will be less open to influence from the outside, perhaps even actively resistant (Parke 1977). By the same token, the family that is more integrated into the community, with links to social groups and activities, is less likely to have severe problems to begin with. A fragmented family, with continual violence at a serious level, is often literally in pieces—the father in jail or the mother and small children in a shelter. Again, the very conditions that are likely to foster delinquency make intervention less feasible. Crowding in the community and poverty level operate in a similar fashion; they create conditions of neglect and stress that are not themselves amenable to influence by intervening in the family. Recent research suggests that some structural characteristics of families are related to child abuse, maltreatment, and later delinquency (Carr *et al.* 1978). These characteristics include size (number of siblings), presence of nonfamily members, absence of a parent, and parental unemployment. These characteristics are also likely to produce stress and neglect in the family and thereby render the family less willing to accept intervention.

Cultural and Ethnic Patterns. Another kind of limitation on amenability to treatment stems from cultural and ethnic differences and variations in class expectations. If the family is to be used as a vehicle for resocialization, the interveners must have high credibility and be sensitive to the wide range of norms and practices. This is true whether the family is a poor, rural, French-speaking family in New Hampshire or a poor, urban, Spanish-speaking family in New York. It is important to realize that values relating to authority, to sex roles, and to the use of violence itself are all at the core of this problem. The range from a volatile, noisy, violently aggressive *and* loving Puerto Rican family to an orderly, quietly mannered, inner-directed WASP family is very wide.

The difficulty of moving across this range in a sensitive but competent way should not be underestimated. When the issue at stake is the amenability of a family to intervention, cultural and class differences are critical. The very disjunction between cultures may itself foster delinquency, and family intervention from outside the community may exacerbate rather than alleviate the problem.

CONCLUSION

One obvious conclusion from our examination of the relationship between family violence and delinquent or criminal behavior is that serious attention to the relationship is warranted. An equally obvious conclusion is that our current knowledge is not sufficient to generate specific policy recommendations.

In order to devise more effective treatment programs, we need to know more, for example, about the different effects of the different kinds of violence. We also need to know more about the reactions of different kinds of victims of violence (spouses, children, siblings, and parents). If the "modeling aggression" hypothesis is correct, interventions should be pointed toward parents and their use of authority. If a major cause of delinquency is a disjunction between norms and rules legitimatizing violence that are learned in the home and different norms and rules followed at school, more attention should be paid to programs that are designed to help a child deal with this disjunction. If the primary effect of the violent home is personality dysfunction, perhaps traditional therapies should be adapted to deal with children from violent homes.

A child in a violent home becomes part of a system of violence. The rules of behavior in that family legitimize violent responses. Over time, the child learns these rules and consequently learns how to respond in the various interactions that occur. At any point in time any participant in the system can set off a chain of interaction that both results in violence and maintains the system of violence. Several questions occur. Is this system of violence closed or open? Are there ways to manipulate the *system* of interaction such that behavioral outcomes can be systematically changed? If the system is learned behavior, do the participants seek out similar systems of interaction outside the family? If the system of violence in the family is open to manipulation, must the intervention be in the family setting itself?

Research on such questions will have a considerable payoff for the development of knowledge and rational policy concerning the treatment of predelinquent and delinquent children. To this end, it is important that both theoretical and programmatic problems be explored. Theoretical issues include (1) the complexities of the linkage between violent family experiences and subsequent delinquent or criminal behavior; (2) the ways in which behaviors are transferred from the family to other settings; (3) the processes of violent interaction, and how they are learned and maintained; and (4) the effects on personal and social development of various kinds of violence within families. Issues that are more directly programmatic include (1) ways of identifying problem situations in the home; (2)

school-based programs to counteract the effects of violence at home; (3) counseling and other clinical approaches to intervention; (4) treatment of the family as a learning unit by which to resocialize parents and children to nonviolent interactions; and (5) development of some form of "extended family" intervention in violent parent-child interactions.

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Biosocial Bases of Morality Learning

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Our major efforts to control crime start with the individual already delinquent or criminal. We spend fortunes developing mace, nicer jails, methods of rehabilitation, and faster court systems. Less effort is expended on the primary or secondary prevention of crime. I wish to suggest that, along with efforts to deal with recidivistic criminality, we consider methods of early intervention to prevent the initial onset of criminal behavior.

I can imagine three avenues in which primary intervention might be explored.

1. Ecological alteration
2. Systematic societal change
3. Individual intervention

1. *Ecological alteration* By ecological alteration, I refer to environmental manipulation that discourages crime, such as increasing street

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lighting, improving supermarket and department store security, and defensive architectural design. I will not consider this method further.

2. *Societal change* In this century, criminology has been dominated by sociological thinking, and for good reason. It seems quite clear that socioeconomic factors provide the reasons for crime for most criminals. Sociological thinking has suggested that the etiology of crime lies in the structure of society. It has expressly assumed that criminals are normal individuals who have been misshapen by an inappropriately arranged social system. If we improve this system, this should prevent criminality.

3. *Individual intervention* A critical assumption of the sociological approach to primary prevention is the essential normality of criminals. To the extent that some criminals have deviant psychological or biological characteristics that help predispose them to antisocial behavior, societal manipulation alone will not be sufficient to prevent crime. Thus, in order to better plan the primary prevention of criminal behavior, we must first consider evidence regarding the possibility that some forms of criminal behavior have individual psychological or biological predispositions.

I will review evidence that bears on this issue. First I will discuss genetic research, then physiological studies, and finally suggestive crime statistics. Then I will attempt to imagine how some specific biological factor might interact with social variables to increase the likelihood that an individual will fail to learn to behave morally.

HERITABILITY OF ANTISOCIAL BEHAVIOR

What is the point of examining the genetics literature? Only one, from my point of view. If it can be demonstrated that there is some genetic contribution to some forms of criminality, then we would have to consider a partial biological etiology for antisocial behavior. This would have implications for directions of research.

Two valuable strategies for studying the influence of genetic factors on behavior are the twin and adoption methods. In the adoption method, we study individuals adopted at birth who later become criminal or psychopathic. Since environment and genetics are thus relatively well separated, we can evaluate the relative influence of these two factors by studying the criminality in the adoptee's biological and adoptive families. The twin method capitalizes on the fact that monozygotic (MZ) twins have essentially identical genetic structures while dizygotic (DZ) twins are not more similar genetically than are siblings. If criminality within pairs of MZ twins is markedly more similar (or concordant) than is criminality within pairs of DZ twins, this may not be seen as evidence against a possi-

ble genetic influence. Conclusions from twin research related to genetics are somewhat weakened, however, by assertions that MZ twins have more mutually similar environments than do DZ twins (Christiansen 1977a). Thus environment as well as genetics may be more similar for MZ twins. On the other hand, environmental conditions during pregnancy and delivery, and after birth may produce differences between MZ twins. Because of these factors, the twin studies must be interpreted cautiously.

TWIN STUDIES

In the first study of twin criminality, Lange (1929) found 77 percent concordance for MZ twins and 12 percent concordance for DZ twins. Subsequently, studies of twins (see Table 1) have tended to confirm Lange's results. About 60 percent concordance has been reported for MZ twins and about 30 percent concordance for DZ twins.

The eight twin studies in Table 1 suffer from the fact that their sampling was biased or even rather haphazard. They report too high a proportion of MZ twins. MZ pairs concordant for criminality are more likely to be noted. MZ twins prove easier to detect, especially if they end up in the same prison. All these factors tend to inflate MZ concordance in asystematic studies.

Christiansen (1977b) in Copenhagen overcame these sampling problems by studying all twins born in a well-defined area of Denmark between 1881 and 1910. Of 3,586 such twin pairs, he found 799 pairs with at least one of the twins registered for criminality or minor criminality. He reported a pairwise concordance rate of 36 percent for the MZ twins and 12.5 percent for the DZ twins. The MZ concordance is 2.8 times higher than the DZ concordance. Christiansen's study is now being extended to all twins born up until 1920 and will include all of Denmark. This will bring the number of twins up to approximately 14,000 pairs. This number should be sufficient for a more detailed analysis than has been possible before. Despite the cautions mentioned, this study does not argue against the existence of some genetic effect in criminality.

Dalgaard and Kringlen (1976) have recently completed a study in Norway that involved a representative, but small, population of twins born from 1921 to 1930. Their MZ pairwise concordance rate for serious criminality was 25.8 percent; their DZ pairwise concordance rate was 14.9 percent. This is the smallest MZ-DZ difference recorded in twin literature, but the results are in the same direction as those from all the other work.

I urge those interested to study Christiansen's detailed review of these twin studies (Christiansen 1977a). Despite the weaknesses of the twin

TABLE 1 Twin Studies of Psychopathy and Criminality in MZ and Same-Sexed DZ Pairs Only

Study	Location	Monozygotic			Dizygotic		
		Total Pairs	Pairs Concordant	Percent Concordant	Total Pairs	Pairs Concordant	Percent Concordant
Lange (1929)	Bavaria	13	10	77	17	2	12
Legras (1932)	Holland	4	4	100	5	1	20
Rosanoff <i>et al.</i> (1934)	United States	37	25	68	28	5	18
Stumpfl (1936)	Germany	18	11	61	19	7	37
Kranz (1936)	Prussia	32	21	66	43	23	54
Borgström (1939)	Finland	4	3	75	5	2	40
Slater (1953) (psychopathy)	England	2	1	50	10	3	30
Yoshimasu (1961)	Japan	28	17	61	18	2	11
TOTAL		138	92	67.2	145	45	31.0

SOURCE: Table adapted from Christiansen (1977a).

method, we can certainly state that the reported findings do not argue for rejection of the hypothesis assigning a partial etiological role to genetic factors.

THE ADOPTION STUDIES

A weakness of the twin method for drawing conclusions relating to genetics is the fact that in the overwhelming number of cases the twins are raised together. Thus genetic and environmental factors are not well separated. A design that does a better job in this regard studies individuals adopted at birth. Fortunately, a register of all nonfamilial adoptions in Denmark in the years 1924-1947 has been established (Kety *et al.* 1968) at the Psykologisk Institut. There are 14,300 adoptions recorded, with information on the adoptee and his biological and adoptive parents.

I will report on two investigations completed on this material that studied adoptees born in Copenhagen. I will also describe a U.S. study by Crowe. From 5,483 Copenhagen adoptees, Schulsinger (1977) identified 57 psychopaths from the psychiatric registers and police files. His definition of psychopathy was reliable and specified. Schulsinger also selected 57 nonpsychopathic control adoptees matched for sex, age, social class, neighborhood of rearing, and age of transfer to the adoptive family. Despite the small sample, it is clear from Table 2 that the heaviest weight of psychopathy in the relatives comes in the cell concerning the biological relatives of the psychopathic adoptees. Since the postnatal contact between the adoptee and the relative was in most cases nonexistent or at most minimal, environmental factors probably did not play a very important role in this relationship. The existence of some heritable factor seems the most reasonable interpretation.

Using part of the same adoptee material, Hutchings and Mednick (1977) conducted a pilot study on the registered criminality of a sample of 1,145 male adoptees born in Copenhagen between 1927 and 1941. Of these 1,145 male adoptees, 185, or 16.2 percent, had been convicted of a violation of the Danish Penal Code. Of these 185 criminals, we were able to identify 143 for whom we were certain of the biological father's identity and where the father had been born after 1890 (since better police records were kept after 1890). To each of these 143 criminal adoptees we matched a noncriminal adoptive son for the age of the child and the social class of the adoptive father. For the criminal and noncriminal groups the age of the parents and the age of the child at adoption were examined; interestingly enough, they proved to be about the same, suggesting that these variables were not related to the child's later criminality. The amount of contact between the adoptee and the biological father was, in

TABLE 2 Psychopathy in Relatives of Psychopathic Adoptees and Control Adoptees

A Psychopathy in Relatives		
	Biological Relatives	Adoptive Relatives
Psychopathic adoptees	12/305 = 3.9%	1/131 = 0.8%
Control adoptees	4/285 = 1.4%	2/133 = 1.5%
B Psychopathy in Parents		
	Biological Parents	Adoptive Parents
Psychopathic adoptees	5/111 = 4.5%	1/111 = 0.9%
Control adoptees	1/113 = 0.9%	0/114 = 0%
C Psychopathy in Fathers		
	Biological Fathers	Adoptive Fathers
Psychopathic adoptees	5/54 = 9.3%	1/54 = 1.9%
Control adoptees	1/56 = 1.8%	0/57 = 0%

SOURCE: Table adapted from Schulsinger (1972).

almost all cases, none at all. Table 3A indicates that the weight of the registered criminality in the fathers is in the cell of the biological fathers of the criminal adoptees. Again, we have evidence that genetic factors play some partial role in the etiology of registered criminality.

Table 3B presents this information in a different form, one analogous to the cross-fostering paradigm. As can be seen in the lower right-hand entry, if neither the biological nor the adoptive father is criminal, 10.5 percent of their sons are criminal. If the biological father is not criminal but the adoptive father is criminal, this figure rises to only 11.5 percent. But, as is illustrated in the lower left-hand entry, if the biological father is criminal and the adoptive father is not criminal, 22 percent of the sons are criminal. The genetic influence is highly significant, and the direction and extent of the differences are clear. This seems to suggest that an assumption of partial genetic etiology may not be totally inaccurate. Note that in this table the influence of the adoptive father's criminality is only statistically significant (36.2 percent versus 22 percent) in those sons with criminal biological fathers.

We have now extended this study to include all of the 14,300 adoptions

TABLE 3A Registered Criminality in Biological and Adoptive Fathers of Criminal Adoptees

	Biological Father	Adoptee Father
Criminal adoptive sons (<i>N</i> = 143)	70	33
Control adoptive sons (<i>N</i> = 143)	40	14

TABLE 3B Cross-Fostering Analysis: Percentage of Adoptive Sons Who Are Registered Criminals

Is Adoptive Father Criminal?	Is Biological Father Criminal?	
	Yes	No
Yes	36.2% (of 58)	11.5% (of 52)
No	22% (of 219)	10.5% (of 333)

SOURCE: Table adapted from Hutchings and Mednick (1977).

in the Kingdom of Denmark from 1924–1947. Including the biological parents and adoptive parents gives us a population of over 70,000 individuals. The results shown in Table 3 are strongly supported by preliminary analyses of the data of the extended study.

I must caution that simply knowing that the adoptive father has been a criminal does not tell us how criminogenic the adoptee's environment has been. On the other hand, just a second after conception the genetic influence of the biological father is already complete. Thus, as we have arranged the cross-fostering table, it is not a fair comparison between environmental and genetic influences.

There are a number of other difficulties with the adoption method that should be pointed out. The adoption agency consciously attempts to match the biological and adoptive parents. The adoptive parents are informed regarding criminal behavior on the part of the biological parents. Results of this study in Denmark should not be casually generalized to other nations without careful evaluation. (See Mednick and Hutchings (1977) for further discussion of the limitations of the adoption method.)

A third adoptee project has been completed by Crowe (1975) in Iowa. This investigation found 41 female inmates of a reformatory who had

given up their children for adoption. Crowe selected controls from a state adoptions register and matched them to the experimental group for age, sex, race, and age of adoption. Eight of the index cases and two of the controls had arrest records. The index cases had 18 records of arrest, the controls had two arrests. Seven of the index cases had been convicted, only one of the controls. Crowe further notes an apparent similarity in the types of crimes of the biological mother and the index cases. This suggests the possibility of some form of specificity of genetic effect. At present, Hutchings and Mednick are extending the study of criminality in adoptees to encompass the entire 14,300 adoptees and their adoptive and biological parents. From study of these individuals and Christiansen's 14,000 twin pairs, it should be possible to test a more precise question regarding the genetic specificity of the type of crime.

The evidence of these twin and adoptee studies lends some credence to a hypothesis partially involving genetically influenced factors in the etiology of antisocial behavior. As suggested above, this implies rather forcefully that biological factors are, to some extent, involved in the etiology of antisocial behavior. There is no suggestion in these findings that biological factors predestine criminality in some inevitable, fateful manner. Rather, they suggest that there must be some biosocial interaction at work.

These findings suggest that there are individual factors that partially determine the probability that a person will become a criminal. Perhaps societal manipulation will not be totally effective as a primary prevention method.

PHYSIOLOGICAL FACTORS

The twin and adoption studies urge us to search for biological differences between criminals and noncriminals. If we find such differences, they may have implications for our choice of primary prevention methods.

My own involvement in criminology research came about through a longitudinal study of 311 Danish children who had schizophrenic mothers and thus were themselves at high risk for schizophrenia (Mednick *et al.* 1974). In 1962 we examined the functioning of the autonomic nervous system (ANS) in these children. A measure of special interest was skin conductance, a peripheral indicant of autonomic nervous system activity. We noted and have published several papers on the autonomic reactivity of children who later became schizophrenic (Mednick *et al.* 1974, 1979). But 36 of our subjects eventually became criminal. We checked and noticed that in 1962, when they were children, their ANS reactivity was abnormally small and their recovery was very slow (Loeb and Mednick 1977).

The results are reminiscent of early work by Lykken (1957), who found

that psychopathic individuals tend to be sluggish ANS responders. Since that time, a number of investigators in England, Sweden, Denmark, the United States, and Canada have found the criminal or the psychopath to tend to show very low ANS responsiveness and slow ANS recovery (see the review by Siddle (1977)). Two studies are especially interesting. Wadsworth (1975) traced all the males registered for delinquency from a sample of 13,687 births that occurred in England, Wales, and Scotland between March 3 and 9 in 1946. When these individuals were 11 years old, they had a school medical examination during which their pulse rate in response to a mild stress was measured. This pulse rate was abnormally low in those boys who became delinquent in the ensuing 10 years (Wadsworth 1976).

Hare, in 1967, measured skin conductance in a group of prisoners at a maximum security prison in Canada. He found their skin conductance to be abnormally low if they were more serious criminals. Ten years later he checked to see how recidivistic these same prisoners had been. Those who had committed additional crimes had (in 1967) slower recovery. Thus, in these two studies, abnormally diminished autonomic reactivity and slow recovery predicted criminality 10 years later. This is impressive in the one case because of the representativeness of the population and in the other case because the discrimination could be made within a group of maximum security prisoners.

More recently, we have ascertained the recorded delinquency of a group of Danish children that we have followed now for eight years. Part of our original assessment of these children included a computer-scored electroencephalogram (EEG). These EEG data, taken at age 11, predict rather well the later delinquency of the boys in this group (see Mednick *et al.*, in press).

All of these results suggest that there are individual biological variables that are characteristic of those who evidence antisocial behavior. Note also that in many cases these measures were taken well before the individuals embarked on a serious criminal career. Thus the measures could not be the result of the criminal career. In addition these measures are *predictive* and thus could conceivably form some part of a test battery to select those at high risk of delinquency for research on preventive intervention.

HERITABILITY OF ANS RECOVERY RATE

In view of the relationship between ANS variables and antisocial behavior, and in view of our interest in better understanding the apparent genetic predisposition to antisocial behavior, we next turned to a study of the possible heritability of ANS behavior (Bell *et al.* 1977). Male 12-year-old twin pairs were studied. Interestingly enough, among the physiological

measures only ANS recovery proved to have significant heritability. This finding suggested that part of the heritability of antisocial behavior might be related to the heritability of ANS recovery. Thus slow ANS recovery might be a characteristic a criminal parent could pass on to a biological son that (in combination with the proper environmental circumstances) could increase the probability of the child's failing to learn adequately to inhibit antisocial responses. Thus we would predict that criminal parents would have children with slow recovery.

Table 4 presents data on the electrodermal behavior of children with criminal and noncriminal fathers. As can be seen, results are consistent with the prediction regarding ANS recovery. It is interesting that the pattern of responsiveness of these children closely resembles that which we might anticipate seeing in their criminal fathers.

I will briefly mention one other indirect fact which suggests that individual factors may help determine the probability that a person will exhibit antisocial behavior. In an important study in Philadelphia, Wolfgang *et al.* (1972) have shown clearly that about 6 percent of the males are responsible for over 50 percent of the serious crimes in that city. We have observed the same effect in a study of a large birth cohort in Copenhagen. Farrington (1979) reports the same relationship for inner London. The concentration of the serious crimes in a very small subgroup of the population suggests that perhaps these highly active criminals have some individual characteristics that make their serious criminality more probable (see Carlsson (1977) for a detailed discussion of this idea).

A THEORY

Lawful behavior is moral behavior. I would now like to close with a suggestion as to how a biological variable might interact with social forces to produce moral behavior.

Perhaps it would do no great harm to begin with a discussion of how I define morality. The Ten Commandments are an early publication on this topic. Note that the major thrust of the message is negative, "Thou shall *not* . . ." While subsequent moral authorities have added *some* positive acts to elaborate the definition of moral behavior (e.g., "Love thy neighbour"), they have also retained the original, basic, inhibitory definitions of moral acts. There are very few who will denounce you if you do not love your neighbour; if you seduce his wife, steal from him, or kill him (and if you are detected), however, you may be certain that your behavior will be classified as immoral. Thus, putting aside (for the moment) highly philosophical, poetic, or artistic musings on morality, we might admit to ourselves that the statements of moral behavior that are critical for every-

TABLE 4 Skin Conductance Behavior During Orienting Response Testing in Children with Criminal and Noncriminal Fathers

Skin Conductance Function (right hand)	Mean Score		F	df	p
	Non-criminal Father	Criminal Father			
Basal level of skin conductance	2.51	2.33	.09	1,193	not significant
Amplitude (microohms)	.031	.016	.03	1,193	not significant
Number of responses	2.79	1.55	8.51	1,187	.01
Response onset latency (seconds)	2.11	2.18	.07	1,97	not significant
Latency to response peak (seconds)	2.05	2.38	5.32	1,95	.05
Average half-recovery time (seconds)	3.75	5.43	4.26	1,99	.05
Minimum half-recovery time	2.26	4.33	8.80	1,99	.01

NOTE: During orienting response testing, the child was presented 14 times with a tone of 1,000 cps.

SOURCE: Mednick (1977, p. 6). Copyright © 1977, Gardner Press, New York. Reprinted by permission.

day activities are essentially negative and inhibitory. The fact that someone took the trouble to enumerate these strictures and then carve them onto stone tablets suggests that there must have been a strong need for the insistence on these inhibitions.

People must have evidenced and still do evidence a tendency to exhibit aggressive, adulterous, and avaricious behavior. In self-defense, society has set up moral codes and has struggled to teach its children to inhibit impulses leading to transgression of those codes.

How are these inhibitions taught to children? As far as I can see there are three mechanisms that might help parents teach children civilized behavior: modeling, positive reinforcement, and negative reinforcement. I believe that positive acts such as loving neighbors, helping old ladies across the street, and cleaning the snow and ice from the front walk can be learned by modeling, but for the more inhibitory moral commands, modeling does not seem to be a natural method. It is possible to imagine arranging circumstances in some artificial way such that modeling *could* teach children not to be adulterous or aggressive. However, if our civilization had to depend solely on modeling it is conceivable that things might be even more chaotic than they are today.

It is also possible to use positive reinforcement to teach inhibition of for-

bidden behavior; but again, reinforcing a child 24 hours a day while he is *not* stealing seems a rather inefficient method and not very specific. Following the excellent exposition of Gordon Trasler (1972), I would suggest that the avoidance of transgression (i.e., lawful behavior) demanded by the moral commandments is probably in the main learned via contingent negative reinforcements (punishments) applied by society, family, and peers. I would guess that the critical morality-training forces in childhood are the punishment of antisocial responses by family, society, and friends and the child's individual capacity to learn to inhibit antisocial responses.

Let us take a specific example. How do children learn to inhibit aggressive impulses? Frequently, when child A is aggressive to child B, child A is punished by a peer or perhaps by his mother. After a sufficient quantity or quality of punishment, just the thought of the aggression should be enough to produce a bit of anticipatory fear in child A. If this fear response is large enough, the raised arm will drop and the aggressive response will be successfully inhibited.

Our story suggests that what happens in this child after he has successfully inhibited such an antisocial response is critical for his learning of civilized behavior. Let us consider the situation again in more detail.

1. Child A contemplates aggressive action.
 2. Because of previous punishment he suffers fear.
 3. He inhibits the aggressive response.
- What happens to his anticipatory fear?*
4. It will begin to dissipate, to be reduced.

We know that fear reduction is the most powerful naturally occurring reinforcement that psychologists have discovered. So the reduction of fear (which immediately follows the inhibition of the aggression) can act as a reinforcement for this inhibition and will result in the learning of the inhibition of aggression. The fear reduction reinforcement increases the probability that the inhibition of the aggression will occur in the future. After many such experiences, the normal child will learn to inhibit aggressive impulses. Each time such an impulse arises and is inhibited, the inhibition will be strengthened by reinforcement.

What does a child need in order to learn effectively to be civilized (in the context of this approach)?

1. A censuring agent (typically family) *and*
2. An adequate fear response *and*
3. The ability to learn the fear response in anticipation of an asocial act

and

4. Fast dissipation of fear to quickly reinforce the inhibitory response.

Now we wish to concentrate on point 4. The speed and size of a reinforcement determine its effectiveness. An effective reinforcement is one that is delivered immediately after the relevant response. In terms of this discussion, the faster the reduction of fear, the faster the delivery of the reinforcement. The fear response is, to a large extent, controlled by the autonomic nervous system. We can estimate the activity of the ANS by means of peripheral indicants such as heart rate, blood pressure, and skin conductance. The measure of most relevance will peripherally reflect the rate or speed at which the ANS recovers from periods of imbalance.

If child A has an ANS that characteristically recovers very quickly from fear, then he will receive a quick and large reinforcement and learn inhibition quickly. If he has an ANS that recovers very slowly, he will receive a slow and small reinforcement and will learn to inhibit the aggression very slowly, if at all. This orientation would predict that (holding constant critical extraindividual variables such as social status, crime training, poverty level, etc.) those who commit antisocial acts will be characterized by diminished autonomic responsiveness and slow autonomic recovery. The slower the recovery, the more serious and repetitive the antisocial behavior predicted.

I have already indicated the ability of the autonomic variables to predict later antisocial behavior. Recall the British study by Wadsworth, the Hare study in the maximum security prison, and our own research in Denmark. I can also mention that in nine other studies, with different methods, with different definitions of antisocial behavior, and in different nations, the antisocial individuals are characterized by sluggish autonomic behavior—diminished responsiveness and slow recovery—as would be predicted by this theory.

What is the precise relevance of these statements for the primary prevention of antisocial behavior? I believe that these statements encourage the hypothesis that predelinquents have distinguishing characteristics that could be used to select them for intervention research well before they become serious criminals. We have always been able to specify variables that would preselect the delinquent, social class, for example. But not all male members of the lowest classes become delinquent. By combining the social and familial variables with the individual variables we should improve our selection procedures.

The selection variables and theory should help us in choosing intervention techniques.

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Social Control and Rehabilitation in Urban China

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Right at the beginning I should state that China has not totally solved its crime problems. People are being robbed, raped, and murdered in China every day (although not usually simultaneously). I should also state that there are no useful statistics published within China that would allow one to examine trends in the crime rate, how many people are incarcerated, the rate of recidivism, or most other things we would really like to know. In such circumstances writing about how the Chinese system of social control and rehabilitation actually works may seem foolhardy indeed, but there is of course the defense that in the land of the blind those of us who have been able to see something with one eye should try to share that information with others. In the pages that follow I will try to present the general outlines of how the system of urban social controls in China has worked in recent years, drawing much of my information from interviews conducted in Hong Kong with former residents of China who had left in the years 1972-1978.¹

¹The research project, entitled "Urban Life in the People's Republic of China" and supported by a grant from the National Science Foundation, is being carried out in collaboration with William L. Parish of the University of Chicago. During our year-long stay in Hong Kong, we conducted semistructured intensive interviews with 133 individuals who had lived in cities large and small in various parts of China (but with a heavy overrepresentation of cities in the southern province of Kwangtung, which is adjacent to Hong Kong). The interviews consumed 1,382 hours in total and resulted in 2,369 pages of single-spaced typed notes

The impression of "no crime in China" conveyed in the accounts of many foreigners who have traveled in China is an understandable misconception. Not only are such visitors screened from most informal contacts with the ordinary populace, but the populace knows that the penalties for robbing or assaulting a foreigner are much more severe than are those for doing the same to a fellow Chinese.² However, an impression that in urban China there is less crime than in America or in most cities in other societies is probably justified. There is almost nothing in the way of organized crime operating in China, major crimes against property appear rare indeed, firearms are tightly controlled, and alcoholism and drugs as sources of criminal behavior do not constitute major problems. Most Chinese urbanites seem to feel that their cities are quite safe places in which to live. More at the level of a hunch, we would hypothesize that recidivism does not constitute the problem in Chinese society that it does in our own, for reasons we will specify later. We cannot be sure of any of these statements without the chance to directly research them within China, but we think it is nonetheless justified to assume that China has a fairly effective system for controlling crime and rehabilitating offenders; we can then proceed to examine how this system works and what its weak points are. The reader will see as we go along that the Chinese system highlights the role of other institutions besides the police, courts, and lawyers in the effort to promote orderly behavior in the populace.

RESTRICTIONS ON URBAN RESIDENCE

To understand the way in which crime is controlled in China (to the extent that it is), you have to start by considering the very different structural principles upon which urban life has been transformed since 1949. First, there is a system of urban household registration that is perhaps more restrictive than any found elsewhere in the world. It is not simply a matter of having to register with a police station when you come into a city. Urban residence is a privilege, and individuals who live in rural areas, towns,

covering many different aspects of urban life, including those dealt with in this paper. Subsequent analysis will attempt to examine variations across and within cities in crime and other forms of proscribed behavior in an effort to flesh out the general picture of the social control system given here.

²In the spring of 1978, for instance, a man later described as deranged attacked a party of foreigners in Peking that included the actor William Holden, and stabbed one individual in the shoulder. Within the week, the attacker had been taken out and shot. Our informants also stated that they were repeatedly made aware of the fact that foreigners were to be treated with extreme caution and respect, and that the penalty for an offense against a foreigner would be especially severe.

or even important cities cannot move and establish residence in a larger urban place unless they have been specifically assigned there for schooling or for employment (Tien 1973, App. L). Even a person who marries someone who lives in a larger city cannot take up residence there, a policy that contributes to the not uncommon Chinese phenomenon of married couples living apart. In addition, individuals and even entire families can lose their urban registrations, temporarily or permanently, and be stuck in a smaller urban place or in the countryside. For example, in the years 1968–1978 a total of 17 million urban-educated young people (out of a total urban population of 160–200 million) were “sent down” to settle in rural communes and state farms, where they became holders of agricultural (rather than urban) household registrations (Bernstein 1977). Also, in the years immediately following the Cultural Revolution (1966–1969) many families were forcibly dispersed from cities as undesirable elements and sent back to their native places, which in the context of Chinese culture were often places they had never been to. The system of restrictions on urban migration and household registration seems to be fairly rigorously enforced, so that visits to a city are always possible but long-term illegal (i.e., unregistered) residence there is very difficult. Through this strict urban registration system, some older established cities have actually succeeded in reducing their populations, with Shanghai declining from 7.2 million in 1957 to 5.7 million in 1972–1973 (Howe 1977).

The restrictive registration system works as effectively as it does not only due to the vigilance of the police but because so many of the necessities of life in urban areas are bureaucratically controlled and require urban household registrations (at a minimum) in order for one to have access to them. Private ownership, voluntary associations, and market forces have a very limited range of operation in supplying popular needs in urban China. In the larger cities, particularly, there is very little privately owned housing (estimates by Thompson (1975) range from under 10 percent for national cities like Peking and Shanghai to at most 25 percent in major provincial cities). Most residents get access to housing only by applying to their work units or directly to city housing management bureaus, and they must satisfy a complex set of criteria, of which having proper urban registration is only one, to be allocated new or better housing. There is also little in the way of a free labor market; instead, schools, labor bureaus, work units, and neighborhood governments work in concert to allocate people to jobs (or to rural exile). In some periods individuals from outside the city have been able to get temporary jobs in fields like construction, but getting long-term employment or an urban household registration is another matter. Additionally, many of the necessities of life are rationed. One needs ration cards, books, or coupons in most cities to buy grain, cooking oil, cotton cloth, some synthetics, sugar, pork, fish, eggs, chicken, soy-

bean curd, powdered milk, soap, coal, kindling, bicycles, watches, sewing machines, and a number of other items. To get the needed coupons to make such purchases, one needs to present one's household registration book to the local neighborhood and police authorities and/or to one's work unit, and from the characteristics of the family and its members it will be determined what the appropriate ration amounts are (White 1977). There are free peasant markets within cities where some of these commodities (e.g., eggs, pork, fish) can be purchased without ration coupons, at a higher price, and there is a limited black market in ration coupons for more tightly controlled items, such as grain and cotton cloth. Nonetheless, it is very difficult for a person or a family without an urban registration to live in the city for any extended period of time. Similar comments could be made about access to schooling, child care, health care, and support of the aged—for these and many other services one needs to be registered in the city in order to be eligible to benefit.

This system of urban household registration has a number of important consequences. Some of these we have already stressed. It is not possible to decide at will to move into a city, it is very difficult to arrange to be transferred there from a smaller place, and it is close to impossible to live in a city for a long time without proper registration. From the standpoint of the authorities, this means that there are not many people in cities who don't have an approved reason for being there. There are of course still visitors coming to see kinsmen and friends, people sent there on business trips, foreign tourists, and a few other categories of people, but nonetheless there are fewer "strangers" lurking about than would be the case in cities almost anywhere else. Another consequence is that cities are pretty lean and productive places these days in terms of their use of human capital. For instance, Shanghai had 34 percent of its population employed in 1957, but 53 percent employed in 1972 (Howe 1977). China has not solved its "unemployment problem," since large numbers of young people for whom there are no jobs are simply shipped off to the countryside, and some people for whom there is no work are still permitted to stay in cities. But Chinese cities lack a large underclass of unemployed people for whom crime might constitute an alternative means of livelihood.

A further feature of urban life stems from the bureaucratic control over housing and jobs and from the fact that little in the way of new housing construction has been carried out since the 1950s in China's cities. For these and perhaps other reasons, most families tend to stay put for long periods of time, rather than moving from one home to another within cities. Most neighborhoods, except for those that have developed in connection with new industrial developments, house people who have lived there for a long time. In addition, three-generation families are still fairly common even in China's largest cities, so that there are usually old people

around in a neighborhood even when the able-bodied are all off at work.³ And in major cities, work units may stagger their days off, so that on any day of the week there will be residents of a range of ages present in the neighborhood. In the evenings there is little night life or organized recreation, so the primary form of leisure is simply relaxing and chatting with friends and family where one lives before turning in. Furthermore, high-rise buildings and elevators are as yet rare in Chinese cities, and private cars nonexistent, so that urban neighbors are probably in closer regular contact and less often "escape from it all" than is the case in our own society. Taken together, it seems to us that these characteristics predispose Chinese cities to be more orderly places than are the cities we are familiar with, even without considering the institutions that are specifically designed to control the activities of people living there. The organizational systems into which urbanites are grouped turn out to be fairly distinctive as well.

THE URBAN ORGANIZATIONAL SYSTEM

There are two fundamental principles by which urban life is organized: the work unit and the neighborhood. For the minority of urbanites whose work units have housing compounds attached to the workplace that house most employees, neighborhood organizations may be irrelevant, as the work unit will supervise most facets of the lives of its employees and their families. An inclusive "company town" setting may be fostered within a complex cityscape. The work unit of course supervises the activities of its employees on the job, and it may also run nursery schools and kindergartens, health clinics, recreational facilities, sports teams, and other activities for those within its orbit. Employees who wish to marry must receive approval from their work unit authorities to do so, as for that matter must those who wish to divorce. Work units regularly convene meetings of their

³There are also few "broken homes" in the sense that these are written about in literature on juvenile delinquency in the West, since official policies strongly discourage divorce and require repeated mediation of marital disputes. However, two other family situations may not be as favorable in terms of the family's role in fostering orderly behavior of its members. A certain number of homes are "broken" because of job assignments to places away from the parents or because of marriage of people with household registrations in different communities. Also, a very high percentage of younger mothers are fully employed, as are fathers. Thus there are a fair number of "latchkey children" who don't have parents around to supervise them after school, and if no grandparent is at home and the school makes no special effort to supervise them, they may not receive much supervision except informally, from neighbors.

employees and their dependents to discuss the government's family planning campaign, they may dictate which families are allowed to have more children and which are not, and they will pressure women who get pregnant "over the quota" (of two children) to submit to an abortion. If the son or daughter of an employee has been assigned to settle in the countryside after graduation from secondary school, the work unit will organize meetings of the parents to pressure them to persuade the child to comply with the decision, and may even play a role in deciding what rural locale the children of employees will be assigned to and in sending personnel to monitor how the young people are doing out in the countryside. In general, problems of inadequate housing, poverty, or even the inability to find a spouse may be referred to work unit authorities in hopes of assistance. Employees who have unemployed spouses or parents living with them may see these people organized into "dependents' committees," in which such people run small workshops, sewing centers, and other facilities where they can make some productive contribution.

If an employee commits a crime or engages in disorderly behavior elsewhere and is apprehended, the police will work with the security officer⁴ and party officials of the unit to decide how to handle the case. If they think it useful, they may decide to bring the offender before a large meeting of employees to be criticized or "struggled" for his waywardness. If the offense is a minor one and the employee is sufficiently repentant, they may decide to let him off with a warning, a reprimand, or a penalty of "supervised" or "controlled" labor. In these latter states, the employee continues to work at his regular job but is subject to special scrutiny from unit security personnel and is required to periodically report on his activities and attitudes (Cohen 1968, Ch. 5). The police may decide that the offense is more serious, warranting penal confinement, with or without a criticism and sentencing meeting in the work unit. In some cases, after the offender's term has been served the work unit may agree to take him back, and in such a case the work unit would again play the major role in keeping the released person under special scrutiny, in a state not much different from supervised labor.

Work units of course vary in their size, the extent to which they provide employees with housing, the proportion of housed families that have

⁴The security officer or committee is in charge of handling general social order problems and serious deviance cases in the work unit and of cooperating with police agencies outside. This is a much broader role than that played by security guards in our own society, but this person is part of the work unit administration, rather than an employee of the police. There is a comparable role within neighborhood organizations, the security-defense officer, that will be discussed below.

members working in other work units, the diligence of authorities within the unit in organizing the after-hours activities of employees, and other dimensions. We would hypothesize that in the most inclusive work units, with employees and their families heavily dependent upon and involved in unit activities, social control will be at its most effective, and problems of crime and rehabilitation will be least troublesome. However, most Chinese urban residents do not live in such an all-inclusive, company town-type setting. Most work units do not provide housing for all or even most of their employees, some housing assigned by work units is dispersed within ordinary neighborhoods, rather than being attached to the unit physically, and in most neighborhoods individuals are employed in a variety of units spread out over the face of the city. Some may be employed in the small cooperative factories and service facilities that are administered by the neighborhood itself, and within any one family there may be ties to several different work units (and schools). For the majority of the city residents who exist in this more complex setting, there will be two distinct social control systems operating: those of the various work units (and schools) and those of the neighborhood. Employed individuals still have to go to their work unit with requests to marry, demands for new housing, reports on contraceptive use, and most of the other matters discussed above. But they will also spend much of their free time away from their work unit, and most of this will be spent in their residential areas. There they are to a certain extent under the authority of a set of neighborhood organizations, and members of their families who do not have an outside work unit or school are more totally subject to this neighborhood authority.⁵ The role of these neighborhood organizations in urban social control is again a distinctive feature of Chinese society.

Cities are generally divided into a small number of districts, and these districts are in turn divided territorially into units called neighborhoods or streets (in fact the terminology varies somewhat from one city to another). Each neighborhood (of, say, 2,000 to 10,000 families) is administered by a neighborhood revolutionary committee composed of salaried state cadres,

⁵Generally speaking, families that have at least one adult member who is not employed or enrolled in school outside must send a representative to residents' committee and residents' small-group meetings and must participate in other activities organized by these bodies. Families all of whose members have ties to outside units do not have to send representatives to these meetings generally, but they would be involved in neighborhood cleanup campaigns, household inspections, and other local activities described below, and would generally get their rations through the neighborhood organizations, rather than through their work unit. In some periods, efforts have been made to foster more active participation of these people tied to work units in neighborhood activities, but never with much success, given the heavy time and energy involvements people maintain in their work units (Salaff 1971).

and also by a police station.⁶ The neighborhood is then subdivided into residents' committees (supervising 100 to 800 families), and these in turn are subdivided into residents' small groups (each supervising about 15 to 40 families). The small group has a single leader, the group head, while the residents' committee has several officers: a chief, assistant chief, security-defense officer, and several others. These people live in the locality and are usually appointed by the neighborhood revolutionary committee or are nominated by them and approved by the residents in a meeting (Cohen 1968, Ch. 2). Generally, only the residents' committee chief receives a small stipend, and the rest perform their duties as an unpaid social obligation. Most of the leaders at these two bottom levels are middle-aged women from good class backgrounds,⁷ but they may include a few retired or disabled male workers or educated youths allowed to stay in the city. On paper the residents' committees and their small groups are primarily subordinate to the neighborhood revolutionary committee, but in the eyes of residents it is actually the neighborhood police station that plays the greatest role in supervising their activities, particularly those that involve social control. It also seems to be a common practice to have a particular police officer from the neighborhood station assigned to work with one or a few residents' committees on a day-to-day basis, and for the officers of these committees and their subordinate small-group heads to take direction primarily from this individual (Vogel 1971).

This set of organizations represents a much more penetrating organizational system than exists in cities elsewhere, and it is important to note that, while the lowest levels of it are composed of unpaid individuals and are thought of as constituting "mass associations," they in no sense represent voluntary associations in the way this term is understood in the West. The entire structure is mandated by law, its leaders and activities are directed by higher levels, participation is required of residents, and residents are prohibited from forming their own autonomous locality associations to pursue grievances or organize activities. Residents must work through this organizational system, or try to work around it.

⁶The term "revolutionary committee" emerged during the Cultural Revolution, and after 1979 it was phased out in favor of the term that had been used previously, simply "neighborhood office."

⁷Class background refers to labels affixed to families based on their economic position just before 1949, such as landlord, rich peasant, poor peasant, capitalist, worker, etc. These labels were maintained in later years and passed on patrilineally, even though they no longer had any clear connection to the economic position of the family (Kraus 1977). Only in 1979 did the government indicate its desire to phase out this system of labels, through reclassifying those with "bad labels" (e.g., landlord, rich peasant) under more neutral terms (e.g., commune member).

The activities organized by neighborhood revolutionary committees, residents' committees, and residents' small groups vary somewhat from place to place but are always fairly broad. It is usually the neighborhood revolutionary committee that establishes and supervises neighborhood factories and service facilities. Many neighborhoods will have anywhere up to a dozen or so small factories and workshops producing buttons, chopsticks, paper bags, matches, small hardware objects, and a variety of other products, some of them produced through subcontracting arrangements with larger, state-run factories. Neighborhoods also often run small barbershops, bicycle repair shops, snack stands, hot water vending stations, nursery schools and kindergartens, paramedical stations, and reading rooms (but rarely laundries), and they often license individuals in the neighborhood to go out and sharpen knives, mend pots, sell popsicles, or work as day-laborers in transportation or construction. The mandate of neighborhood-run economic activities is a dual one; they are designed in part to provide employment for idle labor power in the neighborhood and in part to provide needed services for residents. Most of the small neighborhood factories and service facilities are too small to have the sorts of resources and control over employees described earlier for state-run work units, and so their personnel (many of them former housewives, disabled people, and educated youths) are the responsibility of the neighborhood revolutionary committee and its subordinate organizations.

Residents' committees have functions that are mainly noneconomic. They work in conjunction with the police station and state commercial agencies to distribute the ration books and coupons residents require. The police will check the family members in the household registration book against their dossier on the same family and then certify the family's eligibility to receive the various ration books and coupons. When visitors come to stay with a family they are also required to register temporarily, either with a residents' committee officer or directly with the neighborhood police station. If a small-group head or residents' committee officer suspects a local family of harboring an unregistered individual, they notify the police station and escort the police to the home in question for a night-time search, as a result of which anyone staying there without proper papers may be hauled away to a detention station. The residents' committee and small-group leaders also work on cases of urban-educated youths who have been designated to go to the countryside but have not yet agreed to do so. They organize indoctrination groups for such youths, and they repeatedly come to their homes and pressure them and their parents until they consent to go.

Residents' committees and small groups also have important respon-

sibilities in the areas of public health and sanitation. They notify residents of inoculation drives, they distribute fumigation chemicals to guard against pests, and if the neighborhood is situated off a main street they collect contributions from all residents to hire a local person to sweep the streets on a regular basis (large streets are cleaned by the city sanitation department). Usually each season the city authorities will announce a cleanup campaign for all residents, and then residents' committee officers go from door to door making cleanliness inspections of people's apartments and pasting stickers saying something like "cleanly household" on the doors of those who pass muster. These low-level leaders also play a role in the national birth control campaign, organizing residents (primarily women who are not employed by outside units) to discuss the government's family planning goals, to fill out forms on contraceptive use, and to accept an abortion if they become pregnant "over the quota."

Residents' committees and small groups also regularly convene meetings of those residents not employed by outside units for the purpose of engaging in political study. These meetings will occur once a week or so in ordinary times, but more often during a political campaign or after some major national event. In these meetings the leaders transmit directives and ideas from higher authorities explaining changing official policies and interpretations of events, or they simply have residents read newspaper editorials or political study pamphlets and discuss their meaning and relation to the local situation (Whyte 1974). Often if there is a group of educated youths in the neighborhood who have been allowed to stay in the city but have not yet had jobs assigned to them, the residents' committee will organize them to write banners and slogans for local posting and in general to serve as performers of whatever good deeds need performing. (Such youths are of course given to understand that their enthusiasm for these make-work tasks may affect the kind of job they eventually get assigned.)

On balance it seems clear that the central role of these lowest-level units concerns social control. Residents' committees organize small-group heads and local "activists" (such as the job-aspiring youths just mentioned) to assist the police in keeping an eye on what is happening in the neighborhood. In theory, at least, they are to report strangers whose presence is unaccounted for, neighbors engaging in suspicious activities, illegal peddlers, black marketeers, and other threats to social order. During times of disorder or for national holidays or the visits of important foreigners, the residents' committees may organize each family in the neighborhood to take part in round-the-clock patrolling of the area. The police also periodically run campaigns in which they call meetings and put

up posters to inform residents of the need for vigilance against violators of public order, class enemies, and spies, and to encourage the people to assist the police in carrying out their duties. Small-group heads are expected to remain familiar with what is going on in each family through regular, informal visits and contacts, and to use this familiarity as a basis for fulfilling their responsibility to report any untoward developments to the police. Residents are periodically convened for meetings to discuss the cases of major crimes and apprehended criminals from other parts of the city, as a means of heightening their own vigilance. And if a local resident commits a serious offense, he may be brought before a mass meeting of residents for "struggle" prior to being placed under "mass supervision" or being sent off to penal confinement by the police. Each residents' committee has a special officer, called a security-defense officer, whose special responsibility is to assist the police in securing public order in the neighborhood. Certain families in the neighborhood that get designated as "problem cases" for one reason or another will be subject to the special scrutiny of this officer as well as of the police. Individuals who have been assigned to "mass supervision" or "mass control" within the neighborhood have a special set of restrictions placed upon them. They will not be allowed to participate in certain neighborhood meetings in which national directives are communicated to the population. They have to submit periodic reports on their thoughts and activities to the security-defense officer or directly to the police station. They may be required to do periodic "voluntary" labor stints around the neighborhood. They may have to request special permission to make trips or to stay away from home overnight, and on occasions such as national holidays or the visits of important foreign dignitaries they will be rounded up and confined for "study" for the duration. Released convicts are subject to a variable set of such restrictions, apparently partly reflecting the degree to which they are judged to be potentially harmful or harmless. The handling of civil disputes also fits within this framework. In earlier years there were generally mediation officers or committees as part of each residents' committee, but recently most localities lack such a formal title or office (Cohen 1971, Salaff 1971). However, when severe marital or interfamily disputes break out in the neighborhood, the residents' small-group heads and residents' committee officers are expected to intervene and try to mediate and calm things down, although they are not empowered to enforce a particular settlement on residents. The multiple mechanisms for social control built into the urban neighborhood structure do not mean that other, more positive neighborhood activities are ignored, but they do illustrate the very great concern the Chinese Communists have for social order. It can be argued that we see here a conviction that, even after "progressive" social reforms

and changes in the distribution of property and income, cities are still likely to be very unruly places unless vigorous steps are taken to make them otherwise.

CRIME CONTROL AND REHABILITATION

The combination of restricted access to urban residence and highly penetrating and intrusive neighborhood organizations creates a fairly effective environment for social control in Chinese cities, and in our judgment goes far toward accounting for the impression that these cities are fairly safe places with low crime rates (again, an impression we judge to be correct, in the absence of accurate data). Urban social control and rehabilitation in China thus depend upon a social structure in which there is almost "no place to hide," or, in the Chinese phrase, no "dead corners." Urban centers are stripped of most individuals not employed or needed there, those remaining have fairly fixed locations and obligations, and a pervasive system of controls and of grass-roots organizations under the command of higher authorities makes it difficult for activities prohibited by such authorities to escape notice, as well as making it impossible for large-scale organized crime, including prostitution, narcotics, etc., to exist.

At this point it is important to specify several other possible reasons for low crime that we don't see as the primary ones explaining the general orderliness of Chinese cities. We are not arguing that the change from capitalism to socialism or changes in income distribution are the solutions to urban disorders. Clearly, urban residents often live in cramped and poor conditions while high ranking persons within sight of them have many advantages, these residents have many grievances against the restrictions within which they live, and sources of interpersonal tension and anxiety are by no means absent. Even unemployment would exist on a major scale were not much of it exported beyond the city walls. We would also be skeptical about an explanation that places primary emphasis on the use of Maoist ideology to transform urbanites into new socialist men who are unlikely to disrupt social order. Were the process for transformation of mentalities so effective, there would be no need for the involved systems of social control that we have sketched. We should also clarify that we do not see the tight-knit neighborhood organizations creating a situation in which all residents are in fact constantly vigilant and always actively helping the police and reporting on their neighbors. It does not take such mass cooperation, but only a limited number of residents' committee officers and activists in a neighborhood to make it risky for anyone to engage in unorthodox or criminal activities there. Furthermore, since

there are almost no written laws, and official policies are subject to change (and retroactive guilt is allowed, if not encouraged), the control system promotes a syndrome of trying to be extra cautious in order to avoid not only present but future problems.⁸ Finally, the degree of local orderliness is not dependent on a neighborhood having a high degree of solidarity and on individuals having a fear of being publicly shamed by being accused of misconduct. Even if in a particular neighborhood everyone hates their neighbors, they will feel that disapproved behavior is unlikely to go undetected, and in fact one could argue that precisely in such neighborhoods people will have to be extremely cautious in their behavior and expressions. We would argue, then, that it is primarily a tight-knit organizational and control system in Chinese cities that explains their relative orderliness, and that in this control system police play an important but not a predominant role while courts and other legal mechanisms play practically no role at all.⁹

Before turning to the weaknesses in this control network, we must consider the system of penal rehabilitation in somewhat more detail. We have argued that on even more impressionistic grounds we feel that recidivism is not a major problem in China (see also Vogel 1971, p. 90). At issue is whether, if this is the case, it is due to an effective method for transforming the attitudes and behavior of inmates of penal institutions, or due to a system of controls that restricts them effectively while they are in penal institutions and after they leave. The available evidence again leads us to stress the latter explanation.

Most of those sentenced to penal confinement for either criminal or political offenses are sent to labor reform or labor reeducation camps in the countryside, rather than to conventional prisons. The two separate net-

⁸ Much of our discussion throughout has been based on the notion that there are certain objectively specifiable behaviors that can be identified as crimes and that do not fluctuate sharply over time or depend upon unpredictable whims of enforcement agencies for their identification. This view is of course an oversimplification in our own society, as theorists of labeling, Marxist, and other perspectives point out, and it is also an oversimplification for China. Activities and even thought and speech that are not proscribed at one time become crimes at another, class background labels, political position, and other factors influence whether one is likely to be arrested for a particular act, and in many cases there are no documents or laws one can cite to defend oneself against unjust treatment by the authorities. For a discussion of some of these problems, see Greenblatt (1977).

⁹ In 1979 a policy change occurred in China when a set of new legal statutes, including a criminal law code and a code of criminal procedure, were enacted for the first time (to take effect as of January 1, 1980). However, there is an acute scarcity of personnel to man the new legal institutions, and many of the existing personnel spent long years being oriented against reliance on written legal standards. It remains to be seen how substantial an effect these changes will have on social control and citizen behavior in Chinese cities.

works of camps differ somewhat in the types of inmates and their length of sentences, but their regimens are enough alike for us to discuss them together here. There are two primary activities engaged in by camp inmates: manual labor and political study. The camps vary somewhat in the kinds of work assigned, but typically inmates engage in farming, lumbering, mining, or other heavy labor tasks, often for 10 hours a day or more. So far as one can determine, there is no emphasis on giving inmates new work skills or increasing their educational credentials. It is not assumed that they wound up as inmates due to lack of qualifications for an honest job, but due to poor political attitudes and disrespect for labor. In any case, inmates will not leave the camps with a set of skills or increased technical knowledge that will be of advantage to them in civilian life. Most evenings in the camps are spent in political study meetings of camp small groups, much like the residents' small groups in conception. Inmates are expected to read newspapers, study pamphlets and other materials, and discuss their own poor attitudes and failure to conform to Maoist ideals, including (ideally) any thoughts they may have of wanting to escape from the camp. It is here that the transformation of inmate attitudes is supposed to take place. However, my own research leads me to conclude that the social structure of the camps, with inmates confined and assigned to groups arbitrarily, as well as overworked and underfed, is singularly un-conducive to the desired personal transformations. The successes of the camps are more of a negative sort: the same tight-knit organizational system and controls that exist in civilian society inhibit the development of any sort of "inmate subculture" dominated by hardened criminals and thus make penal institutions less likely than prisons in our own society to function as "schools for crime." We would argue that the typical response to such confinement is likely to be neither personal regeneration nor hardened criminality, but controlled resentment and fear of running afoul of the authorities again (Bao and Chelminski 1976, Lai 1969, Whyte 1974, Ch. 9).

When their terms are completed, only an unknown portion of the inmates get to return to their former homes and jobs. Both labor reform and labor reeducation camp regulations have provisions allowing the public security (police) authorities to keep released inmates on as "free laborers" housed in communities next to the camps. It is uncertain how large a proportion of released inmates are retained in this manner, or what the specific criteria used to make the decision are. However, it is fairly clear that both the public security authorities and the inmate's former work unit and/or neighborhood authorities must feel that he is not likely to cause future trouble in order for them to approve a return to the inmate's city of origin. If these judgments are accurate, we again see a Chinese tac-

tic of excluding threats to social order (in this case potential recidivists) beyond the city walls.

Former inmates who do return to their original city and work unit are still subject to some special controls and scrutiny, although these are applied not by professional parole workers but by security-defense officers and local activists in the work unit or neighborhood, as previously noted. There clearly is some stigma attached to having been incarcerated and then returned to the community. Furthermore, the immobility of Chinese society means that it is virtually impossible to leave and "start a new life." Even if one could change one's place of residence, the police station in one's new locale would receive notification that you were a person to be kept under special scrutiny. There may be exceptions to this pattern, a postrelease exoneration, for example, but for the most part our informants describe released inmates as a very downtrodden, close-mouthed group, just trying to live from day to day and not do anything to antagonize local authorities. This general picture of how the Chinese system of penal rehabilitation works is what leads us to conclude that there is minimal personal transformation and repentance involved, and that serious problems of recidivism are avoided primarily through a very effective system of controls that leaves even disgruntled and alienated members of society with no place to hide.

WEAK SPOTS IN THE CONTROL SYSTEM

We cannot fail to note, however, certain problems with the urban social control system that make it less effective than our foregoing general discussion might lead one to believe. Several of these come to mind. First there is the fact that the solidarity of a neighborhood is to a certain extent contrived and manipulated, rather than based upon natural roots, voluntary associations, and joint ritual life. This is particularly so for those outside of housing compounds attached to large work units. In such a mixed neighborhood, people will have ties with work units of very different types and located in different places, and some families will have all their members tied into such outside units, leaving no one available to participate in residents' committee-sponsored activities. Residents are also likely to be heterogeneous in social background, family composition, and stage in the life cycle. In part this heterogeneity results from the bureaucratic system of housing allocation, which minimizes the role of market forces and personal preferences in determining who lives where. This heterogeneity and involvement in outside units tend to produce recurring tendencies for minimal involvement in neighborhood activities and make it dif-

difficult for residents' committee personnel to get residents concerned about problems of social order that occur beyond their own doors. In many neighborhoods residents live in very cramped conditions (generally with under 4 meters of living space per person) and have to share toilets, kitchens, and other facilities with neighbors, and while this may promote mutual familiarity, as noted earlier, it may also promote conflict and resentment and weaken any sense of mutual responsibility among neighbors. We discussed earlier our guess that such neighborhoods, which are not only heterogeneous but also filled with conflict, will spawn problems and at the same time have a high level of reporting such problems to the police. In any case, we argue that most neighborhoods do not have characteristics that would foster a strong sense of mutual responsibility and general involvement in residents' committee activities.

A second kind of weakness in the control system is the low prestige and lack of positive resources of the neighborhood leaders. Many of those involved are middle-aged women, often poorly educated (particularly the leaders of small groups). They do not usually have personal characteristics that would earn them public respect, and if they did they would be unlikely to be serving in such menial posts, most of them without compensation. Although they have some positive services to perform, they cannot really help residents much in solving the major problems of urban life—getting better housing, better medical care, a rewarding work post, and so forth. But they can get you into trouble—they are the ones who can call the police down on you in the middle of the night if they suspect you of something, and they are the ones who pressure reluctant youths and their parents to get the youths to go settle in the countryside. Informants feel that if you get on the wrong side of them they can make your life miserable, although they may be helpful and considerate to families they like. And if you are in conflict with them there is really no easy way out, since you cannot easily move to a new residence, and they cannot be removed by action of the residents but only if they displease the neighborhood revolutionary committee and police station personnel. At the same time, many of these residents' committee and small-group leaders are old and not very spry, so that they have a difficult time coping with any serious (or numerous) social control problems in their neighborhoods. The result of all of these features is that many residents may try to stay on the right side of the local leaders and say the right things in their presence, but curse them behind their backs and feel no guilt about maintaining only a minimal involvement in neighborhood activities.

A third problem in the social control system involves the system of supplies and rationing. It has been suggested by one authority (White 1977,

1978) that there is a curvilinear relationship between the tightness of the urban rationing system and popular compliance with official controls. When ration levels are set too low, making it difficult for residents to subsist on them, urbanites may be forced to rely increasingly on black markets, speculation, and other shady activity to supply their needs. On the other hand, if ration levels are quite sufficient and if many needed food items are sold in state markets without rations, then individuals may be able to supply their needs even if they don't have proper urban registrations and ration coupons. The ideal situation, from a social control standpoint, would seem to be one in which ration levels are just sufficient to supply popular needs while markets have only a limited amount of unrationed commodities. Over the last several decades there have been fluctuations back and forth between severe shortages and a relative abundance of supplies, rather than a stable, "optimal" level of needed food and other items.

The urban social control system can also weaken if political and other changes run counter to the control principles upon which it is based. This occurred in a major way in the decade after 1966, and we can gauge the weaknesses of the system most clearly by considering what went wrong in those years. A set of changes initiated by the Cultural Revolution, which began in 1966, contributed to a rise in urban social disorder and crime and was particularly manifested in growing juvenile delinquency. One major source of these problems was the fact that, beginning in the early 1960s, urban secondary schools began to turn out more graduates each year than the urban economy could absorb. Then, in the Cultural Revolution itself, millions of urban students were involved in Red Guard activities, rebelling against the leaders in their schools, cities, and the nation, and in the process gaining experience in political debate, physical combat, and even the handling of weapons. This period of extraordinary freedom and power for students, approved initially by Mao and other national leaders, was brought to a halt in 1968 by an effort to end the disorders of the Cultural Revolution. Red Guards were simply declared "graduated" and then mobilized to go settle in the countryside to remold their thinking and behavior. This campaign to resettle urban youths in the countryside continued in subsequent years, with 1 to 2 million urban secondary school graduates resettled each year. But the campaign was not very popular with most urban youths, nor with their parents. It meant that they would have to leave their families and settle in distant and poor villages, ones sometimes inhabited by minority groups speaking a different language, and they were given very little hope of ever being able to return to an urban area, much less to their native city. Urban Chinese with strong family and mobility orientations resented the "bitter fate" this represented for

their educated young people and the threat this posed of ending one's days living alone rather than with one's offspring (Bernstein 1977, Davis-Friedmann 1979). Many peasants and rural authorities also resented the intrusion of these urban youths, who did not have proper respect for rural customs and often consumed more than they produced.

Within a short period of time, it became common to have large numbers of these sent-down youths returning illegally to their cities of origin. Although they no longer had urban household registrations, they could still live with their families and rely on family belt-tightening for food, perhaps supplemented by the rural free markets or the urban black market. Their parents were often sympathetic to their desire to come back to the city or unwilling or unable to force them to return to the village. Some residents' committee and residents' small-group leaders were sympathetic to the plight of these youths and their families (some had a child in the same boat, of course), and others were unwilling to alienate large numbers of local parents by alerting the police to these long-term "visitors." There might be so many of such illegally returned youths that neighborhood authorities would have a difficult time monitoring them all, and they might also be afraid of antagonizing the youths. These were, after all, some of the same youths who had been "steeled" in battle in the Cultural Revolution, and neighborhood authorities might recall that returned sent-down youths of an earlier period had criticized and attacked neighborhood leaders in the early stages of the Cultural Revolution. Returning young people often prolonged their stays by guile rather than intimidation, however. A number of dodges became popular and were used on neighborhood leaders and police who wanted young people to return to the villages. Youths would present brigade certificates (real or forged) stating that they had permission to leave the village, they would claim they needed urban medical care or had to attend to some family crisis, or that they were planning to leave the next day. If things got too insecure in their own neighborhood, they would go and stay temporarily with a friend living elsewhere in the city. Even if none of these devices worked, the shipping back to the village of an illegal returnee might be only temporary. A common pattern was to stay in the village for a month or two and then to head back to the city again, perhaps with some grain earned for agricultural labor and some choice food delicacies to use to curry favor with neighborhood authorities. Youths might repeat this pattern over and over again, and generally they received no sanction except forced return to the village as long as their only offense was a desire to avoid rural hardships.

Some, perhaps most, of these illegally returning youths spent their time while in the city in a peaceful fashion—reading or studying at home, visiting friends, engaging in sports, and so on. But at least a portion of them

were not so well-behaved. Some began to engage in proscribed private trade activities, black marketeering, picking pockets, and petty thievery. It should be noted that there is a prohibition against employing such youths in urban work units, so any income-earning activities they developed had to be shady, if not illegal. No doubt both leisure time and a desire for excitement, as well as economic need in the absence of jobs and rations, contributed to the growing wave of youth crime that developed. The fact that these youths had partially safe bases in their own homes made them more difficult to control than would be the case for strangers from outside the city. Even if some of these youths were apprehended and publicly made a negative example of, it is unclear that this would have much shaming or intimidating effect on other illegal returnees, who saw themselves living on the margins by their wits rather than becoming well-integrated members of the community with much to lose.

Important changes in two other sectors of society also played into the growing problem of youth crime. One of these involved the educational system. The Cultural Revolution produced important changes in urban schooling, particularly a deemphasis on academics and on competition for selection for entrance into the university. Several months a year were spent not in the classroom but out working in factories and communes in order to learn to respect manual labor. Within the classroom the curriculum was simplified and politicized, tests, grades, and homework were de-emphasized or omitted completely, and promotion to the next grade was made automatic. However, it became impossible to go directly from secondary school to the university, and even access to upper middle school (roughly our senior high school) was made contingent more on factors like class background, age, and political activities than on school performance. The great bulk of secondary school students knew full well that they would be sent to live in the countryside after graduation, regardless of the academic skills or industrial experience they had acquired. (More favored classmates might, however, be selected to join the army or start work in an urban work unit instead.) The mass media also encouraged a spirit of students "going against the tide" and criticizing their teachers as "bourgeois academic authorities" (Pepper 1978).

The result of these trends was a rise in problems of discipline in schools, problems that spilled over into society. Among some students the mentality that schooling has no value became prevalent, and low motivation in school resulted. Teachers also became afraid to place strong academic demands on their students for fear of being criticized, and students felt that how they did in school could have little effect on their future lives. Parents also increasingly felt there was no point in placing high demands for

school performance on their children, and were more and more at a loss as to how to help their children prepare for the future. The absence of sanctions such as failure and expulsion for poor performance in school meant that problems of truancy, vandalism, and even physical assault increased within schools, and students also got involved in petty thievery and other misbehavior outside. In many large cities juvenile gangs emerged at this time, with bands of youths fighting with sticks and knives over territory and prestige in a pattern familiar elsewhere on the globe. City residents became increasingly aware of "black societies," involving such youths and others, that engaged in crime and a variety of unsavory activities (drinking, gambling, and even some reported prostitution). The students differed from the illegal rural returnees in having both urban household registrations and urban units (their schools), which gave them a more secure foothold in the city. (Young workers also played a role in the growing crime problem, as urban factories experienced some of the same discipline problems that schools did.)

The other major change affected the urban police system. During the Cultural Revolution, the public security (police) system had been attacked nationally and locally as an oppressive agency and had been thrown into some disarray. In the immediate post-Cultural Revolution years, cities were patrolled by military units supplemented by various kinds of civilian patrol units. In many cities, "workers' picket corps" units patrolled urban neighborhoods with clubs trying to keep order until the public security system was fully operational again. As the police began to take over the major role again, they remained under some pressure to deal with minor offenses by members of the masses (those without "bad class background" labels) by persuasion rather than coercion, which meant taking offenders to a detention station, lecturing them for a few days or weeks, extracting promises to behave, and then releasing them. The picket corps might turn over a suspect to a detention station for police handling, or they might mete out "mass justice" on the spot, for example, beating a purse snatcher severely and sending him fleeing back home. Neither of these methods was judged very effective by our informants. They saw a revolving-door phenomenon occurring, in which brazen youths would get in trouble repeatedly but would never receive serious sanctions and would not change their ways. Many citizens apparently began to feel frustrated at the lack of effectiveness of the authorities in dealing with what they saw as a growing crime wave, and some informants even report instances of ordinary residents viciously beating up a thief they caught in the act, rather than turning him over to the police for handling.

In the decade after the Cultural Revolution, then, Chinese cities were

plagued by rising crime and disorder, with young people seen as the major source of the problem. Our informants uniformly perceived a marked deterioration in public safety in these years, compared with earlier periods, with increased danger of being robbed, assaulted, or even worse. Major property crimes and violent crimes were probably still uncommon compared with most other societies, but residents took increasing precautions—to stay home at night, to avoid “gang turf,” to lock their doors, and to bring property such as bicycles and drying laundry inside their apartments at night (Foreign Broadcast Information Service 1979). A combination of very large numbers of bold and adventurous young people with footholds in urban life through their families, but without opportunities for mobility within the city or major organizational ties and commitments, plus some weakening of the ability of schools and neighborhoods to deal with disorders formed the major ingredients in this growing problem of youth crime.

In the years since 1974 a variety of steps have been taken that seem to have reduced these problems somewhat, although they are still a major concern for authorities. The sending down of youth was altered somewhat so that most urban youths were not required to settle so far from their native city, were given more economic subsidies while in the village, and were given increased hope of eventually being transferred back to an urban job. The program thus evolved increasingly into a rotation system, rather than an exile for life, and authorities hope that eventually it can be discontinued entirely (Bernstein 1977). In any case, these shorter and less distant rural sojourns were somewhat more palatable, and more urban youths were motivated to perform well in the countryside in hopes of being transferred back to the city sooner, or to a more desirable job. Changes have also taken place in the educational system, with tests, homework, failures, and other accoutrements of highly competitive academics back in style in a big way. Strict classroom discipline and respect for teachers are also mandated now, and stints working in factories or communes have been reduced to nominal periods. Beginning in 1977 it became possible for urban secondary school graduates to do well on a placement exam and be selected to go directly to the university, thus avoiding a rural labor stint after graduation entirely. And the picket corps and other informal policing agencies have been phased out increasingly while the police have begun major crackdowns on crime and have expanded their youth reformatories to handle more youths on a long-term basis (Butterfield 1979). Informants report that in the last few years urban social order has improved as a result of these changes but is still not back to what it was prior to 1966.

LESSONS FOR THE UNITED STATES?

To what degree is this system of social controls a distinctive product of Chinese traditions and customs? Are there elements of this social control system that could or should be taken and applied to problems of crime and rehabilitation in the United States? These two questions require somewhat separate treatment. The social control system we have sketched has a number of roots and precedents in traditional Chinese culture, but it nonetheless constitutes something new in very important ways. Population registration systems existed over long periods of Chinese history and at some times required houses to have signs posted by the door listing all family members and their characteristics. Intermittently in various dynasties, families were formed into groups of families that were supposed to have mutual responsibility for the orderly behavior of all their members (Leong and Tao 1915, pp. 61-63). There is also a long tradition in China of expecting the rulers to set moral standards for all members of the community, and of regarding the ability of the government to maintain public order as a primary indication of that government's legitimacy. By the same token, unorthodox thoughts and actions were more likely to be interpreted as a threat to public order, and less likely to be seen as healthy diversity or the exercise of natural rights, than has been the case in our Western tradition (Munro 1977).

Yet the population registration and mutual responsibility systems of past dynasties were not the same as those of today. Large-scale movements of people back and forth between rural and urban locales were common throughout Chinese history. There is no lengthy Chinese heritage of not being able to change one's job or place of work at will. There was a healthy tradition of voluntary associations and providing of social needs from kin and other natural groupings, rather than from the government (Leong and Tao 1915, Skinner 1977). The bureaucratic system of control over jobs, food, housing, and most other necessities is really quite a departure from traditional norms, and for many other reasons those people raised in the "old ways" often find it difficult to fit into post-1949 China (Whyte 1974, Ch. 3). Chinese cities were also not such orderly places in the past. This is after all a society known for its urban secret societies, opium dens, and unemployment. Perhaps some elements of the current system of controls have traditional roots, but still on balance this system represents a major change in the way society is organized.

Can we learn something from this Chinese system of social control? I have argued that the primary reason for the relative success the Chinese have in dealing with crime is the very extensive system of restrictions and

controls under which urban residents live. No single part of this system—rationing, neighborhood criticism meetings, or whatever—by itself would explain this relative effectiveness. By the same token, perhaps a particular element could be detached and applied in America—such as mandating neighborhood organizations through which many services are channeled. But would it work in our society, and even if it did, would it by itself have much impact on our crime problems? Most elements of this Chinese system of social control seem to the author so fundamentally alien to the principles upon which our society is organized that it is hard to conceive of them being implemented here. What policy maker in our own society would be willing to propose that all urban unemployed be removed to rural areas? Who is likely to see the virtues of household cleanliness checks or midnight checks of household registration papers? Clearly, in some parts of the country we see the emergence of voluntary associations within neighborhoods that take part in security patrols, but are we willing to mandate that all neighborhoods must implement such a system and that all families must participate, and to proscribe rival forms of associational life? Unless we are willing to make some rather drastic changes in our political and economic order, it is unlikely that much from this Chinese system of social control would be transferable, even on a piecemeal basis. Examination of the Chinese case at least can serve to deepen our thinking about what is, after all, an age-old dilemma: In a complex society, must guarantees of human autonomy and freedom inevitably conflict with the achievement of public order, or is there some mechanism or formula through which both can be secured?

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A Preliminary Analysis of Legal Limitations on Rehabilitative Alternatives to Corrections and on Correctional Research

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INTRODUCTION

A new system of community-based corrections, emphasizing the twin goals of rehabilitation and reintegration, has developed out of a recognition of the failures of the existing prison system (Hahn 1975, Perlstein and Phelps 1975). In addition, in the prison as well as in the community relatively innocuous individual and group counseling programs are being replaced with increasingly more sophisticated rehabilitative programs, utilizing neurological technologies, behavior modification, and other controversial therapies (Mitford 1973, Opton 1974, Rothman 1975, Spece 1972). The potential for abuse in these programs has become enormous.

Whether the alternative programs are more or less effective than traditional incarceration is an empirical question that has yet to be resolved. Nevertheless, the demand for these alternative programs is growing. This paper concerns the legal issues raised by such alternative programs and proposals, as well as by the research that inevitably precedes, accompanies, and evaluates them.

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Although prisoners have traditionally favored these alternative programs, at least some of them, aware of the increasingly more sophisticated and intensive psychiatric and psychological interventions that have been suggested and in some cases attempted, prefer the traditional prison setting. May these defendants be diverted to alternative programs whether or not they are willing? May judges impose rehabilitative programs on unwilling defendants as conditions of probation or simply sentence convicted defendants to such rehabilitative settings in lieu of prison? May parole boards condition the granting of parole on such therapeutic programs? What legal rights do prisoners and defendants have to resist these alternative programs? If the defendant's consent is required for any of these alternative placements, is a defendant who is presented with the grim prospect of prison if the therapeutic alternative is rejected capable of giving a voluntary and informed consent? What substantive limitations does the law place on these alternative programs as well as on rehabilitative techniques employed within the prison? What procedural requirements are there for placing a defendant or prisoner in such programs either initially or after a period of incarceration? What limits does the law pose for researchers inquiring into the efficacy of these alternative dispositions or into new experimental approaches or testing new hypotheses concerning the causes and correlates of criminality?

The law is just beginning to grapple with these difficult issues. In 1974, Congress created the National Commission for the Protection of Research Subjects of Biomedical and Behavioral Research (referred to hereafter as the National Commission) and directed it, among other tasks, to conduct a special study of the ethical, social, and legal implications of advances in biomedical and behavioral research and technology (National Research Act 1974). This special study has now been issued (National Commission 1978b), but it hardly deals at all with the legal implications of the new technologies. A successor commission—the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, established in 1978 (Community Mental Health Centers Extension Act 1978)—is charged with studying the same issues and making recommendations for legislative and administrative action.

Definitive legal answers are thus unavailable at this point. This paper is an attempt to sketch a preliminary framework for how the law is likely to deal with the issues raised by these new alternatives to traditional incarceration. Some light has been shed by recent statutory and regulatory developments, as well as by judicial decisions involving the rights of mental patients and of prisoners. However, the legal picture is still far from clear.

SOURCES OF LEGAL LIMITATION

STATUTORY LIMITS

Statutes adopted by state legislatures or by the U.S. Congress may place limitations on treatment or research dealing with offenders. Plotkin (1977) reviewed state statutory limitations on coercive treatment of mental patients, although only a few of such statutes apply to prisoners. A survey conducted by the staff of the National Commission (Staff Report 1975) revealed that 9 states had legislation on biomedical research with prisoners and 10 had legislation on behavioral research. One of these states, Oregon, has imposed a flat statutory ban on both types of research with prisoners (Ore. Rev. Stat. Sec. 421.085, 1973). In addition, legislation such as the federal Privacy Act (1974) and similar state statutes may guarantee subjects access to and place limits on agency disclosures of records compiled in correctional research.

California, which has been the forerunner in the area of legislative limits on therapy and experimentation, currently has the most extensive statutory approach to these problems. A pioneering statute, enacted in 1974 as an amendment to the California Penal Code, places limits on the imposition of "organic therapies" on prisoners and mental patients (Calif. Penal Code Sec. 2670-2680, 1979; see Shapiro 1974). Declaring that all persons "have a fundamental right against enforced interference with their thought processes, states of mind, and patterns of mentation," the statute guarantees that, with certain limitations, competent persons may refuse "organic therapies." "Organic therapy" is defined to include psychosurgery, shock therapy, and "the use of any drugs, electric shocks, electronic stimulation of the brain, or infliction of physical pain when used as an aversive or reinforcing stimulus in a program of aversive, classical, or operant conditioning." Psychosurgery is prohibited altogether for nonconsenting persons and for persons lacking the capacity for informed consent. In order to administer any other "organic therapy," the burden is placed on the state to obtain a court order based on a showing that the person involved lacks the capacity for informed consent, that the proposed therapy will be beneficial to its recipient, that its administration is supported by a compelling state interest, and that there are no less onerous alternative therapies available.

A more recent California statute, adopted in 1977, deals with biomedical and behavioral research on prisoners (Calif. Penal Code Sec. 3500 *et seq.*, 1979). In this provision, the legislature affirmed the fundamental right of competent adults to decide whether to participate in such research. Behavioral research, defined broadly (although excluding assess-

ments of program effectiveness), was limited to "studies of the possible causes, effects and processes of incarceration and studies of prisons as institutional structures or of prisoners as incarcerated persons which present minimal or no risk and no more than mere inconvenience to the subjects of the research." Such research may not be conducted without informed consent, unless an institutional review board concludes that consent would be unnecessary or would significantly inhibit the conduct of such research. The board, to authorize research, must determine that the risks to prisoners who consent are outweighed by the sum of the benefits to the prisoner and the importance of the knowledge to be gained, that equitable procedures are followed in the selection of prisoners as subjects, and that legally effective informed consent is obtained from the prisoners involved following the provision of complete oral and written explanations of the research to the prospective subjects.

Other provisions in this statute limit the use of psychotropic medication and behavioral techniques on prisoners. Psychotropic drugs may be used only if indicated in the prisoner's medical treatment and carefully monitored and evaluated, or in the context of a research protocol designed to test the drug's pharmacological or chemical properties or action, and only if there is no serious risk to the prisoner's mental or physical well-being. Behavioral techniques may be used only if they are "medically and socially acceptable" and do not inflict permanent physical or psychological injury.

Biomedical research, which is defined broadly, is prohibited altogether without informed consent. One can seriously quarrel with the use of a broad definition, because it focuses on the type of research instead of on its effects on subjects. For example, research on genetic influences on criminality that seeks to study criminality among twins or in adoptees and their adoptive and biological parents (e.g., Mednick and Christiansen 1977) would appear to be prohibited without informed consent. Yet such studies involve invasion of informational privacy only and do not violate the physical or even mental integrity of the research subject. And limiting participation to those who consent may well have the effect of contaminating the sample studied, with the result that it may be impossible to reach conclusions meeting accepted standards of research methodology.

Although states other than California have recently attempted statutory approaches to these problems, by and large few statutory controls exist on therapeutic interventions and experimentation with offenders. At present, there are no federal statutes on point, although Senate reports and hearings have dealt with the problems (U.S. Congress 1974, 1978), statutes have been proposed, and the newly formed President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behav-

ioral Research has been charged with making recommendations for legislative action.

REGULATORY LIMITS

Another source of legal control is that contained in regulatory law—rules and regulations adopted by federal agencies, state departments of corrections, and other administrative agencies that have been delegated power by Congress or a state legislature. By exercising its express or implied power to adopt rules and regulations to carry out its functions, such an agency may impose limits on itself or on other agencies with respect to certain therapeutic interventions or experimentation. For example, regulations of the U.S. Department of Health and Human Services (HHS; formerly, U.S. Department of Health, Education, and Welfare), applicable to federally funded programs, mandate institutional review boards and other procedures designed to ensure the obtaining of informed consent for research subjects participating in experimentation (45 CFR 46, 1979). A 1978 amendment to these regulations, five years in preparation, deals with biomedical and behavioral research involving prisoners, specifying the conditions under which such research is permitted (45 CFR 46.301-306, 1979). Any research supported by HHS involving prisoners is permitted only if approved by an institutional review board, on which prisoners or their representatives must serve. The subjects of such research are limited to (1) study of the causes, effects, and processes of incarceration and criminal behavior, (2) study of prisons as institutional structures or prisoners as incarcerated persons, (3) research on conditions particularly affecting prisoners as a class or on social and psychological problems affecting prisoners, and (4) research on practices intended to improve the health or well-being of the prisoner who is a research subject. The first two subjects may be investigated only if the proposed study presents no more than minimal risk and no more than inconvenience to the subject; the latter two may be implemented only following consultation by the secretary of HHS with appropriate experts and publication of advance notice of intent to approve such research in the *Federal Register*. Except for research in these specifically delineated areas receiving institutional review board approval, "biomedical or behavioral research conducted or supported by HEW shall not involve prisoners as subjects" (Sec. 46.304).

A staff survey prepared for the National Commission's Study on Research Involving Prisoners (Staff Report 1975) cites several states that, by regulation, have barred or limited experimentation on prisoners. After the National Commission began holding hearings in connection with its prison study, the Federal Bureau of Prisons announced an indefinite

moratorium on nontherapeutic biomedical experimentation conducted in any federal prison (Branson 1977, p. 16). Although regulatory limits on correctional therapy and research are still the exception, increased regulation at both federal and state levels can be anticipated. Indeed, the flexibility and specialized expertise of agencies in general may make them the most appropriate forum for innovation.

INTERNATIONAL LAW LIMITS

Treaties to which the United States is a party and international customary or common law serve as another possible limitation on correctional treatment and research. The Nuremberg Code (1947), although its status in international law is uncertain, surely has an important bearing on the issues under consideration. The code was adopted by a military tribunal established pursuant to the London Agreement of 1945 between the United States, Great Britain, Russia, and France, concerning the trial of World War II war criminals. Enunciated in *United States v. Karl Brandt* (1947) (the trial of 23 German physicians for war crimes involving experiments with prisoners of war and civilians), the code constitutes a comprehensive statement of the requirements of informed consent to human experimentation. In broad language, it requires that the consent of the experimental subject is "absolutely essential," and specifies that such consent must be competent, voluntary, informed, and understanding. Although the court based its decision on "the principles of the law of nations," it is not clear that the code, however it might reflect widely shared views of medical ethics, has the force of international law. Although Annas *et al.* (1977, p. 8) argue that the code and the subsequently adopted Declaration of Helsinki (1964), based on the code, have been incorporated into international customary or common law, this conclusion has not yet been widely adopted. Moreover, even if these are considered a part of international customary law, such law is not independently binding, having validity in U.S. courts only insofar as its principles are adopted by such courts (Lillich 1970, p. 14).

Certainly, the Nuremberg Code and the Declaration of Helsinki have been influential in the formulation of policy and law in this area. Many of the HHS regulations on the protection of human subjects, for example, are derived from the code, as are the Food and Drug Administration regulations concerning investigational use of new drugs and the Department of the Army's regulations on the use of volunteers as subjects of research (Veatch 1975, pp. 32-33). Moreover, a Michigan trial court in an influential opinion on psychosurgery incorporated the code's requirements for informed consent into its decision (*Kaimowitz v. Michigan*

Department of Mental Health 1973). However, although the code speaks broadly of all human experimentation, it was adopted in the context of nontherapeutic medical experimentation and its application outside of this context—to therapeutic medical research, behavioral research, and survey research, for example—seems highly questionable.

JUDICIAL LIMITS

Tort Law

Tort law, as it has developed over time through court decision, may provide an additional source of legal limitation on unwanted therapy or participation in research. For example, the law of battery recognizes a remedy in damages for deliberate invasions of bodily integrity that are not consented to or legally privileged. A medical procedure performed without first obtaining the informed consent of the patient is, with few exceptions, an actionable tort (Prosser 1971, p. 165). In a classic formulation of the principle, Justice Benjamin Cardozo, while a member of the New York Court of Appeals, stated that (*Schloendorff v. Society of New York Hosp.* 1914, p. 129): "Every human being of adult years and sound mind has a right to determine what shall be done with his own body; and a surgeon who performs an operation without his patient's consent commits an assault, for which he is liable in damages." An application of this tort law principle in the prison context is found in a Georgia case involving injuries sustained by a prisoner incident to an X-ray performed without his consent (*Irwin v. Arrendale* 1967). The court, stressing the consensual nature of the physician-patient relationship even within prison, found the X-ray procedure performed without consent to constitute a battery. Compulsory medical examination to protect the health of other inmates or the public would, on the other hand, be permitted, the court indicated.

Aside from the law of battery, other tort theories may apply to correctional treatment or research. Any treatment performed in a negligent fashion and resulting in injury would be actionable malpractice (Prosser 1971, p. 162). The law of negligence would also hold investigators liable for injuries inflicted by procedures that deviate from standard and accepted research practice (see Fried 1974, pp. 14-18; Jaffe 1970, pp. 199, 203-204). Indeed, some commentators have suggested that developing doctrines of strict liability should apply to nontherapeutic experimentation, imposing liability for any resulting harm without regard to fault (Calabresi 1970, pp. 185-190; Fried 1974, pp. 27-28). Moreover, although not previously applied in the correctional context, such traditional torts as invasion of privacy and intentional infliction of severe emotional distress could provide grounds for a claim (Friedman 1975, p. 55).

Whether the state interest in rehabilitation and in expanding the frontiers of knowledge with respect to the causes and treatment of criminality is sufficient to make unauthorized treatment or research that would otherwise be tortious legally privileged is a substantially open question. These issues have been rarely litigated in prison contexts (and even less so in extrainstitutional settings) in large part because the prisoners involved have usually "volunteered" in order to avoid more restrictive conditions and in any event lack the wherewithal to press damage actions against their keepers. Moreover, correctional officials are clothed with immunity to liability for tortious conduct occurring in good faith (e.g., *Procunier v. Navarette* 1978). For these and other institutional reasons, constitutional doctrine is likely to expand more rapidly to fill the void than is the typically slowly developing accretion of tort law.

Constitutional Law

Although as recently as the mid-1960s most courts applied a general "hands off" policy with respect to prisoners seeking judicial remedies against prison authorities (see *Yale Law Journal* 1963), there has since been a veritable revolution in the area of prisoners' rights in which the courts have increasingly been willing to extend constitutional protections to state and federal prisoners as well as to provide judicial remedies for the violation of constitutional rights (see *Virginia Law Review* 1971). It is now generally recognized that prisoners "retain all of their constitutional rights except those which must be infringed upon for security or rehabilitative purposes" (*Jones v. Wittenberg* 1971, p. 98). In *Bell v. Wolfish* (1979), the Supreme Court reiterated that "convicted prisoners do not forfeit all constitutional protections by reason of their conviction and confinement in prison." The Court, in holding the protections of due process applicable to prisoners subjected to additional deprivations of liberty or property, had previously affirmed that "there is no iron curtain drawn between the Constitution and the prisons of this country" (*Wolff v. McDonnell* 1974, pp. 555-556). In addition to the protections of due process, the Court has held that prisoners enjoy freedom of speech and religion under the First Amendment (*Pell v. Procunier* 1974, *Cruz v. Beto* 1972) and are protected against invidious discrimination on the basis of race under the equal protection clause (*Lee v. Washington* 1968) and against cruel and unusual punishment by the Eighth Amendment (*Estelle v. Gamble* 1976).

Although cases applying these constitutional rights in the context of correctional therapy or research are extremely few in number, it is possible to suggest how the courts are likely to deal with these issues in view of constitutional doctrine as it has developed in related areas.

A growing body of recent case law and commentary deals with the developing constitutional right of mental patients to refuse certain types of mental health treatment. Such a right—which would seem applicable to prisoners as well as to defendants not as yet adjudicated guilty of a crime—has been derived from a variety of constitutional sources.

Right to Mentation. Some courts and several commentators (Shapiro 1974, pp. 255–258) have found within the First Amendment protection of freedom of speech a right to be free from interference with mental processes. A leading case recognizing this principle is *Kaimowitz v. Michigan Department of Mental Health* (1974), a Michigan decision holding that the imposition of psychosurgery on an involuntarily detained mental patient would violate the First Amendment. The First Amendment was held to protect the individual's "mental processes, the communication of ideas and the generation of ideas. . . . To the extent that the First Amendment protects the dissemination of ideas and the expression of thoughts, it equally must protect the individual's right to generate ideas" (p. 917).

Other courts have found a First Amendment limitation in cases involving involuntary administration of antipsychotic medication to state mental hospital patients (*Scott v. Plante* 1976, *Rogers v. Okin* 1979) and involuntary administration of the paralyzing drug, anectine, as part of an aversive conditioning program at a state prison medical facility (*Mackey v. Proconier* 1973, p. 878).

Right of Privacy. Some courts have found constitutional limitations to involuntary treatment in the right of privacy guaranteed by substantive due process. The right was applied in a prison context to permit a damage action under the Civil Rights Act for a state prisoner subjected to hemorrhoid surgery without his consent and over his expressed objections (*Runnels v. Rosendale* 1974). Other cases have applied the constitutional right of privacy to protect the right of mental patients to refuse psychosurgery (*Kaimowitz v. Michigan Department of Mental Health* 1973), electroshock therapy (*Bell v. Wayne County General Hospital* 1974, *Price v. Sheppard* 1976), and psychotropic medication (*Bell v. Wayne County General Hospital* 1974, *Rennie v. Klein* 1978, *Rogers v. Okin* 1979, *Souder v. McGuire* 1976).

Ban on Cruel and Unusual Punishment. Some courts have employed the Eighth Amendment's ban on cruel and unusual punishment to protect patients against unwanted therapies found so "shocking to the conscience" as to be offensive to the "dignity of man" (see *Trop v. Dulles* 1958, p. 100). In *Mackey v. Proconier* (1973), a federal appeals court ruled that

the Eighth Amendment had been violated in an aversive conditioning program using the paralyzing drug anectine—a drug that produces sensations of suffocation and drowning—on fully conscious prisoners. A similar result was reached in the federal case of *Knecht v. Gillman* (1973), involving involuntary use at the Iowa Security Medical Facility of the vomit-inducing drug apomorphine in an aversive conditioning program. Other courts have found Eighth Amendment violations in the involuntary administration of psychotropic drugs in state hospitals and juvenile facilities (*Nelson v. Heyne* 1972, *Pena v. New York State Division for Youth* 1976, *Scott v. Plante* 1976, *Souder v. McGuire* 1976.)

Right to the Free Exercise of Religion. In the case of religious-based refusals of treatment, some courts have found a right to refuse based in the First Amendment protection of the free exercise of religion. In *Winters v. Miller* (1971), the leading case, a Christian Scientist who objected to the administration of psychotropic medication at a state mental hospital to which she had been involuntarily committed was held able to bring an action for damages for violation of her right to freedom of religion under the First Amendment (*In re Boyd* 1979; accord, *Dyer v. Brooks* 1976). However, a similar claim by a prisoner was rejected when the plaintiff failed to demonstrate that he was a sincere adherent of an established religion that, as a basic tenet, prohibits the use of such drugs (*Sconiers v. Jarvis* 1978).

Procedural Due Process. In addition to these substantive limits on the government's power to impose therapy involuntarily, the due process clauses of the Fifth and Fourteenth Amendments provide procedural requirements that may have to be met, even for substantively unobjectionable impositions of therapy, before the therapy may be applied. The Supreme Court in a variety of contexts has required "some kind of hearing" whenever state action interferes with the "liberty" of "property" interests protected by the Fifth or Fourteenth Amendment (*Friendly* 1975).

Due process has been applied in the prison context to require a hearing for prison disciplinary proceedings resulting in the forfeiture of "good-time" credits or imposition of solitary confinement (*Enomoto v. Wright* 1978, *Wolff v. McDonnell* 1974) and for the transfer of inmates to mental hospitals (*Vitek v. Jones* 1980). It has also been applied in hospital contexts to require some form of notice and opportunity to be heard prior to the involuntary administration of psychotropic medication (*Rogers v. Okin* 1980, *Winters v. Miller* 1971, *Scott v. Plante* 1976, *Rennie v. Klein* 1978) and in a juvenile facility to require a hearing prior to the imposition of psychotropic medication or "time out" (*Morales v. Turman* 1974). A

Washington state court has ruled that prisoners who have been transferred to a state mental health unit must be afforded a due process hearing prior to imposition of "dramatic" or "intrusive" treatment, specified to include psychotropic drugs, electroconvulsive therapy, and other therapies involving intrusions into the body and the mind (*Harmon v. McNutt* 1978). In *Clonce v. Richardson* (1974), a federal district court invoked procedural due process in a case involving a challenge by a federal prisoner to his involuntary transfer to the START program, an experimental tier program run by the Federal Bureau of Prisons.

AN ANALYSIS OF THE RIGHT TO REFUSE TREATMENT

The cases discussed above appear to suggest the existence of a broad right, supported by a number of constitutional sources, to refuse treatment, but it is neither helpful nor appropriate to conceptualize the right in such a broad fashion. Although the various forms of rehabilitation and treatment in question, when applied coercively, may present certain common constitutional questions, the issues raised differ considerably according to the specific technique of rehabilitation or treatment involved.

A CONTINUUM OF INTRUSIVENESS

It is useful to construct a continuum of intrusiveness onto which the various rehabilitative techniques used on offenders may roughly be placed (Winick 1981). Only at certain points on the continuum will certain of the constitutional provisions be implicated. Moreover, as will be seen, even for those techniques that present sufficient intrusiveness to merit constitutional consideration, there may be instances in which the government's interest is sufficiently important to outweigh the offender's assertion of a constitutional right to resist. If a therapy invades a fundamental right the government may also have to satisfy the "least restrictive alternative" principle, which in this context would require demonstration that the proposed therapy is generally necessary to accomplish a compelling governmental interest and that no less intrusive alternative exists.

In constructing the proposed continuum, the key variables for the purposes of most of the relevant constitutional principles seem to be the extent of any physical or mental intrusion accompanying application of the technique; the nature, extent, and duration of its effects; and the extent to which these effects may be avoided or resisted by unwilling subjects (see Shapiro 1974, p. 262; Spece 1972, p. 618; Tribe 1978, pp. 911-912). Since the focus is on the nature and effects of the differing techniques, the

analysis generally will be the same both for techniques administered within the prison and for those administered in community-based programs. Most of the rehabilitative approaches utilized for prisoners and offenders placed in alternative settings—educational or vocational programs, counseling, individual or group psychotherapy—fall along the lower end of the continuum.

Verbal Rehabilitative Techniques

The focus of verbal rehabilitative techniques—by far the most common in prison and community-based programs—is some kind of verbal or non-verbal communication between the offender and his or her teacher, counselor, or therapist. They include a variety of counseling programs, performed on an individual or group basis, ranging from informal “rap” sessions to formal psychotherapy, and also include vocational and educational programs.

Although these techniques may present substantial opportunities for offenders who seek to change their behavior or attitudes, those who seek to resist such interventions but are forced to attend classes or sessions involuntarily can effectively avoid the effects of these approaches by withholding cooperation. Even psychotherapy, which can have a massive impact on a patient's mental processes and can be used as a potent means of behavior control (Rogers and Skinner 1956, p. 1063), can be resisted because it works slowly, affording the patient time to contemplate the meaning of behavior change and to decide whether to accept such change (Halleck 1974). There is wide agreement that conventional psychotherapy is simply not effective unless the patient participates voluntarily and genuinely seeks change (Morris 1974, p. 17; Katz 1969, pp. 776–777).

In view of the ability of the offender to resist the effects of these essentially verbal interventions, they may readily be distinguished from the more coercive treatment methods found to violate the Constitution in the right to refuse treatment cases discussed earlier. Psychosurgery, electroconvulsive therapy, and psychotropic medication, unlike the verbal interventions, involve direct physical invasions of the body, cause primary and side effects that are both physically and mentally intrusive, occur rapidly, and are not resistible. The two cases that come closest to addressing this issue, and the only reported decisions dealing with the involuntary application of purely verbal techniques, rejected constitutional challenges to compulsory prison education programs (*Jackson v. McLemore* 1975, *Rutherford v. Hutto* 1974), noting that the state may “lead the horse to water even though it knows that the horse cannot be made to drink” (*Rutherford v. Hutto* 1974, p. 272).

It thus seems likely that the typical prison or community rehabilitative program involving largely verbal approaches will be found to violate neither a First Amendment right to be free of interference with mental processes nor a due process right of privacy. Nor would cruel and unusual punishment be involved, both because such programs do not seem to be "punishment" (this label has not been applied by the courts to bona fide treatments, even if they involve pain (Friedman 1975, p. 63)) and because, even if considered punishment, these approaches would not qualify as "cruel and unusual," a condemnation reserved for punishments that are "so bad as to be shocking to the conscience of reasonably civilized people . . ." (*Holt v. Sarver* 1970, pp. 372-373). Moreover, although religious objections to participation in such programs may present more difficult questions, it is clear that, to succeed, the offender must base his or her other position on genuine religious grounds rather than merely on philosophical or personal ones and must demonstrate the sincerity of his or her beliefs and that they are essential to the practice of the religion involved (see Tribe 1978, pp. 859-865; compare *Winters v. Miller* 1971 with *Sconiers v. Jarvis* 1978).

Behavioral Techniques

Somewhat higher on the continuum of intrusiveness than the verbal techniques are the behavioral approaches used with increasing frequency in prison and community-based programs. Behavioral approaches include those using positive reinforcement, that is, the provision of rewards or reinforcers contingent on the occurrence of behavioral responses sought to be established or strengthened; aversion therapy, that is, the application of unpleasant stimuli contingent on the occurrence of inappropriate or maladaptive behavior in an attempt to suppress such behavior; and systematic desensitization, that is, an attempt to reduce maladaptive anxiety reactions by a gradual exposure of the patient to the anxiety-generating situation, paired with relaxation; as well as a variety of other techniques. Several of the positive reinforcement techniques, e.g., the token economy and the tier system, have been used frequently in adult and juvenile correctional settings as well as in alternative community-based programs (Blatte 1974; Milan and McKee 1976, e.g., Carlson 1974; Phillips *et al.* 1971). Aversive conditioning has also been used in prison settings (Blatte 1974, p. 11; e.g., *Mackey v. Procunier* 1973, *Taylor v. Manson* 1975).

Proper placement of behavioral techniques on the proposed continuum of intrusiveness is particularly difficult because they differ substantially in regard to the key variables mentioned above. Some of the aversive techniques involve direct physical intrusion, e.g., drugs that cause nausea or

apnea, electric shocks administered to the body, and mild slapping. Others are not physically intrusive, e.g., the removal of privileges and isolation. The behavior techniques using positive reinforcement do not involve physical intrusions. None of these techniques seems to involve serious mental intrusions, no more so than, for example, psychotherapy (see Schwitzgebel 1979, p. 66).

The side effects produced by some of the aversive techniques may be seriously damaging to patients (Bucher and Lovaas 1968, p. 78). Moreover, although the techniques using positive reinforcement typically produce no physical side effects, the deprivation central to some of the aversive techniques may exist as well in some positive reinforcement procedures. Token economies and tier systems, for example, sometimes make meals, a bed, toilet articles, writing and reading materials, religious services, and other basic personal requirements available contingent on behavior in conformity with program goals (Wexler 1973, pp. 84-90). Some recent cases have held that the Constitution requires certain minimum conditions and standards for prisoners (e.g., *James v. Wallace* 1976). As a result, there may be constitutional limits on using these basic rights and privileges as reinforcers in positive reinforcement programs. To the extent that the Constitution requires these rights and privileges for all prisoners and offenders placed in community-based programs, courts may require that they be made available on a noncontingent basis (see Wexler 1973, pp. 83-85). Moreover, administrative regulations such as those of the Federal Bureau of Prisons, specifying minimum conditions and privileges for prisoners, may also render such reinforcers legally unavailable in token or tier programs.

The constitutional inquiry must focus on the primary effects of these behavioral techniques as well as on their side effects. To what extent do these techniques produce changes in attitude, behavior, and personality in offenders? How long do these changes last? May they be resisted by unwilling subjects? Although the empirical evidence is far from clear, a large number of case studies report strikingly high success rates with the behavioral techniques in the treatment of a wide variety of conditions (Brown *et al.* 1975, pp. 10-11). However, as with psychotherapy, there is evidence that behavioral treatment works only with cooperative patients and that successful treatment cannot be forced on patients against their will (Bandura 1974, pp. 859-860; Erwin 1978, pp. 180-181; Marks 1976, p. 255).

Certainly, some inmates may find some positive reinforcements too tantalizing to resist, e.g., color TV, air-conditioning, better physical conditions, monetary rewards, and the approval of the Parole Board. But it is rather doubtful that these inducements to change, however strong, would

trigger constitutional condemnation. Prison inmates have long been granted good-time credit toward parole eligibility for good conduct and participation in rehabilitative programs as "a tangible reward for positive efforts made during incarceration" (New York Department of Corrections Regulation, 7 NYCRR Sec. 260.1(a), 1974).

Whatever success the conditioning techniques have in effecting short-term alterations in behavior in response to the provision of reinforcers, there is considerable evidence that the effects are short-lived and perhaps restricted to the controlled clinical setting in which the conditioning occurs (Brown *et al.* 1975, p. 7; Gruber 1971). This is particularly true for offenders released to a community in which the contingencies of reinforcement are quite different from those within the prison or community setting in which they were conditioned. Thus, although many of the behavioral techniques may be more difficult to resist than those employing only verbal approaches, they do not work in such a direct and intrusive fashion as to deprive the offender of effective control over his or her own behavior, and in any event, any behavior change induced will be impermanent and reversible absent the offender's willingness.

In view of the ability of the subject to resist a behavioral approach that uses positive enforcement, it seems unlikely that the involuntary application of these techniques will be found to violate either the First Amendment right to be free of interference with mental processes or the right of privacy. Nor could these techniques be seen as involving cruel and unusual punishment.

The aversive techniques present greater difficulties. Some involve direct intrusions on bodily privacy, which, absent sufficient governmental justification, will be held to violate constitutional rights. Mere discomfort not involving bodily intrusions, however, would not seem sufficient to implicate the due process right of privacy (see *Bell v. Wolfish* 1979). Moreover, few of these techniques sufficiently invade the individual's freedom of thought or interfere with mental processes that the First Amendment will be deemed violated (but see *Mackey v. Procunier* 1973). Clearly, some of the aversive techniques will constitute cruel and unusual punishment (see *Southern California Law Review* 1976, *Mackey v. Procunier* 1973, *Knecht v. Gillman* 1973). Some programs, using strong negative stimuli, will be offensive to prevailing standards of decency and therefore can be considered to violate the Eighth Amendment. But if employed for therapeutic or rehabilitative purposes, it is likely that these techniques will not be considered "punishment" in the constitutional sense (see *Bell v. Wolfish* 1979, pp. 538-539). However, even if claimed to be applied for treatment purposes, certain particularly potent aversive stimuli could be considered sufficiently excessive or severe, in relationship

to the objectives of the rehabilitation program and in view of the availability of other less drastic conditioners, to be deemed punishment for Eighth Amendment purposes (see *Knecht v. Gillman* 1973, *Vann v. Scott* 1972, *Inmates of Boys' Training School v. Affleck* 1972). Moreover, the possibility also exists that therapeutic approaches that are totally ineffective as treatment will be considered punishment (Schwitzgebel 1972, pp. 297-305).

Thus the Constitution might make legally unavailable certain of the more drastic aversive conditioners and prevent use as reinforcers in token and tier programs of basic rights and privileges that the law requires be provided on a noncontingent basis. With these exceptions, however, it is likely that an offender will not be able to assert a substantive constitutional right to refuse to participate in a rehabilitative program employing behavioral techniques.

Organic Techniques

More intrusive than the behavioral and verbal techniques are the organic therapies, characterized by direct physical intervention into the body of the subject and effects that are not resistible (Katz 1969, pp. 776-777). In ascending order of intrusiveness, these organic techniques include medication, electroconvulsive therapy, electronic stimulation of the brain, and such surgical interventions as castration for sex offenders and psychosurgery. It is likely that courts would find the coercive application of these techniques to violate the constitutional rights of offenders.

Virtually all prison rehabilitative programs using medication have involved the use of psychotropic drugs—compounds affecting the mind, behavior, intellectual functions, perception, moods, and emotions (Longo 1972, p. 182). The coercive and, at times, punitive use of these drugs in prison and other settings has been documented in the literature (Bomstein 1975; Mitford 1973, p. 129; Opton 1974; Rundle 1972; Sitnick 1975), congressional studies (U.S. Congress 1974), and cases (*U.S. ex rel. Wilson v. Coughlin* 1973, *Nelson v. Heyne* 1972).

Besides intruding directly on mental processes, these drugs are frequently accompanied by toxic reactions and adverse side effects. These include autonomic reactions, disorders of the extrapyramidal motor system (including tardive dyskinesia, a persistent neurological syndrome for which there is no known effective treatment), hypersensitivity reactions, reported cases of sudden death, sedation, convulsions, metabolic and endocrinologic changes, and a variety of behavioral effects (Winick 1977, p. 782).

In cases involving mental patients, a number of federal courts have recognized the constitutional right of competent patients to refuse psy-

chotropic medication. These cases have been based on the First Amendment right to freedom of speech and association (*Scott v. Plante* 1976; *Rogers v. Okin* 1979; *contra*, *Rennie v. Klein* 1978); constitutional privacy (*Scott v. Plante* 1976, p. 946; *Rennie v. Klein* 1978, p. 1144; *Rogers v. Okin* 1979); procedural due process (*Scott v. Plante* 1976); and the First Amendment right to free exercise of religion (*Winters v. Miller* 1971, *In re Boyd* 1979, *Dyer v. Brooks* 1976). Other courts have found involuntary administration of psychotropic drugs to violate the Eighth Amendment ban on cruel and unusual punishment (*Souder v. McGuire* 1976, *Welch v. Likins* 1974, *Nelson v. Heyne* 1972), although the Eighth Amendment approach may not apply in correctional treatment programs where the purpose of drug administration is found to be "treatment" as opposed to discipline or punishment (see *Bell v. Wolfish* 1979).

Coercive administration of electroconvulsive therapy in prison and community programs would certainly raise serious constitutional issues. The technique is hazardous, extremely intrusive both physically and mentally, and incapable of being resisted by unwilling subjects. Moreover, its side effects are extremely distressing and, at least in some cases, it impairs memory in a way that may be irreversible. A number of cases contesting the involuntary use of electroconvulsive therapy on mental patients have either banned its administration without informed consent or prescribed limitations and procedures governing its use (*Bell v. Wayne County General Hospital* 1974, *Price v. Sheppard* 1976, *Doe v. Klein* 1977, *New York City Health & Hosp. Corp v. Stein* 1972).

Treatment approaches employing direct surgical intervention—electronic stimulation of the brain, psychosurgery, and castration for sex offenders, for example—rank highest on the continuum of intrusiveness. Although rarely applied in prisons or alternative settings, these techniques, if performed without the informed consent of the offender, would clearly raise serious constitutional difficulties.

THE GOVERNMENT'S INTEREST IN REHABILITATION

Constitutional rights are not absolute. In appropriate circumstances, the government's interest may be sufficiently important to justify intrusions on individual liberties. In *Jacobson v. Massachusetts* (1905), for example, the Supreme Court upheld a state program of compulsory vaccination to prevent epidemics over a petitioner's due process claim that such a requirement was "hostile to the inherent right of every freeman to care for his own body and health in such a way as to him seems best" (p. 26). Even fundamental constitutional rights must yield to state regulation advancing a "compelling state interest" (*Roe v. Wade* 1973, p. 155).

Judicial scrutiny of governmental action that invades constitutional

rights inevitably involves the courts in balancing the nature of the individual liberty affected against the importance of the government's interest. To justify infringement of constitutionally protected interests, the government's purpose must be found to be at least "legitimate," and in the case of "fundamental" constitutionally protected interests, the government's purpose must be "compelling." Since the constitutional rights infringed by at least the more intrusive therapies may be characterized as fundamental, governmental imposition of these therapies on nonconsenting offenders will be strictly scrutinized. To justify their imposition, courts will insist that the governmental interest to be accomplished be a compelling one. Although thus far, no court has found a governmental purpose sufficiently compelling to justify imposition of a treatment technique found to intrude on fundamental rights (Friedman 1975, p. 72), it is not inconceivable that imposition of such treatments on prisoners or offenders to accomplish correctional goals would be upheld.

Legitimate governmental purposes that might be relevant to the inquiry can usefully be divided into two categories: (1) police power purposes—those protecting the public health, safety, welfare, or morals and (2) the *parens patriae* purpose—governmental decision making in the best interest of persons who by reason of age or disability are incapable of making such decisions for themselves (Friedman 1975, p. 72; *Harvard Law Review* 1974, pp. 1208-1209). The government's interest in rehabilitating offenders, expressly asserted in the typical statutory delegation of authority to correctional agencies (e.g., 18 USC Sec. 4001 (b) (2), 1976; American Law Institute Model Penal Code (1962), Sec. 401.2(2) (b)), seems to partake of both purposes. Surely rehabilitation designed to prevent future criminal conduct serves important police power purposes. The government's *parens patriae* power is less clearly applicable, however. Although correctional authorities may attempt to justify rehabilitative programs as being in the best interests of the offenders involved, our constitutional heritage rebels at governmental paternalism where the individual is himself able to decide his own best interests (see *Harvard Law Review* 1974, pp. 1212-1219; *Winters v. Miller* 1971; *Lynch v. Baxley* 1974; *Lessard v. Schmidt* 1972). With the exception of offenders who are rendered incompetent as a result of mental illness, involuntary imposition of correctional rehabilitation that impinges on fundamental constitutional rights should not be held justified solely on the basis of the government's assertion of the *parens patriae* power. Because correctional treatment also furthers the government's police power interest, however, an interest long considered compelling (e.g., *Jacobson v. Massachusetts* 1905), the government's interest in rehabilitation might be considered sufficient to outweigh the offender's constitutional right to object.

This conclusion is buttressed by the approach taken by the Supreme

Court in a number of cases involving prisoners complaining of violations of constitutional rights. In these cases, the Court has said that prison practices asserted to violate fundamental constitutional rights, including the First Amendment, must further "an important or substantial governmental interest" (*Procunier v. Martinez* 1974, p. 413; *Pell v. Procunier* 1974). In discussing the "legitimate penal objectives" relevant in assessing the constitutionality of challenged prison practices, the Supreme Court has noted that a "paramount objective of the corrections system is the rehabilitation of those committed to its custody" (*Pell v. Procunier* 1974, p. 823). The mere assertion of an interest in rehabilitation will not, however, suffice. In *Procunier v. Martinez* (1974), the state had attempted to justify censorship of statements in prison mail that "magnify grievances" or "unduly complain" as in "furtherance of inmate rehabilitation." Scrutinizing this assertion, the Court, noting that the state did not "specify what contribution the suppression of complaints makes to the rehabilitation of criminals," found the state's justification wanting (p. 416).

It can therefore be concluded that the government's interest in rehabilitation in furtherance of the police power purpose of protecting community safety will be regarded as a compelling one. This in itself, however, will not justify imposition of nonconsensual treatments invading fundamental rights. First, the proposed treatment will be scrutinized to see whether the government's interest in rehabilitation will be furthered thereby. If the weight of professional opinion regards the proposed treatment as ineffective, for example, the courts may well reject the asserted justification for its imposition. Second, even if professional opinion regards the proposed treatment as generally efficacious, the courts may prohibit it if alternative treatment approaches capable of achieving the result exist that are less intrusive on constitutional rights than the one proposed.

SCRUTINY OF THE MEANS CHOSEN TO ACCOMPLISH THE GOVERNMENT'S INTEREST

Under the Constitution, judicial scrutiny of governmental interference with constitutionally protected rights requires consideration not only of the legitimacy of the government's purpose but also of the reasonableness of the means chosen to promote that purpose. The means chosen must at least be rationally related to achievement of the government's legitimate interest. And if governmental action interferes with fundamental constitutional rights, the means chosen must be generally necessary to achieve a compelling governmental interest. Thus, if alternative, less intrusive means exist that would accomplish the government's interest, the government must choose the "less drastic means" or "least restrictive alternative" (*Dunn v. Blumstein* 1972, *Shelton v. Tucker* 1960).

The doctrine of the least restrictive alternative has been applied in the context of civil commitment of the mentally ill, requiring that an individual meeting the statutory standards for civil commitment nevertheless not be hospitalized if less restrictive alternative placements are suitable (*Covington v. Harris* 1969; *Lake v. Cameron* 1966; see also *O'Conner v. Donaldson* 1975, *Chambers* 1972). Moreover, in several recent cases the doctrine has been applied in the context of mental patients seeking to refuse a particular therapy, the courts requiring consideration of less intrusive therapies before a more intrusive one may be imposed (*Romeo v. Youngberg* 1980, *Rogers v. Okin* 1980, *Rennie v. Klein* 1978, *In re Boyd* 1979, *Price v. Sheppard* 1976).

The principle has also been applied in the correctional context, although the Supreme Court seems more deferential in scrutinizing the means chosen by prison authorities to accomplish legitimate correctional goals, particularly in matters of institutional security (*Bell v. Wolfish* 1979, *Pell v. Procunier* 1974, *Procunier v. Martinez* 1974). Unlike the security regulations involved in these prison cases, however, which are best characterized as incidental restrictions on First Amendment expression, the more intrusive correctional therapies result in direct, severe invasions of bodily privacy and impede the very capacity to generate ideas. Moreover, prison restrictions justified by reference to "security considerations . . . paramount in the administration of the prison" (*Pell v. Procunier* 1974, p. 827) are entitled to considerably more deference than is the correctional choice of a rehabilitative technique in furtherance of the significant but somewhat less paramount governmental interest in rehabilitation.

It therefore seems likely that the least restrictive alternative principle will be held to apply to correctional choices of rehabilitative techniques intruding on fundamental rights and that these choices will be subjected to strict scrutiny by the courts. Under the least restrictive principle, the government's attempt to impose one of the more intrusive organic therapies should not be permitted if less intrusive techniques have not already been tried and found unsuccessful. As a result, an offender should be able to contend that verbal techniques, for example, be attempted before the government may impose the somewhat more intrusive behavioral techniques, and that behavioral techniques be attempted before the imposition of organic therapy. For purposes of applying this analysis, the proposed continuum of coerciveness, although admittedly somewhat oversimplified, may be used.

Moreover, an offender presented with the choice of incarceration or one of the intrusive rehabilitative therapies, if he would prefer incarceration, may argue that the least restrictive alternative principle protects his right to refuse the proposed therapy. And this argument can be made as well by

the incarcerated prisoner who would prefer continued incarceration to participation in a treatment program using intrusive techniques. Such incarceration would fully achieve the government's police power interest in rehabilitating offenders to protect community safety, the only government interest in rehabilitation that, for competent offenders, should be considered compelling (see Friedman 1975, p. 73; Shapiro 1974, pp. 299-300). Nor would the government's interest in saving money—assuming therapy would effectuate earlier release and would thus be less expensive than continued incarceration—be considered sufficiently compelling to justify imposition of intrusive treatments that infringe fundamental constitutional rights (see *Shapiro v. Thompson* 1969, *Rhem v. Malcolm* 1974, *Gates v. Collier* 1974, *Nolan v. Fitzpatrick* 1971).

WAIVER OF THE RIGHT TO REFUSE TREATMENT—THE REQUIREMENT OF INFORMED CONSENT

Even though an offender may possess a constitutional right to refuse to participate in correctional rehabilitative programs employing intrusive techniques, he or she may elect to waive this right. The Supreme Court has long recognized that in appropriate circumstances constitutional rights may be waived (e.g., *Brady v. United States* 1970; *D. H. Overmyer Co., Inc., v. Frick* 1972). The elements of constitutional waiver closely parallel the elements of the informed consent doctrine. In the Belmont Report (National Commission 1978a, p. 10), the National Commission noted that "there is widespread agreement that the consent process can be analyzed as containing three elements: information, comprehension, and voluntariness." Similarly, the HHS regulations on the protection of human subjects define informed consent as "the knowing consent of an individual or his legally authorized representative, so situated as to be able to exercise free power of choice without undue inducement of any element of force, fraud, deceit, duress, or other form of constraint or coercion" (45 CFR Sec. 46.103(c), 1979).

Thus an offender receiving sufficient information concerning the possible dangers and risks of a proposed therapeutic intervention, as well as concerning alternative possibilities, who possesses sufficient competence and intelligence to comprehend the information provided, may, if sufficiently free of coercion and undue influence, make a voluntary choice to participate in the proposed therapy. A detailed analysis of the various elements of informed consent is beyond the scope of this article. The details may vary from state to state, depending on differing statutory, regulatory, and case law approaches, but however they are treated, it would seem that

offenders or prisoners who are given a choice to participate in therapeutic programs that they may constitutionally refuse would be able to meet the requirements for informed consent and thereby waive their constitutional rights.

Some, however, have voiced concern that prisons are total institutions that by their very purpose and character make a sufficiently free consent to research or treatment impossible (American Correctional Association 1976; Branson 1977, p. 17; Swan 1976, p. 15-13). And one significant judicial opinion, considering the impact of institutionalization, as well as the prospect of release if consent is given, on the ability of involuntarily confined mental patients to give a truly voluntary consent, held that such patients are unable as a matter of law to consent to experimental psychosurgery (*Kaimowitz v. Michigan Department of Mental Health* 1973, pp. 913-915). The *Kaimowitz* court's approach would certainly seem applicable to prisoners, and perhaps to those consenting to alternative programs, and the opinion has been cited to support the claim that a prisoner, by the very fact of his or her confinement, is unable to give a constitutionally adequate informed consent, even to accepted procedures (National Prison Project 1979, p. 420).

Although on the facts of *Kaimowitz*, which deals with experimental psychosurgery, the court may have reached the right result (see Burt 1975), its reasoning is unsatisfactory and the potential breadth of its holding concerning the effects of institutionalization on the ability to give informed consent could give rise to absurd and constitutionally dubious results. Surely, institutionalization may substantially diminish the ability of some prisoners freely to decide on therapy. And doubtless the lure of release or of avoiding incarceration may be so potent that for at least some offenders refusal to consent is virtually impossible. But these factors should not, in principle, preclude all prisoners and offenders from being considered capable of making these decisions voluntarily. If institutionalization *per se* so diminishes decision-making abilities that the prisoner is incompetent to elect psychosurgery, why should he or she be considered competent to make other important decisions—to participate in prison educational or vocational programs, to have elective surgery or other medical treatment when needed, to choose particular work assignments that may be more hazardous than others, or to agree to accept certain conditions of parole? Moreover, if the prospect of release renders the confined individual incompetent as a matter of law to elect psychosurgery, why is the prisoner not also rendered incompetent to elect a variety of prison programs that are likely to result in his earlier release?

Moreover, the approach of *Kaimowitz* seems unduly paternalistic. An offender who genuinely desires to participate in a therapy program could,

under this approach, be considered legally unable to do so. To deny an offender access to a particular therapeutic program that he voluntarily and competently elects may have the effect of mandating additional confinement and may violate, as well, the constitutional right of privacy, which in certain circumstances protects from governmental interference personal health decisions made by an individual in consultation with his physician (see *Aden v. Younger* 1976; Wexler 1974, pp. 681-686).

For these and other reasons the broad approach of *Kaimowitz* has been roundly criticized by the commentators and at least implicitly rejected by a number of subsequent cases (see National Commission 1977a, pp. 19-22; Murphy 1975; Singer 1977; Wexler 1974, pp. 677-681). It seems likely that courts will be inclined to uphold the validity of consent to therapy in prison or in community programs, at least where the offender has not been subjected to improper threats or promises to induce his or her consent, where the conditions of confinement the offender is permitted to avoid thereby are not constitutionally unacceptable, and where a sufficient procedure exists, perhaps including the assistance of counsel or a counsel-substitute, to assure that the offender's consent is sufficiently knowledgeable, competent, and voluntary (see *Knecht v. Gillman* 1973). In fact, after carefully scrutinizing the voluntariness of consent and the adequacy of the process for assuring it, one court has even held that informed consent may be valid where the conditions of confinement thereby avoided are unconstitutional (*Bailey v. Lally* 1979).

Although the elements of informed consent may differ somewhat from jurisdiction to jurisdiction, as will the procedures required to assure the adequacy of consent, it can be concluded that prisoners and offenders should, at least in principle, be considered legally able to consent to therapeutic programs, even those involving sufficient intrusions to give rise to a constitutional right to refuse. Whether a particular offender's consent to therapy is sufficiently voluntary to be constitutionally acceptable will depend on a consideration of the relevant circumstances. And increasingly the law will require some process to assure the adequacy of consent, frequently involving, as do the HHS regulations, the use of institutional review boards or similar administrative mechanisms.

PROCEDURAL DUE PROCESS AND CORRECTIONAL THERAPIES

The requirements of procedural due process may come into play even for those correctional treatment programs in which, under the constitutional analysis sketched earlier, an offender may be required to participate. For

at least some of the correctional therapies sought to be imposed on unwilling subjects, the procedural due process requirement of the Fifth and Fourteenth Amendments will necessitate some process, perhaps including a hearing, prior to their imposition.

LIBERTY AND PROPERTY INTERESTS

The Fifth Amendment prohibits the federal government, and the Fourteenth Amendment prohibits any state, from depriving a person of life, liberty, or property without due process of law. When these constitutional provisions apply, the courts have required notice and some kind of hearing, typically before the protected interest may be interfered with (Friendly 1975). The Supreme Court has repeatedly rejected the notion that any grievous loss visited upon a person by the government is sufficient to invoke the procedural protections of the due process clause (e.g., *Meachum v. Fano* 1976). Rather, the determining factor is the nature of the interest involved—whether it may be classified as “liberty” or “property” (*Greenholtz v. Inmates of Nebraska Penal and Correctional Complex* 1979, p. 7; *Meachum v. Fano* 1976, p. 224).

Although the Supreme Court has applied the protections of procedural due process to prisoners, holding, for example, that notice and a hearing are required prior to the forfeiture of accumulated good-time credit or imposition of solitary confinement as sanctions in prison disciplinary proceedings (*Wolff v. McDonnell* 1974), the Court has recognized that a valid conviction extinguishes many of the liberties otherwise protected by the Constitution. For example, in *Meachum v. Fano* (1976), the Supreme Court held that no due process protections were required upon the discretionary transfer of state prisoners to a less agreeable prison, even though this resulted in a change in the conditions of confinement having a substantial adverse impact on the prisoners involved. Finding that state law conferred no right to be placed in any particular prison or to remain in a prison to which the prisoner was initially assigned, the Court held that “conviction had sufficiently extinguished the defendant’s liberty interest to empower the State to confine him in any of its prisons. . . . Confinement in any of the State’s institutions is within the normal limits or range of custody which the conviction has authorized the State to impose” (pp. 224–225). The Court applied the same approach in *Greenholtz v. Inmates of Nebraska Penal and Correctional Complex* (1979), holding that, absent state law giving rise to a legitimate expectancy of release on parole if certain conditions are met, the decision of a parole board whether to release a prisoner did not implicate a constitutionally protected liberty interest. The Court could find “no constitutional or inherent right of a convicted person

to be conditionally released before the expiration of a valid sentence" (p. 7). As in *Meachum*, "[g]iven a valid conviction, the criminal defendant has been constitutionally deprived of his liberty" (p. 7).

The approach taken in *Meachum* and *Greenholtz* was not applied, however, where a prisoner was sought to be transferred not to another prison but to a state mental hospital. In *Vitek v. Jones* (1980), the Supreme Court found a liberty interest grounded in an "objective expectation, firmly fixed in state law and official Penal Complex practice," that such a transfer would not occur unless the prisoner suffered from a mental disease or defect that could not be adequately treated in the prison (p. 489). Moreover, the Court found that even absent a liberty interest created by state law, the proposed transfer infringed upon a constitutionally protected liberty interest in view of the stigma accompanying placement in a mental hospital and the requirement that prisoners participate in behavior modification programs (pp. 491-494). Finding these consequences "qualitatively different from the punishment characteristically suffered by a person convicted of crime" (p. 493), the Court noted that although conviction and sentencing extinguish the prisoner's right to freedom from confinement for the term of the sentence, "they do not authorize the State to classify him as mentally ill and to subject him to involuntary psychiatric treatment without affording him additional due process protection" (p. 494).

Thus, at least where state law does not give rise to a property or liberty interest in resisting treatment, the question of whether due process applies to coercive rehabilitation will turn on whether the treatment infringes a liberty interest protected by the Constitution, and whether it "is within the normal limits or range of custody which the conviction has authorized the state to impose" (*Meachum v. Fano* 1976, p. 225). Prior Supreme Court decisions indicate that mental hospitalization exceeds these limits but transfer to another correctional facility does not. The "normal range of custody" approach suggests that the imposition of traditional correctional treatments, either within the prison or in alternative settings (so long as they are not at mental hospitals or similarly stigmatizing facilities), will not be found to invade a constitutionally protected liberty interest. Counseling programs, vocational and educational programs, and other programs employing verbal techniques in which prisoners or offenders are ordered to participate, although they certainly interfere with the offender's freedom to do other things, probably will not require a due process hearing. At least where state law fails to provide a right not to participate in such programs, the defendant's conviction will probably be seen as extinguishing his or her liberty to the extent that such traditional and nonstigmatizing correctional rehabilitative programs may be imposed.

These programs would seem to be "within the normal limits or range of custody which the conviction has authorized the State to impose"

(*Meachum v. Fano* 1976, p. 225). The "normal limits or range of custody" that convicted defendants may be subjected to without additional due process protections would seem to be defined by the typical correctional or parole statute, which usually contemplates rehabilitation as a goal of incarceration or alternative sentence (e.g., 18 USC Sec. 4081 *et seq.*, 1976; also see *Moody v. Daggett* 1976, p. 88, footnote 9; *Thogmartin v. Moseley* 1969, p. 159) or provides that community treatment may be made a condition of parole (e.g., Parole Commission and Reorganization Act 1976).

The Supreme Court's predictable reluctance to burden traditional correctional rehabilitation with formal due process hearings might, however, be overcome when techniques more intrusive than the verbal approaches are imposed. Behavioral and organic approaches, still unconventional and controversial in correctional settings, do not seem "within the normal limits or range of custody." Certainly, any of the organic techniques, which by definition involve bodily intrusions, as well as aversive conditioning techniques involving physically intrusive stimulæ, would invade constitutionally protected liberty, requiring a hearing even if the government interests furthered by therapy were deemed sufficiently compelling to justify such intrusions (see *Vitek v. Jones* 1980; *Rennie v. Klein* 1978, 1979; *Harmon v. McNutt* 1978; cf. *Ingraham v. Wright* 1977).

THE NATURE OF THE HEARING REQUIRED

When liberty or property interests are found to be implicated by imposed correctional therapy, some kind of hearing will be required. However, the hearing required may not always be the formal adversary judicial model for fact-finding mandated for criminal conviction (*Parham v. J. R.* 1979, pp. 606-613). In determining what process is due in a particular situation, the Supreme Court has engaged in a broad balancing approach, considering three distinct factors: "First, the private interest that will be affected by the official action; second, the risk of an erroneous deprivation of such interest through the procedures used, and the probable value, if any of additional or substitute procedural safeguards; and finally, the Government's interest, including the function involved and the fiscal and administrative burdens that the additional or substitute procedural requirement would entail" (*Mathews v. Eldridge* 1976, p. 335; see also *Mashaw* 1976). In balancing these factors, the Court has displayed an increased willingness to permit informal procedures that depart substantially from the trial-type hearing traditionally associated with due process (e.g., *Parham v. J. R.* 1979; *Board of Curators v. Horowitz* 1978; *Ingraham v. Wright* 1977; *Goss v. Lopez* 1975; see also *Tribe* 1978, pp. 539-554; *Verkuil* 1976, pp. 739-742.)

Given the predictive, subjective, and clinical nature of the judgments

involved in assigning offenders to therapeutic programs, and in view of the disinclination of the Supreme Court to extend the procedural protection of the due process clause in a way that would "subject to judicial review a wide spectrum of discretionary actions that traditionally have been the business of prison administrators rather than of the federal courts" (*Meachum v. Fano* 1976, p. 225), it is likely that the courts will find that informal and flexible procedures, rather than adversarial trial-type hearings, are generally sufficient (cf. *Rennie v. Klein* 1979, pp. 1307-1310). The more controversial and intrusive the technique, however, the more likely the courts will be to insist on more formal procedures, perhaps including a formal judicial hearing (e.g., *Price v. Sheppard* 1976 (psycho-surgery)).

The Supreme Court's recent decision in *Vitek v. Jones* (1980) reveals some procedural safeguards that might be followed for moderately to highly intrusive programs. In *Vitek*, the Court upheld a district court decision which required that before a prisoner could be transferred to a mental hospital, written notice that such a transfer was being considered must be provided and an administrative hearing before an independent decision maker must be held (pp. 494-496). A sufficient period of time must be allowed between the notice and hearing to permit the prisoner to prepare adequately (p. 494). At the hearing, evidence relied upon to support the transfer must be disclosed to the prisoner, and he or she generally must be afforded an opportunity to confront and cross-examine state witnesses and to present documentary evidence and testimony of witnesses (pp. 494-495). Assistance by a qualified and independent advisor—a licensed psychiatrist or other mental health professional—must also be provided (pp. 497-500). Finally, the independent decision maker must prepare a written statement of the evidence relied upon and of the reasons for the transfer (pp. 494-495).

Although less formality may be required when the therapeutic intervention involves psychotropic drugs or behavioral techniques administered in a setting less stigmatizing than the mental hospital in *Vitek*, it is clear that an informal administrative determination by an independent decision maker is a minimum requirement before such techniques may be imposed. For intrusions falling on the lower end of the continuum of intrusiveness but still triggering due process protection, the courts will probably be willing to accept managerial models in which correctional decisions are subjected to administrative or clinical review either by a higher-level correctional official or by a neutral and independent evaluator (cf. *Parham v. J. R.* 1979, pp. 616-617). Certainly, the administrative review provided by the typical institutional review board, frequently involving participation by prisoners and noninstitutional personnel, would meet due process requirements for these less intrusive techniques.

It can thus be concluded that although a hearing probably will not be required prior to the imposition of traditional verbal rehabilitative approaches, some kind of hearing probably will be required for the less conventional and more intrusive techniques. In such cases, where the offender objects to therapy, the hearing will consider the efficacy of the proposed approach, and for those therapies intruding on fundamental constitutional rights, whether there are less drastic alternative therapies that would accomplish the government's interest (see *Rennie v. Klein* 1978, p. 1148). For offenders consenting to therapy, a due process hearing will probably not be required, but for highly intrusive techniques resulting in substantial deprivations of fundamental rights, courts may insist on a hearing to assure the adequacy and voluntariness of consent (see, e.g., *Knecht v. Gillman* 1973). The nature of the hearing required in each case will vary substantially, depending on the extent to which the proposed therapy intrudes on protected constitutional rights and the court's evaluation of the usefulness of requiring different procedural safeguards and the costs of their imposition. Moreover, the amount of procedure will probably change over time as professional and community attitudes toward the various therapeutic interventions themselves change and as the risks and benefits of each become better understood.

CONSTITUTIONAL LIMITS ON CORRECTIONAL RESEARCH

SUBSTANTIVE CONSTITUTIONAL OBJECTIONS

In correctional contexts the words "experimentation" and "research" evoke considerable controversy and the specter of Nuremberg, particularly when the subjects are used involuntarily (see, generally, Katz 1972, pp. 1013-1052; National Commission 1976b). Indeed, recent cases have had a chilling effect on correctional research—almost no research is presently being conducted in correctional settings in this country (Halleck 1979, pp. 30-31). Although concern with prison experimentation is certainly legitimate, the categorical response it has evoked in some discussions and proposals (e.g., American Bar Association 1977, pp. 487-490) as well as in some statutory treatments (e.g., Ore. Rev. Stats. Sec. 421.085, 1973; Calif. Penal Code Sec. 3500 *et seq.*, 1979) seems inappropriate. After all, as Justice Holmes has reminded us in another context, "all life is an experiment" (*Abrams v. United States* 1919, p. 616). Instead of treating all types of experimentation or research alike, or for that matter attaching blanket legal consequences to particular categories of research, analysis in this area should focus on the effects of the specific research in question, however categorized.

Whether an offender may raise a substantive constitutional objection to participation in correctional research should therefore turn upon the effects of such research on the subject. The analysis proposed parallels that developed in the discussion of the offender's constitutional right to resist correctional therapy. A continuum of intrusiveness similar to the one constructed for the various rehabilitative techniques may be useful for the classification of different types of correctional research. As with the discussion of therapy, the focus should be placed on the extent of any physical or mental intrusion accompanying the proposed research; the nature, extent, and duration of its effects; and the extent to which these effects may be avoided or resisted by unwilling subjects. Research that seriously invades bodily privacy would therefore seem to implicate the constitutional right of privacy previously discussed. Research that interferes with mental processes would similarly be seen as violating the First Amendment. In both cases, strict judicial scrutiny of the governmental interests furthered by such research as well as of the means used to accomplish these interests would seem appropriate. On the other hand, experimentation involving neither physical intrusions nor interference with mental processes, such as, for example, survey research, would seem not to invade fundamental constitutional rights. Using the framework for analysis developed with respect to correctional therapy, such research would be treated in the same manner as the verbal rehabilitative approaches.

Certain types of research, however, present issues not dealt with in the analysis of correctional therapy. Research involving observation of offenders or collection of information concerning them, including physical, psychiatric, psychological, and neurological examinations as well as electroencephalographic and other physiological testing and measurement, although it invades the privacy of the research subject, is not likely to trigger the strict judicial scrutiny reserved for impairments of fundamental rights. Even though courts have recognized that constitutional privacy includes "the individual interest in avoiding disclosure of personal matters" (*Whalen v. Roe* 1977, p. 599), they have declined to subject interference with informational privacy to strict constitutional scrutiny. Rather, they seem to apply a form of intermediate scrutiny, requiring a balancing of governmental and individual interests and reasonable safeguards against unnecessary invasions of privacy (*Whalen v. Roe* 1977, p. 605; *Nixon v. Administrator of General Services* 1977, pp. 452-454; *Planned Parenthood v. Danforth* 1976, pp. 79-81; *Plante v. Gonzalez* 1978, pp. 1132-1134).

Judged by this standard, correctional research designed to accumulate knowledge concerning the causes of criminality or the efficacy of various correctional therapies or programs will probably be considered sufficiently

important to justify reasonable intrusions on privacy resulting from collection of information concerning offenders. As the collection and publication of this information in scientific studies will probably not involve disclosure of identifying information concerning particular offenders, these kinds of studies would seem constitutionally unobjectionable. Such research may even be upheld where some public disclosure of individual information concerning offenders is essential (see *Commonwealth v. Wiseman* 1969). Moreover, even collection of data involving minimal touching or invasion of bodily privacy, including the performance of physical, neurological, and physiological examinations and measurements that are not seriously intrusive, would seem permissible, at least where the research program is deemed sufficiently important, where the data may not easily be obtained elsewhere or on a voluntary basis, and where minimally intrusive procedures are used (*Schmerber v. California* 1966, cf. *Jacobson v. Massachusetts* 1905, *United States v. Crowder* 1976; see Tribe 1978, pp. 914-915).

When research passes a certain threshold of intrusiveness, however, strict scrutiny, requiring both a compelling governmental interest and the use of less drastic means, will be applied. The government's interest in correctional research would certainly be considered legitimate and probably would meet the "compelling state interest" test as well. In a number of contexts the Supreme Court has displayed sensitivity to the societal need for research and experimentation in the formulation of social policy (e.g., *New State Ice Co. v. Liebmann* 1932, p. 311; *Whalen v. Roe* 1977, p. 597). Since the government has a compelling interest in protecting community safety, it seems likely that research designed to identify causes of criminality, as well as research into new correctional treatment methods or the efficacy of existing methods, would similarly be seen as compelling.

Substantive constitutional objections to correctional research will be decided largely by means of judicial balancing of the competing governmental and individual interests involved in the particular case (see Capron 1975, p. 155). The more drastic the intrusion on individual rights, the more significant must be the government's interest to justify overriding it. In balancing these competing interests, the government's interest in correctional research will be accorded greater judicial deference if the legislature clearly asserts this interest in its statutory delegation of authority to the correctional agency. Where legislation creating correctional agencies fails either explicitly or implicitly to authorize research or experimentation, the courts will be less inclined to subordinate individual rights to the goal of correctional research. In fact, faced with correctional research that invades constitutional rights, the courts may well find the typically general legislative delegation to correctional agencies to "have charge

of the management and regulation" of the prisons (e.g., 18 USC Sec. 4042(1), 1976) to be insufficient to support the agency's assertion of authority to conduct such research (see Freedman 1978, pp. 83-85; *Kent v. Dulles* 1958).

Even if the governmental interest asserted is found to be compelling, the courts will also scrutinize the means used to accomplish its compelling ends, requiring, for research invading fundamental rights, that the least restrictive alternative be used. Thus, if the goal of a particular research project can be accomplished through means that intrude less on protected liberties than the means proposed by correctional authorities, courts will uphold the offender's refusal to participate. Moreover, if the research involved can be performed by using noncorrectional populations, or volunteer prisoners, then research invading fundamental rights will not be permitted with nonconsenting offenders. And, in considering challenges to such research, courts may also insist on proof of the experiment's scientific validity (Capron 1975, p. 152; see Rutstein 1969).

Of course, even for intrusive research impinging on fundamental constitutional rights, as with intrusive therapy, an offender may waive his or her constitutional right to refuse to participate by providing informed consent. As with the previous discussion of informed consent to correctional therapy, neither the fact of incarceration *per se* nor the prospect or promise of release or avoidance of incarceration in exchange for participation will necessarily render informed consent impossible (see *Bailey v. Lally* 1979, Singer 1977).

PROCEDURAL DUE PROCESS REQUIREMENTS

Even for those types of correctional research found to be constitutionally permissible without informed consent, procedural due process may require notice and some kind of hearing prior to their imposition. The general framework for applying procedural due process to correctional therapy developed earlier will apply as well to correctional research. Although for correctional therapy, it is likely that, under *Meachum v. Fano* (1976), the offender's conviction will probably be seen as extinguishing his liberty at least to the extent that traditional correctional rehabilitative programs may be imposed, the analysis may well differ for correctional research. Although verbal rehabilitative programs may be "within the normal limits or range of custody which the conviction has authorized the State to impose" (*Meachum v. Fano* 1976, p. 225), the normal range of custody would seem not to include forced participation in correctional research. The typical statutory delegation of authority to correctional agencies, although authorizing correctional treatment either expressly or by implication, does

not empower such agencies to perform nonconsensual research or experimentation. Thus most forms of involuntary correctional research would seem to invade constitutional liberty, requiring some kind of hearing before they may be imposed.

In such cases, informal procedures—involving administrative or clinical review of the research protocol and of the selection of particular offenders for participation—will be permitted, at least for research that is not highly intrusive. The review provided by the typical institutional review board, as mandated by the recent HHS regulations for biomedical and behavioral research involving prisoners, would seem generally sufficient. For highly intrusive research invading fundamental constitutional rights, assuming it to be substantively permissible, the hearing, more formal in nature than that required for typical correctional research, will strictly scrutinize the research protocol, considering whether there are less drastic means of conducting the proposed research as well as whether noncorrectional populations or consenting offenders may be used instead.

THE CONSTITUTION AND RESEARCH METHODOLOGY

Controlled experimentation requires the random assignment of subjects to experimental and control groups (Morris 1966, pp. 646-647; Zeisel 1970, pp. 475-477; Zimring 1974, pp. 235, 238-239). Random assignment by definition is discriminatory: "some people receive the experimental treatment while others are excluded from it, and either the treatment or its withholding may involve the risk of harm" (Zeisel 1970, p. 475). In correctional research, this difference in treatment has sometimes been thought to violate the Fourteenth Amendment guarantee of equal protection. However, if the proposed research is not otherwise constitutionally impermissible, random assignment of research subjects, with limited exceptions, should not be considered to violate equal protection.

The equal protection clause does not require that government treat all persons similarly situated alike or not at all. Rather, it imposes a burden on government to justify differential treatment as related to a legitimate governmental purpose. The degree of justification required will vary depending on the nature of the individual interest affected and whether the governmental action operates to the peculiar disadvantage of a "suspect" class, such as race, alienage, or national origin. Most classifications challenged on equal protection grounds will be subjected to minimum judicial scrutiny, requiring only that the classification bear a reasonable relation to a legitimate governmental purpose. A more searching standard will be applied in cases involving "suspect classifications" or affecting "fundamental rights." Random selection in correctional research, as it is not

based on membership in a class, whether suspect or otherwise, would generally be subject to minimum scrutiny. At least this is true for research not invading fundamental constitutional rights. As the acquisition of knowledge that serves as the goal for correctional research is surely a legitimate and perhaps even a compelling governmental interest (Teitelbaum 1979, pp. 12-22) and as "[t]he controlled experiment is an indispensable instrument in our search for knowledge" (Zeisel 1970, p. 475), the "rational basis" test should be easily met, and perhaps even strict scrutiny would be satisfied (see Breger 1979, pp. 9-11; Capron 1975, pp. 155-163).

A number of experiments involving random assignment or other selection criteria have been subjected to judicial challenge on equal protection grounds. In *Marshall v. United States* (1974), the Supreme Court considered whether Title II of the Narcotic Addict Rehabilitation Act of 1966 denied equal protection by excluding from discretionary rehabilitative commitment, in lieu of penal incarceration, addicts with two or more felony convictions. Although this "correctional experiment" did not employ random assignment, but rather made availability of the rehabilitative alternative conditional on the absence of two or more prior convictions, the Court's approach is illuminating. In upholding the statutory scheme, the Court noted that a convicted defendant possessed no fundamental right to rehabilitation from narcotics addiction at public expense and that there was no suspect classification under the statutory scheme (p. 421). The Court therefore applied the rational basis test (p. 422). Recognizing that the program was "fundamentally experimental in nature . . ." (p. 426), the Court held that (pp. 427-428):

When Congress undertakes to act in areas fraught with medical and scientific uncertainties, legislative options must be especially broad and courts should be cautious not to rewrite legislation, even assuming *arguendo*, that judges with more direct exposure to the problem might make wiser choices. Accordingly, it would have been a permissible choice for Congress to permit discretionary inclusion in NARA programs of those whose prior offenses were determined to be addiction related or motivated. . . . It should be recognized that the classification selected by Congress is not one which is directed "against" any individual or category of persons, but rather represents a policy choice in an experimental program made by that branch of Government vested with the power to make such choices.

Citing *Marshall*, two state courts have upheld against equal protection attack experimental projects under which those found guilty of driving under the influence of alcoholic beverages in certain districts would be subjected to suspension of their driver's licenses, while similarly charged defendants in other districts would be sent to an alcoholism treatment

program and not have their licenses suspended (*McGlothen v. Dept. of Motor Vehicles* 1977, *Healy v. Bristol* 1975).

These cases support the principle that government social experimentation involving the provision of a benefit to some but not all who are similarly situated, at least where the benefit is one to which there is no constitutional entitlement, will not offend equal protection as long as the selection criteria are rational. Geographic sampling clearly meets the test. Random assignment, since it is the preferred method of determining the effectiveness of a social program or testing social science research hypothesis (e.g., Campbell 1969, p. 426; Riecken and Boruch 1974, pp. 4-9, 52-55; Wortman and Rabinowitz 1979), should also meet the test.

In nonexperimental contexts involving allocation of scarce resources or government benefits, random allocation—as by lot—has been suggested as often the best or least objectionable method of allocation (Greely 1977). Where individual differences seem ethically irrelevant to the making of such choices, as in deciding which of many patients in need receives limited kidney dialysis treatment, randomization has been urged as the most ethical method of selection (Childress 1970; Freund 1969, p. xvii). One empirical study of candidates for an innovative educational program revealed that random assignment was perceived by the candidates as the fairest method of selection (Wortman and Rabinowitz 1979). Indeed, in contexts such as the allocation of low-rent public housing (*Holmes v. New York City Housing Authority* 1968), liquor licenses (*Hornsby v. Allen* 1964), and broadcasting licenses (*Star Television, Inc. v. FCC* 1969), courts have suggested that “in cases where many candidates are equally qualified . . . further selections be made in some reasonable manner such as ‘by lot . . .’” (*Holmes v. New York City Housing Authority* 1968, p. 265; *Hornsby v. Allen* 1964, pp. 609-610; see also Greely 1977).

Even in cases, both experimental and nonexperimental, involving governmental imposition of burdens, as opposed to benefits, random selection has been upheld. In *Aguayo v. Richardson* (1973), the court upheld against equal protection challenge an experimental project in which welfare recipients in selected social service districts were required to register for training and employment. The court, applying the rational basis test, found the government’s legitimate interest in whether and how improvements can be made in the welfare system to be “‘suitably furthered’ by controlled experiment, a method long used in medical science which has its application in the social sciences as well” (pp. 1109-1110). In nonexperimental contexts involving governmental imposition of burdens by lot, at least where alternative methods seem unavailable or more objectionable, equal protection challenges have been similarly denied. The draft lottery, for example, under which persons available for induction

into the armed services were chosen in order of birthdates selected by lottery, was upheld against equal protection challenge (*Stodolsky v. Hershey* 1969, *United States v. Batten* 1972, *United States v. Johnson* 1972, *United States v. Kotrlík* 1972). Grand and petit jury pools are chosen through random selection (28 USC Sec. 1863, 1976), which is thought to avoid the arbitrary exclusion from the jury of any particular class of persons (*United States v. Davis* 1977). Selection by lot has also long been thought appropriate in the desperate situation where shipwrecked lifeboat occupants run out of food (*United States v. Holmes* 1842, p. 367).

In these situations, where burdens must be imposed, random selection seems the fairest or least objectionable method. Where other methods seem more reasonable in the circumstances, however, or where our sense of justice requires individualized treatment, randomization will be found to be arbitrary. Surely any government attempt to exercise the taxing power by means of a lottery, however significant is the governmental interest in the treasury, would be found to violate equal protection. Random police stops of motor vehicles for purposes of checking the driver's license of the operator and the registration of the car, at least where the officer's discretion was unlimited, were recently held to violate the motorist's privacy interests protected by the Fourth Amendment prohibition on unreasonable search and seizure (*Delaware v. Prouse* 1979). And certainly criminal punishments must be imposed on an individualized basis, rather than by means of random selection. Death penalty laws that automatically impose capital punishment for conviction of certain crimes without considering individualized factors concerning the defendant have been found to violate the Eighth Amendment (*Roberts v. Louisiana* 1977, *Woodson v. North Carolina* 1976, see *Lockett v. Ohio* 1978), as have such laws that leave the life or death decision to the total discretion of the jury, allowing arbitrariness and discrimination in the application of the penalty (*Furman v. Georgia* 1972).

These cases, involving imposition of substantial burdens where more reasonable or equitable methods than randomization are available, may be distinguished from those involving allocation of benefits, such as the rehabilitative alternatives to prison or license suspension involved in *Marshall*, *Healy*, and *McGlothen*. The distinction recalls Norvall Morris's suggestion that correctional research may be permissible if performed in accordance with what he calls the principle of "less severity" (1966, pp. 648-649):

By . . . ["less severity"] I mean that the new treatment being studied should not be one that is regarded in the mind of the criminal subjected to it, or of the people imposing the new punishment, or of the community at large, as more severe than the traditional treatment against which it is being compared. To take a group of crimi-

nals who otherwise would be put on probation and to select some at random for institutional treatment would be unjust; conversely, to select at random a group who would otherwise be incarcerated and to treat them on probation or in a probation hostel would seem to be no abuse of human rights.

The death penalty cases and *Prouse* suggest some constitutional limits on the use of randomization in correctional research that burdens fundamental rights. In the case of sentencing decisions affecting liberty, surely one of the most fundamental values, randomization would seem constitutionally offensive if used to test more severe interventions than would normally occur. In any event, correctional research that invades fundamental constitutional rights, whether it involves sentencing or not, will be strictly scrutinized. If such research is otherwise constitutionally permissible, the government's interest in conducting it will have already been found to be sufficiently compelling to outweigh the individual's fundamental right. The constitutionality of random assignment in highly intrusive research will therefore turn on the necessity of controlled experimentation, as opposed to alternative research strategies where random assignment can be avoided or minimized (see Campbell 1969, pp. 419-420; Morris 1966, p. 646; Zeisel 1970, pp. 475-476; e.g., *Administrative Law Review Symposium* 1979), some of which may in some circumstances be equally feasible or only minimally less so.

Although in other contexts randomness may be the quintessence of the arbitrary, in the context of a controlled experiment it seems rational (Breger 1979, pp. 9-11; Capron 1975, pp. 160-163; Riecken 1979, pp. 2-7; Teitelbaum 1979, pp. 12-23). In research, "randomness has the advantage of being evenhanded and rationally related to the state's (and investigator's) interest in conducting a valid experiment" (Capron 1975, p. 163). In a well-designed correctional research study, the use of random selection should therefore be constitutionally permissible, at least where fundamental rights are not infringed and perhaps even where they are if other research designs would not be feasible.

CONCLUSION: ETHICAL AND PROFESSIONAL CONCERNS

As a system of control, the law obviously plays an important role in limiting the activities of those involved with offender rehabilitation and research. However, the law acts against a backdrop of ethical and professional controls that frequently operate much more directly and effectively on those involved (see Jaffe 1970, p. 205). Legal developments often come in response to exposed abuses and derive from sources—legislative, regulatory, and judicial—that necessarily lack the insight and expertise of

those in the field. As a result, the law is apt to proceed through generalized approaches that are likely to make correctional rehabilitators and investigators feel misunderstood. Professional and ethical controls are always to be preferred. This understanding, if not the threat of the coming legal controls that this article describes, should serve to motivate the various disciplines involved in correctional rehabilitation and research to put their own house in order before it is done for them.

Although much work needs to be done by the relevant professional disciplines, some beginnings have been made. Ethical and professional standards for the conduct of human experimentation in medical research have been adopted by a variety of organizations (e.g., Helsinki Declaration 1964, Nuremberg Code 1947, U.S. Department of Health, Education and Welfare 1974). Codes for the conduct of social and behavioral research have also been adopted (e.g., American Psychological Association 1973, American Psychological Association Board of Social and Ethical Responsibility for Psychology 1978). Moreover, a growing body of scholarly work deals with the ethical problems of medical, social, and behavioral experimentation involving human subjects (e.g., Bermant *et al.* 1978, Bloomberg and Wilkins 1977, Freund 1970, Fried 1974, Katz 1972, Nejelski 1976, Ramsey 1970, Rivlin and Timpone 1975), an area treated in great detail by the National Commission (1976a,b, 1977a,b, 1978a,b), whose *Research Involving Prisoners: Report and Recommendations* (1976a) is the most thorough discussion of these issues in the correctional context.

Ethical and professional standards governing the involuntary imposition of correctional rehabilitation have not as yet received widespread discussion. For example, although leading behavior therapists (e.g., Bandura 1975; Davison and Stuart 1975, p. 760) and professional organizations (Association for Advancement of Behavior Therapy 1977) consider a patient's informed consent to be an ethical prerequisite to treatment, the fairly routine violation of this principle in correctional settings has met with little in the way of professional condemnation or discussion. However, a body of scholarship concerning the ethical limitations on forced treatment has begun to emerge (e.g., Halleck 1974, Robinson 1974, Shapiro 1974, Task Panel on Legal and Ethical Issues of the President's Commission on Mental Health 1978). And consideration has been given to one of the most perplexing ethical problems affecting correctional treatment, that presented by the role of the correctional therapist as a "double agent" with loyalties both to his or her patient and to his or her governmental employer (e.g., American Psychological Association Board of Social and Ethical Responsibility for Psychology 1978; *Hasting Center Report* 1978; Monahan 1980; Rundle 1972; Shestack 1974; Task Panel on

Legal and Ethical Issues of the President's Commission on Mental Health 1978, pp. 1474-1476).

Even if the law does not prohibit some forms of involuntary correctional therapy or research, substantial ethical and policy questions remain. Our widely shared societal norms place great emphasis on the freedom, dignity, and autonomy of the individual, treating man as an end in himself, never (or almost never) to be sacrificed to the collective good. At the very least, these principles should place a strong ethical burden on those who would subject offenders to involuntary participation in treatment or research, and should remove decision making in these areas from the sole discretion of rehabilitators and investigators.

In the area of correctional rehabilitation, there is considerable irony in the fact that the constitutionality of coercive imposition of rehabilitative techniques turns to a large extent on the ability of the offender to avoid or resist unwanted effects. Thus, although the law may permit their involuntary imposition on unwilling offenders, the rehabilitative techniques in the lower end of the proposed continuum of intrusiveness will be ineffective absent the offender's voluntary cooperation and genuine desire for change. As a result, efficacy and ethical principles combine to favor a voluntary rather than a coercive approach to correctional rehabilitation (Morris 1974, p. 24). Although it may be appropriate to mandate a brief period of compulsory observation of a treatment program so that the offender's choice whether to participate will be more informed, and to attempt to persuade offenders that it is in their own best interests to participate in such programs, the choice should ultimately be a voluntary one, with the offender suffering no sanctions or loss of privileges as a result of his or her decision (Morris 1974, pp. 18-20).

In any event, ethical and professional concerns should be heightened when the subjects of rehabilitation or experimentation are as vulnerable and removed from public scrutiny as are prisoners within correctional settings or offenders diverted to the new community alternatives. In general, we should be no more willing to experiment with or coercively "rehabilitate" offenders than we are to do so with our fellow citizens.

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A Judicious Slap on the Wrist: Thoughts on Early Sanctions for Juvenile Offenders

MALCOLM W. KLEIN

INTRODUCTION

I have been asked to comment on the appropriateness of early sanctions for deterring juveniles from further delinquent behavior.¹ This is a subject that has not heretofore received much careful attention, surprising as this may seem. This paper attempts only to commit to writing some matters that should be considered in any endeavor to derive policy concerning the early sanctioning of juvenile offenders. Thus it does not consider such questions as what behaviors should be deterred, treated, or normalized; whether juveniles are competent enough to be handled as adults in the justice system; or whether the juvenile justice system should be legalistic or paternalistic. The charge, to comment on early sanctioning, is a narrow one.

Further, the paper does not provide an extensive literature search or a survey of the opinions of experts in the field.² Rather, it is merely a begin-

¹The focus here is on negative sanctions, not on the more general issues of intervention, broadly conceived.

²This paper has had the advantage of critical reading and suggestions from Margo Gordon, Margaret Little, Carol A. B. Warren, Herbert Quay, and Sarnoff Mednick.

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ning. I am convinced that a thorough and intensive exploration must be made of the available rationales for and against early sanctioning. Further, I would hope that such an exploration might be followed by some empirical tests of early sanctioning processes and effects.

The issue of early sanctioning seems important—and increasingly so in the current climate of delinquency legislation—for several reasons. First, an often overlooked consequence of current trends in legislation and programming may be a diminishing of deterrent effects. The well-established commitment to juvenile diversion programs nationwide, along with the federally initiated acceleration of deinstitutionalization, has effectively reduced the sanctioning functions of the juvenile justice system in favor of community-based treatment. While there is ample evidence that diversion and deinstitutionalization rationales have been poorly or inappropriately implemented (Klein 1979a), it is clear nonetheless that increasing numbers of juvenile offenders are being targeted for decreased levels of official sanctions. There is reason to suspect that as this trend becomes less a movement than a new normative standard, youngsters will learn (or be reminded), directly and by word of mouth, that official sanctions are relatively rare. Theoretically, this in turn should lead to even lower levels of both specific and general deterrence attributable to the formal mechanisms of the justice system.

Second, an accompanying trend in delinquency treatment is the greater conceptual and operational separation between minor and serious juvenile offenders. The new delinquency laws in California and Washington are explicit codifications of this trend; preliminary assessments of the impact of the California law (Teilmann and Klein 1980) reveal significant and occasionally unintended effects. More police time is going to investigate serious offenders; more serious offenders are being handled as adults; and, most dramatic of all, police handling of status offenders has decreased by as much as 50 percent without any increase in the use of alternative resources. If decreased sanctioning for minor offenses is not counterbalanced by alternative societal responses, the detriments of labeling may well be avoided, but perhaps at the expense of general deterrence and limits setting by society. The danger has not been demonstrated, but it would seem to be there nevertheless.

A third connected trend can also be discerned, and again it is one that may lead to decreased specific deterrence through sanctions for both serious and minor offenders. This is the trend toward increased legalism in the juvenile arena. One manifestation of the trend is the greater access of juveniles to the due process of law heretofore denied them in many ways. While many concerned persons applaud this development, it may

also be that juveniles will find the law a convenience for avoiding "deserved" sanctions; more may come to see delinquent acts as less serious in their consequences and therefore more viable as behavioral options.

Although it is the serious offenders who are most affected by this legalism (because they are most likely to be taken to court), there is nonetheless a counterpart among minor or status offenders. For them, the legalistic development is in the direction of decriminalization and de-juridication. The juvenile court and its associated apparatus, and the law enforcement agencies as well, are being slowly but ever so surely divested of their power and discretion over noncriminal juvenile "offenders." Prevention of status offender detention and institutionalization is seen by many practitioners in the justice system as a direct threat of even more severe loss of control to come (Kobrin and Klein 1980, Klein 1979a). Assuming that the appraisals of these practitioners are realistic, one consequence is that many juveniles will probably perceive greater freedom and greater liberty to flaunt authorities or assert their own independence. Official sanctions will increasingly be unused, and general deterrent effects may be diminished.

Finally, the importance of the early sanction issue is great because of the persistent assumption among lay and professional thinkers alike that early identification of delinquents is an available art, or at least that it will soon be an available art. Those who share this belief are occasionally held back by some nagging ethical concerns, but more commonly they make the passage easily from early identification to early treatment. This treatment may be punitive or therapeutic, but its efficacy is seldom questioned. It should be questioned, as recent reviews make clear (Klein 1979b, Romig 1978). Surprisingly, even such sophisticated analysts as Marvin Wolfgang and his colleagues provide support for the early identification-early treatment strategy. In commenting on racial and economic differentials in their Philadelphia cohort data, they say, "If resources and attention were to be focused in the lower SES [socioeconomic status] non-white subset of the cohort who have a first delinquency, not only could the general rate of delinquency be affected; the most serious acts—those involving physical violence or assault on others—could also be drastically reduced" (Wolfgang *et al.* 1972, p. 87).

In sum, there is ample reason to undertake a serious investigation of the value of early sanctions. The assumption that youthful behavior is malleable suggests the likely efficacy of early sanctions. But, more importantly, the current cycle of delinquency programming and legislation is decreasing the available official sanctions. We need to know if this is a problem, if there is a vacuum here that needs filling, and if there is a rela-

tionship between sanctions and general deterrence levels, since these latter *seem* endangered by the thrust of our current cycle.

SOME ASSUMPTIONS

In accepting the invitation to write this paper, I found myself entertaining three major assumptions that would presumably provide the context for the discussion.

First, I assumed that the most relevant data would come not from the criminological literature but from the psychological literature. Specifically, since the purpose of early sanctions is to deter or diminish certain behaviors, the literature about learning processes should provide valuable guidelines. Learning theories and experimental learning studies had, I supposed, established reliable principles of learning through negative reinforcement.

Second, I assumed that the criminological literature would yield next to nothing by way of illuminating the issues at hand. In particular, I expected solid empirical data of direct relevance to be minimal. It is not that this need be the case; rather, this assumption merely reflected my inability to recall many studies bearing directly on the question of early sanctions.

Third, I assumed that the nature of justice system processes would place severe restrictions on the applicability of principles derived from the available literature. Built and modified for various purposes other than the direct application of social science principles, the juvenile justice system is a complex amalgam of conflicting and unrelated processes, of intended and unintended checks and balances, that might well be expected to defeat any simple or unidirectional principle.

As a not altogether facetious illustration, consider the case of the experimental psychologist's frog placed in a pan of cool water. If the water is heated in small increments below the "just noticeable differences" of the frog's pain thresholds, the unfortunate animal will eventually boil to death without ever having perceived that it is time to bail out. Sometimes our justice system works in the same fashion. Learning principles are defeated by the use of ever ascending sanctions—from street contact to station counseling to booking to temporary detention to informal probation to court dismissal to home placement to court diversion and so on. Some of our youths end up in secure institutions never having perceived, along with the frog, that the time to "bail out" had come.

As I write this paper, I find that only the third of my assumptions has held up fully, that indeed the processes of juvenile justice do not augur

well for the application of principles supporting the use of early sanctions. But, contrary to assumption, I find less help than I had anticipated from learning theory, and more than I had anticipated from the criminological literature (although "more" does not equate with "much").

RELEVANCE OF PSYCHOLOGICAL PRINCIPLES³

Negative sanctions indicate to us what we are expected *not* to do. They either establish or reinforce social norms concerning disapproved or prohibited behavior. Is this enough to justify the use of such sanctions? The clear implication of negative reinforcement is that learning what not to do may carry few if any cues as to what one may do, especially if there are multiple routes to goals only one of which can be sanctioned at any given time.

Slap my wrist (figuratively) for stealing from my mother; will I generalize the situation, placing my mother (or her money) in the same stimulus category with my father, other relatives, other adults, all other persons? Will I put the particular form of my theft behavior in a broader category of theft from the home, or minor thefts, or all thefts of money, or all appropriate acts?

Immediately then, we have two potentially limiting problems with negative sanctioning. The first is that the sanction may not teach alternative, acceptable behavior. The second is that the sanction may not lead to any generalization of effect. Given either or both limitations, the use of negative sanctions, at least in the absence of a far more sophisticated learning context, would seem to offer limited value.

We must remember as well that my theft probably does not occur in a "moral vacuum." Most delinquent acts occur with the knowledge that they are disapproved; the norms are established early. Thus in most instances negative sanctions, even early sanctions, do not serve to establish norms, but serve instead either to reinforce them or to remind the perpetrator of the possible negative consequences of disapproved acts. Since the norm is already known, and even a verbal reminder can be

³In this section I have relied heavily upon and am indebted to the counsel from two of my university colleagues. Langdon Longstreth, an expert in child development, and Sarnoff Mednick, a neuropsychologist and criminologist, responded to my request for information on pertinent psychological materials and discussed with me their relevance or lack thereof to the early sanctions issue. In addition, Herbert Quay has provided references to pivotal articles that reinforce strongly the general thrust of my conclusions.

enough to reinforce it, it may be fair to assume that sanctioning has other purposes more to the point.

Some of these purposes, of course, have to do with the sanctioner's needs—revenge, establishment of authority or control, release of anger, and so on. Also, they may be designed to increase the perceived connections between the disapproved act and its possible consequences. Since most delinquent acts go undetected, and most others go unsanctioned in any but minor ways, the sanction when finally applied may serve to make up for these prior nonconnections, increasing the perception that the act can indeed lead to unhappy consequences. Thus *severe* sanctions may be applied to drive the point home. Here we are less in the realm of learning theory than in that of deterrence theory.

But the meager data on general deterrence suggest, to date, that sanction severity has less relationship to deterrence than sanction certainty. I know of no evidence that severity increases the expectation of certainty. Thus, if early sanctioning is translated into general deterrence terms, it cannot raise our hopes for effectiveness. If it remains in the realm of learning theory, then it seems subject to the charge of inefficiency. Research on positive and negative sanctions of delinquents stresses that, if anything, it is the teaching of positive skills, not the sanctioning of negative acts, that is related to delinquency reduction or specific deterrence. Punishment without the provision of alternative behaviors is insufficient.

A number of other problems can also be raised, each of which calls into question the likely impact of early sanctioning, especially of the sort amenable to control by the justice system rather than by parents. For instance, it seems well established that punishments are more effective in proportion to their temporal immediacy following the sanctionable act and in proportion to their perceived substantive connection with the act. Justice system sanctions (other than those delivered, perhaps illegally, in the rare case of a juvenile being "caught in the act") are almost always administered after a delay ranging from an hour to days or even weeks. In some cases they are delivered on the basis of a formal charge that may have little resemblance to the nature of the behavioral act in which the juvenile engaged. The charge of incorrigibility may result from the act of parent battering; the charge of assault may result from the act of enforcing one's "protection" racket on a local playground.

The danger in this situation is that the delayed or disconnected sanction may become paired not with the act but with the evidence for it and with the sanctioner. Temporal contiguity with these is greater, as may be the substantive connection. If so, then in the mind of the juvenile it is the source of the evidence (e.g., arresting officer, victim, or witness) that may

be related to the sanction, and the sanctioner (police, probation, or court officials) who may become the focus of what the juvenile learns. Rather than learning not to commit the act, he may learn to avoid situations that produce evidence of his delinquency and he may learn a distaste for those in a position to sanction.⁴

There is a corollary to this point about the direct connection between act and sanction. The process of being caught may in some instances have considerable sanctioning power. This makes a certain amount of intuitive or experiential sense. Being caught quite perceptibly raises the odds of being further sanctioned. But, in addition, being caught is more temporally contiguous with the act and presumably more easily related to the substance of the act. There are subtle psychological and civil liberty implications of this point that might merit attention in a more intensive treatise on early sanctions.

We should also consider the relationship of early sanctions to chronicity of delinquency. While there is a relationship between chronic delinquency and detection and sanction, it is equally true that being caught has many properties of an accidental event. Because the vast majority of delinquent acts go undetected, detection is, in large part, a matter of beating the odds, and the same must *ipso facto* be true of sanctions. Under these circumstances, the impact of any given early sanction within a context of chronic misbehavior must combat a string of nonsanctioned acts. The implicit calculus of the chronic perpetrator may well label the sanction a rare event, thus discounting its deterrent effect.

Finally, with respect to these issues, there is a summary implication of some importance: if early sanctions do have a teaching impact, it may well be upon those who need it least. Juveniles whose acts are most detectable and therefore are most likely to connect the act and the sanction (the non-chronic juveniles), who are most likely to perceive higher odds of acts leading to negative consequences (the criminally unsophisticated), and who are most likely to accept the legitimacy of sanctions from justice system officials are probably those least likely to continue in delinquent careers. If a youngster is easy to detect, easy to apprehend, easy to sanction, and likely to learn from the experience, he or she may well be the most natural dropout from delinquency in any case. It is a question of expending a disproportionate level of sanctioning resources on the "false positives."

⁴For an interesting view on the young adult level, see Hart (1979). See also Azrin and Holz (1966) for experimental verification of this point and many others dealing with the problems of punishment.

There is yet another facet of the psychological literature that should prevent us from being sanguine about the likely impact of early sanctioning. This is that early sanctions may nonetheless be late with respect to learned patterns of response to control. The basic problem arises from the fact that our early sanction is merely an event, whereas responses to sanctions probably are a function of learned patterns of sanctions and rewards. Parental patterns of discipline and control set a major context within which the early sanction will fall. To a lesser extent, school and peer patterns also contribute to this context. But the nature of this context, the learned patterns of sanctions and habituated responses to them, cannot be known to the applier of the early sanction. Nor can the applier of the sanction (e.g., a police officer) do more than guess at (or most probably assume) the response or the relationship of this sanction to the learned pattern of sanctions in the home.

In the absence of known relationships between the early sanction and a learned pattern, the sanctioner applies his own pattern or rationale of sanctioning. Many police officers, for example, have developed personal styles of response to errant juveniles. This probably tends toward uniformity or, at best, gross differentiations between major categories of juveniles or delinquent acts. There is also pressure upon the sanctioner to apply the sanctions with equity. The law often seems to demand it (more and more so these days), and charges of discrimination often are leveled in the absence of it.

Yet these barely differentiated sanctioning patterns or equitable applications work directly against the use of informed discretion; they work against whatever knowledge one might have about individual differences resulting from patterns of parental and other sanctioning. These applications prevent individualization of sanctions (with respect to type and severity) when the best chance of impact would seem to rest upon maximizing individualization, i.e., fitting the sanction into a likely pattern of prior sanctioning (granted, the nature of "fitting" is left ambiguous here).

Let me illustrate at least the possibilities of such individualization by reference to two patterns of parenting that seem to emerge from the relevant literature. First, there is a suggestion that considerable parental permissiveness is associated with greater odds of juvenile misbehavior. In particular, this relationship seems to hold more when the parents themselves are nonconforming. Were a police officer or a court intake officer able to judge, at the time of first arrest, that a given apprehended juvenile came from a permissive parenting background and from a family of relatively nonconformist persuasion, his decision whether to recommend an early sanction, and the form of that sanction, might well be guided by that knowledge. In the absence of that knowledge—certainly the more

likely case at time of first arrest—his decision could as easily be counter-productive.

The second parenting pattern that seems discernible is a curvilinear relationship between control styles and conformity. It is suggested that the juvenile's conduct is most likely to be troublesome under conditions of either predominant permissiveness or predominant restrictiveness. Conforming behavior is then most likely to emerge under patterns of "responsible" permissiveness or "responsible" discipline. Let us assume that behavioral or operational proxies for these patterns could be delineated. Does it seem likely, and under what circumstances, that *early* sanctions would equate with "responsible" sanctions? An answer to such a question, and a directional answer at that, would certainly propel us toward a more individualized application of early sanctions than now seems likely. But the trick, once having the answers, is knowing how to provide the sanctioner with the information on the level and direction of "responsible" control in use in the arrested offender's family.

RELEVANCE OF CRIMINOLOGICAL LITERATURE

In considering the notion of early sanctions, the psychological literature summarized above referred primarily to the sanctions. In some contrast to this, the criminological literature refers more to the issue of labeling, but in many cases labeling stands as a proxy variable for sanctions. In addition, a small part of this literature is pertinent to the "early" in early sanctions. A prior review (Klein *et al.* 1977, pp. 9–10) yielded a rather mixed picture:

Pertinent here are studies dealing directly with the question of the *impact* of labeling on the subsequent status of those labeled. Each of these studies deals with juvenile misconduct. Here, unfortunately, the similarity ends, for they have yielded highly divergent conclusions.

For instance, Fisher's [1972] study indicated that delinquent labeling has no impact—either positive or negative—on subsequent performance in school; Gold's [1970] comparison of matched arrest and non-arrest cohorts indicated far greater recidivism among those arrested (labeled); McEachern *et al.* [1968] showed that court wardship (labeling) without treatment was associated with the lowest recidivism rates of the four possible combinations of wardship and treatment. Closer to *process* variables, O'Connor's [1970] study of detained offenders suggested a differential impact of detention on attitudes depending on the subjects' commitment to delinquency. Finally, Foster *et al.* [1973] carried out interviews with boys recently released by the police or the court. The interviews revealed little perceived impact in terms of stigmatization, although the data collection procedure seems likely to have placed limits on admitted perceptions of stigmatization.

A rapid perusal of the *Criminal Justice Abstracts* from 1971 through 1978 reveals a somewhat less mixed picture than is portrayed in the above review. While the popularity of labeling theory and the many attempts to test its propositions empirically may have occasioned a one-sided attack on the issues involved, the preponderance of the evidence suggests support for the negative effects of labeling and points against the positive effects of sanctioning. With respect to *early* sanctioning, as well, the meager evidence available suggests more detriment than deterrence.

A total of 10 studies emerged from the *Abstracts* as being somewhat relevant.⁵ Of these, only one (Teevan 1977) provides support for the specific deterrent effects of punishment, in this case for acts of theft and of breaking and entering. Another (Alcorn 1978) found no effects on self-report delinquency of perceived certainty and severity of punishment; delinquent peers and values emerged as more directly related.

The remaining eight studies dealt primarily with labeling effects. They are germane here because the labeling effect has been seen as the other side of the deterrence coin; i.e. labeling theory predicts an increase in, rather than deterrence of, criminality as a result of sanctions. Support for the basic labeling proposition would disconfirm a proposed link between early sanctions and deterrence.

Two of the labeling-relevant studies (Hepburn 1973, Kraus 1973) failed to support the labeling proposition. Six others, however, did support the proposition, although a fair summary might be that the labeling effect has been demonstrated to exist but not to be particularly strong. Confirming the hypothesis requires lesser differences than does determining practical significance.

Meade (1974) and Farrington (1977) demonstrated a labeling effect on recidivism. Ageton (1975) and Siegel (1975) demonstrated an effect on cognitive variables such as delinquent orientation and self-image. Klein (1974), in the only macrolevel analysis undertaken to date (and therefore the only one more directly pertinent to issues of general deterrence), found a relationship between municipal police practices and recidivism: the more severe the sanctioning practices, the greater the recidivism levels in that department's city. Finally, Wolfgang *et al.* (1972, p. 252) conclude about the Philadelphia cohort data that, even beyond the effects attributable to selection biases, "we must conclude that the juvenile justice system, at its best, has no effect on the subsequent behavior of adolescent boys and, at its worst, has a deleterious effect on future behavior."

If the bulk of this admittedly not overwhelming evidence speaks against

⁵The reader will recognize that this summary of the 10 studies (and omission of many others) is subject to the quality of the abstracts. A less time-restricted review should entail a return to the original reports.

the deterrent effects of sanctioning, what of early sanctioning? If we take early to mean at the beginning of officially sanctioned criminality, then the comparison of effects on first offenders versus multiple offenders would be most relevant. Unfortunately, most project reports, by the time they reach professional publications, do not refer to such comparisons. Of the study abstracts reviewed above, four (Meade, Ageton, Siegel, and Klein) do examine the comparison between early and later offenders. In all four cases, the labeling effect is most pronounced among first or early offenders. Early sanctioning seems to exacerbate rather than discourage delinquent self-images and behavior. Again, the effects are not overly strong, but they consistently point in a direction that would dictate against a policy of early sanctions.

IMPLICATIONS OF JUSTICE SYSTEM PROCESSING

The conclusion drawn immediately above, that early sanctions appear deleterious in the empirical literature, certainly suggests that there may be direct effects attributable to the nature of the juvenile justice system. The implication is that early responses by the system simply create more of the problem to which the responses were made. Yet, by way of contrast, it is sometimes noted that half or more of the youngsters arrested for the first time are never seen in the juvenile justice system again. The suggestion of a strong specific deterrent effect therefore has plausibility.

The resolution to these competing implications may well be in the assumption underlying the deterrent view that there is a relationship between arrests and levels of delinquency. Certainly the assumption seems supportable at the aggregate level for more serious offenders; i.e., juveniles who have established more clearly delinquent behavior patterns are indeed more commonly apprehended. But particularly at the point of first apprehension, there is good reason to believe the apprehension to be almost accidental, in the sense of being less a function of the act than of the laws of probability. The relatively unrelated patterns of adult detection and reporting combine with the patterns of delinquent behavior to yield nearly random instances of first arrest. If this is true, one would expect many such random events, as with other coincidences, not to be repeated; a 50 percent drop-off in second arrests is thus logically attributable to chance and not necessarily to deterrence.

Two or three additional points about system-administered sanctions need to be considered. The first is that the system has several levels of penetration that the juvenile may reach. Each contact point may, in itself, constitute a sanction. In addition, several of these represent points at

which justice officials are permitted, under law, to decide on alternative sanctions.

If the first contact is on the street, then a police officer, merely by reacting to the juvenile, may be applying a sanction. At the station, other officers (perhaps including juvenile officers) represent a second, "shallow" point of penetration. Beyond this there is the intake officer at the point of detention, then several types of precourt contacts during detention and precourt investigation, and then various levels of court contact, only one of which—sentencing—is normally thought of as a sanctioning point. Finally, at the deepest end of the system are the correctional points of contact that are also normally thought of as providing sanctions.

The first point to be made about these levels of penetration into the system is that they may constitute a roughly linear progression of sanctions. If the progression is not linear, then some interesting questions may arise. Is the pattern one of a decreasing acceleration of sanctions, such that each deeper point adds proportionately less to the cumulative sanction level? Is it one of an increasing acceleration, such that each point is progressively more severe? Is it curvilinear, wherein the greatest impact is in the middle somewhere, such as detention in a juvenile hall or the first court hearing? And of course one must immediately wonder whether there is one such curve more characteristic for first offenders and one more characteristic for multiple offenders, both with and without controls for the severity of the instant offense and charges.

The second point about these levels of penetration is that each permits the exercise of discretion with respect to two or more sanctions. The patrol officer may merely interrogate, he may fill out a field investigation card, he may reprimand or transport the juvenile to his school, home, or other site, and he may require a station appearance via citation or arrest. The station officer typically decides between arrest and booking or informal contact, and between outright release, release to parents (with "counseling"), diversion to a local agency, or initiating the court intake process (with or without detention). Similarly, intake personnel may choose between outright release, informal handling, court petitioning or diversion, and so on. Choices continue to be available at each succeeding point in the system, almost always ranging from release to enforced entry into the next point.

The importance of this description is that each alternative disposition at a given point of penetration represents a sanction. Thus each sanctioning point has several levels of sanctioning severity, producing sanctions within sanctions. The simple phrase "early sanctions," when applied to the actual processing available and employed within the justice system, yields unexpected complexities. Unless we restrict very severely our definition of

early sanctions, we enter upon a most difficult course of inquiry. The complexities just described, it must be remembered, will interact with offender behavior histories, learned sanction and response patterns, and perceptions of the actions of the system's agents.

Without going into detail, I would add one further complication. Community treatment alternatives to justice system processing are commonly proposed as a means of avoiding the labeling consequences of justice system sanctions. But the evidence to date does not support community treatment as an effective alternative (Klein 1979a) in either diversion or deinstitutionalization programs. Indeed, it now seems clear that some community treatment programs provide stigmatization and recidivism perhaps less deleterious than that resulting from insertion into the system but clearly more harmful than that resulting from no treatment. Thus a thorough discourse on early sanctions may have to include among such sanctions the provision of early treatment. It is a discouraging thought to many.

IMPLICATIONS OF DELINQUENCY PATTERNS

On the assumption that there is a less than simple relationship between the sanctions and the recipients of them, several facets of delinquency need to be explicated. Each of these has direct bearing on the "early" component of early sanctions.

For example, it is generally believed that status offenders (runaways, truants, ungovernables, etc.) comprise a category of offenders separable from delinquent offenders. Indeed, this was a major assumption underlying the federal delinquency legislation of 1974. If this were correct, then early sanction application could use this information in building its strategy. But the best evidence now available (see the summary in Klein (1979a, p. 37)) suggests that such is usually not the case; the "pure" status offender is a relatively rare bird.

Similarly, it is often assumed that, unless dealt with early, juvenile offenders will progress from the perpetration of minor offenses to the commission of major offenses such as grand larceny, assault, robbery, and even murder. In fact, it might be hard to find a more entrenched assumption about delinquency, or one more central to our society's commitment to early treatment. Yet the data on this point are at best equivocal. While it seems clear that multiple offenders are apprehended after increasingly shorter periods of time in the aggregate, increasing *severity* of subsequent offenses has not been reliably demonstrated. It would be worth considering what effects on this "nonpattern" might result from a policy of early sanctioning.

Finally, under this heading is the question of whether there are patterns of offenders that need to be considered. The point can be effectively underscored by reference to two recent evaluations of juvenile diversion programs. While differing slightly in some particulars, both Elliott's research group (Elliott 1978) and my own (Klein *et al.* 1977) have found labeling processes to be most pronounced among certain types of offenders. These more "vulnerable" juveniles are more likely to be white rather than minority, female rather than male, from higher rather than lower socioeconomic backgrounds, and (in the case of Klein *et al.*) first rather than multiple offenders. Significantly, these are the very youngsters most likely to be diverted to community treatment (Klein 1979b). Community treatment for diverted youngsters and their families often occurs under real or implied system coercion and thus has a distinct sanctioning flavor. As noted earlier, some studies have shown such treatment to yield increased recidivism or detriments to self-concepts.

ADDITIONAL ISSUES

By this time, the reader may well have thought of additional issues pertinent to the question of early sanctions. Those noted above are certainly not exhaustive. Several others should be mentioned here briefly, but the brevity does not connote lack of importance. At this point, it is difficult to discern with clarity which may indeed be the most and least important issues requiring our attention.

For instance, I have skirted around the question of what is meant by "early," but clearly future work must come to grips with this. In most of the foregoing discussion, I have talked of early as meaning early in one's potential delinquent career as defined by official reaction, i.e., first official offense. But early can also refer to the undetected delinquent career; the first arrest usually is far removed in time from the first delinquent act.

Early can also refer to chronological age, in which case interest in early sanctions may launch an investigation into the place of sanctions in the development of moral precepts. It may place greater emphasis on the thorny problems of early identification, or "delinquency proneness," and the accompanying ethical problems.

Finally, early can refer to the first stages of the justice system; early sanctions would then be defined as those applied by the police on the street or in the station or as anything applied prior to appearance in court.

A second additional issue may be the most complex of all, or at least the most difficult to translate into policy recommendations. This is the issue of how sanctions are perceived. Sanctions are presumably perceived quite differently in many cases by the appliers and the recipients. What is the

effectiveness of a sanction if the applier understands it in one way and the receiver in quite another? How do juveniles, especially the first offenders, the young, the "vulnerables" of whom I spoke earlier, attribute meaning—and what meaning—to a street contact, a booking, a night in juvenile hall, or a dressing down from a juvenile court judge?

One of my colleagues, Margaret Little, has immersed herself recently in the perceptual worlds of juvenile runaways and juvenile officers. Her comments on this point are illustrative of perspectives of no little importance. She comments:

1. "It depends so much on what the kid *wants* the police to do. There are two extremes, the kids who want sanctions from the police and those who have already rejected the cops by now anyway."

2. "Liberated kids, who are just reaching out for autonomy, are surprised that the police feel they have to act. It really brings them up short. But this is a small group of kids."

3. "Police often see themselves as stepping in when parents have failed, so the assumption of police sanctions as *reinforcing* parents' discipline is questionable. In fact, many police see themselves as establishing boundaries not established by the parents."

4. "Much of the importance of all this lies not between the police and the kid, but between the police and the parent."

5. "Especially in the case of young kids, there's the question of whether the police are sanctioning or parenting; I wonder how well the kid can make the distinction."

The final issue is a bit broader. One gets the impression that delinquency, like its big brother crime, waxes and wanes in the mind of the American public as a matter of serious concern. Similarly, one gets the impression that approaches to delinquency policy—hard or soft, retributive or rehabilitative, legalistic or discretionary—are less responses to delinquency *per se* than reflections of more generalized shifts in national mood. The willingness to assess or adopt a policy with respect to early sanctioning will be a function of the moods of America. We need to be alert to this and to seek understanding of the way that early sanctions policies would be reinforced or countervailed by the context of these moods.

NORMALIZATION, LABELING, AND DETERRENCE

I have spoken in earlier pages of labeling and deterrence being opposite sides of the sanctioning coin. Sometimes sanctions, via labeling, may ex-

acerbate the problem, while at other times they may create a deterrent effect. If there were such a thing as a three-sided coin, then the third side of this coin would be called normalization, treating the sanctionable act as if it were quite normal or acceptable, rather than requiring any response.

If we do not sanction, then alternatively we may treat. But as I have indicated, treatment often shares some of the attributes of sanctioning, and some of the effects as well. If we neither sanction nor treat, we normalize; we decide not to react or define the act as wrong. But the trouble with normalization, one often overlooked (although not by police), is that it can in fact reinforce wrongful behavior by the very omission of reaction. If delinquent behavior is a form of limits testing, or a process by which acceptable and nonacceptable behavior is defined, then normalization fails to teach and the legitimacy of the delinquent act may actually be reinforced. In the absence of sanctions, acts we may wish to deter may not be deterred; the juvenile grapevine may soon yield an expanded crop of acceptable behaviors, at the expense of general deterrence.

Within my own research group, we have done research that implies that postarrest normalization is the more effective police response, insofar as specific deterrence over the ensuing 9 months is concerned (Klein *et al.* 1977). But we are concerned about the long-run implications for both specific and general deterrence. In the midst of a national trend toward diversion and normalization, we need empirical investigations of long-term results.

Further, there is a need to pay more attention to the locus of the negative labeling effect of early sanctions. For the most part, we have been concerned with the direct impact on the juvenile, but that is a narrow focus. The impact can also be indirect via "label spread," wherein others learn of the juvenile's justice system involvement (or treatment involvement), and it can be indirect via "alternative encapsulation," wherein the juvenile is "saved" from the justice system by encapsulating him in the mental health treatment system (Klein *et al.* 1977). Labeling effects also take place on those close to the juvenile; his parents and siblings may find themselves stigmatized and subject to sanctionlike actions (Blomberg 1977).

And we should not ignore the effects on the sanctioner. Sanctioning is a repertoire of reactions legally invested in certain public officials. If we increase or decrease their use, we affect the mood and professional stature of these officials. As recent reaction to new juvenile justice legislation has shown, these effects on public officials, from police to judges, can have profound impact on the way they handle their roles and the juveniles who come to their attention (Teilmann and Klein 1980, Kobrin and Klein 1980).

At the risk of summarizing by way of oversimplifying, let us consider this simple, but paradoxical, paradigm of the normalization, labeling, and deterrence aspects of early sanctions.

1. If we sanction, we apply labels: bad!⁶
If we sanction, we deter: good!
2. If we normalize, we don't label: good!
If we normalize, we don't deter: bad!

At the very least, it seems clear that the balance between labeling and deterrence requires more investigation. Each available sanction needs to be analyzed for its implicit labeling and deterring impact in the contexts of type of juvenile, parenting patterns, locus of sanction, and so on. With normalization providing the alternative strategy, we have here a very large order indeed.

Clearly, a good deal of background library research is called for in the psychology of sanctioning and in the effects of sanctions on younger and first offenders compared with older and multiple offenders.⁷ More clarification of the many contexts covered in this paper is badly needed. But there is a tentative conclusion that emerges from the present review. The evidence available to date does not encourage the application of early sanction policies because the very structure of juvenile justice processing does not lend itself well to the application of learning theory principles.

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⁶But sometimes we deter by applying labels, as is practiced by Synanon, Alcoholics Anonymous, and certain other self-help rehabilitation programs.

⁷One might best start with the summary article by Johnston (1972). This review of literature on the punishment of human behavior makes clear the radical disjunction between the "rules" for successful sanctions and the processes of the justice system.

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Consideration of Some Effects of a Counseling Program

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Those who spend their lives providing psychological services generally do not have the opportunity to learn about the long-term effects of their efforts. The opportunity to study men who once were members of the Cambridge-Somerville Youth Study provides a rare exception.

The Cambridge-Somerville Youth Study was designed, during the years of the Great Depression, with the hope that it would help prevent delinquency. Its organizers solicited the names of young boys who lived in designated (generally deteriorated) areas of two communities in eastern Massachusetts. By intention, the program included "average" as well as "difficult" children. Between 1935 and 1939, a Selection Committee gathered information from elementary school teachers, the courts, physicians, and parents regarding the children whose names had been submit-

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ted. On the basis of this information, pairs of boys similar in age, family backgrounds, home environments, intelligence, and delinquency-prone histories were identified. The matching procedure justified a belief that both members of a pair reasonably could be expected to have similar life chances in the absence of intervention. A flip of a coin determined which member in each pair would receive treatment; the other member was placed into the control group.¹

Retrospective comparisons indicated that the treatment and control groups were indeed similar. No reliable differences were discovered in comparisons of age, IQ, whether the boy had been referred to the Youth Study as "difficult" or "average," or the delinquency prediction scores assigned by the Selection Committee on the basis of the boys' histories and home environments. No reliable differences appeared in comparisons of ratings for the boys' physical health, mental health, social adjustment, acceptance of authority, or social aggressiveness. Nor were reliable differences found in ratings of delinquency in the home, adequacy of discipline, standard of living, status of the occupation of the father, "social status level" of the elementary school attended (as measured by sampled occupational levels of the parents), or neighborhoods as likely or unlikely to produce delinquency (see Powers and Witmer 1951, Ch. VI).

By May 1939 each of the 325 boys in the treatment group had been assigned to a social worker who was expected to build close relations with the boy and be available to provide assistance to both the boy and his family. In addition to 10 social workers, the staff included a psychologist, tutors, a shop instructor, consulting psychiatrists, and medical doctors. Counselor turnover and the recognition that case loads were too heavy led to a decision to drop some of the boys from the program. When a boy was dropped from the treatment group, his "matched mate" was dropped from the control group. By 1942, 253 matched pairs of boys remained in the program. These 506 boys are the subjects in the present study.

When the program terminated in 1945, the 253 boys in the treatment group had been visited (on the average) twice a month for five and a half years. Over half had been tutored in academic subjects; over 100 received medical or psychiatric attention; almost half had been sent to summer camps; and most of the boys had participated in such activities as swimming, visits to local athletic competitions, and work in the project's woodshop. Boys in the treatment group were encouraged to join the YMCA or

¹Eight cases were matched after treatment began; the assignment to the treatment group for these eight was not random. All brothers were assigned to that group that was the assignment of the first brother matched.

other community youth programs. Social workers from the Youth Study were specifically prohibited from working with boys in the control group.

The current follow-up study began in 1975. The names (and pseudonyms) of all 506 men were traced through records of the Massachusetts Board of Probation, the Department of Mental Health, the Division of Alcoholism, and the Department of Vital Statistics. Subsequently, over 100 alcoholism treatment centers in Massachusetts and the criminal justice services departments of other states have added information about the men. By January 1979, 98 percent of the men had been located. Almost four out of five were found in Massachusetts. The men were asked to respond to a questionnaire and, later, to consent to an interview. Data from these sources provide the bases for evaluating effects of the Youth Study.

Prior data analyses (McCord 1978) had indicated that men from the treatment group differed subtly from men who had been in the control group. The differences suggested that treatment may have had damaging effects. The present study considers this possibility.

Each of the 506 men was classified as having or not having an "undesirable outcome." If and only if a man had been convicted for a crime indexed by the FBI, or had died prior to the age of 35, or had received medical diagnoses of alcoholism, schizophrenia, or manic-depressive was a man's outcome counted as undesirable. Using this criteria, 105 men from the treatment group (42 percent), as compared with 81 men from the control group (32 percent), had undesirable outcomes ($z = 2.28, p = 0.0226$).²

Although the overall impact of treatment appeared to have been damaging, it seemed reasonable to search for positive effects in variations of treatment. Beneficial effects might have resulted from starting treatment when the child was particularly young, from providing frequent help, or from treatment being available over an especially long period of time. Or, alternatively, the program might have been successful in helping those with whom the counselor had developed close relationships; or, perhaps, in helping those assigned male (or female) counselors. Perhaps boys whose counselors had focused on a particular type of assistance had an advantage: counselor emphases had been classified as dealing with

²In 39 pairs, only the man from the control group had an "undesirable outcome," whereas only the man from the treatment group had an "undesirable outcome" among 63 pairs. When serious criminality is defined by multiple criminal convictions (rather than a single conviction for an indexed crime), differences between the treatment and control groups are larger.

academics, health, group participation, personal problems, or family problems.

To assess the possibilities that subsets of the treatment group had been benefited, the outcome of each man from the treatment group was compared with the outcome of his match in the control group. A pair was placed into one of four categories: neither had an undesirable outcome; only the man from the control group had an undesirable outcome (i.e., the treatment group had a better outcome); only the man from the treatment group had an undesirable outcome (i.e., the control group had a better outcome); or both had undesirable outcomes. The sign test, two-tailed, was used to evaluate the reliability of obtained differences.

The comparisons did not support a view that early intervention was beneficial. Nor was there evidence that intense or close or long-term assistance was helpful. Furthermore, none of the types of assistance resulted in outcomes generally better for the treatment group than for the control group. On the contrary, more intense contact and longer exposure to the treatment were related to a particularly strong adverse impact. Table 1 shows how outcome was related to variations in treatment.

As shown in Table 1, none of the treatment variations revealed a subset of clients in which boys from the treatment group had outcomes better than would have been expected by chance. Rather, several of these subsets seemed to have been particularly harmed: those boys who were between the ages of 9 and 11 when first assigned a counselor ($p = 0.012$); those who had been visited at least every other week for a minimum period of 6 months ($p = 0.008$); those in the program for at least 6 years ($p = 0.001$); and those whose counselors had focused on personal ($p = 0.003$) or family problems ($p = 0.002$).

Analyses of effects from treatment differences point to the conclusion that "more" was "worse." Several possible explanations are worth considering.

1. Counselors, with their middle-class values, may have imposed these values upon the boys; such imposition, it could be argued, might lead to trouble in a lower-class milieu.

2. Since counselors were available and eager to provide assistance, they may have increased or heightened dependency among members of the treatment group; with removal of support (due to termination of the program), it could be argued, these boys were less able than their matches to cope with their problems.

3. Although the Youth Study included "average" as well as "difficult" boys, the presence of counselors may have suggested that help was

TABLE 1 Desirable Outcomes: Treatment Versus Control (number of pairs in each category)

Treatment Variables	Undesirable Outcome (T = C)	Undesirable Outcome Only for Control Case	Undesirable Outcome Only for Treatment Case	Undesirable Outcome for Both (T = C)
Age at beginning of treatment				
Under 9	30	8	12	9
9 to under 11	40	16	35 ^a	19
11 to 13	39	15	16	14
Frequency of counselor visits to subject				
Every other week	21	5	19 ^b	14
Once a month	27	10	23 ^a	18
Less often	61	24	21	10
Frequency of counselor visits to family				
Every other week	16	4	15 ^a	9
Once a month	28	14	20	19
Less often	65	21	28	14
Quality of counselor/subject relationship				
Close	19	6	13	12
Friendly	57	19	27	19
Distant	33	14	23	11
Length of treatment				
Less than 4 years	43	13	15	9
4 to less than 6 years	26	16	14	9
At least 6 years	40	10	34 ^c	24
Number of counselor(s)				
One	31	17	15	7
Two	44	12	21	13
Three of more	34	10	27 ^b	22
Sex of counselor(s)				
Male	61	19	40 ^b	29
Female	22	14	9	1
Both	26	6	14	12
Counselor focused on:				
Academics	52	22	39 ^a	26
Health	35	16	34 ^a	16
Group participation	52	19	33	17
Personal problems	26	8	28 ^b	15
Family problems	33	9	28 ^b	17

^a*p* < 0.05.^b*p* < 0.01.^c*p* < 0.001.

necessary; a "labeling effect," it could be argued, created the behaviors that would justify the help received.

4. The supportive attitudes of the counselors may have filtered reality for the boys, leading them to expect more from life than they could receive; disillusionment based on perceived deprivation, it could be argued, produced those symptoms that differentiated treatment and control groups.

These explanations were evaluated by comparing treatment and control groups for evidence of middle-class achievement values, evidence of dependency, evidence of a labeling effect, and evidence of disillusionment. Responses from 343 men, 178 from the treatment group and 165 from the control group, provided data for these analyses. In the treatment group, excluding men who had died prior to successful contact, 67 percent of those who had "undesirable outcomes" (as defined above) and 85 percent of those who did not have "undesirable outcomes" responded to the questionnaire or were interviewed. The corresponding figures for the control group were 61 percent and 77 percent.

One measure of achievement orientation is the amount of formal education received. During the interview, men were asked how far they had gone in school. Although the groups had been matched for IQ, and although almost equal proportions of interview respondents among the treatment and control groups (36 percent and 33 percent, respectively) had been considered dull, slow, or retarded prior to the beginning of the treatment program, men from the treatment group were less likely to have graduated from high school ($\chi^2(1) = 4.91, p = 0.027$).

Almost equal proportions of the high school graduates from the treatment and control groups (69 percent and 64 percent, respectively) attended college; among these, 15 percent of the treatment group and 30 percent of the control group graduated. Among respondents who had dropped out before graduating from high school, 18 percent in the treatment group and 20 percent in the control group eventually received high school degrees. Among high school graduates, 10 percent from the treatment group and 19 percent from the control group received a college degree.

Other measures of achievement orientation also showed no support for the hypothesis that counselor intervention produced difficulties through imposing middle-class values on the boys. During the interview, the men were read the following two stories:

At the age of 32, Mr. X has been working on an assembly line for 10 years. A friend of his has told him about an opening in the front office which he thinks Mr.

X can get. His salary would be about \$10 a week less than the wages he is now making. Should Mr. X apply for the job?

Mr. M is 22 and has two job offers. He can go to work in a factory where he is assured of steady pay and union benefits—but is not likely to rise. He can join a new company, where—if things work out well—he may become a foreman. Which job should Mr. M accept?

Responses to these stories did not differentiate between treatment and control group.

The men were asked to describe their children. Reasoning that people talk about what they consider to be important, the mention of a child's education (regardless of what was said) was considered to be a sign that achievement was relevant to the respondent. There were 120 men in the treatment group and 105 men in the control group who had at least one child over 18; 47 percent of the former and 50 percent of the latter mentioned education in describing their children.

The men were asked to identify and describe people whom they admired. The treatment and control groups did not differ in proportions who mentioned success, hard work, achievement, or abilities as grounds for their admiration.

In short, none of the comparisons indicates that treatment had increased the achievement orientation attributed to holding middle-class values.

The second possible explanation suggested that treatment increased dependency. Three measures of dependency were gleaned from the interviews. Respondents were asked whether they generally asked others for an opinion when faced with a difficult decision. As compared with men from the control group, men from the treatment group were slightly less likely to respond affirmatively to this question. Men were asked whether they were active in any clubs; 62 percent of the men from the treatment group and 65 percent of those from the control group reported that they were or had been. Men were asked about the frequency of visits with their parents; 41 percent of the treatment group respondents and 45 percent of the control group respondents reported seeing their parents at least once a week.

The questionnaire provided one measure of dependency; it inquired about use of leisure time. Completed questionnaires were received from 125 men in the treatment group and 129 men in the control group; responses to the question on use of leisure time were classified as activities that are generally performed alone, activities in which interaction is peripheral, and activities in which interaction is essential. Almost half of each group (47 percent and 44 percent for treatment and control, respectively) reported that they spend at least part of their leisure time in activities in which interaction is central.

In sum, none of the measures of dependency indicates that the treatment program had encouraged dependency.

The third possible explanation suggested that treatment implied the need for help through a "labeling effect." Several measures were considered as indirect means for discovering a labeling effect. These involved measures of self-confidence, reports of psychosomatic illnesses, and the taking of medication.

Questionnaires included a measure of feelings of competence (Douvan and Walker 1956). This measure asked the men to evaluate their satisfaction with life, their chances for leading the kind of life they would like to have, and whether they could plan ahead. Differences in responses were unrelated to having been in the treatment group.

A measure of self-confidence was included in the interview (modified from Rosenberg 1965). Differences in self-confidence, too, were unrelated to having been in the treatment group.

During the interview, men were asked whether they get headaches; 66 percent of the treatment group respondents and 68 percent of the control group respondents reported that they did. Asked whether they take any medicines, 38 percent of the treatment group respondents and 34 percent of the control group respondents reported affirmatively. Both interviews and questionnaires provided information about psychosomatic diseases: arthritis, gout, emphysema, depression, high blood pressure, asthma, ulcers, heart trouble, allergies. Among respondents from the treatment group, 43 percent reported one or more of the psychosomatic disorders; among respondents from the control group, 36 percent reported one or more of these disorders. If members of the treatment group had been affected by a labeling process, one would expect to find evidence that they viewed themselves as sick. None of the measures designed to detect a self-definition as "ill" support the hypothesis that such a perception had been a result of the treatment program.

The fourth explanation suggested that treatment encouraged unrealistic expectations. The hypothesis that treatment laid the seeds for disillusionment did receive support.

As compared with men from the control group, men from the treatment group had apparently been less satisfied with their first marriages. Although treatment and control group members had been almost the same ages when first married ($\bar{x} = 24.4$ for each group), a higher proportion among the treatment group had been separated, divorced, or remarried ($\chi^2(1) = 5.56, p = 0.018$).

Current marriages, too, seemed less satisfying for men in the treatment group. Several questions in the interview provided information about a man's perception of his wife. Men were asked what sort of things they did with their wives and whether their wives knew most of their friends. Men were free to include their wives in responses to questions about what makes a good marriage, about what they generally do when stuck by a

decision, about the sorts of things that annoy or anger them, about people they admire and people who have made a difference in the way their lives have turned out. After reading these responses, as well as notes about the interaction that had been recorded by the interviewer, coders indicated whether the respondent demonstrated warmth toward his (current) wife. Among the 126 men from the treatment group for whom a rating could be made, 47 percent were coded as demonstrating warmth; that proportion was reliably lower than the 65 percent of 104 men from the control group who demonstrated warmth toward their wives ($\chi^2(1) = 7.94, p = 0.005$).

As the interview drew to a close, the interviewer asked, "If we were to try to get in touch with you in 10 years or so, what would be a good way of reaching you?" Responses were coded to identify those that suggested permanence or continuity (e.g., "I'll probably still be here"; "My daughter keeps in touch"; "I'll still be working for . . ."). Responses from the control group were more likely to indicate belief in continuity (84 percent) than were responses from the treatment group (79 percent) ($\chi^2(1) = 8.95, p = 0.003$).

In the questionnaire, the men were asked whether they found their work satisfying. Responses were linked to ratings of occupational status (Hollingshead and Redlich 1958) ($F(4,243) = 3.02, p = 0.019$). With occupational status controlled, those who had been in the treatment group were less likely to report being satisfied ($F(1,243) = 4.32, p = 0.039$).

The relative frequency of divorce and dissatisfaction among the treatment group is consistent with a view that treatment laid the groundwork for subsequent disillusionment. Alternatively, however, the greater frequency of reported dissatisfaction among men in the treatment group could be due to a reporting bias if men from the treatment group were merely more honest in reporting problems. Responses to questions about problems that would not also represent disillusionment were used to check this latter possibility.

Almost equal proportions of the treatment and control groups (20 percent and 18 percent, respectively) reported having committed serious crimes during childhood. In describing their childhood years, 77 percent of the treatment group and 74 percent of the control group described financial and/or psychosocial problems; in recalling things that stand out in their lives, 35 percent of the treatment group and 40 percent of the control group mentioned problems. Forty-nine percent in the treatment group and 46 percent in the control group reported that their fathers, and 25 percent in each group reported that their mothers, had been harsh or very harsh as disciplinarians. Among the treatment group, 18 percent reported having been unemployed for a year or more, as did 16 percent of those in the control group.

Since members of the treatment group were *not* systematically reporting having more problems than were members of the control group, it seems reasonable to interpret reports of dissatisfactions with jobs, marriage, and life as representing real (as opposed to merely reported) differences.

To review: Inspection of objective evidence used to compare 253 men who had been assigned to a treatment program with 253 men who had been matched with them prior to treatment suggested that the treatment program may have been harmful. Consideration of variations in treatment provided between 1939 and 1945, as these variations were related to objective measures of outcome, gave additional support to that view: longer and more intense treatment appeared to have been particularly damaging. These results, initially detected 30 years after termination of the treatment program, lead to two methodological questions. Could the adverse impact of the program have been detected at an earlier date? Could it have been detected in the absence of a control group? Figure 1 provides a visual display of the relationship between age and adverse outcomes.³

The figure illustrates a relatively constant rate in the development of adverse impacts to the age of 35. Since the slope of the development of adverse outcomes for the treatment group is greater than the slope for the control group, the impact of treatment appears to have been one that affected internal phenomena (e.g., attitudes or beliefs). If the treatment had affected behaviors more directly, one would expect to find a difference in intercepts rather than in slopes.

Treatment seems to have affected expectations, which in turn affected probabilities for behaviors. Using the objective criteria, differences between treatment and control group became statistically reliable by the age of 35 ($z = 2.58, p = 0.010$).⁴

Had there been no control group, evaluation of the program might have led to radically different conclusions. Client evaluation seems to have been favorable. Completed questionnaires were received from 125 former members of the treatment group, yielding a 59 percent response rate from men who were still living and whose addresses were known. The questionnaire asked how, if at all, the Cambridge-Somerville Youth Study had been helpful. Two thirds of the men responded that the program had been helpful. Most of these men amplified their responses by specifying ways in which their counselors or their experiences with the program had improved their lives. The men mentioned that the program had kept them

³The graph includes death to the age of measurement (rather than prior to the age of 35) as an adverse outcome.

⁴In 35 pairs, only the man from the control group had an "undesirable outcome," whereas only the man from the treatment group had an "undesirable outcome" among 59 pairs.

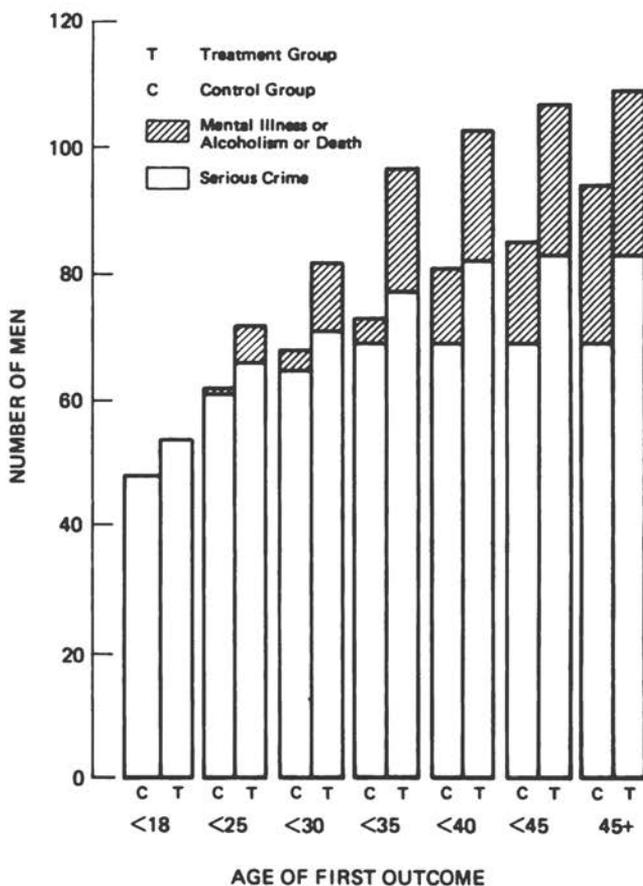


FIGURE 1 Age and undesirable outcomes.

off the streets, taught them to be more understanding, showed them that there were people around who cared; they wrote of the opportunity the program provided for learning, for having someone around who listened and understood, and for doing things that they might not otherwise have done.

The subjective reports served as testimonials for the project. They also provide evidence that such scars as were caused by the treatment program were not those of resentment. The clients' favorable judgments of the program are, however, consistent with a view that supportive attitudes of the counselors led the boys to expect more from life than they were likely to receive.

To summarize: As measured by objective criteria, men in the treatment group were more likely than men in the control group to have had undesirable outcomes. Since the differential between treatment and control groups was greatest among those subsets who had been given more treatment, the relationship appears to be causal. Four "dynamic" interpretations were proposed. These postulated increases in different intervening variables were increase in achievement-oriented values, increase in dependency, increase in perceptions of the self as needing help, and increase in expectations for satisfactions. On the basis of evidence adduced from questionnaires and interviews, the first three interpretations were rejected; the fourth gained support. The Cambridge-Somerville Youth Study seems to have raised the expectations of its clients without also providing the means for increasing satisfactions. The resulting disillusionment seems to have contributed to the probability of having an undesirable outcome.

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The Family and the Ex-Offender: Potentials for Rehabilitation

GREER LITTON FOX

The purpose of this paper is to explore generally some ways in which families are or could be implicated in the process of rehabilitation of ex-offenders. Since the family is for most persons in this society the significant social unit in which social attachments are grounded and social life is enacted, the family might have been expected to have been the focus of a good deal of theoretical and empirical work on rehabilitation, or at least to have been the target of programmatic efforts of those working to reintegrate ex-offenders into the community. This is not the case, however. The literature on the family in this area is meager indeed.

Very little literature and still less research was found specifically on the role families play in rehabilitation. Since searches of the traditional academic literature in family sociology, criminology, child development, and developmental psychology yielded little of substance, the search was broadened to include practitioner-oriented publications and unpublished documents in the helping professions. Here was found a smattering of descriptive accounts of unevaluated service programs that pertain to such matters as visitation policies in prisons and that might have some rele-

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vance to the families of offenders. Given a topic that is of profound importance, it is both dismaying and disconcerting to find that so little conceptual, theoretical, research, or practitioner attention has been devoted to this issue.

Any systematic review and critique of the literature will necessarily reflect the state of the field under review. This review paper is no exception. While the review contained in this paper reflects accurately the materials available, it is neither a complete nor an adequate treatment of the potential rehabilitative utility of the family of offenders. Given this, any attempt to assess the utility of the family in this regard should be held in abeyance until an analysis appropriate to the scope of the issue at hand can be carried out. *The degree to which the family might be involved successfully in rehabilitation simply cannot be assessed from the information currently available.*

The remainder of the paper consists of three sections. The first contains a brief look at the family status of offenders and at the quality and availability of data. This is followed by a consideration of how the family might be expected to foster rehabilitation. In the concluding section, suggestions are made for future research on the role of the family in rehabilitation.

THE FAMILY STATUS OF OFFENDERS

There are many who feel that the family unit is not relevant to a majority of offenders, because the family unit is nonexistent, or because ties have been severed, or because the original family was so disorganized as to be either dysfunctional or nonfunctional.¹ In truth the family backgrounds of many of those who continue to be involved in crime are characterized by severe degrees of disorganization and impaired functioning. The family will be relevant to the rehabilitation of only a subset of offenders.

The Correctional Statistics Program of the National Criminal Justice Information and Statistics Service (NCJISS) collects much information of value in assessing the family status of inmates of state correctional facilities in its survey of inmates, which is fielded approximately every 5 years.

¹Indeed, there is a logical inconsistency in this present attempt to look at the family as a potential source of rehabilitation (or of "tertiary intervention") and those theories of crime (such as control theory or social learning theory) that implicate the family in the etiology of crime by way of the failure of primary socialization processes within the family. The inconsistency can be resolved, however, at an empirical level; for example, the template-matching technique discussed in Chapter 3 provides a mechanism for identifying those for whom rehabilitation interventions that involve the family might be most or least appropriate.

Some of the demographic characteristics relevant to families obtained in the survey are sex, age, parental status, marital status and change in marital status, living arrangements at time of arrest, employment status, support of dependents, and so forth. The timely analysis and presentation of these data in printed form readily accessible to potential users appear to be problematic, however.

For purposes of this review, we obtained directly from NCJISS some data from the 1974 *Survey of Inmates of State Correctional Facilities* (U.S. Department of Justice 1976) from which we could determine something of the family status of inmates. In Table 1 we show the marital status at admission of sentenced inmates by race.

According to these data for this population, about one third of the white inmates and one fourth of the black inmates were married at the time of their admission to a state correctional facility. Without knowing anything about these inmates, we might guess that their family of procreation (that is, the family created by their own marriage and parenting activities) is likely to be more salient as a source of support than their family of orientation (that is, the family in which they were reared as children), although this cannot be determined from these data alone. Another 25 percent of whites and 15 percent of blacks were separated, divorced, or widowed; we can assume then that they have had some experience, of however brief or long duration, in a family in which they served as the adult male or female head. For these inmates there is potentially a pool of children and former spouses, as well as the members of their family of orientation, to whom

TABLE 1 Marital Status at Admission by Race for Inmates of State Correctional Facilities, 1974.

Marital Status	White		Black	
	N	Percent	N	Percent
Married	31,800	34	23,780	27
Divorced	15,148	16	3,820	4
Separated	5,541	6	6,980	8
Widowed	2,786	3	2,045	2
Never married	39,381	41	51,141	58
Not ascertained	345	— ^a	861	1
TOTAL	95,001	100	88,627	100

^aLess than 1.

SOURCE: U.S. Department of Justice (1976).

TABLE 2 Percentage of Inmates Living with Family Prior to Arrest by Marital Status at Time of Admission and Race for Inmates of State Correctional Facilities, 1974

Marital Status	White		Black	
	N "	Percent	N "	Percent
Married	29,272	74	21,719	70
Divorced, separated, or widowed	20,745	41	11,664	40
Never married	32,549	51	41,954	64

"Includes only those inmates who were employed prior to arrest or any time after December 1968.

SOURCE: U.S. Department of Justice (1976).

these inmates are or have been related. Approximately two fifths of the white inmates and three fifths of the black inmates had never been married at the time of admission; for these inmates the family orientation, in which the inmate would be a son or daughter (rather than spouse or head), is likely to be the more salient. Marital status alone is a rather crude indicator of one's familial connections and living arrangements. Therefore in Table 2 we show data on the proportions of inmates who were living with their families at the time of arrest by race and marital status at admission for inmates who were employed prior to their arrest (or at any time after December 1968).

There are two points of interest in these data. First, between 25 percent and 30 percent of married inmates were not living with their families at the time of arrest, which suggests that perhaps some families were already experiencing separation from the inmate even prior to his or her incarceration. Second, half of the never-married white inmates and fully 64 percent of the never-married black inmates were living with their families prior to their arrest. This not only suggests that single inmates are not so isolated from familial relationships as is customarily assumed, but it also points to the substantial numbers of families that are touched directly by the arrest of a son or daughter.

We should point out that the NCJISS data available to us were in an aggregated and tabular format. This presents some problems in their use. For example, both age and sex are of great salience in interpreting data on marital and family status; it is most unfortunate that no information on these characteristics was available in the tabular presentations of the data. As another example, actual time served in prison is relevant to an under-

standing of an inmate's family's career as a family unit during his or her incarceration; yet analysis of the impact of this variable is not possible given the way the data are presented. Further, it should be noted that the 1974 survey covers a restricted population (inmates of state facilities); it is not representative of all inmates of correctional facilities (for example, local jail populations or inmates of federal facilities). Moreover, the quality of the data may be questionable, since inmates may be even more reluctant than the general population to cooperate with a federally sponsored census. Finally, the data at hand indicate nothing of the emotional quality or strength of the family ties indicated by the demographic status characteristics.

Nonetheless, even if we take the data shown above as suggestive rather than definitive, we are on fairly safe ground in concluding that the family group is a social unit to which the majority of inmates have some connection. That is, the family would seem to be worthy of some attention from those interested in techniques of rehabilitation in noninstitutionalized settings.²

HOW DO FAMILIES REHABILITATE?

Having established in the preceding section that an interest in the family as a site or locus of offender rehabilitation is not without justification, let us try now to answer the following question: How do we expect the family to rehabilitate one of its own members?³ In other words, what theoretical schemata take the family as the focus of convenience?

A cursory review of the literature on theoretical systems or conceptual frameworks for analysis of the family in society suggests that the question of the part the family unit can play in rehabilitation of a family member who is a criminal offender has engaged the attention of few family theor-

²At the same time, however, it is unrealistic conceptually, analytically, and practically to consider the family as a "noninstitutionalized" rehabilitation setting without also considering the family-offender interrelationships while the offender is in transit through the criminal justice process from arrest through release. It is beyond the scope of this paper to recount the aspects of the criminal justice process that unnecessarily damage the relationship between an offender and his or her family and the features of the programs that have been suggested (some implemented, few evaluated) as ways of undergirding and protecting the family-offender relationship during its interaction with the criminal justice system. But we would underline the obvious: none of the rehabilitative potential of the family will be realized if the family-offender relationship is severed during the "justice" process.

³As noted earlier, this is an especially critical question in light of the fact that the offender is *prima facie* evidence of the family's earlier failure to socialize successfully.

ists or empiricists. Slightly more attention has been paid to the impact of imprisonment of a family member on the functioning of the family that he or she leaves behind. Although this set of literature reverses the emphasis from the main focus of this paper, we will look at it briefly because of its obvious relevance to our topic. Clearly, any impact a family might have in the rehabilitation of an offender after release is going to be in part a function of what has happened to the offender's family as a result of his or her imprisonment and separation from the family.

There is implicit in any examination of the impact of incarceration on the family a belief that only the offender should be the recipient of the punishment; his or her family is presumed to be innocent. Their loss of the offender from the home is deemed sufficiently detrimental that there is no need to exacerbate the situation. For the offender, imprisonment itself is deemed sufficient retribution and need not entail complete social isolation from the family. Thus maintaining strong family ties is considered beneficial for both the offender and his or her family (Brodsky 1975, Cobean and Power 1978, Glaser 1969, Morris 1965), and much of the empirical and programmatic literature argues that sustaining positive marital relationships during incarceration will be an excellent predictor of "good" postrelease behavior (Freedman and Rice 1977, Glaser 1969, Kaslow 1978). Marital counseling (Freedman and Rice 1977, Kaslow 1978), conjugal visiting (Hopper 1965), and expanded furlough programs (Markeley 1973) have all been advocated on the premise that preserving family ties during incarceration will play an important role in the offender's ability to become reintegrated into society upon his release. However, the scientific bases for these proposals have not been rigorously demonstrated, and we suggest that they have not even been questioned because of an underlying belief that anything that encourages family cohesiveness is by definition desirable on humanitarian grounds alone.⁴

FAMILY STRESS MODEL

In *Families Under Stress*, Hill (1949) employed a situational framework (see Rawlings 1966) as the conceptual scheme to examine the adaptive responses of family units to specific crises or stresses. The existence of stress, the response to and recovery from stress, and the resiliency of families to stress are major points of analysis in his framework. Hill proposes generally that the stress of separation involves two independent di-

⁴We feel compelled to point out that there has been little attempt to determine whether the programs that are designed to maintain family ties or to improve family functioning in fact do so.

mensions: dismemberment and demoralization, each of which can be more or less stressful for a family unit. Dismemberment refers to the physical absence or loss of a family member, whereas demoralization represents the affective ramifications of the separation. A loss of morale and a weakening of family solidarity would be examples of the demoralization process. Hill characterized war-related separations as involving dismemberment but not demoralization. This he contrasted with the crisis of imprisonment of a family member (e.g., the husband/father), which he suggested involved both dismemberment and demoralization as family stressors.

In her study *Families of Prisoners*, Morris (1965) makes some necessary refinements to the concepts of demoralization and dismemberment. Specifically, she takes as problematic the characterization of imprisonment as stressful and clarifies some of the conditions under which husband/father imprisonment is and is not stressful as dismemberment and as demoralization. For example, all families of incarcerated offenders experience dismemberment. However, the emotional response to the involuntary separation may be quite different among families. Morris suggested that the male offender's wife may initially feel overwhelmed by the prospect of assuming complete emotional and financial responsibility for the household. For the youthful offender's family, however, the loss may prove less disruptive if the young man was not contributing significantly to the financial and emotional well-being of the household. Fewer readjustments would be entailed; and indeed, the offender's absence may be perceived as a relief, as parents are no longer obligated to support him.

We can suggest that the literature on family stress, and especially family separations, may be a useful source of analog studies of the impact of imprisonment on families. In this category we would place studies of war-related separations, short- and long-term hospitalizations, and occupationally related separations. Questions that are relevant to offender rehabilitation might include the following: What factors that characterize a separation make it more or less stressful for families; whether and how families maintain the imagery of the members' presence in the face of the obvious absence of the member; how families manage reunions; whether temporary, short-term reunions (e.g., weekend furloughs) are beneficial or stressful to family functioning; and the like. For example, the fact that POW/MIA families found the indeterminacy of the separation as stressful as the length of the separation (McCubbin *et al.* 1975) is a relevant datum to, and ought to be taken into account in, any assessment of the effect of indeterminate sentencing on the criminal offender. We should point out, however, that the research on family separation is not extensive and much of it is quite dated. This latter is especially problematic, since the assess-

ment of the trauma created by the loss of the husband/father may be grossly overstated, given the changing social climate of sex role patterns as they affect leadership roles within the family. Moreover, the few studies that exist tend to be descriptive rather than experimental research.

Some welcome conceptual clarity was given to the family stress literature by Burr (1973). Burr organizes the findings from the research comprising this literature into a set of interrelated propositions wherein the vulnerability of a family to stress is seen as a function of the basic internal cohesion in the family, the family's definition of the seriousness of the changes caused by the stressor event, the family's externalization of blame for changes caused by the stressor event, the amount of time during which changes in the family had been anticipated, the amount of anticipatory socialization the family has had in responding to the stress, and the degree of adaptability of the family. The regenerative power of a family (the family's ability to recover from stress) is hypothesized to be a function of the degree of extended familism of the family in conjunction with the length of time the family system experiences disruption, the structure of internal cohesion within the family, the marital adjustment of the spouses, the similarity of sentiment (the evenness of distribution of affection across and among family members), the degree of external involvements of the wife/mother, and the nature of decision making in the family. It should be noted that none of the studies from which Burr's propositions were derived was based on families of prison populations. Nonetheless, Burr's reformulations can be of great heuristic value in studying the impact upon and response of a family to the involvement of one of its members in the criminal justice process.

FAMILY AS A NETWORK OF EXCHANGES

The family stress model is of much value in identifying characteristics of families that mediate the immediate and long-term impacts of stressor events, such as criminal involvement or imprisonment of a family member. It does not, however, offer a view of the mechanisms or processes through which a family might be expected to rehabilitate a family member who is an offender or ex-offender. In this section we propose a model that attempts to describe how the family can play a restorative role in the life of the offender.

By drawing both from functionalism and exchange theory, we propose that the family operates rehabilitatively through the reengagement of an offender in a series of family-grounded exchange nets. The family has the potential to reincorporate the offender into a net or system of exchanges of rights and responsibilities within the family. We suggest further that reso-

cialization of the offender, which is played out in the social psychological arena of interpersonal interaction, is preceded by and enacted through the socially grounded processes of reattachment and reiteration of familial bonds.

There are at least four domains of familial social interaction that we feel are critical as arenas for reengagement. Most important might be the reengagement of the offender in a network of *emotional exchanges* with spouse or partner, children, parents, siblings, or other kin and pseudo-kin. Here the folk notion of the irrevocability of family bonds becomes an important source of sustenance for the continuation of fragile family relationships through and beyond the points of stress where other relationships less vested with the presumptions of lastingness and irrevocability would readily disintegrate. In this sense, the family is an emotional haven of last resort: the loss of familial ties should be especially damaging to an offender's prospects for rehabilitation. By the same token, the enhancement of the family's ability to "stay with" its offender member and to reengage him or her in affective bonds with them is crucial. The reengagement via emotional exchanges is played out not solely by the family's providing sources of and targets for affective ties but also by its providing for the reestablishment of legitimate sexual relationships, for the resumption or assumption of parental roles, and for the organization of leisure, and more abstractly by its offer of a particularistic rather than a universalistic mode of orientation and response in social interaction.

The reestablishment of ties of *economic interdependence* between the offender and his or her family is another mechanism of reinvolvement. The provision of food, housing, clothing, and other material goods and services in exchange for earnings from labor force participation is the formal aspect of this exchange. The engagement of the offender in the household economy—that is, in a household division of labor that is organized around daily home maintenance and management duties and child care tasks—is the informal part of economic interdependence. Whether the returning offender is able to enter into these exchanges as a contributor rather than as a resource drain is often a function of social forces largely beyond his or her family's control. Given what we know already about the often devastating consequences for families of unemployment of the main income earners, it is not unreasonable to speculate that the difficulties ex-offenders face in locating and holding onto a job after release will greatly hamper the reestablishment of vital economic exchange relationships within the family. Moreover, unemployment can create new sources of or exacerbate the existing levels of familial strain and thus undermine both directly and indirectly the potential of the family to effect rehabilitation.

The family may provide something of a point of reentry for the offender

into the localized societies within which the family operates. That is, families may provide *social legitimation* in exchange for social conformity. The provision of entree into the family's community linkages is a mechanism for reintegrating the offender into the larger social fabric, which, with its attendant array of informal social expectations and obligations, rests upon the implicit contract of sociality for social conformity.

Finally, the family makes demands on its members for participation in and conformity to *authority relationships*. One of the formal properties of family systems is the allocation of authority, power, and obligations of conformity and compliance by age (and sex). The parent position in the family system is vested both with the responsibility to present models of moral authority to children and with the right to exact compliance from children; children are expected to conform to parental authority. It is from participation in a family-based judicial system that respect for the prerogatives and limits of authority and the moral senses of equity, fairness, and justice are learned. Whether as parent or as child, participation in the family requires of the ex-offender behavior that is morally inconsistent with criminal behavior. Simply by virtue of its niche within a larger social (that is, moral) order, the family embodies a subtle pressure on the offender to resolve the inconsistency in favor of socially grounded familial norms and to meet the normative expectations for appropriate moral behavior.

In sum, we have argued that families can be effective in rehabilitation insofar as they can engage the offender in a series of networks of exchange: emotional, economic, civil, and moral.⁵ However, whether the family is able to reengage an offender in any of these four domains is a function of numerous factors, including the subcultural norms of the community within which the family is embedded, the socioemotional status of the family, the economic level of the family, and so forth. In the section that follows we discuss several such conditional variables that we suggest will influence the rehabilitative potential of the family.

CONDITIONAL VARIABLES

The family's potential effectiveness in rehabilitation of the ex-offender is a function of a complexity of factors, each of which can enhance or undermine the ability of the family to reengage the offender in intrafamilial ex-

⁵The exchange model of rehabilitation we propose is consistent with the control theory of crime in that it is intrafamilial exchanges that form the bases for attachments and that provide a rationale for conformity. There is consistency also with economic theories of crime in that the utility of criminal activity should be a negative function of the degree of engagement in intrafamilial exchange nets.

change networks. For the sake of analytic clarity, the following discussion of conditional variables has been organized according to individual offense-related factors, internal family system factors, and extrafamilial contextual factors.

Individual Factors

Apart from individual predispositions to rehabilitation, offense-related characteristics of the individual can be expected to affect the family's response to his or her adjudicated criminal behavior and subsequent separation from and return to the family. For example, the offender's criminal history is likely to affect the process of reintegration. In contrast to first offenders, repeat offenders tend to come from less stable, often highly disorganized families (Morris 1965). Not only may the families of repeat offenders fail to view the latest imprisonment of the offender as a crisis, they may also lack the necessary resources and motivation to successfully reengage the offender upon release. Families of first offenders, on the other hand, may prove to have the greatest potential for reintegrating the offender.

The type of offense may or may not affect the family's response to the offender. Blackwell (1959) found that, with the exception of sex-related offenses, the wife's adjustment to her husband's incarceration is not strongly influenced by the type of offense committed (e.g., crimes inflicted against persons as compared with those affecting property). This finding is consistent with Morris's (1965) conclusion that the separation component of the incarceration is more stressful than the stigma associated with criminality. At the same time, we would expect that crimes against family members, such as spouse or child abuse, would create special difficulties in terms of reintegrating the offender into the emotional exchange nets and into authority relationships. Moreover, instrumental crimes committed in the service of family welfare (e.g., a housewife's shoplifting articles for the home) may be seen as "justifiable" acts and thus may be more difficult to eliminate by the reengagement of the offender into the authority relationships in the family (in which the concepts of "justice" are actualized).

The length of the separation from the family, we would suggest, is positively and linearly related to the difficulty of reengagement of the offender in each of the four domains of intrafamilial exchange. In the extended absence of one of its members, the family—like most other social organizations—will restructure itself so as to make up for the loss of the absent member. The realignment of persons, roles, and the emotional loadings attached to each becomes institutionalized over time, so that the reinte-

gration of the ex-offender after an extended separation is as difficult as the adjustment to the original separation. Whether the effects of length of separation can be mitigated somewhat by institutional policies regarding visitation, home leave, and the like is an open question.

Family-Level Factors

We take as an operating assumption that the postrelease capabilities of the family will be directly influenced by the state of the family prior to the offender's involvement with the criminal justice system and by the experiences the family has in that system as the offender proceeds through it from arrest to release. Probably the best predictor of the family's potential to rehabilitate the offender is the strength of existing family relationships prior to the offender's arrest. For many adults, the quality of the marital, common-law, or other significant emotional bond will shape both the response of the offender as well as that of the family to the enforced separation (Blackwell 1959, Morris 1965, Sack 1977), with stable relationships of longer duration being less likely to be terminated during the imprisonment period (Blackwell 1959).

The offender's role position within the family unit will also shape the family's ability to rehabilitate the offender. Age, sex, and marital and parental status are involved in the determination of one's role position within the family unit. The separation and return of youthful versus adult and male versus female offenders pose rather different problems for the family. Moreover, the centrality of the role position occupied within the family should be positively related to the family's ability to reengage the offender, such that the more central the position, the more potent or effective the familial influences in rehabilitation.

The literature on the impact of incarceration on families provides some clues about the likely effect on the family's subsequent potential for rehabilitative effectiveness of the offender's filling one of the following three role positions within the family system: male family head, female family head, and youthful male nonhead. Let us look briefly at each in turn. The married adult male offender has often served as head of the household and as the primary economic provider for the family. The incarceration experience deprives the male offender of active involvement in each of these roles, which can weaken his ties to the family during his imprisonment. His absence may also be highly stressful for his spouse, as she is forced to assume an additional set of role responsibilities. Obviously, additional factors such as the family's socioeconomic status and the husband's prior income would influence the economic resources available to the offender's family during his incarceration.

Morris's data (1965) suggest that because the incarcerated husband has abdicated a major role within the family as primary wage earner, a key issue upon his return will be the ease with which he can assume these responsibilities. Thus the existence of suitable employment will be of vital importance in the offender's attempt to become integrated into the family and society as a whole. The existence of family ties may play an important role in the offender's ability to locate a job, as most jobs are obtained through personal contacts (Glaser 1969). Clearly, emotional factors will play an important role in the family's ability to reengage the offender; however, without the opportunity for securing suitable employment, the positive benefits to be derived from a supportive environment may well be minimized.

In addition to their role as husband, many male offenders are also fathers. Sack *et al.* (1976) have found that the parental role often becomes highly salient for incarcerated fathers. However, the reintegration of an ex-offender into the parental role with its attendant authority relationships may be especially problematic. LaPointe's (1977) data suggest that parental incarceration weakens the child's respect for the parent and may result in resentment and resistance when the parent tries to resume his position as an authority figure and to enforce moral principles that he or she has violated.

Clinical studies (Sack 1977, Sack *et al.* 1976) suggest that parental incarceration during a child's puberty may leave both male and female children particularly vulnerable to serious behavior problems such as delinquency and truancy. Data on families who have been able to reintegrate ex-offenders and to reestablish them successfully in parental roles would be extremely valuable in learning more about the intergenerational ramifications of incarceration and rehabilitation.

The impact of separation of parent and child is particularly apparent in the case of the female offender. Female inmates constitute only a very small percentage (3 percent) of the incarcerated population (U.S. Department of Justice 1976). Most female offenders are young, single, nonwhite, and of low socioeconomic status (Baunach 1979a, LaPointe 1977). Over 50 percent have at least one child, 23 percent of whom are under the age of 4 (McGowan and Blumenthal 1978, Ward and Kassebaum 1965, as cited in Baunach 1979a). Unlike the male offender with children, whose absence can be mediated by his wife, the female offender is likely to be a single parent with no spouse to fall back upon to oversee the safety and well-being of her children and to maintain the family unit as a viable social group. Female inmates repeatedly express doubts about their competency as mothers and worry about their ability to resume that role when released (Baunach 1979a, LaPointe 1977).

In a recent study of women inmates in three prisons, Baunach (1979b) reports that just over four fifths of the children of the mothers she interviewed were being cared for by relatives during the mother's incarceration. She writes that the "inmate-mother's family, primarily her own parents, provides the major source of caretakers for her children" (p. 5). Because of her absence, however, and especially if the children are young, the female offender may find it difficult to regain her role as the primary parental figure (Baunach 1979a, LaPointe 1977).

Even with the assistance of relatives, the family of the female offender constitutes a high-risk population by any definition. The ability of women to secure stable employment with an income sufficiently high to support a family is problematic in any case; for a woman ex-offender, the task is even more difficult. Thus her ability to become reestablished in the economic exchanges within the family is diminished. Furthermore, the family's ability to reintegrate the woman ex-offender into socially legitimate friendship networks and into familial authority relationships is undermined by the greater social stigma attached to female offenders. Indeed, mothers report the stigma associated with criminality and imprisonment as being more problematic for their children than for themselves (Baunach 1979a, LaPointe 1977, Morris 1965, Sack 1977, Sack *et al.* 1976).

A disproportionate number of incarcerated offenders are young single males. While some of these inmates may have strong ties to a girl friend or common-law wife, most of these offenders are still officially linked to their family of procreation. The mothers of these offenders are often the only visitors and may be the only family members to remain loyal to the offenders despite repeated histories of incarceration (Brodsky 1975).

The rehabilitative potential of the family for these youthful offenders is questionable. Neither the offender nor his parents view him as occupying a central role in the family unit. Further, the young male represents a financial burden and a potential source of emotional aggravation to his parents; as such, their motivation to reengage the offender may be limited. Moreover, youthful offenders tend to come from homes in which conflict is quite prevalent (Glaser 1969). Unfortunately, these conflicts tend to re-surface when the youthful offender returns to his parents' home. According to Glaser (1969), such offenders are highly likely to become involved in further criminal activity.

Contextual Factors

The restorative potential of the family will in large part depend upon its internal resources, but the accessibility of external assistance may strengthen

the family during the offender's absence. For example, the availability of welfare benefits for the parent with young children can play a vital role in his or her ability to sustain the family. Friends and family members may also serve as informal sources of economic support. In light of Baunach's (1979b) findings about the critical importance of extended family members as caregivers for children of female inmates, consideration should be given to eligibility guidelines that would enable such families to qualify for support during the parent's absence.

Informal networks are also vital sources of social support for the family during and following incarceration of an offender. Continuity in, versus disruption of informal community ties, is likely to influence a family's ability to assist in rehabilitation. In this regard, Glaser (1969) and Sack *et al.* (1976) note that families are often forced to move as a result of a decrease in income or in order to be closer to the prison facility where the family member is incarcerated. Unfortunately, a family that is itself isolated will be less able to facilitate the social reintegration of the ex-offender into localized social networks.

The criminal justice system, in general, and the specific prison facility to which an offender is assigned, in particular, are dominant influences in the social context within which the families of offenders must operate. Some attention therefore should be given to the prison policies and informal practices in such facilities that can facilitate or undermine the ability of the family to assist in the rehabilitation of the offender. Some specific practices that directly affect the offender's family can be suggested: location of prison facility to which an offender is sentenced; availability of public transportation to prison facilities; visitation regulations and facilities; availability of privacy during visits with spouses or mates; provision of adequate child care facilities; availability of weekend furloughs for family visits (an analog of work release); and the involvement of family members in prerelease (and postrelease follow-up) programs for offenders.

We would argue straightforwardly from the family-as-exchange model proposed earlier that prison practices that foster meaningful family contact during the period of incarceration will have a positive effect on the family's ability to reengage the offender in family-based exchange networks. Conversely, policies that hamper family contact or limit the quality of familial interaction add yet another burden to those already borne by the offender's family.

CONCLUDING SUMMARY

The bulk of this paper has been devoted to the explication of a theoretical model that describes how a family might be expected to rehabilitate an of-

fender and to an examination of limiting conditions, that is, factors that specify conditions under which the model is more or less likely to operate as described. Specifically, we have argued that families will effectively rehabilitate an offender to the extent that they can reincorporate the offender into emotional, economic, social (civil), and moral (authority) exchange relationships within the family. We suggested that the model should operate differently for those from strong and cohesive families as compared with those from fractured families, for men as compared with women, for youthful as compared with adult offenders, and for those in central rather than peripheral locations in the family role structure. Moreover, external social factors such as community values, the existence of formal and informal support networks, and the socioeconomic status of the family can be expected to condition the operation of the model. Finally, factors related to the criminal justice system itself were cited as important for their impact on family functioning directly and for their indirect impact on the family's ability to rehabilitate the offender.

While the proposed model draws upon what we know of the sociology and social psychology of family functioning as well as upon the available literature on the families of offenders, the model has not been tested empirically and thus can serve only as an overarching heuristic for empirical research. We can suggest a few of the researchable questions generated by the model. For example, the model would suggest that the effects of job programs on recidivism will be mediated by the family status of the offender. An offender with strong familial attachments might be expected to be more motivated and more successful in job release or other job-related programs than offenders without such ties, because the job program affords the opportunity for enhancement of the offender's position in intra-familial economic exchange relationships, which itself is a rehabilitative mechanism, and this should operate above and beyond any absolute economic contributions to recidivism that stem from participation in the program.

The model offers theoretical rationale for evaluation of prison policies (such as weekend furloughs and visitation regulations) that are assumed to enhance or hamper the quality of the familial relationships of offenders. If families are important to rehabilitation, then we need to know which prison practices undermine fragile family relationships and which enhance family functioning. Moreover, the discussion of conditional variables offers an initial listing of factors that need to be examined in designing family-relevant intervention programs for specific offender subgroups. Further, the model suggests a set of outcome variables (that is, the degree of reengagement of the offender in the four domains of family exchange) against which the effectiveness of rehabilitation programs can be evaluated.

Apart from research suggested by the model, we suggest that basic research investigation of the role of the family in resocialization in general is needed. There may well be significant limits on the extent to which a family can be expected to participate in the re-creation (and subsequent maintenance) of a "new" person out of the "old" and familiar one, around whose old (even though imperfect) self a variety of family customs, practices, and expectations of and allowances for shortcomings has grown through the years. There may be limits on the ability of the family to readjust its patterns of interaction and its long-established role sets to accommodate the new person. This suggests that programs that are designed to return "new" or "repaired" persons back to their families and that expect to enlist the family's support in the maintenance of the repair, but that have failed to take into full account the rigidity of family practices, the force of family history, and the systemic nature of families, will have limited chances of success. Only programs that involve the family fully in working through the full implications of the resocialization of one member for the internal organization and functioning of the family as a whole, and that proffer some assistance to families during the resocialization and re-integration process, would seem to have much chances of success.⁶

In conclusion, we have not been able to assert unequivocally from the available data that familial involvement is important to the rehabilitation of criminal offenders. We have suggested, however, how families might be expected to rehabilitate offenders and under what conditions these expectations might be realized. It is our feeling that there is *theoretical* rationale (not to mention humanitarian justification) for acting as if families were important to offenders. Further, we feel that it is justifiable to design and evaluate programs that would involve families in rehabilitation. While this position is not based entirely on faith, it is clear that much of the necessary research has yet to be done.

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Schooling and Delinquency

GARY D. GOTTFREDSON

This paper is intended to illustrate some ways in which research on the relation of schooling to youth crime might be used as a basis for developing strategies to prevent delinquency. Areas where better knowledge is needed are outlined, and the kinds of research that appear most promising if that knowledge is to be gained are specified.

The first several sections review some of the descriptive data about the distribution of delinquent behavior according to age, social class, ability, and school performance. These descriptive data constitute much of what must be explained by useful theories of delinquency. The reported associations of delinquent activity with age and among different social groups vary according to source—official records, self-reports, level of aggregation—and whether or not incidence rates or prevalence rates are examined. In subsequent sections I attempt to put delinquency into perspective by describing the roles and statuses occupied by contemporary youths.

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The social positions occupied by contemporary youths to a large extent determine the opportunities and problems they experience. Then implications of several major theoretical perspectives linking schooling with delinquency are discussed. Finally, I comment on the kinds of research required to improve theories and gain practical knowledge about preventing delinquency.

YOUTH CRIME

AGE

Crime shows striking associations with age. Age-specific arrest rates based on the FBI's Uniform Crime Reports and the 1970 census of population are shown in Table 4 in the panel's report (p. 96). Entries in the table are based on reports only from participating peace-keeping agencies and not from all agencies or jurisdictions in the United States. For this reason, the rates shown not only underestimate the rates for all age groups, but to the extent that participating agencies are not representative of all areas in the country in terms of their age structures, crime patterns, or arrest practices, biases of an unknown nature enter the calculation of these age-specific rates. Nevertheless, this table provides a compelling portrait of official crime as a phenomenon dominated by youths.

A more detailed perspective on the relation of age to official delinquency derives from the study of 9,945 boys born in 1945 who lived in Philadelphia at least from their tenth to their eighteenth birthdays (Wolfgang *et al.* 1972). Table 1 shows that the age of first arrest by the police peaks at age 16 for this group of boys. The first two columns of Table 1 show the rate of first arrests per thousand boys in the birth cohort for youths residing in lower socioeconomic census tracts and in higher socioeconomic census tracts, respectively. This rate rises monotonically for both group of boys until age 16 and then drops sharply. The second two columns show a different kind of rate. The base for these rates includes only those boys who have not already experienced an arrest prior to attaining a given age. Again, the rates rise monotonically for both socioeconomic groups until age 16 and then drop. These rates confirm and extend the general impression portrayed in the FBI data summarized in the panel report—delinquent activity, as registered by official records, is high around age 16 and drops off after that age.

Information about the extent of official contacts for the boys in the Wolfgang *et al.* (1972) sample is summarized in Table 2 by showing prevalence rates. A prevalence rate indicates the number per thousand

TABLE 1 Age of First Recorded Police Contact According to Socioeconomic Status and Race

Age	Number per 1,000 in Group with First Police Contact at this Age		Number per 1,000 Remaining Eligible Pool with First Police Contact at this Age	
	Low Socioeconomic Status (N = 4,584)	High Socioeconomic Status (N = 5,361)	Low Socioeconomic Status (N = 4,584)	High Socioeconomic Status (N = 5,361)
7	4.1	1.1	4.1	1.1
8	7.6	3.9	7.7	3.9
9	20.1	6.0	20.3	6.0
10	28.8	8.8	29.7	8.9
11	36.9	12.1	39.2	12.4
12	46.0	16.8	51.0	17.3
13	60.6	25.0	70.8	26.3
14	60.0	39.0	75.4	42.1
15	70.9	50.6	96.4	57.0
16	77.7	67.5	116.8	80.7
17	35.8	33.9	60.9	44.1

NOTE: Police contact means the youth was taken into custody regardless of the eventual disposition of the case. Data are from the Philadelphia cohort study reported by Wolfgang *et al.* (1972) based on information presented in Tables 6.4 and 8.1 in the original report.

boys who acquired a police record of arrest at any time up to or including a given age. By age 17, 45 percent of the boys from lower socioeconomic census tracts and 26 percent of the boys from higher socioeconomic census tracts had acquired such an arrest history. In short, official delinquency among youths, defined by at least one police contact, is a surprisingly prevalent phenomenon.¹

A distinction between officially recorded delinquency and delinquent

¹Tables displaying prevalence data, as does Table 2, show nonnegligible associations of official delinquency with social class, associations that are higher than those obtained when incidence rates are examined in individual-level analyses (cf. Gordon 1976). In the Wolfgang *et al.* (1972) data, the ϕ coefficient between socioeconomic status and delinquency status, defined as at least one police contact, is 0.19 (not presented by Wolfgang *et al.* but calculated from their results). The corresponding ϕ for the white-nonwhite dichotomy is 0.20. In general, incidence data tend to show small or nearly negligible correlations with social class at the individual level, but they do show strong negative correlations in data aggregated to the census tract level or higher (e.g., Block 1979).

behavior itself is useful because official records measure not only delinquent behavior but also official actions or responses to that behavior, if indeed the behavior is detected at all (Empey and Erickson, 1966, Erickson and Empey 1963, Williams and Gold 1972). Unfortunately, it is difficult, if not impossible, to assess the incidence, prevalence, or extent of actual delinquent behavior directly. Two alternatives to the use of official records of delinquency exist: self-reports of one's own delinquent participation and the reports of victims of their personal experiences. The available evidence derived from self-reports is described next, followed by a description of the more indirect information about delinquent involvement derived from the reports of victims.

Information about self-reported delinquency and age for several types of delinquent behavior is shown in Table 3. This table contains estimates computed by pooling results presented by Gold and Reimer (1975) for two national samples of youths. The data were pooled to obtain more reliable estimates; the sample sizes in the original report were small. These incidence rates (rates of persons reporting an offense within the recall pe-

TABLE 2 Prevalence per 1,000 of Police Contacts According to Age and Socioeconomic Status

Age	Socioeconomic Status	
	Low (N = 4,584)	High (N = 5,361)
7	4.1	1.1
8	11.7	5.0
9	31.8	11.0
10	60.6	19.8
11	97.5	31.9
12	143.5	48.7
13	204.1	73.7
14	264.1	112.7
15	335.0	163.3
16	412.7	230.8
17	448.5	264.7

NOTE: The association of social class with delinquency by age 17 implied by this prevalence measure is summarized by a phi coefficient of 0.19, based on Wolfgang *et al.* (1972, Table 8.1). The socioeconomic status is based on an index for the census tract of residence for the boy. By way of comparison, the phi between this prevalence measure and race in the Wolfgang *et al.* report (1972, calculated from data presented on p. 54) is 0.20.

TABLE 3 Self-Reported Delinquent Incidents by Age per Hundred High School Boys and Girls

Type of Incident	Age			
	13	14	15	16
<i>Boys</i>				
Property destruction	48	61	62	69
Fraud	22	23	35	56
Theft	67	59	76	78
Assault	60	62	60	56
Threat	36	43	44	36
Concealed weapon	12	13	18	22
Take car	1	4	12	20
Any type ^a	535	593	763	863
<i>N</i>	169	211	217	214
<i>Girls</i>				
Property destruction	22	15	24	22
Fraud	18	28	34	46
Theft	25	28	47	39
Assault	16	18	23	12
Threat	12	11	19	19
Concealed weapon	1	5	4	3
Take car	0	1	5	6
Any type ^a	276	320	454	509
<i>N</i>	149	151	187	180

^aIncludes a number of types of "offenses" not listed here.

SOURCE: Calculated from data presented by Gold and Reimer (1975, Tables 5 and 6) by pooling data for 1967 and 1972 samples to obtain more stable estimates. Note that sample sizes are nevertheless small.

riod) are higher even than the prevalence rates derived from official data.² Moreover, when taken together there is a tendency for these self-reported rates to increase with the age of the reporting youths over the 13 to 16-year age range. Self-report studies of adult criminal behavior are rare, perhaps largely because researchers have found it convenient to study school pupils. As a consequence, no nationally representative data of the

²Even in anonymous questionnaires, people may remain reluctant to admit delinquent behavior. Higher estimates of delinquency rates are sometimes obtained using the randomized response technique (Gottfredson 1978). See, however, reports by Corey (1937), and Kulik *et al.* (1968), which suggest that differences associated with anonymity are slight and that response quality may drop in anonymous questionnaires.

sort reported by Gold and Reimer (1975) for youths are available for adults.³

Some striking self-report evidence is available for a small sample of highly active adult California felons studied by Petersilia *et al.* (1977). They divided the criminal "career" of their subjects into three periods, which they labeled juvenile, young adult, and adult. The juvenile period extended from the first self-reported offense through release from the first juvenile incarceration, and its median duration was 1.3 years. The young adult period extended from release from the first juvenile incarceration to release from the first adult incarceration and had a median duration of 6.4 years. The adult period spans the time since release from the person's first adult incarceration, with a median of 10.3 years for the sample. Even for this highly active group of criminals, self-reported offenses per month of street time dropped off sharply from 3.28 for the juvenile period to 1.52 during the young adult period and 0.64 during the adult period.

Evidence about age and criminal behavior derived from the reports of victims is indirect and often based on perceptions of doubtful accuracy. Nevertheless, some insight into the relation of age with delinquency may be gleaned from surveys of victims. Hindelang (1976) summarized victim perceptions from surveys by the Census Bureau and the Law Enforcement Assistance Administration (LEAA) in eight cities that suggest the following percentages as estimates of the proportions of offenders aged 12 to 20: assaultive violence with theft, 39 percent; assaultive violence without theft, 31 percent; personal theft without injury, 42 percent; and larceny, 51 percent. These proportions, which are much higher than the proportion of the population in this age range, contribute to the general picture of crime as a phenomenon of youth.

In summary, although no single source of evidence about the relation of delinquent behavior to age is clear and compelling, the evidence from official data, self-reports, and victim surveys converges in implying that participation in delinquent behavior increases throughout adolescence to peak at around 16 years of age and then drops off as youths grow older.⁴

³The only nationally representative study (Bachman *et al.* 1978) that examined self-reported delinquent behavior for boys in the high school years up to age 23 did not use a consistent recall period for the youths at different ages, making this a poor source of trends with age. Nevertheless, the results do suggest a decline as youths age after tenth grade. Reports by Wallerstein and Wyle (1947), for example, illustrate that adults of all social levels commit crimes of one sort or another, but provide poor bases for comprehensive evaluative statements about age or social class trends.

⁴The early study of age and first offense by Goring (1972) is of more than historical interest, although his specific results may be out of date. His peak ages for first conviction are higher than current estimates.

At least there is no evidence to contradict this portrait. At the same time, few attempts have been made to disentangle age, cohort, and time effects (Schaie 1965) in data about delinquency.⁵

Some tantalizing evidence suggests that effects other than age effects may indeed exist. In the United States, compulsory attendance laws in most states require youths to attend school through age 16 or 17 (Children's Defense Fund 1974), and these are the years at which delinquent behavior appears to peak in our country. Wilkins (1965) summarizes some contrasting, and interesting, official data for English boys. Prior to 1948, the typical "school-leaving age" (age at which it is legal to leave school) was 13, and indictable offenses peaked at that age. In 1948 the age at which the majority of boys leaving full-time education was raised, and in that year and subsequent years the peak age of official delinquency was 14.⁶

Such information—as well as other imperfect evidence summarized by Zimring (1978), which implies that rates of offenses according to official data fall off with age but that, in contrast, the severity of sanctions may increase with age—leads to the speculation that age *per se* is not the only variable operating. It may be that delinquent behavior as well as reactions to it are functions of the ways youths are treated, the statuses they are accorded, or the roles they are expected to play. If such expectations change, or if institutional arrangements change, the relation of delinquency to age may also change.

SOCIAL CLASS, ABILITY, SCHOOL PERFORMANCE, AND YOUTH DELINQUENCY

The following paragraphs continue the description of youth crime by summarizing the evidence about the relation of delinquency to ability, social class, and school performance. Considerable confusion exists in the literature on these matters; the link with ability is generally understated and the link with social class is sometimes overstated (at least at the individual level). These variables are so central to the major theories of delinquency that an understanding of the basic descriptive data is essential. Because recent reviews of this evidence are available elsewhere (Gordon 1976, Hindelang *et al.* 1979, Hirschi and Hindelang 1977, Tittle *et al.* 1978), my account is brief.

⁵A minor exception is the report by Chilton and Spielberger (1971).

⁶See also McKissack (1973), who argues that the peak age for property offending is related to the "school-leaving age," and Mannheim (1965), who regards the peak age as an artifact due to the ways youths are processed officially.

Social Class

Until recently a strong negative association between social status and delinquency was widely regarded as one of the most firmly established findings in the area of criminology (see Gordon 1976, footnote 1; Tittle and Villemez 1977). The literature about social class and delinquency has been confusing for at least the following six reasons: (1) several theories assume the association or seek to explain it, and for some writers the theories may be more persuasive than is empirical evidence, (2) confusion exists between the results of studies at the ecological and individual levels, (3) a clear distinction between prevalence and incidence is not always made, (4) distinctions based on the relative seriousness of official and typical self-report offenses have been given insufficient attention, (5) the extent of bias in official handling may have been overestimated, and (6) measures of association that are inherently dependent on the marginal distributions in a table have been applied to nonrepresentative data and interpreted without acknowledging this property.

Tittle *et al.* (1978) recently reviewed as many published studies as possible by calculating from tabular material a common measure of association, gamma, between social status and delinquency status at the individual level. They showed that gammas tend to be low and negative for both official and self-report criterion measures. The average gamma across the 363 measures of association in 35 studies they were able to summarize was only -0.09 . Furthermore, it is clear that the value of gamma found in the studies they reviewed was not uniformly negative. For studies reported between 1960 and 1969, the average of 124 gammas involving a self-report measure of delinquency was -0.11 , and the average gamma for studies published during the same interval involving official delinquency data was -0.22 . For more recent studies, those reported since 1970, the corresponding average gammas were -0.03 ($N = 175$) and $+0.04$ ($N = 5$).

The Tittle *et al.* (1978) report is interesting because it attempts an analytical description of differences among studies in the size of gamma as a criterion variable in a multiple correlation analysis using the following predictors: sample type, sample size, type of place where the data were collected (rural, urban, combination), year of data collection, quality of the socioeconomic measure, and quality and other characteristics of the delinquency measure. To summarize the results of their meta-analysis briefly, it appears that slightly smaller negative associations between delinquency and social class tend to be found in self-report studies, and that for studies involving official data more recent studies find weaker associations.

In short, recent work suggests a coherent picture—the association between social class of origin and delinquency is weak but negative—regard-

less of whether the delinquency measure is based on self-report data (Akers 1964, Voss 1966) or official data (Frease 1973, Polk and Halferty 1966, Rhodes and Reiss 1969). The slightly larger gammas found for official data compared with those for self-report data may have four explanations, at least.

Because official data are the product of some activity of an agency of control, they reflect in part the social class, race, or other biases of the agents involved. Some evidence suggests that such biases may exist (e.g., Daiger *et al.* 1978; Wolfgang *et al.* 1972, Table 13.5). Hindelang *et al.* (1979), however, argue that such biases are insufficient to account for the large race differences in official versus self-report data, and they document that data useful to assess social class biases are rare.

Measures based on official data may be measuring more serious offensive behavior than do typical self-report measures, and the correlation of social status with serious crime is stronger than its correlation with trivial criminal behavior. This possibility is plausible because evidence involving both self-report data (Elliott and Ageton 1979) and official data (Cardarelli 1974, Wolfgang *et al.* 1972) suggest that seriousness of delinquency is related to social class, and reports by Williams and Gold (1972) and Erickson and Empey (1963) suggest that official records are better measures of serious offenses than of other delinquent behavior. Hindelang *et al.* (1979) illustrate the extreme divergence in the range of seriousness of offenses tapped in self-report versus official data. They conclude that *apparent* differences that exist may reflect the nature of information collected, rather than actually being contradictory. Their argument is highly persuasive (see also Empey 1978, pp. 191-192). Very recently, Elliott and Ageton (1979) studied a national sample of almost 2,000 boys using a 47-item self-report delinquency measure that coded frequency in an open-ended manner and included offenses more typical of those included in official statistics than of the usual self-reported delinquency scale. (Typical self-report measures often include minor or frequent kinds of misconduct to increase item variance and thus boost scale reliability.) They not only found markedly skewed distributions, with a few youths reporting remarkable numbers of offenses, but they also found reliable differences associated with social class using these self-reported serious crime data. Although these differences were reliable, they were still not large. Mean differences were small in relation to the standard deviations of the offense distributions.

Official data tend to be prevalence measures, whereas self-report data may tap only recent behavior—questionnaires often use a one-year recall period. Prevalence is the proportion of an age-specific cohort that has acquired the status of "delinquent" by a given age. Thus, if one were to search police or court records to determine whether a given youth has a

record, one might define the youth as delinquent if any record, regardless of the date of occurrence, were found. In contrast, even if no recall period is specified in a self-report questionnaire, decay of memory would tend to produce accounts of recent behavior. For equally rare or equally serious behavior, prevalence data will produce rates that are higher than those from incidence data (data reflecting delinquent acts within a specified time interval). In short, for serious behavior incidence data will tend to produce bad marginal splits and limit the size of correlations or other measures of association with social class. Therefore prevalence data will generally result in higher correlations with social status than will incidence or questionnaire data, providing one explanation for the larger correlation sometimes observed for official prevalence data.

Investigators often summarize the associations in their samples using correlation coefficients, gamma, or Sommer's *d*. Such statistics are influenced by the form of the marginal distributions for the two variables under examination. Hindelang *et al.* (1979) reexamined one study often cited as implying a discrepancy between official and self-report data with respect to its association with social class (Short and Nye 1958). When they corrected the marginal distributions so that the official data and self-report data referred to a common (general) population, the self-report and official data did produce consistent results.

Perhaps all of these possibilities contribute to differences between the correlates of self-report and official estimates. However that may be, it is important not to lose sight of the main point. The individual-level association between social class and delinquency, however measured, is almost never large—it is generally weakly negative. The correlation of social status and serious or very frequent delinquent behavior is larger (negative) than the correlation of social status with less serious behavior. For serious crime the correlation is strong enough to warrant theoretical attention.

When measures at the ecological rather than individual level are considered (Robinson 1950), the relation of aggregate social class and delinquency rates is strong and negative. A series of studies using official data (Block 1979, Gordon 1967, Shaw and McKay 1969) document correlations in the 0.60's and 0.70's. Victimization studies also sometimes show strong associations between neighborhood characteristics and victimization rates. For example, Pope (1978) shows that victimization rates are much higher in neighborhoods with many female-headed families,⁷ and in

⁷Factor analyses of community characteristics generally find this variable to be a good marker for a factor on which such variables as unemployment rates, percentage of families below poverty, and percentage of black population have high loadings (cf. Gottfredson and Daiger 1979; Smith 1973). In addition, this ecological variable is closely related to Miller's (1958) definition of lower-class culture.

a study of over 600 schools Gottfredson and Daiger (1979) show that the rate of teacher victimization is strongly correlated with the degree of poverty and unemployment characteristic of the communities within which the schools are located. Self-report studies involving ecological analyses are rare. The only study I have located is a dissertation by Feyerherm (1977), which involved a very small number of census tracts but did find a moderate negative correlation between economic conditions and self-reported delinquency rates.

In short, although most of the evidence is based on official data, the correlation between the typical social status characterizing ecological units and delinquency rate is strongly negative. More research using self-report data and victimization rates would be helpful in clarifying the picture. Minor doubts persist because the negative correlations that exist may reflect police deployment or arrest practices, and because the correlations of community characteristics with different types of victimization rates are not always consistent (Gottfredson and Daiger 1979, Gottfredson *et al.* 1980). Because these strong ecological associations are found for offenses with very high clearance rates (e.g., homicide), however, they are almost certainly not due solely to the behavior of control agents.

Ability

The literature about the link between ability and delinquency is also controversial. Delinquency researchers have until very recently tended to de-emphasize the correlation between delinquency and ability. The reasons for this are complex. They apparently relate in part to uncertainty about the meaning of the construct of ability and about the extent of cultural bias in tests of ability. Although controversy about the meanings of the research results may continue for some time to come, the results themselves are reasonably clear.

Hirschi and Hindelang (1977) have recently reviewed the evidence and history in this area, and they present a persuasive portrait. According to their review, commonly used measures of intelligence or ability have modest but consistent negative correlations with delinquency at the individual level. They are about the same size as the correlations between delinquency and social class, if not somewhat stronger. Ability measures may also be slightly more strongly associated with more serious offenses; the correlations with police contacts and with interpersonal aggression are higher than they are with undifferentiated self-report measures of frequency of delinquent behavior.

Hirschi and Hindelang (1977) show that the correlation between ability and delinquency is not purely spurious in the sense that the application of statistical controls for socioeconomic status or race will make the associa-

tion disappear. They also argue persuasively that hypotheses that the link between ability and delinquency is due solely to differential detection of such behavior are untenable, citing research by Wolfgang *et al.* (1972) and West (1973). They also suggest that the link between ability and delinquency may be largely indirect via performance in and attitudes toward school. Finally, they show that arguments by those who attempt to discount a role of ability in delinquency by citing the malleability of IQ test performance, or the temporal instability of intelligence scores, are wrong in the sense that such arguments do not square with the evidence. Arguments that IQ tests are culturally biased are also discussed by Hirschi and Hindelang with the conclusion that such hypotheses are inadequate to account for all the results within social class or race categories. A more compelling debunking of some criticisms of IQ tests may be found in Gordon and Rudert (1979).⁸

Researchers have seldom conducted ecological studies of ability and delinquency. One such study, which is valuable despite its limited sample, reports such correlations at the individual level and at three levels of successively higher aggregation for the tenth- and eleventh-grade high school boys in a single small community (Slatin 1969). As the level of aggregation increases so does the correlation between delinquency (defined by a probation office record of some activity related to the boy, based either on a formal court disposition or on informal police or probation office activity) and IQ test and Differential Aptitude Test scores. Slatin's research is exemplary because it provides a concrete picture of how aggregation generally increases the size of correlations observed (cf. Robinson 1950) and also of the complexities associated with different degrees of within-area homogeneity, and potential heterogeneity of regression among social areas. Despite this, the small sample (only 516 boys), the relatively low levels of aggregation involved (all are at the sub-school level), and the small number of ecological units studied limit the usefulness of the specific results.

School Performance

In contrast to the descriptive data relating to social class and ability, the associations of school grades and persistence in school are not in dispute.

⁸The Hirschi and Hindelang (1977) report is the subject of a critique by Simons (1978), which adds little to the discussion but may be of interest to some readers. Compelling evidence of an association between intelligence and convictions comes from a study of several thousand Danish men born in 1944-1947 and followed up in 1973 by Witkin *et al.* (1976). Men with conviction records (about 9 percent) had scores approximately 0.8 standard deviation below those without records on an intelligence test used for screening army recruits.

A long series of studies—from 1936 to the present—have found negative associations between school performance (grades, educational tests, or liking for school) and delinquency (Bachman *et al.* 1978, Ferguson 1952, Frease 1973, Glueck and Glueck 1940, Healy and Bronner 1936, Hirschi 1969, Kvaraceus 1945, Little 1979, Plocek 1970, Polk and Schafer 1972, Rhodes and Reiss 1969, Silberberg and Silberberg 1971, Stinchcombe 1964). The magnitude of the association between educational performance and delinquent behavior was overestimated in early reports, just as the strength of the association between mental ability and delinquency was overestimated in early years (Empey 1978, Hirschi and Hindelang 1977). In part this overestimation appears to have resulted from the analysis of data from samples with disproportionately large numbers of delinquents. More recent reports are more credible. The association between grades and delinquency in most reports is of moderate size and negative. It is usually stronger than the associations with either social status or ability.

Still, because school performance is linked in obvious ways to ability (correlations are typically in the middle 0.40's), one may wonder why the IQ–delinquency relation, but not the school performance–delinquency link, has been questioned. One reason appears to be that theorists have had little ideological difficulty in integrating school failure with a view that educational institutions harm individuals by providing an inappropriate environment (e.g. Greenberg 1977, Kvaraceus and Miller 1959, Schafer and Polk 1967) or by labeling or tracking them in undesirable ways (Schafer and Polk 1967, Tannenbaum 1938) and thus promote delinquency. In short, a preference for purely social interpretation is easier to satisfy with respect to school grades than it is with respect to intelligence or ability. In addition, the exaggerated association between social class and delinquency (at the individual level) also fits nicely with the notion that the socialization of lower-class youths makes it difficult for them to adjust to middle-class institutions (schools), and that such youths will show poor performance and react to the incongruence between their prospects, habits, or predispositions on the one hand and school expectations and demands on the other by rebellion or delinquency (Cohen 1955, Polk and Schafer 1972).

Some typical correlations between social status, ability test scores, and school grades and various measures of delinquency from several studies are shown in Table 4. These serve to make the range of values obtained concrete and to put the degree of association in perspective by showing it together with results for socioeconomic status and ability. These studies are a haphazard and convenient rather than a thorough or representative sampling. This table is shown to provide some concrete experience for the reader of the way these estimates bounce around in recent studies and to illustrate that the associations are generally modest.

Difficulties relating to measurement are pervasive in this literature. First, the reliabilities of measures used in research are seldom carefully scrutinized by the researchers. These can sometimes be quite low. For example, in the Bachman *et al.* (1978) research, retest reliabilities for their self-report delinquency measures over intervals of a year or two tend to be around 0.50. Self-report scales tend to have high homogeneity estimates only when they measure behavior of low seriousness (e.g., Kulik *et al.* 1968) or when they are very long (Elliott and Ageton 1979). Second, the measurement of "independent" or predictor variables examined is also often problematic. In the Wolfgang *et al.* (1972) study, for example, the socioeconomic status of an individual was represented by the median income of families living in the census tract in which the individual boys lived. The researchers were forced into the use of this variable by the lack of a more direct measure. Nevertheless, the reassurances they give about their measure are based on correlations among social characteristics aggregated to the census tract level and on the correlations among prestige, income, and so forth with occupations as the unit of analysis (see Wolfgang *et al.* 1972, pp. 47-48). They confuse levels of aggregation in their argument. It is clear neither that one should consider the Wolfgang *et al.* socioeconomic status variable concordant with usual measures of family background, nor that census tracts are sufficiently homogeneous to make this a sensible contextual variable in a cross-level analysis. As a consequence of such questions about the construct validity of the measures used, the meaning of their results is unclear.

Specific Learning Disabilities

Much attention has recently been focused on a potential link between specific learning disabilities and delinquency. Pupils to whom this term is applied are often disruptive and ill-behaved in school, usually show poor school performance, and often show difficulty in listening, thinking, writing, talking, reading, spelling, or arithmetic. Presumably, the term does not apply to persons who exhibit these difficulties when they can be interpreted as due to mental retardation, physical handicap, emotional disturbance, or socioeconomic disadvantage. Instead, the term applies to those who are performing below expectation. Several causal sequences have been hypothesized to "explain" how this "disorder" may lead to delinquent behavior (see Murray 1976).

No attempt is made here to review all the literature on the topic of specific learning disabilities (SLD), but because of the current prominence of these hypotheses a few words are in order. It is not at all clear that SLD exists as an important diagnostic entity. SLD is often defined by what it is not. For example, SLD was earlier called minimal brain dys-

TABLE 4 Associations Between Measures of Ability, Social Class, Race, and School Grades for Selected Samples: Individual-Level Analyses

Group	Approximate N	Predictor	Criterion	Association	
				Value	Type
Contra Costa County high school boys (Hirschi 1969, Hirschi and Hindelang 1977)					
Whites	1,500	IQ ^a	Police record	-0.31	gamma
Blacks	950	IQ	Police record	-0.16	gamma
Whites	1,500	Father's education	Police record	-0.20	gamma
Blacks	950	Father's education	Police record	-0.05	gamma
Both groups	2,500	White	Police record	-0.26	gamma
Both groups	2,500	IQ	Police record	-0.27	gamma
Whites	1,500	IQ	Self-report ^b	-0.16	gamma
Blacks	900	IQ	Self-report	-0.07	gamma
Whites and blacks	936	Average English grade	Self-report	-0.18	r
Whites and blacks	970	Average English grade	Police record	-0.22	r
Youth in Transition high school boys (Bachman 1975) ^c					
Mostly whites	1,620	Socioeconomic status	Self-report frequency	-0.02	r
Mostly whites	1,620	Socioeconomic status	Interpersonal aggression	-0.14	r
Mostly whites	1,620	Quick Test	Self-report frequency	-0.09	r
Mostly whites	1,620	Quick Test	Interpersonal aggression	-0.22	r
Mostly whites	1,620	GATB-J	Self-report frequency	-0.09	r
Mostly whites	1,620	GATB-J	Interpersonal aggression	-0.24	r
Mostly whites	1,620	Reading test	Self-report frequency	-0.13	r
Mostly whites	1,620	Reading test	Interpersonal aggression	-0.30	r
Mostly whites	1,374	Grades	Self-report frequency	-0.16	r

Philadelphia birth cohort (Wolfgang <i>et al.</i> 1972) ^d					
71% white	9,950	White	Official record	-0.20	phi
71% white	9,950	Socioeconomic status ^e	Official record	-0.19	phi
71% white	—	IQ	Official record	- <i>f</i>	—
National sample of 13- to 16-year-old boys and girls (Williams and Gold 1972)					
Boys (mostly white)	460	Socioeconomic status	Self-report frequency	0.05	gamma
Girls (mostly white)	376	Socioeconomic status	Self-report frequency	0.05	gamma
Boys (mostly white)	461	Socioeconomic status	Self-report seriousness	0.06	gamma
Girls (mostly white)	376	Socioeconomic status	Self-report seriousness	0.03	gamma
Boys (mostly white)	?	Socioeconomic status	Self-report police contact	0.04	gamma
Girls (mostly white)	?	Socioeconomic status	Self-report police contact	-0.11	gamma
White boys	408	Socioeconomic status	Police record	-0.02	gamma
White girls	328	Socioeconomic status	Police record	-0.41	gamma
Davidson County pupils in grades 7 through 12 (Rhodes and Reiss 1969)					
48% boys	Large ^g	English grade	Serious juvenile court record ^h	-0.63	gamma
48% boys	Large	Reading achievement	Serious juvenile court record	-0.20	gamma
48% boys	Large	IQ	Serious juvenile court record	-0.32	gamma
48% boys	Large	Male	Serious juvenile court record	0.90	gamma
48% boys	Large	Family occupational level	Serious juvenile court record	-0.26	gamma
A Pacific Northwest high school (Polk and Halferty 1972)					
Boys	410	Modal grade	Court record	-0.23	<i>r</i>
Boys	410	Father's education	Court record	-0.16	<i>r</i>

NOTE: The results summarized here represent a convenient sample rather than a systematic review. Reports where a single summary statistic was reported by the author, or where one could be readily calculated from data presented, were selected.

^aSource of measure unclear.

^bNo reference period.

^cThree-year longitudinal predictions, except for grades, which are one-year predictions.

^dPrevalence at age 17.

^eInferred from socioeconomic status of census tract of individual residence rather than individual family socioeconomic status.

^fCarefully buried in the Wolfgang *et al.* (1972) report. Cannot be retrieved from their published material.

^gNot explicitly stated in the report.

^hGrand larceny, auto theft, assault, and burglary; prevalence at twelfth birthday.

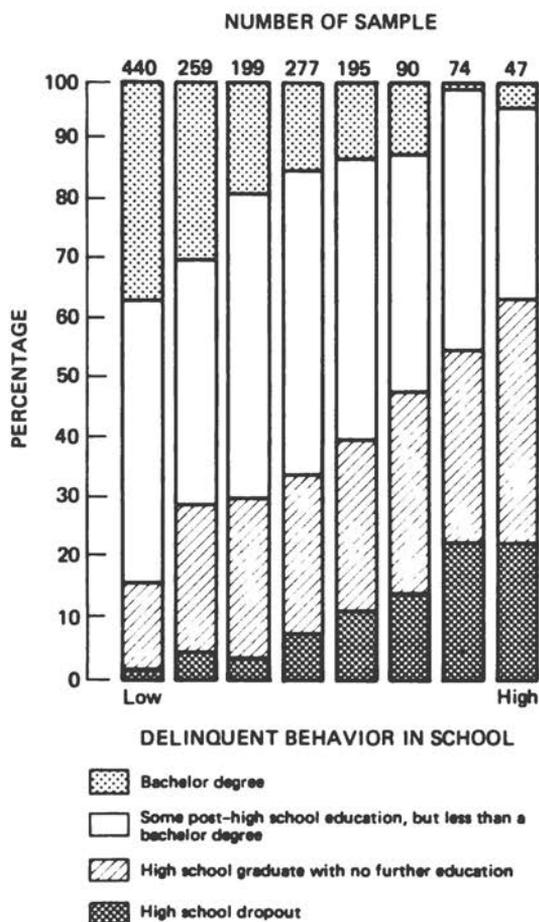
function because there was presumptive evidence of brain injury or dysfunction, but no neurological evidence of dysfunction could be demonstrated. Current diagnostic methods appear to involve patternings in profiles of scores on ability batteries (see Barrow *et al.* 1977). In practice, a clinician examines a profile and makes a judgment that some scores are out of line with expectation based on other scores in the profile. When combined with other evidence, such as poor school work, disruptive behavior in class, or teacher complaints, a diagnosis of SLD may be made. A high degree of clinical skill is said to be involved, which may be interpreted as a euphemism for a lack of explicit rules for how to make a diagnosis. Such a diagnostic approach is fraught with difficulties, not the least of which is the unreliability of difference scores in batteries composed of correlated measures. Much of the evidence for a link between delinquency and SLD is based on comparisons of institutionalized delinquents and normal populations without regard for the relative frequency of the two categories. This technique is potentially misleading about the efficacy of the diagnosis of SLD for predicting delinquency in an undifferentiated (representative) sample. Finally, there is already evidence that delinquency, ability, poor school performance, and impulsivity (Lefkowitz 1968, Roberts *et al.* 1974) are all weakly to moderately associated. These characteristics are closely related to the major components of the diagnosis of SLD. There appears then to be little reason for special interest in a difficult to define, difficult to diagnose syndrome for which little sound evidence is available, especially when possible association of that syndrome with delinquency could be easily accounted for by more straight-forward measures of school performance, ability, and perhaps impulsivity.

The foregoing statement requires some qualification. A recent report by Zimmerman *et al.* (1979) used a somewhat more defensible method of diagnosis than is typical in the field. It is interesting because it suggested that whereas learning disabled youths may engage in about the same amount of delinquent behavior as do non-learning disabled youths, they may be treated differently in the juvenile courts. The suggestion is a provocative one, and it merits further research. The authors' speculations are plausible, and so are speculations that the lower reliability of measures for institutionalized youths result in larger proportions of them than of non-institutionalized youths being diagnosed as learning disabled.

Persistence in School

An additional aspect of school performance is important to discuss because it constitutes an important element of the descriptive picture of

delinquency—persistence in school. Those who eventually drop out of high school show higher levels of self-reported delinquency, “serious” self-reported delinquency, official delinquency, and serious official delinquency while in school than do those who persist in school (Bachman *et al.* 1978, Elliott & Voss 1974, Wolfgang *et al.* 1972). Figure 1, taken from Bachman *et al.* (1978, p. 52), graphically shows that students with high levels of delinquent behavior in school (a nine-item index involving skip-



NOTE: Sample sizes are indicated in numbers at tops of columns.

SOURCE: Figure adapted from Bachman *et al.* (1978).

FIGURE 1 Educational attainment related to delinquent behavior in school.

ping school, smoking, hitting teachers, and damaging school property) not only persist in high school at lower rates but also continue their education beyond high school at lower rates than do students who report little such behavior. This pattern of results is not limited to this measure of relatively minor delinquency. In the Bachman *et al.* (1978) report, the correlation of a nine-item interpersonal aggression scale with educational attainment was -0.25 (the correlation associated with the Figure 1 data is -0.32). Furthermore, moderately strong negative associations with serious official delinquency (and with official delinquency regardless of seriousness) are reported by Elliott and Voss (1974) and Wolfgang *et al.* (1972). In the Elliott and Voss report, the mean number of police contacts for dropouts was about four times the average for high school graduates.

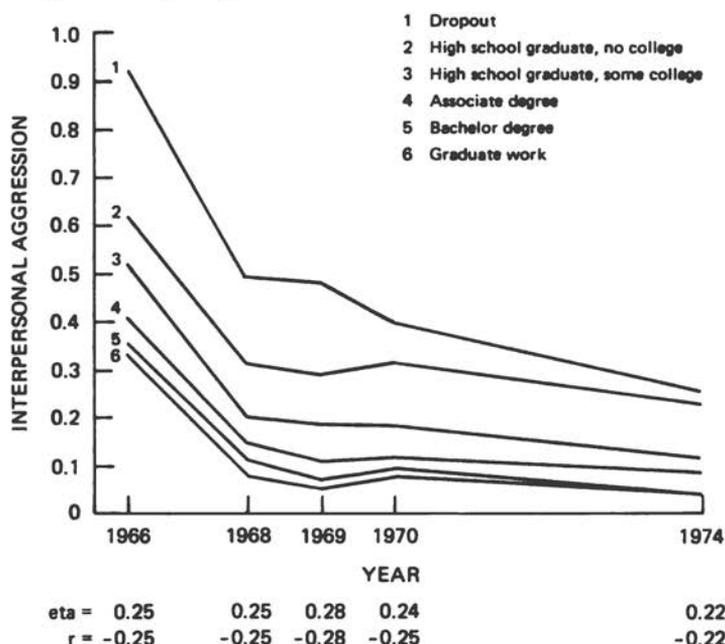
These results do not imply that dropping out of school leads to delinquency. Elliott and Voss (1974) present intriguing data implying that delinquent behavior decreases after dropout. Dropouts show higher rates of police contact while in school than do those who eventually complete school, and for dropouts the rate increases with time while they remain in school. This increasing trend is dramatically reversed when the youths drop out of school, and continues to decline thereafter. Self-reported delinquent behavior shows similar results. For both boys and girls, the self-reported delinquent behavior of dropouts increases until they leave school and then drops off after they leave (see Elliott and Voss 1974, Tables 5-3 and 5-4).⁹

A similar pattern of delinquent behavior was reported independently by Bachman *et al.* (1978). Figure 2, taken from the Bachman *et al.* (1978) report, shows self-reported interpersonal aggression at five different reporting times for a national sample of high school boys. Although the delinquent behavior of dropouts diverged sharply from that of other boys during high school, by the time almost all the boys had left school the reports of dropouts and high school completers are nearly the same.¹⁰

Elliott and Voss (1974) suggest a causal explanation in which poor school performance leads both to dropout and to delinquency, and Hirschi and Hindelang (1977) and Bachman *et al.* (1978) as well as a number of others have made similar interpretations. These interpretations are plausible because of the centrality of the student role in the lives of youths. The next section summarizes some recent characterizations of the status of youths in contemporary society. This characterization forms a

⁹Reports by Kvaraceus (1945) and Elliott (1966) suggest that delinquent behavior may decline during summer recesses from school.

¹⁰In an earlier report, Bachman *et al.* (1971) show that self-esteem also increases after pupils drop out.



NOTE: The measures of interpersonal aggression were retrospective. The 1966 measure asked about the past 3 years; the 1968 and 1969 measures asked about the past 18 months; the 1970 and 1974 measures asked about the past year.

SOURCE: Bachman *et al.* (1978). Copyright © 1978, University of Michigan Institute for Social Research, Ann Arbor, Mich. Reprinted by permission.

FIGURE 2 Interpersonal aggression related to educational attainment.

major part of the reason for implicating schooling or school experiences in the explanation of delinquency.

BEING A STUDENT

The foregoing description of the relation of age, social class, ability, and school performance to delinquent behavior is a major part of the descriptive data that theories of delinquency must try to explain. The following paragraphs develop an argument that delinquency may be linked to the peculiar roles accorded to youths in our society. More specifically, this section documents the increasingly prominent place of schooling in the lives of American youths over the past several decades and the increasing estrangement of young people from work roles and from adults. The centrality of the student role for youths forms part of the argument for im-

plicating schooling as currently organized in the production of delinquency.¹¹ The argument here is broad and abstract. Empey (this volume) more specifically discusses several perspectives on the link between school experiences and delinquency in the context of his description of several theories of delinquency.

Large-scale changes in the major social institutions affecting young people—family, work, and schools—may be clearly perceived if one adopts a long enough time perspective. First, as Coleman (1972) notes, the position of family as a source of occupational learning has eroded. As the father and, more recently, the mother began to conduct their major economic activities outside the home, the family began to wane in importance as a source of learning to conduct an occupation and to take adult work and social roles. At the same time, increasing geographic mobility appears to have decreased the extent to which extended families are a source of social interaction that integrates persons of different generations.

For the years since the turn of the century, a dramatic decline in the involvement of youths in gainful employment is evident. Reasonable estimates of the involvement of American youths in the labor market are available since 1890. The data are difficult to summarize in a coherent way because of major changes in the way census data have been gathered. At one time (prior to 1940), enumerators were requested to determine the occupation of each "gainful worker" 10 years of age or over.¹² From the 1940 census onward, a "labor force" concept was used to count persons at work, with a job, seeking work, or on public or emergency work during an enumeration week. Furthermore, the ages for which data were collected have progressively shifted upward. In 1940 data were collected only for persons aged 14 or over.¹³ Despite these difficulties, a clear picture of youth involvement in the labor market emerges when one puts the pieces of the puzzle together. Even though no readily available summary indices are available, the general picture is as follows: At the turn of the century, large proportions of youths in their early teens were engaged in work—especially males. Although events such as major wars and economic condi-

¹¹The argument is not original. It is heavily influenced by Coleman (1972), Empey (1978), Greenberg (1977), and others who have made related arguments, including the Panel on Youth of the President's Science Advisory Committee (1973).

¹²The gainful worker concept included no time referent such as activity in a specified week, may have included seasonal workers or the retired, and in published statistics did not exclude institutionalized persons, as do current reports.

¹³These changes in data collection practices are themselves evidence of the decreasing salience of work for American youths. Occasionally, the Bureau of Labor Statistics does report on labor market status for persons ages 14 and 15 using Current Population Survey data.

tions have influenced this activity, the employment of persons in their teens has shown a general decline. The decline is especially marked for nonwhite males. Recent years have seen an increase in the relative participation of white females in their late teens and a leveling off of the decline of participation in the labor market by white teenage males.

The evidence that has just been summarized—when taken with our expectations of how the real-life work experiences must have been different for youths when many more of their fathers and mothers worked on the farm or ran the general store—converges in implying that the experience of youths in their early teens with productive work integrated with adults has waned remarkably over the past century.¹⁴

During this same time, the participation of American youths in formal secondary education has zoomed up. Figure 3, reproduced from Cartter (1976, Figure 4-1), documents this increase.¹⁵ This means that unprecedented proportions of youths are enrolled in school. Indeed, most states now have compulsory attendance laws that require attendance at school through age 16 or 17 (Children's Defense Fund 1974). Such laws are currently being relaxed in some states, and the existing laws are not really enforced in many jurisdictions. Nevertheless, the historical trend toward more and more secondary education is pervasive and of major proportion.

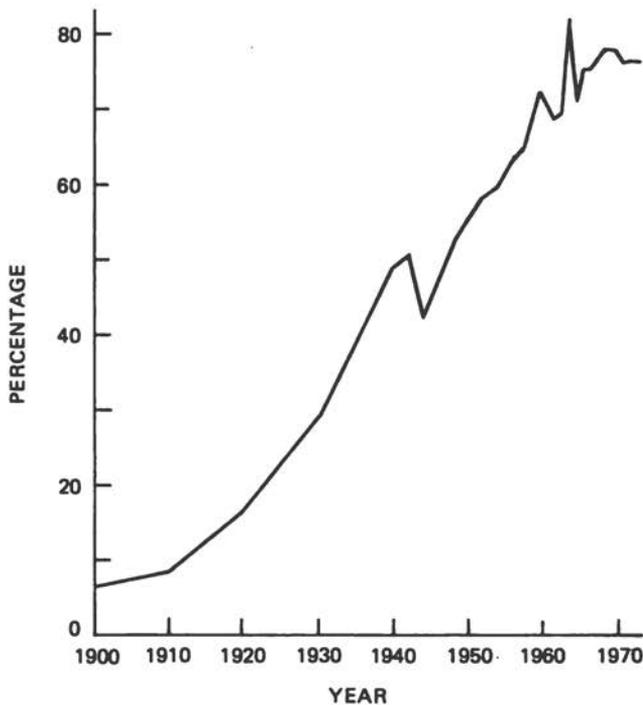
Members of our society tend to view education as an unquestioned good. Yet there is growing reason to question this view. First, the consequences of a decline in the immigration of proportionately large numbers of immigrants of low socioeconomic standing,¹⁶ combined with a relatively stable occupational structure, are clear. "Occupational upgrading," a euphemism for increased educational credentials required for the same or closely similar occupations, is to be expected. One useful if imperfect way of viewing competition in the labor market is a queue in which people line

¹⁴The paucity of recent data on persons under age 16 is amazing. Apparently, the meaning of "youth" for the official talliers has changed drastically over the years. Recent labor department publications such as *Youth and the Meaning of Work* (U.S. Bureau of Labor Statistics 1974) actually discuss the situation of college graduates.

Tables that support this conclusion are contained in a longer version of this paper, which is being deposited with the Educational Resources Information Center (ERIC) document reproduction service.

¹⁵See also Featherman and Hauser (1978, p. 231) for independent corroborating evidence. The location of such a large proportion of the population in schools implies that schools are a likely location for much crime (cf. Boggs 1965, Cohen and Felson 1979), and indeed much occurs there (McDermott 1977).

¹⁶The Statistical Policy Division (1977) documents the trends in immigration, which not only indicate decreasing numbers but also increasing educational or social standing of the immigrants compared with earlier years.



SOURCE: Cartter (1978). Copyright © 1978, McGraw-Hill, New York. Reprinted by permission.

FIGURE 3 High school graduates as a percentage of 18-year-olds, 1900-1970.

up in terms of their "credentials" for desired jobs. With the increasing educational attainment of the population as a whole, a given number of years of education does not have the same meaning in terms of one's order in such a queue as it once did. In addition, the payoff in income from completing high school is lower than is often imagined, at least in the short run (Bachman *et al.* 1978; Featherman and Hauser 1978, Table 5.25). Years of education continues to be one of the best predictors of eventual attainment, but the predictions are not very efficient (Jencks 1972, 1977).

Such considerations lead to speculation that one major function of schooling in contemporary American society is simply occupying time for people whose services are not required in the labor market. Not only are large proportions of youths now enrolled in school, but by 1968 the average length of the school term had increased to 179 days from 132 days in 1870, and the average number of days actually attended has increased

to 163 days compared with 78 days actually attended in 1870 (President's Science Advisory Committee on Youth 1973). Much of this time is squandered. It is not spent in activity explicitly devoted to educational tasks (Karweit 1979).

A major consequence of the high participation of youths in secondary education, combined with changes in the organization of work over time that have removed the location of most work from the home, is an extreme form of age segregation for youths. Typically, the current organization of schooling not only segregates youths from adults other than teachers, but it also segregates youths themselves into groups with narrow ranges of age. When this segregation is combined with the narrow focus of formal schooling on academic learning, it has the effect of isolating youths from opportunities to develop certain kinds of skills.

The following list, the first eight elements of which are taken from Coleman (1972; see also President's Science Advisory Committee on Youth 1973), illustrates the diversity of skills that education *might* provide:

1. Intellectual skills
2. Vocational skills
3. Decision-making skills, i.e., skills for making decisions in complex situations where consequences follow from the decisions
4. General skills for enabling a person to cope with physical or mechanical problems he or she will confront outside of work, in the home, or elsewhere
5. Bureaucratic and organizational skills required for coping with organizations, employers, merchants, clients, customers, or the Internal Revenue Service, or to work as a manager or entrepreneur
6. Skills in the care of dependent persons
7. Skills required to cope with emergencies
8. Verbal communication skills in argument and debate
9. Social skills required to maintain positive interactions with others, influence others, and resist undesirable social pressures from others; the skills required to manage day-to-day social exchange so that it is generally rewarding rather than frustrating
10. The ability to make long-range plans and delay gratification

Because formal schooling may be an efficient way to accomplish only some of these educational objectives, Coleman (1972) has suggested a restricted role for schooling and an expanded role for other institutions, especially work, in the education of youths. In a highly persuasive theoretical account of how the current organization of schooling may account for the age patterns in delinquency, Greenberg (1977) argues that "any society that excluded juveniles from the world of adult work for long

periods of mandatory attendance at schools organized like ours would have a substantial amount of delinquency" (pp. 213-214).¹⁷ Unlike Coleman, (1972), Greenberg recognizes that the large-scale reconstructions of the economy and labor market necessary to alter this state of affairs are unlikely.¹⁸ Despite this pessimistic appraisal, it is important to understand the major role that formal schooling now plays in the peculiar status of contemporary American youths.

The peculiar status of contemporary youths has the following components: (1) Youths are estranged from adults in an age-segregated system of compulsory schooling. (2) Rather than having meaningful social roles in work or even (to some degree) in the preparation for work, youths are spending large amounts of time in school. (3) The time spent in school is characterized by much lackluster activity focused on academic goals and a goodly amount of nontask (wasted?) time. (4) The payoff gained by youths for their time spent in school in terms of labor market returns is moderate, not large—at least in the short run. And (5) youths are held to different standards of conduct than adults—they tend to be treated leniently by sanctioning agencies.

THEORIES LINKING SCHOOLING AND DELINQUENCY

This section focuses on the role that school experiences and performance play in several quasi-theories of delinquent behavior. There exists no shortage of speculation about schooling and delinquency. I shall be selective in those that I discuss, describing only explanations suggested by social organization theorists (Kvaraceus and Miller 1959, Shaw and McKay 1969), social control theorists (Hirschi 1969), and social learning theorists. More thorough accounts of these perspectives and several others are provided by Empey (1978; this volume).

SOCIAL ORGANIZATION AND DISORGANIZATION

The basic idea underlying what are here called social organization perspectives is the view that there exist areas that create a social environment

¹⁷Although Greenberg (1977) interprets some of his conclusions in Marxist terms, nothing in his argument appears to be peculiar to capitalist societies as opposed to industrialized society in general.

¹⁸In their assessment of the role of schools in delinquency in the 1967 President's Commission report, Schafer and Polk (1967) take an entirely different view. They believe schools should gear up to provide all the kinds of education that family and the community now do not and should remediate where difficulties exist, and that every effort should be made to keep students in school at least through high school.

conducive to crime and delinquency. These perspectives are apparent in the work of Shaw and McKay (Shaw 1929, Shaw and McKay 1969) and of Miller (Kvaraceus and Miller 1959, Miller 1958) and in the empirical research of social geographers (Block 1979, Chilton 1964, Gordon 1967, Hadden and Borgatta 1965, Harries 1976, Jonassen and Peres 1960, Lander 1954, Pope 1978, Smith 1973).

This tradition is related to Hawley's (1950) account of human ecology. Regularities in the properties of human aggregates are the focus of inquiry rather than regularities in the behaviors of individual people. Many researchers in this tradition have regarded variations among the characteristics of human aggregates as interesting in their own right, not to gain insight into the behavior of individuals.¹⁹ Reviews of this perspective may be found in Wilks (1967) and in Empey (1978), so the present account will be brief. Readers are referred to those sources for more details.

Shaw (1929) and his collaborators assembled impressive evidence that rates of juvenile court appearances, truancy, police and probation activity, youth felony charges, and adult offenses showed a remarkably regular pattern across areas of a city. Shaw and his associates concluded that differences in rates of truancy, crime, and delinquency reflected differences among communities, with high rates occurring in areas characterized by physical deterioration, and that the areas with the highest rates have characteristically had high rates over a long period of time.²⁰ After considering their data about the spatial distributions and conducting a number of interviews with delinquent youths, they conclude with the following hypothesis (Shaw 1929, pp. 205-206):

¹⁹Despite the impressive and provocative early reports by Shaw and McKay, following an influential paper by Robinson (1950) one may note a temporary waning of research in this tradition. Robinson illustrated that ecological correlations are generally misleading about the correlations among characteristics of individuals. What has come to be known as the "ecological fallacy" is interpreting aggregate data as if they applied to individuals. Such interpretations and the reverse fallacy are inappropriate, and despite the sanguine view expressed by Wilks (1967) in the President's Commission task force report (footnote 3), such dangerous interpretations do indeed abound in the criminology literature, sometimes even in the writings of the intellectual originators of this tradition, and with great frequency in reviews or secondary accounts.

Blau's (1960) distinction between structural and individual effects is relevant to the distinction between ecological and individual perspectives. Seldom are researchers or theorists careful in assessing the effects of structural and individual effects separately.

²⁰It is of interest for this panel that recidivism rates also dropped off with distance from the central city and that recidivism rates were closely associated with delinquency rates for the areas studied. One wonders how the geographic location of a community treatment program may influence success rates. The persistence of high delinquency rates in certain areas, regardless of the specific racial or ethnic groups that inhabit them, resembles the way some occupational groups such as garment workers remain among the most poorly paid regardless of their changing racial or ethnic composition.

It has been quite common in discussions of delinquency to attribute causal significance to such conditions as poor housing, overcrowding, low living standards, low educational standards, and so on. But these conditions themselves probably reflect a type of community life. By treating them one treats only symptoms of more basic processes. Even the disorganized family and delinquent gang, which are often thought of as the main factors in delinquency, probably reflect community situations.

In short, with the process of growth of the city the invasion of residential communities by business and industry causes a disintegration of the community as a unit of social control. This disorganization is intensified by the influx of foreign national and racial groups whose old cultural and social controls break down in the new cultural and racial situation of the city. In this state of social disorganization, community resistance is low. Delinquent and criminal patterns arise and are transmitted. In time these delinquent patterns may become dominant and shape the attitudes and behavior of persons living in the area. Thus the section becomes an area of delinquency.

Related themes are continued in two distinct lines of additional work. The first line of work, illustrated by Miller, Kvaraceus, and Kobrin (Kobrin 1959, Kvaraceus and Miller 1959, Mays 1954, Miller 1958), derives from field studies or attempts at social intervention. Miller (1958) argues that "in areas where [attitudes, practices, and behaviors] differ from features of middle-class culture, action oriented to the achievement and maintenance of the lower class system may violate norms of middle-class culture and be perceived as deliberately non-conforming or malicious by 'a middle-class observer' " (p. 19). More specifically, the concern of middle-class persons with "achievement" is said not to be a dominant concern of youths in certain social areas. Instead, they tend to be concerned with trouble, toughness, smartness (manipulative skill), excitement, fate (explaining events by reference to chance or luck), and autonomy (characterized as an ambivalent relation to authority—overtly desiring on the one hand not to be pushed around but covertly harboring a desire to be cared for or controlled on the other). These "lower-class" focal concerns are said to develop in areas where family life is characterized by female-headed households and "serial monogamy," where adult males contribute little to the support or stability of the family.

An important distinction between the Shaw and McKay (1969) perspective and the Kvaraceus and Miller (1959) perspective is that the latter stresses the *differential* organization of social areas. Whereas Shaw (1929) and his colleagues assume that disorganized communities lost control over children, the Kvaraceus and Miller perspective stresses the emergence of stable social arrangements. These stable but different forms of social organization result in youths internalizing values shared by both adults

and juveniles in their social areas, and in "lower-class" areas this results in delinquency.

Kvaraceus and Miller (1959) describe how "lower-class" focal concerns result in difficulties in school. A concern with autonomy results in norm-violating behavior to test the firmness of the school rules. According to them, "if kicking up, talking back, truanting or running from an institution are dealt with severely, firmly, and quickly, the pupil is reassured, although he may complain bitterly about his 'unfair' and 'tough' punishment or the 'bad luck' of being caught" (p. 68). Furthermore, the requirement that one apply oneself assiduously to intellectual tasks (or book learning) in school does not mesh well with the focal concerns of so-called street corner youths. One who engages in such behavior is prone to be tagged as effeminate by his peer group. In short, "lower-class culture" is seen as a way of adapting to a social group's exclusion from the middle class, and what is adaptive for one kind of social situation may be maladaptive for another. One might infer, as does Elliott (1966) in a study of school attendance, delinquency, and dropout, "that dropout is a satisfactory solution for those from lower [socioeconomic status] areas" (p. 314).

The second related line of inquiry is the empirical investigation of the social and demographic characteristics of ecological units and delinquency rates. This research searches for statistical regularities in aggregate-level data and attends hardly at all to evidence based on the testimony of youths or observations of them. Furthermore, it is purely ecological, seldom seeking explanations of how social processes might work in terms of the values or concerns of individual persons.

The social geographic research that followed the work of Shaw (1929) and his colleagues at first involved quite similar methods and produced similar results for other cities (White 1932). Subsequent research has focused on multivariate attempts to describe the geographical distribution of delinquency rates (Beasley and Antunes 1974, Bordua 1958-59, Chilton 1964, Chilton and Dussich 1974, Gordon 1967, Harries 1976, Lander 1954) or has been general factor-analytic examinations of the characteristics of communities (Hadden and Borgatta 1965, Jonassen and Peres 1960, Smith 1973). Lander's (1954) multivariate study of Baltimore census tracts generated considerable interest and controversy. He studied rates of boys or girls aged 6 to 17 who had experienced official court hearings, averaged over 4 years for each census tract. The research methods involved the use of census data for tracts together with factor analysis and multiple regression to describe the distribution of delinquency rates. Lander's specific conclusions (that delinquency rates are only superficially related to the socioeconomic status of the tracts and instead are related to race and

home ownership) are less important than the subsequent research they stimulated. Both Bordua (1958) and Chilton (1964) attempted replications, raised methodological and interpretive issues, and questioned Lander's conclusions. And Gordon (1967) showed that a number of methodological difficulties in the Lander research make some of his conclusions potentially misleading.²¹ Briefly, the subsequent research that was stimulated by the Lander book established a clear and strong association of depressed socioeconomic conditions with delinquency rates. The independent research of others who have examined community characteristics at the levels of the county, the city, or the Census Bureau's standard metropolitan statistical areas (Hadden and Borgatta 1965, Harries 1976, Jonassen and Peres 1960, Smith 1973) produces results that, despite differing levels of aggregation, tend to find delinquency associated with urbanism, depressed economic conditions, and other measures of social disorganization such as a high proportion of female-headed families.

The ecological study of delinquency has recently been extended specifically to disruption in schools by Gottfredson and Daiger (1979). Using data for over 600 junior and senior high schools, we regressed rates of student and teacher victimization on community and school characteristics. In contrast to most ecological studies, which use rates of official delinquency as the criterion, we examined aggregated victimization reports, and the measure of victimization used was dominated by less serious kinds of behavior than in the typical study. Of primary concern here is the observation that organizational variables resembling those described by Shaw and McKay (1969) and Miller (1958) are related to school victimization rates in much the way expected.

The Gottfredson and Daiger (1979) research implies that school organization warrants further study because school governance practices, the climate of belief in conventional social rules in a school, and school disruption are all strongly related to characteristics of the community within which the school is located. The observation that different forms of school social organization seem to develop in neighborhoods with different social characteristics is in general accord with Miller's (1958) differential organization perspective. This observation constitutes a challenge for prevention research. It is not now clear how successful interventions aimed at the school might be in preventing delinquency when schools operate in a social environment that may tend to perpetuate their current

²¹In the same year a major review of ecological studies by Wilks (1967) appeared in the President's Commission task force report. A recent tendentious review by Baldwin (1979) is useful because it contains citations to British work in this area.

organizational forms and climates. Despite the existence of some programs based on differential social organization theory (Kobrin 1959), they were never large scale and never carefully evaluated.

SOCIAL CONTROL

A second major perspective on schooling and delinquency is social control theory (see Empey, this volume). In Hirschi's (1969, 1977) account, control theory assumes that delinquent acts result from the weakening of bonds of an individual to society. Four elements of the bond of a person to society are viewed as important. First, the *attachment* of a person to a family, peers, or school may weaken. Second, the *commitment* of a person to goals may vary, and weak commitment may make conforming behavior of relatively little instrumental value to the individual. Third, the *involvement* of persons in conventional activities may be low, leading to opportunities to spend time in disruptive or delinquent activity. Finally, the extent to which a person shares in the *belief* in conventional moral norms may vary. This does not imply that persons who engage in delinquent activity hold deviant moral norms, but that belief in the common norms is not shared by all to the same extent.

Schools provide a set of environments that not only provide settings for the playing out of student behavior but also provide structures, incentives, expectations, and opportunities for attachment, commitment, involvement, and belief to evolve. For example, to the extent to which youths with low abilities lack the opportunity or ability to pursue higher education, lowered commitment to educational attainment may result. As a consequence, the constraints that the preparation for access to postsecondary education places on behavior may be weakened.

SOCIAL LEARNING THEORY

Social learning theory (Bandura 1971) and its applied counterpart, applied behavior analysis (O'Leary and O'Leary 1977), are not designed specifically to explain delinquent behavior. Social learning theory is a general psychological theory for explaining some ways in which behavior is learned, maintained, or changed. This perspective suggests ways to influence behavior (including delinquent behavior) directly. It also suggests that the elements of the bond in Hirschi's (1969) social control theory might be altered.

The interventions implied by the social learning model have potential for strengthening the elements of the bond described by social control theory. Attachment might be increased because youths would learn to

develop positive relations with parents, teachers, and peers; commitment to goals would increase because the individual would develop a stake in attaining goals or rewards that are within reach; belief in conventional rules would increase because rewards and punishments are contingent on behavior in an orderly fashion. Cognitive concomitants of behavior may also be changed (Bandura 1977). As far as I know, no one has systematically attempted to measure outcomes of social learning interventions in terms of the intervening variables suggested by social control theory, but the foregoing speculations imply that the two perspectives are compatible—they imply convergent strategies to reduce delinquent behavior. Control theory suggests what should be changed, and social learning theory suggests ways to make the changes.

SOME IMPLICATIONS

Each of these major perspectives appears to have some merit, with each calling attention to plausible and somewhat different explanations of youth delinquency and the place of schooling or education in the explanation.

The social disorganization perspective calls attention to the forms of social organization of human collectivities—schools and neighborhoods. If the influences of social structure implied by the social organization perspective do exist, preventative strategies would involve major social changes such as the desegregation of neighborhoods and schools, not just by integrating the races but by integrating social and economic groups as well. If, as Miller's (1958) perspective suggests, delinquency is *adaptive* behavior in a social area (a neighborhood or school) in which the predominance of female-headed households, high unemployment, and so forth make delinquent roles or focal concerns useful mechanisms for coping with life, then one task for prevention would be to eliminate these social areas. The segregation along socioeconomic lines that characterizes much of American life is expected, according to this perspective, to foster and accentuate (cf. Wilkins 1965) delinquent life styles. Desegregation may eliminate enclaves characterized by delinquency.

Similarly, if social disorganization—meaning an inability of neighborhoods to maintain control of their social environments—is a problem, then a task for delinquency prevention would be to attack the mechanisms that bring disorganized social areas about. This means influencing policy decisions about where low-cost housing will be located and that influence the segregation of the social classes.

Our society has shown little willingness to move in this direction. Most past efforts to cope with the problems of some of the more blighted areas

in our cities would not have been expected to reduce disorganization or decrease differential organization, but rather to have perpetuated these problems. For example, tearing down dilapidated housing has typically, even when intentions were good, located the low-cost housing for displaced residents in the same or similar neighborhoods, rather than dispersing it more widely throughout the urban area (Polikoff 1978). In less thoughtful instances, efforts have simply been made to eradicate housing in a barrio with little or no thought of where the affected residents would relocate, thus exacerbating rather than alleviating the social organizational characteristics of the community (Boyd 1980).

Suggesting plausible and politically feasible ways to integrate the social classes in the way that social organization theories imply would be required is difficult. Tools that could be used are available. Tax incentives for the affluent to locate in middle-class enclaves could be abolished. Low-cost housing could, as a matter of public policy, be more widely dispersed. Low-interest loans could be provided for families who will relocate across traditional social class boundaries. Ordinances could require that new developments plan for a mix of housing suited for families of varying economic circumstances. Tax disincentives rather than incentives for the affluent to choose private rather than public schooling for their children could be implemented. These and many more tools of social policy are conceivable. The difficulty is in imagining their implementation. This is a reflection of our limited courage and the contemporary political climate. Social organization theories therefore suggest some consequences of our limited imagination.

Social organization theories also suggest some less dramatic ideas about the treatment of individual offenders. The most straightforward of these is that the placement of delinquent youths and their families in new environments may be helpful. It is neither a radical nor an unimaginable suggestion that a troublesome youth whose family lives in a blighted inner-city community might be well served if support for the relocation of the family in a more affluent and orderly neighborhood could be arranged. The new neighborhood might, because of its different social organization, neither support nor tolerate delinquent behavior.

The social control and social learning perspectives imply that delinquency may be prevented by increasing stakes in conformity. Each individual youth should have something to gain by conformity and something to lose by delinquency. In school, some youths, especially low achievers in academic pursuits, have little to lose and little to gain. Grading practices that summarize school performance periodically and in an omnibus fashion result in some pupils almost never receiving rewards for conformity or performance; and when a pupil's grades are already low,

little is to be lost by delinquent behavior. Alternative evaluative procedures are available. One such alternative, which draws on social learning principles, is a set of experimental learning procedures that involve cooperative learning in situations where, because pupils compete against others of approximately equal ability, each pupil reaps rewards some of the time (Slavin 1979). Such procedures not only appear in evaluations to increase learning, but they also seem to increase peer attachment and liking for school—elements of the social bond in Hirschi's formulation.

Control and social learning theories have additional implications. If formal schooling is appropriate and relevant for the ability levels, social skills, and vocational aspirations of pupils, it may be expected to foster commitment and involvement. When schooling is not well matched to the individual, alternatives to formal schooling may be more appropriate. In traditionally organized schooling, rewards in the form of grades and positive interaction with teachers are gained by those students who compete most effectively for them. The individual differences in the resources—scholastic ability, social background, interpersonal skills—that youths bring to school imply that some youths will find schooling rewarding. Others will experience failure. Specifically, a pattern of failure is to be expected for youths who experience the most difficulty with school work. This social learning experience would be expected to increase bonding for the successful and undermine bonding for the failures. The scholastically and interpersonally more competent youths learn to like school and acquire commitments to educational and occupational attainment. The less competent at coping with traditional educational expectations learn that schooling is punishing and may seek rewards elsewhere. One implication is that schooling should be tailored to the level of ability and current social skills of the student in order to allow more students to experience success. (An alternative implication, altering reward structures, has already been mentioned.)

The foregoing interpretation is counter to the suggestion by some writers (Kelly 1975, Schafer and Polk 1967) that differential educational programs (called "tracking" by their detractors) are harmful. Unfortunately, the literature in this area does not really provide solid grounds for making a clear call on the merits of the evidence. On the one hand, the evidence offered by differential education's detractors ranges from anecdotes through very weak correlational research. On the other hand, the evidence for the perspective suggested here is also fairly weak. Open-minded and rigorous research on the actual effects of differential curriculum placement and individualized instructional plans is needed. If differential education results in homogeneity and the isolation of low-ability youths from prosocial role models, if it leads to derogated self-concepts, if it does not provide for success experiences, or if it undermines

commitment and attachment, then it should be eschewed. Because there are reasons to expect that differential education can be helpful rather than harmful, and because the basis for a judgment is not available, differential education should currently be regarded as a promising idea that requires thorough evaluation.

Another implication of the social control perspective for schooling relates to the dual problem of age segregation and the estrangement of youths from work. Age segregation can be translated as a lack of opportunity for attachments to adults in social control theory terms, and non-work means a lack of involvement and potentially weak commitment. Control theory implies the need to strengthen these social bonds to prevent delinquency. This will not be particularly easy in today's economy, but some prospects are apparent. These include work-study programs in which youths receive both pay and educational credit for learning how to perform in adult roles together with adults. A variety of ways to accomplish this kind of integration have been suggested. The Carnegie Council on Policy Studies in Higher Education (1979) has suggested arrangements in which youths attend school fewer days per week and instead take on apprentice roles in work situations. Another suggestion is to make education—which is tailored to the work the youths are performing—a condition for remaining on the job.

The integration of youths and adults in work and preparation for work will require careful planning to ensure that youths are being trained for jobs that they will actually be able to get. This means being alert to labor market conditions and making serious efforts to anticipate future labor market demands and the supply of workers. If the economy does not hopelessly deteriorate in future years, this kind of integration of youths with adults in work roles may become easier to accomplish. A possible shift toward more labor-intensive modes of production, a movement of our economy in the direction of service activities, and changes in our population structure may result in a shortage of young people in the labor market and a host of new work roles to provide services to an increasingly aged population.

Altering schooling to provide for greater integration of youths with adults in career-related activities would accord both with a social control perspective and with the earlier diagnosis of the status of contemporary youths. It is a prevention idea worthy of implementation and testing.

EVALUATION

Little is to be gained by an extended or detailed assessment of the quality of the evidence relating to the details of these perspectives and intervention ideas. Fairly comprehensive reviews may be found in Empey (1978),

National Task Force (1977), and Wilks (1967). The literature shows a dismaying lack of rigorous research nearly everywhere. With the exception of the learning perspective, the predominant mode of investigation is the use of cross-tabular analysis in cross-sectional samples, often with some attempt at statistical "control" by showing three-way breakdowns to hold one or another variable "constant." This research approach characterizes quite well the major theoretical statements that relate to school experiences (Hirschi 1969, Stinchcombe 1964). The recent literature occasionally uses structural equation modeling to provide some weak probes of hypotheses (e.g., Empey and Lubeck 1971, Gottfredson and Daiger 1979, Johnson 1977, Little 1979, Wiatrowski and Swatko 1979), and some use is being made of cross-lagged panel correlations to search for clues about causal predominance (Kulka *et al.* 1979). Such research is to be regarded as an advance over much of the earlier research because it does make assumptions more explicit and because it should serve to focus discussion on issues of model specification and measurement in more concrete ways. However, even this research, which provides some additional safeguards against spurious results and is more explicit about its assumptions, provides only very weak probes of causal hypotheses (Cook and Campbell 1976).

Moreover, the literature is replete with analyses that ignore major competing hypotheses about causal processes. To choose but one example from the many available, Kelly (1975) attempted to test hypotheses about the effect of track (curriculum) placement on delinquency without making any attempt to control statistically for academic potential or school ability. Other major research projects (e.g., Wolfgang *et al.* 1972) apply statistical controls one at a time, or in multivariate models use several variables measuring closely related constructs, resulting in potentially misleading estimates of the "effects" of some variables in the research. Only rarely are original correlation matrices, which would allow reanalysis, made available in reports.

If theory testing is to improve, better data will have to become available. The existing literature does not enable a clear assessment, for example, of whether poor school performance leads to delinquency, delinquency to poor school performance, or both (Phillips and Kelly 1979). Data that would enable even weak quasi-experimental approaches to this problem are rarely available. Suppose, for example, that one wished to employ a cross-lagged panel correlation design (or a related design, see Regosa (1980)) to assess the hypothesis that low grades in school lead to delinquency more than the other way around. The largest panel studies containing relevant data that are currently available are samples of about 2,000 boys in the Youth in Transition study (Bachman *et al.* 1978) and an ongoing panel study of about 1,700 youths (Elliott and Ageton 1979). If

the true differences in crossed correlations were of a magnitude of about 0.05, about the size that may be generally anticipated, then the power of the statistical procedures involved is such that this difference would be detected only about half the time with a two-tailed test at the 0.05 level in a sample of 2,000 (Kenny and Harackiewicz 1979). In short, sample sizes available are too small to employ even this weak quasi-experimental technique with any efficiency.

Virtually no time series data of the sort that would enable reasonably powerful studies of the effects of naturally occurring changes in the way youths are treated in schools or in the arms of the law are available. Juvenile court statistics involve neither parallel nor consistent reporting practices across years or jurisdictions, for example, and time series data based on self-reports and disaggregated by age and location are nowhere collected in a way that makes evaluation research possible.

True experiments are nearly unheard of. One ongoing project (Mann 1979) hopes to assign troublesome youth to alternative schools, and similar quasi-experimental programs have been attempted elsewhere (Empey 1978). But rigorous research evaluating planned attempts to intervene in the organizational or educational characteristics of schools—to see whether the schools themselves can be changed in desirable ways—does not exist.

Even passive measurement-based research, however, has much to offer. The variety of theories and speculations regarding youth delinquency in general and schools and delinquency more specifically (including many not specifically discussed here) involve a host of explanations, sometimes overlapping those used in other theories and sometimes not. Gold (1978), for example, focuses on self-esteem as an explanatory variable. He sees delinquency as one way a student may cope with failure experienced in school and the ravaged self-image that results from that failure. Hirschi (1969) uses a different set of constructs as variables that mediate the relation between school experiences and delinquency. Others see power relations or rule formation processes as contributing variables (David and Lincoln 1978, Ianni 1978) or regard inaccurate labeling (Feldman 1978) or insidious labeling (Schur 1973) as contributing to the explanation of delinquency. Still others see social class, means-ends disjunction (Cohen 1955, Merton 1957, Stinchcombe 1964), or isolation and alienation from mainstream American (or British) culture via an inappropriate schooling experience as explanations (Coleman 1972, Greenberg 1977, McPartland and McDill 1977, West 1975). Additional provocative speculations propose that delinquency may be one outcome of the inability of youths through their experiences in the school environment, which is so central to their lives at that time, to take a variety of roles that would aid in the development of interpersonal skills and meet their needs or expectations

to develop competence, in other words, to "matter" (e.g., Rosenberg and McCullough 1979). An abundance of explanatory variables has been suggested. Because some fairly comprehensive reviews exist (Kulka *et al.* 1978, National Task Force 1977), they will not be belabored here. Instead, I simply note the extensiveness of the list, the partially overlapping nature of the constructs involved, and the lack in the literature of attempts to cover the field with respect to these explanations to determine which from among them stand up to empirical scrutiny, which attempt to locate spurious relations, or even which merely attempt to replicate earlier findings.

To test alternative theories using measurement-based research, we need large, longitudinal, prospective studies. These research projects will require better operational indicators of key theoretical constructs than we now use. This means that in planning such studies, serious attention needs to be given to psychometric considerations now only occasionally taken seriously. More careful attention to the construct validity of measures of strain, anomie, commitment, and delinquent behavior is needed at the research planning stage. The attention that can be given to these topics, and the range of measures available in existing survey data are limited. Better methodology, better conceptualization, and larger samples in future longitudinal studies will enhance the continuation of this kind of research.

Comprehensive examination of alternative explanatory models, avoiding the approach most prevalent in the literature of examining a few of one's favorite variables and omitting other variables from consideration, is required. Such comprehensive research is needed for the reasons spelled out over a decade ago by Hirschi and Selvin (1967) in a sweeping appraisal of analytic methods in delinquency research. They pointed out the desirability of deleting spurious or redundant explanations from our theoretical repertoire and noted that although passive quasi-experimental methods such as causal analysis using multivariate procedures appear to have much to offer, there is a dearth of activity that aims to accomplish this task. The characterization of delinquency research that Hirschi and Selvin provided is still apt today. Indeed, the situation has, if anything, become even worse. Explanations are multiplying at a rapid rate. There remains, therefore, much potential for even weak quasi-experimental techniques to extend our knowledge.

IMPROVING THEORIES AND LEARNING TO PREVENT DELINQUENCY

The theoretical perspectives described in this report and by Empey (this volume) imply that the social organization of schooling and the educa-

tional experiences of youths may be involved in the production of delinquent behavior. Not only is the scientific status of our theories on shaky ground for the reasons outlined in the previous section, but the situation is even worse than that. It would be one thing if we could be sure that altering school experiences in a certain way would lead to more or less delinquency but did not know why the change occurred. It is quite another not to know how to produce any change at all. The current situation is as follows: On the basis of theories or observed statistical regularities in the data about schools and delinquency rates or about school experiences and individual delinquency, we suspect that certain changes (e.g., a decrease in the age through which youth are required to attend school²²) may reduce age-specific delinquency rates. We cannot, however, point to any instances in which such a change was deliberately introduced and delinquency was reduced as a consequence.

This situation is not satisfactory. There is currently little emphasis on the careful evaluation of delinquency prevention programs involving schools. In addition, in most places the apparatus required to monitor the implementation of programs and to evaluate their effectiveness is lacking. Conducting careful evaluations of large-scale programs in educational systems or communities is not easy.

Naturally, the evaluation of programs intended to reduce delinquency will require the expenditures of some money, and evaluation research can often be quite expensive. Unless systematic evaluation is planned for, properly staffed, and sufficiently funded, we will have little hope of learning what strategies most effectively prevent delinquency.

We will learn most about preventing delinquency using methods that are socially and economically feasible if we actively engage in programs designed to accomplish that end and rigorously evaluate those efforts. Aside from the conduct of true experiments, which are optimal but not politically expedient, a number of approaches to such evaluation are available. These approaches merit special mention because they are so often overlooked in the design of research projects.

First, the routine, uniform, and disaggregated collection and preservation of delinquency data, at least in a substantial number of jurisdictions (school attendance areas), involving both official and self-report data over time, would provide a valuable evaluation tool. From time to time, changes in the social organization of schools or communities occur naturally. Boom towns spring up in some areas, populations decline in others. New grading practices or administrative policies arise here and there spontaneously; and court-ordered or "voluntary" desegregation

²²Or grading practices, track assignments, etc.

plans are implemented. Provided that uniform and high-quality time series data are available and that results are replicated in several locations at different times, such naturally occurring changes provide reasonably strong grounds for inferring the effect of the social change on delinquency rates.

Such time series data are not now being collected, nor so far as I know is anyone seriously considering collecting any. Instead, official data on juveniles are collected in ways that are determined by local jurisdictions, and those data that are collected are not collected in standard ways across time even within jurisdictions. When Congress required the secretary of the Department of Health, Education and Welfare to conduct a study of school crime (P.L. 93-380), the federal agency's response was to launch a cross-sectional study of a sample of schools. No attempt has been made to institute uniform data collection procedures that would provide, in the long run, sounder knowledge about schools and youth delinquency. The appeal of speedy but difficult to interpret research often results in the failure to implement longer-term efforts that would provide more trustworthy conclusions in the long run.

A second often overlooked research strategy is the use of regression discontinuity designs. Quite often, evaluation of alternative treatment or prevention strategies is sacrificed when for one reason or another randomization is deemed impolitic or unethical. Yet some interventions implied by theory may lend themselves fairly well to evaluation using a regression discontinuity design. If assignment to meaningful apprenticeship or vocational programs appears appropriate for youths who perform poorly in formal academic schooling, then assignment to such programs based on a measure of school performance is also appropriate.

In the final analysis, we will have greater prospects of gaining practical knowledge of strategies for delinquency prevention via educational or school interventions if we adopt an action research approach (Lewin 1947, Sanford 1970). If researchers engage in active collaboration with program administrators and school officials in the planning and execution of experiments and provide feedback based on the experience of attempting change, rather than engaging in passive theoretical research, then more progress will be made. .

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Restitution and Community Service Sentences: Promising Sentencing Alternative or Passing Fad?

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Restitution is an ancient concept that recently has gained support as a means for sanctioning criminal offenders in state and local jurisdictions across the United States. In the past decade, restitution programs have gained support from several national policy- and standard-setting bodies,¹ state legislatures (see Chesney *et al.* (1978) and Harland (1980a,b) for a summary of recent legislation), and federal, state, and local criminal justice agencies. The resurgence of interest in restitution seems to be related to the current widespread disillusionment with existing correctional programs, a growing concern with the problem of the victims of crime, and the apparent compatibility of restitution with the diverse goals of the criminal justice system. Indeed, restitution seems to offer something for everyone. As Harland (1978) notes, it is seen as "a victim compensation measure and as an offender treatment modality; as a way of restoring equity after a criminal victimization and as a retributive and deterrent sanction; as a way of diverting offenders from more intrusive contacts with the criminal justice system and as a way of increasing ex-

¹ See National Advisory Commission on Criminal Justice Standards and Goals (1973), the second revision of the Model Sentencing Act by the Council of Judges of the National Council on Crime and Delinquency (1972), and the American Bar Association (1968).

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isting penalties; in the context of pretrial diversion, plea bargaining, sentencing, probation, parole, and in a number of different incarcerative situations."

This paper presents a brief overview of the growing literature on restitution. It examines the meaning, history, and theoretical bases for restitution programs; explores program issues and current knowledge about the implementation and effectiveness of restitution programs; describes current efforts to evaluate restitution programs funded by the Law Enforcement Assistance Administration (LEAA) for both adults and juveniles; and raises further questions about restitution as a sentencing alternative and about the strategy for generating knowledge about it.

MEANING, HISTORY, AND THEORETICAL BASES OF RESTITUTION AND COMMUNITY SERVICE

DEFINITION

Hudson and Galaway (1978, p. 1) define restitution as "a sanction imposed by an official of the criminal justice system requiring the offender to make payment of money or service to either the direct or substitute crime victim." Included in this definition are four different types of arrangements that have been labeled restitution (Galaway 1977). As indicated in Table 1, they differ with respect to the form of payment (money or service) and its object (the victim or a substitute victim).

Type I restitution programs require monetary payments by an offender to the victim(s) of the crime, although payment may pass through the offices of an intermediary.

Type II restitution involves monetary payments made by an offender to some community agency, a third party such as an insurance company, or the community at large. It may occur when a victim requests the money be given to a charity, when the victim cannot be found or does not want to

TABLE 1 Types of Restitution

Recipient of Restitution Payment	Form of Payment	
	Monetary	Service or Symbolic
Victim	Type I	Type III
Third party or community	Type II	Type IV

participate in a restitution scheme, or when a victim's losses have been passed on to another party.

Type III restitution requires an offender to make repayments in the form of personal services to the victim. This may occur, for example, when a judge requires juvenile vandals to clean up or make repairs to damaged property.

Type IV restitution occurs when an offender is required to provide service to the community rather than the direct victim. The Community Service Orders program in Great Britain is an example of this type.² While initially viewed as a variant of restitution, community service has more recently come to be viewed as a conceptually and administratively distinct sentencing alternative.

Restitution must be distinguished from victim compensation. The latter involves a monetary payment made by a state agency using tax monies to victims of violent crimes whether or not the offender is apprehended. Restitution, on the other hand, directly involves the offender in making payments of either money or service to the victim of crime or to a symbolic substitute.

HISTORY

Restitution as a penal alternative dates back to the ancient civilizations. The Code of Hammurabi, the Torah, and Greek and Roman law all contained graduated scales of compensation paid to crime victims by offenders or their kin (Schafer 1970). Initially, the focus of restitutive justice was on protecting the offender from the aggressive retaliation of the victim and the community rather than on compensating the victims, although the transfer of money or property from offender to victim generally occurred (Edelherz *et al.* 1975).

Restitution was also a characteristic sanction in the early Middle Ages among barbarian societies. In the seventh century the Anglo-Saxons developed a restitutive code that specified the amount of compensation or blood money to be paid for each type of crime as a substitute for traditional retaliation. The amount was specified for injury to each part of the body, with injury payments "carefully graded to reflect substantive

²In 1972 the Criminal Justice Act empowered the courts to order offenders 17 years of age or older to perform unpaid work as a service to the community. The offender must consent to the sentence and work between 40 and 240 hours (Pease *et al.* 1975). The program began on an experimental basis in London, was judged to be a viable correctional alternative for offenders who would normally have been incarcerated, and has gradually been expanded throughout Britain (Pease *et al.* 1975, 1977; Young 1979).

disabilities which affected the victim's ability to work or fight" (Edelherz *et al.* 1975, p. 5). Under the Anglo-Saxon code, the offender made two payments: one to the victim or his or her survivors, the other to the king for having broken the peace. As the power of the central government grew, the crown took an increasingly large proportion of the restitution payments until, by the late twelfth century, the entire payment went to the crown. As this occurred, the role of the state shifted from that of an arbitrating or mediating force to that of a punishing one, and the focus of the proceedings shifted from the victim to the criminal. The state replaced the victim as the prosecuting party, reinforcing the idea of harm to society being the basis for the state's justification for punishing the offender; at the same time, the rights of the injured to compensation or damages gradually separated from the criminal law and became a civil law of torts (Schafer 1970).

Although restitution has long been employed as a sentencing alternative by American judges (Cohen 1944, Laster 1970, Schafer 1970), only in the 1970s, as a result of the growing interest in the rights of victims of crime and the search for alternatives to incarceration and probation casework, has there been a strong resurgence of interest in it and the development of restitution programs.

THEORETICAL RATIONALE

The disagreements regarding the primary purposes to be achieved by the criminal justice system characterize the discussion of restitution. Yet restitution has gained wide favor among adherents of a variety of penal philosophies. It appears to be compatible with the punitive (Dagger 1980, McAnany 1978, Schafer 1970), rehabilitative (Eglash 1958), and deterrent (Tittle 1978) goals of the existing criminal justice system, although in each case there are conceptual, legal, and practical problems in introducing restitution. Others view restitution as offering an alternative correctional model (Galaway and Hudson 1975) or reparative goal (Thorvaldson 1979b), or see it serving as the basis of a new paradigm of justice (Barnett and Hagel 1977). (For a critique of Barnett and Hagel's scheme of "pure restitution," see Dagger (1980).)

The principal psychological support for restitution is equity theory. (For a fuller statement of the principles of equity theory, see Walster *et al.* (1973).) When all participants in a relationship are receiving equal relative gains, equity exists. When participants find themselves in inequitable situations, both the exploiter and the victim became uncomfortable and react in various ways to reduce both the retaliation distress and the self-concept distress that arises (Hatfield and Utne 1978). To reduce

distress, the harm-doer may either restore actual equity by compensating the victim or restore psychological equity by rationalizing or justifying his or her behavior. Thus the use of restitution as a sanction may restore the actual balance that existed prior to the criminal act and thereby "set things right" between victim and offender. The harm-doer's response is contingent on two situational variables: the adequacy of the existing techniques for restoring equity and the costs. Adequacy refers to the extent to which a technique exactly restores equity. Both insufficient compensation and excessive compensation have been found to lack adequacy, and when given a choice between making inadequate compensation and completely justifying the victim's suffering, the harm-doer is apt to choose the latter as more satisfying (Berscheid and Walster 1967, Walster *et al.* 1973). Further, if the cost of the restitution is beyond the offender's ability to pay, he or she is more likely to seek psychological equity (Walster *et al.* 1973).

Direct restitution from offender to victim (Types I and III), according to equity theory, produce the most psychologically satisfying results; the psychological meaning or impact of symbolic restitution or community service (Types II and IV) is less clear. Does an offender who performs service work or makes a payment to a third party unrelated to the harm feel the same connection between his crime and sanction? Does he or she view the sanction as less just if it benefits a third party? These are empirical questions for which theory provides only weak guidance.

The validity of the principles of equity theory have largely been established in contexts outside the criminal justice system, in drug communities and Alcoholics Anonymous, for example. In Alcoholics Anonymous, even though the term "restitution" is not used, there is great emphasis placed on "making amends," but, unlike community service sentences, these activities are voluntarily undertaken by the harm-doer.

Some (Egash 1958, Keve 1978) assert that, in addition to guilt reduction, "creative restitution" provides positive psychological rewards for the offender and is rehabilitative when the conditions of a restitution sentence (1) require the offender to give of himself or herself to benefit another, (2) provide a clear task that relates to the harm caused, and (3) produce visible rewards for the other. By providing a meaningful experience for the offender, a restitution sentence may change his or her attitude toward the self, the victim, and the community and thereby lead to behavior changes. Harris (1979) adds that a community service sentence, by placing offenders in task assignments along with regular volunteers, reduces or eliminates stigmatization while providing a work experience and the opportunity to acquire skills that may meet the economic needs of some offenders. But can these conditions be met by restitution programs

established by or through the criminal justice system? And, if so, do they produce the anticipated outcomes?

Others (Dagger 1980, Schafer 1970) regard restitution as a superior form of punishment but maintain that as a sanction it promises positive outcomes by offering the offender the opportunity to take steps toward his own reformation. Schafer (1970, p. 125) notes that restitution "is something an offender does, not something done for him or to him and as it requires effort on his part it may be especially useful in strengthening his feelings of responsibility."

It has also been suggested (Galaway 1977, Galaway and Hudson 1975) that restitution offers an alternative to current correctional models. Rejecting the classical and positivist perspectives on the criminal and punishment, these writers assert that crime results from the estrangement of the individual from society and meaningful social participation. Restitution as a sanction can be designed to give the offender the opportunity to neutralize the damage he or she has done and to become integrated into society by doing something positive. While this restorative model of restitution avoids the "sickness premise," it rests on the premise that restoring the balance between the offender and victim is sufficient to terminate criminal behavior. Is this the case when the sentence is very severe or carried out over a long period of time? When restitution payments go to a third party? When only partial restitution is required? In each instance, theory suggests that restitution may lead, instead, to a greater sense of inequity and alienation on the part of the offender.

Despite the solid historical roots and social psychological support for restitution and community service sentences, going from theory to actual programs operating within the criminal justice system poses a number of practical problems and raises many empirical questions.

RESTITUTION PROGRAM MODELS, ISSUES, AND PRACTICES: SOME RESEARCH FINDINGS

THE RESEARCH LITERATURE

Optimistic calls for restitution programs are numerous; literature reporting on the client populations, program activities, and outcomes of actual restitution programs is just beginning to accumulate. The literature reviewed in this section includes the following types of studies:

1. Surveys that seek to determine the extent of the use of restitution and the characteristics of various restitution programs (see Chesney *et al.*

1978, Edelherz *et al.* 1975, Harland *et al.* 1979a, Harris 1979, Hudson and Galaway (no date), Hudson and Galaway 1980b, Hudson *et al.* 1977, and Schneider *et al.* 1977).

2. Descriptive accounts of existing programs, including the British magistrates' courts study (Softley 1977), the Minnesota probation study (Chesney 1977), and the Win-onus program (Challeen and Heinlen 1978).

3. Evaluations of programs and projects at particular sites, including the Minnesota Restitution Center evaluation (Chesney *et al.* 1978) and the Georgia Restitution Shelter program (Flowers 1977).

4. Interim findings reported by the National Assessment of Adult Restitution Programs (Hudson and Galaway (no date), 1980a,b).

5. Interim reports of the National Evaluation of Adult Restitution Programs (Harland *et al.* 1979b), including legal analyses of financial restitution and community service programs (Harland 1980a,b) and the National Evaluation of Juvenile Restitution Programs (Schneider and Schneider 1979a,b).

6. A miscellany of other studies, including surveys of the attitudes of various segments of the public toward restitution (Galaway and Marsella 1976, Gandy 1975) and discussions of the variety of practical issues involved in developing restitution programs and models (Harland *et al.* 1979b, Institute for Policy Analysis 1978).

EXTENT OF THE USE OF RESTITUTION IN THE CRIMINAL JUSTICE SYSTEM

Several recent surveys indicate that the use of restitution and community service sentences is more widespread than expected, although the number of restitution and community service *programs* is smaller and still not known (Hudson and Galaway (no date), Schneider *et al.* 1977). One survey (Chesney *et al.* 1978) identified only 40 formal programs nationwide, most of which were nonresidential and involved adult property offenders. Harris (1979) found more than 50 community service programs in California alone. Hudson and Galaway (no date) located 82 projects or programs for adults with an emphasis on restitution or community service and more than 100 that included restitution and community service without explicitly focusing on them. Studies of restitution programs in juvenile courts by Edelherz *et al.* (1975), the American Institutes for Research (1976), and Hudson *et al.* (1977) located and described a number of programs but failed to systematically sample courts to determine the extent of the use of restitution. Schneider *et al.*'s (1977) survey of 133 randomly selected juvenile courts found that more than 86 percent of them reported using restitution as a sanction, although a much smaller proportion have developed special restitution programs that use it as an alter-

native to probation or incarceration. Currently, there are 85 such programs participating in the national juvenile restitution initiative funded by LEAA, most of which are newly created.

OFFENSE AND OFFENDER CHARACTERISTICS

Restitution is usually imposed as a sanction for property offenses; Chesney (1977), for example, found that 96 percent of all ordered restitution cases in Minnesota were for such offenses. Flowers (1977) reports that about three fourths of the offenders in the Georgia Restitution Shelter programs committed property offenses. Schneider and Schneider (1979a) also found that juvenile offenders participating in restitution programs were predominantly property offenders, occasionally robbers, and very rarely adjudicated for assault, sexual offenses, or victimless crimes.

The limited data on offenders indicate that most are young, white, unmarried males with few prior offenses. Softley (1977) found that 39 percent of those sentenced to make restitution in British magistrates' courts had no prior convictions, 28 percent had one or more prior convictions, and 31 percent had three or more prior convictions.

VICTIM ROLE AND CHARACTERISTICS

Although there is strong support of the idea of direct victim-offender involvement in the development and completion of a restitution scheme, in practice victim participation is relatively rare. Chesney (1977) found that direct involvement of victims with offenders in negotiating a formal restitution agreement occurred in only 6 out of 525 cases studied. Not only are victims generally excluded from negotiating the restitution sentence, but they often are not even informed about it. Galaway and Marsella (1976) found that after an average of 40 days following court disposition and the issuing of a restitution order, none of the victims had been informed of it.

Although the public's idealized vision of the victim is an individual who has been traumatized by crime, most victim studies of both adults (Harland *et al.* 1979b) and juveniles (Schneider *et al.* 1977) have found that most of the victims repaid by restitution programs are governments, businesses, or other organizations. Offenders ordered to make financial restitution to a corporate victim or an interested third party such as an insurance company may regard themselves as victims and the state as a collection agency for big-business interests, which is likely to undermine the reconciliative or rehabilitative effect of the sentence. No data are now available with respect to this issue.

CHARACTERISTICS OF RESTITUTION PROGRAMS

Program Goals

Restitution and community service programs may have as their primary purpose benefit for the offender (including reduction in recidivism and system intrusiveness), benefit to the victim or community (including victim compensation and public satisfaction with the criminal justice system), or benefit to the criminal justice system (including alleviation of agency problems and reduction of costs). In addition, offender-focused programs may lean toward being social service oriented or punishment oriented (Institute for Policy Analysis 1978). Although these goals overlap, they present conflicting programmatic alternatives, since what may be best for the offender may not be best for the victim or most cost effective for the criminal justice system.

Edelherz *et al.* (1975) observed that most programs appear to emphasize benefits for the offender rather than for the victim. Schneider *et al.* (1977) found almost 75 percent of their respondents claimed that both goals were equally important, which may lead to ambiguity with respect to program priorities.

Timing of Restitution Programs: Placement in the Criminal Justice System

Restitution programs operate at all stages in criminal justice processing. Some operate prior to adjudication as components of the diversion process administered by police or probation departments. More often, a restitution order follows a finding of guilt, usually as a condition of probation (Chesney 1977, Hudson and Galaway (no date), Schneider *et al.* 1977). Restitution may also be ordered as an addition to incarceration or as part of a work release agreement (e.g., Restitution Shelters in Georgia) or as a condition of parole following incarceration (e.g., the Minnesota Restitution Center). Currently, there are parole programs for adults but none for juveniles (Chesney 1977).

Types of Restitution

Most restitution sentences involve financial payments made to direct victims. Direct service to victims is rare, but community service sentences are gaining in use. In his study of Minnesota counties, Chesney (1977) found that only 4 percent of restitution sentences involved community service and 2 percent required the provision of services directly to the victim. Of

the 82 adult restitution programs or projects studied by Hudson and Galaway (no date), about 33 percent principally involved financial restitution (i.e., 75 percent of the cases had this sentence), 41 percent primarily involved community service, and 25 percent involved both types. Similarly, Schneider and Schneider (1979a) found that a very small proportion of the more than 3,000 referrals during the first several months of the juvenile restitution initiative involved direct victim service; about half involved service restitution in which the young offender performed unpaid work for a nonprofit or government agency. The rest required financial restitution; many of these programs provided job assistance and subsidized employment for the youth, who repaid the victim from his or her earnings.

Two surveys (Chesney 1977; Hudson, Galaway, and Chesney 1977) found that full restitution is more often ordered than partial restitution. The amount of restitution ordered, however, is relatively small. Chesney (1977) found that the mean loss sustained by crime victims was \$214; the mean restitution ordered was \$167. Schneider and Schneider (1979a) reported that restitution sanctions averaged \$236 and that community service averaged 49 hours per youth in the early months of the juvenile restitution initiative.

Restitution may be used as a sole sanction or in conjunction with other sanctions. Although some model sentencing codes expressly provide for the use of restitution as a sole sanction, it is most frequently used as a condition of probation and therefore as an "add-on" sentence (Hudson, Galaway, and Chesney 1977; Schneider *et al.* 1977). Arguments for using restitution in combination with other penalties are that restitution alone may constitute "insufficient punishment" (Schafer 1970); that to be "constructive," restitution must be guided (Eglish 1958); and that restitution cannot be enforced unless it is made a condition of probation or another sanction. Opponents argue that as a sole sanction restitution conveys society's moral message but is less intrusive, cheaper to administer, and avoids association with probation (a sanction that is often not taken seriously).

A preliminary examination of data from the National Evaluation of Juvenile Restitution Programs, which examined the outcomes of approximately 10,000 cases in which youths received one of three dispositions—restitution as a sole sanction, restitution as a condition of probation, and restitution under a suspended sentence of commitment to a juvenile institution—found that youths sentenced to restitution as a sole sanction demonstrated a markedly higher rate of successful completion than did those with combined dispositions (Schneider and Griffith 1980). Ninety-five percent receiving the sole sanction completed it, in comparison with an 88 percent overall completion rate. Further analysis, controlling

for the assignment of youth considered better risks and those given smaller amounts to pay or fewer community service hours to work, indicated that the relationship between the condition of the restitution sentence and completion remained strong. In addition, controlling for the number of prior offenses, the in-program reoffense rate was lower for sole sanction restitution than for combined dispositions.

The Restitution Process

The restitution process involves a number of phases and program components: intake, including the development of the restitution plan; determination of loss; arrangement for the collection of financial restitution from the offender; disbursement of funds to the victim; placement in community service programs; monitoring compliance; and the development of job placements, subsidized employment, community agency placements, and ancillary services for offender and victim. Management of the aspects of restitution cases may be highly coordinated or diffuse.

Program operations vary widely; data about practices and administrative strategies and their effectiveness are very limited. Eligibility criteria for program participation often are neither clearly specified by law nor determined by program goals (Harland 1980a). Judges' decisions to order financial restitution appear most frequently to be based on the perception that the offender can pay, and may therefore lead to the use of discriminatory selection criteria. Generally, such factors as prior offense history, amount of damage, and the likelihood of diversion from court processing without program intervention are also considered.

In many programs the amount of loss serves as a basis for determining the amount of restitution. Determining loss, however, is not a simple matter. Losses may include only material losses (e.g., stolen cash or damaged property) or may also include pain and suffering, which must be established in quantitative terms. In assessing losses, it is necessary to establish which types of victims will be included: only victims directly injured by an offender's conduct, or indirect victims such as insurance companies or garages that provide services to direct victims as well.

In formulating a restitution plan, the amount of restitution in terms of money or hours of service, the payment or completion schedule, ancillary obligations or rights of the offender (such as job training), and the conditions or sanctions for program failure must be specified. Plans range from simple orders for payment to complex contractual documents setting forth the rights and obligations of participants.

Some community service programs offer formulas or ratios to the court for converting a fine or jail term into community service hours. Conversion formulas vary: one hour of service is equated to \$3.00 in fines in Project 20

in San Francisco, \$2.00 in San Bernadino, California, and \$4.58 in Los Angeles County's South-Bay Harbor program (Harris 1979, p. 40). These low conversion equivalents imply that community service sentences are likely to be used principally with petty offenders, because completion of a sentence for a more serious offense could take years. For example, in the Solano County, California, Volunteer Work program during 1976 and 1977, approximately 80 percent of the 379 offenders referred to the program were sentenced to less than 240 hours of service. For those offenders convicted of felonies, however, the mean sentence was 585 hours and the mode was 800 hours. An 800-hour sentence would require 5 months of 40-hour weeks to complete, or nearly 2 years of working 8 hours every Saturday. The longest sentence, 2,920 hours, would require putting in 8 hours a day every day for a year, or every Saturday for nearly 7 years. Such a sentence may be "just" in terms of the seriousness of the offense, but it is likely to have negative impacts on the offender's job and family life, to lose its connection with the offense when continued over such a long period of time, and to lead to problems with monitoring and compliance.

The organizations and agencies participating in community service programs usually are limited to private nonprofit or tax-supported agencies, including hospitals and rest homes, health clinics, schools, child care centers, recreation centers, libraries, social service agencies, and consumer protection organizations. Most programs exclude organizations that engage in political action; others exclude religious or fraternal organizations. Work tasks include maintenance and clerical activities, work as a hospital or recreation aide, tutoring or serving as a driver. Finding agencies willing to serve as a worksite for offenders has not proven to be a major problem (Harris 1979).

Community service placements tend to be based on one of three rationales: assignment based on the crime (e.g., in one program a man convicted of attempted arson was assigned to work in the burn unit of a hospital emergency room), assignment to fit the offender's profession or skills in order to maximize the benefit to the community, and placement based on convenience. The British initially sought to carefully match offenders' skills and work assignments. They have switched to giving greater consideration to such practical factors as proximity of the service work sites to the offender's home, work, and transportation. Whether such an assignment pattern fosters the offender's perception of the connectedness of his sentence with the crime and thereby is as effective is unclear.

The Impact of Restitution on the Criminal Justice System

While some view restitution as an alternative sentence that may limit the scope and severity of court-imposed sanctions, restitution programming

appears to be expanding the reach of the criminal justice system and increasing the severity of sentences. It results in the imposition of sanctions on individuals whose cases previously would have been dismissed and often is used as an add-on to existing conditions of probation and parole rather than as an alternative to them (Chesney *et al.* 1978, Flowers 1977, Harland 1980a, Pease *et al.* 1977, Schneider and Griffith 1980). Schneider *et al.* (1977) found that almost half the study sample of juvenile courts reported that requiring restitution increased offender's length of contact with the justice system. Despite the encouraging preliminary findings from the juvenile restitution initiative that almost one third of referrals were chronic or serious offenders (likely to have been incarcerated) and very few were minor offenders (Schneider and Schneider 1979a), most findings on the uses of restitution raise disturbing questions about the extent to which it is being employed with the intended target population and the phenomenon, observed elsewhere, of the "spreading net of social control."

COST EFFECTIVENESS AND COST-BENEFIT ANALYSES

A number of programs have attempted cost-benefit or cost-effectiveness studies to justify the continuation of their funding. Although many of these studies fail to fully consider the costs incurred or the benefits derived, they nonetheless tend to paint a positive financial picture of such programs. For example, a cost-benefit study of the second year of operation of the court referral program of San Diego County, California (in which misdemeanants were offered a community service sentence in place of a fine), found that 1,838 offenders were referred to the program and that they performed 75,000 hours of service, which, based on the minimum wage, was worth more than \$200,000 to the community (Paur 1977 as cited in Harris 1979). Program costs to local government were estimated as \$153,346, including \$120,112 in fine revenues lost and \$33,234 in project operating costs. The financial impact of failure to complete the community service sentences was found to be no different from that associated with failure to pay a fine. Thus the report concluded that, from a cost-effectiveness perspective, the program was successful.

One national cost analysis comparing probation with restitution and community service concluded that average costs are much lower for the latter than for other sentencing alternatives (Thalheimer 1978). Specifically, the study found that an urban nonresidential restitution/community service program (operating independently from the county probation department) at the design capacity of 250 referrals per month (for a total of 3,000 per year) had average costs per referral ranging from an average high of \$46.89 to an average low of \$34.43 with a mean of \$40.64.

A restitution program operating at only 60 percent capacity with an average of 150 cases per month had a mean average cost of \$67.75. These average costs are much lower than either the cost of probation (with minimum supervision and minimum service needs, the average cost is \$243; with medium supervision and high service needs, it is \$324; with high supervision and high service needs, the costs average \$486), non-residential pretrial diversion (with mean costs of \$3,900), halfway house residence (costing \$6,649), or a state correctional institution operating in compliance with the Correctional Standards of the National Advisory Commission on Criminal Justice Standards and Goals (which costs \$9,214) (Thalheimer 1978).

A major shortcoming of the foregoing analysis is the assumption that the community service/restitution program operates not only outside the probation department but as an alternative to probation, rather than as a condition of probation. Since most restitution programs are operated by county probation departments or state agencies responsible for probation and parole, such programs may in fact compound costs.

LEGAL AND ETHICAL ISSUES

Restitution and community service sentences raise numerous legal and ethical questions. Case law establishing a legal basis for community service is not well developed, and statutory provisions for its use as a criminal disposition are established in only about one third of the states (Harland 1980a). The use of service sentences in other jurisdictions is based on implicit probation powers with the questionable assumptions that they are voluntary, rehabilitative, and used as an alternative to incarceration. Case law and statutory authority for financial restitution, on the other hand, are more ample; the rationale for its use as part of the criminal process, however, is largely absent (Harland 1980b). Again it rests primarily on the assertion, unsupported by scientific evidence, that restitution is rehabilitative or a less intrusive sanction than incarceration. Questions arise as to whether community service constitutes involuntary servitude. Supporters assert that offenders are offered the sentence as an option that they may refuse; critics argue that consent is hardly meaningful since most offenders do not realize that in most cases refusal would not lead to incarceration. Other unresolved legal questions revolve around eligibility criteria for program participants, the method of determining the amount of restitution, the scope and amount of the restitution order, parameters of the community service programs, and tort liability. With the rapid increase in the use of financial restitution and community service sentences, there is increasing need for procedural regularity, program guidelines, and the delimitation of the uses of these sentences.

The use of financial restitution sentences primarily with white middle-class offenders raises equity issues. How can the court avoid discriminating against poor (and often minority) offenders who cannot afford to make monetary restitution? Part of the appeal of community service sentences appears to be their feasibility for rich and poor alike. Other equity issues include the implications of imposing more severe sentences on those who refuse a community service option and questions of how to sanction those who fail to complete a restitution sentence.

PERCEPTIONS OF THE FAIRNESS OF RESTITUTION SENTENCES: PUBLIC AND OFFENDERS

Several surveys have indicated that various segments of the public regard restitution as a fair sanction. Hudson, Chesney, and McLagen (1977), for example, found that state legislators and correctional administrators support the use of restitution, particularly with property offenders. Similarly, Gandy (1975) found support for restitution among police officers, students, women's club members, and probation and parole officers.

Two recent studies shed light on the reactions of sentenced offenders to restitution. Thorvaldson (1979a) found that recipients of community service orders in Britain perceived the reparative principle in their sentences (as distinguished from the helpfulness goal of probation and the punitive goal perceived by recipients of fines). They were more positive toward their sentences than were recipients of probations or fines, although community service only weakly affected offenders' attitudes toward the criminal justice system.

Hudson and Galaway's survey (1980b) of offenders and victims in 19 widely diverse restitution projects found strong support for the use of financial restitution and community service sentences. Sixty-one percent of the offenders (and 60 percent of the victim respondents) thought their financial restitution sentence had been fair; an even greater proportion of those sentenced to community service (79 percent) viewed it as a fair sanction, and 71 percent regarded it as a useful or very useful experience. Hudson and Galaway believe that the strong support of community service is related to the choice given offenders in their service activities, the fact that rich and poor alike may "pay their debt to society" in this way, and the usefulness of the community service experience.

THE NATIONAL ASSESSMENT OF ADULT RESTITUTION PROGRAMS

Evaluations of the activities and effectiveness of individual restitution programs are few and flawed. To determine how restitution sanctions are be-

ing used and their effects, the National Institute of Justice established the National Assessment of Adult Restitution Programs. One task of the national assessment was to review empirical data on restitution using restitution as a dependent or independent variable. This review located 31 evaluations of programs (15) or individual projects (16), all of which were completed since 1975 mostly in the United States (Hudson and Galaway 1980b). Twenty-three of the 31 involved programs with adults; five programs were targeted at juveniles and three were mixed. The studies were nearly divided between financial and service restitution. Because only 4 of the 31 projects involved experimental designs and most failed to state adequately even the purpose of the study, Hudson and Galaway (1980b) observe that what these reports present as assessments of program effectiveness are, instead, descriptions of project outputs and direct costs relative to output. Many reports fail to give a clear description of how the program or project operated or to state the logical assumptions linking program inputs with expected outputs or outcomes (Hudson and Galaway 1980b). Without clear specification of a program's rationale, activities, outcomes, or the linkages among these three (i.e., without a clear program model), and without information on the actual operation of a program (since most are not implemented exactly as planned), it is impossible to assess the integrity of either the program or the outcome (Klein 1979) or the program's strength (Hudson and Galaway 1980b). The failure to employ an experimental design means that reported findings are not generalizable.

Despite conceptual and methodological shortcomings, however, the review of the existing literature did yield a number of tentative conclusions. First, restitution and community service programs are feasible; "they can handle a large number of persons at relatively low cost with relatively few in-project failures and result in large amounts of work being performed for community agencies" (Hudson and Galaway 1980b, p. 32). Second, they are sanctions used principally with minor property offenders who have to make small payments that go primarily to business firms. Third, about one quarter of those ordered to pay restitution failed to satisfy the order; the larger the payment ordered, the less likely it is to be completed.

NATIONAL EVALUATIONS OF RESTITUTION PROGRAMS

Without having any data on the feasibility or effectiveness of fledgling restitution programs, LEAA decided in 1976 to support a national action program on restitution. In October 1976 it awarded nearly \$1.6 million in

discretionary grants to seven states to operate restitution projects, and at the same time the National Institute of Law Enforcement and Criminal Justice (NILECJ) awarded a 2-year contract (subsequently extended for a year) to the Criminal Justice Research Center (CJRC) at Albany, New York. The objective of this "Corrections Initiative: Experiment in Restitution" was to determine under what conditions restitution would be an effective tool in dealing with offenders in the criminal justice system. In 1978 the Office of Juvenile Justice and Delinquency Prevention initiated a similar program and evaluation effort. Although these evaluations have not yet produced outcome findings or final reports, the coordinated funding of demonstration programs and their evaluation marked an innovative strategy of "action research" at LEAA that merits further examination.

THE NATIONAL EVALUATION OF ADULT RESTITUTION PROGRAMS: GOALS AND RESEARCH DESIGN

The National Evaluation of Adult Restitution Programs (or Adult Evaluation) was established to study, describe, and evaluate the financial restitution programs developed in the seven states and, on the basis of its data analysis, to provide guidance for further research regarding financial restitution. The process evaluations are designed to provide information about the restitution decision, the ways restitution programs operate, and programs' effects on offenders, victims, and the criminal justice system to determine what works for whom under what circumstances and with what costs. In addition, the evaluators are addressing such theoretical questions as: Does restitution act as a deterrent? Is restitution a punishment? And does it facilitate rehabilitation?

The key to the evaluation is the use of an experimental design that calls for program staff to define the eligibility criteria for restitution and then to randomly assign all eligibles to either experimental (i.e., restitution) or comparison (nonrestitution) groups. Evaluators are following offenders in both groups to the completion of their disposition conditions or their discharge from the system and are seeking data on subsequent contacts with the criminal justice system for those offenders discharged during the course of the evaluation.

PROBLEMS IN IMPLEMENTING THE ADULT EVALUATION

As might be expected in an evaluation of an innovative program designed as a number of field experiments at diverse sites, the problems faced by the evaluators were monumental. In addition to the challenge posed by requiring the evaluators to "conduct action research across the miles"

(Warren 1978, p. 117), they faced four general problems: timing of programs and the evaluation; difficulties in adhering to the experimental design; role conflicts; and obstacles to evaluation extraneous to the program or research activities (Harland and Warren 1978).

Timing of the Programs and Evaluation

Problems arose both from the briefness of the life span of programs and the evaluation and from their concurrent starting points. Simultaneous funding of separate program and evaluation proposals, although an improvement over past practices, meant that the evaluation design was developed with negligible information about programs, that evaluators had no opportunity to examine program proposals prior to their selection for funding to assess their potential for evaluation or to contribute to program selection, and that programs were designed with little awareness of data needs or design expectations of the Adult Evaluation. Because of the "double blind inception" (Harland and Warren 1978), the practical problems of implementing an experimental design, of gaining access to agency records, and of collecting large amounts of data often were overlooked until the programs had been funded. This resulted in delays in operationalizing programs and in collecting data. Many of these problems might have been avoided by selecting an evaluation team prior to the announcement of a program.³

Experimental Design Issues

The Adult Evaluation staff had major problems ensuring that the program staffs implemented and maintained an experimental design. The program announcement had been unclear about research expectations, and programs were not initially selected on the basis of their ability or willingness to provide research data or adhere to an experimental design. Thus it is hardly surprising that many program administrators did not expect to have to adhere to a stated experimental design and resisted establishing special procedures to permit randomization. Other administrators opposed the experimental design as unfairly denying the experimental treatment to the control group.

In addition, the program and evaluation faced a challenge from the

³In the second phase of the adult restitution experiment, the evaluator was selected prior to the selection of program proposals; communication difficulties between program and evaluation staffs were reduced and data gathering activities were greatly facilitated as a result (personal communication by Alan Harland, October 28, 1980).

General Accounting Office (GAO) that threatened the completion of the entire project. In a report that was not published but was sent to LEAA for action, the GAO asserted that "weakness in planning and managing the experiment (i.e. program site activities), difficulties in implementing the projects and failure to develop sufficient research data will prevent accomplishment of the experiment's objective" (U.S. General Accounting Office 1978). It pointed out the inadequacy of the program plans approved by LEAA, the failure of program personnel to secure approval and cooperation of other agency personnel prior to funding, and insufficient staffing and/or funding, which together resulted in the failure to provide research data. The report noted that after 18 months of the 2-year grant period only 832 acceptable cases (696 from one site) had been generated instead of the more than 3,500 projected (U.S. General Accounting Office 1978, p. 9).

In response to the GAO letter, LEAA terminated two of the restitution projects and put tighter requirements, conditions, and controls on three others, but continued them and the evaluation. California voluntarily terminated participation in the experiment after a change in its sentencing laws greatly limited the number of offenders eligible for the program. Connecticut lost its funding because it continued to provide far fewer cases than promised. While the proposal had projected 1,200 offenders in the program, after 18 months only 14 cases had been validly assigned in random fashion.⁴

Conflicts Between Evaluations and Program Goals

Evaluation research requires clearly stated program goals and procedures. An evaluator assessing programs operating without these faces a dilemma: how to "shape up" the program to be evaluable without becoming overly involved in it. The Adult Evaluation staff faced this problem because many of the original program proposals were insufficiently conceptualized.

Another conflict between evaluations and program roles grew from the staffing patterns stipulated by LEAA. Each program had an on-site evaluation specialist who was hired to provide liaison with the CJRC staff and to coordinate data collection, but who was paid out of program funds and selected by and responsible to the program administrator. This ar-

⁴The project then sued LEAA for withholding the promised funds, and, in a precedent-setting case that was recently decided, LEAA won, affirming its right to terminate a contract and withhold funds from a program if it fails to adhere to the terms of the award with respect to the evaluation component.

rangement led to role conflict for the on-site evaluators and created problems for the Adult Evaluation staff, which had to depend heavily on the efforts of the on-site specialists, whose competence was initially unknown and whose objectivity may have been suspect due to a variety of pressures they faced from program personnel.

Extraneous Obstacles to Evaluation

During the course of the evaluation of adult programs, several of the programs were affected by events beyond their control that affected program operations and their subsequent evaluation. In Connecticut, for example, the Chief Judge of the Superior Court, who had enthusiastically participated in the early negotiations regarding procedures, was appointed to a seat on the appellate court. Negotiations had to be repeated with his successor, delaying initiation of the program.

THE NATIONAL EVALUATION OF JUVENILE RESTITUTION PROGRAMS

A similar restitution and evaluation effort is currently being funded by the Office of Juvenile Justice and Delinquency Prevention (OJJDP). In this instance, 85 projects have been funded and are being evaluated in terms of limited effectiveness measures (Are judges ordering restitution as frequently as projected by the project? Are restitution orders being completed?). In six of the sites, the program has been set up as an experimental design that is being more intensively evaluated.

The evaluators of the juvenile restitution programs have thus far avoided some of the difficulties faced by the CJRC group in evaluating the adult programs, in part by accident. OJJDP had planned to award an evaluation research contract 6 months prior to the selection of the restitution projects. After rewarding the evaluation contract to the Institute of Policy Analysis of Eugene, Oregon, program funding was delayed by changes in program guidelines. This permitted the evaluators to visit the sites of many of the groups that had submitted preapplication statements and to participate in the selection of project sites based on familiarity with the local scene and review of their evaluability. Getting funded well in advance of projects permitted the evaluators to "stay ahead of the game instead of constantly trying to catch up from behind" (telephone interview with Ann Schneider, March 29, 1979). In addition, the evaluation staff is larger, permitting it to maintain closer contacts with project sites, and the six on-site evaluators at intensive evaluation projects were selected and are paid by the Institute of Policy Analysis. Finally, because the special conditions of the grant were clearly communicated in advance and evaluators

worked with the program staff prior to funding, the cooperation of programs with the evaluators has been satisfactory. Data collection is under way, monthly reports of assignments to restitution programs are being published, and a number of interim and conceptual reports have been issued.

A NATIONAL EVALUATION OF ADULT COMMUNITY SERVICE PROGRAMS

Having "done" restitution programming and evaluation for two and a half years, LEAA determined in late 1978 that there was no need to demonstrate further the effectiveness of financial restitution by supporting programs (statement by Peter Regner, Office of Criminal Justice Plans, LEAA, March 30, 1979). Instead, the agency announced a new program to support and evaluate community service projects in early 1979. Contracts were awarded by LEAA for both programs and a national evaluation on May 1, 1979. The "action research strategy" of LEAA-funded projects and NILECJ-supported evaluation was dropped.

This program shift has unfortunate implications for the accumulation of knowledge about restitution. First, simultaneous program and evaluation announcements suggested that the timing problems encountered by the Adult Evaluation were likely to recur; they did. Furthermore, the shift indicated that rather than committing itself to the development and evaluation of a theoretically defensible program until it determines how well it works in practice, LEAA continued to be inclined to seek to develop new "innovative" action programs without learning whether they "work" except in the most rudimentary way, i.e., can they be implemented?⁵ Large-scale, loosely controlled national evaluations at this initial stage of program development are neither the most efficient nor the most cost effective way of learning about restitution. After the expenditure of several millions of dollars, the integrity of program implementation is dubious and the validity of data gathered at many sites is suspect; inputs and outcomes are inadequately controlled and poorly measured. If, as appears to be the case from preliminary data, financial restitution and community service are workable criminal justice alternatives with community support, much more carefully controlled research on the relationships between offender and victim characteristics, program processes, and outcomes is needed.

⁵Indeed, in the latest round of discretionary grant awards for community service programs, LEAA did not include any evaluation component and even discouraged programs from undertaking research.

CONCLUSIONS

Restitution and community service appear to be useful sentencing alternatives for the criminal justice system. In principle they appear to fulfill several purposes of punishment. Advocates contend that they can punish, make clear society's disapproval of certain deeds, deter further offending, and rehabilitate offenders by permitting them to take steps toward their own reformation. In addition they are viewed by the public as fair sanctions that also offer redress to victims and cost savings to the criminal justice system. Whether in practice restitution programs can be designed and implemented to achieve all these goals, however, is an empirical question that can only be answered through the development of programs and their careful evaluation.

Designing and implementing restitution and community service programs and evaluating their inputs, processes, and outcomes, however, are not simple matters. The potential variety of programs is enormous, legal questions abound, and often crucial issues are not clearly addressed. Preliminary evidence indicates that both restitution and community service programs are feasible for use with both juvenile and adult offenders. Yet because programs frequently fail to clearly specify achievable goals, it is difficult to determine if they are linked to appropriate program activities that achieve desired outcomes.

Research in the past 5 years has shed some preliminary light on the extent and uses of restitution and community service sentences and programs; the types of offenders receiving these sentences; the variety of programs and their component elements; the administrative feasibility and cost effectiveness of many types of programs; and the attitudes of the public, victims, and offenders toward a restitution sanction. Yet many troubling questions remain. For those concerned with rehabilitation, these questions relate particularly to the offenses and offenders for which different types and conditions of restitution sanctions are most appropriate and effective and to the sufficiency of various sentences in producing behavior change. A just or adequate intervention from a psychological point of view may differ from what is acceptable or employed by the criminal justice system. What is the connection, for example, between the harm done and the recipient of restitution? Are the psychological and legal bases for financial restitution and community service the same? A restitution sentence may not be "strong" enough to change the behavior of a chronic offender sentenced to make a small payment or work a few hours for a minor offense. For the serious offender for whom restitution may serve as an alternative to incarceration, a relatively large payment or work order may be "just" but may prove administratively unworkable and

lead to further alienation. Although the vast majority of persons sentenced to make restitution are minor property offenders, restitution may be appropriate for some person offenders, particularly those whose harm was unintended.

Other questions arise regarding the best strategy for gaining knowledge about restitution and community service sentences. To prevent widespread and uncritical embrace of this newest "hot" sentencing alternative only to discover that it "doesn't work," much careful research is needed. Single-project assessments appear to yield little generalizable data. The experience of the national evaluations in implementing multisite experimental action research indicates that this current federal knowledge-building strategy is difficult and costly. For such a grandiose strategy to yield useful data, certain conditions that frequently have not been met are essential. These include (1) selection of the evaluators and an experimental design prior to program selection; (2) clear understanding and acceptance of the research expectations by program staff; (3) selection criteria that fund projects likely to yield research data; (4) assurance of the cooperation of decision makers in other agencies with the project prior to project selection; (5) adequate support for the evaluation in terms of staff, funds, and "clout" with program staff; and (6) enough time to permit the program to become operational, generate data, and collect follow-up data on participants. In brief, less emphasis on "action" and more on "research" would pay greater dividends in knowledge accumulation. In addition, it must be recognized by funding agencies that development and testing of a promising new program is just the first phase; several iterations involving successive modifications of program elements are likely to be necessary to produce a successful program model.

Like diversion and probation, restitution is a broad concept with theoretical promise, popular appeal, and unsystematic empirical support that indicates that it is a potentially effective sentencing alternative for use with certain types of offenses and offenders. As with other types of sentencing approaches, it is *not* a panacea. Given its promise and our lack of knowledge, a systematic long-term multistage experimental research program is now needed. As Harland (1980a, p. 58) cautions, "With a history of one criminal justice innovation after another producing counterproductive and often inhuman side-effects and unintended consequences . . . the exciting opportunity to innovate [with restitution and community service programs] also carries with it a responsibility to do so cautiously and with a sensitivity to what has gone before."

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Appendix: Conference on Research on Rehabilitative Techniques

WOODS HOLE, MASSACHUSETTS
June 11-15, 1981

PANEL ON RESEARCH ON REHABILITATIVE TECHNIQUES

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